

KALPA 2016

Dedicated to 10 years of IISER Pune and 10 years of Kalpa



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Merci Beaucoup!

Kalpaterra is a vibrant land, not only because of its diverse landscapes, but also because of its diverse people. The scripters put life into words that give the people a glimpse into the ongoings of the land and the ongoings of the mind. The artisans realise our imagination of the words, and put colour to these thoughts. The editors polish the corners and edges of the scripted word. The photographers capture the beauty of daily occurrences. The designers bring these artworks together that brings to light the stories of Kalpaterra.

It is only fair to mention all the hands and minds involved in the adventure that Kalpa has been. The essence of this magazine lies in the works of the contributors. Hence, it is imperative that we thank all those who put enough faith in us and Kalpa to send in their works.

Naven Narayanan, Lokahith Agasthya, Bhargavi Parthasarathy, Urmi Poddar, Nandini Hazra, Nabha Shah, Rajaditya Das, Abhishek V., Nivedhika Kannan, Anup Anand Singh, Tanushree Kundu, Janani Ananthanarayanan, Jewel Ann Maria, Anwesh Bhattacharya, Sriram Raghunath, Rajath Sawant, Raghuram H. V., Manoj Hegde, Govind S., Goutham Sukumaran, Prathamesh Datar, Mayur Dhawale, Pranavi Reddy, Harsha H. R., Harini Suri, Darshini Ravishankar, Prerana Kumar, Vinayak Sadasivam, Ira Phadke, Shubham Chhajed, Vishrut Patel, and Shraddha Lall were committed to read each word, and go through every punctuation to make Kalpa literarily perfect.

Kezia Ann, Faseela E. E., Tomin James, Swastik Mishra, Nabha Shah, Ira Phadke, Prachiti Moghe, and Shubham Chhajed were the artisans who brought the words to life with the masterful strokes of their paint brushes.

Spinning yarns through stills were Pranavi Reddy, Anshul Kapoor, Shubham Gupta, Lavanya Lokhande, Satvika Bandarupally, Mayur Dhawale, Chinmay Katke, Nagarjuna Chary, Hrithik Gudapati, Mayank Kumar, Vishrut Patel, Sharaddha Lall, Abhishek V., Surabhi K. S., Mayur Dhawale, Dr. V. S. Rao, and Dr. Kundan Sengupta.

The crafting and execution of the layout of Kalpaterra could not have been possible without the creative endeavours of Kaarthik Abhinav, Rahul Iyer, Swastik Mishra, Shashank Pratap Singh, P. Sravya, Felix Jose, Jiffin Benjamin, Nazia V., and Akhil Babu.

Every town needs a mayor and ours deserves a special mention. For us, Dr. Richa Rikhy comes with a tagline – Obsessed with quality since 2012 – which we hope we've maintained with this edition. Her keen eye made sure that nothing was amiss.

Kalpa celebrates ten years of IISER and its tenth edition with this issue, and to make these celebrations grand, we had Prof. K. N. Ganesh, Prof. Ajay Sood, Prof. Sourav Pal, Prof. L. S. Shashidhara, Prof. A. A. Natu, Prof. G. Ambika, Dr. Ramakrishna G. Bhat, Dr. Mayurika Lahiri, Dr. Shanti Kalipatnapu, Dr. Apurva Barve, Madhuresh Sumit, Darshan Joshi, Surojit Sural, Sisir C. Anand, Siddharth B. Iyengar, Rachana Bhavé, Sharvaree Vadgama, Harini Suri, and Lavanya Lokhande join us in the festivities.

Kalpaterra not only has a mayor but also a president, without whom it wouldn't exist. Prof. K. N. Ganesh has shown great support for Kalpa since its inception. Along with the administrative staff, Prof. Ganesh has made the continual existence of Kalpa realisable. We thank Mr. Ketan Joshi and Vikram Printers for turning our blueprints into a concrete reality.

We hold this issue of Kalpa very close to our hearts, and are indebted to each and every person who has shown their support and appreciation for Kalpa over the years.

-Divya Singh and Mekhala Kumar



Dear Diary,

I sit here, with a pen in my hand, and the desire to put down the plethora of thoughts and memories on this blank piece of paper. The memories are in abundance, but the words that can do justice to them, very few. But, words are what will make these experiences immortal. So, I sit here, with a pen in my hand, and a purpose in my mind.

Fall arrived, and so we gathered under the pink and orange hues of the evening sky. The evening star was looking down on us, with the old lady smiling down from the moon, telling us that amazing experiences lay in store for us. We sat, we talked, we laughed, and we embarked upon our voyage.

Confronted with a million choices, we wandered to different places. A new place meant new faces, new ideas, new languages, and a new perspective. The unusual became the usual, and we grew accustomed to the novelty of it all.

We wandered into towns we had heard of, but time had taken its course in every street and alley. The doors weren't the same, and new windows had replaced the collapsing bricks.

'... Space is only time visible in a different way...'

The trains, the treks, the hills and valleys, walking through the jungles and swimming across rivers – we meandered – and we discovered new places which gave us direction. However the journey culminated, what remains with us are our escapades through the unknown, because they were not just something we went along with, rather, they left their mark on us.

'... Places we love we can never leave.'

Dear Diary, as I come to the end of my narration, I hope that all those who pore over your pages will go through this journey, just as I will, every time I flip through.

-Divya Singh and Mekhala Kumar

Dekada

SCRIPTING IISER PUNE

The Bugle

WINGS
OF
FIRE

In Memoriam:
DR. APJ ABDUL KALAM

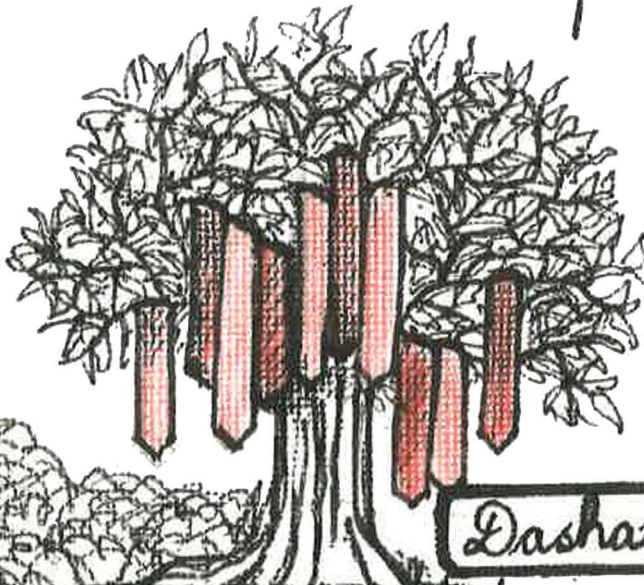
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Numinous

LETTERS
TO THE
ALMA MATER



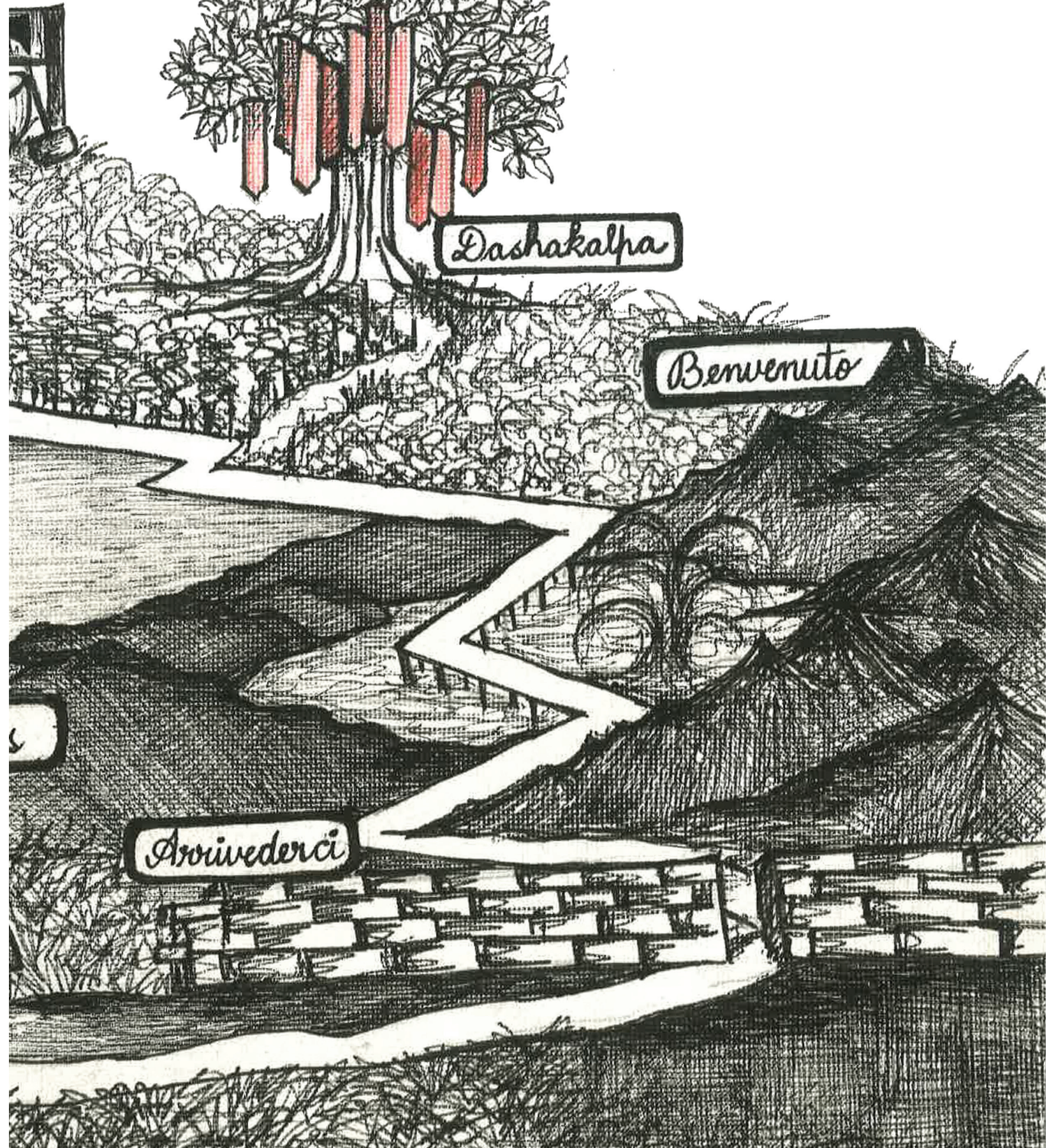
Kalpaterra



Dashakalpa

Benvenuto

Arrivederci





DEKADA

10 YEARS OF IISER PUNE





Scripting IISER Pune

Prof. K. N. Ganesh
Director, IISER Pune

In June 2006, I received the appointment letter recognising me as the first Director of IISER Pune. I did not realise the challenge of establishing IISERs as branded, science education and research institutes. I was just exuberant about the new possibilities of combining undergraduate teaching with advanced research, just as it happens in the west, but which was completely lacking in India. During the very first Board meeting, Prof C. N. R. Rao, in a twenty minute address laid the doctrines of IISERs, and the processes to achieve the same. It is deeply ingrained in my mind even today. It was about how IISERs should become student-teacher learning centres in science, where young undergraduate students could do research, and do so beyond the confines of conventional disciplines. It is possible only when faculty members teaching the undergraduates, are themselves active in advanced research, and all the IISERs have now imbibed these tenets. I believe it has succeeded, and has been well recognised nationally and internationally. The 'idea' of IISERs has captured attention as a new paradigm in science education.

The first year of IISER Pune started with a batch of forty-four students, who will remain special for me, as they trusted us despite the guaranteed uncertainty. It was an exciting year with only five faculty members apart from me running the academics. Every event, be it a colloquium, a visitor, or a festival was always an occasion to celebrate and mingle with students. Although, only the undergraduate lectures and practicals were in place, it was not like an 'another degree college', but like a newborn baby, watchfully acquiring new skills every day. I remember the cultural programme during the first annual day at NCL auditorium, when every student was behind or on the stage exhibiting their talents without inhibition; we had to hire the audience! The second year saw the admission of fifty-five students or so, and we were struggling to find accommodation. This agony existed at the beginning of every academic year, leading to the sequential birth of HR1, HR2, and HR3, till the year 2009, when HR4 (the present Guest House) was established on the campus. Apart from alleviating the persistent student accommodation issues, setting up HR4 was a proud occasion for all of us, as it imparted a sense of identity and belonging to an institute – the beginnings of campus life at IISER Pune.

In parallel, during 2008, we started shifting to the 'transit' campus, Sai Trinity, and settled in as though we were going to be there forever, without any sense of temporariness sinking in. For five years or more, IISER Pune bloomed academically from this campus, with several academic achievements. The Raman Hall and the Ramanujan Hall witnessed some of the best lectures delivered by distinguished visitors, the Annual/Foundation Day events, and many scientific meetings. Important student activities such as Kalpa, Karavaan, Mimamsa, Music Club etc. originated here. It was also here that the academic programmes, the philosophy of teaching, evaluation, grading, and various policies of the undergraduate and doctoral studies evolved, with the active participation of faculty members at all levels. The credit goes to the academic fraternity who endured frank and forceful arguments, many a time with no holds barred. IISER Pune never followed any standard models of curricula and evaluations, but continuously evolved its own designs to the best choices in the interests of the students rather than the convenience of the faculty members. The uncompromised academic and research freedom became the stamp of the philosophy of IISER Pune. The evolution continues even now, with constant refining of courses and rules happening regularly, though many a time it is accompanied by constraints on the timetable for teaching and exams.

The 'Sai Trinity' days are an inseparable part of the history of IISER Pune as it is the place where IISER Pune was visualised and shaped in both, physical and academic sense. The master plan of the IISER Pune campus was conceived in 2009, and the important stakeholders, the students and the faculty members, were involved in designing the halls of residence, the faculty housing, and the main building. While the architect gave form to the campus, the stakeholders gave function. The unique architectural features of the campus are (i) compartmentalising the campus into three zones – academic, sports/recreational, and residential (ii) placing all the buildings closer to the periphery on a ring road, and (iii) a green wavy spine running through the centre of the campus. This imparted unique features to the campus wherein all vehicular traffic could be kept to the periphery, with plenty of pedestrian spaces in the centre. I remember the long meetings with architects, engineers, and the faculty members, which ran late into the nights, passionately defining and refining every contour of the campus. Consequently, the IISER Pune campus has acquired a pleasant and green profile, which is not just the owners' pleasure, but also the neighbours' pride.

The 1st of April, 2010 is a landmark day as it was the day when the then Prime Minister, Dr. Manmohan Singh, unveiled the foundation stone of the campus, signalling the beginning of a series of events which were about to happen on the campus. The chemistry labs block, 'Mendeleev', was completed in 2011, physics experimental labs, 'h-cross', in 2012, and biology labs, 'G1', in 2013. The setting up of these labs enormously accelerated the research output from IISER Pune. As the lecture hall complex (LHC) and the main building became progressively functional in 2013–2014, IISER Pune vacated the Sai Trinity campus in stages. Simultaneously, the completion and occupation of Halls of Residence during 2012–2013, and the faculty housing in 2015 was significant in shaping the present life on campus.

On the 15th of June, 2014, the President of India, Shri Pranab Mukherjee, dedicated the campus to the nation, and delivered the third convocation address in the Sir C. V. Raman Auditorium. It was a culmination of hard work with a vision and imagination to create an institution from scratch within four years, without compromising on the quality and the virtues of science teaching combined with research. The future achievements of the graduated five batches (more than three hundred students) of BS-MS students, and the forty students who have received their PhD degree will take some time to make an impact. However, the research outcomes in terms of quality and quantity, excellent publications, academic recognitions of faculty, and their ability to attract competitive research grants are already making an impression. With this launch pad, the academic accomplishments should grow unabated in the future. An important and understated ingredient of IISER Pune's achievement is the efficient, responsive, and enabling administration. A great sense of 'ownership' across all stakeholders has been the hallmark of the institution.

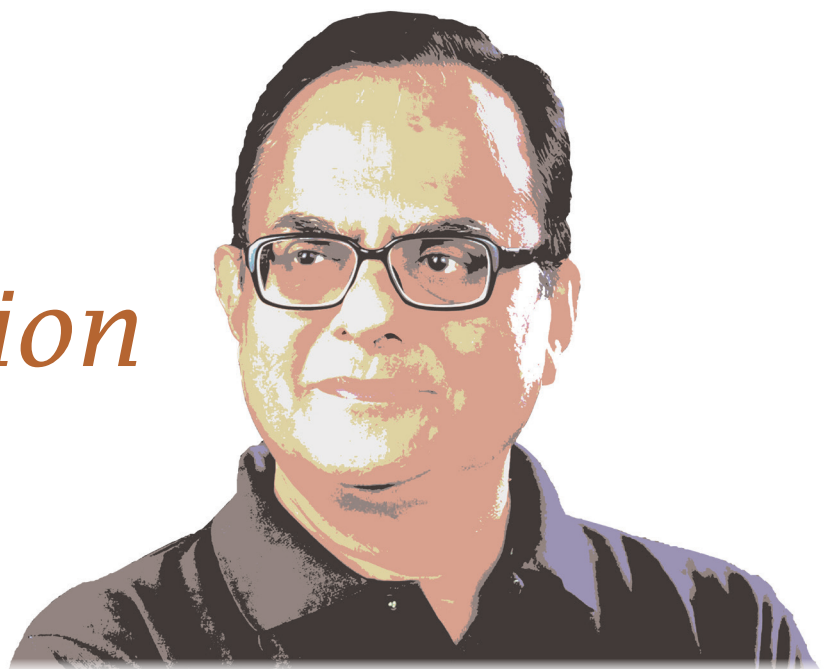
When resources are plenty with the associated freedom of deployment, success is limited only by the perceived vision and creativity, with no excuses for failure. The real challenge for 'the future IISER Pune' is the question of how sustenance can be achieved, and how there can be accelerated growth under shrinking governmental resources. It needs a different type of creativity to harness the various alternative sources of funds. I believe that the success achieved so far, the experience gained, and the quality of minds at IISER Pune is capable of effectively confronting this challenge.

In June 2006, as the first director, I stood alone with a bag of the first installment of three crore rupees from MHRD, gazing at the empty ninety-eight acres of campus land provided by NCL, visualising an institute par excellence in science teaching with high calibre cross-disciplinary research, and *where tomorrow's science begins today*. After a decade, as I walk among the hundreds of students and a multitude of faculty members on campus, and observe the students engaged in animated conversation about their courses, lectures, and the lab experiments, faculty discussing research with graduate students in corridors and coffee places, screens flashing series of seminars for the day, and the upcoming events, as I bump into various academic visitors, both national and international, and as I get e-mails from the faculty members about the acceptance of their latest papers in reputed journals, I feel joyous beyond expression. I have learnt to balance the process of bureaucracy and meritocracy, and understand the cultural multiplicity in different disciplines of sciences, both of which have been essential to create this institution of excellence. I feel fortunate and overwhelmed to have wonderful colleagues, who believed in me, and contributed strongly to build this organisation. IISER Pune embodies the growth of an institute, synchronous with that of its students and the young faculty members. We are now glad to be mentoring the new sixth IISER at Tirupati, which should get total advantage of the collective experiences of all the IISERs.

During the last ten years, my limited intellect has perceived nothing beyond scripting IISER Pune, creating modern facilities, and creative ambience for enabling its young faculty members and students to pursue their passion for science. The derived sense of fulfilment has overcompensated for the lack of time to continue my own research that has taken a backseat. Now with 'IISER Pune' being a reality, I look forward to spending more time on research, and teaching courses, and satiating the unfulfilled aspirations of my curiosities in science.

In Conversation with

Prof. Ajay Sood



Interviewer: To begin this interview, we would like to understand how the concept of IISERs came about, and what the idea was behind setting up such institutes?

Interviewee: The IISERs were started ten years ago. The seeds originated from the Scientific Advisory Council to the Prime Minister which was chaired by Prof. C. N. R. Rao. It was appreciated that in technology, we had made a name for ourselves by the establishment of the IITs since the 1950s, but there was a realisation that there was no equivalent effort in pure sciences. This thought was nurtured by Prof. Rao and the other council members. The most amazing thing was that in a very short time, the whole thing took shape.

Before everything happened formally, there were ideas. For example, in Pune, Prof. Bhide and Prof. Govind Swarup had had the idea of integrating undergraduate education with practical exposure of students to the local industries. The plan was to do something different from a simple BSc or MSc course.

Earlier, there were no playgrounds for basic sciences as there were for basic engineering. People could only do a five-year MSc in IIT Kanpur, or engineering physics in IIT Bombay or one or two other places, but there were a very small number of students who could take these courses. So in this way, IISER has made a really nice arena for basic sciences.

Interviewer: Why do you think a developing nation like ours needs institutes dedicated to science, primarily?

Interviewee: Wealth cannot be created in the country without a strong foundation in science. It is science which has to translate into technology, but where people make a mistake is that they think that technology can be bought. For this translation to take place it takes time, and people need to understand that.

Interviewer: There must have been goals for the IISERs when the committee started them. What were those goals, and to what extent do you think that the IISERs have achieved them?

Interviewee: The goal was to be the best in science education which is not decoupled from research. The institutes which were doing very well in research were not doing very well in education. That was the dichotomy about ten years ago. In my mind, the goal is very close to being achieved. Education has been excellent, and research is picking up at a very good pace. It takes time to build a new culture, but it is progressing in the right direction.

Interviewer: And what about IISER Pune?

Interviewee: IISER Pune is doing extremely well. In many ways, it will become an example of how to build an institution. One has to create the right ambience, good infrastructure, and the right spirit among people which IISER Pune has been able to do.

Interviewer: What do you feel about the future of the IISERs?

Interviewee: I think the IISERs will have a good future. There is no guarantee that a good institute will remain good or become better. But the recipe is to never assume that you have reached the target. You have to remain dynamic to be stable, and as long as the IISERs remain dynamic, the future will be good.

Interviewer: How can one attract the sharpest minds back to our country?

Interviewee: There are some people who are ready to take up the challenge of contributing to the development of their country in spite of having to face some hardships. The example set by these people is a better source of inspiration to the future generations than the hype created by pep talks and slogans. Institutes like the IISERs provide such an inspiration which is instrumental in motivating people to come back to their country.

IISER is 10 years old?

-Prof. A. A. Natu

IISER is ten years old? I can't believe it, perhaps because of the young look the campus has, but ultimately we need to respect the Almanac.

Down memory lane – Kaleidoscope, whatever you say, it rolls back to the year 2005. I was in NCL then sharing a lab and an office for some time with Dr. Ganesh. Besides our work in NCL, both of us were engaged with and enjoying teaching in the Biotechnology Department of Pune University. The students' pathetic condition at the MSc level (except a few notable exceptions) was often discussed among other topics. As an alumnus of Cambridge University, and having visited many universities, Dr. Ganesh was always equivocal about 'why not in India?'. I think the seeds of IISER (not christened then) were sown in his mind then, and he started discussing the problems as well as the solutions in various forums. Prof. C. N. R. Rao had already conceptualised similar dreams of an ideal institute of global standard education in the vibrant atmosphere of research catering to the Indian community, and then started the *silsila* of excitement, encouragement, structured concrete ideas, academic ambience, and then 'where to do this?', as the main problem was land, which was solved by Dr. Mashelkar (Director General, CSIR) in no time. He realised the noble cause, and granted permission to part with NCL land, the present home of IISER.

The story will not be complete if I do not mention some of the earlier efforts to establish a kind of institute of higher education by Dr. Bhide and Dr. Govind Swarup, who were toiling with the idea since 2004; various names were discussed such as NITR, ITR, NIRs, etc. as they mainly wanted industry/technology as a component from day one. Somehow, due to some institutional problems, this dream did not come through, and finally Prof. C. N. R. Rao was successful in realising this conceptual dream into reality.

Then started a series of meetings to establish the society and bodies, transfer of land, and so on. In order to channelise these efforts to build the institute in a formal structured manner, a task force with five scientists and five infrastructure staff members was established in NCL. I was fortunate to be an academic member of this task force. Work flows were designed, and work assignments were accordingly completed. Everybody was thrilled and anxious and charged to carry out whichever job that was assigned to them. I could easily feel the spirit flowing in the minds of the members to establish some kind of global entity, without fully knowing the dimensions and scope of the same.

The biggest task was to establish the syllabus, as that is the yardstick to measure success. You may not believe it, but more than fifty-five scientists (cream of the country) were invited to accept this challenge. This three day/night meeting realised the daunting task ahead. A policy decision of a five-year course was also finalised after giving careful consideration to a four-year course. The major problem was that very few people were associated with undergraduate teaching, and hence, they were unaware of the levels of the twelfth standard students, which was further complicated by the cluster of thirty-three examination boards with various syllabi. Finally, NCERT board books were brought in, glanced through, and a plausible syllabus was outlined. I still remember how members of the Biology Department used to storm into the chemistry room to discuss the biological component of the Bio-organic/Chemical Biology syllabus. This was perhaps the first time that both experts came together on the same platform on day one, and discussed through the day and night; after several sessions, finally, the ultimate *navaneet* came out of this *manthan*. The same was true for all the other interdisciplinary courses.

After a sigh of relief, the team started working on the lab infrastructure. In the final plans, we had only three labs (30' x 15'), including research-cum-undergraduate labs. The Biology



Department was fortunate enough to get bonus space to accommodate hoods, sterilisers, tissue culture, and a small microbiology lab. Glassware, chemicals, simple gadgets, and media were procured from the vendors (thanks to the NCL Purchase section). Until then, it was almost thought that the institute will start in 2017 considering the decision making process of the government. But then, in the month of February 2006, the MHRD issued a *farman* that IISER Pune and IISER Kolkata will start in the month of August 2006, perhaps taking into account the vision and the capabilities of Prof. Rao. That necessitated a temporary campus to be created in less than five months. Dr. Mashellkar, Dr. Sivaram, and Dr. Ganesh finally selected the old haunting *khandar* of the MERADO Campus (now NCL Innovation Centre), mainly because of the proximity to NCL, and the NCL infrastructure engineering personnel were familiar with each corner of the structure. It was a defunct structure for at least ten years, and hence, to bring it to the standard Indian institute structure was really challenging. Fortunately, Mahajan, Mane company accepted the challenge, and started working on it, starting with a structural audit to establish the capacity/capability of the structure. The complete NCL machinery (purchase, stores, engineering section) was put to work. In one of the meetings, Dr. Sivaram and Dr. Ganesh inspired the task force by saying, 'I know that you are stretching your capabilities by overworking, it is painful, but remember that these are labour pains, and you are a part of the efforts of delivering a new child, new concepts, new dreams, and ultimately a new vision; you will certainly enjoy this *navnirman*, once it is realised. This really provided the much desired impetus to facilitate, rather accelerate the whole process.

The place was allocated – teaching-cum-research labs, lecture hall-cum-seminar hall, library-cum-meeting room, faculty offices-cum-tea room – everything was something-cum-something, can you imagine? The total area that was getting ready was ten thousand square feet, which is half of Mendeleev Block, but it was meticulously planned and executed to accommodate the functional requirements, keeping in view the aesthetic sense. Basic instruments were ordered. IISER purchase requisition No. 1 was for the microfilt bio safety hood (2' x 2', dual side), and was raised and issued by me. Tata movable phones were ordered. The internet was still dongle based; some faculty members did not even get a proper table to start with, forget the luxury of a single seated room, but the things were really getting in place, and now the two vital pillars of the institute needed to be structured and raised i.e. the faculty and students.

Efforts were made to get some capable faculty members to start with, essentially to maintain the international standards of the institute. There was a pressure due to the time constraint, but not at the cost of academic standards; both were well balanced, and we had Dr. Ambika, R. G. B., R. R., Neelesh, Samir, Vikram, Sucheta, and others as regular faculty members, whereas visiting faculty members were really the 'who's who' of the wisdom of Pune. The team was small, and hence, coherent. The responsibility of the practicals was shared by Mr. Adhav, Desai, Neelesh, and me. Neelesh and I designed the

biology practicals, and even took some basic biology lectures.

Right from the designing and implementation of the infrastructure within the limited space, time was demanding; many a time it meant going to the market to buy chemicals, goggles, etc., talking to suitable, experienced teachers from colleges who were dealing with the undergraduate practicals. The main job was to change the mental orientation to fit into the vision of IISER, which was successfully done by the IISER members. Everybody worked beyond the time of the need; perhaps the heart was overruling the brain.

More or less similar activities were going on in IISER Kolkata, which was trying to settle down under the mentorship of IIT Kharagpur. It was decided to have a combined admission process restricted to IIT-JEE, KVPY, and Olympiad winners. Sixty offers for each IISER were made from the IIT-JEE list, and were counselled at Kolkata in IIT Kharagpur campus, with a ten-member contingent from Pune, which was mainly drawn from NCL, NCCS, and Pune University; an equal number came from IIT Kharagpur as representatives of IISER Kolkata. Ten teams, with a member from each IISER were made, and the main job of the counsellors was to help the candidates to select between Pune and Kolkata. The members, including me, were not fully aware of the procedure of reservations etc. as all the things were master minded by Prof. Mathur of IIT Kharagpur. This *Bhishm Pitamah* of the IISER admissions was associated with the admission activity till last year. Offers were made and sent to the candidates; finally forty-five accepted the Pune offer. The second round of counselling for KVPY candidates (5P, 5K) and Olympiad winners (5P, 5K) was carried out in the NCL campus, Pune; one candidate joined Pune, and none joined Kolkata. Thus, our first batch of forty-four students was ready to enter this historic, unique experiment in science education.

Finally, all was set to raise the curtain for the real academic inauguration. The first lecture on the 14th of August, 2006, at 8:30 AM in the lecture-cum-seminar hall was to be delivered by Prof. Milind Watve (then in Garware College) on 'What is Science?'. He was to be introduced by Dr. Ganesh, who was unfortunately not available, and keeping in view 'the tradition' of IISER, it had to start on time, and therefore, I was asked to introduce him. Thus, I was the first to face (pun intended) the students of any IISER in the country. The second day was a holiday, and the Independence Day flag hoisting was done in the IISER hostel in the NCL Guest House complex, christened then as HRI, and regular classes of the first ever novel experiment of the symbiotic growth of research and education (not a cliché then) began in the country.

These are a melange of thoughts which may not be in strict chronological order as they have come from the heart, and not from the brain.

Note: I purposely stop here as the later developments are witnessed by many members of the IISER community, and may be described in other places. I am proud that I was a part (may be at the nano scale) of this epoch making exercise of building IISER Pune.



IISER Pune: A Great Beginning to World Class Science Education

-Prof. Sourav Pal

I have been associated with IISER Pune since its inception. IISER Pune has been built with an objective to promote fundamental science research and education together. The country needs institutes that promote basic science and inter-disciplinary research in a holistic manner. The establishment of IISERs in various parts of the country was a major step in this direction. In particular, the objective was to establish a niche for undergraduate education in science.

In 2006, the first IISERs were set up in Pune and Kolkata. Subsequently, in 2007, a third IISER was set up at Mohali, followed by the ones in Thiruvananthapuram and Bhopal in 2008. More IISERs are being planned by the government. I am happy that IISER Pune is now completing a decade of its glorious existence. It was set up on land belonging to CSIR-National Chemical Laboratory (NCL) through a memorandum of understanding. I have been fortunate to have been involved with the implementation committee of IISER Pune from 2006. On this happy occasion of the completion of one decade by IISER Pune, I recall that the first joint committee to frame the syllabus for the IISER undergraduate programme, which is a five-year BS-MS course (on the lines of an integrated Masters course), was held at NCL. I was personally involved in its organisation, and participated in the syllabus making. IISER Pune started functioning from August 2006 with its first batch of undergraduate students. I was involved from the stage of admission. Later, IISER formally started a PhD curriculum. The faculty members were selected with great care. Along with this, the construction of buildings started in the area earmarked for IISER. Prof. K. N. Ganesh, who became the first director, is presently continuing to hold his post. He has been a visionary leader, and his role in the careful selection of excellent faculty and in the construction of buildings is exemplary. The faculty members are excellent, and are beginning to carry out high quality research, and the buildings and facilities constructed for both teaching and research are absolutely outstanding and world-class. In these ten years, the campus has grown in terms of the number of students, hostels, and various facilities for entertainment, in addition to research facilities and working space. The classrooms are excellent, with modern amenities. Very rarely does one come across a more beautiful educational campus, at least in this country. On behalf of IISER Pune, I must congratulate Director Prof. Ganesh and all others associated with this development. I must mention that NCL also provided excellent support to help build IISER infrastructure in the formative years, when Dr. S. Sivaram was the director of NCL. When I took charge as Director of NCL, I continued the support from NCL, when required.

Personally, I was also involved with IISER Pune as an adjunct professor from 2006, and thus participated in teaching, along with some administrative aspects. I have greatly enjoyed teaching in IISER, particularly at the undergraduate first-year level. This continued very actively even when I was Director of NCL. I cherish the love and respect that I have received from the students who I have taught.

It has indeed been a great pleasure to see IISER Pune grow in infrastructure, quality of research, and importance as a science education centre in the country. Today, it stands tall, and is easily among the very few excellent institutions for science education. IISER Pune has also given due importance to teaching humanities and many soft skills required for the proper growth of students. The growth of IISER Pune has been truly remarkable. Of course, needless to say, it attracts a high quality of students through its established admission procedure as well as its high quality faculty in all disciplines. One of the great features of the undergraduate education of IISER Pune is its inter-disciplinary nature, whereby the basic degree is just a science degree. It has established a class of its own, and I am sure that in the coming years, it will grow further, and will strive to achieve merit by international standards. Being a chemist, I am happy to note that the IISER chemistry curriculum has been accredited by the Royal Society of Chemistry, UK.

As someone involved with IISER Pune as an adjunct professor, and seeing IISER's growth from NCL, I wish great times ahead for IISER Pune. I congratulate the director, all faculty members, staff members, and students on this happy occasion of a decade of excellence.

A New Star in the World of Science Education and Research

An insider's view of how IISER Pune is viewed by outsiders!

-Prof. L. S. Shashidhara

While the idea of integrating undergraduate education in basic sciences and high quality research is pretty old, it was sometime between 2005 and 2006 that discussions in the academic circles on the need to establish dedicated research institutes that also run undergraduate education became louder and audible across the nation. A document was swiftly put up to the Cabinet to seek approval to set up IISERs, which the Cabinet approved with equal speed, and the first two IISERs were set up in April 2006.

Prof. K. N. Ganesh was appointed as the first director of IISER Pune. He was given a document, which is known as a Detailed Project Report, which mandated the objectives and goals for the institute, and three crore rupees (as the first installment!) to build the institute. The challenge on hand was to set up an institute that was unique, not just to India, but to the world. The academicians and officials in the government had very high expectations of the IISERs. But, the set objectives seemed utopian, and the complexity of India daunting! Prof. Ganesh took up this challenge, partly due to his self-confidence, and partly due to the enormous support provided by the academic community of this country. IISER Pune enjoyed the goodwill of the academic community, who were ready to help in designing the curriculum, setting up the labs, and actually teaching courses and motivating students and young faculty in their adventure. Three people who travelled together with Prof. Ganesh in this journey from the get-go are Prof. G. Ambika, who took care of all the academic activities, Dr. A. A. Natu, who took charge of the setting up of facilities, and Dr. R. G. Bhat, who dedicated himself to the safety and welfare of the students. We should give equal or more credit to the first batch of students. They joined an unknown institute, not knowing how it would shape their own future. This was not only an act of courage, but also a symbol of commitment to nation building. A true act of patriotism! One thing was certain – these students would shape the future of this institute.

Prof. Ganesh was clear in his thoughts. If one had to build an institute of top quality, one needed people of high calibre. To attract such people, one needed to build good research infrastructure. But the challenge was the question of which came first. Could you attract good faculty members only based on verbal promise? It would take years to build good research infrastructure. But the show had to go on. Year after year, we needed to recruit undergraduate students. Total integration of research and teaching meant undergraduate students had to work in research labs with PhD students. In this context, renting the Sai Trinity premises, and establishing state-of-the-art laboratories was a bold step, another 'first of its kind' decision in India. The strategy was to arrange for more hostels, and space for teaching and research in a phased manner such that nothing was left unutilised – so that every rupee was spent wisely. IISER Pune added to its fold, building after building. After the NCL innovation park, it was the Central Wing of Sai Trinity, then the West Wing, and then the East Wing. In parallel, we started the construction, of what is fondly named HR4, and of Mendeleev block. HR4 has had several *avatars*. It started as a hostel-cum-lecture hall complex, became part hostel, part Guest House. Then it housed faculty offices, and finally, now, is put to use as a Guest House-cum-mini conference centre, as per its original architectural design!

As the years passed, more and more buildings came up, some faster than the others. Despite all the financial problems, and associated delays in campus development, we managed to house all students on campus by the summer of 2013. It was not until the beginning of 2015 that we could claim that we had a 'well developed' permanent campus of our own. IISER Pune has set up some of the best-equipped labs in the country. Rest,



as they say, is history. Since then the productivity has doubled. Not just in publications, but in overall academic strengths. The number of conferences, symposia, workshops, and seminars have increased several fold. On campus, we have some twenty-five lecture and seminar rooms, and a few discussion rooms. There are (many) days, when we can't find a room to organise a meeting. The campus is that busy! Student-driven activities such as Mimamsa, Karavaan, Disha, and Prutha put together by student clubs including the Science Club, Quiz Club, Music Club, Dance Club, Sports Club, etc. too are very frequent, giving an opportunity for every student to strengthen and showcase their creative skills.

Recently at a dinner, I met a delegation from a European University. I introduced myself as a faculty member of an institute, which is a new addition to Pune's clutch of educational institutes. The head of the delegation expressed surprise and said, 'New addition? We have heard about IISER Pune so much that we thought the institute is several decades old.' It was a compliment worth recording, and it also made me wonder why IISER Pune became a brand name so fast. What was it that we had achieved other than building the buildings? Or maybe the brand name is in the virtual world. The modern 'instantaneous' communication system, which spread the news of the arrival of IISER Pune the day it arrived, may have made it look like an old, established institute in the cyber world. Indeed, within months of establishing the institute, we started receiving applications for faculty positions from people who have had offers in their hands from more established institutes such as IISc, TIFR, and the IITs.

I think the brand name is real. A research institute is known for its research publications, and IISER Pune is already known for its research output. An educational institute is known for its alumni. Although our alumni have not yet assumed leadership roles in academia or industry, or in any other walk of life, IISER Pune is equally known for both, the quality of training, and education imparted to its students. The intelligent and uninhibited questions by students in seminars are key reasons to believe that IISER Pune is on the right track in imparting science education. Undergraduate students are provided training to use high-end equipment. They are allowed, even encouraged, to make use of the research facilities. This makes them more confident to face the world of cutting-edge research. A premier institute, which admitted one of our students for a PhD programme had this to say (in an unsolicited e-mail) – 'The professors who interviewed the student were impressed with the research and academics happening at your institution'. The intensity with which our students contribute to societal causes through Disha and Prutha is a reflection of their maturity and concern for the less privileged population of the country. The clean and eye-pleasing campus too makes the visitors feel an atmosphere of care and attachment. Obviously, they carry a very positive impression of IISER Pune.

All institutes have their own positives and negatives. IISER Pune too has its own share of negative points. But, the positive ones outnumber the negative ones, thereby, filling the institute with lot of positive energy. The fact that the average age of the faculty members in IISER Pune is below forty years also adds to the vibrancy of the place. The challenge is to maintain the same level of enthusiasm, even while the institute and its members age with time!

The IISERs are the first of their kind in India. They have a greater responsibility in ensuring the success of this very attractive education model, as various other government and non-government educational institutes are looking at the IISERs as role models. It is also important that the benefits of various new educational initiatives that are being developed at the IISERs spread beyond the boundaries of the IISERs.

From an empty 'football field' to what we are today!

-Dr. Mayurika Lahiri

It was May 2007 when I came to Pune for my job interview at IISER. It was my first visit to Pune too. I stayed in the NCL Guest House, and on the morning of my job talk, I went to NCL Innovation Park, from where IISER Pune was functioning. I met Prof. Ganesh and Shashi, and a few faculty members from physics and chemistry disciplines, and one from biology discipline. We all trooped to Agharkar Research Institute where I gave my job talk, and at that time, it was Prof. Ganesh who drove us (Aurnab and me) to the venue in his own car. During that visit, we were taken to a building called Sai Trinity where all the floors in the central tower (that was the one we visited that day) were empty, like a large football field. Prof. Ganesh and Shashi were contemplating on renting some of the floors since space was needed for expansion, and the one floor of IISER Pune in NCL Innovation Park was not adequate.

I was offered a job, and officially joined from January 2008. My first so-called 'office' was in the boardroom beside Prof. Ganesh's office which I shared with other newly joined faculty – Aurnab and Sudarshan. This room was unique as it was used as an office, a boardroom, as well as the doctor's room! I remember Mari preparing and serving us tea and coffee in the same 'boardroom-cum-office' along with biscuits every day between 10:00 AM and 10:30 AM, and again between 4:00 PM and 4:30 PM. It seemed too good to be true. For the first three weeks after joining, we stayed at the then IISER Guest House in Panchavati. A funny incident happened once. The showers in one of the bathrooms were not functioning properly, and we asked the then civil engineer (cannot recall his name) to check it. He came back completely drenched and said, 'The showers are definitely working now!'

During Fall 2007, and in the early part of Spring 2008, I remember Shashi would make a trip twice (once in the morning and once in the evening) to the Sai Trinity Building to see that the inner constructions were happening as per schedule. By January, Raman and Ramanujan halls were ready in the Sai Trinity Building, and I took my first lecture of the BIO 202 course on apoptosis, followed by ageing. It was the fourth semester for the 2006 batch. At first, it was quite daunting to face forty-five students on the first day, but gradually one got used to teaching. Since the research laboratories were not yet ready, more time was devoted to preparing lectures, and interacting with students. We also learnt to prepare indents for chemicals and instruments that would be required for research. It was quite an experience as I had never done research in India (left India after my BSc) and therefore, had to understand the various government rules and regulations for indenting for instruments specifically.

In August 2008, we had our first batch of PhD students, and since both faculty members and students were few in number, we somewhat got to know each other very well, not just within a discipline, but across disciplines too. The small boardroom on the first floor in the Sai Trinity central tower was more than sufficient to accommodate the few faculty members that we were then. Everyone seemed to know everyone. But today in March 2016, I cannot say the same. Today we are finally in our own campus, and have over a hundred faculty members, and close to two thousand students with a lot more staff in administration. I live on campus, and feel great as the campus is truly beautiful. Today, IISER Pune is bustling with all kinds of activities, both, academic and non-academic. It is a very vibrant community. A lot of credit goes to Prof. Ganesh and Shashi for what we are today.

Sometimes I do reminisce about the 'good old' days and feel very nostalgic. Things were very different then. But having been present since the initial development and growth of IISER, having experienced all the changes, I feel quite proud to belong here. It gives me a sense of ownership – a feeling that one can only feel when one has experienced quite a lot over eight long years.

Celebrating the Past and Charting out the Future

-Dr. R. G. Bhat

It is amazing to realise that IISER Pune is celebrating its tenth anniversary this year. We have arrived at the stage of rejoicing our successful journey that has been personally exciting and enlightening for me. I vividly remember that unforgettable day in July 2006 when I landed in Pune. It was raining cats and dogs during that monsoon season. I was supposed to join a new MHRD institute which I had not even imagined anything about, and the name of the institute was still in the stage of conception. Thoughts were playing a tug-of-war in my mind. On one hand, I was excited that I was going to enter the career of my choice because teaching young students and doing research had been my dream since my PhD days. On the other hand, I was totally unaware of the future of this brand new institute that did not exist at that time in reality. At that point of time, Prof. Ganesh (the then future Director of IISER Pune), and my thesis supervisor, Prof. S. Chandrasekaran, IISc Bangalore, proved to be inspirational *gurus* for me. They showed the right path to my complicated insights. With great courage, I chose the path of my career, and joined IISER Pune as the first faculty member. My sincere gratitude forever to Prof. Ganesh for offering me this position, and for the continuous guidance. Possibly, this decision proved to be a turning point in my career about which I am still proud of. On my very first day, with great enthusiasm, Prof. Ganesh showed me two buildings that were under renovation. One was the then MERADO building (IISER Pune's very first academic building at Innovation Park, NCL), and the other was, at that time, an almost abandoned hostel (renamed as Hall of Residence-1, near NCL Guest House). He briefed me about my responsibilities as a faculty member, a mentor, an advisor, and the warden for the incoming students. I started my career and academic activities, working from National Chemical Laboratory (NCL). In the initial phase we were working on ordering the required equipment, chemicals for undergraduate experiments, and reviewing the syllabi. Meanwhile, I was preparing for offering course work for the first time in my life. I must mention that Prof. Ganesh's and Prof. Ramachandran's pieces of advice in the round table meetings helped me plan the course work in detail.

Finally... I witnessed the very first batch of students (with a strength of forty-four students) joining IISER Pune in August 2006. Believe it or not, this was a very exciting moment for all of us. Excitement was followed by a lot of responsibility. We all got busy with teaching and interacting with students. Students were naïve and anxious in the new place. I had a great time as a warden, interacting with students most of the time in the evenings. To accomplish the role of a warden, my wife and I moved into a suite in the Hall of Residence-1, and shared our good and bad times with the students. To keep everything in order, we set up rules and guidelines for the hostel. Six faculty members including the director were busy in teaching, tutorials, and managing undergraduate labs. We used to set up the undergraduate experiments in the morning hours, and then rush to teach courses/conduct tutorials, and in the afternoon we used to run the practical sessions. Many a time I used to take tutorials in the mess (the dining hall), late in the evenings. Simultaneously, we were busy in the setting up of the library. I still remember the times when Prof. Ambika and I went around the city many times to purchase books of different categories. My role as a teacher and a warden or guardian was a great challenge! Imagine forty boys and four girls staying in one hostel with a kind of barricade on the veranda! I still remember those nights when students used to knock on the door of my room late at night to complain about the stealing of buckets, fusing of bulbs, power and water cuts, etc. One year passed, and the next batch of students joined. Likewise, more faculty members became a part of the institute. I greatly admire and appreciate the students and faculty members who coped up with the system, and adjusted with the shuttling between

hostels and the institute – it was quite a long distance. The plying of buses with the IISER Pune logo was a common sight in Pashan-Sus Road in those days. In the year 2008, the institute hired a new building called Sai Trinity where teaching and research activities started flourishing. A great memorable moment in the history of IISER Pune was the landmark transfer of NCL land to the institute to set up a permanent campus of our own. This led to a great headway in setting up our own campus. With each passing year, more students and new faculty members joined. Then, slowly, cultural activities started in a big way, though in the first three years, students participated in cultural programmes as well, albeit at a smaller scale. I feel proud to be a part of IISER's cultural fest, Karavaan, which was conducted in our own campus for the first time. Gradually new buildings such as HR4, Mendeleev, h-cross, G1, hostel buildings, etc. started mushrooming in the permanent campus. I feel excited to have been a part of this entire journey. The institute grew bigger and bigger day by day.

With each passing year, along with the institute, I witnessed the growth of all the departments. I would particularly like to share my memories about the growth of the Chemistry Department since August 2006 as I witnessed each and every moment of the department with great intensity and closeness. The history of the Department of Chemistry at IISER Pune dates back to August 2006, right from the day of the inception of the institute. This day will always be remembered in history of this great organisation. Over the last nine years and eight months, the department has dramatically expanded, restructured, and flourished, starting from a very small congested laboratory. The history of the department has been narrated in the following sections which unravel through time in several phases.

1. The early days in NCL (May – July 2006)
2. Initiation from Innovation Park (August 2006 – January 2009)
3. Chemistry at Commercial Building – Sai Trinity (January 2009 – July 2011)
4. Journey from Mendeleev Block to Main campus (July 2011 – October 2014)
5. Mega movement to Main building-Academic Complex (October 2014 – till today)

The early days in NCL (May 2006 – July 2006): Initial efforts to set up IISER Pune and its individual Chemistry Department started in NCL. The initial focus was largely on designing the course curricula in detail, course modules, setting up labs, and ordering equipment and chemicals for undergraduate laboratory experiments. Under the visionary stewardship of the founder, director, and eminent scientist, Prof. K. N. Ganesh, the department started evolving rapidly to establish a first-of-its-kind chemistry department in the country. The Chemistry Department with two faculty members offered a few core chemistry courses.

Initiation from Innovation Park (August 2006 – January 2009): Originally, the institute



was situated in NCL Innovation Park, and all the departments shared one single floor. We conducted undergraduate practical sessions in a very small laboratory – small in size but equipped with safety precautionary measures. Though we had limited space, we could carry

out our duties effectively by exploring the close knit facilities of the laboratory, the library, and the lecture halls. Having had a humongous task in the first year, the department



was very aggressive while appointing five new faculty members from different research backgrounds in the second year. Due to the limited space, and a great deal of involvement in teaching and administrative responsibilities, research activities were going at a slow pace. The director, who also happened to be (and still is) the head of the Department of Chemistry, strongly believed that intense research involvement would keep up the momentum, and also ignite and inculcate the scientific temperament among the young but motivated undergraduates. Some of us were busy drafting PhD guidelines for the institute. In August 2008, the Department of Chemistry started its PhD programme for the very first batch. The department started accessing many scientific journals and search engines that aid research activities. While buildings were on the stocks in the main campus, the institute leased a commercial building, and engineers were instructed for the speedy construction of undergraduate and research laboratories meeting environmental regulations.

Chemistry at the commercial building – Sai Trinity building (January 2009 – July 2011):



In January 2009, with great enthusiasm, the Department of Chemistry shifted to the Sai Trinity building, a new laboratory facility in Pashan. Both, undergraduate and research laboratories were set up in one place along with the required sophisticated instrumentation facility. In this year, the Chemistry Department welcomed several new members (faculty, scientific and teaching assistants, and support staff) into its fold, both in terms of human resources, and instruments. Several fields were also added in chemistry, notably chemical biology, material chemistry, medicinal chemistry, and chemical physics. In the midst of all these developments, intense

research activity finally began. Each passing year attracted more faculty members, and thus, more graduate (PhD) students. The department offered a common laboratory, and all the faculty members shared the laboratory with one working bench. Though this was very congested, it was a tidy lab, and faculty members and students learnt a great culture of sharing the common facility and sense of ownership spirit. By mid-2011 along with the department, the faculty also grew, both in numbers and distinction.

Journey from Mendeleev Block to the main campus (July 2011 – October 2014): In less than two and a half years, the Sai Trinity building was overcrowded, and the sense of urgency to shift to our own campus was at its peak. To cater to the immediate requirements of laboratory space, the institute came up with a quick solution of having pre-engineered buildings. Change had crept through the ever wide-open main gate to the closed doors of our laboratories. The very first, pre-engineered chemistry building, Mendeleev Block, housed faculty offices and modern laboratory facilities of a great size with all safety measures in place. Coincidentally, this year also happened to be the International Year of Chemistry (IYC).



सेवका होना
सब की की राखण
अविरोधीय

Lecture Hall
Dr C V Raman
Auditorium

The department soon got engaged in intense research activities, and produced many publications of international repute. In the year 2012, the Chemistry Department produced its first two PhD students, and indeed, it was a moment of great pride. Within a short span of time the department was recognised as one of the leading chemistry departments in the country, and made a mark internationally. Many international delegates visited the department that culminated into fruitful international collaborations at the departmental as well as at an institutional level. After rigorous evaluation, our chemistry undergraduate programme was recognised for RSC accreditation, and the department was the first one to be recognised in India. Foreseeing the department's continuous growth along with the severe space crunch, higher enrolments with the passing years, and the need for increasingly modern laboratory space, the facilities for research and teaching in the institute were now ready with a huge laboratory complex of three floors.

Mega movement to the Main Building (October 2014 – till today):



The large laboratory complex housing individualistic labs with ultra-modern facilities, and safety measures was ready in mid-2014. This resulted in a mega movement on many levels. The department currently boasts thirty-eight faculty members, twelve supporting staff, over a hundred and fifty graduate students, and around two hundred undergraduates. The undergraduate chemistry programme is unique in its offering a potpourri of courses with an interdisciplinary approach. The department has world class instrumentation facilities such as four NMR spectrometers (two 400 MHz, and one 500 and 600 MHz each), MALDI and HRMS mass spectrometers, a state-of-the art X-Ray crystallography laboratory (three Single crystal X-ray diffractometers), sophisticated laser facilities, and a great collection of scientific literature. Today the department is known for its quality research and teaching. It feels great to note that some of our faculty members have been recognised with prestigious and notable awards.

When I sit back and imagine the earlier picture of barren land, it reminds me of the journey of IISER Pune from the ground to a fully grown institute that is now internationally recognised for teaching and research. I am proud to be an important part of this mesmerising journey! We are grateful to our alumni, mentors, faculty members, and staff members who have been an integral part of IISER Pune for the past almost ten years. Thank you for making a difference in the lives of your fraternity. Everything ages with time, grows older, and turns weaker, however, interestingly, an ageing institute grows stronger and stronger with each passing day.

1st day: August, 2006



Faculty with Prof. Narlikar, 2006



GMRT site, 2008



Physics Lab: Innovation Park, 2006



Kalpa editing session, 2010



Ambar Lake, Lonar Crater, 2009



Outstanding faculty award, 2009



SERC School, 2011



Delegation to UK, 2009



Academic Administration, 2016



WTSA, 2015



With the 1st PhD student, V. Resmi



University of Melbourne, 2015



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Synchronization schemes in dimensional discrete systems

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¹ May 2006

² Publication 9 August 2006

³ PhysScr74/510

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As we move on...

-Prof. G. Ambika

'Time plays like an accordion in the way it can stretch out and compress itself in a thousand melodic ways.' – Julia Glass.

For me, the past ten years in IISER Pune have been packed with many moments of action, so fast-paced, and exciting that they were like a 'quick series of chords'. As I recall all those moments, I see how they served to add colour, richness, and variety to my days here. I look back on the traversed time line, and see many peaks of activity, some of them broad, stretching over a considerable amount of time, a few others sharp and high, but in general, with hardly any gaps in between.

On the Independence Day of 2006, while waiting at the airport in Bangalore on my way to Pune, several vibrant ripples were resonating in my otherwise cool mind. Unable to gauge the significance of my new venture, still unclear about what lay ahead, I was indeed at the crossroads of my career. It took me only a few days to assure myself that I had taken the right decision. I was thrilled by the fact that I had got the chance to teach such bright and interested students, and at the same time, concentrate more on my research interests. Later, the possibility of getting to design and model the curriculum and course structure for a new institute topped it off like a cherry on a chocolate cake.

When I set time in reverse, I can relive all the moments spent in interactions of various types with the students at all levels, within the classrooms, in the labs, in the dean's office, as the warden of the girl students during the first four years, issuing books from the library in early years, lively evenings in HRI with during and after dinner discussions on a variety of topics ranging from how to measure and characterise friction to locating stars in a galaxy.

When we started the Science Club, we organised Science Day, and field trips to GMRT, IUCAA, and Lonar Crater, etc. as a part of the Science Club activities. Organising such activities gave me several days of lively discussions and interactions with very enthusiastic students like C. B. Ajit, Lakshmi Priya, Madhuresh Sumit, Darshan Joshi, and Tushar Shrotriya, to mention a few.

From 2007 itself, we started the institute's annual magazine, Kalpa, and as the faculty-in-charge (till 2012), I had many interesting sessions discussing literature, editing, designing, etc. with very smart students. I recall the spirit and enthusiasm of the early editors like Sisir C. Anand, followed by Roshni Bano, Pooja Naik, Krithika, Aashay Patil, Pallavi Patil, Alisha Pathak, Krishna Anujan, Rachana Bhavé, and others over the years.

As the tenth edition of Kalpa is getting ready, I am delighted to note that this magazine has sustained and improved year after year due to the continued enthusiasm of fresh batches of students joining in every year.

As Dean of Graduate Studies, I was involved intensely with the making of the curriculum for the BS-MS programme. In early 2008, IISER Pune took a bold decision to have considerable flexibility and freedom in the choice that students could make while selecting their courses. Certainly, this has given the students an opportunity to individualise their programme based on their personal academic goals. We were entrusted with creating an ambient atmosphere for them to achieve their goals. This has created many challenges, especially in the scheduling of lectures and lab sessions, conducting exams, etc. I am happy with the fact that we have solved all these issues effectively, and stabilised the procedures over the years in the best possible way, making them comfortable to both, the students and the faculty members. Of course, this meant several hours of discussions, and pooling in of ideas and suggestions every semester. Now we have a good system of designing and



adding new courses as we go along, keeping in mind the required flexibility and freedom, and at the same time placing relevant checks and quality controls. We have been able to come up with a few relevant documents on guidelines for grading, exams, and other components of continuous assessment, academic misconducts and actions, etc. I am sure these documents will be rated highly for their simplicity in comprehension, and ease and clarity in implementation.

The students who graduated from the previous batches will bear testimony to the benefit of our method of training in facing greater challenges and achieving bigger career plans. It has now been proven that broadening the students' horizons in the first two years makes them wiser in selecting courses and a career later. So, also, the in-depth study of subjects of their interest and inclination in the later years introduces them to ways of thinking that are interdisciplinary and seamless. The semester long projects, and a full fifth year of a research project and thesis open doors to the pleasures and thrills of research at a very early age to our students. I am happy to note that six students from the first two batches have already completed their PhD degree from very good places in the US and Europe, and have started their post-doctoral work.

It is quite natural that there will be a few students in every batch who find the course work here a little difficult to adjust to in the beginning due to various reasons. Over the years, we have started for them, a few initiatives like extra tutorials run by our own PhD students, special text book grants, special coaching in the correct usage and understanding of English, etc. Since last year, we have also started a refresher course in mathematics for those who have not studied the subject in their eleventh and twelfth standard. In addition to the regular mentor-mentee system, our students can now approach any member of CoMAP, a committee for monitoring the academic progress of students. The campus is thus, totally student-friendly, addressing all the academic requirements of the students.

All these years, I was intent on keeping to all the relevant deadlines related to the academic programme. This has always been a challenge for me. In spite of a few difficult times in my personal life, I am happy that that I could meet all the deadlines related to finalising courses, completing registrations, conduct of exams, announcement of grades, etc. exactly on the dates announced in the academic calendar till now. In this context, I thank the staff in academics for their support and co-operation.

Over the last ten years, I have organised several interesting events including SERC School in nonlinear dynamics in 2011, National Conference on Nonlinear Systems and Dynamics (NCNSD) in 2012, Indo-US Workshop on Time Series Analysis, WTSA in 2015, etc.

IISER Pune started student exchange programmes and MoUs with universities abroad as early as 2009, when the first institute delegation visited a consortium of UK universities. The most recent progress in this direction is the designing of a curriculum for Blended BSc programme in colleges in Pune, a new venture in collaboration with the University of Melbourne which will be starting from August 2016.

In between such serious activities, there have been lighter moments like occasional visits to bookshops to select books for the library, hours spent in art galleries and with artists to select paintings for the campus, that keep me close to the passions of my heart. As the first chairperson of the Women's Cell, I have spent many hours spelling out the doctrines for gender equality, and together with the present chairperson, Dr. Mayurika Lahiri, and the other members, we have evolved a system that makes our work place comfortable for both genders.

I find time to meet the new faculty members every semester to brief them on our system and curriculum and the guidelines to be followed. I spend many hours talking to the parents of students, in addition to assuring them on the day of the admissions, and congratulating them on Convocation Day. It has taken a considerable amount of my time to get the software package called SAM customised over the years for our basic requirements in academics. Also, training our staff in the administration of academics, and monitoring all activities, especially during events like the annual convocation have been quite engaging. I have had a nice time teaching five or six different courses in physics in various semesters. My research career during these years has been quite active, with thirty-five research papers published since I shifted here. These report a few notable contributions in the area of nonlinear dynamics, time series analysis and complex networks. To be specific, a new coupling scheme for synchronisation that involves only transmission of intermittent information, and hence of use in secure communication with enhanced security, environmental coupling that can induce amplitude death, an extended environment that can control emergent behavior in connected systems, and complexity measures from time series and networks are some of the relevant ones.

This year, 2016, is indeed a significant one for me in several ways. This is the fortieth year of my career in physics, the thirtieth year of my research in nonlinear dynamics, and the tenth year of the present phase of my career in IISER Pune. Being one of the first few faculty members, I was able to add a few 'firsts' to my credit, like the first research paper from IISER Pune, the first PhD student, V. Resmi (who worked with me) to graduate from IISER Pune, etc.

Now I stand enriched by my research with my teaching practices improved, my views on academics and curriculum evolved and my management abilities enhanced. There were one or two adventures, a few challenges, and at times, stressful moments. But I always had my senior colleagues for seeking advice and guidance. I get refreshed year after year, seeing the happy jubilant faces that come in in August, and the shining and confident faces that go out in May.

As I walk in the present campus now, I tell myself every day how much I like this campus for its cool and breezy mornings, bright and sunny afternoons, calm and relaxing evenings, the surrounding beautiful greenery and gardens hedged by fiery orange flowers on the way, the safety and security that makes it comfortable for me to work in my office at any time of the day or night, and the cleanliness that is evident around. I present here a ton of thanks to the director and all my colleagues who contributed in many ways, for their creative thinking, careful planning and timely execution of the campus building process in the last ten years.

In one line, the impact of IISERs in the Indian scenario can be put this way – now there is a third option (other than engineering and medicine) for the bright students of the country, for their studies and career after school. This itself is a great turn of trends brought about in such a short time.

As we move on, we carefully and continuously make efforts to modulate all parameters for better outcomes. We have set a pattern in academics and research that will keep going ahead on its own; still many more variations and additions will surely be needed to reach our target with the changing environment around us, so that we move forward and stay in front.



THE BUBBLE

Indian Institute of Science Education and Research, Pune, Thursday, April 21, 2016

SPIC MACAY Overnight Concert

All the maestros were honoured with exquisite presents by faculty members and senior SPIC MACAY volunteers. The audience as well as the artists were quite pleased with the volunteers, as could be gauged by a few messages that we received. It was a wonderful night with mesmerising performances. The volunteers did a great job, was what Mr. Nandan Kudhyadi, a film producer had to say. Shruti Tai expressed her desire to practice in the lovely IISER campus, and Shri Barotji complimented the organisers for ensuring that he could perform in a relaxed and calm atmosphere.

Freshers 2015

All of us were given paper arm-bands with phrases from Harry Potter, science, and what not. We shuffled into the auditorium, a few of us with costumes, eyeing the stage with dread. One after another, we put up our performances, and our mood was lifted. It was really fun to watch the boys dance to

the 'Baby Doll' song, and another group render One Direction, to which the audience danced. There was a zombie dance (people dressed up as zombies and dancing, not eating brains) and a horror fashion-show. The skit 'Blind Date', where fictional scenarios about how a date between two entirely unrelated famous personalities would go, was enacted, and it tickled everyone's funny bone, and left them in splits. Then of course, there was a dance performance by the seniors, and an amazing beatbox routine.

Pinkathon

The night before the event, the cricket field was abuzz. Students wandered around to find out what was going on, and many made themselves comfortable in the different stalls that were being put up. Many of them were surprised to see Milind Soman at 11:00 PM. A few enthusiastic participants managed to get a 'selfie' or two with him.

On the day of the event, the cricket field came alive at 4:30 AM, and the half-marathoners, and their pacers started to arrive. Women of various

age groups converged upon the IISER cricket ground. We were 'PINKED'.

Kreedajung

Kreedajung, the annual intra-IISER sports competition, is one of the most awaited events of the Fall Semesters, bringing out the competitive nature of students in a fun and exciting way. Kreedajung 2015 saw tremendous participation from everyone, especially the first year batch. It was conducted during the monsoons, and so naturally all the outdoor sports had to face the onslaught of the rains; yet the enthusiasm of everyone was amazing. Some of the events were basketball, football, table tennis, carom, chess, kho-kho, kabaddi, volleyball, throwball, athletics, etc. Here are some of the highlights of Kreedajung 2015.

A Pedagogical Experiment

For the Introductory Biology course in 2015, in the first semester of the BS-MS course, our instructors Dr. Kundan Sengupta and Prof. Milind Watve included model building as a part of the

evaluation. This exercise was meant to inculcate a practical approach to biology among the students. The students had to work in groups of ten, and were free to choose any biological system to make a working model. The students had to submit an abstract of the concept behind their model beforehand.

3.14.15.9.26

The Maths Carnival had a plethora of events attracting widespread participation. Posters of maths idols like Srinivasa Ramanujan, Lady Ada Lovelace, Evariste Galois, Emmy Noether etc. were displayed in a quadrangle. A beautifully rendered sketch of the genius, Alexander Grothendieck, could be seen promenading to the Carnival. Amongst the events, the one which had the most participants was Plato meets Rubik. As the title speaks for itself, Plato would have been dazed to see his solids being put into remarkable puzzle cubes. Efficient heuristic algorithms paving the way to the solution of not only the 3×3 cube, but also of several platonic solids, were explained with a peek into the underlying maths. If none of these excited one, there was the code-breaking event, for all those who imagined being a hotshot undercover spy. There was also Dumb Charades, but for the not-

so-dumb, as one needed to guess mathematical terms.

Mimamsa 2016

Mimamsa is an annual quiz, hosted and conducted entirely by the IISER Pune community. Widely regarded as the toughest science quiz in India, Mimamsa tests the fundamental concepts of undergraduate students from all over the country.

Mimamsa is a Sanskrit word meaning critical investigation, an appropriate choice, as this is exactly the nature of the quiz. Rather than questions based on fact and raw knowledge, Mimamsa tests its participants concepts through questions designed to invoke the investigative nature that is essential for research. Mimamsa was started in the year 2009 by Dr. Sutirth Dey, faculty at IISER Pune, with the intention of cultivating this inquisitive mindset in young researchers, a legacy that has since been carried forward for eight years by the students. Mimamsa has constantly expanded, and with each edition, sets a new milestone.

Disha Day

This year, Disha Day took place on the 14th of April, 2015 at HR4, IISER Pune. The evening began at 6:00 PM with a small photo exhibition showing our most memorable moments

of the year in pictures. Once the guests had moved in, hosts Anjali and Sneha invited the faculty coordinator, Dr. Anirban Hazra, to say a few words and announce the release of Disha's newsletter, Pahal (Volume II, Issue II). The evening was made more entertaining by a couple of performances from members of the Music Club. This included an instrumental performance by Harsha Sampathkumar on the mridangam, and Harsha Hampapura on the tabla followed by Parijat Banerjee's soulful rendition of You Raise Me Up.

Convocation 2015

The convocation was a matter of great anticipation for most of us, as five beautiful years at IISER would culminate on that day. Thus, after fun filled and rather frenzied months that followed that nightmare, I was eagerly waiting for the 27th of May, 2015. As a precaution, I decided to reach IISER a day earlier despite my house being in the same city. The night was filled with nostalgia; spending the night at the hostel gave us a chance to relive the fun we had missed out on the past year, as each of us had been away for our projects. More than anything, it was reassuring to feel at home in a place which had begun feeling alien

CAMPUS SECTION

Science Day 2015

Scientific festivities at IISER Pune

Surabhi K. S., Lecture Hall Complex

The Science Day celebrations were held on the 28th of February, 2015, for the very first time in the Sir C. V. Raman Auditorium. With much fervour and excitement, the programme began with a documentary, made by the Science Media Centre, on the work of Dr. Anjan Banerjee. The theme was 'Science for Nation Building'. The documentary focused on using genetic engineering methods for higher qualitative and quantitative output in agriculture. The need for this was highlighted, as India ranks second in both population and farm output.

This was followed by an inaugural speech by Prof. L. S. Shashidhara, who gave a profound insight into the purpose of science. The speech was centered on the fact that the barriers around pure and applied sciences are fast fading and that we all have to be ready to usher ourselves into a new era of philosophical understanding; an era of science, along with its applications, for the betterment of society. He stressed the fact that integration of science and technology was the key to development.

Prof. Satish Ogale, the Chief Scientist of the Physical and Material Chemistry Division of NCL, presented a lecture titled 'Supercapacitors: A Super-fast Way to Store and Retrieve Energy'. He began by emphasising the importance of energy for sustenance and perpetuation of development. He correlated the need for energy with higher GDP. He mentioned that the parameters measuring quality of devices were power, and energy density. He also talked about a range of charge storing devices from batteries to fuel cells. He

then delved into details about supercapacitors. Supercapacitors are electrically insulating but ionically conducting. The introduction of an activated carbon layer increases the net surface area making charging and discharging faster. The supercapacitors seem to be unparalleled when it comes to the speed with which energy can be stored. The lecture was followed by a demonstration depicting the rate of charging and discharging of a supercapacitor, prepared in his lab.

Royal Society of Chemistry (RSC) interns Arun A. Tanpure and Bijoyananda Mishra then shared their experience as the recipients of the summer research internship programme at the RSC, London. The first presentation was by Arun A. Tanpure who spoke about the quality ascertained by the impact factor of journals, and the number of citations being the marker for the quality of submitted papers. He also explained the role of editors as mediators between the publisher and the reviewers. His presentation was followed by that of Bijoyananda Mishra who then spoke about RSC International

Week, and the different components of RSC. He went on to elucidate the life cycle of a manuscript and the advantages and disadvantages of the open access strategy. He further elaborated on their roles in the commissioning department, where they had to identify upcoming scientists for the revival of the journal.

Apart from the events at the Sir C. V. Raman Auditorium, there was a poster exhibition on 'The History of Science' by the Homi Bhabha Centre for



Science Education, TIFR, Mumbai. The posters were enthralling, in the sense that they walked people through the course of development of science, starting with science in the ancient world with crude tools of the early Stone Age, leading up to the development of modern spacecrafts and supercomputers. The impact of science on society, and its evolution into a great global enterprise as a product of human endeavour were articulated.

There were also three ongoing book exhibitions by Segment Book Distributors, the Word Bookshop, and the India Today group. The exhibition catered to the interests of many, as the books under different themes incorporated a vast range of topics from sociology to astrophysics.

After a lunch break, the much awaited inaugural Pauling Memorial Inter School Science Quiz, organised by the Quiz Club of IISER Pune, was held. The prelims involved a diverse pallet of questions with quirky clues and funny comic strips. The prelims consisted of twenty questions, including tie breakers and lasted for about forty-five minutes, after which there was a short documentary on 'Science in India' by eminent scientists.

The five quiz finalists were Delhi Public School, P. Jog Junior College, Vikhe Patil Memorial School, S. E. S. Gurukul, and Dr. Kalmadi Shamrao School.



The questions were of three types – direct questions type-one, where each team was given two questions carrying ten points each, with one minute thinking time, and five points for a passed question, tie breaker questions, where scientists had to be identified based on a video, and direct questions type-two, which comprised one question per team, with twenty points for a correct answer, and ten points for a passed question. There were three clues per question with a stepwise decreasing gradation of marking.

This was followed by a rapid fire round which consisted of seven questions per team each for five points, and a bonus of ten points if all the answers were correct. At the end of the rapid fire round, Atharva Joshi and Pranav Kirsur of S. E. S. Gurukul won with a hundred and seven points, followed by Sahil Behere and Tanmay Pardeshi of Vikhe Patil Memorial School with eighty-four points. The prizes were distributed by Prof. L. S. Shashidhara and Prof. Pandit B. Vidyasagar.



The quiz was followed by a public lecture on 'Vigyan Prasara: Ek Aavhaan' by Prof. Pandit B. Vidyasagar, Vice Chancellor of Nanded University. Prof. Vidyasagar talked about the various channels through which science could be popularised in India. He emphasised the importance of conveying scientific concepts through experiments and demonstrations in order to reach a greater number of people from different facets of society, and recounted his experiences in doing so. His creative idea of resorting to poetry for etching scientific facts into people's minds is unique, and he has published many such excerpts in his book, titled 'Superclone'.

The last event of the day was a mesmerising play on the life of Sir C. V. Raman, by the Drama Club of IISER Pune. The play portrayed the dedication and undeterred enthusiasm of Sir C. V. Raman, a fitting end to an eventful day. ■

3.14.15.9.26

Math Day 2016

Dhruba Bora, Lecture Hall Complex

Some things are meant to be irrational. It so happened that Pi Day, celebrated as Math Day in IISER Pune, was kick-started on the 14th day of the 3rd month of the 15th year of the millennium, at 9:26 AM (remember the digits of pi?), with the cutting of an apple pie in the Pi (Mathematics)

Department. Soon, a radiant atmosphere enveloped the lecture hall complex (LHC), with the commencement of most of the activities scheduled for Math Day. Be it the buzz inside the LHC, folks running outside, or the crowd gathered in front of a notice board, there was maths in the air.

Along with the Maths Carnival events, there were several background ones. If you were a coding geek, or loved addictive brain teasers, the reception was your place-to-be. Every half-hour, a brand new tickler was put up, waiting to be solved before the next. For the coding geeks, maths based non-trivial problems were put up to be solved before noon. The folks running outside were a part of the puzzle relay race, wherein one of the four teammates was supposed to solve a puzzle, which led to a new one for the next teammate.

The Maths Carnival, which started soon after, had a plethora of events attracting widespread participation. Posters of maths idols like Srinivasa Ramanujan, Lady Ada Lovelace, Evariste Galois, Emmy Noether etc. were displayed in a quadrangle. A beautifully rendered sketch of the genius Alexander Grothendieck, could be seen promenading to the Carnival. Amongst the events, the one that had the most participants was 'Plato meets Rubik'. The title speaks for itself; Plato would have been dazed to see his solids being put into remarkable puzzle cubes. Efficient heuristic algorithms paving the way to the solution of not only the 3×3 cube, but also of several platonic solids, were explained with a peek into the underlying maths. If none of these excited one, there was the code-breaking events for all those who imagined being a hotshot undercover spy. There was also 'Dumb Charades', but for the not-so-dumb, as one needed to guess mathematical terms. The 'Crafty Maths' stalls put on a show of beautiful concepts using art and craft. The uninitiated were at their wit's end trying to





solve the Königsberg Bridge Problem (which is unsolvable). Truly, 'Maths is Art'.

The fun filled festivities of the morning were followed by a skit post lunch. It apprised the story of Cantor finding a correspondence between a plane and a line, and cherished his humble belief that if we looked for the things we believed in, they would come looking for us. Following the skit was a captivating talk by the eminent mathematician, Prof. Nitin Nitsure, from TIFR, Mumbai. The basic notions of Set Theory were discussed, along with its fate, after several problems were found with it by the likes of Cantor and Godel. His talk also discussed the future prospects in this direction in the form of Category Theory and Homotopy Theory. The talk was followed by the flagship event of Math Day, the 'Maths Quiz'. While the preliminaries had already taken place in the morning session, it was for the final four teams to battle it out in front of a packed audience at the Sir C. V. Raman Auditorium.

Along with the activities of the day, several events were up and running. An essay competition with themes as uncanny as 'Life on a planet whose surface is a Möbius Strip', 'Aliens arrive but don't understand any human language. How would you talk to them using only mathematics as a common language?', and 'A world where π equals

3', did squeeze out large bits of imaginary marvels from its participants. Another event was 'Maths Everywhere'. Going by the stance 'mathematics is in the eye of the beholder', it urged participants to take photos of the campus that could be described by some neat mathematics. The prize distribution ceremony for all these events happened after the quiz. Prof. Raghuram was elected the 'Coolest Math Prof' by an institute wide poll, and Makarand Sarnobat was chosen as the graduate student of the year.

The beauty of mathematics was vividly illustrated with its deep connections to the study of music, which was followed by mesmerising pieces of Western and Indian classical music in a percussion fusion performance. The final event before the curtains were closed for the day was the screening of the animated movie 'Flatland'. The mundane lives of lively squares, lines, circles, and polygons in two dimensions, and the abrupt turn it takes when the existence of three dimensions is revealed to them bears substantial philosophical importance. The events of the day, being largely successful, left an echo of the comeliness of the abstract concepts of mathematics and their implications in understanding nature around us. ■

Foundation Day 2015

The fifth Foundation Day celebrations

Shraddha Lall, Sir C. V. Raman Auditorium

On the 6th of April, 2015, celebrations of the fifth foundation day of IISER Pune commenced in the Sir C. V. Raman Auditorium. Beginning with a nostalgic film by the Science Media Centre, with snippets from Foundation Day celebrations over the years, it was followed by an address by the Director, Prof. K. N. Ganesh, who talked about how IISER Pune had grown over the past year, including the addition of the Academic Block, inaugurated by the President, Shri Pranab Mukherjee. He mentioned the growing reach and progress of student activities, both cultural and academic. He also emphasised how the IISERs had established a name for themselves in terms of scientific research in such a short span of time, and had been ranked fourth in India by a Nature magazine survey on research organisations. He talked about the need to maintain this progress, and improve our standing, for which we must establish clear goals for the future and work towards them.

Following this was the Foundation Day Lecture by Prof. Devang Khakhar, Director, IIT Bombay. He congratulated IISER Pune on the progress made, both in terms of infrastructure and research within just a few years of inception. His talk, titled 'The Role and Impact of Modern Research Universities' began with a general overview and history of the University, and their ever-changing role. Delving deeper into the history of the IITs, he talked about their early years in the post-independence era, and about how various elements had come together to shape them into institutes of such high calibre and of national importance. These elements, which continue to play a major role in determining the success of an institute, are an emphasis on the teaching of basic sciences and importance of research, and a merit-based acceptance and evaluation of students. He emphasised that a research institute becomes successful due to the culmination of a number of factors; from the best faculty and students to stable funding, academic autonomy, and most of all, a vision. He reiterated that institutes such



as the IISERs and the IITs have today become not just places for academic pursuit, but also supporters for start-ups and innovative ideas, technology partners for industries and key players in patenting and publishing. He then talked about how nascent institutes like IISER Pune must strive to maintain excellence, while also keeping pace with the changing nature of global education and economy. He concluded with saying that as institutes that enjoy a privileged position in society, the IITs and IISERs must justify the faith reposed in them.

Following tradition, the unveiling of IISER Pune's annual magazine Kalpa was done by Prof. Khakhar. This was followed by an award ceremony, where students were felicitated for academic excellence. Faculty members who had contributed towards exceptional development in IISER, including the recently inaugurated Day-care Facility, were also honoured, and so were the staff members for significant contributions in various aspects of IISER's day to day functioning. Students who had been key members of the large group that had created the Limca Record for the largest Warli Composition, and those involved in organising Mimamsa, the annual national level inter-college science quiz, were also honoured.

The Foundation Day celebrations came to a close with the singing of the national anthem, marking another successful year for the institute. ■

Disha Day 2015

Commemorating the achievements of Disha

Reema Jamal, C201 HR4

Since its modest beginning in 2010, Disha has grown both in terms of the number of programmes conducted by it, and its reach. Over the years, we have successfully collaborated with many organisations that share our passion in making science education accessible to children from adverse backgrounds. Therefore, every year on Disha Day, we celebrate our growth, and thank our volunteers and supporters for their dedication in helping us achieve our goals. We also use this opportunity to discuss the annual report, and garner more support for the future.

Disha Day took place on the 14th of April, 2015 at HR4, IISER Pune. The evening began at 6:00 PM with a small photo exhibition showing our most memorable moments of the year in pictures. Once the guests had moved in, hosts Anjali and Sneha invited the faculty co-ordinator, Dr. Anirban Hazra, to say a few words and announce the release of Disha's newsletter, *Pahal* (Volume II, Issue II). The evening was made more entertaining by a couple of performances from members of the Music Club. This included an instrumental performance by Harsha Sampathkumar on the *mridangam*, and Harsha Hampapura on the tabla followed by Parijat Banerjee's soulful rendition of 'You Raise Me Up'.

A slide show featuring all our programmes and their objectives were presented to educate our guests on Disha's work in promoting scientific curiosity among underprivileged young minds. Student volunteers make up Disha's back bone, so it was only fitting that they shared their experience of working with Disha.

Representatives from each programme talked about their experiences with the children, and the challenges they faced. The speakers included Danish Kaur Pannu for 'Spread the Smile', Shekhar Jadhav for 'Abhyasika', Akshata Meshram for 'Mind Spark', and Aniket Khairnar for 'Weekend Programme'. This was followed by an active interaction between the guests and volunteers that brought up many issues, like the need for a stimulating atmosphere for students to learn, and resource development. The discussion helped everyone realise why bringing quality science education to children of neglected communities is a complex problem, and further convinced us of the need to traverse the long road ahead.

Before breaking up for dinner, the director, Prof. K. N. Ganesh, and Dr. Anirban Hazra helped distribute certificates to appreciate the volunteers of Spread the Smile '15. Prof. Ganesh also addressed the volunteers, and promised his support in Disha's future ventures. At 9:00 PM, a classic Maharashtrian dinner, prepared by a women's self-help group in Sanjay Gandhi Vasahat, Pashan was served to the guests in the balcony. The members of this group include the mothers of children who attend Disha's Abhyasikas in Somersharwadi and Lamanvasti. The fund raising dinner was a heart-warming success with healthy donations from the guests. The evening left us feeling grateful for the IISER community's continuous support for Disha, and filled us with determination to continue working hard to get closer to realising our goals. ■



CONVOCATION DAY 2015





Convocation Day 2015

**Students of 2010 batch were awarded BS-MS degrees
and sixteen students were conferred PhD degrees**

Rachana Bhawe, Sir C. V. Raman Auditorium

Although a momentous occasion, it felt like any other day. There was no chance of me arriving late given that the ceremony was scheduled to begin at 7:00 PM. As a result, I wasn't in any particular rush to get ready, and my mother didn't insist on coming either. I decided to wear a pair of jeans and a top since my mother didn't think it was worth the effort to teach me how to drape a saree for a few hours. It was shocking, therefore, when I saw live updates about the IISER Pune Convocation at 4:30 PM on a local news channel. The dean was halfway through the list of students while I was miles away from the venue. I had missed my own graduation ceremony!

I jolted awake with a look of absolute horror on my face. However, seeing 'Runtime Error' flash in the small window at the corner of my laptop screen, made me forget about my misery in a flash. My thesis was still due, which meant that convocation was ages away. It was just a very bad dream.

The convocation was a matter of great anticipation for most of us, as five beautiful years at IISER would culminate on that day. Thus, after fun filled and rather frenzied months that followed that nightmare, I was eagerly waiting for the 27th of May, 2015. As a precaution, I decided to reach IISER a day earlier despite my house being in the same city. The night was filled with nostalgia; spending the night at the hostel gave us a chance to relive the fun we had missed out on the past year, as each of us had been away for our projects. More than anything, it was reassuring to feel at home in a place which had begun feeling alien to most of us. Gone were the days when our whole world in this campus was restricted to HR4 (currently the Guest

House at IISER). Nevertheless, it was amazing that the physical distance between us hadn't changed the camaraderie and warmth among our peers.

Lack of sleep and the scorching summer heat did little to deter us the next day to attend a dress rehearsal at the Lecture Hall Complex (LHC) in the morning. Much to our amusement, however, it turned out to be a show-and-tell lecture by Prof. Ambika on the etiquettes of the ceremony, ending with an earnest reminder from her that we dress appropriately for the occasion.

With only two hours left, the wing on the eighth floor turned into a very chaotic dressing room. We had undoubtedly miscalculated our abilities to drape a saree or dress up in time. While most of us waited in a very long line for a chance to be tidied up by the experts of our batch, a few others emerged victorious using trial and error. Finishing touches were given by talented hair and make up experts of the batch, after which we rushed to the auditorium. Outside the auditorium we spent a bit more time pinning our stoles perfectly, each finding innovative ways to secure the graduation caps on our heads.

As we filed into the auditorium, we sat in the auditorium according to our roll numbers for one last time. Soon, members of the Senate entered, bringing about a hushed silence in the auditorium. Prof. T. V. Ramakrishnan declared the convocation 'open', and soon followed the official awarding of degrees by the Director. It was a moment of pride and glory for students and parents alike, reflected in the cheer and applause after each name was called. The awarding of BS-MS degrees was followed by the awarding of PhD degrees to

sixteen candidates. It was a testament of how far IISER has come since the first PhD student graduated from IISER in 2012. The Institute Gold medal for BS-MS students was awarded to P. Shivachidambaram who graduated with the best academic record that year. As this mathematical genius walked onto the stage to much adulation and applause, a distant memory from a Sunday afternoon came rushing back. I was reminded of a discussion I once had about how people sometimes avoided taking certain courses if Shiva was crediting them, just because they did not want to be relegated to the plane of 'B' grades forever.

The customary annual report of IISER was delivered by the Director, Prof. K. N. Ganesh. While listening to his speech, my mind reeled back to the several previous occasions when the Director would give us detailed reports of campus developments regardless of whether it was in the crammed Multipurpose Hall at HR4, Raman Hall at Sai Trinity, or the classrooms of the Lecture Hall Complex. In less than a decade, IISER Pune had transformed into a globally recognised name in scientific research from rather humble beginnings on an obscure white board next to NCL – and we had been through it all! These thoughts were shared by the chief guest, Prof. Man Mohan Sharma, in his speech which followed the academic report. Having followed the growth of IISER since its inception, he encouraged us in his speech to uphold the education we had received, and use this foundational knowledge of basic sciences to contribute to building solutions to problems faced by the country.

At the end of this speech, all students stood up to honour the exhortation delivered to us by the director, asking us to pledge the upholding of the legacy and dignity of our alma mater as we stepped into the world outside. The convocation ceremony came to a close with the national anthem. We stepped out of the hall with our caps turned, and our tassels to the right. Eager to throw our caps in the air in celebration, we hurried to the entrance of the LHC for an official photograph with members of the senate. No guesses as to who didn't make it to the photograph in the first round! Much to the distress of the office though, many of the caps landed on the roof of the doorway but they overlooked it with a smile. After handing over the robes it was time to click photos and flaunt our get-up, one which we had so painstakingly acquired. We spent hours clicking as many pictures as possible with our batchmates – every single one of whom was impeccably dressed for the first time in our five years at IISER, very unlike the shorts and pyjamas one would usually find us in. Cameras were flashing at us from every angle, and we revelled in this spotlight, so rarely encountered in our profession.

When asked by my junior colleagues about how it felt to graduate, I was at a loss for an answer. Everything seemed as normal the day before, but I guess that was the heart's way of protecting us from the anxiety and excitement of the future. It was just any other day no doubt, but in hindsight a very special one – for the Batch of 2010 was together before moving on from the magnificent five years that we had spent at IISER. ■



Fresher's Party 2015

Abhishek V., IISER Pune

The first few days at IISER were, well, not extremely comfortable. Our interactions with our batchmates were limited to awkward 'Hi's and 'Bye's in the canteen, vague introductions near the water coolers, and complaining to each other about the lack of hot water.

One fine morning, I saw many first years gathered around a notice board in the LHC, and there was a constant murmur of 'Which group? Which group?' in the crowd. The seniors had randomly split our batch into groups, and we were asked to perform on stage, with people we barely knew!

Nevertheless, we immediately sprang into action, gathering the members of our group. One could see rehearsals going on in all nooks and corners of the campus, with each group perfecting its performance. The hostel was a hive of fun and activity for about ten days. We went beyond the many barriers between us, linguistic and otherwise, to come up with great ideas, and execute them to the best of our abilities, and we, as a batch, formed our first bond.

The 15th of August, 2015, was D-Day. All of us were given paper arm-bands with phrases from Harry Potter, science, and whatnot. We shuffled into the auditorium, a few of us with costumes, eyeing the stage with dread. One after another, we put up our performances, and our mood was lifted. It was really fun to watch the boys dance to the 'Baby Doll' song, and another group render One Direction, to which the audience danced. There was a zombie dance (people dressed up as zombies and dancing, not eating brains), and a horror fashion-show. The skit 'Blind Date', where fictional scenarios about how a date between two entirely unrelated famous personalities would go, was enacted, and it tickled everyone's funny bone and left them in splits. Then of course, there was a dance performance by the seniors, and an amazing beatbox routine. Peppered amidst the performances were smaller activities based on our armbands. The person with the 'Harry Potter' armband had to collect all those people with armbands denoting each of the Horcruxes, and there was a rock-paper-scissors face-off between 'Harry', 'Voldy', and 'the Horcruxes'.

Later in the evening, we were served snacks, and there was a disco themed DJ night (a

gross misnomer, as there was no DJ per se) where we danced to popular numbers, and sang along during the karaoke sessions. A few pros showed off their best moves, much to the amazement of the bystanders. By 10:00 PM, all of us were sore and tired, but our hearts glowed with happiness. We had made a new set of friends, with both seniors and batchmates. We lumbered back to our respective rooms with smiles on our faces, and with the conviction in our hearts that our next few years were going to be amazing.



Abhijit Gupta, 7 Seas, Pune

The freshers' party for the 2015 Integrated PhD batch was organised by their seniors on 22nd August 2015. The venue for it was 7 Seas.

The relaxed ambience of the place, and the exuberance of the freshers and seniors alike blended together to create a convivial atmosphere.

The evening opened with a light-hearted game, wherein the freshers first introduced themselves, and were then given a task to complete within the stipulated time, or be expected to answer rapid-fire questions.

The excitement peaked when the DJ started, and almost everybody danced to the beat. A handful who were initially content with watching shed their inhibitions and danced.

To conclude, it was an evening filled with music, excitement and unbridled enthusiasm.



Bio Model Presentation

A pedagogical experiment

Avani Koparkar and Sriram Raghunath, Dining Block

Our instructors for the Introductory Biology course in the first semester of the BS-MS course in 2015 were Dr. Kundan Sengupta and Prof. Milind Watve, and the course included model building as a part of the evaluation. This exercise was meant to inculcate a practical approach to biology. The students had to work in groups of ten, and were free to choose any biological system to make a working model on. The students had to submit an abstract of the concept behind their model beforehand.

The model exhibition was held on the 7th of November, 2015 at the ground floor of the dining complex adjacent to the mess.

The judges for this exercise were faculty members from the Biology Department including Dr. Nishad Matange, Dr. Sudha Rajamani, and Dr. Gayathri Pananghat. The criteria for judging the model were its innovativeness, its representation of the biological system, and how cost-effective and eco-friendly it was.

The students did not disappoint the judges, and came up with highly innovative concepts for their models. The models demonstrated processes such as the bottleneck effect, and RNA translation. There were many models which explained physiological processes such as nerve signal transmission, working of a reflex arc, nephron filtration, and muscle contraction. Some models also tried to connect how molecular and cellular processes underlie these systemic processes, for example, muscle contraction is due to the sliding of actin over myosin.

Quite a few of the models were inspired by molecular and cell biology. Students tried to demonstrate how a motor protein works, what the structure of DNA looks like, how microtubules pull chromosomes apart at anaphase, how proteins are translated, and how the electron transport system works in

photosynthesis. One group even explained how the HIV virus propagates through reverse transcription and the ways in which we can stop their proliferation. Some models demonstrated the mechanical aspects of motor proteins walking on microfilaments. Such models conjured vivid images of these microscopic processes in the minds of the audience, helping them understand their mechanisms better.

Coincidentally, the exercise was held on the same day as the annual conference of the Indian Academy of Sciences (IAS).

The distinguished invitees took some time off to have a look at the models. The experts asked the students thought-provoking questions, and guided them towards the answers. The invitees were impressed with the thought and effort that had gone into these models, and congratulated the students for their splendid effort.

What was striking about the entire exercise was its interdisciplinary flavour. A group demonstrated the physics of locomotion using flagella, while other groups explained the electrical

circuitry of neurons. This was in line with the aim of the Biology Department at IISER Pune, i.e. to link biology to other sciences and equip students with a multidisciplinary approach to biology. The exercise also brought to our attention how using simple materials like cardboard and paper, one can demonstrate complicated biological processes.

The model exhibition concluded at 4:00 PM on that day. It was a highly successful venture that brought out the creativity and innovation of the students at IISER. ■





An Informal (and rather personal) Communiqué

By Anup Anand Singh



I am struck by the realisation that it's not going to be an easy task writing this piece the moment I pick up my pen to begin. Not that it's difficult recalling any of it – it is as vivid as it can possibly be – it's just that going through all of it, in retrospect, is deeply stirring. When I look back at it now, being a part of the team that made Karavaan '15 possible seems more than just a cherished moment from the past.

When we began putting together a team to organise the seventh edition of the fest, we didn't realise that when we would reach the end of it, we would long to play all those moments back again. And when I look back now, I realise that Karavaan, for me, was not just the three days of events that happened onstage; it was the whole duration of all those months, working with a team that, in spite of the many mistakes made, did a wonderful job of putting up a great show.

For a fest that began as an intra-college event in 2008, Karavaan, sticking true to its meaning, has been on a journey of constant transformation and evolution. And when we took up the task in 2015, we tried to do our bit by adding more dimensions to the fest. We tried to expand Karavaan into a science, social, and cultural fest; it was an attempt to showcase that apparently varied things like passion for science, responsibility towards society, and appreciation for the arts could

all go together – perhaps blend together in a surprisingly unpredicted manner.

With joyful and light-hearted science events, we aimed to get the message across that science does have a fun side to it, which even we, as scientists (or scientists-to-be), tend to overlook. Complementing these were a number of social initiative events and cultural events that included a variety of music, art, dance, and drama competitions.

A special event this Karavaan was a cartooning competition in memory of the late R. K. Laxman, one of the best cartoonists India has ever seen. And then, perhaps a rather significant change was collaborating with MTV for organising our 'Band Hunt' and 'Pronite' events. Pronite, probably the event with the highest turnout, was reshaped into 'MTV Bollyland' with performances by playback singer Sonu Kakkar, and DJ Anshul.

A common theme running through the fest was 'India'; something we felt suited the flavour of the events, evolving with the times, but sticking to the roots. I think the IISER Showcase performances, that included a diverse line-up of classical and semi-classical performances on the inaugural evening, exemplified this very well.

The 2015 edition of Karavaan also saw the addition of the 'Leadership Conclave', an



attempt to create a platform to inspire young minds by giving them an opportunity to interact with people who have led through their innovation and excellence, and have made marks in their respective fields.

The Karavaan team indeed tried to bring a feeling of freshness to the fest, something that I think is essential to Karavaan. This year, we also saw a greater participation from the faculty members and the administrative staff at IISER. IISER Pune being a relatively small but tight-knit community lends a uniqueness to Karavaan; when you have students, faculty members, and all other staff members coming together for something like a college fest, it indeed gives the fest a rather special appeal.

But none of this, probably nothing in Karavaan '15 would have been possible, if not for the support of Dr. M. S. Madhusudhan, the faculty co-ordinator this Karavaan. He was with us all the while, with his unmatched humour and enthusiasm, helping us find innovative solutions to our problems. Words of gratitude surely cannot suffice for thanking him for the role he played.

The Karavaan team is grateful to the institute for its continuous support in hosting the event. We are indebted to Prof. K. N. Ganesh and Col. (Retd.) G. Raja Sekhar for showing great interest in the event, and regularly boosting our morale, to Prof. Sunil Mukhi and the entire Committee on Student Activities (COSA) for their guidance throughout, and to the members of the IISER administration, who made the event a smooth ride for us.

I would like to extend my heartiest thanks to the first and second year BS-MS students who took up tasks with great vigour, and helped shape the event. It is now up to all of you, the future team; go ahead and organise a bigger and brighter Karavaan, in your own good way!



The faculty co-ordinator's insight

By M. S. Madhusudhan

When Snehal, Anup and Prathamesh trooped into my office to ask whether I would want to be the faculty co-ordinator of Karavaan '15, I readily agreed. For me it was a chance to relive a distant past – the last such intercollegiate festival I attended, I had also helped organise. As it has been in the previous seven editions of Karavaan, there were all the fun competitions and excitement emanating from the quizzes, cartooning, drama, music (the music is always the best, it pulls the biggest of crowds and seldom disappoints) etc. Most/all of you witnessed all of this and there is little point in my writing about it. It was great fun, and everyone that I saw appeared to be having a good time. I want to touch upon a few aspects of Karavaan that do not get noticed just as much as they deserve.

Karavaan '15 started on the 16th of October and culminated with the spectacular flying lanterns on the night of the 18th. The festivities though started earlier – a string of curtain raiser events earlier in the week brought together student and faculty for fun activities. Karavaan is not currently big enough that these events cause enough of a buzz but all indications are that it is headed in that direction. Karavaan for the IISER students is more than just the annual festival; it has a strong social awareness component. ResQ volunteers along with IISER students vaccinated stray dogs on campus, a blood donation drive was organised, the art and environmental clubs collaborated to make art out of junk, and the Disha kids got the loudest cheer after their spotlight performance.

The biggest challenge faced by the organisers this year was raising money for the event. Thanks to their dogged persistence, the amount of money they raised through sponsorship doubled from what it was in Karavaan '14. Many people chipped in, far too many for me to list here but salient efforts by Prof. Natu were vital to the cause. This has, hopefully, set a trend that over the years would help Karavaan grow into a large/popular Pune event. Other steps in this direction have been



an MTV tie up for the band wars, and naming the cartoon marking competition after the great R. K. Laxman. As lanterns dotted the night sky, it was the culmination of some hard work by the organising team. Their efforts are setting a proud tradition amongst the IISER community ensuring that each edition of Karavaan would be eagerly anticipated and socially relevant. ■

Science and Beyond Lecture Series

Celebrating ten years of IISER Pune.

Apurva Barve and Shanti Kalipatnapu, IISER Pune

IISER Pune turning ten is an occasion for the IISER Pune community to reflect and refocus. It is also a great opportunity to connect with the public, and present them a broader perspective on science. The public lecture series, Science and Beyond, that was held in IISER Pune was one such endeavour.

IISER Pune, in collaboration with the British Council, organised the Science and Beyond lecture series, which was spread over three months, and across six cities in India. As a part of this series, eminent scholars from the UK toured and gave lectures in five to six cities in India, all of which were co-ordinated by IISER Pune.



The lectures included a diverse set of topics, many of which seamlessly combined areas such as science and art, science and history, language and culture, and science communication and policy. Here is a brief summary of these lectures in the following themes.

1) History of Science

The development and progress of science is intimately connected to the social and cultural contexts of the prevailing times, and this aspect was the centre stage of the ideas presented by the following three speakers.

October 30, 2016: Dr. Jon Turney, a science writer by profession, and author of the

book I, 'Superorganism: Learning to Love your Inner Ecosystem (2015)', talked about how our predictions about the future could be influenced by how well our previous predictions have gone on to become reality. His talk was titled 'Futurama: does the past cloud our thinking about the futures to come?'

January 4, 2016: In his talk on the big themes of the history of twentieth-century science, Dr. Jon Agar presented his synthetic, historical approach where he proposed the idea of 'working worlds', contexts in which problems are posed and solved, as a means of understanding how science policies of a nation are shaped. Dr. Agar is Professor of Science and Technology Studies at University College, London and is the author of several books including 'Science in the Twentieth Century and Beyond (2012)'.

January 25, 2016: Dr. Charlotte Sleight from the University of Kent spoke on the role of drawings and paintings of animals from the Renaissance to the nineteenth century in the documentation and classification of animals. She drew parallels between the erstwhile mode of drawings to that of the current times where both photography and videography can contribute to documenting animal species and behavior. Some of the ideas that Dr. Sleight has shared in her talk offer a preview of her forthcoming book, 'The Paper Zoo (British Library Publications, 2016)'.



2) Education, Science Communication, and Public Engagement

January 13, 2016: Ideas on the future of learning were presented by Prof. Sugata Mitra, who had initiated the 'Hole in the Wall' (HIW) experiment in 1999, where a computer was embedded within a wall in an Indian slum at Kalkaji, Delhi, and children were allowed to freely use it. Prof. Mitra shared with the audience the captivating story of this observation, and his additional experiments at other places, the results of which have further emboldened his belief that learning can be achieved in the absence of a formal teaching setup. His current work on 'Schools in the Cloud' combines this mode of self-organised learning, together with online interaction sessions with volunteers carrying out the role of mentors.

January 12, 2016: Dr. Carol Trager-Cowan, a physicist working in the area of materials science, is passionate about engaging the public to popularise science and improve awareness about issues such as health, climate, and environment that can help the public make informed choices. Activities that she co-ordinates along with her team at the University of Glasgow include leading street science tours, simple science demonstrations in parks, and providing activities for teachers to use in the classroom.



January 28, 2016: In his talk on communicating geoscience through the popular media, Prof. Iain Stewart spoke about community attitudes about science and technology and why it matters that scientists are effective in conveying their work to the public. He encouraged scientists to simplify facts and tell stories to entertain and capture the wonder of the public, not necessarily to educate them but to inculcate a positive perception on what

scientists do.

3) Perception of Art and Beauty by the Human Brain

February 6, 2016: Prof. Semir Zeki, one of the pioneers of the area of neuroesthetics, described his observations on which region(s) of the brain seem to be responsive to the experience of beauty derived from sources such as visual art or music, and from experiences such as solving a problem in mathematics. His talk generated active discussion from both, the perspective of appreciating art as well as understanding the function of the brain.



4) Understanding the origins of groups of people through the study of Language: Tracing the Roots of the Romani Language

February 2, 2016: In his talk on the history, language, and status of the Romani minority, Prof. Yaron Matras spoke about the Roma community in Europe, which is thought to have originated from the north-western regions of the Indian subcontinent. Prof. Matras, who is well versed with both Romani and Hindi drew the attention of the audience to the similarities and the differences between the two languages. He also spoke about the Roma identity and Roma-related government policies. His latest book 'I met Lucky People' dwells on the social and cultural history of the Roma community.

The overall goal of this lecture series was to connect with the public, and present them a broad array of science and related topics that have important implications to the society. In view of this, efforts were directed, both by IISER Pune and the British Council, on publicising the lectures to multiple types of audiences including students, educators, researchers, and artists across Pune. Thus, hosting this series was not only a great opportunity to listen to these invigorating lectures, but also a chance to invite the public to be a part of the intellectual stimulation. ■

SPREAD THE SMILE



Spread the smile isn't just a one way transfer of knowledge from 'selected' students of a national level institute to students studying in the villages. It is a programme that usually results in the sharing of knowledge, ideas, and emotions. It is an attempt to explore rural India and understand the problems that we Indians face in this rapidly changing world. It is also an attempt to get out of the cozy and safe cocoons that we are enclosed in, and experience the reality that lies beyond!

-Mukta Joshi
Third Year BS-MS,
Co-ordinator of Spread the Smile.

I volunteered for the 'Spread the Smile' event and went to a village named Kule twice. It was a delightful experience. I went there seeking peace, and to admire the breathtaking scenery which was replete with mountains, open fields, and lakes.

Interacting and playing with the children in spite of the language barrier was fun. For an introvert like me, it was a big deal teaching a whole class, full of new and sometimes disinterested people, and then keeping them excited through the entire duration of the class.

-Nikhil Gupta,
First Year BS-MS.

The Spread the Smile experience, to me, was a first of its kind. I had always thought of doing something along these lines, but never had had the right opportunity. I enjoyed the three weekends that I spent in the field. The preparation before the event, tedious as it was, did not stop us from putting on a good show.

The session at the village I visited worked out well at various levels. Firstly, the staff members at the school were very helpful. The attendance was decent. It was very satisfying to hear the children answer with a nice, loud 'YES' every time. The experiments clearly aroused their curiosity, and even though no one volunteered in front of the class, everyone wanted to touch the apparatus later. The children were smart; there was a child who solved one face of a Rubik's Cube without having been given any instructions. Yes, they lacked a bit of exposure to recent information, but they do have the fuel to harvest that information and move forward.

We became friends in no time. When we were with them, the volunteers were the centre of their world. They wanted to play with us, and even if it bored them, they would do what we said. They needed no bribes like mobile phones or chocolates. They listened intently, and got us involved in their world for the short time we spent there. It was a little difficult to leave the place. But then again, there will be an opportunity to do it once again. A big thanks to Disha for this opportunity; it was great working with you.

-Aseem Pradhan,
Engineer - CAE,
Tata Technologies Ltd.



Spread the Smile, or STS, as it is commonly known, is a programme organised by Disha, the IISER Pune organisation that reaches out to the underprivileged children in and around Pune. Every weekend, volunteers from IISER and other colleges visit schools in various villages to demonstrate and explain scientific principles to the students.

On the third weekend of January, I visited a village called 'Kule' near Paud with four other volunteers. The villagers were very hospitable and seemed eager to help us in every way. Although I was a bit doubtful about the interest of students in whatever I had to show them, their enthusiastic response cleared my mind of all doubt.

My senior, Swastik, and I demonstrated the use of a prism, and explained total internal reflection, and the formation of rainbows. It was the first time the children had seen an actual prism, and we had a lot of fun creating rainbows on walls and on the floor. We also showed capillary action using chalks and sketch pens, using water as a solvent. The colourful chalks delighted the children so much that they took all my used chalks home!

The other volunteers demonstrated the use of pH paper, litmus paper, and taught them origami. We also played many games with the children, and made a rough map of the village.

The wholehearted response from everyone, and of course, the food was what made my stay in the village a wonderful experience.

-Avani Koparkar,
First Year BS-MS.



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SPIC MACAY Overnight Concert

A night of cultural appetite

Anwesh Bhattacharya, Sir C. V. Raman Auditorium

After a relatively silent Fall semester, SPIC MACAY's IISER Pune chapter burst into frenetic activity in the Spring 2016 semester for the Overnight Concert on Saturday, the 30th of January, 2016, an annual event of night-long Indian classical performances. An assortment of the finest classical musicians, instrumentalists, and dancers graced the event this year, giving connoisseurs the chance to delve into a peaceful and serene night of unparalleled elegance and energy.

Leading up to the big day, the volunteers ensured that all the minute details were addressed, and did a superb job of setting the stage for an event of such magnitude and involvement. As time homed in on 9:00 PM of the Saturday night, and volunteers sorted out last minute hiccups, the steady stream of music lovers was greeted by a radiant *rangoli* and cheerful volunteers at the SPIC MACAY registration desk. Surabhi welcomed the audience to the night-long concert, and the first performance witnessed the grace and expressiveness of *Shri* Praveen Kumarji's impeccable Bharatanatyam skills. Accompanying him on the violin was *Shri* Mandya Nagarajji, *Shri* S.V. Balakrishnaji on the *mridangam*, and *Shri* K. S. Vasudhaji and *Shri* P. Ganeshji on the vocals. He began his recital with a *Pushpanjali* to Lord Ganesha, Goddess Lakshmi, and Lord Shiva in *Ragam Gambheera Nattai* set to *Adi Taalam*, followed by a *Shiva Stuti* in *Ragam Revati*, and

Devarnama composed by Saint Purandara Dasa. In a rare composition, the *Apadam*, the audience got a chance to witness the intricate emotions and facial expressions of the artist depicting Krishna's exploits. He closed his recital with a Marathi *Abhang*, *Sundara Te Dhyani*, set to *Raga Hamir Kalyani* in *Ek Taal* composed by *Sant* Tukaram which described the attire of Lord Vitthala of Pandarpur.

After a short break for snacks, *Shri* Pradeep Barotji, one of the most prodigious *sarod* maestros of our time, brought to life the venerable traditions of the *Maihar Gharana*. Accompanied by *Pandit* Ramdas Palsuleji, an accomplished *tabla* player who is quite famous in the Pune circuit, and *Shrimati* Juliaji, *Shri* Barotji's disciple, the trio treated the audience to the soothing and intoxicating late night *Raga Malkauns*, a serious and meditative *raga* and one of the oldest classical *ragas*. Building up from the *Aalap* in *Vilambit Teen Taal*, through the *Jor* and finally culminating in the sprightly *Jhaala*, the *sarod* danced to the commands of *Shri* Barotji's nimble fingers.

From Hindustani music, the next part of the concert progressed to showcase the Carnatic school of Indian classical music. Accompanied by Vidushi Kumari Ranjani Ramakrishnanji on the violin and *Shri* Sankarnarayanji on the *mridangam*, Vidushi Kumari Amritha Muraliji propelled the



concert to a new realm. With her meditative and soothing vocal recital, and her intricate gestures, the audience was mesmerised by the late night *ragas* that she performed with a richness and maturity that charmed many. Starting off with *Jagadananda Karaka* in *Ragam Nattai*, she performed *Ragam Khamaaj* in *Adi Talam*, *Ragam Abheri* in *Adi Talam*, *Ragam Kalyani*, and a *Ragam Tanam Pallavi* in *Ragam Kaphi*. Culminating with a *Ganesh Aarti*, she set the night ablaze with her evocative singing style.

As the night progressed, the concert began to exude vibrancy as the famous Akkarai Sisters, *Kumari Subhalakshmi* and *Kumari Sornalathaji*, child prodigies with the violin, piloted the instrument to showcase its sweet and bright timbre. With *Shri Rajesh Srinivasanji* on the *mridangam*, the stage was electric with the fast-paced yet soulful pieces that were being played by the sisters. Starting with *Ragam Nalinakanthi*, the performance was peppered with multitudinous small pieces that contributed and led to the *Ragam Tanam Pallavi* of *Ragam Pantuvarali* which brought their spirited performance to an end.

As the last slot of an overnight concert is the most coveted due to the chance for the artists to perform rare early morning *ragas*, it was not surprising that this niche was graced by *Shrimati Shruti Sadolikarji*, the famous singer of the *Khyal* style of the *Jaipur-Atrauli Gharana*. Being a third generation musician of the *gharana*, she was trained by some of the stalwarts of the *gharana*, including her father *Pandit Wamanrao Sadolikarji*. Accompanied by *Shri Suyog Kundalkarji* on the harmonium, *Shri Mangesh Muleji* on the *tabla*, *Shri Teja Kale Godseji* and *Shrimati Avani Walvekar Patkiji* on *tanpuras*, *Shruti Tai*, as she is fondly addressed, gave a brief insight into the

Jaipur-Atrauli Gharana and her training. Her mellow and euphonious voice captivated the audience as she performed *Raga Ahir Bhairav*, a mixture of the *ragas Bhairav* and *Abhiri*, which is sung during the second *prahar* of the morning. With her eloquent vocalisation and subtle tricks, she kept the audience awake and engrossed. As the concert neared its termination, *Shruti Tai* concluded her riveting performance with a rare *Dhrut Bandish* composed by Faiz Mohammad Khan *Saheb* of Hyderabad in *Raga Bahaduri Todi*.

As a token of our gratitude, all the maestros were honoured with exquisite presents by faculty members and senior SPIC MACAY volunteers. The audience as well as the artists were quite pleased with the volunteers, as could be gauged by a few messages that we received. 'It was a wonderful night with mesmerising performances. The volunteers did a great job,' was what Mr. Nandan Kudhyadi, a film producer had to say. *Shruti Tai* expressed her desire to practise in the lovely IISER campus, and *Shri Barotji* complimented the organisers for ensuring that he could perform in a relaxed and calm atmosphere.

As is customary for all SPIC MACAY concerts at IISER Pune, the event concluded with a photograph of the artists with all the

volunteers followed by some frolic and work, something the volunteers never fail to enjoy. Since, the concert had rolled on till about 8:00 AM, all of us ate sandwiches together in the LHC, and sang happily on the way back to our hostels, looking forward to a good day's sleep after all the taxing tasks, and reminiscing a memorable night, full of enthralling Indian classical performances. Let's hope for more such concerts in the coming days!



■



Another year, another landmark edition.

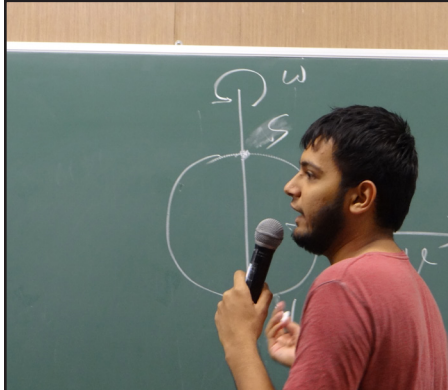
The eighth edition of Mimamsa, the annual science quiz of IISER Pune, came and went by with a bang... or rather, with the silence of intense thought, punctuated by concise discussions.

Let us first have an insight into Mimamsa – What is it? What does it stand for?

Mimamsa is an annual quiz, hosted and conducted entirely by the IISER Pune community. Widely regarded as the toughest science quiz in India, Mimamsa tests the fundamental concepts of undergraduate students from all over the country.

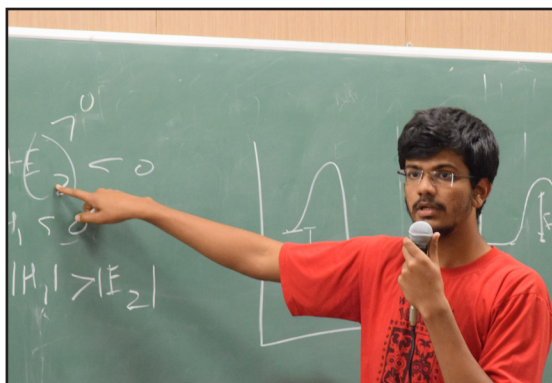
Mimamsa is a Sanskrit word meaning 'critical investigation', an appropriate choice, as this is exactly the nature of the quiz. Rather than questions based on fact and raw knowledge, Mimamsa tests its participants' concepts through questions designed to invoke the investigative nature that is essential for research. Mimamsa was started in the year 2009 by Dr. Sutirth Dey, faculty at IISER Pune, with the intention of cultivating this inquisitive mindset in young researchers, a legacy that has since been carried forward for eight years by the students. Mimamsa has constantly expanded, and with each edition, sets a new milestone.

Mimamsa is conducted in two rounds – the Prelims and the Mains. The Prelims were conducted on the 10th of January, 2016 in ten centers across the country – Pune, Mumbai, Bangalore, Chennai, Hyderabad, Bhopal, Kolkata, Delhi, Ahmedabad, and Tirupati. It witnessed the participation of over two hundred and thirty teams from over a hundred and fifty colleges all over India. Beating the competition were the teams from IISc, IIT Bombay, IIT Madras, and University of



Hyderabad, who won the chance to participate in the Mains, conducted at IISER Pune.

The Mains were conducted on the 13th and 14th of February, 2016, in C201, Guest House. The Mains were conducted in four gruelling sessions. Each session consisted of a subject round, one for each of the core subjects namely, physics, chemistry, mathematics, and biology, and one exposition, conducted by one of the finalist teams. To spice things up, at the end of Day 1, the Occulomotor (the audio visual round) and Stepping Stones (the rapid fire round) rounds were conducted which provided a different flavour, and raised the stakes. The level of the questions of the Mains was significantly higher this year, with the participants finding barely a breath between rounds. To say that it was mentally exhausting would be an understatement.



Our finalists began their ordeal at 8:00 AM on Saturday with the Physics round, presided over by the judges, Prof. Sunil Mukhi, Dr. Sourabh Dube, and Prof. Anil Gangal. The team from University of Hyderabad then presented their exposition first, with the topic 'Entropy of Evolution'.

The finalists had a chance to relax with a wonderful lunch with the entire Team Mimamsa. This sweet relief was short lived, and we were back for Session 2, with IISc conducting their exposition on 'Mathematical Modelling of Genetic Networks and Gene Regulation'. This was followed by the Biology round, presided over by the judges, Dr. Nishad Matange, Prof. Milind Watve, Dr. Sudha Rajamani, and Dr. Richa Rikhy. The judges, despite being happy with the food, did not compromise on the philosophy of science; at one point, Dr. Matange found it necessary to inform the participants about the method of scientific inquiry.



IISc took the lead early on, with IIT Bombay in second place, and IIT Madras close in third place. University of Hyderabad seemed to be in good shape, and were geared up to race ahead.

After a short break, the Occulomotor round was conducted. Team IISc wished to see the scores to decide a strategy. Before showing the scores, though, Dr. Dube, the faculty co-ordinator for Mimamsa '16, in a particularly philosophical mood, quipped that the only strategy would be, 'If you know it, go for it', earning a thunderous applause. The Stepping Stones round was conducted shortly thereafter. Exhausted, the participants earned their reprieve for the day with an exceptionally delicious dinner with the co-ordinators at Sigree.



Day 2 began at 8:30 AM on Sunday with the Mathematics round, presided over by the judges, Dr. Steven Spallone, Dr. Chandrasheel Bhagwat, and Dr. Anisa Chorwadwala. The morning session exposition was conducted by IIT Madras, on the topic 'Tsunami'. The Food and Hospitality team left no 'stove' unturned to keep the finalists well fed and fresh, in time for the final session.



IIT Bombay went last, with the topic 'True Random Numbers'. This was quickly followed by the Chemistry round, presided over by the judges Dr. Gayathri Pananghat, Dr. Harinath Chakrapani, Dr. Sayam Sen Gupta, and Dr. Arnab Mukherjee.

Throughout the contest, the margins between the scores of the teams went up and down, but the order stayed the same – IISc in first place followed by IIT Bombay, IIT Madras, and University of Hyderabad. History was repeated, and indeed, IISc did win Mimamsa '16.

IISER also hosted Prof. G. P. Das, a faculty member at the Indian Association for the Cultivation of Sciences, Kolkata, as judge for the exposition. Prof. G. P. Das, a longtime supporter of Mimamsa and its idea, was delighted, and thoroughly enjoyed the proceedings.

A few interesting moments lightened the mood – during the Stepping Stones round, a particularly intricate geometric figure was given, with the question being to find the length of a line segment. Anuj, from IISc gave the correct answer, four, in a matter of seconds, his reason being 'The ratio of these two forms an integer, so the ratio of these two must be an integer. We got it right, so...', which irked our Mathematics team. The grace and elegance of the solution, via the relation between arithmetic, geometric, and harmonic progression was completely bypassed. However, their answer was correct.

As is the norm with Mimamsa, the questions were in a league of their own. Questions that had to be carefully reasoned out step by step, with decisions being made about what information was relevant and what was not. Questions that nobody could get, leading Dr. Sayam Sen Gupta to award the teams a hint, plus extra time to attempt the question once more. Questions that were so beautiful, and so obvious once you knew the answer – an Occulomotor question that had the teams guessing everything from circular birefringence to changing polarisation, when the answer was merely optical rotation due to a solution of glucose.

The events of Mimamsa '16 Mains concluded on the evening of Sunday, the 14th of February, 2016, at the hands of our director, Prof. K. N. Ganesh, who awarded the winners' trophy to IISc Bangalore for the fifth time in a row. The first runner up trophy was awarded to IIT Bombay, with the second and third runner up positions going to IIT Madras and University of Hyderabad respectively.

On a final note, Prof. Ganesh, who has always been supportive of Mimamsa, and has let nothing hinder its progress, remarked on the excellence of the finalists, who year after year rise to the challenge posed by IISER students. He then, in a fitting and rousing manner, challenged IISc to come up with a quiz that would give IISER Pune the chance to show that they were not just good at making questions, but cracking them wide open as well.

It is a challenge that, no doubt, will be answered. And a challenge that IISER Pune shall rise to as well. The true spirit of Mimamsa lies perfectly embodied in its name and its deed. As we say here,

Be In-quiz-itive!





Through the lens of the faculty co-ordinator

Sourabh Dube

Mimamsa, for me, is a reflection of the *raison d'être* for the existence of IISER, and science education and research in science addressed to undergraduates. Mimamsa is, unarguably, one of the toughest science quizzes, and it aims to test how deeply contestants understand the individual pieces of science, and how well they can put those pieces together in unfamiliar contexts.

The heart of Mimamsa is the questions. I think the creation of the quiz questions is a remarkable activity, where four groups, each consisting of ten to twenty students, one for every subject – biology, chemistry, physics, and mathematics, struggle over a period of months to devise multiple sets of questions. These questions are based on science that is taught in the eleventh and twelfth standard, and yet delve deep into the subject matter to extract the very fundamental understanding that all of us should have (but don't!). It impresses me so much that even the framing of the questions is discussed and debated – no hints can be given, but yet no ambiguities should persist.

And yet. Yet Mimamsa is much more than the questions. The challenges of the exam are like any other competitive exam; arranging the centres, and arrangements at the centres, getting the question papers to the examinees safely, collating the results, and dealing with the issues that crop up with any exam of this scale.

The Mimamsa finals are in themselves a full-blown event requiring several organising teams to deal with arranging the room layout, prepping the judges, and making the sound and video arrangements for a quiz format. Then there are the hospitality requirements for the contestants, the judges, and the audience. It really is a remarkable event that is completely run by students, and it was a privilege for me to be a part of the team this year.

A major challenge in moving ahead for Mimamsa is to keep participation within IISER high, from students as well as faculty. A different challenge will be to get the other IISERs around the country interested; better teams make for a better contest, and we need more teams who approach science in the way we at IISER Pune do.

There is one thing I'm quite sure of. Given the culture of open discussion and collective effort I have seen from the Mimamsa team this year, and most certainly the brilliance, IISER's 'showpiece' event, Mimamsa, is sure to remain the best quiz contest ever. ■

INTERNATIONAL NEWS

Asian Science Camp 2015

Held at NSTDA, Thailand

Shraddha Lall and Vishrut Patel, NSTDA, Thailand

When someone tells you that you get to go for free to Thailand, you are bound to get excited. And then, they give you two hundred US Dollars. Now that's how a trip is supposed to start.

On a more serious note, Asian Science Camp (ASC) '15 was the experience of a lifetime for a number of reasons, the least of which were the free things. Held at National Science and Technology Development Agency (NSTDA), Thailand, from the 2nd to the 8th of August, 2015, ASC '15 brought together two hundred and seventy students from thirty countries/regions across Asia, Oceania, and Egypt. 'A journey is best measured in friends rather than miles', and the journey from Bangalore to Thailand was one where $^{20}\text{C}_2$ lasting friendships were forged.

In the Land of Smiles, your jaw sure hurts from all the grinning and eating. Being welcomed by volunteer Ae, whose name is pronounced 'just like the letter A', and then meeting people named Kau, Kao, Beer, Shampoo, and Game, we learnt that no nickname in Thailand is too out of the box.

Welcomed by royalty, Rajakumari Maha Chakri Sirindhorn, the princess of Thailand commenced the programme. Over a period of five days, we had lectures from the greats

in every field, including Nobel Laureates and Fields Medallists. From ribosomes to the cosmos, the talks were humbling, inspiring, and intellectually stimulating. We also had camp sessions, and when divided into groups, we could properly fangirl over these rock stars of science.

On the penultimate day of the trip, we piled into awesome double decker buses, and went on a trip to Ayutthaya, the old capital of Thailand with a guide called Tic-Tac. We visited Buddhist temples and ruins, and shopped as much as we could, bargaining over material possessions in the Floating Market of Ayutthaya.

Broken into groups of six, each student from a different country, we brought together our ideas to create a poster, which we presented on the last day of the camp. Amidst all the hard work, strangers became friends, explaining their unique cultural eccentricities. It all culminated in a final farewell party, with performances from each country, food, live music, and lots of dancing.

The journey back to India was filled with sleeplessness, happy memories, and a realisation that when the time came, we would surely write a Kalpa article on this trip, together. ■



IISER Pune at iGEM

Team IISER Pune wins the Bronze



Snehal Kadam, Boston, USA

The International Genetically Engineered Machine (iGEM) competition was held from the 24th to the 28th of September, 2015, and I had the amazing opportunity to be a part of the IISER Pune iGEM team.

iGEM is a foundation that works towards education and advancement of synthetic biology. The iGEM competition is their way of introducing high school students, undergraduates and graduates to research in synthetic biology. The iGEM teams work through the summer, using standard biological parts (called BioBricks) to create genetically engineered systems that contribute to their society. iGEM has grown tremendously over the years, from a mere five teams in 2004, to two hundred and eighty teams in 2015!

It started in IISER Pune on the 17th of March, 2015, when we received an e-mail from Dr. Chaitanya Athale about the selections for the iGEM IISER Pune team. Never having heard of iGEM, I decided to attend the meeting out of curiosity. After the first meeting, with only five people having attended it, I wasn't very clear as to where this project would go; I don't think any of us were. However, the

meetings continued, and very soon, we were a team of ten undergraduate students, two mentors, and one Principal Investigator. We brainstormed about project ideas, and after various discussions over a period of one month, we finally decided on our project. We would try and improve Tuberculosis (TB) diagnosis using synthetic biology.

TB is an infectious pulmonary disease that affects nearly forty per cent of India's population. The most commonly used diagnosis tests in India take an average of two to four weeks to give results, whereas the faster, automated tests are expensive. We visited a few diagnostic labs in Pune to learn more about the current available technology, and realised that it was necessary to find a test that was not only accurate and efficient, but also quick and cost-effective.

The project had three modules, and each of us was working on a small part of the project. The three modules were:

1. Accelerating the division of *Mycobacterium tuberculosis* bacteria in the patient sample, and achieve a detectable number in a short period of time.



2. Detection of *Mycobacterium tuberculosis* in the patient sample by production of a coloured pigment.

3. A kill switch to prevent the uncontrolled growth of the bacterium.

As our project progressed, we faced various problems. These roadblocks taught us to troubleshoot and come out strong in our work. Apart from the lab work, there were other things to be taken care of. The iGEM foundation focusses not only on the lab work of a project, but also on various other aspects like reaching out to the society about the project, collaborations with other teams, promoting synthetic biology, etc.

We conducted a session in collaboration with Disha regarding TB, its causes, and precautions. A session was also conducted with the children where they were introduced to the foldscope (a paper microscope). With support from IISER Pune and its Biology Department, we were also successful in conducting an 'India iGEM Meet' where the teams of IIT Delhi and IIT Kanpur visited IISER Pune, and we discussed various aspects of our projects and ways to improve them.

After almost six months, it was finally time to present our project idea at the Giant Jamboree, which is a gathering of all the iGEM teams in Boston, USA. The Giant Jamboree was in every sense 'gigantic'. The venue, the arrangements, the sophisticated project ideas, and the very fact that over five thousand students from all over the world had gathered to present their hard work – it was all very overwhelming. We witnessed some amazing talks and presentations, and got to see some pretty innovative projects throughout the entire week at iGEM. Our presentation was

scheduled on the very first day which added to the nervousness and excitement! The numerous practice sessions back home had helped, and the judges loved the 'Harry Potter' theme for our project – *Mycobacterium Revelio*.

Despite the fact that we were at iGEM, learning so much, the most amazing part of the whole week for me was when we got to visit Harvard Medical School. Thanks to Dr. Chaitanya Athale, we had the once in a lifetime opportunity to meet Dr. George Church, one of the pioneers of synthetic biology. He is one of the most intelligent yet humble people I have ever met. He talked to us about our project, his visit to India, the ongoing projects in his lab, and synthetic biology. Being able to just sit there and hear him speak was an inspiration in itself. His lab members gave us a tour of their lab (which is spread over two buildings!).

We also got a chance to explore Boston which, I must say, is a beautiful place. And the bronze medal we won at iGEM was the cherry on the cake!

IISER Pune's support has been very crucial in making this project possible. Dr. Chaitanya Athale has been a great guide through the whole project, and so have our PhD mentors, Neha and Manasi.

The whole experience of iGEM teaches you a lot – creating your project, working as a team, presenting your work to scientific and non-scientific audiences, learning about the effects of your research on society – it truly is a complete package. The teams at iGEM are an inspiration and I think we all stand to learn something from them. I look back at this experience, and realise it will always bring a smile on my face. ■

World Science Conference 2015

Held in Jerusalem, Israel

Akshay Suresh, Jerusalem, Israel

After gut wrenching clearance delays, Nabha Shah and I were ultimately stoked to be aboard the flight to Israel, as part of the fifteen-member Indian delegation to attend the World Science Conference Israel (WSCI) '15 in Jerusalem from the 15th to the 20th of August, 2015. WSCI '15 brought together sixteen Nobel laureates, outstanding Israeli scientists, and young minds from over seventy countries to create a global network bonded by a spirit of scientific thinking. Students were exposed to panel discussions on the goals, challenges, and rewards of modern science, lectures on the mind-blowing research carried out by the Nobel laureates, and also invited to participate in three-on-one discussions with these eminent scientists. I was privileged to be given the chance to talk to Prof. David Gross and Prof. Cohen-Tannoudji, whose stories of the struggles in their professional research left me deeply amazed. Interactive sessions on the creative Israeli innovations developed using artificial intelligence by the students of

the Hebrew University of Jerusalem left me spellbound.

To foster the spirit of international scientific co-operation, students from different countries were grouped in teams of ten to work on a poster. Interactions with fellow group mates gave me insights into the research methodologies adopted in their respective countries.

Apart from the scientific sessions, the days were fun-filled, with game shows, parties, visits to sacred monuments in Old Jerusalem, and the warm Mediterranean Sea shore at Tel Aviv, all amply complemented by sumptuous feasts. WSCI '15 concluded with cultural performances by the delegations from different countries during which we enacted a scene from the Mahabharata. WSCI has certainly gifted me with fond memories of intense scientific discussions, fun moments, and global peer contacts. ■



Vijyoshi Camp 2015

National Science Camp at IISc.



Sriram Raghunath, IISER Kolkata and IISc Bangalore

Vijyoshi, the National Science Camp, was held from the 16th to the 18th of December, 2015 at IISER Kolkata, and from the 18th to the 20th of December, 2015 at IISc Bangalore. This year, the camp (which is held annually) was attended by nearly one thousand two hundred students from all over India. Distinguished scientists from India and other parts of the world delivered lectures at the camp. The topics of the lectures were as diverse as 'Fat is Fabulous', a lecture on the amazing biological properties of lipids, and 'Non-Euclidean Geometries', a lecture on how rejecting the parallel postulate gives rise to new branches of geometry.

On the first day, there were lectures on quantum chemistry, statistics, superconductivity, and non-Euclidean geometries. The lectures were followed by an interactive tutorial session which gave the students an opportunity to pick the brains of these established scientists. An experimental session was also organised, wherein thought provoking experiments were demonstrated by the students of IISc Bangalore.

The second day saw lectures on organic synthesis, quantum computing, cancer research, and neutrino oscillations. It was exhilarating to look at the frontiers of science

through the scientists' lens. The students of IISc had also organised a cultural programme for us. The highlight of this programme was the skit enacted by the drama club which had us split our sides with laughter.

The third day began with lectures on biochemical properties of carbohydrates and lipids. This was followed by a lecture on quasi-crystals and inorganic chemistry. We had the evening free to ourselves to roam around the magnificent campus of IISc Bangalore and explore its scenic nooks. A few students from IISc guided us in our tour of the campus, and we ended up having a great time.

The overarching theme of Vijyoshi '15 was the interdisciplinary nature of science. Lectures ranging from atmospheric quantum chemistry to quasi-crystals to the biophysics and biochemistry of lipids and carbohydrates gave us a sense of the interconnectedness of the various scientific fields. The camp also gave the students an insight into how actual research is carried out in science, and the topics that are at the forefront of scientific research today. Vijyoshi has definitely achieved its objective of inspiring students to take up scientific research and has proved to be a fruitful experience for all those who attended it. ■

SPORTS SECTION

Kreedajung 2015

Sports at IISER Pune

Mitali Thatte, IISER Pune

Kreedajung, the annual intra-IISER sports competition, is one of the most awaited events of the Fall Semesters, bringing out the competitive nature of students in a fun and exciting way. Kreedajung '15 saw tremendous participation from everyone, especially the first year batch. It was conducted during the monsoons, and so naturally all the outdoor sports had to face the onslaught of the rains; yet the enthusiasm of everyone was amazing. Some of the events were basketball, football, table tennis, carom, chess, kho-kho, kabbadi, volleyball, throwball, athletics, etc. Here are some of the highlights of Kreedajung '15.

Basketball is without any doubt one of the pillars of Kreedajung, and probably the most popular sport. A team event with individual registrations, it is a great means of interaction for students of different batches, who the organisers sort into teams. More than fifty students participated, forming seven teams across different batches. All the teams played against each other in the league stage, and the top four teams qualified for the next round. An interesting titbit – after the league stages the teams were ranked as 'A', 'B', 'C', 'D', 'E', 'F', and 'G' with 'A' being the highest ranked, and 'G' being the lowest ranked. Team A eventually went on to win the

tournament beating team B with the score being 34-21 in the finals. Everyone, not just the co-ordinators, helped in making the event a success. Kreedajung '15 helped in identifying talented young players to be a part of the boys' and girls' IISM basketball teams, who went on to lift both the basketball trophies in the inter-IISER tournament conducted in Bhopal.

Football, another popular sport in Kreedajung,

was the earliest one to start. Football is played passionately by many students at IISER Pune and nine teams registered for Kreedajung Football – two from the first year, one each from the second and third years, three from the fourth year, and two PhD teams. In truth, many teams were quite heterogeneous, for instance, only half the Maths PhDs' team consisted of Maths PhDs. Matches were played in a nine-a-side format due to the small size of the pitch. Two groups of five and four teams were formed, and

matches kicked off after the mid-semester exams. The semi-finals were played between the Maths PhDs team and the second year team, and the fourth year team and the third year team. The Maths PhDs and the fourth year team qualified for the finals. The finals was an eventful match which saw a red card, and a penalty. The fourth years unfortunately





lost one of their key players, Mohammed Aamir, due to an injury he suffered early in the game, and Abhishek Rale scored the winning goal for the Maths PhDs when he rebounded in a saved penalty. The match ended 1-0 to the Maths PhDs, and they won the tournament.

Table tennis was perhaps the most well conducted game in Kreedajung. A good number of people have a soft spot for TT and the TT table in the students' common room is used well all year round, so the overall response was quite overwhelming. The tournament consisted of league as well as knockout stages. Vamshi Krishna and Satvika Bandarupalli went on to win the tournament in men's and women's category respectively.

Carrom is a local favourite enjoyed by many in IISER, and is therefore an important part of Kreedajung. To the delight of everyone, a lot of matches went to 'point all' so the winner was undecided till the very last moment. The final between Gunja and Sunil vs. Vaibhav and Arindam was no exception. It was a nail-biting match which went on till the very last point but finally Vaibhav and Arindam prevailed over their opponents.

As soon as chess matches began, it was a common sight to see people playing chess diligently in the common room every day. The tournament consisted of a sort of a round

robin stage where similarly ranked players played each other in a round, and no two players played each other more than once. After eight rigorous rounds, Vinayak Kulkarni topped the table followed by Mohammad Fawaz and Sourath Ghosh.

Kho-kho was made a mixed event this year and the response from the girls was unprecedented. Out of the forty-five registrations, twenty-four were girls. Rain played spoilsport on a good number of weekends, and hence the event could not be completed. Each team got to play only one game.

Four teams registered for throwball (a girls-only event), which was twice as many as last year. Again, the event could not be completed, but the fourth years was the highest ranked team. Kreedajung being the first institute-wide activity for the newcomers served as a wonderful ice-breaker between the new students and the seniors. It was a great way for people to get to know each other on campus while participating in team activities, and also for the selection of new members for the IISM teams. ■

Pinkathon 2015

A marathon to endeavour

Nita Belliappa, IISER Pune

The third edition of Pinkathon, Pinkathon 2016, in Pune was bigger and better than the previous two editions. Pinkathon is a community project to spread awareness of the importance of an active lifestyle for women, and health issues that put women's lives at risk. And, when 'Ironman' and founder of Pinkathon, Mr. Milind Soman, and his team approached IISER to hold the event at IISER, we had no idea what we were getting into. We had no inkling of the enormity of the event.

The night before the event, the cricket field was abuzz. Students wandered around to find out what was going on, and many made themselves comfortable in the different stalls that were being put up. Many of them were surprised to see Milind Soman at 11:00 PM. A few enthusiastic participants managed to get a 'selfie' or two with him.

On the day of the event, the cricket field came alive at 4:30 AM, and the half-marathoners, and their pacers started to arrive. Women of various age groups converged upon the IISER cricket ground. We were 'PINKED'. The 21 km event commenced at 5:00 AM. Groups of fifteen were provided with a pacer each to ensure their safety. Our very own marathoner, Prof. Raghuram, paced his sister-in-law. The

10 km run began at 6:00 AM followed by the 5 km run which started at 6:30 AM. Ten minutes later, the 3 km run, which saw the largest number of participants, was flagged off.

Some of the highlights of the event included the participation of eighteen visually impaired girls who ran along with a volunteer each, the participation of two hundred women from 'Swach', a cleanliness organisation, the presence of green water stations en route, and waste warriors to help segregate the waste generated.

The total number of participants was a stunning five thousand six hundred and seventy-one of which a hundred and thirty-two participants were from IISER. It was a pleasure to see IISER's First Lady, Mrs. Suchitra Ganesh, the registrar's wife, Mrs. Janaki Rajashekar, the wife of the head of the Biology Department, Mrs. Lakshmi Shashidhara, along with Dr. Suhita Nadkarni, Dr. Mayurika Lahiri, Dr. Sudha Rajamani, Dr. Anisa Chorwadwala, Dr. Pooja Sancheti, and other faculty members, and students among the sea of 'PINK' women.

The event was a grand success, and the IISER family enjoyed being a part of such a celebration. ■



Inter IISER Sports Meet 2015

IISER Pune contingent finishes second



Bhargavi Parthasarathy, IISER Bhopal

The Fourth Inter IISER Sports Meet, (IISM as it is commonly known) was held from the 16th to the 21st of December, 2015, at IISER Bhopal. This edition of IISM saw contingents from all the six IISERs, NISER, IISc, and CBS competing.

Following the end of the 2015 Fall Semester, practice for the various individual and team events began, with the goal being to win the coveted title of being the best at IISM '15. After a week filled with practice sessions, the IISER Pune contingent set out to their destination, IISER Bhopal. A vast campus with a lot of ongoing construction, the IISER Bhopal campus was abuzz with activity on the chilly winter morning of the 15th of December. The various arenas where the events would be held during the week were being prepared, and athletes from various contingents in their respective institutes' track suits were practising.

IISM began with an opening ceremony on the 15th of December, with all the contingents displaying their marching prowess, marching past the podium in sync and aiming to win the title of 'Best Marching Contingent'. The march past was followed by the lighting

of the ceremonial torch, and an oath of sportsmanship was taken by the leaders of the various contingents. Ms. Harwant Kaur, silver medallist at the 2010 Commonwealth Games in the discus throw event, officially declared the meet open. She highlighted the importance of applying knowledge of various scientific phenomena in various sporting events. This was followed by a stellar display of physical and mental strength by the Madhya Pradesh Malkhamb team. The evening drew to a close with speeches by various esteemed members of the IISER Bhopal administration, and the IISER Bhopal and Mohali teams were jointly declared as the 'Best Marching Contingents'.

Athletic events started early in the mornings on the athletics ground, usually covered with dense fog. The athletes vigorously warmed themselves up to ward off the cold, and very soon, the other events also began, with players eager to display their skills to very supportive audiences from their respective institutes. The players and teams who weren't scheduled for a match were seen practising hard and till the very last minute to win every point they could, and get a step closer to helping their

contingent win the IISM trophy.

The IISER Bhopal athletics team dominated the track and field events, winning a majority of the medals. Nonetheless, the IISER Pune athletics team had some astounding performances winning four gold, five silver, and eight bronze medals. In Kabaddi, the IISER Pune team put up a great show, entertaining the crowds and finishing with a silver. In Kho-Kho and basketball, the teams had to battle it out with IISER Kolkata and IISER Mohali respectively to win the gold, with the basketball match running into overtime and leading to a thrilling, nail-biting finish.

The womens' teams in volleyball, throwball, badminton, lawn tennis, and basketball

proved their mettle by winning golds in their respective events. The talk of the town, though, was Pranavi Reddy's presence in all these team sports. She, despite spraining her ankle, and repeatedly breaking and fixing her spectacles, was instrumental in keeping the spirits up, and helping the teams win.

With a tally of seven thousand and fifty points, the IISER Pune contingent finished second behind the hosts, IISER Bhopal who had a total of nine thousand and fifty points. With the completion of prize distributions on the final day followed by grand dinner arrangements, we bid adieu to fellow participants in hopes that we'd meet them again the following year. ■



IISER Premiere League 2015

What makes the IISER cricket ground abuzz every year?

Abhishek Ojha and Rahul Iyer, IISER Pune

As January 2016 set in, everyone at IISER looked forward to a new semester, new courses, and, among other things, the seventh edition of IPL! Throughout the campus, cricket enthusiasts reminded each other to register their respective teams. The first years joined in the excitement too, and the cricket field was flooded each evening with people practising. Twenty-four teams registered, including teams from each batch of the BS-MS programme, multiple Integrated-PhD teams, PhD teams, and teams from the security department, administration, and faculty. Of these, the teams Finemen, Stoners, Biohazard, and especially the Alchemists came in with great momentum as they were the previous semi-finalists, and were at the back of every other team's mind. New teams as well as old ones worked towards improving their side as they decided batting line-ups, fielding settings, and bowling orders after analysing each player's strengths and weaknesses.



Finally, the tournament began on the 16th of January, 2016, with the inaugural ceremony. This was conducted by Dr. Shivprasad Patil, Dr. S. Srivatsan, and the sports co-ordinator, Mr. Swapnil Bule. The first match took place between Baahubali, the new inter-batch team of predominantly Telugu ethnicity, and Admin, a stable and fairly strong team. It was an interesting start to IPL '16, as Baahubali put up a decent fight, but weren't up to the mark. Matches took place, crowds cheered for their favourites, some teams chased well, some



defended their scores well. Weekends at this point only meant IPL, and the atmosphere was as infectious as it was exciting. The initial stages of the tournament had its fair share of superb innings, nail-biting finishes, and great performances. One noteworthy match was Faculty vs. Timepass, which saw an unexpectedly good fight by Timepass, the second year all-girls team. However, they were still steamrollered by their strong opponents.

Four such weekends later, the semi-finals took place with semi-finalists being Admin, Lethal Warriors, Alchemists, and Faculty. Supporters of these teams were beside themselves, following their progress thus far. The first semi-final match saw Alchemists beat Admin by a decent margin. The second semi-final match, however, was perhaps the most exciting match this IPL. It was Lethal Warriors vs. Faculty, and the Lethal Warriors' attempt to defend their fairly high score went very well, and they would have been the finalists





had it not been for the timely innings of Dr. Vaidhyanathan and Dr. Srivatsan which led Faculty to a last-over victory. This set the stage for the finals – Alchemists vs. Faculty. On the 7th of February, 2016, a huge crowd swarmed to the stands, eagerly waiting to find out the victors of IPL '16. The teams and their fans readied themselves for a thrilling match. From the get-go, the Alchemists showed exactly how strong their side was. The strong batting-side put up a stunning hundred and seventy-six runs in twenty overs. In an admittedly controversial situation, Faculty's star batsman, Dr. Srivatsan, got out early. This was an excellent breakthrough for the Alchemists, who ploughed through the Faculty batting

line-up, in spite of some resistance by a few, particularly Dr. Pramod Pillai. Alchemists ended up winning decisively, in a match to remember. This brought an end to IPL '16, with the Alchemists continuing their winning streak. The closing ceremony witnessed the distribution of the caps – Orange Cap to Kiran Gajhans of Lethal Warriors for a stunning hundred and twenty-one runs, Purple Cap to Akhil N. B. of Lethal Warriors for nine wickets with a remarkable economy of 3.4, and Green Cap to Dr. Sudipta Tung for seventeen catches, some of which were unbelievable. The man of the series was awarded to Kiran Gajhans, and another unforgettable chapter of IPL came to an end. ■



IISER Badminton League 2015

Long fought badminton tournaments into the nights

Amitayush Jha and Ashwin Gopal, IISER Pune

The fourth edition of IISER Pune's in-house badminton league was conducted between the 18th of January and the 17th of March, 2016. Dubbed as IBL (IISER Badminton League), this event attracted many badminton lovers, first timers, and IBL veterans alike, and consisted exclusively of double's events i.e. men's, women's, and mixed doubles. This event was open to everyone in the campus.

The reception for this year's event was humongous with sixty-eight men's, fifty-four mixed, and twenty-four women's teams registering for the event. This owed largely to the enthusiasm of first year BS-MS students. Due to the delay in completion of the sports complex, which was originally supposed to house the badminton court, the outdoor court near Shiv Sagar canteen opposite to h-cross lab was used to house the event, with tarpaulin covering the perimeter of the court.

The tournament was conducted in a round robin format in the group stages, and then in the knockout format in the latter stages. The teams were divided into pools of three teams each. The group leaders then faced each other in the knockout matches. The draws were made such that each pool consisted of a seeded team. The seeding was based on the performance of the team in the previous season of IBL.

The season kick-started with the inauguration ceremony where many exciting exhibition matches were conducted. The director, Prof. K. N. Ganesh, inaugurated the event, and displayed his badminton skills by playing a few rallies with Dr. Srinivas Hotha. This was followed by exhibition matches between the teams consisting of Dr. Diganta Borah, Dr. Vaidyanathan, Dr. Pramod Pillai, and Dr. S. G. Srivatsan which were crowd pullers. The audience was invited to play a five-point match against Dr. Anupam but none were able to beat him one on one. The day concluded with a mixed doubles match between the finalists of the previous season.

The pool stages began on the 21st of January, 2016 with the players in a relaxed mood. The new teams tried to make an impact while the seeded teams experimented with their



game, and strengthened their co-ordination. The court was filled throughout the night by teams preparing for their matches. The group stages went smoothly, and the results were predictable, albeit some dark horses surprised everyone with their performances. There were also chocolates given for the best shot of the match. The turnout for the group stage matches was appreciable (especially from the first years) in spite of the long duration of the tournament.

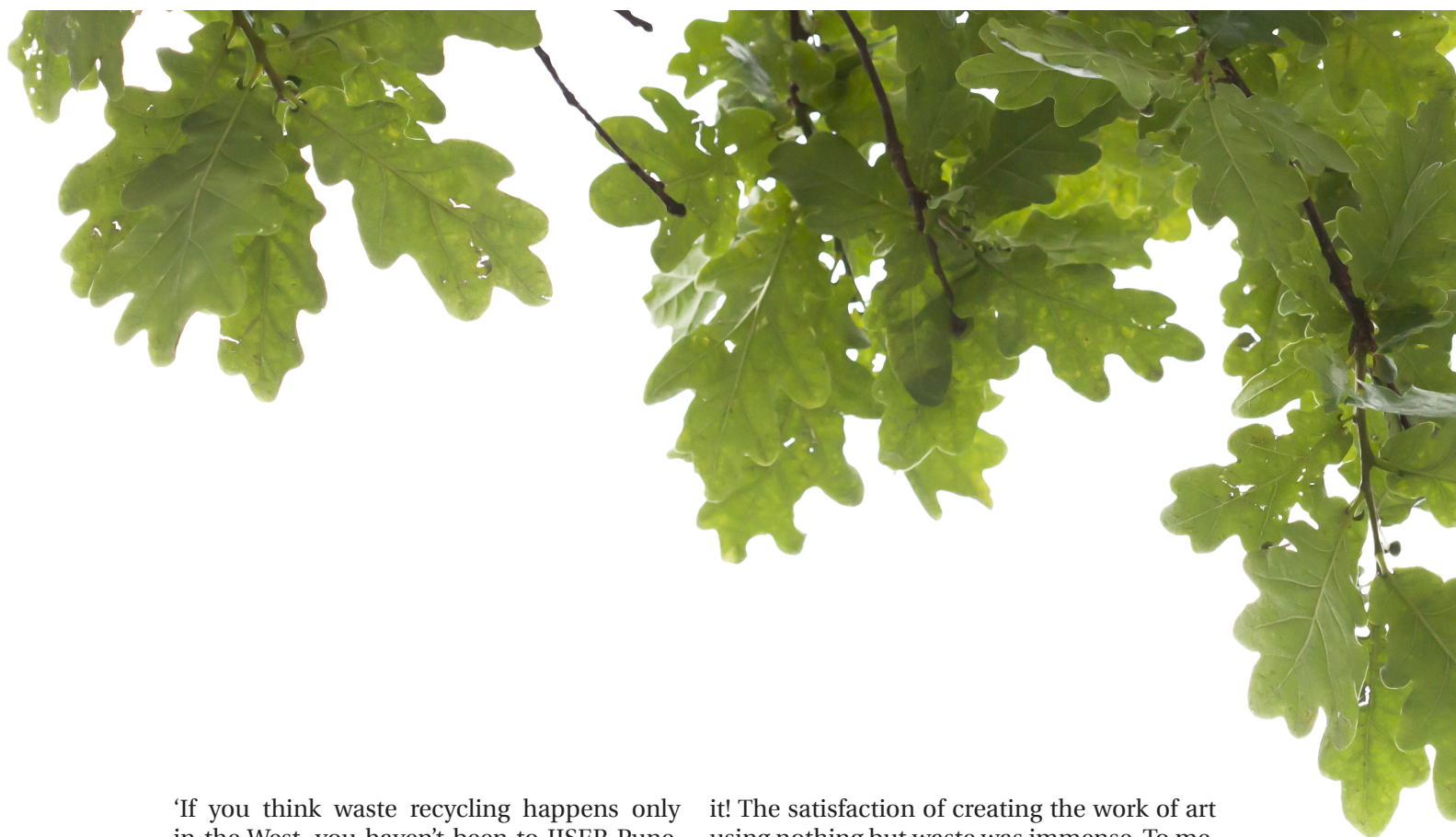
The knockouts commenced after a short break due to the mid-semester exams. There was a great deal of rescheduling due to rain and wind, and clashes with the schedules of the faculty members and the ICC T20 World Cup. The players were now serious, and displayed their prowess in the game in their matches. The semi-finals saw some amazing matchups. After two months of intense badminton, it was finally time for 'The Finals'. The finalists in the men's doubles were Shubham and Aanjaneya, and Ashwin and Aditya, in the women's doubles were Gunja and Deeksha, and Mitali and Surabhi, and in the mixed doubles were Shubham and Ira, and Mitali and Aditya. One could see the players' will to win, their desire to succeed, and the urge get their hands on the IBL trophy. After some truly close sets in 'The Finals', Aditya and Ashwin emerged as men's doubles winner, Mitali and Surabhi emerged as women's doubles winners, and Aditya and Mitali as mixed doubles winners. This season of IBL was a great success, and credit for this mainly goes to the co-ordinators, the volunteers, and Mr. Swapnil Bule (the Sports Co-ordinator). We hope to see all of you in the next season of IBL! ■



Prutha

The Green Club of IISER Pune





'If you think waste recycling happens only in the West, you haven't been to IISER Pune. Prutha, the green club of IISER Pune, gets the job done. Waste is first segregated into plastic, paper, tin and other dry, and wet waste and the dry waste is then effectively recycled.

One other fun part of Prutha are the paper sorting sessions. Here is where you come across students' quiz papers, assignments and sometimes, if you're lucky, their own private scribbles. The blank or partially used sheets are given to Disha, while the completely used ones are sent for recycling.'

—Sameer Kumar Jagirdar, 3rd Year BS-MS

'With the idea that art can be created out of anything, we decided that a coming together of Prutha and Art club to create a piece of art would be both aesthetically appealing and spread a message. We collected the bottles and tin cans, and also started hunting for other waste material around campus. Walking into the mess complex basement one day—Lo and behold! It was like finding a treasure chest. We scavenged out from the heap, and found rusty broken iron bars from old mops, and torn clothes that people had thrown away. The next step was to create a design. We had a lot of blues and greens, and decided to go with a peacock. The football field was our canvas for the day. Over a period of four hours, we arranged bottles, cloth and rods to create the entire peacock. We also found an old coconut shell, which made for a perfect eye. It turned out to be much better than we had pictured

it! The satisfaction of creating the work of art using nothing but waste was immense. To me, it was a coming together of two things that I hold dear, art and the spirit of Prutha.'

—Shraddha Lall, 2nd Year BS-MS

'We left the campus early on the Sunday, 30th August, 2015 and walked to the Baner-Pashan Biodiversity Park. Armed with gloves and garbage bags, we began trekking and searching for waste to collect. I was quite surprised to see the different types of wastes around there. During the trek, we met members from the Wildlife Research and Conservation Society (WRCS) who told us about their tree plantation drives. Following this, we headed to Subway and had a sumptuous breakfast. This cleanup trek made me realise the importance of waste-management and, that if it is not done efficiently, the damage it can cause to our environment.'

—Bhargavi Parthasarathy, 2nd Year BS-MS

'We tend to generate a lot waste in our everyday lives. This is even more pronounced in a huge community such as ours. To make our lives easier and eco-friendly, Prutha has set up a system for recycling of non-biodegradable waste in the campus. Dustbins for tin cans, plastics and cardboard boxes for waste paper are present all around the campus. These steps have been promising, although there is much more potential for making this system more effective. Appropriate steps also need to be taken towards making people aware of these



“It is very easy to sit and grumble about what the government is doing to the environment, what the corporates are doing, what other people are doing, but we at Prutha believe in asking ‘What can we do about it?’.”

– Darshini Ravishankar, 4th Year BS-MS

systems and getting more people involved in our activities. I believe that through the right kind of motivation and awareness, people can get into the habit of reducing and recycling waste. As the saying goes, “Small drops make a big ocean”, our efforts could go on to impact people’s lives.’

–Karthik Abhinav, 2nd Year BS-MS

‘Keeping our surroundings neat and clean is not as simple as making ourselves look clean. It requires the co-operation and co-ordination of lots of people to make the whole campus neat and tidy. As the environmental club of IISER, Pune, Prutha plays the major role in this. Apart from cleaning, Prutha also takes initiatives to protect and conserve natural resources and to resolve environmental issues. Working in Prutha is a joyous experience; we even crack jokes during the paper sorting sessions and other meetings. Our Prutha board is a platform for us to spread awareness through our artistic skills. The freedom that everyone has, and the friendly atmosphere is the speciality of Prutha.’

–Jyothish S., 1st Year BS-MS

‘Saturday mornings at IISER are supposed to be lazy, very lazy. Whether or not you sleep late into the night, you won’t get out of your bed early on a Saturday morning; unless, you are a bird-lover.

Equipped with binoculars, notebooks and water bottles (and a lot of patience) I was off

on a birding trip (organised by Prutha) one Saturday morning in March, 2014. Sunbirds, bee-eaters, robins, swallows, kingfishers, lapwings, cormorants, shikras, and obviously, the noteworthy Indian peafowls – these were, I think, just a tiny fraction of the plethora of avians that Saturday morning treated us with.

On the one hand, the trip was a sweet bliss; on the other, a sorrowful reminder: none of this is going to last forever. All those things we read about in those colourful magazines and books, about losing the biodiversity on this planet, can be seen out there for real.’

–Anup Anand Singh, 3rd Year BS-MS

‘We used to drink quite a lot of juices and I collected those bottles in the hope that they would prove useful someday. And sure enough, the first Plastic Premier League (a competition where participants had to collect the maximum number of plastic waste items) gave those bottles a new purpose. For about 2 weeks, all the teams, and everyone in general, were very careful about plastic segregation and collection. This showed that people can channelise their efforts to making the environment better by their own little contributions. We were overjoyed when we won PPL1 as this gave us the opportunity to dine at Le Plaisir Patisserie & Bistro; but the greater lesson was in learning that waste is really not so worthless, if only we treat it properly.’

–Anwesh Bhattacharya, 2nd Year BS-MS ■

Around the World in 90 Days

'Passepartout!' Phileas Fogg called out. 'We start out for South Korea.'

Passepartout was surprised to see his Master, a man of exactness, break his habits for once.

'Monsieur is going to leave home?' Passepartout inquired, puzzled.

'Yes', returned Mr Fogg, 'We are going around the world.'

'Around the world!' murmured Passepartout, astonished.

'In ninety days', responded Mr Fogg. 'So we haven't a moment to lose!'

-Jules Verne

Around the World in Eighty Days

Kaustubh Tarmale
3rd Year, BS-MS
Synthesis of Multifunctional
Polymer Binder for the Application
of Li Ion Batteries
Dr. Ja Hyoung Ryu
UNIST, South Korea

Kumar Priyadarshi
3rd Year, BS-MS
Graphene Type Materials, Growth
and Device Fabrication
Dr. Andrew Wee,
Provost Professor
NUS Singapore

Saket R. Bagde
3rd Year, BS-MS
Purification and Crystallisation
of Polyketide Synthase Protein
Isd16, Involved in the Lasalocid
Biosynthetic Pathway in
Streptomyces lasaliensis
Dr. Chu Young Kim
Department of Biological Sciences,
NUS Singapore

Rajeev Singh Rathore
2nd Year, BS-MS
Mechanism of Prompt Emission
And Afterglow Properties of Short
Gamma-Ray Bursts
Dr. Shashi Bhushan Pandey
ARIES, Nainital

Shubham Kumar
2nd Year, BS-MS
Design and Synthesis of Porous
Metal Organic Frameworks
Dr. Nagaraja Mallaiah
IIT Ropar

Shubham Chhajer
2nd Year, BS-MS
3D Digital Reconstruction of
Parvalbumin Positive Neurons in
Zebra Finch and Human Brains
Dr. Soumya Iyengar
NBRC, Manesar

Kunal Mozumdar
3rd Year, BS-MS
Studying the Organisation
of Cortical Representations
of Tactile Perception and
Motor Coordination, and their
Reorganisation in case of a
Spinal Cord Lesion/Injury Using
Electrophysiology in Model
System – Rats And Mice
Dr. Neeraj Jain
NBRC, Manesar

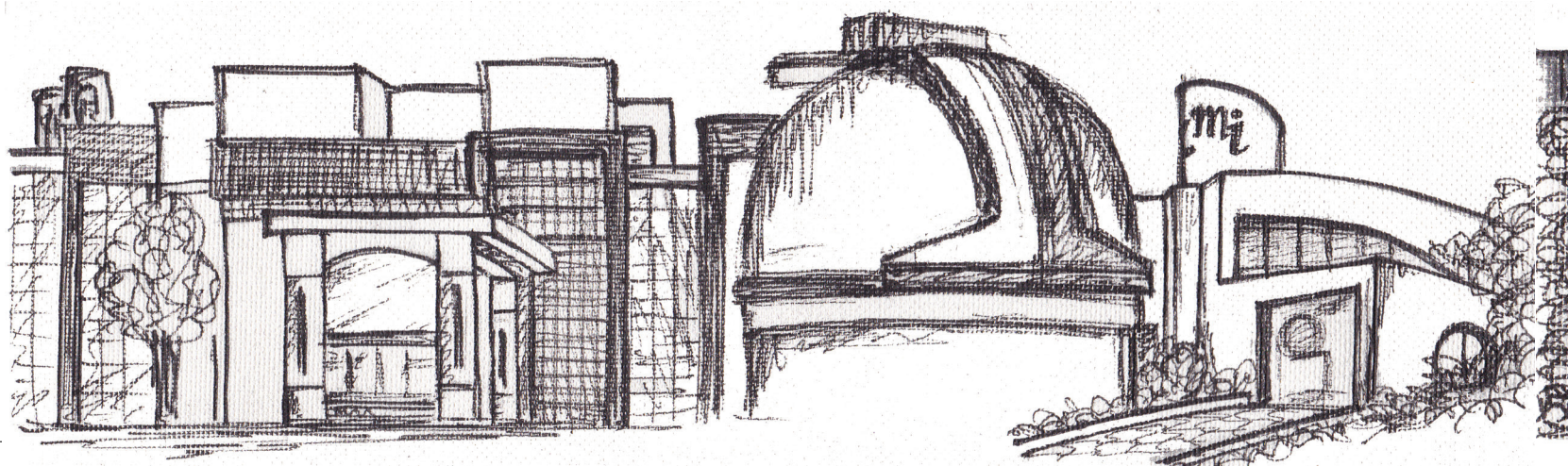
Kartik Maurya
2nd Year, BS-MS
Study of Beam Focusing in Circular
Particle Accelerator
Dr. Malay Kanti Dey
VECC, Kolkata

Prathamesh Madhav Datar
2nd Year, BS-MS
Synthesis and Assay of Thiol
Reacting Compounds
Dr. Dimpy Kalia
University of Pune

Anup Anand Singh
2nd Year, BS-MS
Spectral Analysis of Binary Star
Systems
Dr. Varun Bhalerao
IUCAA, Pune

Karthik Prabhu P.
2nd Year, BS-MS
Study of Harmonicity in the CMB
Anisotropies
Dr. Tarun Souradeep
IUCAA, Pune

Sumeet Kulkarni
3rd Year, BS-MS
Automation of Robotic Telescopes
for Rapid Electromagnetic Follow-
Up Observations of Gravitational
Wave Sources
Dr. Varun Bhalerao
IUCAA, Pune



Sandeep Joy
1st Year, BS-MS
Functionalisation of Cellulose
With Biomolecules and its Novel
Applications
Dr. Sayam Sen Gupta
NCL, Pune

Anurag Singh
1st Year, BS-MS
Magnetically Chargeable Battery
Dr. Muhammed Musthafa
IISER Pune

Basila M. A.
1st Year, BS-MS
Interaction of Intra and Extra
Cellular Forces in Maintaining RBC
Shape
Dr. Chaitanya Athale
IISER Pune

Durga Makarand Parkhi
1st Year, BS-MS
Application of Differential
Geometry Principles to
Atmospheric Modelling
Dr. S. Janakiraman
CDAC, Pune

Haritha S. Rajeev
1st Year, BS-MS
Mechanical Exfoliation of
Graphene and Atomic Force
Microscopy (AFM)
Dr. Aparna Deshpande
IISER Pune

Ingale Vaibhav Vijay
1st Year, BS-MS
To Study the Coherence of
He-Ne Laser Light Using
Michelson Interferometer and
Generation of Exciton-Polariton
in Semiconductor Material
Dr. Shouvik Datta
IISER Pune

Joshi Gaurav Shrikant
1st Year, BS-MS
Characterisation of Restriction
Modification Systems
Dr. Saikrishnan Kayarat
IISER Pune

N. Jayanth Kumar
1st Year, BS-MS
Modelling of Strandbeest to Move
Using a Python Code Written on
Raspberry Pi
Dr. Collins Assisi
IISER Pune

Pankaj Bhagwat
1st Year, BS-MS
Number Theory (Interesting
Primes!)
Dr. Chandrasheel Bhagwat
IISER Pune

Shilbhushan Shambharkar
1st Year, BS-MS
Group Theory
Dr. Rabeya Basu
IISER Pune

Sumana Chetia
1st Year, BS-MS
Elementary Number Theory
Dr. Chandrasheel Bhagwat
IISER Pune

Vimanshu Chanda
1st Year, BS-MS
Study of the Effect of Electrode
Material for Supercapacitor
Application
Dr. Muhammed Musthafa
IISER Pune

Faseela E. E.
2nd Year, BS-MS
Site-Directed Mutagenesis of HA-
API5 K251Q And K251R to make
them shRNA Resistant
Dr. Mayurika Lahiri
IISER Pune

Jesil Jose
2nd Year, BS-MS
Synthetic Applications of
Aldehyde, Amine, Alkyne Coupling
Reaction
Dr. Pinaki Talukdar
IISER Pune

Rubiya Mohammed
2nd Year, BS-MS
Synthesis and Analysis of Bi₂Se₃
Dr. Aparna Deshpande
IISER Pune

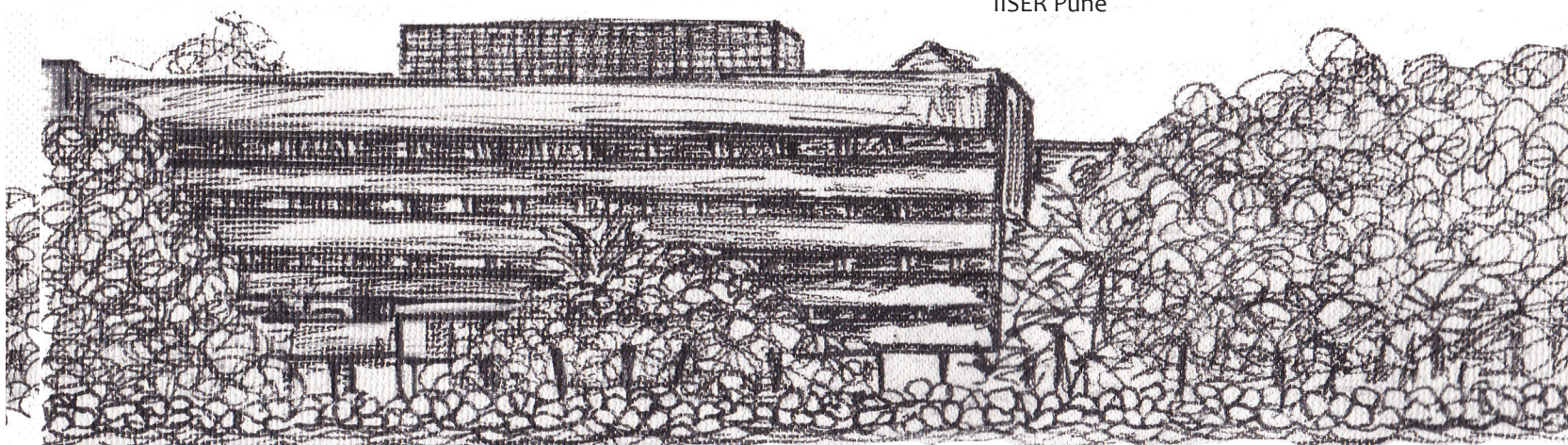
Swathi Krishna S.
2nd Year, BS-MS
Optimising the Fibre Tip for
a Scanning Near Field Optical
Microscope
Dr. Shivprasad Patil
IISER Pune

Swetha Jos
2nd Year, BS-MS
Modification in Nucleosides to
Perform Click Reactions
Dr. S. G. Srivatsan
IISER Pune

Chris John
3rd Year, BS-MS
Matrix Groups and their Lie
Algebras (Mathematics)
Dr. Anupam Singh
IISER Pune

Aishwarya Dipak Bhosale
3rd Year, BS-MS
Studying Microtubule
Modifications and Dynamics in
Neurons
Dr. Aurnab Ghose
IISER Pune

Kiran Gajhans
3rd Year, BS-MS
Multisite Phosphorus-Nitrogen
Ligands and their Coordination
Compounds
Dr. R. Boomi Shankar
IISER Pune



Lavanya Lokhande
3rd Year, BS-MS
Signalling Pathways Involved in
the Regulation of Food Intake and
Obesity
Dr. Milind Watve
IISER Pune

Lipi Jain
3rd Year, BS-MS
Block Co-Polymers Based on
Poly(Caprolactone)S
Dr. Manickam Jayakannan
IISER Pune

Papia Bera
3rd Year, BS-MS
P-Adic Fields
Dr. Supriya Pisolkar
IISER Pune

P. M. Shreendhi
3rd Year, BS-MS
Modelling an Index to Measure
Reciprocity in Heterostylous
Plants
Dr. Deepak Barua
IISER Pune

S. Harini
3rd Year, BS-MS
Influence of Female Cues on Male
Zebra Finch Song and Dance
Dr. Raghav Rajan
IISER Pune

Ruchi Wasnik
3rd Year, BS-MS
Large Scale RNAi Screen to
Identify Tumor Suppressor Genes
in *Drosophila melanogaster*
Dr. L. S. Shashidhara
IISER Pune

Kapil Tirpude
4th Year, BS-MS
Study of Electron Blobs Emitting
from 3C120
Dr. Prasad Subramanian
IISER Pune

Anwesh Bhattacharya
1st Year, BS-MS
Asteroeismology of Red Giant
Stars
Dr. Anwesh Mazumdar
HBCSE – TIFR, Mumbai

Deeksha Adil
3rd Year, BS-MS
Inertial Particles on a Random
and Vibrating Potential Energy
Landscape
Dr. Samriddhi Sankar Ray
ICTS – TIFR, Mumbai

Bharath Krishnan
2nd Year, BS-MS
The Dance Behaviour of the
Western Honeybee
Dr. Axel Brockmann
NCBS, Bangalore

Siddhartha Sohoni
2nd Year, BS-MS
Core-shell Nanoparticles Exhibiting
Novel Magnetic Properties
Dr. Ranjani Viswanatha
JNCASR, Bangalore

Poornima B.
1st Year, BS-MS
Honeybee Democracy
Dr. Vishwesha Guttal
IISc Bangalore

Mekhala Kumar
2nd Year, BS-MS
Effect of the Age of a Wasp in its
Competitive Ability to Become an
Egg Layer
Dr. Raghavendra Gadagkar
IISc Bangalore

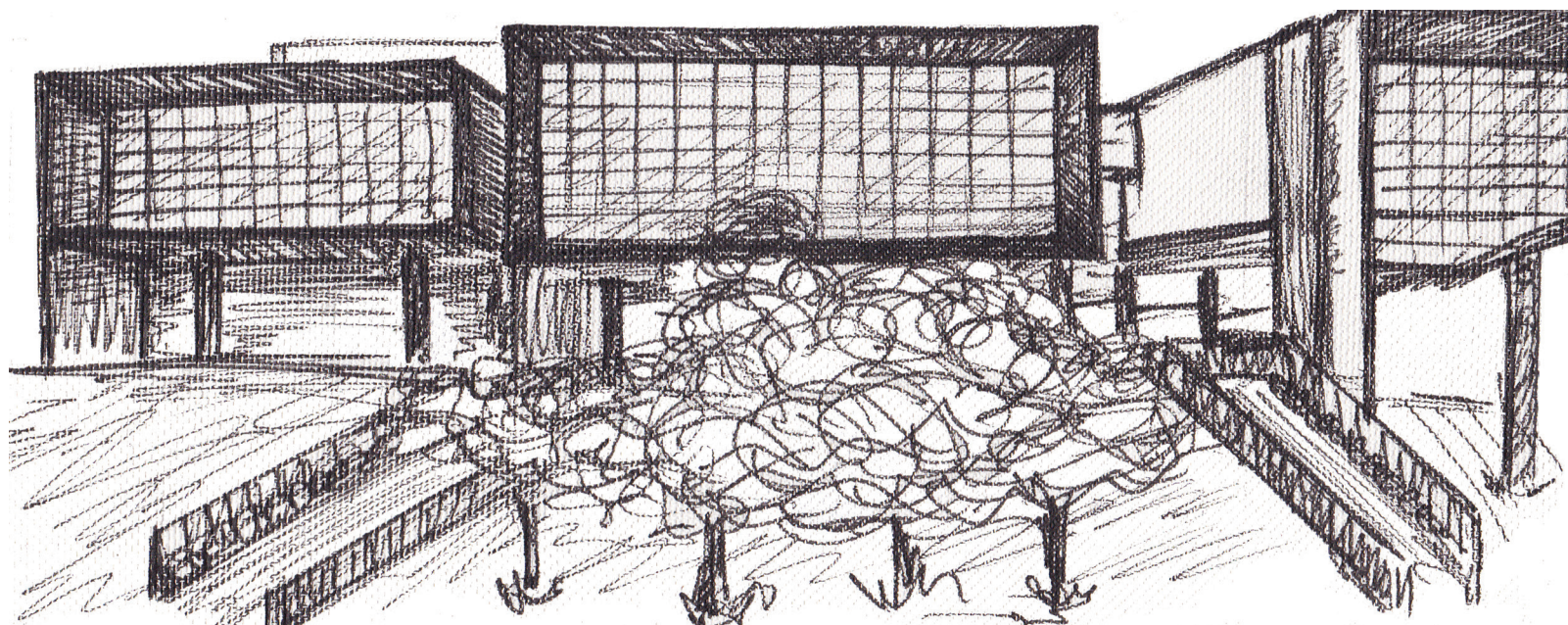
Shreeya Behera
2nd Year, BS-MS
Code Construction for Balanced
Arrays
Dr. Shayan Srinivasa Garani
IISc Bangalore

Urmi Poddar
2nd Year, BS-MS
Effect of Shrub Encroachment
on Soil Bacterial Biomass in
Chellakere Grasslands
Dr. Sumanta Bagchi
IISc Bangalore

Shrinidhi Mahishi
3rd Year, BS-MS
Study of Pre-Mating Behaviour
in a Eusocial Wasp, *Ropalidia
marginata*
Dr. Raghavendra Gadagkar
IISc Bangalore

Seethalakshmi K.
1st Year, BS-MS
Preliminary Study in Differential
Equations
Dr. Ashish Awasthi
NIT Calicut

Upendra Arya
2nd Year, BS-MS
Vocalisation Patterns in Nilgiri
Langur, *Semnopithecus johnii*
Dr. Mewa Singh
University of Mysore and
Nelliampathy Reserve Forest,
Kerala



Alma Mathew
2nd Year, BS-MS
Study on LaFeO₃ Perovskite:
Synthesis and Characterisation
Dr. Manoj Raama Varma
CSIR – IIIST, Thiruvananthapuram

Aathira Gopinath P.
Keerthana T. V.
2nd Year, BS-MS
Cloning of Scorable and
Quantifiable Reporter System to
Detect Alphavirus Replication
Dr. E Sreekumar
RGCB, Thiruvananthapuram

Irene Dutta
3rd Year, BS-MS
CMS Open Data Validation
Dr. Achim Geiser
DESY, Hamburg, Germany

Varun Srivastava
3rd Year, BS-MS
Auto-Alignment of the Laser Beam
for the Guoy Phase Telescope
Dr. Harald Lueck
Albert Einstein Institute, Hanover,
Germany

Abhishek Anand
3rd Year, BS-MS
Characterisation of PCH2, a
Meiosis Specific Protein
Dr. Gerben Vader
Max Planck Institute of Molecular
Physiology, Dortmund, Germany

Saikat Bera
3rd Year, BS-MS
Indirect Detection of Dark Matter
Particles
Dr. Manuel Drees
Physikalisches Institut der
Rheinischen Friedrich-Wilhelms-
Universität Bonn, Bonn, Germany

Abhijit Fulkar
3rd Year, BS-MS
Study of Mesoporous
Materials by Small Angle
X-Ray Scattering at Soleil
Synchrotron
Dr. Marianne Impéror
Université Paris-Sud, France

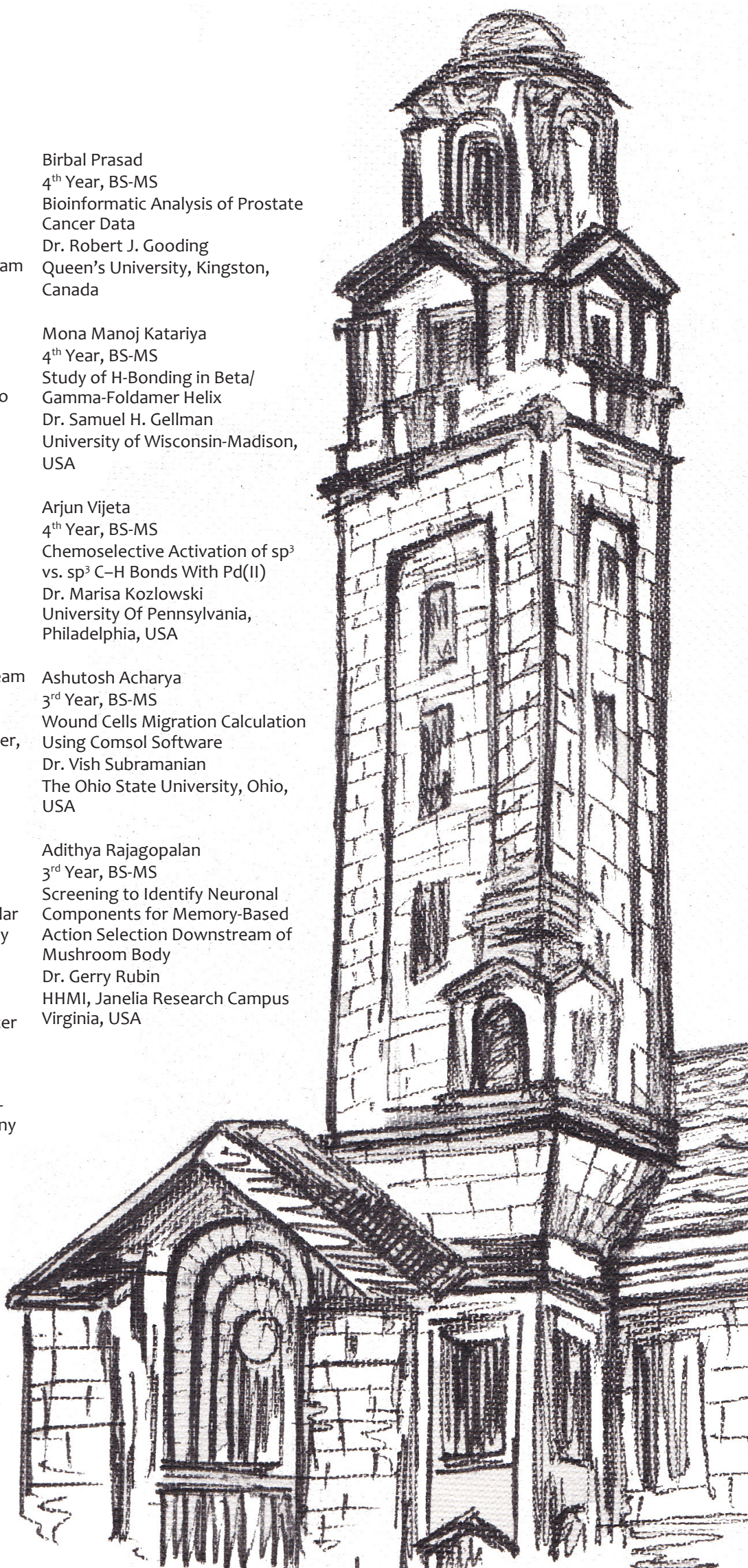
Birbal Prasad
4th Year, BS-MS
Bioinformatic Analysis of Prostate
Cancer Data
Dr. Robert J. Gooding
Queen's University, Kingston,
Canada

Mona Manoj Katariya
4th Year, BS-MS
Study of H-Bonding in Beta/
Gamma-Foldamer Helix
Dr. Samuel H. Gellman
University of Wisconsin-Madison,
USA

Arjun Vijeta
4th Year, BS-MS
Chemoselective Activation of sp³
vs. sp³ C–H Bonds With Pd(II)
Dr. Marisa Kozlowski
University Of Pennsylvania,
Philadelphia, USA

Ashutosh Acharya
3rd Year, BS-MS
Wound Cells Migration Calculation
Using Comsol Software
Dr. Vish Subramanian
The Ohio State University, Ohio,
USA

Adithya Rajagopalan
3rd Year, BS-MS
Screening to Identify Neuronal
Components for Memory-Based
Action Selection Downstream of
Mushroom Body
Dr. Gerry Rubin
HHMI, Janelia Research Campus
Virginia, USA





Artwork by Tomin James

In memoriam: Dr. A. P. J. Abdul Kalam

By Siddhesh Zadey

The 27th of July will now be commemorated as Students' Day. It seems to be the only suitable way to celebrate the life of a man who spent even his last moments in an auditorium in the Far East with his students. For most of my adolescence, Dr. Kalam stood not as an inspiration, but rather, as an obstruction to my descent towards believing in anarchism. His idealism is obscure for a critique's comprehension, yet simple for a believer's acceptance. To be a staunch nationalist at heart, and yet be a commentator of global good without being diplomatic necessitates the pristine quality of mind and soul. Dr. Kalam was in possession of this quality, which shimmered through his enthusiasm for creative idealism. His vision is now the dream of many. He was a man without any children but a million descendants.

Amidst all the news obituaries and RIP messages, I started feeling occluded as I was not able to remember the real him. This was more miserable than missing him. I needed an encounter with him posthumously. But I knew that neither his books nor my dreams could assist me in reaching him. After remaining sleepless for about an entire night, at 4:00 AM I wrote to Dr. R. A. Mashelkar, asking him to visit IISER and join us in remembering Dr. Abdul Kalam. Proving to be Dr. Kalam's true disciple, he wrote back within a few minutes, starting the mail with 'My dear Siddhesh', and ending with an affirmative response.

The encounter with Dr. Mashelkar provided all the attendees an insight into Dr. Kalam's life as a president, as a technologist, as a teacher, and as a person. The programme commenced by unveiling a poster titled 'An appeal to Indian Citizens' that contained the message of Dr. Kalam after which Prathamesh Datar and I began the interview by asking him his take on the message.

He began by speaking about the three dreams of Dr. Kalam for our nation. His first dream was of freedom in terms of economy, technology, and thought. He was inclined towards an understanding of freedom that compelled us to compete with the world in every aspect but prevented us from the idea of conquering anyone. His second dream was of development. He wanted our nation to be self-reliant and self-assured. He wished for her to be self-confident. The third dream was derived from the first and second dream – he wanted India to stand up to the world. He believed that she should be a nation of value and respect her fellows.

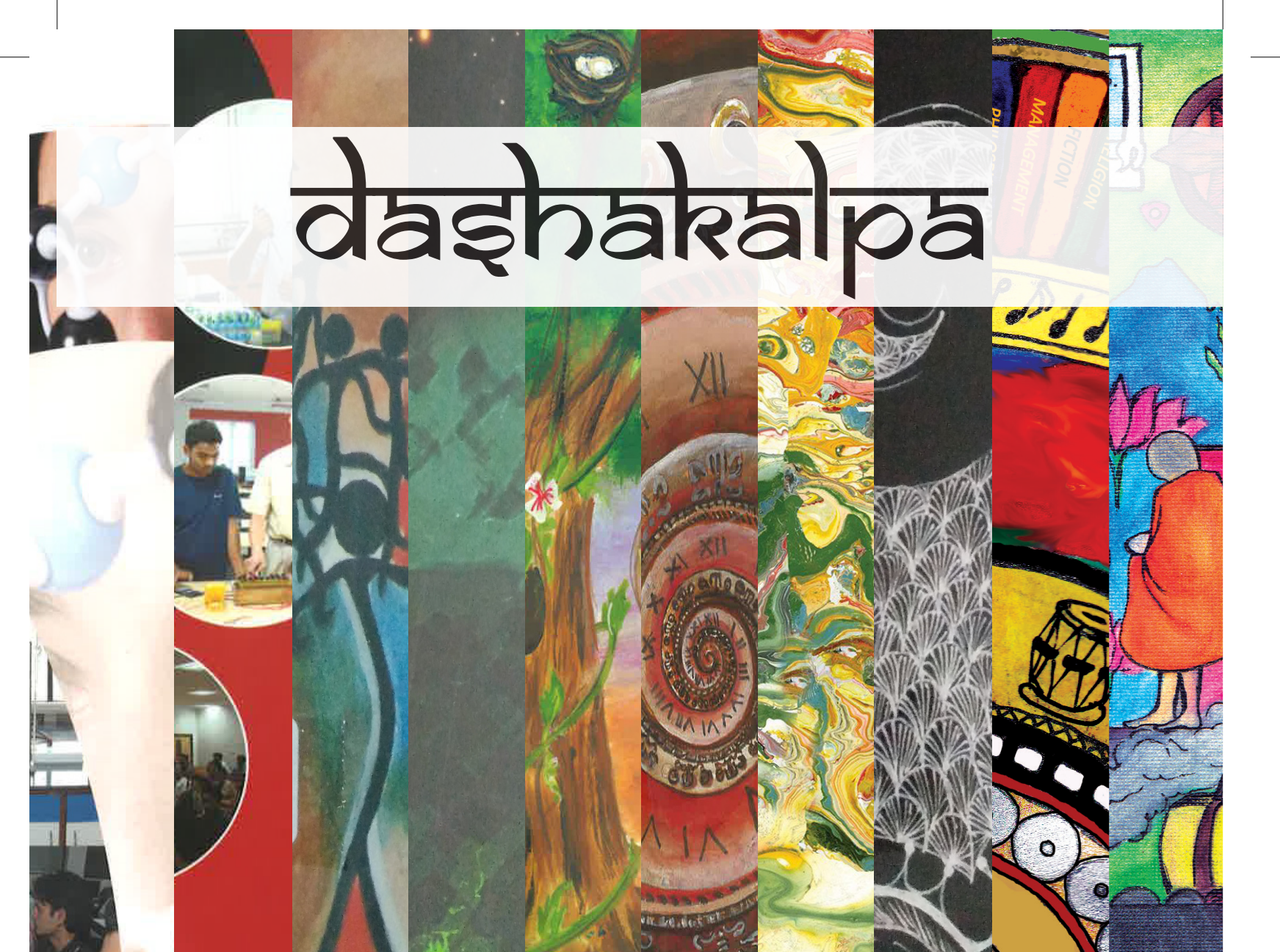
When asked about which aspects of Dr. Kalam's personality he found captivating, Dr. Mashelkar replied that Kalam's humbleness as a person, and his ability to sink deep into a subject as a student were two of his very attractive attributes. He further elaborated by mentioning how those qualities made Dr. Kalam a truly great president. He brought into discussion the famous story of patenting the medicinal use of turmeric, and how India won the patent during the presidency of Dr. Kalam.

He then talked about what made Dr. Kalam a successful researcher and technologist. Dr. Kalam's entire career was filled with instances of denial driven research. He said, 'Sometimes getting no for an answer is more encouraging than a yes'. He spoke about the importance of indigenous science by citing the example of Gandhian engineering.

When a comparison was made between him and Dr. Kalam, he replied politely that the comparison was too far-fetched, and that the work of Dr. Kalam was gigantic in stature and magnanimous in nature.

The programme ended with a very critical question – 'What does it take for a person to be a defense researcher for a great part of his life and still win the hearts of his countrymen as a peace lover?', to which he simply answered, '... well this is what happens when science and spirituality come together.'

The general consensus at the end of the programme was the acceptance that every individual in the room had understood a great deal better, the philosophy and the undeniable greatness of Dr. A. P. J. Abdul Kalam.



वेदशेखरवाप

Kalpa at 10

Richa Rikhy

Kalpa editors' choice, call for articles, midnight snacks, arguments, madness, another call for articles, colours, paints, computers, software, 3:00 AM breakthroughs, compilation, and the ultimate result – the Kalpa magazine for the year! Year after year, for the past decade, the student teams have come together with a creative, innovative, and an original magazine, traversing the gamut of emotions, art, and updates of the eon that was. This magazine is a heartfelt tribute to the journey of the student batch departing that year, and a warm welcome to the new batch of students and employees of the IISER community. Each edition has continually stirred interest within the IISER Pune community and outside.

Even though I have been the faculty co-ordinator for this magazine for the last few years, I have secretly cherished the enthusiasm and unconventional aptitude of the students. As much as meeting the Kalpa team in the wee hours of the morning has been a crazy experience, seeing the Kalpa team evolve an organisation out of nothing, and keeping to the deadline of delivering a printed copy for the Foundation Day has been absolutely remarkable. From invigorating discussions on the Kalpa theme, which represents the articles of the year, to the aroma of the arrival of the first printed copies, the Kalpa magazine has created innumerable memories that will last forever.

The makers of the tenth Kalpa have taken a special effort to create a travelogue through the ten-year-old journey of IISER Pune. Ten years is not a long time in the history of any place that is determined to have an everlasting presence. But it has been a time that saw a lot of change in terms of location, people, infrastructure, and campus formation. The editors have made a tribute to all the achievements that have contributed to a unique, vibrant, and enriched ecosystem that never was.

2007-09

Sisir C. Anand



I was unsuspectingly nominated as the editor of our college magazine in the first year of IISER Pune. Uninitiated in the process of publishing, I limited myself to the role of canvassing articles from the students, faculty, and administrative staff. Proofreading was done under the supervision of the faculty editor in-charge, Prof. Ambika. Our hostel warden, Dr. Bhat, had cultural flair, and helped us stumble upon the name 'Kalpa' in under half an hour of serendipity – there was a Sanskrit Dictionary in the fledgling library, we borrowed it, unimaginatively looked up the word for imagination, Kalpana, and then, untutoredly scrolled up to Kalpa.

Half the magazine wrote itself as it had an institutist's reports on events in and around IISER; the stress was on collating and fact-checking. The literary ambit of the magazine was to be inclusive – the quality control was lenient – challenging and motivating students to contribute to a magazine that alienated us from our hectic journeyworks. Only plagiarised articles were rejected.

Some of us wished for a flashier budget, others felt the magazine was beneath their standards, while yet others felt they needed to be paid for their efforts. But practically, we knew nothing grand would come out of our efforts. No one wished for any deadlines in addition to the ones that were already there for other curricular assignments, and people diplomatically brushed off requests for articles. Deadlines had to be extended to just before the final drafts were handed over to the press. We fell short of material, and were confronted with plenty of blank spaces when the galley was typeset, resulting in a scramble to get filler material. The fresh copies of the magazine, however, arrived in time for its inauguration. The reaction to the first edition of the magazine was muted, and luckily, uncontroversial, with the most asked question being, 'What does Kalpa mean?' Frankly, we needed to look at the dictionary to be prepared with an answer every year, with the release of each issue.

The new academic year brought new students, and recruited new faculty members. IISER kept expanding, and the magazine matured with input from those eager new people. The unplanned stress of the first year was avoided as we had a skeleton plan, and had calibrated our expectations.

It remained a leisurely and voluntary activity, and since none of us were insiders of a more organised publishing industry, the insights we gained, or worries we had were minimal, with no professional wisdom helping us troubleshoot the magazine to take it to greater heights. More contributors also brought into the fore the contest between quality and quantity and issues of censorship. The reaction to the release of the second edition also reflected these trends. None of us were professional critics either, and could not gauge the pulse on what exactly had to be improved. It felt ironic that a scientific institution was going about executing its magazine in an irrational, non-scientific way. None of us attended conferences on publishing, there were no journals showcasing research on what a campus magazine from a scientific community should look like; the magazine totally divested from the scientific spirit. We didn't even conclusively survey samples of other scientific magazines for any hints on how to tailor our mission. Sadly, thus, we didn't hypothesise, experiment, or falsify, and therefore, rectify anything. We quarantined the art of the magazine into some impenetrable, contagious domain of the humanities which seemed then, as an antithesis to science. Perhaps we excused ourselves by saying that we were trying to humanise our lab coats rather than using the humanities to camouflage our lab coats.

The third academic year arrived, the campus rented better infrastructure, and the magazine found more advocates. Technology started becoming universal and accessible and allowed for streamlining. I found youthful, less disillusioned members joining the editorial board. They brought ambitious test tubes, and unstained lab coats into the magazine, and incubated new schemes, while I was relegated to distributing the safety goggles, lubricating the magazine at some stubborn gears, and disposing hazardous outputs of experiments that blew up. At the home stretch, I was relieved of my duties, and had the mutant luxury of reacting to the magazine as an outsider, except for the mandate of contributing to it on demand, and feeling the sympathy of a deadline from the other end.

I hope the magazine has grown up to be a guide for the community who embraced it, and that braver souls keep contributing.



2010

Siddharth B. Iyengar

There is something magical about seeing art; to see expression, possibility, emotion, imagination. There's something magical about making art; the process of creation, the inspiration and thought that is irreducibly opaque, exciting, and fundamentally a part of being human. There is something magical about sharing (and facilitating) art. Take some thoughts, assemble to a form, and send that form out to play with the world. The joy of touching and exchanging with different minds, the tension of always imperfect translations (between languages, people, lives).

Why, in a scientific institution, must I talk of magic?

To me, it is magical to see beauty and vitality in everything around me. I haven't always grasped the sheer importance of that inexplicable magic in my life, my society, and my profession. In our formal writing, we tend to act as if it doesn't exist. We don't always acknowledge the fundamental role of imagination in shaping our possible futures. Working for Kalpa in 2009 and 2010, labouring with a team of dear friends, was all of these things for me – a chance to be involved in so much magic! Kalpa carried the first piece of poetry I ever wrote (written in a burst like I am writing now). It* showed me that there are many ways of being an artist (and therefore, a person) that my younger (grammar obsessed, English educated, and puritan) self hadn't known. It made me appreciate the labour that goes into publishing.

'Does it matter that I pay so much attention to where the commas go?'

'Should we really be letting XYZ be so long winded?'

'The deadline is far away, we'll certainly be done by then.'

'Who's going to take on writing all these reports on the glory of IISER?'

'It would sound so much better if they just framed it this way!' 'No, that would be you writing in your particular way, this magazine is not about you.'

'Just one more round of edits.'

'Why can't this printer understand our colour scheme?'

'Please, please give your article by the deadline...'

A huge, huge debt of gratitude to Sisir C. Anand (from the 2006 batch) and Prof. G. Ambika. We complained a lot, feared their e-mails, and kept pushing their deadlines. Their initiative and dedication really gave Kalpa a start in the world, a start from which it has continued to grow!

And a huge debt of gratitude to all the artists of IISER who have shared bits of themselves with the world, through Kalpa!

Here's to many more decades of expression and imagination!

*Here, I am frustrated by the way gender and animacy are tied to pronouns in English. 'It' suggests inanimacy, but Kalpa doesn't feel inanimate to me, rather brimming with so many lives! To show animacy, I must use 'he' or 'she', and I can't give Kalpa a gender...

2013

Rachana Bhave



Working with Kalpa for three years was the closest I have ever been to experiencing parenthood. The many sleepless nights I spent adoring it, agonising over it, cajoling it, and even being guilty of ignoring it at times, is testimonial to this fact. In return for thy unrequited time and love, I have been rewarded with, among several other things, virus-laden pen drives (that could crash one's laptop hard disk), a messed up circadian clock, and in some cases, lower grades in courses. Surprised as to how and why one would voluntarily put themselves through all this for a magazine which could end up in a waste paper bin? For the sheer thrill and joy of concocting abstract ideas into reality – I would do it all again.

Being one of the 'enthu-cutlets' of the 2010 batch, there were few opportunities at IISER then, to engage oneself creatively without the activity fizzling into oblivion. I was, therefore, excited about the opportunity of being part of the 'proper' college experience that Kalpa defined. As first year students, we did several small tasks – designing posters, writing reports, transcribing interviews, and compiling photographs. The enthusiasm with which we all shouldered responsibility for the magazine was well rewarded as we were given the chance to pen the editorial for the magazine. This appreciation and encouragement notwithstanding seniority has been a cornerstone in making the work delightful year after year.

What made the experience of working with the 2011 edition of Kalpa distinctive, though, was the fact that in spite of our efforts, when the magazine released, it was an utter disappointment to everyone. Despite our efforts, the magazine was rather childish, and didn't represent the diversity of the community at IISER. It was the failure of this edition that inspired us to strive for something better, and ultimately shaped the 2012 edition of Kalpa. The entire credit for putting together the magazine goes to Alisha (from the 2009 batch) whose vision for the magazine transformed it into a benchmark to which all editions of Kalpa would be measured. I remember how we absolutely failed to grasp her ideas in the first few meetings, but nevertheless trusted her, and contributed as much as we could.

But that wasn't enough, as we were still restricted by our need to outsource the typesetting of the magazine to a printing agency, which was a major reason for our failure the previous time. Thus, we were over the moon when we heard that the assigned printer had left us, and that too five weeks before the magazine release! The institute had to finally give in, and trust us to design the magazine all by ourselves. So for the next whole month the reading room was our abode right until the wee hours of the night, and exhausting as it was, I had the time of my life. Flipping through the pages of Kalpa 2012, I am reminded of the countless stories behind each page of the magazine – disagreement over fonts or edits, brainwaves regarding design, our lament at the dearth of writers, and our everyday struggle with the ever imposing deadlines.

While Kalpa 2012 will perhaps be the closest to my heart of the three editions, it burdened us with an additional responsibility to create an edition that could surpass or be as good as the previous one. It was back to struggling with the old demons, time, and trying hard to avoid mistakes of the past to create something better. Keeping the team equally motivated to work was difficult to do, given that we had to let go of so much of our social and academic life at IISER in the weeks leading to the release. But the inspired madness, perseverance, and talent of many in the team ensured that the 2013 edition lived up to the legacy of its predecessor.

Browsing through the pages of the past editions, my heart still cringes seeing mistakes in every other page. Nevertheless, I will forever be grateful to Kalpa for giving me a life's worth of fond memories, and an irresistible obsession with to-do lists and font styles. If nothing else, it guaranteed us an alternative career option in a publishing house, if ever things went south for us in research. Thanks can never be enough to Sisir for creating the possibility of this experience, Alisha for upping it several notches higher, my comrades, Krishna, Saudamini, and Prasenjeet for being part of this experience with me, and for all those contributors in the past and in the future, who will ensure that Kalpa keeps growing forever.





2014

Sharvaree Vadgama

cow (n): is used for a living being with an overload of craziness and creativity.

A few crazy ideas and some foolhardiness;
She took up the baton as the head cow of the magazine.
Thus began a year long journey...

Of convincing, pleading, and bossing over innocents,
Waking them up, on early mornings of lazy weekends,
To edit articles, poems, and sundry reports,
About IPL, campus updates, new faculties, and more.

She begged, pleaded, shouted, and terrorised,
To complete work long overdue, or they shall all die.
Editing paragraphs, and putting oxford commas,
Struggling against sleep, they toiled all night.

Aligning articles, drawing doodles, Photoshop-ing pictures,
Finding fonts, and InDesign-ing illustrations.
They lived in haunting fear of distraught contributors,
Who felt their articles had been butchered, their poems mangled.

Disheartened and dismayed, angry and annoyed,
They tracked those poor editors, in corridors and the mess,
Held them tight by their collars, against the wall,
Until their articles were purged, not included at all.

The cows worked all day and through the nights,
Time passed by with no social life.
They strove and slogged, and overworked themselves,
Sat through class, just doodling some elves.

With all these efforts came a final black and white,
The nicest cover of all times – a new Kalpa to hold tight.

Undone edits, and that extra space,
Uncorrected mistakes, and tears on her face.
Kay made a face, 'Why do you do so?
Care about people who just flip through?
You worked hard, and so did your team.
Now it's time to study and take a chill pill.'

Wiping her tears she realised,
It's not just those mistakes, but all the stuff...



2015

Harini Suri & Lavanya Lokhande



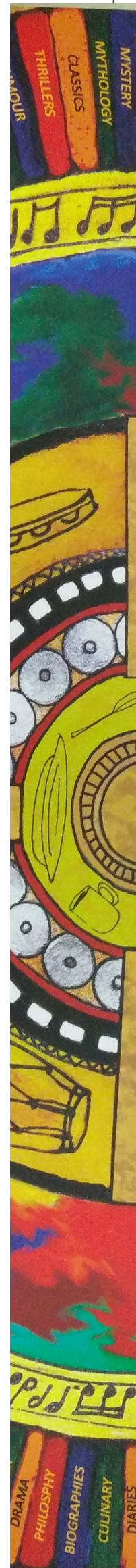
The year 2015 came, and we were prepared. It was going to be anything but simple, and we had it all planned for two years, at least that's what we felt. We had been trained and taught by the best, and it had become an innate part of us by then.

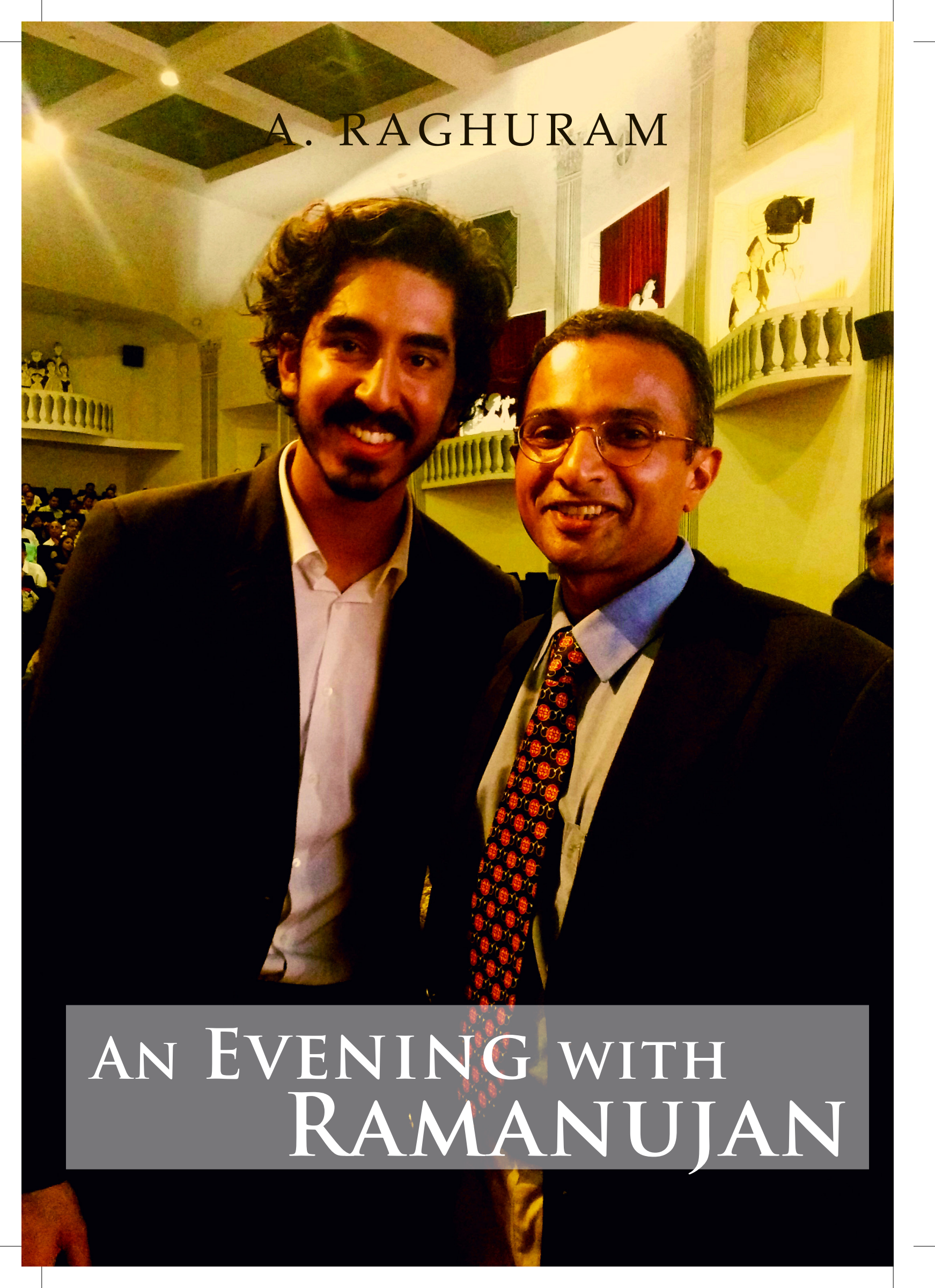
When we joined the Kalpa team for the first time in the year 2013, we were every bit naïve to Photoshop, InDesign, and Illustrator as one could be. We were just rookies who were interested in art or in writing. That's it. We remember those days when Rachana would push us to do a bit better, or Prasanjeet would teach us something remarkable and time saving on InDesign that would leave both of us amazed. But what we learnt the most from our predecessors was how much you can support each other, bring together people across batches, and not just make a team to get a magazine made, but to build friendships and instil the love – the love for Kalpa.

Kalpa '15 was, and will always be very close to our hearts. Each one of those one hundred and fifty pages has been engraved in our minds forever (and mind you, I mean it literally!). From the very beginning, we cherished every tiny incident that was related to the making of Kalpa '15 – how a theme was chosen from the list of absurd but brilliant words that Darshini was throwing at us one fine evening, or how we had an impromptu discussion with Shubham, Divya, Mekhala, and Mithila about the farewell section (that meant the world to us at that point) and putting things in sticky notes, or how Amruta managed to tackle Baraha like a professional to just save us in time, or how we really got lucky to have some amazing juniors join us for the first time, and make Kalpa '15 even more colourful. Every bit of these and a lot more moments will always be remembered. But Kalpa '15 was nothing without the other mainstream events, like upgrading to new levels on how to take power naps in the cozy multipurpose hall, random dance and song sessions, running to the vending machine to grab every packet of food we could get our hands on, sending people to buy food from Shivajinagar station at 3:00 AM, and catching up on addictive songs on YouTube (Thanks to Divya!).

The day we finished our Kalpa, we were nothing but than proud and nostalgic, and we knew that it really wouldn't have been possible without the immense amount of support and trust that Dr. Richa had given us. For as long as we know Kalpa, she has always been there to come look at what we were up to, comprehend our ridiculous ideas (I still wonder how she made sense out of some of them!), and somehow every year she has managed to make us stick to our 'hard' deadlines, always! Thanks a lot Ma'am! We are also grateful to the Kalpa '15 team for making our dream come true, and of course, for putting up with our crazy ideas! We know we were hard at times.

We are extremely proud to have been a part of Kalpa. We have acquired new skills, we have learnt new languages, we have made great friends, and we love it! And to top it all, what Kalpa taught us the most was that no matter how much you strive to attain perfection, there is always going to be something missing, something a little off, and you don't know what it is, but if you are happy, and you are happy that you made it, that feeling of satisfaction will always be with you and make you smile every time you look at your work – your Kalpa!



A photograph of two men standing in a theater. The man on the left has dark, curly hair and a beard, wearing a dark suit jacket over a light-colored shirt. The man on the right has short dark hair, wears glasses, a dark suit jacket, a light blue shirt, and a patterned tie. They are both smiling. The background shows the interior of a theater with balconies and a red curtain.

A. RAGHURAM

AN EVENING WITH
RAMANUJAN

The 15th of November, 2015 was another typical day of a Fall semester – I woke up in the morning and checked my e-mail, and was somewhat surprised to see that my friend, Manjul Bhargava, had sent me a long-ish e-mail, somewhat apologetic in tone, because he was giving me a very short time to decide if I could make it to the International Film Festival of India (IFFI) in Goa, which was to start in five days' time. I was to represent the world of Indian Mathematic(ian)s for the opening evening of IFFI, which had a premiere screening of 'The Man Who Knew Infinity'. I remember thinking to myself, even if Manjul was joking with me, I wouldn't miss such an evening for the world. I had to tell my students in my Representation Theory class, who had their final exams coming up shortly, that they simply had to figure out the Mackey Isomorphisms by themselves during all the end-of-the-semester chaos, as I had a date with Ramanujan in Goa. (Manjul Bhargava, incidentally, is the famous number theorist at Princeton, who was awarded a Fields Medal in the Seoul ICM in 2014 for his breathtakingly original work on extending Gauss's ideas on composing quadratic and higher order binary forms.)

A few quick calls, and my flight tickets and a hotel room in Goa were all arranged. I was amused that I was mentally fussing over what one should wear for such an evening. Mathematicians in general, and I am one exception to such a generalisation, are sartorially challenged freaks of nature. My customary, almost regulation mathematician's uniform of jeans and shirt simply wouldn't do if I were to be representing all the *desi* mathematicians. The excruciating choice of going for either a *kurta*-type attire, or a jacket-and-tie ultimately admitted an easy solution, simply because I had no appropriate footwear for ethnic outfits. Even the grand idea of a film festival couldn't make me go and buy a pair of *mojharis* (or whatever those uncomfortable looking things are called – I will take a pair of running shoes any day, thank you very much). So, I dusted my old navy blue blazer, picked up a tie, and was soon on a flight to Goa, looking forward to the IFFI, not to mention sipping some cashew fenny, and squeezing in a morning run by the beach. The uneasiness of going to an opening evening of a film festival, which presented an infinite number of possibilities of making a complete fool of myself, was mitigated by the thought that I was, after all, a natural choice for going to IFFI for this opening evening, since I was a mathematician, indeed a number theorist, who had made a documentary on Srinivasa Ramanujan, the greatest mathematician that India has produced, and whose penetrating insights into Number Theory were once aptly remarked about – that every number was a dear friend of his. So, in the name of good ol' Ramanujan, here I was, on my way to watch this movie that everyone was talking about.

It turned out that after arriving in Goa, Manjul himself couldn't make it (he was to fly down from Princeton to Goa for IFFI) for some urgent personal reasons. In fact, he stayed up all night in New Jersey making a number of calls to India to take care that invitees like Narayan Murthy and I, all got our tickets and entry passes. The evening was on...

It started with a pre-screening reception at the Taj Vivanta in Panaji. To me, it was a strange and exotic mix of people from around the world; just to give one example, there was a Swiss banker with a beautiful Brazilian wife, settled in the financial world of Singapore, and who had presumably invested in the movie. An initial awkwardness in getting to know one another was deftly taken care of with some sparkling champagne. I was definitely the odd bird in that entire set-up, because I was the only one who spoke the language of Mathematics!



It is impossible to convey the uniqueness of that reception, but let me try by mentioning this – a six-foot tall super-model and actress from Russia, who could barely speak a word of English, wanted to know what exactly number theorists did. Had it not been for the champagne I might have even answered her. It suffices to say that I did not have any long conversation about the ethereal beauty of prime numbers. Soon, we were all asked to go into the nearby auditorium for the screening.

At this point, let me mention that Anil Kapoor, the timeless Bollywood hero, who was the master of ceremonies for the first part of the evening, walked in, and there was a hushed silence with people whispering in awe, ‘there is Mr. India’. I must confess to this supremely idiotic moment of my life when I said, ‘Hi Anil, how are you man, long time no see.’ Mr. Kapoor was desperately trying to remember who on earth I was, and was trying his best to make some polite conversation, when I had this photograph taken with him. I think I got in a clear thirty seconds of triviality with him before all the socialite women within a five-mile radius pounced upon Mr. India. That essentially concludes my tryst with Bollywood super-stars. I have to admit that ol’ chap Anil Kapoor does look very fit, and walks with an energy which will not have one believe that he is on the wrong side of his fifties, but then, as one of my friends put it, a few hundred crores in your bank balance will do that to your walk too, and there is no need to run marathons to stay fit. But, I am digressing...

As I was mentioning, all the special invitees were ushered into this auditorium at the Kala Academy for the screening. Finally, in walked the actors, and the director, and after they were all introduced to the audience, I had the immense pleasure of watching the movie, ‘The Man Who Knew Infinity’. The title is the same as the biography of Ramanujan, written by Robert Kanigel, which inspired the movie. It took Director Matt Brown more than ten years of arduous work to convert his dream into a film. In the movie, Dev Patel (the slumdog in ‘Slumdog Millionaire’) plays the role of Srinivasa Ramanujan, the theatre actress, Arundhati Nag, plays Ramanujan’s mother, Komalatammal, the young and beautiful Devika Bhise plays Ramanujan’s wife, Janakiammal, and Oscar-award winner, Jeremy Irons, plays the role of the Cambridge don, G. H. Hardy who mentored and collaborated with Ramanujan. Those of us to whom the lore of Ramanujan and Hardy is familiar might find the choice of Dev Patel and Jeremy Irons as perhaps not most appropriate, however, their superior acting talents very quickly dispel such preliminary notions. The



movie itself was a treat, bringing out with great sensitivity the mathematical relationship between Hardy and Ramanujan, and the troubled relationship between Ramanujan's wife and her mother-in-law. Also, the underlying mathematics itself is treated very well. To me this came as no surprise as I knew that Ken Ono was the consulting mathematician for this film. (Ken, who was part of the documentary that Nandan Kudhyadi and I made in 2013, is one of the leading experts of our times on much of the mathematics that has evolved out of Ramanujan's work, especially that involving congruences for partitions, and mock theta functions.) After the film, we gathered in the green room for post-movie discussions, and Dev Patel was personally very touched when I told him that the film did great justice to Ramanujan's mathematics. Apparently, Dev felt most nervous about what mathematicians might think of his portrayal of Ramanujan. Speaking of actors and actresses, there were many great film personalities in the late evening post-screening drinks and dinner reception on one of the beaches of Panaji. Although I did not see them, I heard that the musical genius, Ilayaraja was there, as was the Hollywood martial arts expert, Jet Li. I did, however, get to see the great cricketer, Sir Gary Sobers, a special invitee of the festival. During this reception, I also had the pleasure of some long conversations with Matt Brown, drawn as we were by our mutual fascination of the legacy of Ramanujan. The movie, after having been screened at the Toronto, Zurich, and Goa film festivals, is now scheduled for a late-spring release in theatres worldwide. The entire evening, indeed, the entire trip to Goa was a unique experience for me. As I boarded the flight back home, I couldn't help notice an indescribable melancholy that was colouring my thoughts. The story of Ramanujan is very a sad one. But so was this experience; the glitter of the tinsel world was so very 'un-Ramanujanesque'. He would have been the last one to spend time in such a world. He found great comfort in his mathematics, even in a lonely sanatorium, in the gloomy, cold and grey English countryside. And, I found myself craving for the comforting solitude of my office, and wanting to get back to my own little calculations. Let me end by saying that even though a century separates me from Ramanujan, the world of Automorphic Forms that I work in actually starts with a beautiful example studied by Ramanujan in a paper in 1916, somewhat humbly titled 'On Certain Arithmetical Functions' which stands as a testament to his genius, and ultimately, also as a testament to the grand nature of Mathematics itself. My life has been so much richer for having known about the life and work of Srinivasa Ramanujan.

Numinous

'Journey to the end of day,
Come the fire-fly,
Come the moon,
Say a prayer for God's good grace
And sleep with lore upon your face.'

-Clive Barker, *Abarat*





Photo Credit: Pranavi Reddy



Pranavi Reddy



Madhavi Bhosale



Madhavi Bhosale



Lavanya Lokhande

A Question

That all these days, all these moments,
All these years, of our hopes, our fears,
And smiles, and laughter, and tears,
Last only as long as a lifetime,
Lost to the air, to the earth,
Or left to languish as a memory,
A memory in mortal minds,
That the labours of all the ages,
All the knowledge, all the conquests,
That this flicker of existence,
With all its elements,
Will go under the feet of time,
Trampled into nothingness,
That all of this, that everything,
Is nothing—
Tell me, should I still keep on living?

-ULAN

ऐसे क्यूँ

Aise kyun: unknowing

Perhaps a very persistent question that keeps bothering us concerns the changes we see around us. We fail to understand why – it makes sense and it does not – it leaves us feeling utterly powerless in front of it all.

-Danveer Singh

अलफ़ाज़ बदल रहे हैं
मतलब बदल रहे हैं
समय के साथ इंसान
ऐसे क्यूँ बदल रहे हैं

साथ-साथ रहकर भी
दूर हो रहे हैं
रिश्तों के ये धागे
ऐसे क्यूँ बदल रहे हैं

जान कर भी अनजान हैं
शब्दों से भी नादान हैं
चेहरों पर ये मुखौटे
ऐसे क्यूँ बदल रहे हैं

चाह कर भी मजबूर हैं
मन से भी कमज़ोर हैं
परिस्थितियों के ये पल
ऐसे क्यूँ आ रहे हैं

-दानवीर सिंह



Artwork by Swastik Mishra

Conductor

Half asleep, he pulled on his grubby *khakis* and rubbed his eyes to get a better view of the room. It had barely enough space to house himself and his sister. He looked at her, and smiled. Her school ribbons were still in her hair. Everything was fuzzy, and so he rubbed his eyes again, only to realise he wasn't wearing his glasses.

He proceeded to complete his morning rituals, which culminated in him slicking his hair back with a cap-full of coconut oil. He slipped into the kitchenette to make some *upma* and *chutney*, taking deep, happy breaths as the smell of fresh *tadka* rose to meet him. His hands worked on their own as he packed lunch for his sister and himself.

He walked outside onto the street, and gazed at its tiny width, as he squatted on the side with a tea cup in one hand, and a banana in the other. About ten minutes later, with his trusty ticket-printer slung over his shoulder, he glided out of the house.

As he reached the depot, the sun was just beginning to rise. *I am a good man*, he thought. The thought surprised him, and broke the still of his usually passive mind. *I work sincerely, and do a good day's work to support my sister through school*, his mind continued. *I am a good man*. The thought echoed this time.

He got onto '21 L', gave the bell rope the usual two tugs, and Muraliappa and he were off. Passengers got on and off his bus. Time wore on. He yelled out the stop names habitually – Madhya Kailash, Adyar bridge, Gokul Arcade, LB road... and was his cordial self, but there was a tinge of something bad.

He felt the women give him dirty looks when he accidentally brushed past them. He felt a sneer in everyone's demand for a ticket. It was as though they felt he would pocket their money without ticketing it. He felt people staring at their *khaki* uniforms when Muraliappa and he stopped for a cup of tea.

He was confused. He worked this job every day, and not once had he ever thought these things. What was happening?

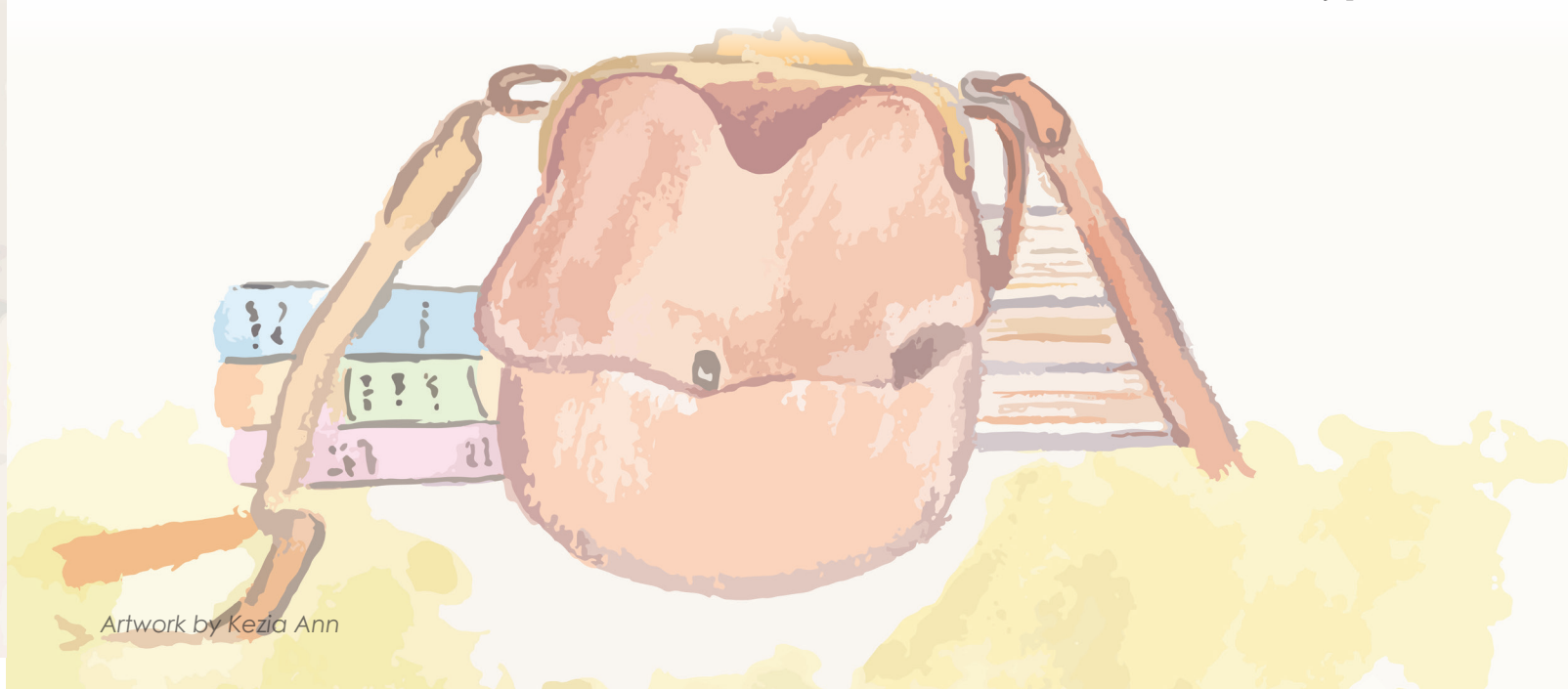
It was around seven in the evening when he got off his shift. He felt worn out from all the thinking. It was as if a year's worth of emotion had been packed into that one day. But why? What was so special about today? It required a good sit-down. So he sat down on the curb, watching people's feet move around him, and thought back.

Only one surprising thing had happened that day. *I am a good man*. It was not something he'd ever thought before. But now he felt it more than ever. *I am a good man and I deserve better*. Never having known a better course of action, his feet began to take him home, while he pondered away...

And then there was a smile. He realised he was standing in the doorway, and his sister was smiling at him holding up her grade sheet. *A*. She wrapped her arms around him in a tight hug. *It wouldn't have been but for you*, he read between the small gaps in her teeth.

And as easily as that, his mind returned to quiescence.

-Shruti Paranjape



Artwork by Kezia Ann

Observe

Perhaps the pinnacle of achievement in modern physics, if not all of science, is the theory of quantum mechanics, a theory that shifted several paradigms, and shattered multiple dogmas about firstly, how physics and the world works, and deeper still, about our relationship with what we see, study, and observe. Quantum mechanics is spooky. There is action at a distance, there is uncertainty, and perhaps most amazingly, there is a collapse of wave functions.

Before you stop reading this article because you think it's too scientific or too serious, let me put your fears to rest. It is not the former, it might be the latter. No jargon, and that's a promise.

So let me break it down for you. Think of two exactly identical boxes; when I say exactly I mean EXACTLY. It's a theoretical construct so we can be as exact as we wish. You have your two identical boxes, you do EXACTLY the same thing to them but they each do something different in response. Let us say box 'A' did thing 'P', and the box 'B' did thing 'Q' in response to the same thing 'N'. Now you do the thing 'N' again to 'A' and 'B', and again they respond by doing 'P' and 'Q' respectively. You do it a million times, and they each do the exact same thing again and again. There's something fishy going on here, but you don't want to jump to any conclusions yet.

You take a hundred identical boxes. EXACTLY identical. Name them B1, B2, ... and so on up to B100 (because box begins with B, you know?). Then you do the EXACT same thing 'N' to all of them. Some fifteen boxes respond by doing 'P', another thirty by doing 'Q', yet another thirty-five by doing 'R', and the rest do 'S' in response. Now you keep doing 'N' again on the boxes, say a million times. Those that responded with 'P' the first time, respond with 'P' each and every time, all million times. Same with those that responded with 'Q', 'R', and 'S'.

Spooky. But you still don't want to draw any conclusions. You again take hundred boxes, exactly identical. You label them B101, B102, ... so on up to B200. You do the exact same thing 'N' to all of them. Some twenty respond by doing 'P', another twenty-seven respond by doing 'Q', etc. etc. You do 'N' again, a million times. The 'P's remain 'Ps', the 'Qs' remain 'Qs', and so on.

Now you are stumped. Not only are the identical boxes responding differently to the same action 'N', a different number of them is responding in the same way every time. But once they respond in a particular way, they continue to respond that way only. Clearly, and these are the main postulates of quantum mechanics in simple terms i.e. these are the things happening –

- 1) The response to one action can be many different actions. You cannot be sure which will happen.
- 2) Once you see that one thing happens, only that thing continues to happen.

So, very very spookily, the box knows that it's performed this action once, and after that, every time it wants to show you the same action. It knows it's been caught doing it, and wants to make sure it isn't caught doing anything else. And no, this is isn't me simplifying what's happening here in those terms. It seems, and physicists are quite sure about this, the box knows that it has been seen, and that is the exact reason why it remains the same.

Quantum theory came to be accepted widely, not without reason. It explains a myriad of phenomena. Once this happened, obviously questions were asked about our role in the universe. Is everything we see just what we see or is it what is actually there? Is it remaining that way because we happen to have seen it? Does it dance about crazily when our backs are turned? If we aren't there to observe and record it, does anything at all happen in the universe? Until quantum mechanics, we just assumed that we live in the universe; now we're questioning whether the universe lives without us.

Let's make this a little more mind-boggling. I have a box 'B', I do a thing 'N', it responds with 'P'. Let us say to do 'N', I have to push a button. So every time henceforth I push the button, the box responds with 'P'. I bring my beloved house cat, Bekku, and make him press the button. Do I see the box respond with 'P'? More interestingly, does my cat see the response as 'P'? Or maybe 'R'? Who could say? Does the universe decide who the original or dominant observer is, and tune itself accordingly? Or does the cat, by virtue of its observations, create its own universe? What was the nature of the box until I observed it? What about after I observed it, and before the cat observed it?



It is phenomena such as these that have caused concepts such as 'objective reality' to be outdated in physics. Yes, what we observe every day with our own eyes is hardly this counter-intuitive – quantum mechanics holds only for a specific type of objects; objects that are very small. We can be safe in our 'classical' knowledge, where doing identical things to identical objects yields identical results. But underlying all we see is all that we may see, and all that knows what we see when we see.

Which brings me then, to the next part of my article.

You see, each of us has a philosophy. Without us ever finding out, over the course of growing up, we absorb, assimilate and process tons of information – things that we have heard, things that we read, things that have happened to us. We slowly form opinions, and guided by the underlying mechanisms of how we're wired, we form a template based on which we live, all subconsciously of course. We don't know that we're doing this, but I'm sure we are.

When we're young, we rarely give a thought to our thoughts; we rarely wonder why we react to a situation the way we do. We just think and react. Once we start fishing out reasons as to why we're living the way we are, try to snap out of the autopilot, so to speak, we'll never know what was originally in our mind. Because once you've thought about how you think, you immediately form an opinion about it. And once you form an opinion about something, you think upon it, and act upon it based on this template that you have formed. If, however, your template is subjected to your thoughts based on your template, you never know what came first, what went last. In other words, you can never be truly sure what your philosophy in life initially was once you think about what your philosophy in life is. The more you learn about your own philosophy, the more it is subjected to the template and the philosophy, and the more dogmatic about it you become. It's a never-ending circle I don't see a way out of.

Now isn't it this like a quantum system up to the first postulate? You don't know what it is until then. You do something to it, it reacts, and once it reacts you may have an idea of what it is now but you'll never know what it was before that. So what? Nothing, I just found it really cool.

What about when we actively try to change our template? I hear something about the way to live, I realise that that is not the way I live, and I want to live that way. This thought came out of our last way of thinking. Ok, my mind is in knots.

Can you, at any point in life, know your exact philosophy, separate from any bias, any stigma, and any assumptions? I don't think so.

Let us say there is a book where everything that you will ever do in your life is written down. Unchangeable, and perfectly accurate. And let us say you manage to find this book. Assume you can read at any speed, so you won't take ages to read the boring account of your activities to date. You reach the part where you find the book. Then it says you're reading the book. Can you ever read what the future holds for you? I don't think so. And this time I have a reason. Every time you read the book until the present moment, your book will say you are reading the book. And as long as you're reading the book, it will say you're reading the book. If you, say, look up at the sky, and you look down at the book, the book will say 'Looked up at the sky. Looked back down into the book. Reading the book.' Let us say you do go ahead of the present. The book says 'Reading the book. Looks up, and thinks about cats', so you decide to be a renegade and look down, and think about dogs. This violates the fact that the book is perfectly accurate. So you'll just have to keep reading 'Reading the book' until you choose to look away. Assuming free will on your part of course. But then again, where is the notion of free will if everything is written down in a book? I don't know.

Isn't this just like the second postulate? As long as you are looking at it, it keeps saying the same thing. And you don't know what happens when you look away, but with a little catching up (call the catching up action 'N'), you can come back to seeing the same thing again and again. So what? Nothing, I just found it cool.

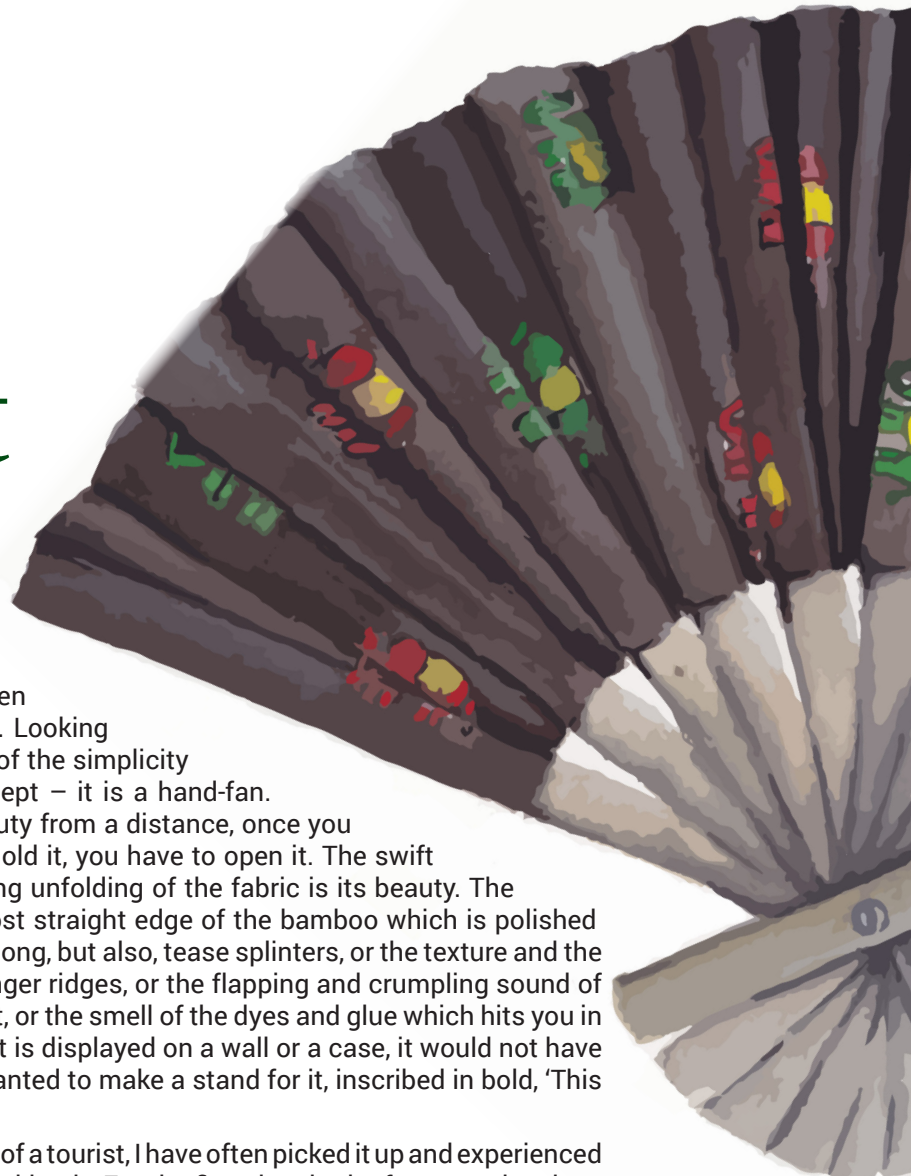
-Lokahith Agasthya

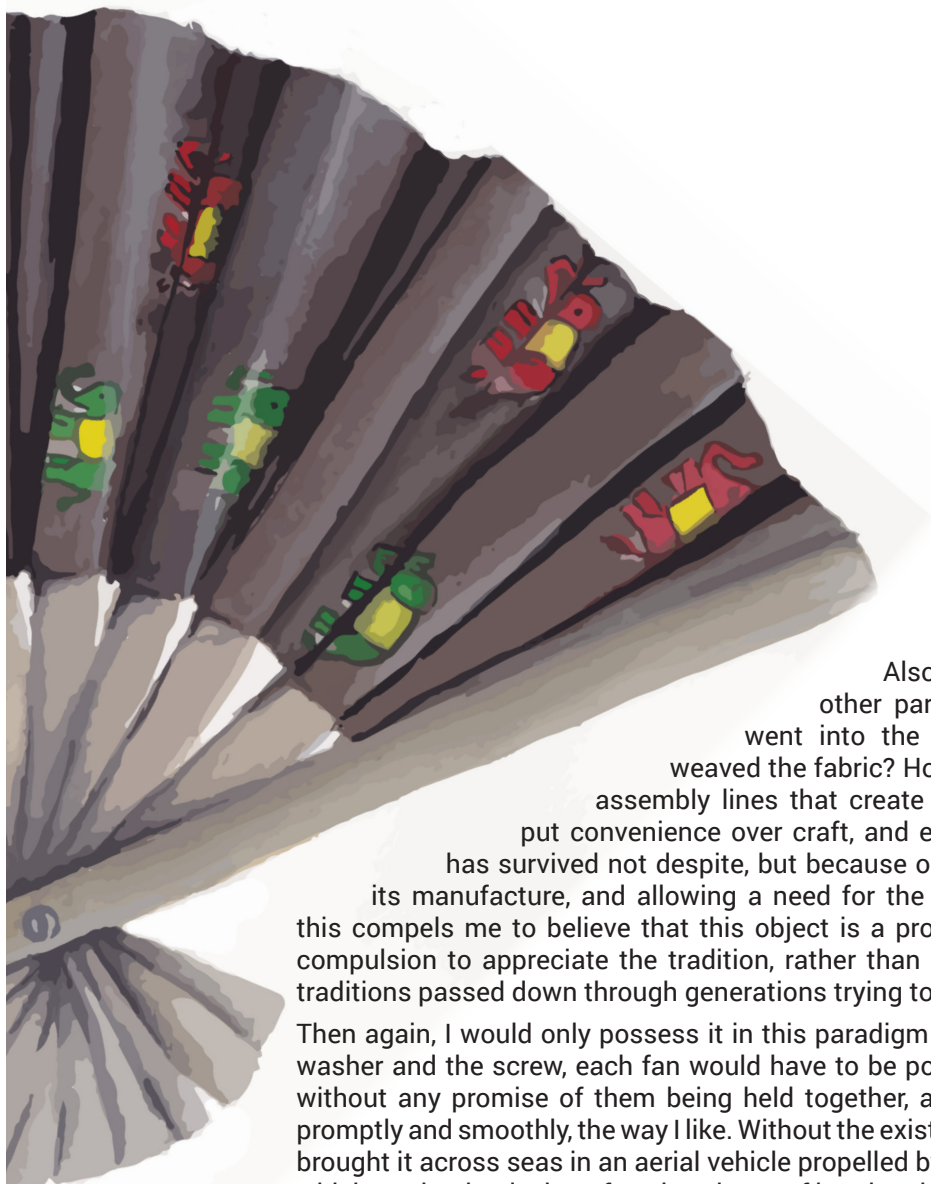
This is Not a Fan!

Twelve bamboo wedges held together by a piece of cloth, dyed brown, with red and green elephants printed on it with golden borders. Looking at it, one knows that it is beautiful because of the simplicity of its construction, its design, and its concept – it is a hand-fan. After you have chosen to indulge in the beauty from a distance, once you are compelled enough to move closer and hold it, you have to open it. The swift arc swiped by the wedges, and the cascading unfolding of the fabric is its beauty. The fan is nothing, if not for the feel of the almost straight edge of the bamboo which is polished just enough to tempt you to run your finger along, but also, tease splinters, or the texture and the creases of the fabric brushing under your finger ridges, or the flapping and crumpling sound of the fan as you try to open it in one movement, or the smell of the dyes and glue which hits you in pulses as you wave it close to your head. If it is displayed on a wall or a case, it would not have been a fan until you lift it from it. I almost wanted to make a stand for it, inscribed in bold, 'This is not a fan'.

After buying myself one in the hurried fashion of a tourist, I have often picked it up and experienced it with all my senses, with the exception of licking it. For the first time in the four months since I bought it, I realised the nature of the pivot. Amidst what I assumed to be traditional materials was the hinging point consisting of a long steel screw and a square steel washer. (At this point, I did lick it.) This broke the illusion of... 'Authenticity'. It was supposed to be, I don't know, a relic of the individuality of a culture in a time where globalisation forces us into this modern progressive homogenous gooey existence. I think. I am not sure. It kind of makes me want to say, 'This is not the fan.'

To me, before the realisation, it was a culmination of craftsmanship, culturally defined aestheticism and authenticity. It was a piece of craft (not art), which kind of gave me these images of a woman inside a small, yet modern house, meticulously splitting hollow bamboo, and a man unfurling a huge roll of textile with a proud smile. But, once I have this image of the woman picking up a washer from a plastic box with hundreds of washers just like it, and then, a sequence of five different hands picking a washer from the same box, the exquisiteness of the fan is diluted by the number of washers in the box. The washer and the screw, the smallest components of the construction, probably have the most number of people involved in their existence and their particular form; from the steel and coal miners to the metal workers; from the assembly line workers to the truck drivers. None of whom seem to be craftsmen in my head; all of them are unaware of their contribution to this creation, and are burdened by the mundane. If someone showed me the chunks of the steel ore piled up in tons, or the patent of the design of the machine that molded the screw, I would say that although that is not the fan, the fan does not exist without it. At least not this one.





Also, the realisation makes me question the other parts of the construction. What implements went into the carving? How big were the looms that weaved the fabric? How new were the dyes or the adhesive? The assembly lines that create the fans, destroy it. Everything seems to put convenience over craft, and efficiency over authenticity. And this 'craft' has survived not despite, but because of the technological growth, both by easing its manufacture, and allowing a need for the reversion to the old. Whether true or not, this compels me to believe that this object is a product hinging upon the exploitation of our compulsion to appreciate the tradition, rather than my earlier idea of a fan, an expression of traditions passed down through generations trying to survive.

Then again, I would only possess it in this paradigm of creation and consumption. Without the washer and the screw, each fan would have to be poked with great effort, tied with dried twigs without any promise of them being held together, and each fan would not have extended so promptly and smoothly, the way I like. Without the existence of washers and bolts, I would not have brought it across seas in an aerial vehicle propelled by aerodynamical inventions like jet engines which render the design of twelve pieces of bamboo held together by cloth and a screw primitive, to say the least. The device that hangs over my head currently is a fan. Despite being called that, it is not a device used for artificial enhancement in the cooling of perspiring individuals.

If objects are defined by the purpose they serve, then this is a souvenir; a remembrance from a culture that was put on display during my brief encounter with it, and an embodiment of how we tailor memories out of imagined experiences. And it is as imperfect as the actual experiences themselves. It is the imperfect alignment of the wedges that trigger the obsessive compulsive behavior to make it just right. It is the loose thread at the edge of the piece of cloth, unraveling over every use. It is the fact that one day, the washer will come loose, and until someone puts it back on, it will stop being whatever it is now. A poignant construction, that endures every open-and-close, so easily messed up or washed away by a confrontation with reality, and also, a reminder of fragility. This is a metaphorically resonant physical object out of which I derive meaning. This is not a fan.

This is a distillation of my thoughts about a thing that may not even exist. If it did, you cannot be sure of its existence. But, after having read this, you must realise that actual existence does not matter. Whatever exists is inside your head, and even though I was able to implant a picture of a hand-fan inside your head, it is still not real, in a way that normal people call real.

This is an essay. This is not a fan.

-Vishrut Patel

The Wardrobe

My mother's frown deepened. 'No excuses', she said dismissively. 'You are going to clean your wardrobe today.'

I looked at her in dismay. 'Cleaning' frightened me because it meant clearing out the many things that my mother considered trash. If I had my way, I would pack all my belongings in boxes, and take them to hostel with me, where I would be spending the next five years of my life. After all, I came from a family of hoarders. My grandfather collected coins. His vast hoard ranged from ancient bronze coins which, despite an enormous amount of effort, were simply not round to freshly minted shiny coins. My grandmother collected utensils and crockery that she magnanimously 'lent' to her family. God forbid you lose a spoon or two at school or office, and you would be lectured on responsibility. My father collected stationery (including pencil stubs and broken rulers), while my sister was too young to appreciate the joys of hoarding.

My mother, on the other hand, was the sane one in the family who got annoyed at our hoarding tendencies. Coins were valuable, and utensils were useful, so she tolerated them. However, she truly believed that broken stationery belonged in the trash. My father fervently protected his cache from her by reasoning that the items would come in handy in the near future. Despite my mother's numerous attempts, she failed to convince him that this 'future' did not exist, and was definitely not around the corner. However, her greatest challenge was me – I had not found my true calling yet, and so I resorted to collecting the most bizarre objects. These were what I had stashed away in my wardrobe over the years. My going off to college presented my mother with a unique opportunity to get rid of at least one pile of junk.

As far as I remembered, there was a box of sea shells in there somewhere, which I preferred not to open due to the stench that emanated from it. I had spent three evenings of a vacation in Goa collecting those beautiful but smelly trinkets. Then there were diaries filled with dried flowers and leaves intended for use in greeting cards. Forgotten and unused, they had crumbled, and turned to dust and food for teeming insects. All this acquired wealth and more was crammed into my humongous wardrobe in an order that my mother would call chaotic, but I would call complex. There was order and method but only the great Hercule Poirot could find it.

Unwillingly, I began this endeavour with dread in my heart and my mother's watchful eye on the proceedings. As it turns out, things I believed I had lost during childhood had simply been misplaced. Now they came out of the nooks and crannies of the wardrobe, and brought back a flood of memories. The first thing I stumbled upon was a notebook that contained my debut as a storyteller; a complete fiasco that was in its essence a convoluted retelling of the 'The Secret Seven'. I had even begun a sequel before abandoning the venture altogether for reasons I could no longer recollect. Ironically, I had hoped to get them published someday and eclipse Enid Blyton in fame.

Next, I found a faded old shirt that had once been my favourite. It had been a gift on my eleventh birthday from a close friend, and it brought back recollections of the many warm summer evenings we had spent cycling around the park at top speed with the wind in our faces, and the whiff of freshly cut grass in the air. Later in the evening, we would scale the jungle gym in the park effortlessly, sit atop our fort, harbouring a sense of grandeur, and protect it valiantly from an invading army of six-year-olds. Now she was halfway around the world, and we hadn't got a chance to catch up in the past six years. I had not thought of her in a while, actually. Strange how easily new friends fill the void left by old ones, and you barely notice it.

I continued emptying out my wardrobe, attempting to get rid of my worldly possessions. But to me even trifles were precious, because they reminded me of the bygone years, something I couldn't get my mother to understand. Then suddenly, I unearthed my beloved Atlas from the muddle in the wardrobe. Nine-year-old me had dreamed of travelling the world, and this Atlas bore testament to the same. Its maps were dotted with crosses to mark noteworthy destinations, with notes in tiny scribbles elaborating on the wonders these places held. I had spent hours poring over the Atlas, planning my trips in excruciating detail, and trying to imagine the blue of the Mediterranean, the beauty of the Taj Mahal, and the white landscapes of Russia. But over the years, the greatest of my childhood aspirations

had withered and died a painless death. Just like childhood friends, my childhood dreams had been replaced by new ambitions.

Other amusing discoveries I made among my possessions included a diet plan I had chalked up as fourteen-year-old to grow tall, and an old diary from when I actually wrote diary entries, filled with pages and pages of inconsequential details (as you can see I haven't changed much), and 'hilarious' incidents (that were, in reality, not even remotely funny). The left corner of the bottom shelf contained an assortment of paper and ribbons which I had stowed away in the name of craft, and conveniently forgotten all about. In the farthest recess of the wardrobe I uncovered a dusty and deceptively archaic looking chest. As a child, I had daydreamt about discovering a hidden treasure with my friends (à la the Famous Five). My friends and I had even debated excavating my neighbour's yard, as I had a strong, nagging suspicion that someone had buried their treasure there. Thankfully, good sense had prevailed, and we had decided against it. To overcome my disappointment I had started putting together my very own treasure chest, complete with 'jewels' (read colourful stones picked up by the roadside) and 'gold' (read anything with the slightest tinge of golden colour). My most coveted pieces obviously came from the countless earrings I had destroyed to pry the false stones loose (much to my mother's annoyance).

'What have you done?' My mother's cry brought me out of my reverie. 'You were supposed to clean up, not make a bigger mess. It has already been three hours!'

I looked around myself in despair, still clutching my treasure chest. Nostalgia, what a futile sentiment!



-Nilima Walunjkar

दुर्मिळ



Doormil: rare

This poem is dedicated to the 'rare' people with a big heart. The poet describes how they are able to befriend everyone, and savour even the smallest things in life. Although the poetess appreciates these qualities, she is afraid to implement them in her own life. Hence, she advises us to never let go of such rare people.

-Shweta Tendulkar

कती छान असतं नाही मोठं मन असणं,
इवल्याऱ्या आनंदावर अगदी खुलून हसणं!

सर्व व्यक्ती जणू आपले स्नेहीच वाटतात;
ठेच लागता कुणालाही अश्रू ढळू लागतात

माझ्या डोळ्यांनी पाहते तेव्हा ती हिरवळ नाही दाटत...
त्यांच्या नजरेमध्ये मात्र आभाळमाया साठत

ठेवायचा असतो जेव्हा विश्वास साऱ्यांवर,
चित्त माझे कधी नसतेच थाऱ्यावर

असा आंधळेपणा तरीही त्यांना जमतो,
त्यातच तर त्यांचा जीव रमतो...

आजची कळी उद्या फुलेल,
तिच्या सुगंधाने हे जग बदलेल

जीव जंतू सुखी होतील,
त्या फुलाला मात्र ते पुजतील

अशी आशावादी व्यक्ती जर सापडली तुम्हाला,
जपून ठेवा हो नजर न लागो त्या गुणाला!

-श्वेता तेंडुलकर

Miles Away in Nigeria

Miles away in Nigeria,
I remember her cries,
Conversations with her God,
And looking up to the skies.

Miles away from Nigeria,
Here now I stand,
Wondering if the seas erased
Our names from the sand.

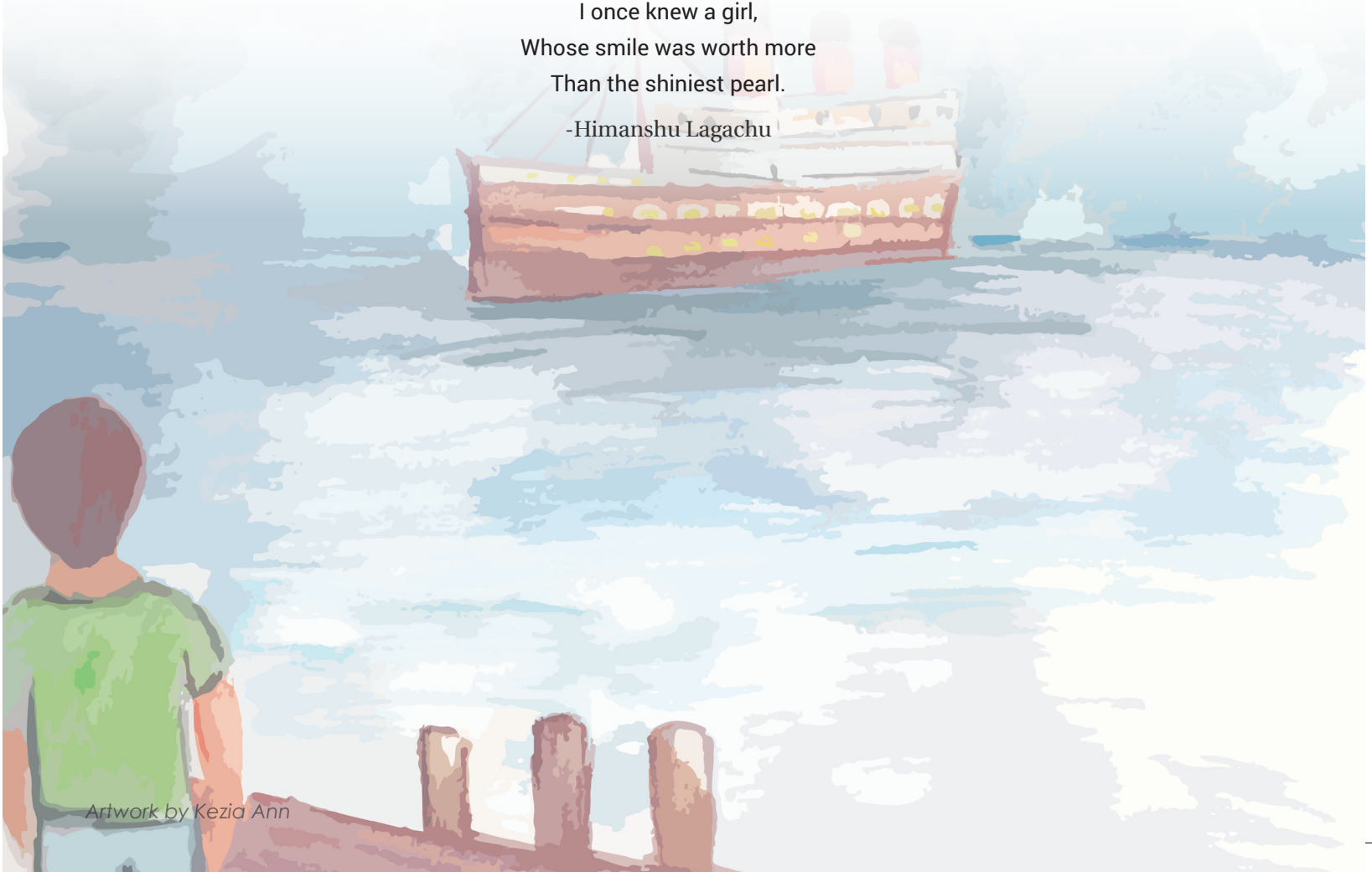
I wonder what it would be like
If I stayed behind.
Oh the places we could go!
Oh the things we could find!

I'm lost as I look up to the sky
Oblivious to the starry night.
I think of the things we could have been,
And colour my dreams open eyed

When one day I show up at your door,
What will you say?
Will you scorn over things unsaid?
Or just ask me to stay?

Miles away in Nigeria,
I once knew a girl,
Whose smile was worth more
Than the shiniest pearl.

-Himanshu Lagachu



आई

Aai: mother

The poet is about to start a new chapter in his life by leaving his home. He feels nostalgic as he remembers all the good times with his mother. He reminds her about how she has stood up for him, taken care of him, and provided him with everything that he has asked for. He now asks her for one last thing – to not shed a single tear when the time comes for him to leave.

-Mayur Dhawale

आयुष्याच्या नव्या वळणावर आपल्या बाळाला सोडताना,
डोळ्यात पाणी आणायचं नाही हं आई...
मला हिम्मत देत असताना,
स्वतः हिम्मत हरवून बसायचं नाही हं आई...
चालायला शिकवताना पडलो तरी,
शिकवणं सोडलं नाहीसच ना गं आई...
किती जरी त्रास दिला तरी,
लाड करणं सोडलं नाहीसच ना गं आई...
कधीही मी उदास होऊन बसलो की,
कोणी येऊन मला हसवलं आई?
काहीही बोलावं वाटलं की,
कोणाला येऊन बोलायचो मी आई?
काहीही मी मागीतलं की,
माझा हट्ट तूच तर पुरवलास ना गं आई...
अजून एक गोष्ट मागायची आहे तुला,
मला सोडताना डोळ्यांत पाणी आणायचं नाही हं आई...

-मयूर ढवळे

Over Time & Over Again

How odd it is to trace,
One's footsteps over barren land,
Which holds neither hope nor space,
For colourful trees to stand.

A gusty wind uprooting one
Little shrub, with a single wave.
One tries to stop, one tries to turn,
Over and over again.

A plight of great might, a peril so cold,
All one can do is watch it unfold,
A sense of helplessness, a consoling numbness,
Shrouding you in a tender caress.

What is it, that deters us so?
An unbecoming lethargic flow,
Of life, and life in between,
Never heard of or never seen.

Hollowed out,
Of things unsaid.
Some unintended rebukes,
And all of solitude instead.

Why? One asks, over time and over again.
Why nothing remains, except pain.

All of the gory details,
But don't let the small things slip by.
For in them are the tiny trails,
The reason you always try.

-Surabhi K. S.



An October Evening

When October evenings are drunk,
Revelling under the scarlet sun,
Faint sunshine glimmers across the sky,
Embracing us all in its crimson ambience.

It paints the canvas with trees so gold,
Like an artist's work – tender, yet bold,
Woods adorned with crescent, golden leaves,
An exquisite scenery for all to perceive.

Bidding adieu to shimmering rays,
Dusk draws the curtain of the azure sky,
Scattering silvery dew drops,
That shut every flower's weary eye.

A grey-haired woman strolling down,
Reminiscing about the years foregone,
A serene smile flickering on her face,
Tranquillity complementing her grace.

A veil of cool breeze caresses her face,
Perhaps, the solitary admirer there,
Starts laughing and rustling,
The carpet of golden leaves that lay nearby,
Singing away the serenade of fall.

-Abhijit Gupta





Free

Looking at the stars, she thinks,
It's all a bad dream, just blink, blink!

It's not the pain, but it is the pain.
She isn't tied up, but she is in chains.

It's like the scars will never fade,
Was it for this that she had been made?

She did not want pity, nor to be blamed;
What wrong had she done? Her soul had been maimed.

No longer can we turn a blind eye to the truth;
How long can the society remain uncouth?

When will we realise, it isn't about her clothes;
Whatever she chooses to wear, this isn't the fate she chose.

When will they learn, it's their thinking that must be changed;
Their narrow and archaic thoughts are making the society deranged.

It's time for a revolution, a revolution of the mind;
It's time to put our foot down, break away from the binds.

It's time for her to be free.

-Shraddha Lall

हसरत



Hasrat: the yearning desires

It is your dreams that define you. And perhaps, they not only influence, but also govern everything in your life. Sometimes they strengthen you to be hopeful, and help you move ahead. And sometimes, they just leave you wondering – wondering about the mysteries of your own dreams.

-Siddhesh Zadey

ये ख्वाबों की ख्वाहिश है कि
मेरी ज़िंदगी एक हसरत बने
वरना क्यों आते वो
लेकर साया रात का
भरने मेरी आँखों में नींद
और जगाने मेरी रूह को।

बड़े चालाक हैं ये ख्वाब
ये जगाना चाहते हैं मुझे सोते वक़्त
जगमगाना चाहते हैं
मेरी आँखों को बंद रख कर ही।

ये बताना चाहते हैं मुझे कि
कुछ मैं भी कर सकता हूँ, कोई मैं भी बन सकता
हूँ
तोहफ़े के तौर पर देते हैं मुझे 'हिम्मत'
सिर्फ़ उम्मीद करने की।

उम्मीद
कि मुझे जगाने ख्वाब आते रहेंगे
उम्मीद, जो मेरी आदत बन जाए
जो मेरी ज़िंदगी को हसरत बना दे।

बड़े चालाक होते हैं ये ख्वाब
उनकी ख्वाहिशों को
मेरी ज़रूरत बनाते हैं
वरना क्यों आते छुपकर
रातों में अंधेरों का साया लिए।

-सिद्धेश झाडे

Give Me a Hundred Lives to Live!

Give me a hundred lives to live,
Just to pursue all my dreams,
Varied and many, to perfection,
One at a time for fruition in full.

One single life, for me to chase
All the flaring quests on my mind,
Each in an attempt to discern in full,
The complex nature of the world around.

A life for sure, long and full,
To map onto stretched canvasses,
Images and visions, all in my mind,
In strokes of a million hues abound.

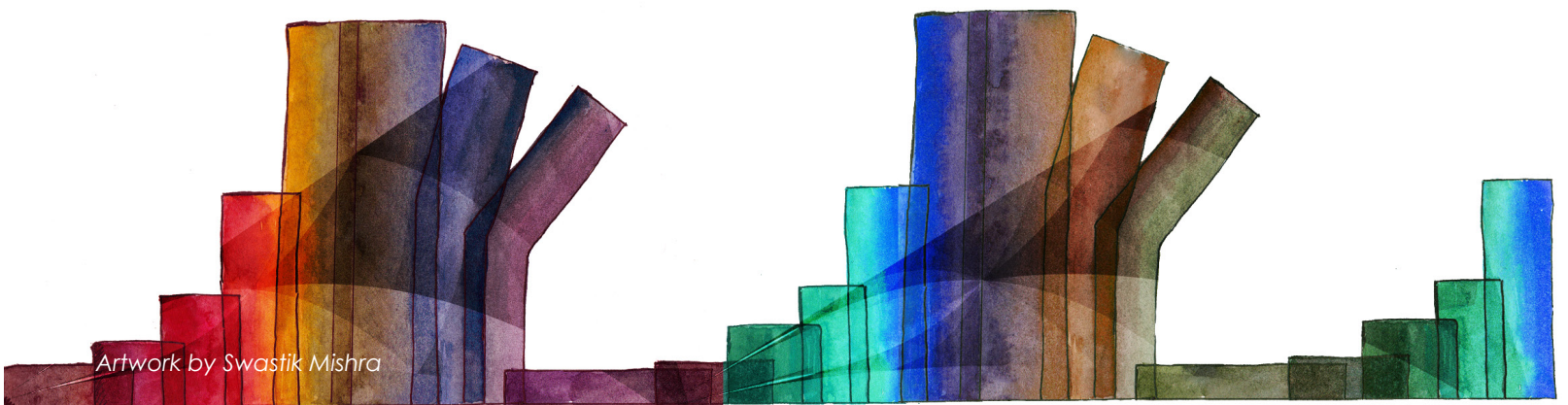
How about one life just to set free
Bottled up views and themes in wait?
As poured out in verses, all along,
Kindling with sparks of bliss and joy.

Then should come a relaxed one
Just for reading and reading again,
All my favourites on the shelves,
Stretched on a divan, dawn till dusk.

When can I enjoy the joys and thrills
Of traveling leisurely over all lands?
Happily drifting and sailing on seas,
Drunk on the infinite shades around.

More of such pressing passions rove,
Lost in the lanes and nooks of my mind,
Yearning for fulfillment, life after life;
So, give me a hundred lives to live!

-G. Ambika



Artwork by Swastik Mishra

രവിയീൽനിന്ന് രവിയിലേക്ക്

Raviyilninn Raviyilek: a voyage from Ravi to Ravi

For reasons unknown, her husband is drifting away from her. Though they are living under the same roof, they are miles apart. Eventually the desires of her body emancipate her from the shackles of morality, and make her venture outside the four walls of the house.

-Devika T. D.

നിലാവുദിച്ചിരുന്നില്ല, ജനാലയിൽക്കൂടി തണുത്ത കാറ്റ് ഉള്ളിലേക്ക് വീശിയടിച്ചു. അടുക്കളയിലെ പണികൾ ഒരുവിധം ഒരുങ്ങിയിരുന്നു, കറികൾക്കൂടി വാങ്ങിവെച്ചതിനു ശേഷമാണ് മുറിയിലേക്ക് വന്നത്. രവി എന്തോ വായിക്കുകയാണ്. അടുത്ത് ചെന്ന് നോക്കിയപ്പോൾ മുഖം മറച്ച് കിടന്നുറങ്ങുന്നതാണ് കണ്ടത്. ഒന്നും പറയുവാൻ തോന്നിയില്ല, ഉറക്കം ഉണർത്തേണ്ടെന്നു തോന്നി പതുക്കെ അടുക്കളയിലേക്ക് തന്നെ മടങ്ങി. രണ്ടുപേർ മാത്രം താമസിക്കുന്ന വീട്ടിൽ പണികൾ ചെയ്ത് സമയം തള്ളിനീക്കുവാൻ കഴിയുകയില്ല.

ഒറ്റപ്പെടലിന്റെ മടുപ്പ് എന്നെ മുച്ചുടും മുടിയിരുന്നു. രവിയൊരിക്കലും ഇങ്ങനെയായിരുന്നില്ല, പലപ്പോഴും തന്റേതായ ലോകത്തിലേയ്ക്ക് ഒരുങ്ങിയിരുന്നെങ്കിലും ഒരിക്കലും എന്നെ ഇത്രമാത്രം ഒറ്റപ്പെടുത്തിയിരുന്നില്ല. ഇതുവരെ ഇല്ലാത്തവണ്ണം തീർത്തും തനിച്ചാവുന്നത് എനിക്കറിയാൻ കഴിയുന്നുണ്ട്. കാര്യകാരണങ്ങൾ ഏതുമില്ലാതെ ഞാനീ ചുവരുകൾക്കുള്ളിൽ ഒറ്റപ്പെടുന്നു. സ്വന്തം ചിന്തകൾക്കകൂടി അന്യയായെന്നൊരു തോന്നൽ. കോൺക്രീറ്റ് ഭിത്തിയുടെ സംരക്ഷണത്തിൽ നിന്നും പുറത്തിറങ്ങുമ്പോൾ ഒരാൾക്കുട്ടത്തിനിടയിൽ ഒറ്റപ്പെട്ട് പോകാനുള്ള വിഷമം കൊണ്ട് ഞാൻ എന്നെ ഈ മുറികൾക്കുള്ളിൽ തളച്ചിട്ടു. തമ്മിൽ നേരിടേണ്ടി വരുന്ന സന്ദർഭങ്ങളിൽ രവി ഒന്നോ രണ്ടോ വാക്കുകളിൽ സംസാരമൊതുക്കി. ഭക്ഷണം കഴിക്കാനിരിക്കുമ്പോൾ ഒരാമ തോടിനുള്ളിലേയ്ക്ക് തല വലിച്ചെടുക്കുന്നവേഗതയിൽ എന്നിൽ നിന്നും ഒഴിഞ്ഞുമാറി. ദൂരങ്ങളിൽ നിന്നുവന്നുചേർന്ന്, ഒരുമിച്ച് യാത്രതൂടങ്ങി വീണ്ടും പഴയതിനേക്കാൾ ദൂരത്തേക്കു ഞങ്ങൾ അകന്നു പോയ്ക്കോണ്ടിരുന്നു. കിടക്കയിൽ രണ്ടു ധ്രുവങ്ങളിൽ അകന്നുമാറി കിടന്നു. രവിയുടെ എകാന്തത തകർക്കാൻ ഞാൻ ശ്രമിച്ചില്ല. ചിലപ്പോൾ ചിലർക്കൊക്കെ അവരവരുടെ ഏകാന്തത വിലപ്പെട്ടതാണെന്നു വായിച്ചിട്ടുണ്ട് പണ്ടവിടെയോ. അവനവന്റെ സ്വത്വവുമായി കലഹിച്ചു പിരിയുമ്പോൾ രവി എന്നിലേയ്ക്ക് തന്നെ മടങ്ങി വരുമെന്ന് എനിക്ക് ഉറപ്പുണ്ടായിരുന്നു.

ദിവസങ്ങൾ കടന്നു പോയി, രവി തന്റെ മൗഢ്യതവിട്ടു പുറത്ത് വന്നില്ലെന്ന് മാത്രമല്ല കൂടുതൽ തന്നിലേയ്ക്കു തന്നെ ഒരുങ്ങിക്കൂടി. മഴപെയ്ത് തോർന്ന മറ്റൊരു പകലിൽ എന്നിലേയ്ക്ക് തന്നെയവൻ വരുമെന്നോർത്ത് ഞാൻ കാത്തിരുന്നു. എന്റെ ആത്മാവ് രവിയുടെ കൂട്ടിനായ് ദാഹിച്ചുകൊണ്ടിരുന്നു. മുറ്റത്തെ ഇനിയും പൂക്കാത്ത തേന്മാവ് കാറ്റത്ത് ആടിയുലഞ്ഞു. വീട്ടിലെ പൂച്ച എന്തോ അപകടം മണത്തത് പോലെ എന്റെ കാലിൽ മുട്ടിയുരുമ്മി നിന്നു. അവൾ എന്റെ ദേഹത്ത് ചാടി കയറി നഖങ്ങൾ കൊണ്ടെന്റെ നെഞ്ച് കുത്തിക്കീറിയിരുന്നെങ്കിൽ എന്നു ഞാൻ ആഗ്രഹിച്ചു. ദിവസങ്ങൾ കൊഴിഞ്ഞു പോകുമ്പോഴും ഞാനും രവിയും കൂടുതൽ അകലുകയല്ലാതെ ഒരിഞ്ചുപോലും അടുത്തില്ല. പോകെപ്പോകെ ആത്മാവിന്റെ ദാഹത്തിനേക്കാൾ ശരീരത്തിന്റെ ആവശ്യങ്ങൾ കൂടി വന്നു. ശരീരവും ആത്മാവും ശക്തമായ വാദപ്രതിവാദങ്ങളിൽ ഏർപ്പെട്ടുകൊണ്ടിരുന്നു. സദാചാരത്തിന്റെ വാൾ തലയ്ക്കു മുകളിൽ തൂങ്ങിയാടി എന്നെ വേദനിപ്പിച്ചുകൊണ്ടിരുന്നു.

അലമാരിയിലിരിക്കുന്ന ഒരിക്കലുമുടക്കാത്ത സാരി പോലെ എന്റെ ആത്മാവും പതിയെ ദ്രവിക്കാൻ തുടങ്ങി. പകലുകളിൽ ഞാൻ രാത്രിയാകുവാൻ കാത്തിരുന്നു. പകലിനെ ഇരുട്ട് വിഴുങ്ങുവാനുള്ള ഓരോ കാത്തിരിപ്പും രവി വന്നു കഴിയുമ്പോൾ തിരിച്ച് പകലിലേയ്ക്ക് എത്താനുള്ള വെമ്പലുകളിൽ പെട്ടലഞ്ഞു. അത്രമേൽ ഒട്ടിച്ചേർന്നിരുന്ന രണ്ടാത്മാക്കൾ തീർത്തും അപരിചിതരായ് കഴിഞ്ഞിരുന്നു. അപരിചിതരായ് ചിരപരിചിതമായിട്ടും അതിന്റെ കാരണമന്വേഷിക്കാൻ ഞാൻ തുനിഞ്ഞില്ല. കാര്യകാരണങ്ങൾ എന്നെ കൂടുതൽ വേദനിപ്പിക്കും എന്നെന്നിരിക്കുറപ്പുണ്ടായിരുന്നു.

നാലുചുമരുകൾക്കുള്ളിൽ നിറഞ്ഞു നിന്ന എന്റെ വീർപ്പുമുട്ടൽ ശരീരത്തിനേയും മനസ്സിനേയും കടന്ന്, വീടുവിട്ട് പുറത്തേക്ക് ഒഴുകുവാൻ തുടങ്ങി. വീടിന്റെ വാതിൽ തള്ളിത്തുറന്ന് ഞാൻ പുറത്തേക്കിറങ്ങി. വഴിയിൽ ആദ്യം കണ്ടത് ഒരു മധുവയസ്കനെ ആയിരുന്നു. ഞാൻ അയാളെ നോക്കി ചിരിച്ചു എന്നു വരുത്താൻ ശ്രമിച്ചെങ്കിലും അയാൾ എന്നെ കണ്ട ഭാവം നടിച്ചില്ല. മുന്നോട്ടു നീങ്ങുവാൻ ചെറുതായി പേടി തോന്നിയെങ്കിലും വീണ്ടും ഞാൻ നടത്തം തുടർന്നു. കുറച്ചു നടന്നപ്പോൾ എതിരേ ഒരു മീൻ

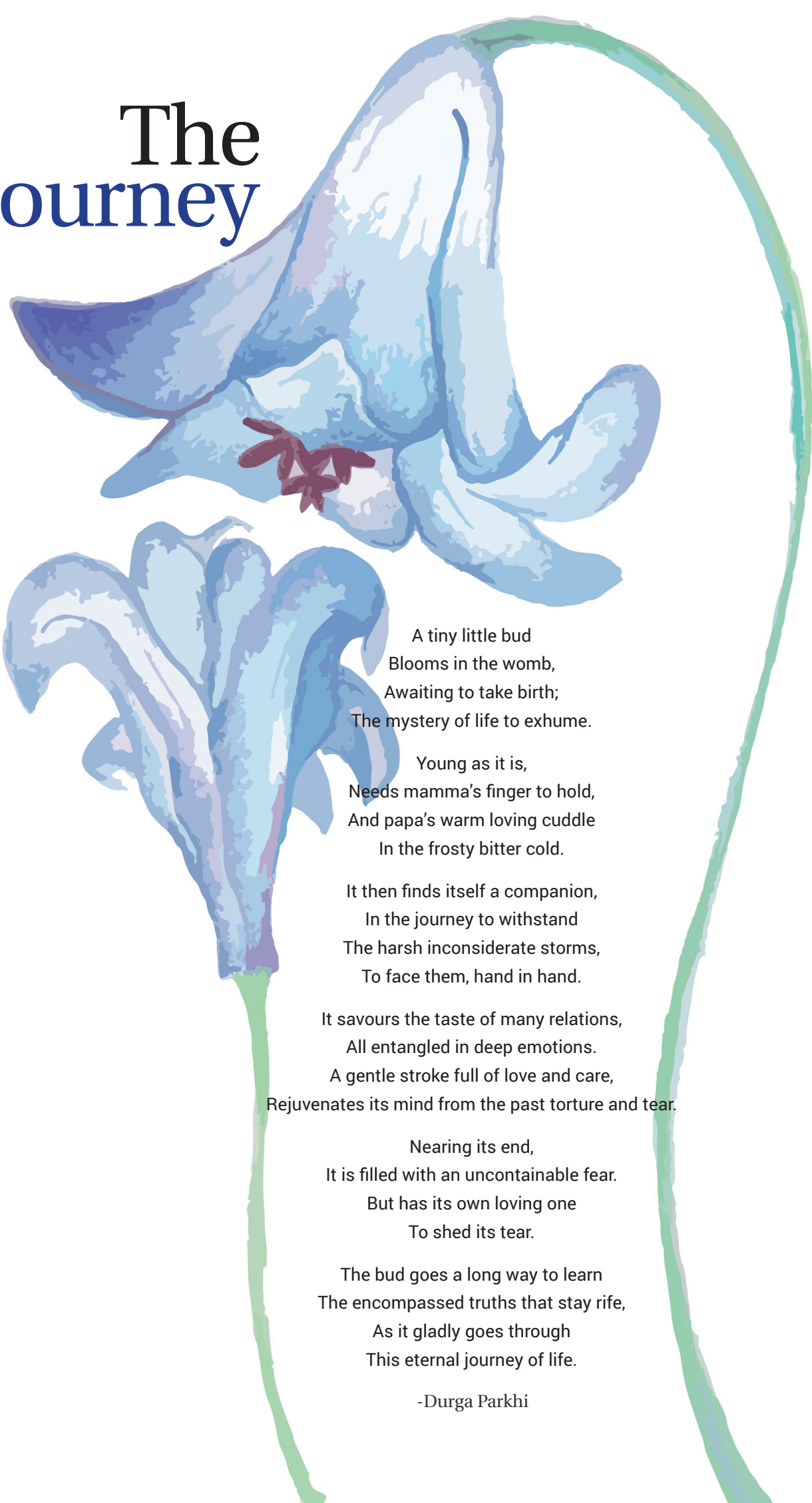


വിൽപ്പനക്കാരൻ തന്റെ സൈക്കിളിൽ വന്നു. അയാളുടെ ഹൃദയമായ ചിരി വശ്യതയാർന്നതായിരുന്നു. അയാൾ തന്റെ കൂടയിൽ ഉണ്ടായിരുന്ന മത്തിയും കിളിമീനും പിന്നെ മറ്റൊന്നൊക്കെയോ മീനുകളും എനിക്ക് വിൽക്കുവാൻ ശ്രമിച്ചു. മീൻ വാങ്ങുന്നതിലുമുപരി പച്ചയായ മനുഷ്യൻ എന്നെ ചോരയും നീരുമുള്ള ഒരു സ്ത്രീയായി കണ്ടതിൽ എനിക്ക് സന്തോഷം തോന്നി. ഊരും പേരും അറിയില്ലെങ്കിലും ആ നിമിഷത്തിൽ അയാൾ എനിക്ക് പ്രിയപ്പെട്ടവനായിത്തീർന്നു. വിഷാദം നിറഞ്ഞ എന്റെ ചുമരുകളിലേക്ക് അയാളെ ഞാൻ സ്വാഗതം ചെയ്തു. രവിയെന്നയാളെയുംപേരിട്ടു വിളിച്ചയാൾക്കുമേൽ ഞാനെന്റെ ഭാരമിറക്കി വെച്ചു. ഉമ്മ പട്ടിണിയാൽ മനസ്സും ശരീരവും തളർന്നയെന്നിക്ക് പുതുമണവും ജീവനും അവൻ പകർന്നേകി. മീൻ മണം പടർന്ന കാലുകൾ വീട്ടിലെ പൂച്ച നക്കി തുടച്ചു മിനുക്കാൻ പണിപ്പെട്ടു.

വൈകിട്ട് എന്റെ രവി വരുന്നതുവരേയും അവിടിരിക്കാൻ അയാളെ ഞാൻ നിർബന്ധിച്ചു. കൂടയിലെ മീനണം മുറികളിൽ തങ്ങിനിന്നു. എനിക്കത് തീർത്തും പുതിയതായിരുന്നു. അയാൾ കരയ്ക്കടിഞ്ഞ മീനിനെ പോലെ ശ്വാസം കഴിക്കാൻ നന്നേ ബുദ്ധിമുട്ടി. ഞങ്ങൾക്കിടയിൽ കിടന്നു വിരകുന്ന പൂച്ചയുടെ ചെയ്തികൾ നോക്കിയിരുന്ന് സമയം കഴിഞ്ഞു പോയി. രവി വന്നപ്പോൾ ഞാനെന്റെ പുതിയ രവിയെ പരിചയപ്പെടുത്തി. രവിയും രവിയും കൈകോർത്ത് പിടിച്ച് മുറിയിലേക്ക് നടന്നു പോയി. സന്ധ്യ മയങ്ങിയപ്പോൾ രവി തന്റെ മീൻ കൂടയുമായി മടങ്ങി. രവിയുടെ ശരീരം മീൻ ചെതുവൽ കൊണ്ട് പൊതിഞ്ഞിരുന്നു. ആ മണം ചുറ്റിപ്പറ്റി ഞാനും എന്റെ പൂച്ചയും അയാൾക്ക് ചുറ്റും കറങ്ങി.

-ദേവിക ടി ഡി

The Journey



A tiny little bud
Blooms in the womb,
Awaiting to take birth;
The mystery of life to exhume.

Young as it is,
Needs mamma's finger to hold,
And papa's warm loving cuddle
In the frosty bitter cold.

It then finds itself a companion,
In the journey to withstand
The harsh inconsiderate storms,
To face them, hand in hand.

It savours the taste of many relations,
All entangled in deep emotions.
A gentle stroke full of love and care,
Rejuvenates its mind from the past torture and tear.

Nearing its end,
It is filled with an uncontainable fear.
But has its own loving one
To shed its tear.

The bud goes a long way to learn
The encompassed truths that stay rife,
As it gladly goes through
This eternal journey of life.

-Durga Parkhi



The Winner

'Who is a winner?', asked the son.

Hearing this, smiled the wise one.

Said he,

'A winner is like the Universe,

In constant search for its purpose.

Once he finds his passion, he stops not;

The passion lights a spark,

A spark that sets him afire,

The fire that makes him perspire,

The perspiration that makes others admire,

The admiration, in turn, sets them afire.

Thus, a winner is the one who inspires.

A winner is like an ant,

Fuelled by determination.

For him, his work is like an art,

An art with which he will never part,

Part if he may, he will strive to come back to his art.

A winner is one who performs not for the people,

Not even for his own self.

He performs for the upliftment of his art,

To make his art divine,

To make the art his shrine,

To make it so elegant,

That anyone who dare pursue it,

Would be consumed by Love, Beauty, and Wonder.

To his art, the winner surrenders.

Dear son, think not that the winner never fails,

He is the one who has failed the most,

Yet the spirit, not lost.

The pain haunts like a ghost,

Still he moves, again, and again, and again.

Such is a winner, my son.

The one who is hardened by failure,

Melted by Love,

Inspired by work,

Fuelled by greatness,

And willing to take action,

Is a true WINNER, my son.'

-Tushar Gopalka

The Candy Crush Saga



'So she ran away in her sleep, and dreamed of paradise' – Paradise, Coldplay

It was just another round of the Candy Crush Saga; flipping sweet little candies, crushing each of them into a whole lot of nothing, but still rising higher on the scoreboard. She was simply rewinding everything, all over again. Laying on the bed, staring into the vivid colours of the candies on the screen. Her legs were leaning against the wall, her fingers engaged in random, distorted movements, drawing strange patterns, crushing each and every sweet little candy, struggling to fetch another life, extra sweet victories... all she could do as a favour towards them was crushing the candies in silence.

The afternoon sunlight of late January seemed to hesitate to enter the room, in spite of the open windows.

She likes the weeping dragon in the lemonade lake. Strangely though, she could never figure out the reason why the dragon wept, and it never was funny to see Blondie in a pink frock keep on laughing and hopping.

The levels simply reflected.

One,

two,

three... all of them were covered with too much sweetness, so much so that she was blinded by the core

of the candy. It was too much sugar and sweet for her to put up with. She could never figure out then, that the most 'sweet' and 'delicious' candies came out of brutality.

Level thirteen – that was all.

Her senses were overflowing. Melanie Martinez is insanely accurate.

'All the makeup in the world

Won't make you feel less insecure,

You got weights in your pockets

When you go to the doctors'

Candies just were not enough.

'Your favourite candy's cotton,

That's why all your teeth are rotten.'

Not at all enough. Just a matter of coincidence.

Someone was adding wine to the candies. Wine. Sarcastic wine. The one which you make that odd face at, when you realise that it is too sour, too much for your age.

And then fourteen, fifteen...

'Struggling is pointless', Rapunzel yells on the screen. 'May be you should download the soda version', suggested her friend.

Yes, that was interesting enough. In search of all the lost, hidden teddy bears in between those candies. Real soda is nice. The fizz that came just when the cork popped out made her crazy. Being a child, she was too afraid of breakage, she never let go of the bottles in fear that they might crash with a loud shattering sound, into a million pieces.

The game – she seemed to be running out of lives. The love-heart candy kept weeping in a stupid manner.

'Maybe it's a cruel joke on me.'

Melanie, you are simply giving her the spiteful hope of 'Way more cakes.'

Way more candies,

Way more life...

Got it.

It's past the seventeenth level.

But no sugar drops in this level.

No lollipops to break open the windows of the cage.

The candies slowly turned colourless, sour, or rather, bitter.

'Oops, you have no more lives left, please wait until...'

24: 54: 26

: 25

: 24

The stopwatch became too mechanical.

The phone simply slipped off from her hand.

Game Over!

But still, she could hear, a couple of doors away, a ukulele playing her favourite song.

That kept her awake.

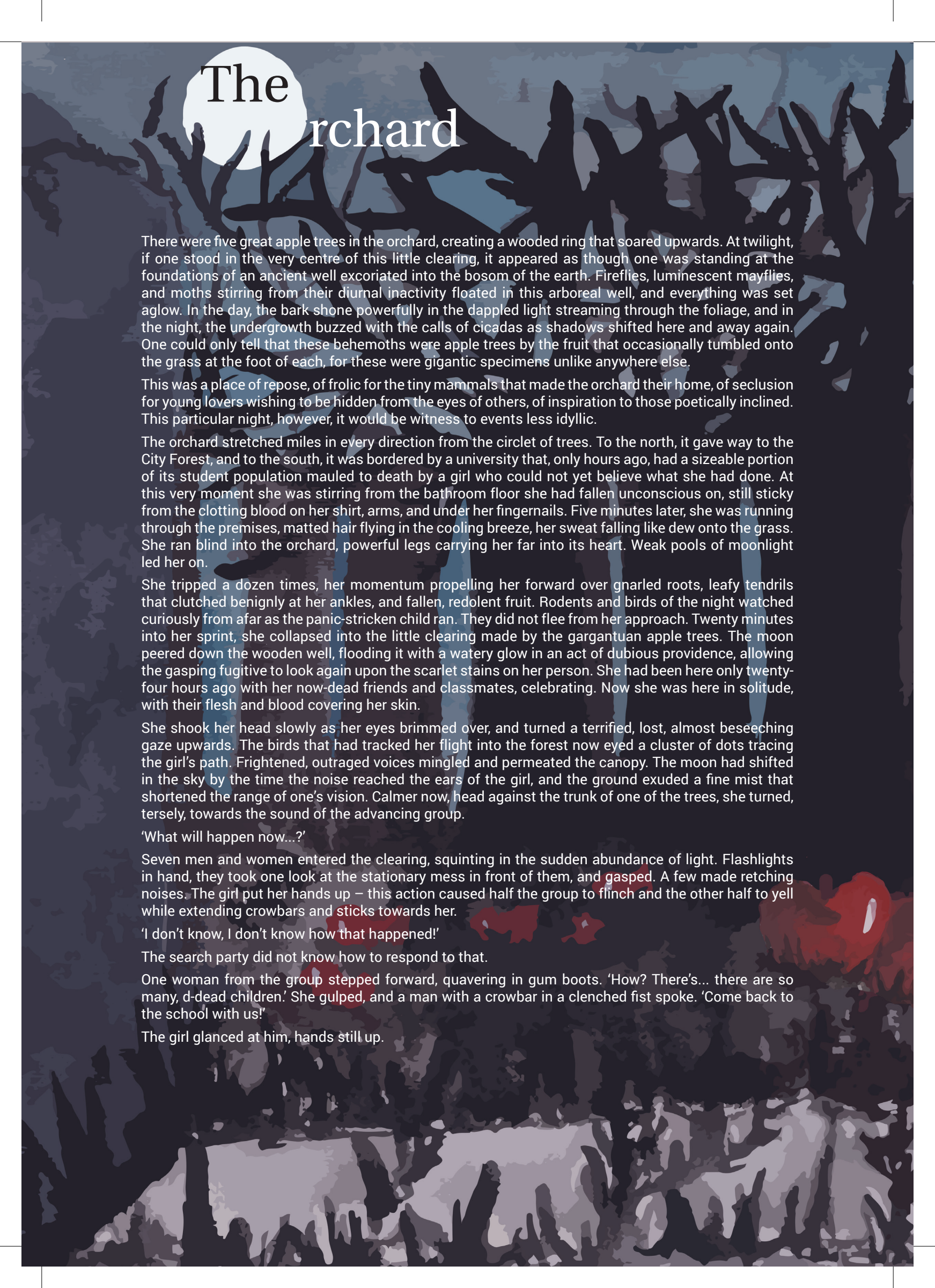
And then a smile flashed.

After all this, she still dreams of paradise.

'In the night, the stormy night,

Away she'd fly.'

The song goes on...!



The orchard

There were five great apple trees in the orchard, creating a wooded ring that soared upwards. At twilight, if one stood in the very centre of this little clearing, it appeared as though one was standing at the foundations of an ancient well excoriated into the bosom of the earth. Fireflies, luminescent mayflies, and moths stirring from their diurnal inactivity floated in this arboreal well, and everything was set aglow. In the day, the bark shone powerfully in the dappled light streaming through the foliage, and in the night, the undergrowth buzzed with the calls of cicadas as shadows shifted here and away again. One could only tell that these behemoths were apple trees by the fruit that occasionally tumbled onto the grass at the foot of each, for these were gigantic specimens unlike anywhere else.

This was a place of repose, of frolic for the tiny mammals that made the orchard their home, of seclusion for young lovers wishing to be hidden from the eyes of others, of inspiration to those poetically inclined. This particular night, however, it would be witness to events less idyllic.

The orchard stretched miles in every direction from the circlet of trees. To the north, it gave way to the City Forest, and to the south, it was bordered by a university that, only hours ago, had a sizeable portion of its student population mauled to death by a girl who could not yet believe what she had done. At this very moment she was stirring from the bathroom floor she had fallen unconscious on, still sticky from the clotting blood on her shirt, arms, and under her fingernails. Five minutes later, she was running through the premises, matted hair flying in the cooling breeze, her sweat falling like dew onto the grass. She ran blind into the orchard, powerful legs carrying her far into its heart. Weak pools of moonlight led her on.

She tripped a dozen times, her momentum propelling her forward over gnarled roots, leafy tendrils that clutched benignly at her ankles, and fallen, redolent fruit. Rodents and birds of the night watched curiously from afar as the panic-stricken child ran. They did not flee from her approach. Twenty minutes into her sprint, she collapsed into the little clearing made by the gargantuan apple trees. The moon peered down the wooden well, flooding it with a watery glow in an act of dubious providence, allowing the gasping fugitive to look again upon the scarlet stains on her person. She had been here only twenty-four hours ago with her now-dead friends and classmates, celebrating. Now she was here in solitude, with their flesh and blood covering her skin.

She shook her head slowly as her eyes brimmed over, and turned a terrified, lost, almost beseeching gaze upwards. The birds that had tracked her flight into the forest now eyed a cluster of dots tracing the girl's path. Frightened, outraged voices mingled and permeated the canopy. The moon had shifted in the sky by the time the noise reached the ears of the girl, and the ground exuded a fine mist that shortened the range of one's vision. Calmer now, head against the trunk of one of the trees, she turned, tersely, towards the sound of the advancing group.

'What will happen now...?'

Seven men and women entered the clearing, squinting in the sudden abundance of light. Flashlights in hand, they took one look at the stationary mess in front of them, and gasped. A few made retching noises. The girl put her hands up – this action caused half the group to flinch and the other half to yell while extending crowbars and sticks towards her.

'I don't know, I don't know how that happened!'

The search party did not know how to respond to that.

One woman from the group stepped forward, quavering in gum boots. 'How? There's... there are so many, d-dead children.' She gulped, and a man with a crowbar in a clenched fist spoke. 'Come back to the school with us!'

The girl glanced at him, hands still up.



'I'll come. I don't know why this happened. Please help me find out why.'

The girl and the party stood staring at each other for a good long while. An owl hooted, somewhere in the thickets. She lowered her arms, slowly, and took a step forward. It was all the adults could do to keep from bolting away, but they allowed the child to approach them, and, surrounding her, they attempted to commence the homeward journey.

They could not.

The girth of the five trees seemed to have been augmented while they had spent time regarding each other in apprehension, and there was no path left, no crack through the trees. Nothing but pallor covered the faces of the orchard's visitors as they stared, blankly, at the wall of bark that their group was ensconced in.

There was a thump. And another. And yet another. Apples fell at their feet. Round, robust, rosy. In the moonlight, they looked moist, opalescent, and enticing. Five more apples fell, and a squirrel dropped down onto the ground, watching them. It nudged one towards the closest person, one of the campus security guards.

'What...?'

'Maybe we should wait here until daybreak. It's only an hour or two away, in any case...'

Nervous glances were exchanged. Nobody wanted to be stuck in an enclosed space with a possible cannibal and confirmed mass murderer.

'I'll just sit here.'

The group rested, spreading out among the bases of the giant trees. In silence they sat, none daring to sleep, none sure what to say or do. The squirrel, unafraid of these people, watched them with beady eyes.

After an hour, one of the search party reached for an apple, buffing it on the lining of her jacket. Another imitated her, using his sleeve. The woman's first bite resounded uncannily off the walls of the wooden well, and the girl's head snapped towards her, causing her neighbour to jump back.

'WAIT'

The woman froze, brow furrowing.

'What...?'

'Don't... eat that.' The girl had her mouth slightly agape, as though she was thinking hard, trying to remember something. Coupled with her current appearance, the effect was terrifying.

'You, shut up!', one of the older ones snapped. 'Don't move, and don't say a word.'

The girl frowned, but obliged. The man and woman resumed eating, watching her, unsure. There was a low rustling as they continued. The sky began to lighten, and the moon shrunk away. The wall had receded, and the trail had reappeared. The group got up, tense, and began escorting the girl back home.

My life is over, she thought. It's over. But somehow, that was not the thing worrying her most. Dread welled up inside her gut – she remembered the fruit glistening in the moonlight, the fruit that two of her escorts had eaten – it was the very fruit she had eaten the day before. She stopped abruptly, causing the man behind her to bump into her and curse. She turned slowly, back towards the sinister trees, and as certainty and fear blended together, she fell backwards for the final time that night, onto the dewy orchard ground.

-Darshini Ravishankar

മൂവാണ്ടൻ

Moovandan: the mango tree

The story is a recollection of a woman's life with her husband, who has passed away. After fifty-six years of married life, they have parted and the woman reminisces about the time that she and her husband have spent together.

-Thasneem A.

ഇന്നും എനോട് മിണ്ടുന്നില്ല.അമ്പത്തിയാറു വർഷത്തെ ശീലങ്ങൾ ഒരു ദിവസംകൊണ്ട് മാറുമെന്ന് ഞാൻ വിശ്വസിക്കുന്നുമില്ല.എന്നാലും ഒന്നുവന്ന് മിണ്ടിക്കൂടെ? ഇത്രയും നീണ്ട ദാമ്പത്യത്തിനുമുന്നിൽ നിങ്ങളുടെ വാശി മറന്നുകൂടെ?

അന്ന് ആദ്യമായി കൈപിടിച്ച് വന്നുകയറുമ്പോൾ, നിങ്ങളുടെ കൈത്തണ്ടയുടെ ബലം മാത്രമേ അനുഭവപ്പെടുന്നുണ്ടായിരുന്നുള്ളൂ.സ്വന്തമായി കാര്യങ്ങൾ ചെയ്യുവാനോ സ്വപ്നംകാണുവാനോ അറിയാതിരുന്ന എന്നെ നിങ്ങൾ പഠിപ്പിച്ചു, പലതും നേടിപ്പിച്ചു.എന്നെ ഞാനാക്കി. പലപ്പോഴും ഞാൻ അഹങ്കരിച്ചു. എന്നാൽ നിങ്ങളുടെ നിസ്വാർഥതയായിരുന്നു അതെന്ന് അറിയുവാൻ ഞാൻ വൈകിപ്പോയി. ഋതുക്കൾ മാറിമറിഞ്ഞു, നമ്മുടെ കുട്ടികൾ അവരുടേതായ ലോകങ്ങളിലേക്കെത്തി.

പറക്കമുറ്റാത്ത അവരേയുംകൊണ്ട് നടന്നപ്പോൾ നമ്മുടെ കാലുകളിടറി. വീട്ടുകാരും നാട്ടുകാരും പേരിനമാത്രമായി ഒരുങ്ങിയപ്പോൾ നിങ്ങളാണ് നമ്മുടെ കടുംബത്തെ ചേർത്തുവെച്ചത്. അപ്പോഴും എന്റെ സ്വപ്നങ്ങൾക്കായി സമയംകാത്തുവെക്കാൻ നിങ്ങൾ മറന്നില്ല.

മഴയുടെ വേഗം കുറഞ്ഞുതുടങ്ങി, നിങ്ങൾക്ക് പോകാറായെന്ന് തോന്നുന്നു.ഞാൻ ആദ്യമായാണ് ഒരു വഴക്കിന് ഇത്രയും വേഗം തോറ്റുതരുന്നത്, അതെങ്കിലും മനസ്സിലാക്കി ഒന്ന് പുഞ്ചിരിച്ചുകൂടെ? കാലം ചുളിവുകൾ സമ്മാനിച്ചെങ്കിലും ആ ചിരിക്ക് ഇന്നുമൊരു സുഖമുണ്ട്.കുട്ടികൾ

അടുത്തുനില്ക്കൂണ്ട്, അവർക്ക് തിരക്കാണെന്ന് തോന്നുന്നു. നമുക്ക് പറയാൻ ഒരുപാട് കാര്യങ്ങളുണ്ടെന്ന് അവർക്ക് മനസ്സിലാകില്ലല്ലോ.കാലത്തിന്റെ നൗകയിൽ നമ്മൾ സഞ്ചരിച്ചയത്രയും അവരും സഞ്ചരിച്ചാലല്ലേ ഈ ആത്മബന്ധം അവർ തിരിച്ചറിയും.നമ്മുടെ വഴക്കുകളെ അവർ പേടിച്ച് നിന്നത് ഓർക്കുന്നില്ലേ? അന്ന് നിങ്ങൾ ഒരുപാട് കുറപ്പെടുത്തി,അവരുടെ മുന്നിലെങ്കിലും സ്നേഹം അഭിനയിച്ചുകൂടേയെന്ന്.

മൂവാണ്ടന്മാവ് വീണ്ടും പുത്തു.നിങ്ങൾ കണ്ടുവോയെന്നറിയില്ല. ചെറുപ്പത്തിൽ എന്റെ വീടിനുമുന്നിൽവന്ന് മാങ്ങ തന്നതും അച്ഛൻ ശകാരിച്ചതുമൊക്കെ ഞാനോർക്കുന്നു.അതുകൊണ്ടാണോ എന്നറിയില്ല, എനിക്കിപ്പോഴും അതിനോട് ദേഷ്യമാണ്.പക്ഷെ ഓരോ തവണയും അതിലെ പഴങ്ങൾ സുഖമുള്ള ഓർമകളായിരുന്നു, പ്രണയത്തിന്റെ ഓർമകൾ! മഴ വീണ്ടും കനക്കുകയാണല്ലോ.നമ്മുടെ വർത്തമാനം അവർക്കും രസിച്ചുവെന്ന് തോന്നുന്നു.പ്രായത്തിന്റെ കളികൾ ഓരോന്നായി എന്നെ വേട്ടയാടിത്തുടങ്ങിയപ്പോൾ വയസ്സിയെന്നു പറഞ്ഞ് നിങ്ങൾ കളിയാക്കി. അന്ന് ഞാൻ മിണ്ടാതിരുന്നപ്പോൾ വയസ്സിന്റെ ഒച്ചയും പോയോയെന്ന് ചോദിച്ചു. നിങ്ങൾ എന്ത് ദുഷ്ടനാണെന്ന് അന്ന് ഞാനോർത്തു. ഒടുവിൽ നിങ്ങൾക്ക് മറവിയുടെ ഏതോ വ്യാധിയാണെന്ന് ഡോക്ടർമാർ വിധിയെഴുതിയപ്പോഴും എന്നെ മറന്നിട്ടില്ലെന്നറിയാം.എന്റെ മെടഞ്ഞ മുടിയെപ്പറ്റിയും പട്ടുപാവാടയെപ്പറ്റിയും നിങ്ങൾ പറഞ്ഞുകൊണ്ടേയിരുന്നു.ഈ വയസ്സിയെ മറന്നെങ്കിലും എന്റെ ഓർമകളെ മറന്നില്ലല്ലോ.പിന്നെന്തിന് ഞാൻ ദുഃഖിക്കണം.

മോൻ വിളിക്കുന്നു, അവന്റെ വീട്ടിലേക്ക് പോകാമെന്ന്.അപ്പോൾ നിങ്ങൾ എന്തുചെയ്യും? ഈ കുട്ടികൾക്ക് എപ്പോഴും അവരുടെ കാര്യം മാത്രമേ ചിന്തയുള്ളൂ.അമ്മയെ ഒറ്റയ്ക്ക് നിർത്തുന്നത് അവർക്ക് മോശമല്ലേ.പക്ഷെ നിങ്ങളെ വിട്ട് പോകാൻ എനിക്ക് കഴിയില്ല.ഞാൻ ഇവിടെത്തന്നെ നിന്നുകൊള്ളാം. നമ്മുടെ മാവ് വെട്ടിത്തീരാറായി, എനിക്കും അതിൽനിന്ന് കുറച്ച് തടി മാറ്റിവെക്കാൻ ഞാൻ പറഞ്ഞിട്ടുണ്ട്. നിങ്ങളെ പുണർന്ന അതേ തടിതന്നെമതിയെന്നിരിക്കും.നിങ്ങൾ പൊയ്ക്കൊള്ളൂ, ഞാൻ ഇവിടെത്തന്നെയുണ്ടാകും, നിങ്ങൾ ഉറങ്ങിയിടത്തുതന്നെ എനിക്കും കണ്ണടയ്ക്കണം. മഴ മാറിയിരിക്കുന്നു. ഇനിയും വർത്തമാനം പറഞ്ഞ് നിൽക്കുന്നില്ല.ഞാൻ നമ്മുടെ മുറിയിലേക്കുപോകട്ടെ! ഒന്നു നടക്കാൻ പോലും കഴിയാത്ത നിങ്ങളെ കൊണ്ടുപോകുന്നത് എനിക്ക് കാണേണ്ട.

-തസ്നീം എ



The Union

It was time for her sister-in-law to finally leave – the hired cab started honking its impatience out. 'A' wondered whether she should muster up some tears. She tried to, but her eyes didn't oblige. So when 'S' started crying, 'A' had to do with only what she thought was the most aggrieved face she could manage. 'S' hugged her tightly one last time, and 'A' pretended to hug her back with equal passion. It was a very long hug and 'A' had to start wondering if the hug would last forever – wonders put to rest by the unsympathetic cab-driver's last impatient honk. With her luggage loaded, the cab started, and 'A' turned back to her door immediately, having to look back again when 'S' shouted, 'Take care!' loudly, while wiping her tears.

Take care! You bet I will, thought 'A'. Having closed the door, she did a little jig all the way to the opposite side of the room, where, on the wall hung the portrait of her recently deceased husband, garlanded with yellow marigolds. She took a few seconds to savour the sense of accomplishment in garlanding his terrible face with flowers of a colour he had hated so much. Then, she pulled out her middle fingers and resumed her jig, with the fingers out in front of that face. That face! She had a childishly malicious impulse to draw over it, but had to decide against it. Who knew which grief-toting relative or friend would come next, and be shocked to death over the defaced portrait?

She then glided across the stairs to the bedroom, and heaved away the mattress of what used to be their shared bed. There lay beneath it the bright yellow gown that she had secretly saved up for, and bought a few months ago, on a rare unaccompanied trip to the city centre. She picked it up with great love and turned towards the mirror. How drab her sari looked, thought she, like it was made to convey the wearer's misery. She began to take it off in deliberate steps that were meant to be graceful, but sped up when the reflection of her movements seemed to so slightly resemble his slow, dying movements. She shook that image away with a glance at the happy yellow of the gown.

It looked good on her. She didn't look her years at all; she almost looked like she was thirty. But the usual feminine worries bugged her before she realised all that. Perhaps this one looked a tad old-fashioned. Or perhaps the blue one would have been a better choice. Why hadn't she got the blue dress? Or the black-and-white one? She remembered with a little shock that the last two colours were his favourite colours, and checked her train of regrets. She turned and smiled at the mirror, admiring herself for a minute or so. *Yes, I do look good,* she told herself, rather vehemently so.

So what now, she wondered as she sat down on the naked bed. She had been dreaming of this for almost a decade before all this, but now that she could do all the things she had so badly wanted to, she couldn't think of any. *Really, girl, can you not think of anything?*, she asked herself. *Of course I can,* she asserted. *I could use that load of insurance money, and the money off this house. Buy another place, go off for a visit abroad. Start teaching again. Learn to drive. Learn to play something.* She beamed. Yes, she would do all these things.

After a happy reverie about her near future, she decided she would go out. She would visit a few places, perhaps a bookstore, even a mall – places he'd never liked or approved of. She could even have a little drink somewhere. And come back and have a long, long sleep, and wake up to the first free morning of her life in years.

When she stepped out, the pleasant evening had already started slipping into the night, with a fat little moon growing brighter through the leaves of the banyan tree across her house. She walked on, diligently avoiding the sympathetic glances of neighbours returning from their walk, and striving to conceal the smile that erupted so often at the thought of the night's promise. She was impossibly happy.

On reaching the main road, she stood for a while, contemplating the chaos of the scene. Forced by habit, her right hand seemed to reach out for something. She stopped in shock and folded her arms reflexively. She was afraid of crossing roads. She had always been. So every time they had to cross a road, he would take her hand. She now thought how he had never failed to do that, and checked her thoughts again. *What are you thinking,* she asked herself. *Why are you thinking of him, almost as if you are missing him!* *Of course I'm not missing him, of course not,* she thought. *I can cross the road myself, surely, I can. A trivial thing, surely!*

She stepped onto the zebra crossing with a rather defiant variety of confidence. *It's going to be alright,* she told herself. *It'll be alright,* she kept on thinking. Busy with self-assuring, she didn't see the truck till it was only a yard or two away.

A week later, at the funeral, her sister-in-law said through tears to another relative, 'How sad! And touching at the same time. Not parted even in death!' Her feelings were echoed countless times that day, and indeed, for years after that.



Artwork by Tomin James

The Crossing

The sea... wild and ferocious. I begin my journey here sailing along the tides. Am I safe among these roaring waves? Turning back, I see a lot disappearing quietly into the trenches of memories, bidding me farewell forever. Will I really cross this sea? Allah knows. I remember those days when I used to live in the world of stories created by my grandma. The story of the bridge that connects heaven and hell is popping up in my mind throughout this journey... What am I up to? I don't know whether I am heading towards heaven, but for sure have left the hell created by... I don't understand why Allah changed my fate forever. Why is he making me run away like a coward with my daughters?

My daughters, I feel sad for them. I can't imagine how it feels to experience the hard side of life at their age. 'Mamma, we are getting scared. Will we be safe?' Poor things, I should not have looked at their faces. Now I don't know how to give them hope. 'Don't worry dear. Mamma is here with you, and we will always be safe.' I can see the clouds of anxiety and terror clogging their little eyes, but they are not going to ask anymore. I think all this brought us close, so close that our hearts speak directly. Miles and miles away, there is a beautiful place... No, there was a beautiful place where I could find a woman playing cheerfully with her daughters and husband. Do I recognise her anymore? She is far away, and is growing stranger to me with every passing second. The bombs and drones shattered that beautiful young lady. Took away her husband... and left her with four daughters destitute in the very land in which they were born. Looking back into those smog filled days, terrorised by human folly, I don't realise what all this was for. Did millions like me get anything, or did those who preyed upon us gain anything? The result of all this was that millions were torn apart from their family, like my husband, and the rest left to be smuggled through the sea on a rubber tube, or left to die. I took the risk to cross this sea on a flimsy dinghy with just a life jacket put on for safety. I was always scared of the sea. But now I am no longer scared; it is better to sleep forever in the arms of the sea than to be a prey to those callous vampires. I am happy to die drowning in the sea but not in the fire set by warmongers. Coming face to face with death, I realise the value of life. I have never thought of it before. Today, what am I to the whole world? A mere migrant, whose name or story doesn't mean much. The fire swallowed my identity and my story. Now I am one among the millions. If I die during this struggle the media may raise the death toll by one. Nothing will change. The world will go on and on. I will be quietly erased from the universe. What are my children thinking? Are they also wrestling with these muddy thoughts? I think they have grown a lot within this short period of time. The thunderous sounds and the blasts have made them different; wiped away the childishness from their eyes, and filled it with something else.

There, I can finally see the shore. We have made it. My daughters are crying and hugging me tightly. Am I really happy? I don't know. I feel a strangeness and an emptiness. But I will put on a smile for my daughters. I will have to start my life afresh, leaving the burdens of the past. I can see questioning eyes roving all around me, some eyes are terrifying. I can see the suspicion, the disenchantment, forcing me to think whether I was an invader. I want to proclaim that crossing the sea facing death made me realise that land, money, and power are worthless. Struggling to just keep living, I can neither invade anything nor do what I want to. War has really changed everything. I can't believe I am still alive. Since I still breathe, I have to struggle more. I will have to survive for my daughters. My life will meander through the new land, far away from the screams and howls of the battlefield.

-Basila M. A.

ಅವಶೇಷ

Avashesha: the remains of something

Deranna is a common man who owns a small tea shop. His shop helps him earn bread and butter for his family. In a sudden turn of events, he has to bear the grief of the destruction of his shop by some mischief-makers. He loses his source of livelihood, and his dreams are shattered in a matter of minutes. Through this short story, the writer beautifully depicts how the innocent common man, who has no vested interest in communal clashes, is often a victim of communal violence in our society.

-Adarsh B. Vasista

ಯಾವಾಗಲೂ ಗಿಜಿಗುಡುತ್ತಿದ್ದ ದೇರಣ್ಣನ ಚಾ ಅಂಗಡಿ, ಅಂದೇಕೋ ಬಿಮ್ಮೆಂದು ಕೂತಿತ್ತು. ಅಂಗಡಿಯೆಂದರೆ ನಾಲ್ಕು ಮೇಜುಗಳು, ಅದಕ್ಕೆ ಒತ್ತೊತ್ತಾಗಿ ಇಟ್ಟಿರುವ ಎಂಟು ಕುರ್ಚಿಗಳು, ಒಂದೆರಡು ಗಾಜಿನ ಡಬ್ಬಿ. ಅದರಲ್ಲಿ ಪೆಪ್ಪೆಮೆಂಟು, ಹಾಲ್ಬೊವ ಇತ್ಯಾದಿ. ಒಳಗೆ ದೇರಣ್ಣ ಕುಳಿತುಕೊಳ್ಳಲು ಒಂದು ಕುರ್ಚಿ, ಒಂದು ಮೇಜು, ಚಾ ಕಾಯಿಸುವ ಪಾತ್ರೆ ಇತ್ಯಾದಿ... ಹತ್ತಾರು ಜನ ಗಿರಾಕಿಗಳು, ಅವರ ಚಿಟಿ-ಪಿಟಿ ಮಾತುಗಳು, 'ನಂಗೊಂದು ಕಾಫಿ ...', 'ಎರಡ್ ಪ್ಲೇಟ್ ಇಡ್ಲಿ ಹಾಕು ದೇರಣ್ಣ ...', ಎಂದು ಕೇಳಿ ಬರುತ್ತಿದ್ದ ಯಾವುದೇ ಶಬ್ದಗಳ ಗೋಜಿರಲ್ಲಿಲ್ಲ. ಸೂರ್ಯ ಬಾನಿನ ಅಂಚಲ್ಲಿ ಇಣುಕಿನೋಡಿ, ಮೈ ಮುರಿದು, ನಿಧಾನಕ್ಕೆ ನಡೆದು ಬಾನಿನ ಮೇಲೆ ಬಂದಾಗಲೂ ದೇರಣ್ಣನ ಅಂಗಡಿ ನಿದ್ರಿಸುತ್ತಲೇ ಇತ್ತು. ಎದುರಿಗೆ ಕರಿಯ ಕಂಬಳಿಯಂತೆ ಚಾಚಿ ಮಲಗಿದ್ದ ರಸ್ತೆಯೂ ನಿದ್ರೆ ಹೋಗಿತ್ತು. ಆಗ್ನೇಗೆ ರೊಯ್ಯೆಂದು ಹೋಗುವ ವಾಹನಗಳನ್ನು ಬಿಟ್ಟರೆ ಎಂದಿನ ಉತ್ಸಾಹ ಇರಲಿಲ್ಲ. ನೇಸರ ಮೂಡಣದ ಕೆಂಪು ಚೆಲ್ಲಿ, ಅದನ್ನು ಹೆಕ್ಕಿಕೊಂಡು ಬಾನಿನಲ್ಲಿ ಇಣುಕುವ ಮೊದಲೇ ಲವಲವಿಕೆಯ ಮದುವೆಮನೆಯಂತೆ ಆಗುತ್ತಿದ್ದ ಮಹಾನಗರ, ಇಂದೇಕೋ ದುಗುಡ - ದುಮ್ಮಾನಗಳಿಂದ ಕೂಡಿದ, ಮೌನ ಧರಿಸಿದ ಸುಂದರಿಯ ಮುಖದಂತೆ ಬಾಡಿತ್ತು. ಎಲ್ಲೆಲ್ಲೂ ಸ್ಮಶಾನ ಮೌನ.

ದೇರಣ್ಣ ಅಂಗಡಿಯೊಳಗಿನಿಂದ ಹೊರಗೆ ಇಣುಕಿದ. ಗಾಢ ಮೌನದೊಂದಿಗಿನ ರಣ ಬಿಸಿಲು ಮುಖಕ್ಕೆ ರಾಚಿತು. ಎಲ್ಲೋ ದೂರದಲ್ಲಿ ಸುಟ್ಟು ಟೈರಿನ ವಾಸನೆ ಮೂಗಿಗೆ ಮೆಲ್ಲಗೆ ಬಡಿಯುತ್ತಿತ್ತು. ಬೆಳಗ್ಗಿನಿಂದ ಒಬ್ಬನೂ ಅಂಗಡಿಯ ಕಡೆ ಮುಖ ಕೂಡ ಹಾಕಿರಲಿಲ್ಲ. ಎದುರಿಗಿದ್ದ ಗಾರ್ಮೆಂಟ್ಸ್ ಫ್ಯಾಕ್ಟರಿಯವರೂ ಕೂಡ ಅಂದು ರಜೆ ಘೋಷಿಸಿದ್ದರು. ಎಲ್ಲರಿಗೂ ತಮ್ಮ ತಮ್ಮ ಜೀವ-ಜೀವನದ ಮೇಲೆ ಆಸೆಯಿರುವುದಿಲ್ಲವೇ...? ಹೌದು... ಅಂದು ಮಹಾನಗರ ಬಂದ್. ಯಾವ ವಿಶೇಷತೆಗೆಂದು ಬಂದ್ ಆಚರಿಸಲಾಗುತ್ತಿದೆ ಎಂದು ದೇರಣ್ಣನಿಗೆ ತಿಳಿದಿರಲಿಲ್ಲ. ತಿಳಿದುಕೊಳ್ಳುವ ಗೋಜಿಗೆ ಹೋಗುವುದೂ ದೇರಣ್ಣನ ಮನಸ್ಸಿಗೆ ಸಾಧ್ಯವಾಗುತ್ತಿರಲಿಲ್ಲ. ದಿನದ ಕೂಳಿಗೆ ಹೋರಾಡುವ ಮನಕ್ಕೆ ಹೊಟ್ಟೆಯ ಆರ್ತ ಧ್ವನಿ ಬಿಟ್ಟು ಬೇರೆ ಕೂಗು ಕೇಳುವುದು ಕಷ್ಟ ಸಾಧ್ಯ. ಪ್ರತಿದಿನ ಬೆಳಗ್ಗೆ ಆರು ಘಂಟೆಗೆ, ತನ್ನ ಕಬ್ಬಿಣದ ಸರಳನ್ನು ಎಳೆದುಕೊಂಡು, ಬಾಗಿಲನ್ನು ಮುಚ್ಚಿಕೊಂಡು ನಿದ್ರಿಸುತ್ತಿರುವ ತನ್ನ ಅಂಗಡಿಯನ್ನು ದೇರಣ್ಣ ಎಚ್ಚರಿಸುತ್ತಾನೆ. ಅನಂತರ ಮಧ್ಯಾಹ್ನ ಸುಮಾರು ಮೂರು ಘಂಟೆಗೊಮ್ಮೆ ಮನೆಯ ಮುಖ ನೋಡಿದರಷ್ಟೇ ಭಾಗ್ಯ. ಮತ್ತೆ ಮನೆ ಕಡೆ ಹೋಗುವುದು ನಿಷ್ಠೆ ಆವರಿಸಿದ ಮೇಲೆಯೇ. ಐದು ಹಸಿದ ಹೊಟ್ಟೆಗಳಿಗೆ ಅನ್ನ ಹಾಕುವ ಕೈ ದೇರಣ್ಣ. ಅಂಗಡಿಯ ಕೆಲಸಕಾರ್ಯಗಳಲ್ಲಿ ಗಾಢವಾಗಿ ಮುಳುಗಿ ಹೋದರೂ, ಮಗಳ ಮದುವೆಗೆ ಬೀಗರು ಕೇಳಿರುವ ಒಡವೆಗಳು, ಭತ್ತ, ಅಪ್ಪನ ಖಾಯಿಲೆ, ಈ ತಿಂಗಳ ಮನೆ ಬಾಡಿಗೆ, ಹೆಂಡತಿಯ ಒಡವೆ ಗಿರವಿ ಇಟ್ಟಿರುವುದು, ಅದರ ಬಡ್ಡಿ ಎಲ್ಲವೂ ಅಮೂರ್ತ ಭೂತಗಳಾಗಿ ದೇರಣ್ಣನ ಎದುರು ನೃತ್ಯ ಮಾಡುತ್ತವೆ. ಇವೆಲ್ಲದರ ಎದುರು ಅವನು ನಿತ್ಯವೂ ಹೋರಾಡುತ್ತಲೇ ಇರುತ್ತಾನೆ.

ಮೇಜಿನ ಮೇಲೆ ಮೊಣಕೈ ಊರಿ ಹೊರಗಿನ ನಿರ್ವಾತ ಪ್ರಪಂಚವನ್ನೊಮ್ಮೆ ದಿಟ್ಟಿಸಿದ ದೇರಣ್ಣ. ಅರ್ಧ ಖಾಲಿಯಾಗಿ ಉಳಿದಿರುವ ಪೆಪ್ಪೆಮೆಂಟಿನ ಡಬ್ಬಿಗಳು, ಬೆಳಗ್ಗೆಯೇ ಗಿರಾಕಿಗಳಿಗಾಗಿ ಕಾಯಿಸಿಟ್ಟಿದ್ದ ಚಾ, ಬೇಯಿಸಿಟ್ಟಿದ್ದ ಇಡ್ಲಿಗಳು ಎಲ್ಲವೂ ಒಂದು ವಿಚಿತ್ರ ರೀತಿಯ ಘಮ ಸೂಸಲಾರಂಭಿಸಿದ್ದುವು. 'ಅವು ಹಾಳಾಗಿ ಹೋಗುವುದಲ್ಲ... ಅದರಿಂದಾಗುವ ನಷ್ಟ ಹೇಗೆ ತುಂಬಿಕೊಳ್ಳಲಿ...', ಎಂದು ಯೋಚಿಸುತ್ತಾ, 'ಯಾರಾದರೂ ಇತ್ತ ಸುಳಿಯಬಹುದೇನೋ... ಸ್ವಲ್ಪವಾದರೂ ವ್ಯಾಪಾರ ಆಗಬಹುದೇನೋ...' ಎನ್ನುವ ಭರವಸೆಯೇ ದೇರಣ್ಣನ ಆ ದೃಷ್ಟಿಯ ಹಿಂದಿನ ಶಕ್ತಿಯಾಗಿತ್ತು. ಎಲ್ಲರೂ ನಾಳೆಯ ರಾಜಕುಮಾರರೇ... ಇಂದಿಗಿಂತ ಹೆಚ್ಚು ನಾಳೆ ವ್ಯಾಪಾರವಾಗಬಹುದು... ನಾಳೆ ಇಂದಿಗಿಂತ ಒಳ್ಳೆಯ ಜೀವನ ನಮ್ಮದಾಗಬಹುದು ಎನ್ನುವುದು ಕೆಳ ಮಧ್ಯಮ ವರ್ಗದ ಆಶಾಬೆಳಕು...

ಬಿಸಿಲಿನ ಝಳಕ್ಕೂ, ಮಂದವಾಗಿದ್ದ ಅಂಗಡಿಯೊಳಗಿನ ಘಮಕ್ಕೂ ದೇರಣ್ಣನಿಗೆ ಜೋಂಪು ಹತ್ತಿದಹಾಗಾಯಿತು. ಮೇಜಿನ ಮೇಲೆ ತನ್ನ ತಲೆಯೊರಗಿಸಿ ಕಣ್ಣು ಮುಚ್ಚಿದ. ನಿದ್ರಾದೇವಿ ಅವನನ್ನು ಆವರಿಸಿಕೊಳ್ಳಲು ತನ್ನ ಕೋಮಲವಾದ,

ಮಬ್ಬು-ಮಬ್ಬಾದ ಬಲೆಯನ್ನು ಹರವಿಹಾಕುತ್ತಿರುವಾಗಲೇ 'ಬಚಾವೋ... ಬಚಾವೋ...', ಎಂದು ಕಿರುಚಿಕೊಂಡಂತಹ ಧ್ವನಿಯಿಂದ ಅವನಿಗೆ ಎಚ್ಚರವಾಯಿತು. ದೇರಣ್ಣ ಗಾಬರಿಗೊಂಡ. ಕನಸೇನೋ ಎಂದುಕೊಂಡು ತನ್ನ ತಲೆ ಕೊಡವಿಕೊಂಡ. ತುಸು ಕ್ಷಣದ ನಂತರ ಮತ್ತದೇ ಪುನರಾವರ್ತನೆ ಆಯಿತು ಅದೇ ಜೋರಾಗಿ, ಕರ್ಕಶವಾಗಿ, ಆರ್ತತೆಯನ್ನು ಗರ್ಭೀಕರಿಸಿಕೊಂಡ ಕೀರಲು ಸ್ವರ. ದಿಗಿಲುಗೊಂಡ ದೇರಣ್ಣ, ಅಂಗಡಿಯಿಂದ ಹೊರಬಿದ್ದು ಅತ್ತಿತ್ತ ನೋಡಲಾರಂಭಿಸಿದ.

ತುಸು ದೂರದಲ್ಲಿ ಹೊಗೆಯು ತನ್ನ ಚಕ್ರಾಧಿಪತ್ಯ ಸಾಧಿಸಿತ್ತು. 'ಹೋ... ಹೋ...', ಎನ್ನುವ ಏರುದನಿಯ ಸ್ವರ ಕೇಳಲಾರಂಭಿಸಿತು. ಯಾರೋ ಆ ಮಬ್ಬಿನಿಂದ ದೇರಣ್ಣನತ್ತಲೇ ಓಡಿ ಬರುತ್ತಿದ್ದ. ಅವನ ಹಿಂದೆ ಗುಂಪು ಗುಂಪಾಗಿ ಜನ ಅವನನ್ನು ಓಡಿಸಿಕೊಂಡು ಬರುತ್ತಿದ್ದರು. ಅವರೆಲ್ಲ ಈ ವ್ಯಕ್ತಿಯನ್ನು ಅಟ್ಟಿಸಿಕೊಂಡು ಬರುತ್ತಿರುವುದು ಸ್ಪಷ್ಟ ಗೋಚರವಾಗಿತ್ತು. ಆ ವ್ಯಕ್ತಿಯ ಬಟ್ಟೆಯೆಲ್ಲಾ ರಕ್ತದಿಂದ ತೊಯ್ದಿತ್ತು. ದೇರಣ್ಣ ಹೆದರಿದ. ಅವನ ಕಾಲುಗಳು ನಡುಗತೊಡಗಿದವು. ತಾನು ಎಲ್ಲಿದ್ದೇನೆ ಎನ್ನುವ ಅರಿವೂ ಅವನಿಗಾಗಲಿಲ್ಲ. ಕಾಲುಗಳು ತನ್ನ ಸ್ವಸ್ಥಾನ ಬಿಟ್ಟು ಹೋಗಲು ನಿರಾಕರಿಸುತ್ತಿದ್ದವು. ಅಟ್ಟಿಸಿಕೊಂಡು ಬರುತ್ತಿದ್ದವರ ಕೈಯಲ್ಲಿ ಹರಿತವಾದ ಮಚ್ಚು, ಕತ್ತಿಗಳಿದ್ದವು... ಹಾಕಿ ಸ್ವಿಕ್ಗಳಿದ್ದವು. 'ಎಳ್ಳೆಲೊ ಬಡ್ಡಿಮಗನ್ನಾ... ನಮ್ಮೋರನ್ನೆಲ್ಲ ಹೊಡೆದಿದಾರೆ ಅವು... ಸಿಕ್ಕಿರೋ ಈ ಮಗನ್ನ ಬಿಡಬಾರದು...', ಎಂದು ಗುಂಪಿನಿಂದ ಯಾರೋ ಕೂಗಿದ. ತಕ್ಷಣವೇ... 'ಕತ್ತಸೋ... ಬಾಡಿನೂ ಉಳಿಬಾದು', ಎನ್ನುವ ಹತ್ತಾರು ಧ್ವನಿಗಳು ಮೊಳಗಿದುವು. ಆ ವ್ಯಕ್ತಿ ದೇರಣ್ಣನಿಗೆ ಹತ್ತಿರಾಗುತ್ತಿದ್ದ. ದೇರಣ್ಣನ ಎದೆಬಡಿತ ಜೋರಾಗತೊಡಗಿತು. ತುಟಿಗಳು ಅದುರಿದವು. ಕಿರುಚಿಕೊಳ್ಳಬೇಕು ಎಂದೆನಿಸಲು ಆರಂಭಿಸಿತು. ಆದರೆ ನಾಲಗೆ ಹೊರಡುತ್ತಿರಲಿಲ್ಲ. ಹಿಂದೆ ಬರುತ್ತಿದ್ದ ಗುಂಪು ತನ್ನ ಓಟದ ವೇಗ ಹೆಚ್ಚಿಸಿಕೊಳ್ಳುತ್ತಿತ್ತು. ವ್ಯಕ್ತಿ ಸುಸ್ತಾಗಿದ್ದ, ಕಾಲುಗಳು ಕುಂಟಲು ಆರಂಭವಾಗಿದ್ದವು. ಅವನು ದೇರಣ್ಣನ ಹತ್ತಿರ ಬಂದೇ ಬಿಟ್ಟ. ದೇರಣ್ಣನ ಅಂಗಡಿಯ ಹೊಸ್ತಿಲ ಬಳಿಯೇ ಅವನ ಕಾಲಬಳಿ ಬಂದು ಧೂಪನೆ ಬಿದ್ದ. ... ತನ್ನ ಅರ್ಧತೆರೆದ ಕಣ್ಣುಗಳಲ್ಲಿ ಮನದೊಳಗಿನ ಎಲ್ಲಾ ಭಯ, ನೋವು, ಸಂಕಟ ಕೂಡಿಕೊಂಡು, 'ಭಾಯ್... ಬಚಾವೋ...', ಎಂದಷ್ಟೇ ತೊದಲಿ ಎವೆ ಮುಚ್ಚಿದ.

ದೇರಣ್ಣ ಸ್ಥಂಭೀಭೂತನಾದ. ಅವನ ತಲೆಯೊಳಗೆ ಸಾವಿರ ಯೋಚನೆಗಳು ಹರಿದಾಡತೊಡಗಿದುವು. 'ಇವನ್ಯಾರು... ಯಾಕೆ ಇಷ್ಟು ಗಾಯಗೊಂಡಿದ್ದಾನೆ... ಏನಾಗಿದೆ... ಇವನನ್ನು ಯಾಕೆ ಅಟ್ಟಿಸಿಕೊಂಡು ಬರುತ್ತಿದ್ದಾರೆ...', ಎಂದೆಲ್ಲಾ ಪ್ರಶ್ನೆಗಳು ಒಮ್ಮೆಲೇ ದೇರಣ್ಣನ ತಲೆ ತುಂಬಿದವು. ಗೊಂದಲದಲ್ಲಿದ್ದ ದೇರಣ್ಣನನ್ನು ಯಾರೋ ಎಳೆದು ಕೆಳಗೆ ಕೆಡವಿದರು. ಅಂಗಡಿಯಿಂದ ದೂರ ಬಿದ್ದ ದೇರಣ್ಣ. ಸಾವರಿಸಿಕೊಂಡು ತನ್ನ ಅಂಗಡಿಯತ್ತ ದೃಷ್ಟಿ ಬೀರಿದ. ಹತ್ತಾರು ಜನ ಅಂಗಡಿಯೊಳಗೆ ನುಗ್ಗಿ, ಗಾಜಿನ ಡಬ್ಬಗಳನ್ನು ಎತ್ತಿ ಆ ವ್ಯಕ್ತಿಯ ಮೇಲೆ ಬೀಸಿದರು. ಅವು ಒಡೆದು ಚೂರಾದವು. ಅವನ ತಲೆಯಿಂದ ರಕ್ತ ಹರಿಯತೊಡಗಿತು. 'ಒದಿ... ಬಿಡಬೇಡ...', 'ಹೊಡಿ ...', 'ಕಡಿ...', ಇವುಗಳ ರೈಂಕಾರದಿಂದ ಇಡೀ ವಾತಾವರಣ ತುಂಬಿಹೋಯಿತು. ಗಿರಾಕಿಗಳೆಂದು ಇಟ್ಟಿದ್ದ ಇಡ್ಲಿ, ಚಾ ಎಲ್ಲವೂ ನೆಲದ ಮೇಲೆ ಬಿದ್ದು ಹೊರಳಾಡತೊಡಗಿದುವು. ಕುರ್ಚಿಗಳು ಕಾಲು ಮುಂದುಕೊಂಡವು. ಬೆಳಗ್ಗೆ ದೇವರ ಫೋಟೋ ಮುಂದೆ ಹತ್ತಿಸಿಟ್ಟಿದ್ದ ದೀಪವೂ ಕೆಳಗೆ ಬಿದ್ದು ಆರಿ ಹೋಗಿ ಸಣ್ಣಗೆ ಹೊಗೆ ಸೂಸತೊಡಗಿತ್ತು. 'ಮತ್ತೆ... ನಮ್ ದೇವರ ಬಗ್ಗೆ ಮಾತಾಡಿದ್ರೆ... ಬಿಡ್ತೀವಾ...', ಎನ್ನುತ್ತಾ ಮಲಗಿದ್ದವನ ಹೊಟ್ಟೆಗೊಬ್ಬ ಜೋರಾಗಿ ಒದ್ದ. ಆ ವ್ಯಕ್ತಿಯ ಚಲನೆ ನಿಂತಿತು. ಅವನಾರ್ತ ಚೀರಾಟ ನಿಂತಿತು. ದೇರಣ್ಣ ತನ್ನ ಕನಸು, ತನ್ನ ಜೀವನ ತನ್ನ ಕಣ್ಣು ಮುಂದೆಯೇ ಒಡೆದುಹೋಗುವುದನ್ನು ನೋಡುತ್ತಾ ಕೂತ. ಸ್ವಲ್ಪ ಹೊತ್ತು ಚೀರಾಡಿದ ಗುಂಪು, ಮೆಲ್ಲಗೆ ಚದುರತೊಡಗಿತು. ದೇರಣ್ಣನ ಇರುವಿಕೆಯನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ನಿರ್ಲಕ್ಷಿಸಿದಂತೆ ಅಲ್ಲಿ ಉಳಿದಿದ್ದ ಕುರ್ಚಿಗಳನ್ನೂ, ಮೇಜನ್ನೂ ಒದ್ದು ಧ್ವಂಸಗೊಳಿಸಿ ಗುಂಪು ಅಲ್ಲಿಂದ ನಿರ್ಗಮಿಸಿತು. ಮತ್ತೆ, 'ಹೋ...', ಎನ್ನುತ್ತಾ ಮುಂದುವರೆಯಿತು.

ಮೆಲ್ಲಗೆ ಕುಳಿತಲ್ಲಿಂದ ದೇರಣ್ಣ ಎದ್ದ. ತನ್ನ ಅಂಗಡಿಯನ್ನೊಮ್ಮೆ ದಿಟ್ಟಿಸಿದ. ಆಗಸ ಮೇಘಗಳ ಸಾಲಿಂದ ಆವೃತವಾಯಿತು. ಕಡುಕಪ್ಪು ಮೋಡಗಳು ತಮ್ಮ ಮಿಂಚಿನ ನಾಲಗೆಯನ್ನೊಮ್ಮೆ ಚಾಚಿ, ದೇರಣ್ಣನನ್ನು ನೋಡಿ ಬಿಕ್ಕಿದಂತೆ ಗುಡುಗಿ ವರ್ಷಾಭಿಷೇಕ ಆರಂಭಿಸಿದವು. ದೇರಣ್ಣ ಮಳೆಯಲ್ಲಿ ತೊಯ್ಯುತ್ತಲೇ, ಆ ವ್ಯಕ್ತಿಯ ದೇಹವನ್ನು ನೋಡುತ್ತಾ ಉಸಿರುಗಟ್ಟಿ ಕುಕ್ಕುರು ಕೂತ. ಸುತ್ತಲೂ ಹೊಗೆಯ ಮಬ್ಬು ಕವಿದಿತ್ತು. ನಿರ್ಭಾವದ ಅವನ ಮುಖದ ಮೇಲೆ ಮಳೆಯ ಹನಿಗಳು ನಾಟ್ಯ ಆರಂಭಿಸಿದವು. ದೂರದಲ್ಲೆಲ್ಲೋ ಕೂಗಾಡುವ ಶಬ್ದ, ಪೊಲಿಸ್ ಜೀಪಿನ ಸೈರನ್ ಶಬ್ದ ಕೇಳತೊಡಗಿತು. ದೇರಣ್ಣ ನಿರುಮ್ಮಳನಾಗಿ ಅವಶೇಷದೊಂದಿಗೆ ಒಂದಾಗಿಬಿಟ್ಟ.

-ಆದರ್ಶ ಬಿ. ವಸಿಷ್ಠ

Leaps of Faith

'Off to meet long beard again today?'

Walking back, the debate popped up again. Being called to defend his faith, as some of the priests during his younger days would tell him.

Whenever the debate came up, Kuttan felt pushed into a corner. In fact, he rather often felt like a man out of place. His name and well kempt appearance were more suited for a school boy. His receding hairline though, gave away his three-decade long experience on earth. The topic of discussion this evening though, was his habit of going to a dilapidated church nearby.

Kuttan's silent preparations for duel, collecting his thoughts on the matter, were suddenly interrupted by another blow.

'So you believe in a bearded man with a stick, doling out punishments on a day to day basis?'

Kuttan liked people, and he liked arguments. He had an opinion on everything people talked about. Everything, from celebrities insuring their backsides to the role of communism towards Indian polity. This time though, he was caught unawares. Normally, whenever the topic came up, he would turn his head slightly, and give a half smile, quietly clarifying that he was unwilling to continue the conversation.

'Uyarangalilekuyarette, hridaya vijara vikaranga! (May the emotions and thoughts of your heart soar to great heights)', said one of the prayers that he had sung out in church during his childhood. They would never soar if he were to keep avoiding the debate, he realised.

'After a four-year long engineering degree, if you still convince yourself of the existence of this person, then I am unable to understand you. 'Veritas vos leberabit!', isn't that what the Bible says as well? 'The truth shall set you free'. Why do you want to constrain yourself to this system of belief that has caused more harm than good to the world, when the truth is staring at you in the face, waiting to liberate you?'

Kuttan felt a tinge of earnestness in the appeal. 'It all depends on the paradigm. When I talk to a theist, I find it easy enough to switch to a paradigm where the laws of the universe are defined by a higher power. It isn't difficult for me to switch to a paradigm where random mutations give rise to species that are more stable in the adaptive landscape', said Kuttan as he put forward his first verbal contribution in the debate animatedly. He regretted the animation soon enough, as a passer-by turned around with mild interest, towards him.

He mellowed down, and thought about how he ought to put all the debates he had on various topics in the form of a book. During periods of self-obsession, he would imagine the book in print. The cover was a blurry blue in his head. He imagined it ought to have the phrase 'The Intelligent Man's guide...' on the cover. He smiled at his narcissism, and listened again.

'So essentially you have no thoughts of your own. Merely acquired thoughts based on the environment. If I rub you with cat's fur you are an atheist, and with silk, you are a theist!'

Kuttan wondered whether the words were true. Were his thoughts merely imitating the people he was with? He flushed and said, 'I'm not entirely convinced though, that the two paradigms I talked about are mutually independent'. He had almost reached home. He felt like he had more left to say, though. He broke into a mini speech as he opened the front door.

'I think it is the question we debate. If the question is whether a bearded man doles out punishments or love every minute to a group of beings he created to observe, my answer will be in complete agreement with yours. No. That is silly. If the question is whether the sum of human consciousness has evolved into something that the human mind perceives as being better, over the course of history, I would imagine yes. Does this entail the necessity of a 'higher entity'? Frankly I do not know. Meanwhile, it works for me to go to a quiet church, and listen to a voice that may or may not be 'God'.'

A man who was walking ahead stopped and turned around to the house, and stared as Kuttan completed the little speech that he was making to the air. Kuttan quickly closed the door, and walked into his front room. He dropped his bag by the chair, walked towards a little cupboard, and took out a yellow pill, and popped it into his mouth. He looked at his table for the water jug, and drank from it like a stork. For a man convinced of the reality of the voices in his head, the reality of another invisible voice of divine origin was hardly a leap of faith.

-Sandip George

ಮಾನವೀಯತೆ

Manaveeyate: humanity

Humanity is rare in today's world. Materialism drives people's actions, which makes them go to any extent to satisfy their own selfish needs. The poor are dying, and only humanitarian values can pull us out from this dark phase. Hence, the poet invokes humanity to return to the world.

-Sanjay N. S.

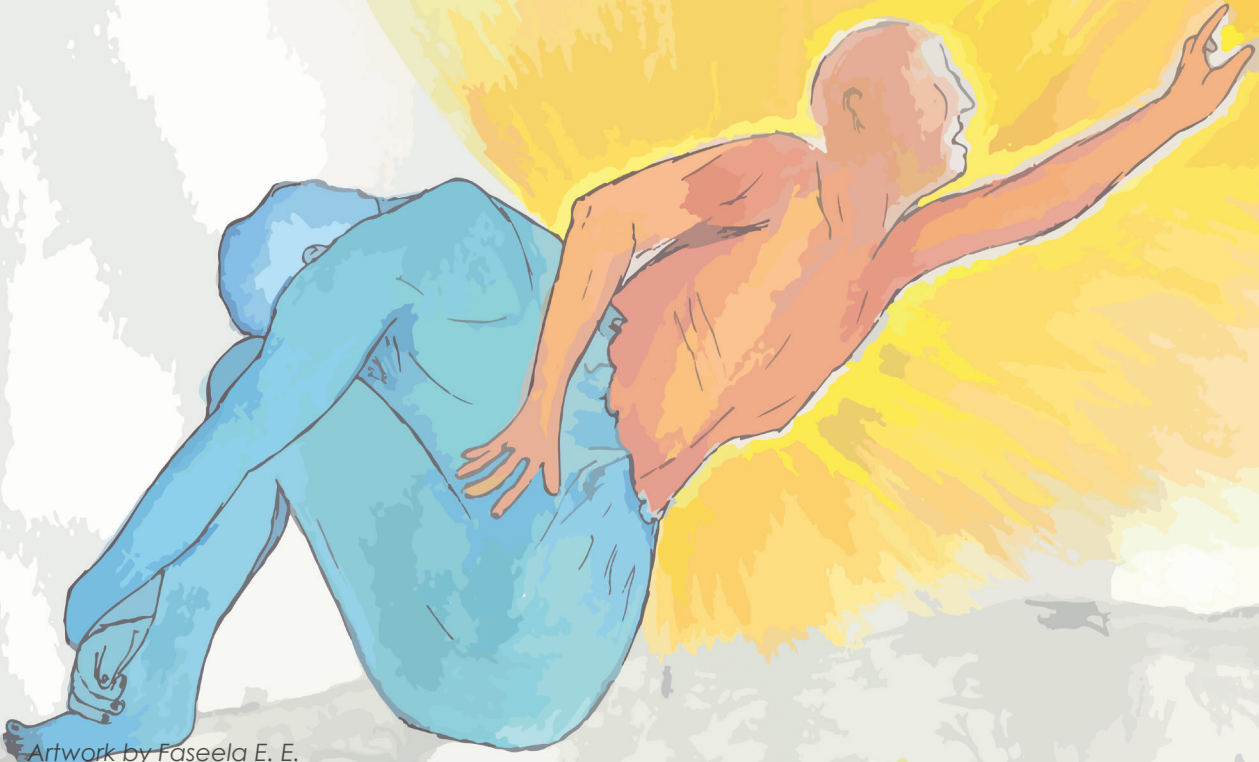
ಹುಡುಕಿದೆ ನಿನಗಾಗಿ ಎಲ್ಲೆಲ್ಲೂ
ಕಾಣಲಿಲ್ಲ ನೀ ಇಲ್ಲೆಲ್ಲೂ
ಉಳಿದಿರುವೆಯಾ ನೀ ನಮ್ಮಲ್ಲಿ
ಇಂದಿನ ಕರಾಳ ಕಲಿಯುಗದಲ್ಲಿ

ಜನರನ್ನು ಸ್ವಾರ್ಥಕ್ಕೆ ಬಳಸಿಕೊಂಡು
ಪ್ರಾಪಂಚಿಕ ವಸ್ತುಗಳನ್ನು, ಪ್ರೇಮಿಸುವರು
ಕಣ್ಣಲ್ಲಿ ಕಣ್ಣಿಟ್ಟು ನಂಬಿಕೆ ಉಳಿಸಿಕೊಂಡು
ಬಣ್ಣ ಬಣ್ಣದ ಮಾತನಾಡಿ ಟೋಪಿ ಹಾಕುವರು

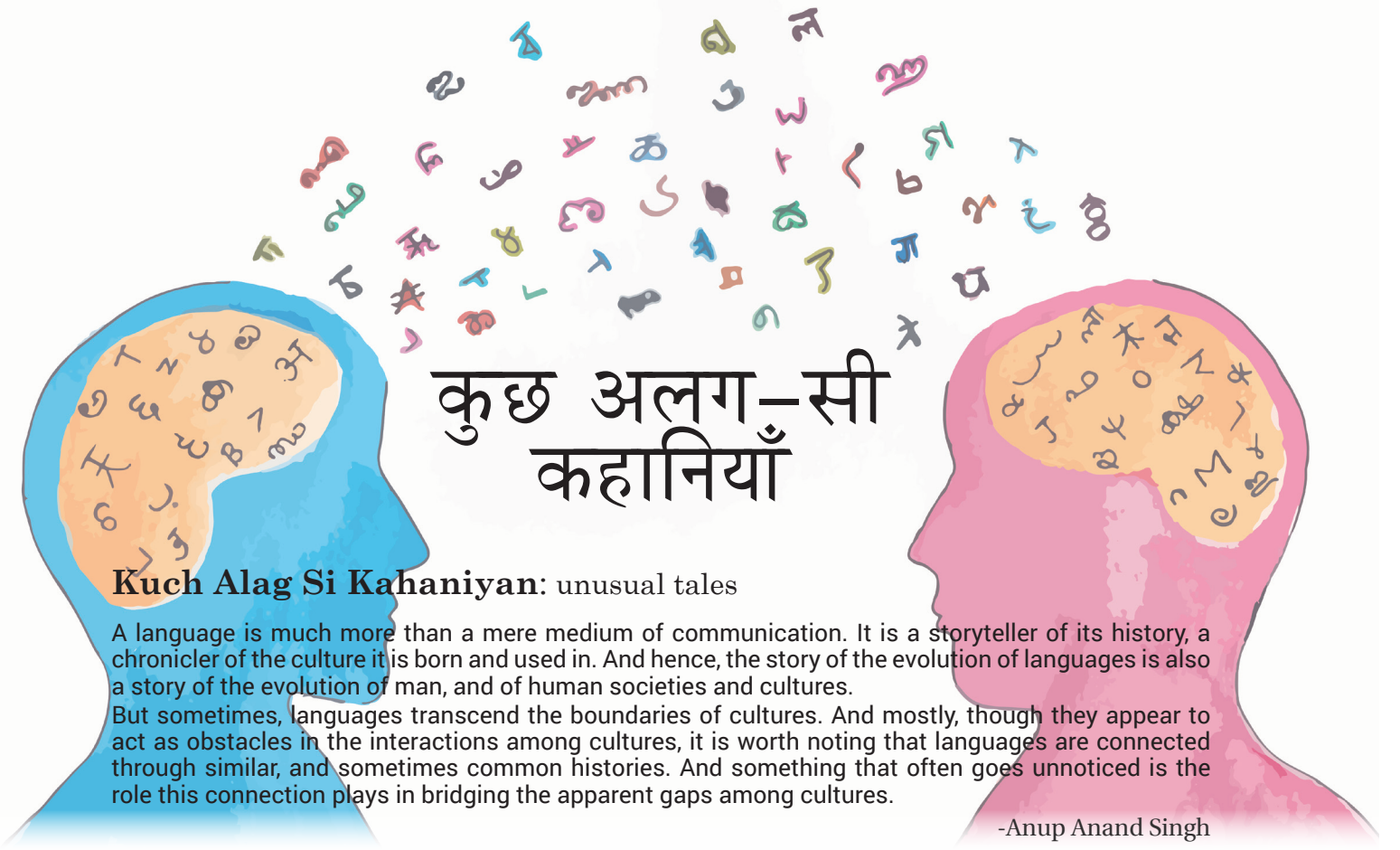
ನಿತ್ಯವೂ ಕೊಲೆ ಸುಲಿಗೆ ಅತ್ಯಾಚಾರ
ಕಾರ್ಯಕಾಲಪಗಳಲ್ಲಿ ಅವ್ಯವಹಾರ
ಸಾಯುತ್ತಿರುವವರು ಸಾವಿರ ಇಲ್ಲದೇ ಆಹಾರ
ಎಲ್ಲೆಲ್ಲೂ ಮತ್ತೊಬ್ಬರ ವಂಚಿಸುವ ಹುನ್ನಾರ

ಬೇಕಿಲ್ಲ ನಮಗೆ ಈ ಕಪಟತೆ
ಎಲ್ಲಿರುವೇ ನೀ, ಓ ಮಾನವೀಯತೆ
ಕಾಣುತ್ತಿಲ್ಲವೇ ನಿನಗೆ ಜನರ ಅಂಧತೆ?
ಹುಟ್ಟಿ ಬಾ ಮತ್ತೆ, ಓ ಮಾನವೀಯತೆ

-ಸಂಜಯ್ ಎನ್ ಎಸ್



Artwork by Faseela E. E.



Kuch Alag Si Kahaniyan: unusual tales

A language is much more than a mere medium of communication. It is a storyteller of its history, a chronicler of the culture it is born and used in. And hence, the story of the evolution of languages is also a story of the evolution of man, and of human societies and cultures.

But sometimes, languages transcend the boundaries of cultures. And mostly, though they appear to act as obstacles in the interactions among cultures, it is worth noting that languages are connected through similar, and sometimes common histories. And something that often goes unnoticed is the role this connection plays in bridging the apparent gaps among cultures.

-Anup Anand Singh

भाषाएँ केवल कहानियों का माध्यम ही नहीं, स्वयं कहानियाँ भी होती हैं। एक भाषा का इतिहास अनगिनत अनजानी कहानियों से भरा पड़ा होता है। कहानियाँ उसकी उत्पत्ति की, उसे आश्रय देने वाली संस्कृति की, उसमें हुए परिवर्तनों की और कई बार उसके पतन की भी। हर भाषा स्वयं में एक यात्रा वृत्तांत की तरह है, राहों में मिले सभी किस्सों को खुद में समाए हुए।

भाषा का विकास केवल उसके खुद की नहीं, उससे जुड़े मनुष्यों के विकास की भी कहानी है। भाषाओं की उत्पत्ति भले ही विचारों के आदान-प्रदान के लिए हुई हो, पर उनकी भूमिका केवल यहीं तक ही सीमित नहीं। विचारों के संचार के लिए प्रयोग की जाने वाली भाषा हमारे विचारों को भी वैसे ही प्रभावित करती है जैसे की हमारी भावनाएँ। भाषा के बगैर विचारों की रचना की परिकल्पना करना लगभग असंभव है।

सदियों से विश्व भर में संस्कृतियों के विकास के साथ-साथ भाषाओं का भी विकास होता रहा। इसलिये वर्तमान में प्रचलित छः हज़ार से अधिक भाषाओं की विविधता अचंभित तो करती है पर उनके विकास को संस्कृतियों के विकास से जोड़ कर देखें तो अधिक आश्चर्य नहीं होता।

मानव विकास के पहलू से देखें तो संस्कृतियों और भाषाओं की विविधता में समानता स्वभाविक है। कई बार भाषाएँ संस्कृतियों की सीमाओं के परे जाकर इस विविधता को और अधिक समृद्ध कर देती हैं। पर वहीं जब दो ऐसे व्यक्तियों की मुलाकात होती है जिनकी भाषाएँ भिन्न हों तब दोनों अनायास ही असहज हो जाते हैं। यह असहजता कुछ हद तक तो स्वभाविक है पर जाने-अनजाने में यही असहजता शायद अलगाव को भी जन्म देती है।

दिलचस्प बात यह है कि भाषाओं की वजह से प्रतीत होते इस वियोग का समाधान भी उन भाषाओं में ही छिपा हुआ होता है। या यूँ कहें कि उनसे जुड़ी कहानियों में। जिन भाषाओं को हम अजनबी समझ कर असहज महसूस करते हैं उनमें और हमारी अपनी भाषा में अंतर तो है पर साथ ही उनका एक समबद्ध इतिहास भी है। हर भाषा के विकास की कहानी, चाहे उसकी दूसरी भाषाओं से भौगोलिक दूरी कितनी भी अधिक क्यों न हो, दूसरे भाषाओं सी ही होती है। ये कहानियाँ केवल भाषाओं के विकास की कहानियाँ नहीं हैं, ये कहानियाँ मानव के विकास और उत्थान की भी हैं।

-अनूप आनंद सिंह

రాతలు గీతలు

Raatalu Geetalu: just lines

The truth is distorted because information is volatile. News is just a scribble on a large sheet of paper if its authenticity is compromised. What has journalism become today? How have we turned a blind eye towards it?

-Narsi



ఏముందీ? ఎక్కడుందీ?
ఆశా నిరాశ మిన్నంటిన నిట్టూర్పు
కాని కష్టం, ఆరని కష్టం
మనుగడ మరచిన జీవుల్లారా
ఎన్నాళ్ళీ నిద్ర
లేవండీ, కదలండీ అన్న అరుపులు
మూగబోయిన రోజున మరణించిన నీవు
లేవగలవా లేచినా జీవించగలవా?
రోజూ తన్నులు తినే ఈ బానిస బ్రతుకు
ఏముందీ? ఎక్కడుందీ ఆ మేల్కొలుపు జీవితం
రాతలు మరచి, గీతలు చెరచి
కూతలు కూసి, మూతలు మూసి
ముంతలు తాగి, గంతలు కట్టుకు
తెగబలిన కూనికోర్ల సమాజం ని
లెగమంటూ తన గొంతు కోల్పోయిన కలం
నిన్ను నడిపించటానికి తాను
అవిటిదయిన విప్లవం
నిజం నిజం అని ప్రాకులాడే పత్రిక
అబద్ధాన్నే నిజంగా నమ్మించే దూరదర్శన్ మధ్య
ఎప్పుడు తెలుసుకుంటావ్?
గ్రహించే గడియకు గ్రహపాటు
మరచిన నిజం, కప్పెట్టేసిన ఖనిజం
మురికిలో రాతలు, మడుగంటిన గీతలు

-నర్సి

मी, एस. टी. आणि कोकणचा बदलता चेहरा

Mi, S.T. aani konkancha badalta chehra: me, S.T., and konkan's changing face

Konkan, the patch of coastal land that separates the Arabian Sea and the Sahyadri ranges, is home to mango trees, cashew nut trees, coconut trees, and beautiful beaches. The author regularly visits his maternal grandparents, who live in a village along this coast. He writes about his memories of the place, and how it has changed over the years.

-Prathamesh Madhav Datar

हो. एस्. टी. च लिहिले आहे मी. महाराष्ट्र राज्य मार्ग परिवहन महामंडळ. स्वार्गेट आगारात कोऱ्या करकरीत शिवनेरीच्या बाजूला लागणारी लाल रंगाची अतिसामान्य व अनेकदा मळकट असणारी बस, जी 'लाल डब्बा' म्हणून (कु)प्रसिद्ध आहे. पण हाच लाल डब्बा एस्. टी. महामंडळाचे 'रस्ता तिथे एस्. टी.' हे ब्रीदवाक्य चोखपणे बजावतो. जमिनीच्या पृष्ठभागावर 'रस्ता' म्हणू शकू असे डांबराचे जरा जरी अवशेष असले तरी त्यावरून एस्. टी. ची दिवसातून एक खेप तरी असणारच. रस्ता कमी व खड्डे जास्त अशा नागमोडी वळणांवर आपल्या प्रचंड ग्राऊंड क्लिअरर्स, तगडे टायर्स व विनाआराम सस्पेंशनच्या पाठबळावर एस्. टी. टरटरवीत पुढे जाते. पण आरामाच्या बाबतीत अजागळ असलेल्या एस्. टी. चे नाव घेतले की शहरी माणसे नाके मुरडतात. मला मात्र असे कधीच वाटले नाही. उलट एस्. टी. त चढल्या चढल्या येणाऱ्या डिझेल व धुळीच्या उबस वासाने लहानपणापासूनच्या आजोळी (आईच्या माहेरी) जायच्या आठवणींचा पूर येतो.

माझे आजोळ मुक्काम पोस्ट केळशी, तालुका दापोली, जिल्हा रत्नागिरी. सह्याद्री पर्वतरांगांना अरबी समुद्रापासून कायमचे वेगळे करणाऱ्या कोकणप्रांतातील एक टुमदार गाव. माझा जन्म मुंबईचा. पण बारसे आजोळी केळशीला झाले. लहानपासूनच वर्षातून दोन वेळा तरी केळशीला जाणे व्हायचेच. त्यामुळे गावाची मला विलक्षण ओढ.

उन्हाळ्याचे दिवस. वार्षिक परीक्षेचा शेवटचा पेपर सकाळी दहा वाजता सोडवायचा व बरोबर बारा तासांनंतर रात्री दहाची रातराणी पकडायची : 'मुंबई-केळशी'. ग्रीष्म ऋतूमध्ये तिन्हीसांजेपासून पहाटेपर्यंत एक वेगळीच ऊब जाणवते. नुकतेच झालेल्या वर्सत आगमन-निर्गमनामुळे हवेत कुसूमगंध दरवळत असतो. मागे येणारा वारा मध्येच आंब्याचा मोहोर घेऊन येतो. अश्या ह्या माहौलात एस्. टी. ची खिडकी सताड उघडी ठेवून रात्रभर न झोपता बाहेरच्या मिट्ट काळोखात एकटक बघणारा मी. तब्बल सात तास असे चालायचे आणि पहाटे पाच वाजता आम्ही केळशीला पोहोचायचो. तेव्हा आजोबा आपल्या 'हिरो होंडा स्ट्रीट' वर आम्हाला न्यायला येत.

आजोबांचा मी खूप लाडका होतो. दिवसभर त्यांची शोपूट बनून फिरायचो. सकाळी 'गुंड्या, चल पटकन' अशी हाक आली की बसला गुंड्या आजोबांच्या मागे स्ट्रीटवर पाय फाकवून! आजोबा गावातल्या हायस्कूलवर अनेक वर्षे हेडमास्तर होते. त्यामुळे गावात त्यांना भारी भाव. व त्यांची शोपूट मी! त्यामुळे मला गावात 'पी. व्ही. सरांचा नातू' असेच ओळखतात. ते रिटायर होईपर्यंत दिवसातील पहिला कार्यक्रम असायचा शाळेत जाणे. त्यानंतर आम्ही आमच्या आंब्याच्या कलमात जायचो, आंबे तोडायला! आंबे तोडून, पेव्या भरून (व काही आंबे मी लंपास करून) झाल्यावर स्वारी बाजारात वडापाव किंवा रस्सावडा खाऊन घरी परतायची.

माझे आजोळचे घर कोकणातील इतर कोणत्याही घरासारखेच. ओटी-पडवी, माजघर व स्वयंपाकघर ह्या मुख्य खोल्या, पुढीलदारी शेणाने सारवलेले अंगण व मागीलदारी गोठा, एक विहीर व एक पंप. त्यामागे चार-पाच एकर जमीन, ज्याला वाडी असे म्हणतात. त्यात बागायती आंबा, केळी, चिकू, माड (नारळ), कोकम, काजू इ. झाडे. घरावर एक कौलारू छप्पर. गाव किनाऱ्यालगत असल्यामुळे कुठल्याही कोपऱ्यातून ५-१५ मिनीटांच्या अंतरावर समुद्रकिनारा येतो. मी तर रोज संध्याकाळी समुद्रावर जायचा हट्ट करायचो. समुद्रावर मग वाळूत खेळणे किंवा पाण्यात मनसोक डुंबणे हीच कामे. थोडा मोठा झाल्यावर पाण्यात नुस्तेच पाय बुडवून अथांग पसरलेल्या समुद्राकडे पाहात बसायचो. निसर्गाची किमया अशा वेळी अनुभवता येते. संध्यासमय. मावळता सूर्य क्षितीजावर टेकलेला. त्याची किरणे पसरून लालभडक झालेले आभाळ आणि त्या आभाळातून माघारी परतणारे पक्षांचे थवे. काही क्षणात तो सूर्य डुबूक-कन समुद्रात बुडतो व आपणही घरी परतून, हातपाय धुवून, शुभं-करोति म्हणून जेवायची वेळ होते.

किती रम्य हे गाव! ह्या गावात काहीच दोष नाही व हे कधीच बदलणार नाही असा लहानपणी भाबडा विश्वास होता. पण बालपणातील विश्वातून खऱ्या विश्वात येऊ लागल्यावर गावातील दोष व चांगले-वाईट होणारे बदल दिसून येऊ लागले. सुरुवात झाली २००७ च्या सप्टेंबर पासून. आजोबा वारले आणि माझ्या व्यक्तिमत्वाची जडणघडण करणारा एक धगधगता दिवा मावळला. याची दोनच कारणे. गावात असूनही नसलेले अल्पबौद्धिक डॉक्टर व प्रथमोपचारासाठी वणवण फिरू लागावे अशी करुणामय अवस्था. आजोबा गेल्यानंतर नैसर्गिकताच सगळे अपूर्ण वाटू लागले. माझ्या अवती-भवती असलेले त्यांचे कवच निसटल्यावर गावातील बदलही दिसू लागले.

सर्वात मोठा बदल म्हणजे पर्यटन. शहरी जीवांना 'बीच' चे फार वेड. पण गोव्याला जाणे सारखे-सारखे जमत नाही म्हणून शनिवार-रविवार मध्ये जाता येईल अशा 'बीच' च्या शोधात हे जीव कोकणाकडेच वळतात. त्याचा आर्थिकदृष्ट्या कोकणालाही फायदा होतो. येणाऱ्या पर्यटकांसाठी मग घरघुती राहण्या-खाण्याची व्यवस्था करून गावकरी चार पैसे कमवतात. रहदारी वाढल्यामुळे गावाकडील रस्त्यांच्या डागडुजीचे काम हाती घेतले जाते. एकंदर गावाचे भले होत आहे असे जाणवते.

पण हल्ली पर्यटनात इतकी वाढ झाली आहे की ते जणू अतिक्रमणच झाले आहे. याचे अनेक दुष्परिणाम दिसून येतात. वाढत्या पर्यटकांना जागा करायला म्हणा किंवा इतर कारणांसाठी म्हणा, आजकाल बांधण्यात येणाऱ्या सर्व वास्तू सिमेंटच्या असतात. पिढीजात असलेली कौलारू घरे हळू-हळू काळाच्या पडद्याआड जात आहेत. त्याहूनही मोठी समस्या म्हणजे कचरा. पूर्वी स्वच्छ असणारा समुद्रकिनारा आता नुसता गलिच्छ दिसतो. हे सर्व पाहून मन विदीर्ण होते. वाढणारे पर्यटन किनाऱ्याची व एकंदर गावाची शांतता भंगच करते. गावकऱ्यांमध्ये आपापसात काही नियम असतात. पण बाहेरून येणाऱ्या पर्यटकांना गावातले विचार, राहणीमान आपल्यापेक्षा भिन्न आहे याची जाणीवच नसते. उदा. आजीने आम्हाला ओहोटीच्या वेळेला कधीच पोहायला जाऊ दिले नाही. पाणी पटकन आत खेचते. पर्यटक मात्र भर ओहोटीतही खोल पाण्यात जातात. अनेकदा दारू ढोसून पाण्यात शिरतात. आपल्या कॉलनीतला स्विमींग पूलच वाटतो त्यांना समुद्र. अशा बेशिस्त वर्तनामुळे एखादा अपघात घडला तर ३५ किलोमीटर लांबपर्यंत धड रुग्णालयही नाही. मग काय करायचे माणसाने?

काही नाही. परिस्थिती बदलायची वाट बघायची. ते व्हायला फार काळ लागेल. सरकारी धोरण बदलेल तेव्हा मुंबईला २४ तास वीज आणि कोकणात ८ तास लोड शेडींग ही विषमता नष्ट होईल. जिल्हा परीषद खडबडून जागी होईल तेव्हा रस्ते चांगले होतील व प्रथमोपचार केंद्रे उभारली जातील. ग्रामपंचायतीने स्वच्छता मोहीम राबवल्यावर किनारा स्वच्छ व गाव शिस्तबद्ध राहील. आपण केवळ बीचवर नव्हे तर एका गावात जात आहोत व त्या गावाला एक अस्तित्व आहे, जे आपण जपले पाहिजे, असा विचार जेव्हा पर्यटक, व पर्यटक केवळ पैसा ओरबाडण्याचे साधन नसून आपले पाहुणे आहेत असा विचार गावकरी करतील तेव्हा पर्यटन खरे लाभदायक ठरेल.

माझ्या परीने मी केळशीला किनाऱ्यावर गेलो की कचरा गोळा करणे व माझ्या मित्रांना ह्या विचारांचे महत्त्व पटवणे हे करतच असतो. तुम्हीही कधी कोकणात गेलात तर एखाद्या गावी जाऊन या. नुसतेच बीच वर जाऊन येऊ नका!

—प्रथमेश माधव दातार

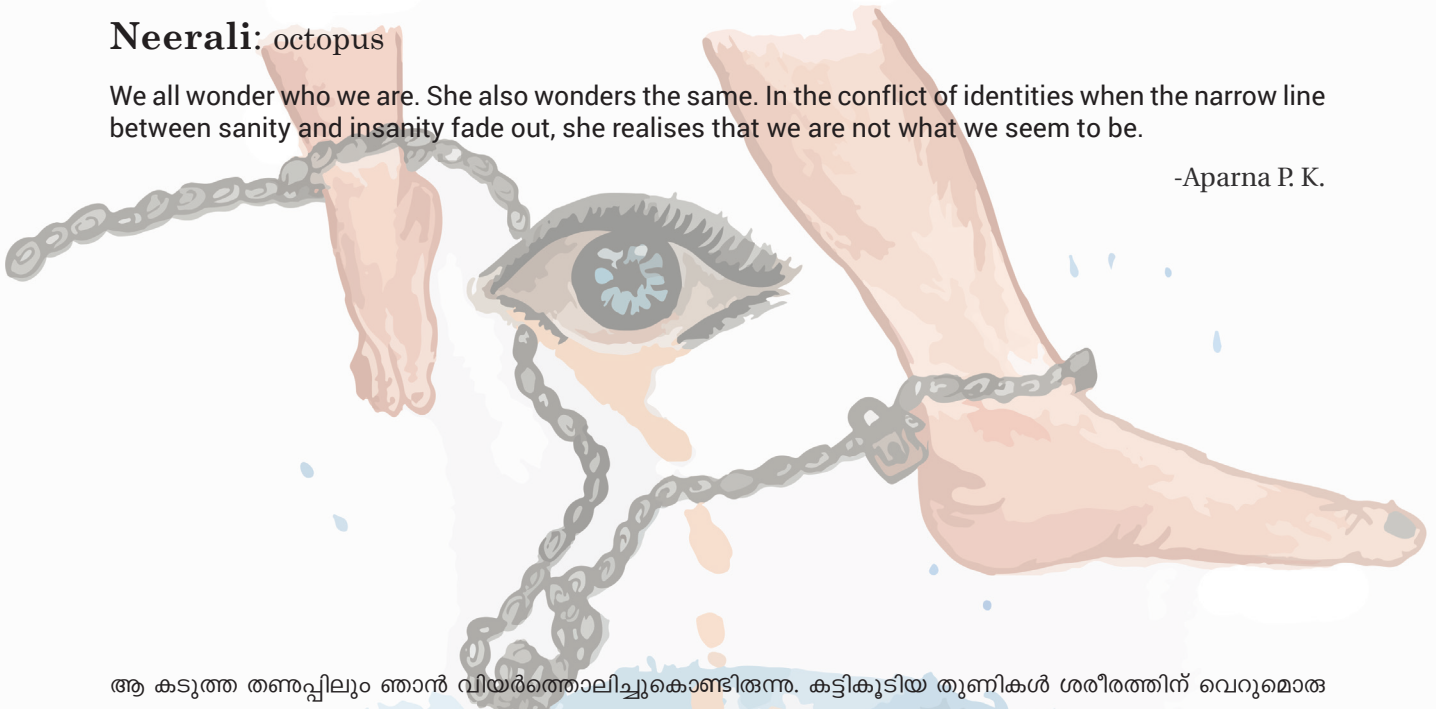


നീരാളി

Neerali: octopus

We all wonder who we are. She also wonders the same. In the conflict of identities when the narrow line between sanity and insanity faded out, she realises that we are not what we seem to be.

-Aparna P. K.



ആ കടുത്ത തണുപ്പിലും ഞാൻ വിയർത്തൊലിച്ചുകൊണ്ടിരുന്നു. കട്ടികൂടിയ തൂണികൾ ശരീരത്തിന് വെറുമൊരു ഭാരം മാത്രമായിരുന്നു. ഭക്ഷണം കഴിച്ചു കൈ കഴുകിയപ്പോൾ ഒരുപാട് ദിവസത്തിനുശേഷം കണ്ണാടിയിൽ നോക്കി. നാളുകൾക്ക് മുമ്പ് മരിച്ചുപോയ ഒരാളുടെ മുഖത്ത് കണ്ടേക്കാവുന്ന ജീർണിച്ച ഒരു മരവിപ്പിനപ്പുറം മറ്റൊന്നും കാണാൻ സാധിച്ചില്ല. ‘ഉള്ളിലെ പനി ഇപ്പോഴും മാറാത്തതു കൊണ്ടായിരിക്കാം നിങ്ങൾക്കിത്ര ചൂട്’ മരുന്നുകൾ നീട്ടിക്കൊണ്ട് നഴ്സ് പറഞ്ഞു. ചിരിയാണ് വന്നത്. ഞാൻ വിയർക്കുകയല്ല. ഉരുക്കുകയാണ്. കണ്ടില്ലേ, നാൾക്കു നാൾ ഇല്ലാതാവുന്നത്.ഒരുനാൾ നിങ്ങൾ വൃത്തികെട്ട ഈ മരുന്നുകുപ്പികളുംകൊണ്ട് വാതിൽ തുറന്നു വരുമ്പോൾ എന്നെ കാണില്ല. ചുമരുകൾപോലെ വെളുത്ത വസ്ത്രങ്ങൾക്കുള്ളിൽ നിന്ന് ഞാൻ മോചനം നേടും. സ്വർണ മത്സ്യത്തിന്റെ നിറമുള്ള ഈ സൂര്യരശ്മിയുടെ ചിറകിലൂടെ ഞാൻ ഒഴുകി നടക്കും. അവിടെ, മഞ്ഞുമലകളുടെ താഴ്വരയിൽ അവൻ എന്നെ കാത്തിരിക്കും.

‘ഇന്ന് സുഖം തോന്നുന്നുണ്ടല്ലോ, അല്ലേ?’. ഡോക്ടറാണ്. ഞാൻ മന്ദഹസിച്ചു. “ഇന്നുച്ചയ്ക്ക് തനിയെ ഭക്ഷണം കഴിക്കേണ്ടിവരില്ല. നിങ്ങളുടെ അമ്മയും ഭർത്താവും വരുന്നുണ്ട്. ഇനി പണ്ടത്തെയത്ര മരുന്നുകൾ കഴിക്കേണ്ടതില്ല. ഒരു, നല്ല തുടക്കമാണെന്ന് കൂട്ടിക്കൊളു”. അവർ തോളിൽ തട്ടിക്കൊണ്ട് പറഞ്ഞപ്പോൾ ഞാൻ അസ്വസ്ഥതയോടെ മുഖം തിരിച്ചു.എനിക്കാരെയും കാണേണ്ടതില്ല. ഒന്നും ഇനി തുടങ്ങാൻ കഴിയുകയുമില്ല. എന്നെ വിശ്വസിക്കുമോ എന്നറിയില്ല. എന്റെ എല്ലാ തുടക്കങ്ങൾക്കും തൊട്ടുപിറകിലായി ഇപ്പോഴുള്ളത് ഒരു മൊട്ടക്കുന്നാണ്. രാത്രിയുടെ അരണ്ട തണുപ്പിൽ പതിവുപോലെ ഒരു പക്ഷി വന്നെത്തുന്നു. ചിതലുകൾ തിന്നു തുടങ്ങിയ ഒരു മരക്കുറ്റിയിൽ കുടുങ്ങാക്കി മുട്ടകളിടുന്നു. പുലരാൻ നാഴികകൾ അവശേഷിക്കുക, കണ്ണുങ്ങൾ കണ്ണുകൾ തുറക്കുന്നു. തൂവലുകൾ മുളക്കുന്നു. ചിറകുകളിൽ അനന്തതയുടെ നവരസങ്ങൾ പടർന്നു തുടങ്ങുമ്പോൾ കിഴക്കിന്റെ തീച്ചുളയിൽ എല്ലാം കത്തിക്കരിഞ്ഞില്ലാതാവുന്നു. ഭയം അതിന്റെ നീണ്ട ചുണ്ടുപിരലുകൾ എന്റെ കഴുത്തിലേക്കാഴ്ത്തുന്നത് ഇവിടെവെച്ചാണ്. ആ പിഞ്ചു മുഖങ്ങളുടെ ദൈന്യതയ്ക്കു ചുറ്റും, ജാലകൾ ആടിത്തീർക്കുമ്പോൾ ഒന്നും ചെയ്യാൻ കഴിയാതെ എല്ലാം കണ്ടുനിൽക്കേണ്ടി വരുന്ന അമ്മക്കിളിയുടെ നിസ്സഹായാവസ്ഥ എന്നെ ഭ്രാന്തിയാക്കുന്നു.

ചാരം തണുത്തുറഞ്ഞിട്ടും അതിന്റെ കനൽ അടിത്തട്ടുകളിലെവിടെയോ മറഞ്ഞു കിടപ്പുണ്ട്.വേദനയിൽ കിടന്നു പുളയുമ്പോൾ പതിയെ കാണാനാവുന്നു രണ്ടു പിഞ്ചു കണ്ണുകൾ. സർവ്വശക്തിയുമെടുത്ത് അവയ്ക്ക് നേരേ നീങ്ങുമ്പോൾ ആ കണ്ണു നീർക്കുമിളകൾ മാഞ്ഞില്ലാതാവുന്നു. ഒരലർച്ചയോടെ കണ്ണു തുറക്കുമ്പോൾ എല്ലാം പഴയ പടി. എന്തുപറ്റിയെന്ന് ആരാഞ്ഞുകൊണ്ട് നഴ്സ് ഓടിവന്നു.ഒരു തുടക്കക്കാരിയായ ഭ്രാന്തിക്ക് കിട്ടാവുന്നതിലപ്പുറം പരിഗണനകൾ എനിക്കിവിടെ ലഭിക്കുന്നുണ്ട്. പക്ഷേ കൂടെക്കൂടെയുള്ള നിങ്ങളുടെ ഈ പോക്കുവരവുകൾ എന്നിൽ വെറുപ്പുളവാക്കുന്നു. ഒരു സർപ്പത്തെ പോലെ ചീറ്റാൻ ശ്രമിച്ചിട്ടും കരഞ്ഞു കലങ്ങിയ കണ്ണുകളോടെ ഭാരമുള്ള പുതപ്പിനടിയിലേക്ക് മടങ്ങാനേ എനിക്ക് സാധിക്കുന്നുള്ളൂ. ഭക്ഷണ സമയത്ത് ആരേയും നോക്കിയില്ല. വിളമ്പിവെച്ച പാത്രത്തിലേക്ക് തുറിച്ചുനോക്കിക്കൊണ്ടിരുന്നപ്പോഴും അമ്മയുടെ നിശബ്ദമായ കണ്ണുനീർ എനിക്കനുഭവപ്പെട്ടു.ഒരു ചിത്രശലഭം പോലെ എനിക്കു ചുറ്റും പാറി നടന്നിരുന്ന മനുഷ്യൻ എന്നെത്തന്നെ ഉറ്റു നോക്കിക്കൊണ്ടിരിക്കുകയായിരുന്നു.പക്ഷേ കണ്ടതായി നടിച്ചില്ല.കൈ കഴുകി അവർ തിരിച്ചുവരാൻ നിൽക്കാതെ ഞാൻ മുറിയിലേക്ക് നടന്നു.

ഒരേ തുവൽപ്പക്ഷികൾ ആയിരുന്നു ഞങ്ങൾ. ഒരുപാട് നാളത്തെ കാത്തിരിപ്പിനു ശേഷം ആകാശത്തുനിന്ന് ഒരു



വെണ്ണക്കല്ല് മടിയിൽ വന്നുവീണപ്പോൾ ഏറ്റവും വലിയ നിധിയായി കരുതി സന്തോഷിച്ചു. നിന്റെ കഞ്ഞുവരകൾക്കായി പുതിയ വെളുത്ത ക്യാൻവാസ് ഞങ്ങൾ ഒരുക്കിവെച്ചു. അപ്പോഴേക്കും നിറങ്ങളെല്ലാം വാരിയെടുത്തുകൊണ്ട് നീ പോയ്ക്കളഞ്ഞു.

കണ്ണുതുറക്കുമ്പോൾ സൂര്യൻ മാഞ്ഞു തുടങ്ങിയിരിക്കുന്നു. ക്രമേണ ഓരോ സ്വർണമത്സ്യങ്ങളും ഓടി ഒളിക്കും. മരുന്നുകൾ സൃഷ്ടിക്കുന്നത് ഉറക്കത്തിന്റെ നൂൽപ്പാലങ്ങളാണ്. ഒരിക്കലും തിരിച്ചറിയാൻ കഴിയാത്ത അവയുടെ അറ്റങ്ങൾ തേടി എങ്ങോട്ടെന്നില്ലാതെ അലയുന്നു. കാലൊന്നു തെറ്റിയാൽ ആഴം അറിയാത്ത അഗാധതയിലേക്ക് കുപ്പുകുത്തിപ്പോവും. ഓരോ അടിയും പിഴക്കാതെ നോക്കിക്കൊണ്ട് പതിയെ നടന്നുനീങ്ങുന്നു. ഉണരാൻ ശ്രമിക്കുന്ന ഓരോ തവണയും കൂടുതൽ തളരുന്നു. സമയത്തിന് കാത്തു നിൽക്കാതെ കണ്ണുകൾ അടയുമ്പോൾ വീണ്ടും നടന്നു തുടങ്ങുന്നു.

ഇത്തവണ ചുവന്ന പന്ത് എന്റെ കൈകളിലാണ്. മുത്തശ്ശൻ തോറ്റിരിക്കുന്നു. മറ്റുള്ളവരെ ശാസനയുടെ മുൾമുനയിൽ നിർത്തിയപ്പോഴും അദ്ദേഹം എന്റെ ഉറ്റ കളിത്തോഴനായി. ഒരുനാൾ, പൂലർകാലത്തെ നടത്തത്തിനു ശേഷം പത്രം വായിക്കുന്നേടത്ത് കാണാഞ്ഞ് അന്വേഷിച്ചു ചെന്നപ്പോൾ വാതിൽ ഉള്ളിൽ നിന്ന് കുറ്റിയിട്ടിരുന്നു. താക്കോൽ പഴുതിലൂടെ പേപ്പറുകളുടെ ഒരു കുമ്പാരവും അതിനു നടുവിലായി തിളങ്ങുന്ന ഒരു കഷണ്ടിത്തലയും മാത്രമേ കാണാൻ കഴിഞ്ഞുള്ളൂ. ചോദിക്കാതെ അകത്തേക്ക് കയറിവന്ന ആരേയും പരിഗണിക്കാതെ അദ്ദേഹം കത്തുകൾ എഴുതി. വീട്ടിലെ സാമ്പത്തിക പ്രതിസന്ധികൾ പരിഗണിച്ച് ധനസഹായം അഭ്യർത്ഥിച്ചുകൊണ്ട് പ്രധാനമന്ത്രിക്കെഴുതിയ എഴുത്തുകളായിരുന്നു അവ. മുത്തശ്ശി ബോധംകെട്ടു വീണു. മറുപടിയില്ലാത്ത അക്ഷരങ്ങളായിരുന്നു എഴുതപ്പെട്ടത് എന്ന് തിരിച്ചറിവുണ്ടാകാൻ പ്രായമായിരുന്നില്ലെങ്കിലും എന്റെ മുത്തശ്ശൻ പൂർണ്ണമായും മറ്റൊരാളായി കഴിഞ്ഞിരുന്നുവെന്ന് മനസ്സിലായി. കത്തുകൾ എത്തിക്കാൻ ഇറങ്ങി പുറപ്പെട്ടപ്പോൾ ശേഷകാലം ചങ്ങലകൾക്കുള്ളിലായി.

മാനസിക വിഭ്രാന്തിക്ക് അദ്ദേഹം മുദ്ര കുത്തപ്പെട്ടപ്പോൾ എന്റെ മനസ്സിൽ മറ്റൊന്നായിരുന്നു. അദ്ദേഹത്തിന് ഇപ്പോൾ സ്വയം ആരായിരിക്കും? കണ്ണാടിക്കു മുമ്പിൽ നിൽക്കുമ്പോൾ തെളിയുന്ന പ്രതിബിംബം ആരുടേതാണ്? ചോദ്യങ്ങൾ ചോദിക്കാൻ ആരുമുണ്ടായില്ല. അവ ഉള്ളിൽ കിടന്നു പിടിച്ചു. പതക്കെ ഞാൻ പോലുമറിയാതെ തെളിഞ്ഞു വരാത്ത ഒരു കണ്ണാടി എനിക്കുള്ളിൽ രൂപം കൊണ്ടു.

പക്ഷേ ഇപ്പോൾ, ചുവന്ന പന്തുമായി മകൻ ജയിച്ചിരിക്കുമ്പോൾ കുറേശ്ശേ കാണാനാവുന്നുണ്ട്. എല്ലാവർക്കും നീരാളിയുടെ മുഖമാണ്. തുടക്കത്തിൽ എല്ലാവരും ഓരോ മുഖംമൂടികളണിയുന്നു. മറ്റുള്ളവരേയും തന്നെത്തന്നെയും താൻ മറ്റാരോ ആണെന്ന് തെറ്റിദ്ധരിപ്പിക്കുന്നു. പക്ഷേ തുടർച്ചയായി ചുവന്ന പന്തുകൾ കൈക്കലാക്കാൻ കഴിയാതെ വരുമ്പോൾ സ്വന്തം കൈകൾ തന്നെ ചതിച്ചു തുടങ്ങുന്നു. ഇപ്പോൾ അദ്ദേഹത്തിനും എനിക്കും ഒരേ മുഖം. നിങ്ങൾ എന്റെ തൊട്ടുപിറകിലായി നിൽക്കുന്നുണ്ട് എന്നെന്നിരിക്കറിയാം. കണ്ണാടിയിലെ, നിങ്ങൾക്ക് കാണാൻ കഴിയാത്ത പ്രതിബിംബം സൃഷ്ടിക്കുന്ന ഈ മുഖം കാണാനുള്ള അക്ഷമയും എനിക്ക് കാണാം. ചോര പൊടിയുന്ന ഈ നീരാളിമുഖം നിങ്ങളെ കാണിക്കാൻ എനിക്കും അതിയായ ആഗ്രഹമുണ്ട്. പക്ഷേ നിങ്ങളുടെ കൈകളിൽ ചുവന്ന പന്തുകൾ കാണുന്നു. അതുകൊണ്ട് നിങ്ങൾ തിരിഞ്ഞ് നടക്കുക. ശബ്ദം ഇടറാതെ നിങ്ങൾ പാടുന്ന താരാട്ടുപാട്ടിൽ ഞാൻ എന്നെന്നേക്കുമായി ഉറങ്ങിപ്പോകണം. എനിക്ക് പിന്നിൽ വാതിൽ കൊട്ടിയടയ്ക്കുക. സസുഖം വാഴുക!

—അപർണ പി കെ

The shadow cast upon the empty seat beside me captures my attention. It belongs to a girl – the girl seated in front of me. I look ahead, straight into those wavy locks of dark hair, and amuse myself with the intricacies that it poses to me – the assortment of curls, the random streaks of grey hair, and the little imperfections that catch my eye. I ponder on these, and immediately draw parallels to my universe, my life, and my everyday struggle to fit an assortment of ambitions and hobbies in it, the random streaks of dull moments that I owe these to, and the little moments of imperfection that I hold myself close to. I waver between the two scenarios in my head, and decide that I could be easily charmed by these little analogies I draw. The conductor rings the bell, and I am brought to my senses. I get off the bus, and embark on foot to my destination.

The Delusional Me!

I cross the road, careful to keep myself walking on the zebra crossing. The black and white bands on the road move along with me. I reach the end but they still move along. They describe the opposites that I see in everything, in myself. I could be anything I want, and yet I choose to be who I am – a combination of weird and frustrated faces, fickle-mindedness and contrasting images between reality and deception.

I count my footsteps in groups of hundred as I walk, observing the patterns on the concrete I tread on. And with a jolt, I halt. I turn around, and see a grandma buying her grandson candy floss. I move closer, speculating whether I need to buy one for myself or not, but I am too overwhelmed to let my thoughts sway away from the beautiful childhood memories I recall. I remember those trips to the market accompanying my grandmother who would buy me tamarind toffees and mango bites, and how much I relish them still. I walk away, overcoming the mixture of joy and sadness that is unconsciously moving up to my eyes. I don't like it. But something makes me look back, and I get lost again in another world – a happy one picturing myself as a child.

The swift movement of a bike on the road, whose silencer just isn't working, catches me off guard, and makes me yelp unknowingly, surprising the people around me. I apologise, and move ahead, slightly embarrassed with myself. I chide myself for having registered yet another embarrassing incident into my mind. It surely will add up to how I will behave during the rest of my day. All I can do now is sigh, and then a question strikes me – Why did it bother me so much? It was a genuine reaction. I don't have to be perfect all the time. With this I delude myself into thinking a better thought, one where I am an accomplished person, and have achieved all I ever wanted to. I am in my perfect happy place.

I stroll ahead, and finally reach my home. I push open the gate, and it responds with a grating sound. I come back to my senses, my reality. I open the door, shutting it right behind me, and settle down on my comfortable recliner with a book, some coffee, and my mobile phone by my side. I can see the dark sky through the window I am facing. It doesn't impress me. I wonder what it is about the sky, the sun, the moon, and the other celestial beings that writers and poets find so interesting, and flip through the pages of the book I am reading. Time passes by, and I get immersed in the story. It isn't going to take me long to stop myself from worrying about the characters in the book, and start wondering about my own self. How much do I keep thinking about myself!

A few dogs bark outside. I envy them in the middle of my slumberous state. But what did I envy about them? I wonder. I guess it is their freedom, and decide that it is the best thing I could envy about 'dogs'. I let that train of thought slip into a peaceful sleep, and I hope it will be a dreamless one, for my head has had enough of the random ideas and notions that I keep deceiving myself with.

I guess at the end of the day all that really matters is how much you can spare yourself from these loops of delusions and distractions that you keep throwing yourself into. I know I can't stop it voluntarily. I know I will keep doing this, just to keep myself at ease, and surround myself in this happy bubble if it is all it takes to keep me going.

I know, I am an illusion to myself. I am what I perceive.

-Eilen



Artwork by Kezia Ann

A Glimpse of the IISER Community

Faculty members 2016



Academic Office



Administration



BENVENUTO

PhD Batch of 2015



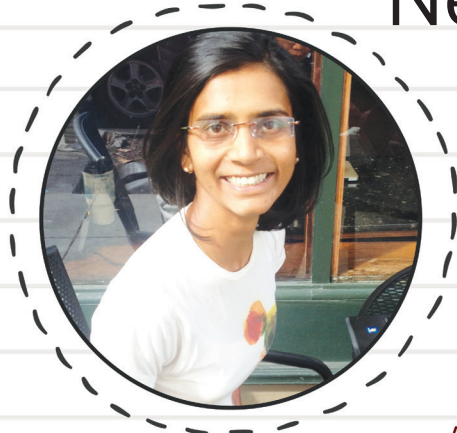
Integrated PhD Batch of 2015



BS-MS Batch of 2015

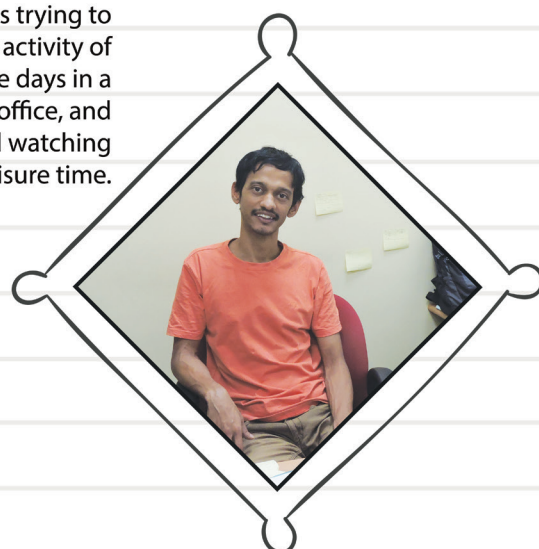


New Members of the Faculty



Amrita Hazra: Aided by a different approach to science as being a way of life rather than a career or a job, this bio-chemist's research interests lie in the study of the mechanism of enzymes. She is especially inclined towards the making of vitamins in nature, and the novel synthesis of bio-metabolites, specifically in extremophilic conditions. She enjoys reading non-fiction related to socio-economic view of food, and plans to start off a student-run community garden during her stay at IISER.

Argha Banerjee: A theoretical condensed-matter physicist by training, this affable glaciologist is trying to develop simple models that would explain the activity of Himalayan glaciers. He spends around forty-five days in a year in the Himalayas, where he also has an office, and likes listening to music, reading Manga, and watching animes in his leisure time.



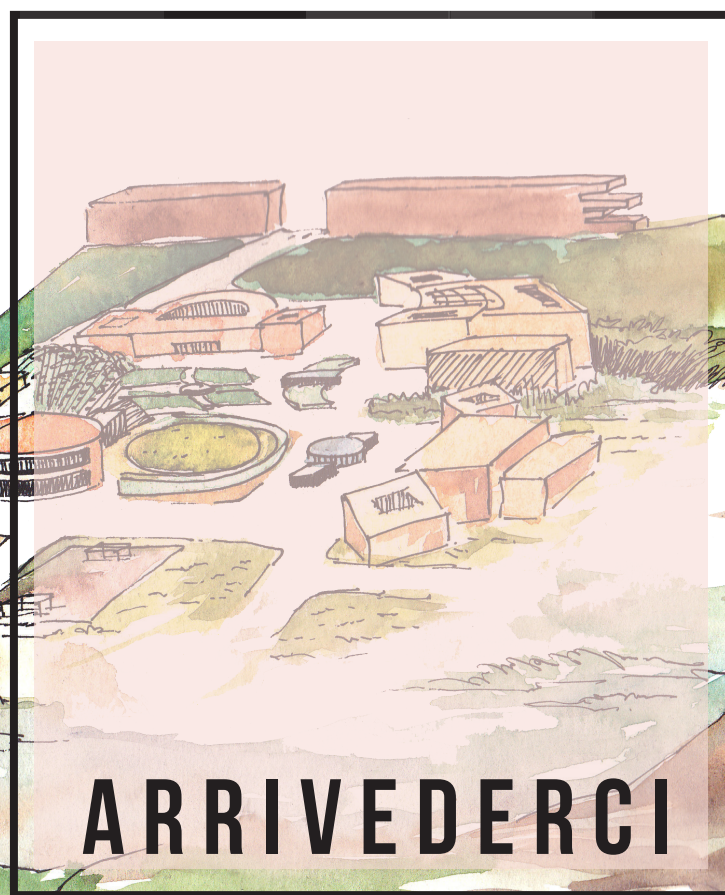
Neena Joseph Mani: With the determination to get into a different field of work rather than a conventional one, this amiable climate researcher with a gentle smile decided to work on the predictability of climate and weather. In her free time, she enjoys reading books by the likes of Khaled Hosseini and Paulo Coelho, and often writes.



Nixon Abraham: This biologist with a Masters in Chemistry works in the neuroscientific field of perception and decision making, using olfaction as a tool in the model system of mice. Further, he enjoys spending time with his family, watching sports, especially cricket, and playing table-tennis.



Satish Ogale: While planning his return to India following a successful stint in the United States, this physicist decided that he wanted to choose an area of research with a social context, and thus entered the field of development of next-generation solar cells as sources of storage, conservation, and conversion. Aside from this, he enjoys listening to film music, watching foreign language films, throwing lavish parties, and would like see his project, 'Kalpataru' - a wish-granting tree, come to life.



*'You and I will meet again,
When we're least expecting it,
One day in some far off place,
I will recognise your face,
I won't say goodbye my friend,
For you and I will meet again.'*

-Tom Petty and The Heartbreakers



Designed by: Swastik, Ira, and Shubham

The Expected Turn



The buildings, the cricket field, the ever increasing student body, and with it, the ever increasing pool of talent. When we started off there, we did not have people running the different clubs successfully as they are now, and I think our juniors have done a great job in carrying out so many activities making the campus a very vibrant place. -Anandita



Physics wise, wow! I've seen the interest go up exponentially, and we're gathering more and more, and better and better faculty members too... The only slightly worrying twist I see, is that people are becoming more attracted to the goal than to the journey of doing science. But maybe that's just my bias. -Shruti



Bittersweet. We were perhaps the last batch to experience some of the archaic rules in IISER (remember the girls/boys division on the IISER bus?) We were part of this greater change, and as IISER grew, so did we. As nice as it is to see IISER taking large leaps and strides, and growing number of students and faculty members, I do miss the warmth and comfort of being part of a smaller community, and the sheer closeness of the students and the faculty members. - Ashwini



Our batch still loves the HR4 days and catching (mostly missing) the bus to Sai for morning practicals. Most of us still prefer to be 'old school' in that sense... the coming batches are kind of born with a silver spoon. -Akshay Khadse

Of course, there was Sai Trinity – the holy place for labs, library, and food. We could literally waste an entire day there... -Sharvaree





Headbanging across editions of Karavaan. -Anandita

Socially: Having every one of your friends around at all times. Being able to take everyone's presence for granted. Our year apart has been a harsh reminder of how we had eased into the fact that all of us were just around the corner.

Academically: Being able to have the Physics vs. Maths fight a thousand times, each in a different avatar. Sudarshan's jokes, Khare's pearls, Tejas's clarity, classes upon classes, all the sleeping, proxying, and bunking. The general feeling of 'we're all in this together', High School Musical style. -Shruti

Winning the prize for face painting in Karavaan. Sohan, Chaitanya, and I participated as Zombies. -Akshay

In-house Bharatnatyam concert. Our cheap publicity stunts in the mess worked, and plenty of IISERites turned up. And the best part is, in-house has now become a common, happening event of IISER. -Sharvaree

Culturally: Karavaan, Kalpa, Sentience, SPICMACAY, Disha... Just all of it! Doing what you want when you want to, and doing a lot of it! Being active, running around, teaching kids, desperately searching for alliterations, editing, more editing, and spreading the smile. -Shruti

Those spontaneous nocturnal discussions (especially when we had an 8:30 lecture in the morning) where we would somehow gather somewhere on the 6th floor, and discuss pretty much everything under the sun – philosophy, career, the best way to bring about an apocalypse, and whatnot. And the priceless feeling when, despite all that, we managed to attend the morning lecture.

-Govind and Sishil

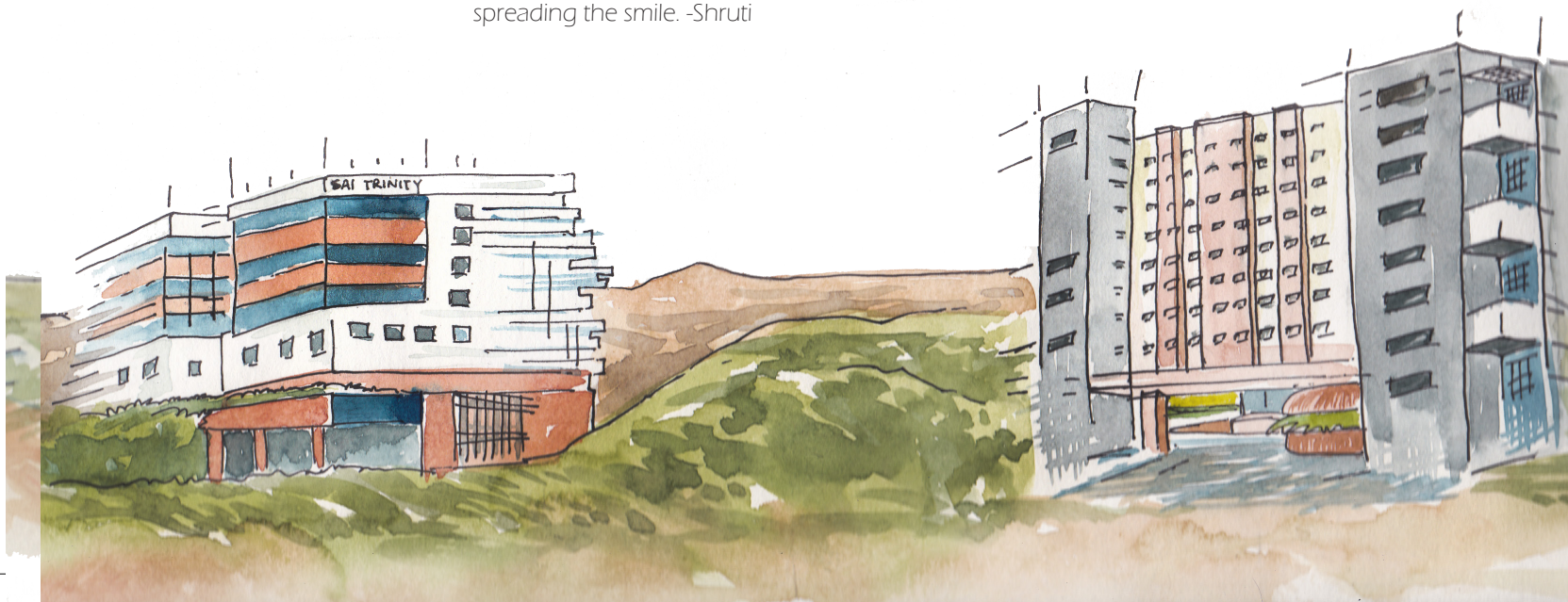
Hostel Life: The facilities which spoilt us. It is seldom that I will ever get as comfortable a hostel as this ever in my life again. -Sujay, Agrim

Sleeping with the curtain wrapped around me in the HR4 multi-purpose hall, and not being caught by the Professor!

Getting ready for dance performances. Our room was a mess of clips, safety-pins, bangles, *alta*, and clothes.

Shruti's and my concert in our last semester was also very memorable. We have been dance-mates for four-and-a-half years, and performing in the auditorium was a dream.

Heavy rainfall. Wet corridors. We sang and slid in the corridors until scolded. -Anandita





It was the traditional thing to do after every single Diwali – a batch photo.

Collecting donations and organising festivals like Janmashtami and Diwali... Lighting all those lamps, and selecting and sampling oh-so-much food. -Shruti

Sadhya in Onam 2014. Everyone in our batch got dressed up, and the food was amazing to top it all off! -Anandita



Another favourite moment was the first Holi celebration of our batch. The fountain pond in front of HR4 was partially filled. All the boys' t-shirts were torn off as a tradition, and a few were rolled in mud! We were throwing balloons from our HR4 room balconies. -Akshay



Farewell party for our seniors... Though many of us don't remember all of it (well, you know why!) it was a fun night. A few guys of my batch danced, and the performance as well the practice sessions were hilarious and will always be treasured. -Sharvaree

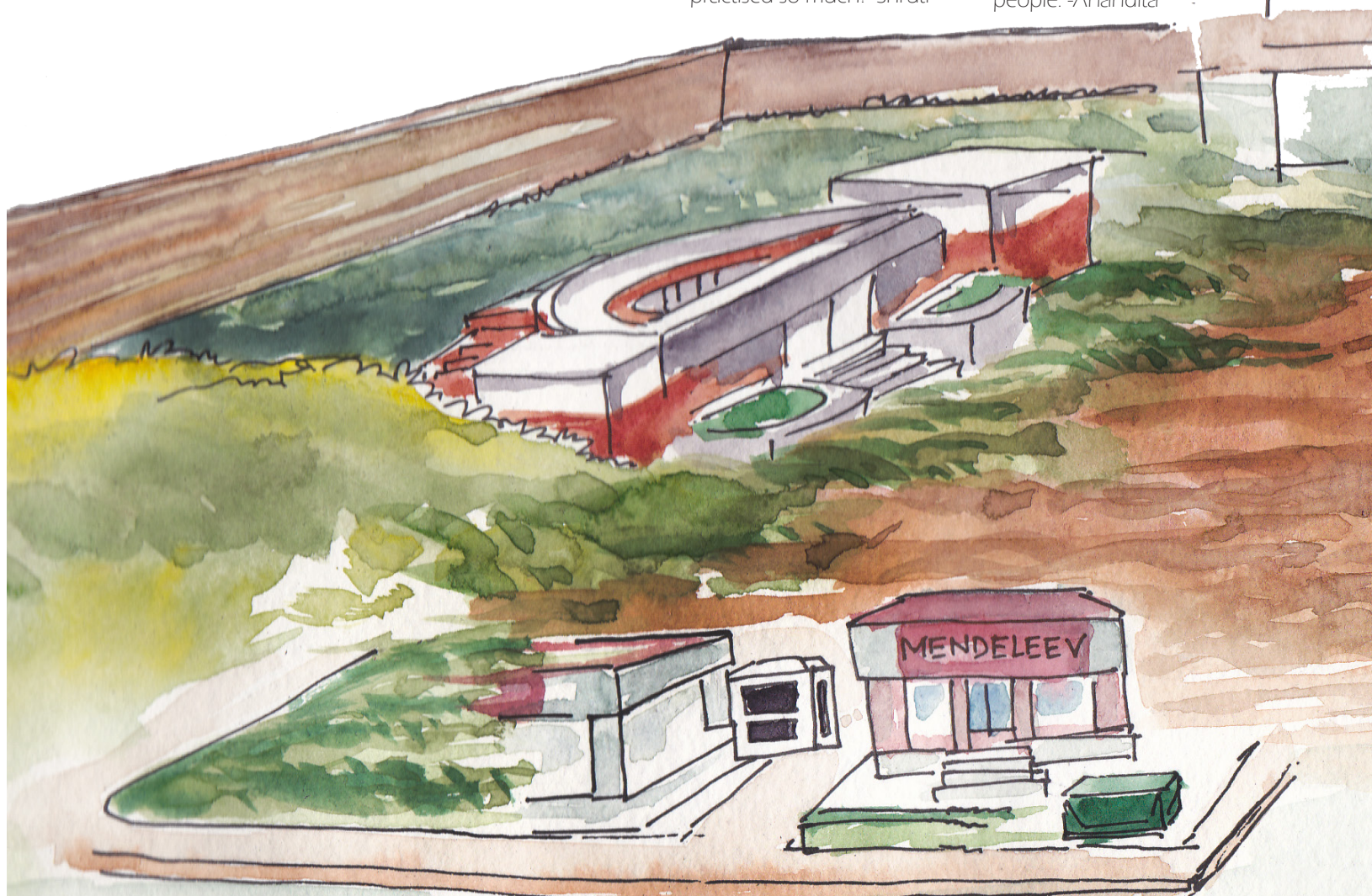
Freshers: Organising freshers brought a lot of politics into our batch dynamics... when I look back at it, it's hilarious. We took it very seriously back then, though. All the girls sang 'Koi Kahe' together. We practised so much! -Shruti



The time Kalyanee and I dressed up in blanket saris, and did tapori dances. -Shruti

Dance practice: Be it the flash mob or Rakhtcharitra practices for the BITS Goa fest, times with the dance club have been very exciting. -Sharvaree

Random dance sessions in our room wherein we put on random music, and danced around like crazy people. -Anandita





The 'impossible' win over the legendary 'Rascals' in an IPL semifinal and our 'stupid' loss in the finals!

A very nice thing happened after the match. The girls of our batch, as a gesture of appreciation gave our batch IPL team a party at the IISER canteen :) It was very nice of them to have done so, and it just let us see our batch as one big family.

-Akshay and Sishil



We have been nurtured in a highly academic environment and it does reflect in our thinking. With IISER growing, and more and more opportunities coming here, I believe it is all set to become one of the best institutes.

- Sohan

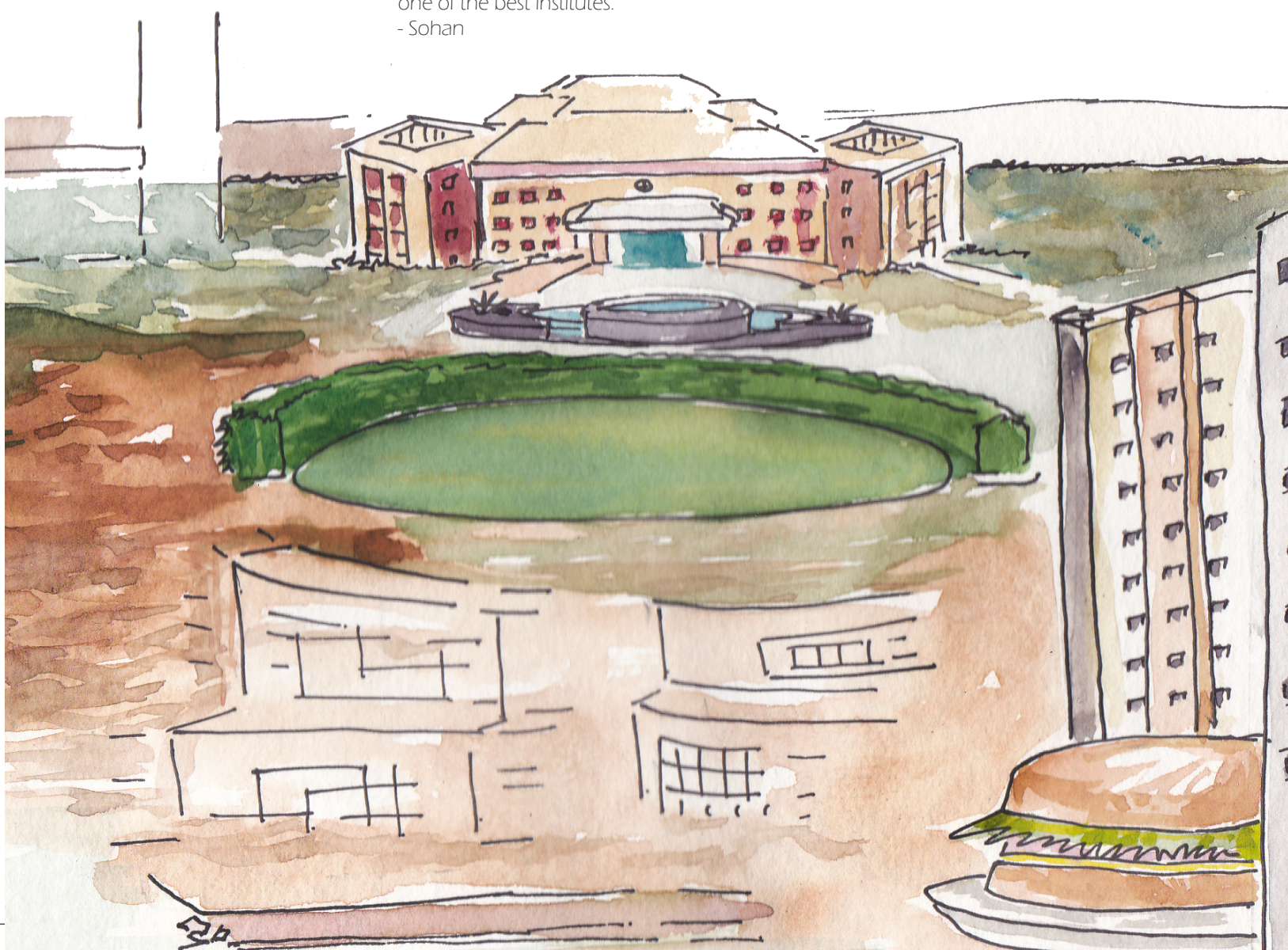


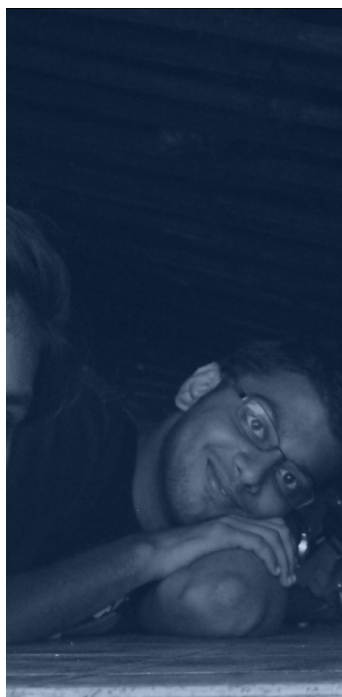
Getting internet in the room was an achievement, and some lucky ones near the common room had achieved it, but now everyone gets it in their rooms, although I won't comment on the speed :P

- Sujay



When we joined, neither HR4 nor Sai Trinity failed to impress our teenage brains... we have lost that sense of belonging which prevails in a relatively small group of people, but I guess that's unavoidable. -Govind





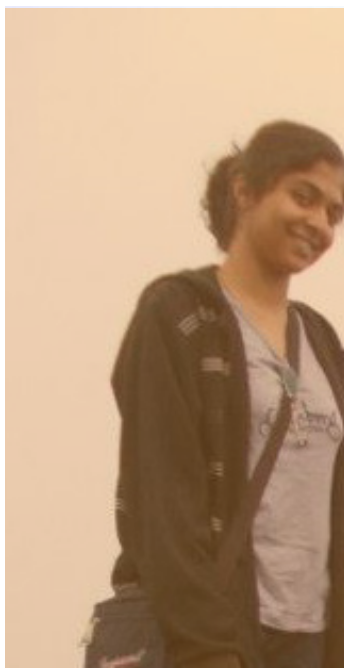
Our trip to Rajmachi... We started from Lonavala early in the morning. Bathed in a waterfall along the way, got wet in the rain several times, reached a river which had formed a pool, splashed around and played in it, got wet again, and came back. Had dinner at Rajdhani after that. -Anandita

Second Semester, just after mid-sems. Some of us decided to go to Lonavala taking a local train. We posted it in a facebook group, and sent out an e-mail (we had permission to send e-mails to the entire batch back then). We were sitting at the fountain, and people were getting up, seeing us from their balconies, and asked us to wait. At the end, there were fifty-four of us. We reached Shivajinagar station, booked a bus, and went to Lohagad. Completely unplanned, we started climbing in random directions. Some of us reached the top, some narrowly escaped death. I remember... I was sliding down a slope, and had Kalyanee not held my hand, if not dead, I would have been seriously injured. -Sohan

Trek to Kenjalgad was the best. We lost the trail, and were coming down random paths (sliding mostly!) We were lucky as it rained only after we reached down... Dudhsagar waterfalls in Goa... travelled around 60 km one way on bikes... totally worth it... went in Varun's car at around 2:30 AM to the backside of Pune airport! Though we saw no planes take off or land, we enjoyed ourselves by telling horror stories (they were pretty lame and comical at times but were enough to give Kalyanee goosebumps!) -Akshay

One day, suddenly, Akshay decides that he wants to go to Sinhagad and manages to convince Anandita, me and (just woken up) Chaitanya. The climb was wonderful as it was accompanied by light rain. This one is memorable and will be so also because we managed to take plenty of good photos. :P -Sharvaree





Lohagad: Fifty-one people out of a batch of seventy-five went for a trek to Lohagad, and what started as a plan for two to three boys after the 2012 Spring mid-semester exams turned out to be a mega batch event. We broke into random groups which had nothing to do with pre-existing friendships. We got lost, thirsty, had near-death experiences, lost a borrowed camera lens, drank water containing frogs in it; which definitely carried disease germs, and we swam in it too. The most amazing thing is, most of us ended up climbing an adjacent fort - Visapur, never realising that it was not Lohagad, the one we had intended to climb.

-Shruti, Chaitanya, Govind



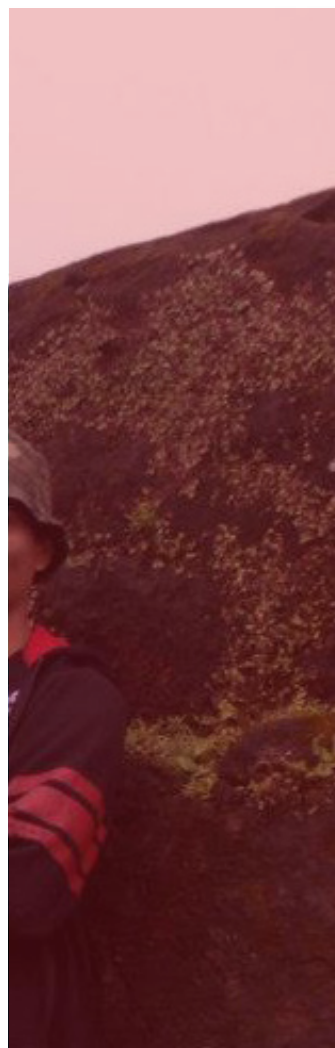
Trip to Trimbakeshwar with Laksmi, Smita, and Charu, lab trips-cum-field visits to Bhimashankar with Souparna, Shatarupa, Ron, and Neha, the multiple treks in Lonavala with batchmates, all of these form a treasure of memories I would always cherish.

-Asmi



The Rajmachi Trek.. Planned a night before out of exam frustration :P, doing *jugad* and making a tent from the Karavaan backdrop with Barbecue Chicken....:D

-Sujay

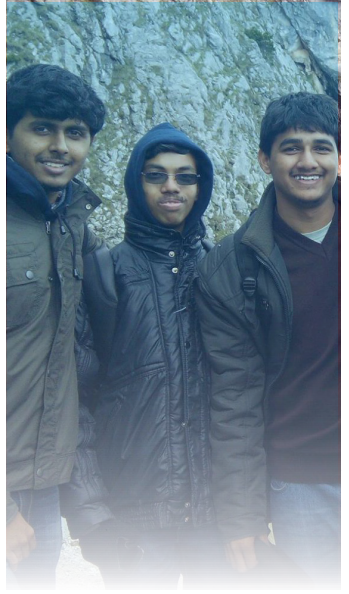
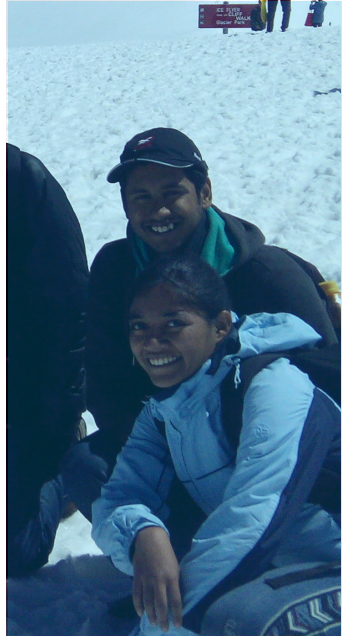


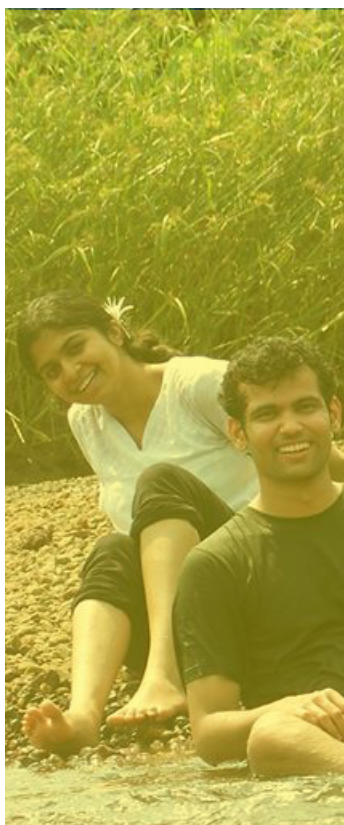
Trip to Paris. Roaming around post 2:00 AM in the outskirts of Paris trying to find our Guest House without a map, and finally figuring out it's location from a thumbnail saved in my phone.

-Govind



Backpack Buddies





Rose Incident: Bought around thirty roses, and got almost all the girls of our batch to give them to Birbal on Valentine's day! -Shruti

Secret Valentine: Second year Valentine's week, all the girls played Secret Valentine. Notes, presents, puzzles all culminating in one big present giving ceremony. So much love! -Shruti, Asmi



Background: One Saturday night during my first year, I stayed back at the deserted Ramanujan Hall at Sai prepping for a presentation. It was quite late, and I began panicking as I didn't know the Saturday bus-timings. I looked around for help only to find a single, very popular senior boy across the room. Back then, it was an unwritten rule that freshers were to steer clear of senior boys. Picking up some courage, I inquired about the bus-timing, and by the panicked look on my face he continued to make some polite conversation with me.

Senior Boy: So are you here for some work?

Me: Yes.

After a bunch of monosyllabic replies from my end, I thought I was being quite rude, and decided that I probably had to ask him some standard questions too.

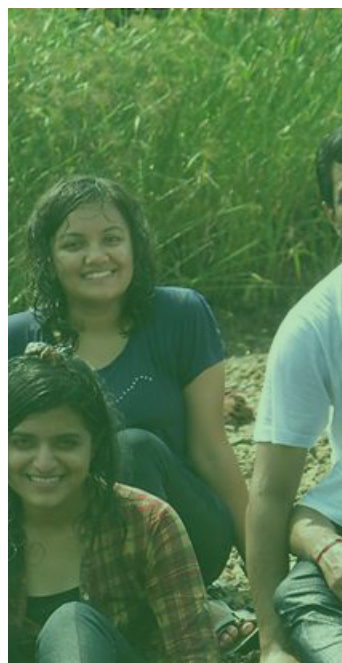
Me (Mumbling): So are you here for some work too?

Senior Boy: Sorry, didn't catch that.

Me (Louder): Are you here for some work, or are you here *chumma chumma*?

The look on his face, and the realisation that dawned upon me of the differential use of this word in northern and southern India was mortifying. Needless to say, I had to explain myself in great depth, and pretty much ducked away from the halls every time I saw him during the semesters that followed.

-Ashwini



Well, Kalyanee, Sharvaree and I convinced Chaitanya to paint Harsha's nails pink while he was asleep. -Shruti

This just involves me (thankfully). So just out of curiosity to see what would happen, I put lots of dry ice in a sprite bottle, and then poured boiling water in it and closed the lid. Then I threw the bottle under my bed, and covered the opening side of the bed with heavy blankets. A few seconds later there was such a loud explosion that my ears rang for a while. I thought for sometime that those were my last few hours in the IISER hostel before they came and suspended me!P

I quickly ran and cleared things up as though nothing had happened. -Akshay

Well I was a victim because of my surname...! Need I say more?P -Sujay 'Mate'



FIND YOUR MATES AT THE CROSSROADS

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Letters
to the
Alma Mater



Madhuresh Sumit

20061014, First Batch of IISER Pune

Graduate student, University of Michigan Ann Arbor



IISER never taught me science. It made me passionate about it. I learnt about the physics of electrons in a lecture on the chemistry of life. I learnt about probability and game theory in a lecture on predator-prey ecology. I learnt about geometrically constrained diffusion in a lecture on the development of a fly embryo. In short, I learnt 'learning without borders', 'questioning without hesitation', and 'finding solutions without restricting myself to a particular field'. The borderless curriculum, the semester long research projects, the mentor-mentee programme, and above all, the amazing professors make IISER Pune a unique centre for learning. Yes, they were incredibly student-friendly, and one could discuss anything and everything, from science to arts and music, from environmental challenges to policy making. The discussions were not restricted to the labs or the classrooms. Rather, they used to extend over tea in the campus garden. We trekked with them in the Western Ghats, learning about biodiversity. We toured with them to the Lonar Crater learning about meteors and its ecological effects. We went to the Meteorology Institute to learn about how weather predictions are made. Several eminent scientists from across India and abroad would deliver research colloquia and we, the curious students, would ask them 'I-don't-know-if-that-is-funny' questions during high-tea. This made me what I am. I still ask stimulating questions about chemical signaling in biology, fabricate my own experimental devices in a physics lab, and write my

own programming codes to model my experiments mathematically. It will eventually earn me a doctoral degree in the coming summer, and I would like to continue my passion along with teaching thereafter.

Every student in our batch will have his/her own story to tell. Someone will talk about his love for the condensed matter theory, the IUCAA trip, and the IISER Premier League, our version of the IPL. Someone else will tell you about his passion for astronomy, the NCRA trip, and the first SPIC MACAY concert we organised. A third person may tell you about her fascinating research in organic chemistry, and our first cultural-fest, Karavaan, in the NCL auditorium, where a few of us debuted as singers and dancers. Perhaps another will tell you about his explorations in mathematical biology, and about the challenge of editing the first issue of Kalpa. One of our batchmates might talk about his research with anti-fungal chemicals, and how excited he was to present his work in an international symposium. Sometimes, we thought we were guinea pigs. But in hindsight, we see ourselves pioneering so many 'firsts'. And in doing so, we paved our way forward. Most of us have been successful in reaching our dream destination career-wise, as is evident by the kind of places we are currently at. All of that was possible because we were at IISER Pune, and we were lucky to have some of the best teachers teaching us science *and* life.



Surojit Sural

20071006, Second Batch of IISER Pune

Graduate Student, University of Michigan - Ann Arbor



Freedom to Grow Wings - My days at IISER Pune

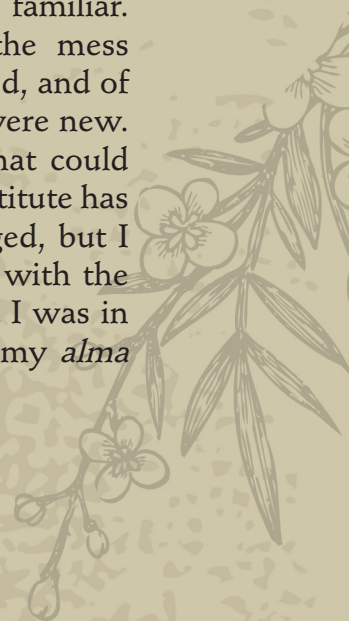
Ingenuous, inquisitive, free – these three adjectives sum up my five years at IISER Pune. The more I see the world, the more I appreciate the fact that my college gave me the freedom to shape my own destiny. When I joined IISER in 2007, all I knew was that doing science as a profession must be really cool. Eight semesters of classes, four summer internships, and a one-year thesis project later, I was fortunate to retain that same passion for scientific research.

I loved solving puzzles as a child, but hated memorising facts when the context was not interesting enough. The courses at IISER were shaped more like the puzzles. I enjoyed almost all of my courses at IISER. It was maybe only in one course during those five years that I cared more about the grades than about enjoying the lectures, and maybe that is why I don't remember which course it was. Otherwise, every single discussion we had during the courses is so well etched in my memory that whenever I come across a research topic now, I am immediately reminded of the analogies we used in class to better visualise that concept. Honestly, at one point, I felt that I was not learning anything at IISER because unlike my friends at other colleges, I never read any textbook from cover to cover in those years. Much later in time, I figured out that I was wrong.

If I was asked to pick one thing that was the most invaluable aspect of my IISER years, I can't think of anything more significant than my time in the

lab. Looking back, that experience prepared me well to confidently plunge myself into the world of research. In my courses at IISER, I learnt two immensely important things about science that are not often taught formally in classrooms elsewhere – the way to search and cite primary literature appropriately, and the unbending attitude a scientist must possess towards ethical practices in research. Moreover, I had the liberty to explore labs around the world during my summer breaks, which helped me form my opinions about good versus bad experimental design. By the time I was about to graduate from IISER, I was designing my own experiments, ordering my own reagents, and writing the manuscript of a paper I could call my own. This experience immensely helped me while taking more challenging decisions during my early PhD years; when I cared less about obtaining results but more about testing hypotheses.

It is hard to believe that four years have passed since I graduated from college. When I visited IISER Pune last year, very few things looked familiar. The buildings were new, the mess where I had food had changed, and of course, almost all the faces were new. I tried hard to find things that could take me back in time. The institute has grown, the faces have changed, but I still felt a strong connection with the place that made me feel that I was in my intellectual motherland, my *alma mater*.



Darshan G. Joshi

20071023, Second Batch of IISER Pune

Graduate Student, TU Dresden, Germany



If I look back and think on what it was that I liked the most about IISER Pune, the answer would be the fact that we were allowed and encouraged to question anything that was taught in class or the labs. This is different from just asking doubts. We were part of an active learning process. Questioning and reasoning, which are among the necessary qualities for scientific development, were instilled in us deeply right from the beginning. Science at IISER Pune was not bound within lecture halls. If you think of the activities such as working for the Science Club and Mimamsa, then you will immediately realise what I mean. Through colloquia and special lectures, we were exposed to a wide spectrum of scientific fields. On many occasions, such events inspired us to explore a particular topic during our following summer or winter internships. What I particularly liked was the idea of Physics@IISER-P, where our faculty described their current research interests. It was during one such event when a talk by Dr. Arijit Bhattacharyay sparked within me an interest towards condensed matter theory, which is my current field of interest.

I feel that it was a privilege being at IISER Pune, because,

had it not been the case, we would have missed out on so many scientific opportunities. In particular, the DAAD internship in Germany, and various MoUs with international universities opened the door for us to the international scientific community at a very early age. This helped me in particular while looking for good options for a PhD position.

I enjoyed my time at IISER Pune. Since an academic race was almost absent, I had plenty of spare time to learn and read many random Physics topics which I found interesting. Actually, being in the second batch, many of us were unsure of where we were. However, after the first semester itself, I could safely say that I did not regret my decision to join IISER Pune. Of course there were issues, which I was not so happy about. But on an average, I would say that the five years at IISER Pune were a wonderful experience!

It is a nice feeling to be a part of the ten years journey of IISER Pune. I would like to take this opportunity to thank everyone at IISER Pune, in particular our director and all the faculty members. Also, I wish many more successful years for IISER Pune!

ESTAMOS AQUÍ

CAMPUS UPDATES

Cafe Coffee Day

Pavilion

ATM moves to Dining Block

MDP Night Canteen

Welcome to the campus, professors!