



Kalpa 2020

IISER Pune





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The above drawing is of completely random faces reproduced from Freepik references, which is a sad replacement of the team photo we were unable to take due to the unprecedented shut down.



KALPA 2020

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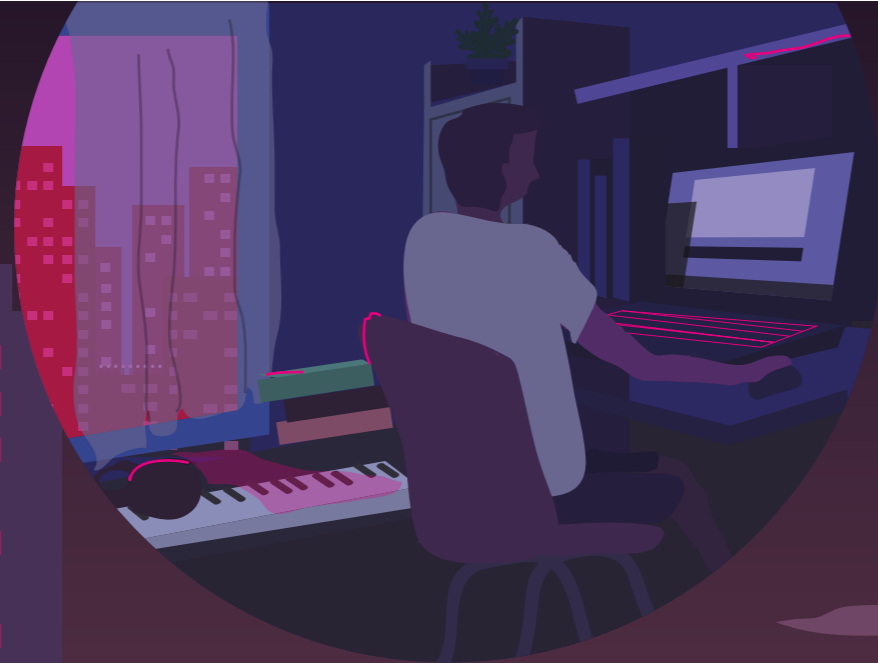
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Editorial

Critics have it that the plague that marks the beginning of Sophocles' Oedipus Rex is allegorical of the moral malaise in the King's family. Now if Sophocles were to write the drama of 2020, critiques of a future millennium possibly could have identified Covid-19 with a plethora of malaises. IISER and the academic part of the world, in general, aren't alien to the rest of it, so any cloud in the latter is going to cast its shade on the former. We all have been talking about the 'new normal' for quite some time now. Let's examine how it looks like in the context of IISER.

Academics is a very social profession. Knowledge is nothing if not exchanged. We have already been concerning ourselves with how the financially non-creamy layer can even possibly adjust to this online mode of education. However, the tax it exercises even on the creamiest is non-negligible. The spontaneous flow of a chalk-and-blackboard intellectual discussion is to be missed. To be missed is the intellect-nourishing ambience of our institute where a student can simply walk into a professor's chamber any time and have fulfilling conversations. The online mode does slow down the much-required co-ordination between peers all research projects demand. That being said, it must be noted that beyond just an institute where cutting-edge research like the invention of a low-cost ventilator to fight COVID happens, IISER Pune is a vibrant campus where club events keep rocking throughout the year, the climax being achieved with the extravaganza of our most-awaited annual fest Karavaan.



Vibrancy means chorus of lively people, music, food, party and gathering... And COVID has a problem with gathering! So with clubs also moving to the online mode, and a COVID-free earth seeming distant, we are not going to get our bustling campus back anytime soon. Not anytime soon are we visiting the second home that we find in the messy hostel life that comprises of exam-eve group study sessions, out-of-the-blue pizza-parties, overnight binge-watching of web-series with friends and compensating for the sleep later in mid-lecture naps... and many other satanities. Each of us has left a family back there. The state-of-the-art sports facilities stand aloof out there. The trekking opportunities at an arm's distance from the campus, the charm of the city that Pune is... all seem a distant past. An institute like IISER with students representing almost all states, languages and sects of the country has a rich and diverse cultural atmosphere. Regional fests like Ugadi, Omkarotsav, Onam, Saraswati Puja etc are participated in by all communities, and thus we observe rich cultural exchange. We keep meeting new people at the dining table, and

exchange of diverse opinions aided by platforms like speakers' forums or debates open up and sculpt the tender mind of a freshman into the completeness that living in a modern society demands. These opportunities either stand cancelled as of now or have no means to continue other than in some stifled online format. Moreover, the lack of physical connectedness with peers and the regular busy routine is affecting mental health.

But when life gives you constraints, search for the apt generalised coordinates! Human has survived epidemics, predators, famines, droughts, wars and what-not during the course of history and pre-history, and despite the constraints, has been able to construct an elegant Lagrangian in each case. Life is now smooth and secure, at least for a chunk of the society, like never before — thanks to the

technologies we have easy access to, and not to mention, the internet. So let's embrace the online mode of everything. Let's try to talk to our near and dear ones over the phone or video calls regularly, let's simulate the culture of our beloved hostel life through healthy usage of social media, let's simulate the group study sessions and the intellectual exchanges that used to keep us enriched and push us forward in our careers, let's engage in the now-online club activities to discover new dimensions of ourselves and to promote inclusivity in the IISER Pune community. Last but not the least, let's be supportive of our not-so-fortunate friends who are struggling to make their ends meet during this crisis. So, dear reader, as we sign off, we leave to your discretion whatever we have to offer in the following pages to keep you intellectually fed in an epoch of guns, germs and peril.

- Ayan Biswas

CHALLENGES IN PROBLEM-DRIVEN RESEARCH



Dr. Bejoy K Thomas is an Associate Professor in Humanities and Social Sciences at IISER Pune. He is a social scientist who has worked more with natural scientists than his own kind for the most part of his professional career. Contact: bejoy@iiserpune.ac.in

Compared to a decade or two earlier, we see more researchers working in interdisciplinary teams thanks to the increasing attention on issues such as climate change, poverty and water management. There has been an improvement in donor and institutional support for problem-driven research. Liberal arts programs that focus on developing cross-disciplinary skills are not uncommon anymore in India. A whole new set of graduate programs in areas such as 'climate change and development' and 'water science and policy', to name a couple, have emerged, combining physical, biological and social sciences. While these are encouraging trends, some challenges remain.

There are strong disciplinary hierarchies set between natural sciences, social sciences and humanities. Among the natural sciences, applied fields such as engineering are given prominence over fundamental branches of

science namely physics, chemistry, biology and mathematics. Among the social sciences, economics and its more applied form, business studies, occupy a higher position because of the use of quantitative techniques as compared to political science, sociology or anthropology. Humanities disciplines including philosophy, literature and linguistics are accorded a lower status.

Some level of interdisciplinary engagement is crucial for problem-driven research, in the form of cross-disciplinary insights drawn from basic disciplines, or full-fledged integrative frameworks. As Popper's oft-cited quote from *Conjectures and Refutations* goes, "We are not students of some subject matter, but students of problems. And problems may cut right across the borders of any subject matter or discipline". Water resources research is a case in point. Water scarcity presents itself as a climatic or hydrological problem, but the underlying drivers might include land-use change, food preferences, labour availability or even regional politics, requiring inputs from economics, sociology and politics in addition to hydrology and climate science. However, basic disciplines cutting across the social and

natural sciences tend to fiercely guard their territories. In social sciences, cross-disciplines such as development studies and ecological economics emerged out of the disquiet in dealing with problems posed by poverty and environmental degradation. Similar is the case with conservation biology, often called a 'crisis discipline', that originated primarily to confront the rapid decline in biodiversity.

The expertise of most humanities disciplines and social sciences, except for economics, is generally under-utilized in responding to emergencies such as natural disasters or epidemics and long-term challenges such as climate change. The widely reported contributions of anthropologists to help design culturally appropriate epidemiological interventions in the wake of the Ebola virus disease outbreak was notable but not the norm.

The labels 'hard' and 'soft' sciences, still widely used, are themselves problematic. If empirical evidence is the key to rigour, and being labelled 'hard', data gathered through questionnaire surveys or ethnography is as much empirical as data collected from experiments. The same logic applies to interpretive and textual analysis as compared to statistical analysis.

In the case of climate change, the 'softer' side (values, worldviews) is turning out to be harder to crack. There are enough evidence on the 'hard' side (physical impact) of climate change and the potential adaptation and mitigation strategies. However, this does not seem enough to convince decision-makers to undertake major policy shifts and people to make lifestyle changes, as seen in the business-as-usual responses, or at the extreme, climate change denialism.

There are more economists and human geographers involved than earlier in research on adaptation to climate change and mitigation strategies, and in bodies like the Intergovernmental Panel for Climate Change (IPCC). However, there is a lot left to be desired. More attention needs to go into the ethical, psychological, behavioural and political factors underlying decisions and responses, as Mike Hulme argues in the book *Why We Disagree About Climate Change*. Philosophers and scholars of religion can possibly offer insights into how values and belief systems trigger action, or inaction, on climate change. A recent global analysis by Overland and Sovacool published in *Energy Research and Social Science* showed that between 1990 and 2018, the funding for climate change related research in natural and technical sciences was 770% more than what was given for social sciences and humanities. Though we do not have the numbers, given the 'technical' and 'policy' thrust of climate research funding in India, the situation could only be bleak.

Disciplinary hierarchies and lack of cross-disciplinary engagements only partly explain the diffidence towards problem-driven research. Problem-driven research is perceived as coming at the expense of curiosity-driven research. This need not be the case. The aim is not to come up with a 'solution' in the sense of an outcome or a product, as in the case of applied research. And unlike action research, there need not be an 'agenda' driving the research process. Wastewater treatment and reuse, for instance, involves looking at the contaminants (environmental chemistry), the technology involved (engineering) and attitudes and responses of people (sociology and economics). An agenda-and-solution-driven approach to

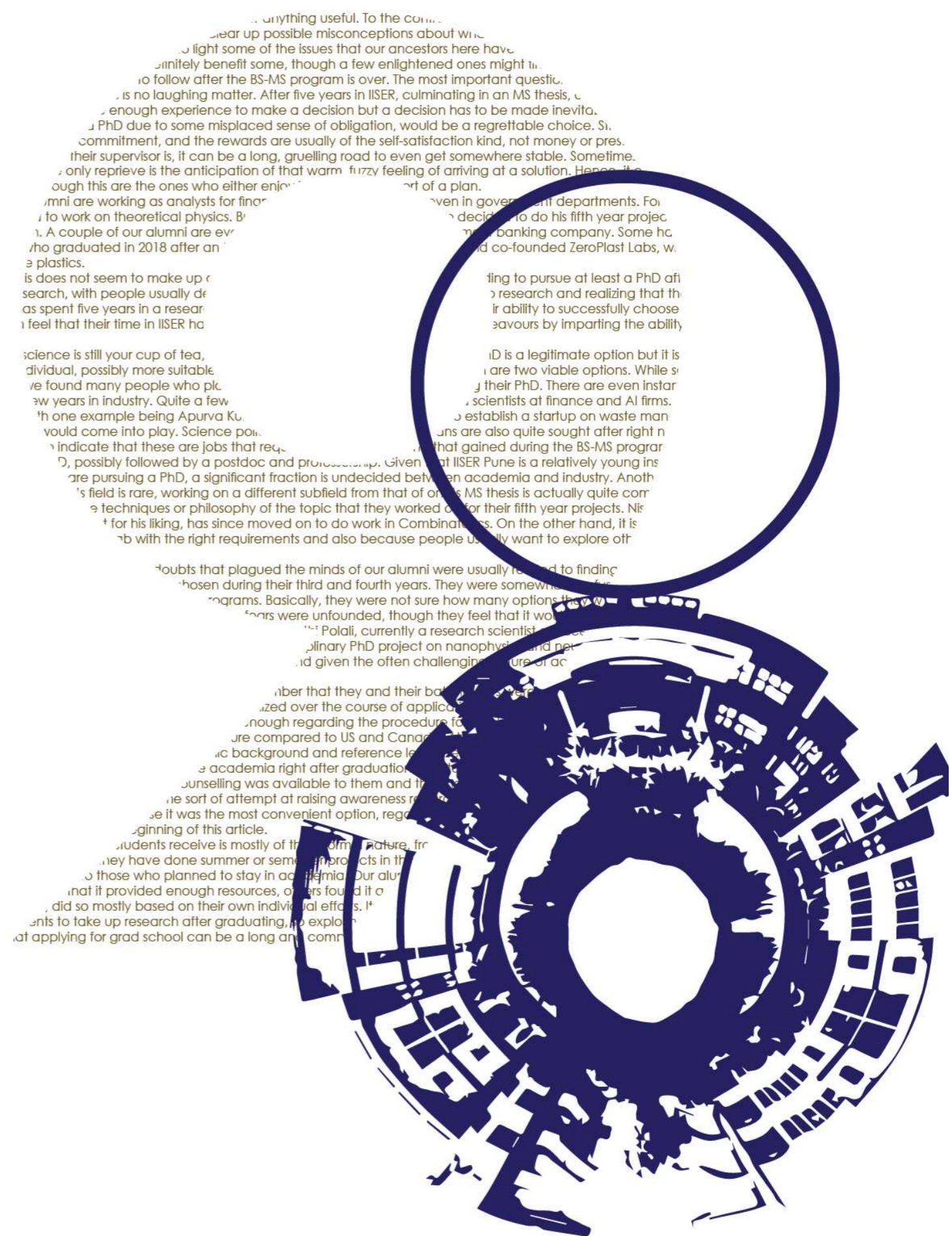


wastewater reuse can, however, be problematic. The agenda (reuse to save water) and solution (treatment technology) can appear benign, but water recycling upstream would mean less water available downstream, depriving downstream users of water and reducing environmental flows. The aim of problem-driven research should be to steer clear of quick-fixes and 'solutions' and present the various options (or 'scenarios') including who gains and who loses (the 'winners' and 'losers').

Fundamental explorations, as is the case with natural sciences, and the development of new concepts and alternative frameworks, in social sciences, is central to problem-driven research. A now popular example is the economics Nobel winning work of Duflo, Banerjee and Kremer that used field experiments modelled in the lines of randomized control trials to explore the question of poverty. Theories and tools in development economics have long been employed to explain the causes and persistence of poverty, and to inform policies to improve human well-being. Policy recommendations, however, tend to be broad. It is generally not clear as to what particular intervention would work in specific problem contexts. The Nobel winning research spoke to this knowledge gap by developing and utilizing field experiments.

In one of the well-known studies, published in The BMJ, Duflo, Banerjee and others tried to see what explains the low immunization rates despite free public provision of the service and how can this be improved. They designed a clustered randomized controlled study in 134 villages in Rajasthan and found that providing 1 kg of raw lentils per immunization dose and a thali plate upon completing immunization improved the completion rate from 6% in the control villages, with no reliable services and incentives, to 39% in villages where incentives were provided in addition to reliable services. These and other findings not just helped improve the effectiveness of interventions in sectors like health and education but also made fundamental contributions to development economics.

Problem-driven research is eclectic with fundamental science ('science' here includes social sciences too) and theories being utilized to contribute to debates on salient problems, and empirical insights, in turn, contributing to theory. Reflecting on the points raised here can make the effort more effective.



The AlumnII SERenade



Artwork by- Sanjana Vasanth

To some, the question of what might happen after graduation, hangs like the sword of Damocles, while to some it might just be a triviality. Regardless, this article, crafted after considering the opinions of our wizened alumni, will attempt to enlighten the readers on post BS-MS life. We offer not hope but truth and some soft opinions, which should help alleviate at least a few doubts regarding what to do when your fifth year ends.

Let's begin by being slightly metaphysical in spirit. This article was originally conceived due to a few of us noticing a potentially worrisome trend in recently published NIRF data. It seemed to indicate that the percentage of BS-MS graduates from IISER opting for higher studies was steadily dropping, having fallen to below forty percent for the batch graduating in 2019. Thus, we of IISER's 98 Acres, took it upon ourselves to investigate what we suspected was a major issue lurking in the shadows. (Un) Fortunately and quite anticlimactically, after interacting with our alumni and with a bit of asking around the main building, we have come to realize that the NIRF data is probably not very reliable, given that it is collected via self-reporting from the BS-MS students themselves, usually right after graduation. So, it does not account for factors like taking a gap year and the natural reluctance humans have towards filling out surveys, especially official ones.

However, that is not to say that we did not uncover anything useful. To the contrary, by conversing with our alumni, we chanced upon a lot of relevant information that could clear up possible misconceptions about what happens after one's fifth year in the BS-MS program at IISER Pune, while also bringing to light some of the issues that our ancestors here have faced. We feel that elaborating on these topics will not harm anyone and definitely benefit some, though a few enlightened ones might find it redundant.

Firstly, there is the matter of which path to follow after the BS-MS program is over. The most important question here is whether or not one even wants to continue doing research. This is no laughing matter. After five years in IISER, culminating in an MS thesis, one can't help but get a taste of what research is like. That may not be enough experience to make a decision but a decision has to be made inevitably. If one feels that research is not where their heart lies, then pursuing a PhD due to some misplaced sense of obligation, would be a regrettable choice. Sticking to academia requires a significant amount of patience and commitment, and the rewards are usually of the self-satisfaction kind, not money or prestige. Depending upon where one does their PhD or postdoc and who their supervisor is, it can be a long, gruelling road to even get somewhere stable. Sometimes, one has to work on the same problem for days at an end and the only reprieve is the anticipation of that warm, fuzzy feeling of arriving at a solution. Hence, it only makes sense that the only ones who should put themselves through this are the ones who either enjoy it or have some sort of a plan.

Instead of research, some of our alumni are working as analysts for finance firms, as

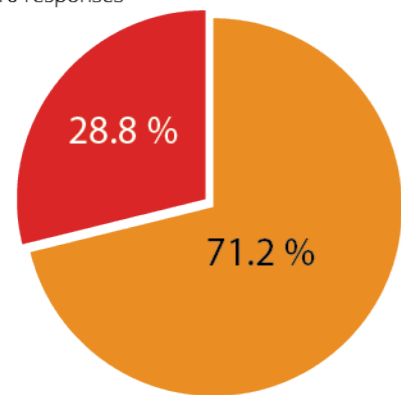
teachers and even in government departments. For example, Tanmay Patankar of the 2011 batch had initially planned to work on theoretical physics. But after considering his options, he decided to do his fifth year project on mathematical finance and is currently an analyst at J.P. Morgan. A couple of our alumni are even working for Credit Suisse, an investment banking company. Some have even launched their own companies, such as Aditya Kabra, who graduated in 2018 after an MS thesis on Parameterized Algorithms and co-founded ZeroPlast Labs, which focuses on developing degradable alternatives to single-use plastics.

Unlike what the NIRF data implies, this does not seem to make up a major portion of our alumni, with most deciding to pursue at least a PhD after graduation. Numbers in no way invalidate the decision to quit research, with people usually deciding to do so only after struggling to get into research and realizing that they weren't interested enough to go to the trouble. Just because one has spent five years in a research environment like IISER, it does not hinder their ability to successfully choose a path other than research, if they feel like doing so. In fact, most of them feel that their time in IISER has at least indirectly helped them with their endeavours by imparting the ability of critical thinking and broadening their worldview

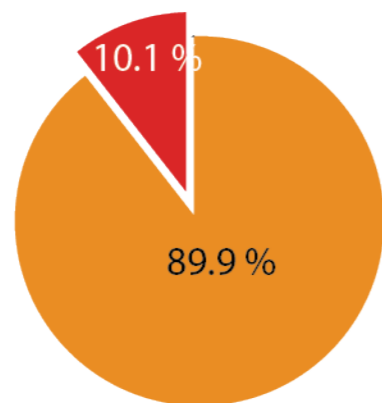
Now, what happens if you do feel that science is still your cup of tea, after your five years here? Then pursuing a PhD is a legitimate option but it is not the only one. There are several alternatives and depending upon the individual, possibly more suitable ones. Industry and science communication are two viable options. While some may decide to immediately get into industrial research after their BS-MS, we found many people who plan to transition to industry after completing their PhD. There are even instances of people going the other way round, intending to pursue a PhD after a few years in industry. Quite a few of our predecessors are currently data scientists at finance and AI firms. Entrepreneurship related to one's MS thesis research is not off the table either, with one example being Apurva Kulkarni of batch 2008, who intends to establish a startup on waste management where the skills of insect rearing that he learnt during his BS-MS days would come into play. Science policymakers and science historians are also quite sought after right now, though the fact that none of the alumni we surveyed are doing either seems to indicate that these are jobs that require experience beyond that gained during the BS-MS program.

Finally, we have the conventional path of a PhD, possibly followed by a postdoc and

Did you choose to pursue a PhD after the BS-MS program?
110 responses



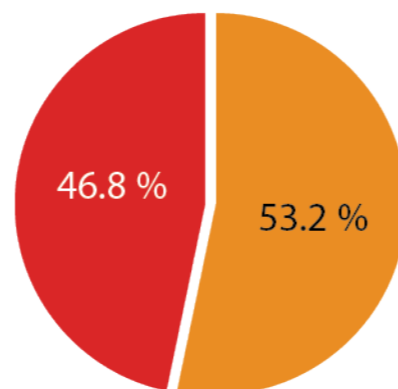
Are you still actively pursuing research?
79 responses



These are based on the responses to the survey we conducted among the alumni. The first chart is for the 110 that responded and the second and third ones are for the 79 among them that replied yes to the first question.

● Yes
● No

Did you follow up on the research you did for your MS thesis?
79 responses



professorship. Given that IISER Pune is a relatively young institute, most of its alumni are still going through the motions. In fact, while most of them are pursuing a PhD, a significant fraction is undecided between academia and industry. Another thing that came up during the course of our survey, is that while completely changing one's field is rare, working on a different subfield from that of one's MS thesis is actually quite common. People often realize that while they enjoy the spirit of a subject, they do not really like the techniques or philosophy of the topic that they worked on for their fifth year projects. Nishad Mandlik from 2010's batch did his MS thesis on Algebraic K-theory and finding it too abstract for his liking, has since moved on to do work in Combinatorics. On the other hand, it is also rare to work on the exact same topic as your MS thesis, mainly because of the issue of finding a lab with the right requirements and also because people usually want to explore other exciting questions in the same research subfield.

Looking back on the months leading to their graduation, the doubts that plagued the minds of our alumni were usually related to finding a suitable PhD program. For some, the issue was the interdisciplinary nature of the course structure they had chosen during their third and fourth years. They were somewhat confused as to which program would cater to their interests and a bit apprehensive regarding their eligibility for certain programs. Basically, they were not sure how many options they would have after graduating. However, given the blurred boundaries of modern science, most of them discovered that their fears were unfounded, though they feel that it would be safe to have at least done some advanced courses in one discipline. Of course, there are cases such as that of batch 2008's Sruthi Polali, currently a research scientist at Facebook, who switched to machine learning because it was challenging to get an industry job in the sciences after an extremely interdisciplinary PhD project on nanophysics and neuroscience. However, she believes that the interdisciplinary nature of IISER's course structure makes it easy to transition to new areas and given the often challenging nature of academia and the paucity of opportunities in certain areas, she feels more and more students should consider the alternatives.

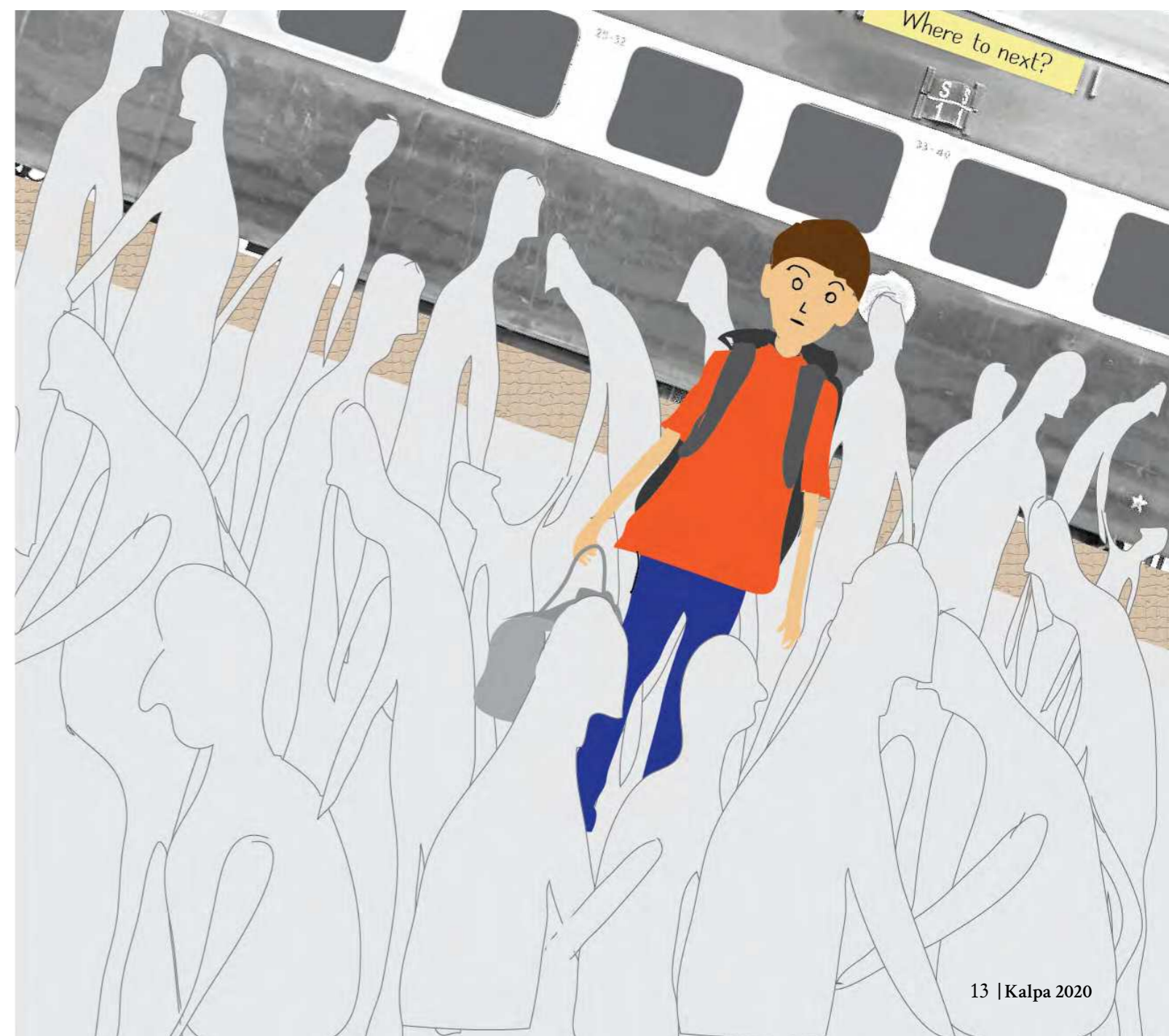
There is also the question of where to apply. Quite a few of our alumni remember that they and their batchmates were under the misconception that if one were going abroad, US universities were the cream of the crop. However, as they realized over the course of applications, there are equally good opportunities elsewhere, like Europe and Korea. The only issue here is that they felt that they did not know enough regarding the procedure for applying to PhDs in these places and missed some nice chances

just because the information pathway for them was relatively obscure compared to US and Canada. Also, some feel that their batchmates obsessed a bit too much over their SOPs and GRE scores, whereas in hindsight, one's academic background and reference letters seem to be more important.

Then there are those who decided to apply for a job outside academia right after graduation, due to various reasons like loss of interest and family constraints. Given that IISER is a research institute, not a lot in the way of counselling was available to them and they had to figure most of the procedure on their own. A couple of alumni feel that there should have at least been some sort of attempt at raising awareness regarding how to handle applications and interviews. Some of their batchmates went for grad school simply because it was the most convenient option, regardless of how they felt about research.

This is not at all a good reason, due to reasons mentioned at the beginning of this article.

The career counselling that IISER BS-MS students receive is mostly of the informal nature, from their interactions with the professors under whom they are doing their MS thesis or with whom they have done summer or semester projects in the past. Almost everyone we talked to was satisfied with this system, at least when it came to those who planned to stay in academia. Our alumni's opinion of the Career Development Cell here at IISER is a bit



varied. While some felt that it provided enough resources, others found it a bit obscure and not very helpful. The people who acquired jobs unrelated to science, did so mostly based on their own individual efforts. It has been acknowledged that IISER's policy would be to encourage students to take up research after graduating, so exploring other avenues via the CDC wouldn't receive much support. But given that applying for grad school can be a long and competitive process, some feel it would have been reassuring to have job prospects as a backup. For those who are not sure whether a PhD would be the right choice, our alumni believe that it would be wise not to hurry and instead take a year or so to think, perhaps as an intern or a T.A to get a better idea of the work that goes on. The path to stability in academia is long and one should consider all the variables before embarking on it, instead of rushing in head first. A few of our alumni have decided to leave academia after completing their PhDs, as they are put off by the likelihood of having to do multiple postdocs and the notion of having to work on the same research problem for days and perhaps months at an end.

To tie things up, adopting an optimistic outlook would lead one to say that there are a multitude of possible career options available after completing the BS-MS program and one should always be able to choose a path that fits their needs well, as most of our alumni believe and have done. Pessimistically speaking, one might simply choose wrong, as some of our alumni feel that they did after their BS-MS. There is nothing to be done, except talking to seniors and professors, obtaining timely information, doing relevant research projects and performing some self-reflection to figure out what suits one the best and how one can go about doing it, whether it be research or something else.

Adithyan Unni, Nishant Baruah,
Sanjana Vasanth, Sougato Chowdhury

Misogyny Inc.

TRIGGER WARNING: The following article contains descriptions of incidents that could be disturbing to readers.

Note to the reader: Many of the incidents you are about to read are unreported, often owing to a lack of witness due to the intimate nature of the crime and the stigma associated with speaking up about it. We, as investigators, have done our best to bring to light as rounded a perspective as enabled by our means and we urge you to respect the anonymity of individuals mentioned.

It was near midnight on the last day of her first Karavaan. The concerts had just gotten over. The stalls were folding up and the crowd was spilling out of the stadium, leaving a group of straggling volunteers to clean up when Ria's* email-notification pinged. 'Looking nic today 😊'. She felt a sinking feeling in her stomach. It had started two weeks ago with a 'hello' from a senior she did not know. 'Are u in first year?' and 'why u not reply to me' followed. "He wasn't even the only one," she confessed.

"He texted me that he knew my relationship won't last, so why don't you invest in me," recounted Sarah*, about an incident in the first few weeks of her first semester when she received texts from a stranger, asking her to choose who looked better – her boyfriend or himself, from a collage he had constructed. She later discovered that he had somehow obtained childhood photographs of her, which he was using as his phone screen wallpaper. Speaking to more girls and reading the responses to our survey, such cyberstalking emerged as a prevalent trend across batches. It isn't always limited to the phone screen. Rehana*, in her first year, was followed around by Keshab* who had previously tried to ask her out multiple times, and would drop texts like "blue looks good on you." When he learned that she had confided in a faculty member regarding his advances, he sent a final text: "You don't have to roam around telling people how special you are that you're getting texts from unknown people." The notion that receiving such messages would be flattering is in stark contrast to the hair-raising alarm that the recipient actually experiences.

Akash, a third-year BS-MS student, shared that to his surprise, even in a place like IISER, some of his batchmates harboured regressive attitudes regarding their female counterparts. For instance, comments are often made about first year girls being easy targets for advances. "They have this mentality that...[first years] *ke saath karna easy hai, kar sakte hain* (It is easy to make a move on first years)." Although he clarified that he hasn't personally witnessed such targeting of first years, numerous entries from our survey confirm the existence of such a culture at IISER. "*Ladki se baat nahin karni hai, dar lagta hai ki koi ladki mujhe judge karegi toh?* (they don't even want to speak to girls, they are afraid that what if a girl will judge me?...)" and later they go sit in a room and stalk a girl on Facebook... what's the meaning of that?" Akash added. He believes that this unwillingness to communicate or interact just fosters unhealthy attitudes towards other genders and that the depiction of women in movies and porn perpetuates these regressive attitudes. "The dichotomy is interesting. They are courteous and polite when they talk to women but the moment they are in a room full of boys, they start talking about them in a completely different language. I think it is in their upbringing that if you focus on these body parts you are macho," added Chrisil, a third-year BS-MS. "No one calls it out."

The phrase 'Locker Room Talk' is an umbrella term for the kind of discussions that take place in private male circles regarding women. Koustav, a fourth-year BS-MS student, recalled instances of locker room talk that he has heard, "*Ek haath mein 'Melons' aur doosre mein 'Bra Straps' balance karta hai. Playboy hai playboy* (He handles 'Melons' in one hand and 'Bra straps' in another. Such a playboy)." The explicit nicknames referred to two women Koustav was friends with. "I remember the numerous times when they talked about women I know personally and that remained seared, but they would literally talk about any woman they have looked at. It is almost an embedded culture. They would rate people they would see by the size of their hips, breasts, complexion, and compare. *Iska utna bada nahin hai, yeh gori nahin hai, 6, 6.5, voh toh thi mast* (Hers aren't so big, she isn't fair, 6, 6.5, she was so hot)."

"Like most jokes, you are trying to pass a witty remark, to get some sort of validation. Nobody really means these jokes. It is mostly to act cool," said Amartya, a third-year BS-MS student who condemned popular media for encouraging such jokes. However, like most ironic humor, the distinction between objectification and appreciation is grey. Although we were told that these talks remain within the four walls of boys' hostel rooms, a lot more than just a trickle of these attitudes permeates public and professional spaces. Nupura 2019, IISER's first intercollegiate dance festival, hosted its final round in the C.V. Raman Auditorium in October. What started off as inconspicuous whispering unfolded into an unabashed public slur calling. A witness summarised, "So while Nupura was



'While the lights watched', by Sultan Nazir

going on, every time the girls did a particular move such as swinging their hips, the guys whistled loudly and screamed lewd remarks. One remark I remember hearing was 'good slut' in Hindi and '*Naachne vaali bandiyon ko vaapas lao* (Bring back the dancing girls)' and '*Aa gayi saali bhadvi* (Here comes the damn pimp)'. And these [performers] are outsiders who came to IISER so you can imagine how unsafe and weird they would feel. They have come to a new place and are trying to showcase their dance but this is how they are received."

A similar situation occurred during Hindi Diwas celebrations wherein groups of male students sitting in the last rows of the crowded auditorium catcalled and hurled derogatory comments at performers. "Long skirt, short skirt, any skirt, they whistled," a witness told us. A play on the rape of a young girl became a reason for mindless laughter and jeering in a scene where an actress portraying the traumatized rape victim took off her salwar. These incidents are often heard, sometimes experienced, and eventually forgotten. But when they start seeping into daily routine, into shared workspaces, they leave a lasting impact.

Ila*, a PhD student in the chemistry department spoke about the behavior that is adopted when one is talking to a female in contrast to a male. "Somehow they feel that we (girls) are not interested. If a new research paper has come, they (professors) will come and discuss it with their male colleagues, never with us. Even if he (the professor) wants to discuss something with them (girls), he will ask a boy to accompany them and he will

talk to the boy and the boy will tell the girl. It is too awkward."

A conversation with a PhD student highlighted an instance when a professor reportedly said, "Why did I hire girls if the lab is going to be messy?"

Another student, speaking about her mentor, said "He also has visions of what and how women should be, but he's more outspoken about the men part." Instructing men on what to wear, how to look, which colours to prefer, what to drink, etc. are all textbook examples of enforcing gender normative stereotypes as well as exercising control over them. "And I actually did tell him [her mentor] that then, that has nothing to do with them (the men) and he was like 'No, this is how it is'. Those kinds of things do affect people. I have seen people look really upset."

Ila* elaborates on how this communication gap between these two genders stretches beyond just personal domains. "If you see communication between males and females, even regarding research, it is almost zero. It is almost like female students miss out on crucial mentorship because of this. Sometimes in group meetings, you will be even neglected by your guide when you give opinions. It is as if I don't have enough knowledge or am unable to take up responsibility. My junior guys are publishing before me. The preference is clear," she said. "If you have to go abroad for conferences, they will always pick the males."

When asked about how women were received during their TA-ship, Ila* said, "It has happened that the girl TAs are not taken seriously by the students. When every new batch comes, they rate the girls." Koustav confirmed, "Some TAs, they (his batchmates) would fetishize to no end whatsoever. '*Arey kya mast maal hai* (She is such hot stuff), I wish I was in that batch.' They would sometimes switch classes, presumably to look at them."

"Sexist comments, people talking about women's bodies in labs and discriminating on the basis of their intellect, [such as] 'girls cannot study physics', 'there are better ways to fail, why do physics?' [or] 'you shouldn't do organic chemistry because you would have to lift solvent drums'—in general, trash talk knowing some women are listening," mentioned Dhriti Nagar, student representative on the Internal Committee, when recounting the kinds of incidents she has had to hear.

Female faculty are no strangers to these everyday battles. From her experience, Dr. Srabanti Chaudhary said that men who haven't seen women in positions of importance find it hard to accept a female professor when it comes to teaching.

Owing to the smaller number of female faculty and the recommended requirement of having one of them as a member in every committee, they end up handling positions where they are often given stereotyped roles such as 'decoration' or 'welcoming'. Confirming this, Dr. Mayurika Lahiri recounted her experience of walking out of a committee in frustration. "The person [organiser who assigned me to the committee] did not mean it in that way, it's again, society. It is ingrained. It came out as if it is a natural thing to say."

Dr. Chaudhary, Dr. Nadkarni and Dr. Lahiri have noted that emails sent by the admin are regularly addressed to 'Dear Sir.' "When you know who you're writing to, [when] they're a faculty... In spite [of knowing better, if you're] still writing 'Sir', it really really angers me. Even a general mail should be [addressed as] 'Sir/Madam.'" Even when they wrote back to the admin, it wasn't resolved. "I know people in admin who are even uncomfortable to look at me and talk. They talk to me while looking somewhere else. They don't take complaints from this gender seriously."

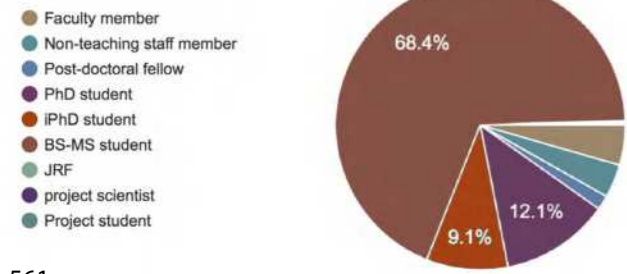
"If there are two faculty getting fellowship, one male and one female, they don't make any comments about the male faculty getting it, while with the female faculty, it is 'nowadays they are promoting girls,'" said Dr. Chaudhary.

In Dr. Nadkarni's words, "I think most women just have their own algorithms about what battles to let go and what to take on. In the beginning, I thought I should take the important battles, but now I have changed my opinion. Even the little things matter". Little things such as including women guards marching in the Republic Day parade, sarees or not.

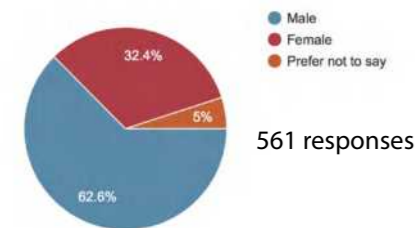
So far, we have only looked at words shouted from a distance or from behind a screen, but

WORRYING NUMBERS

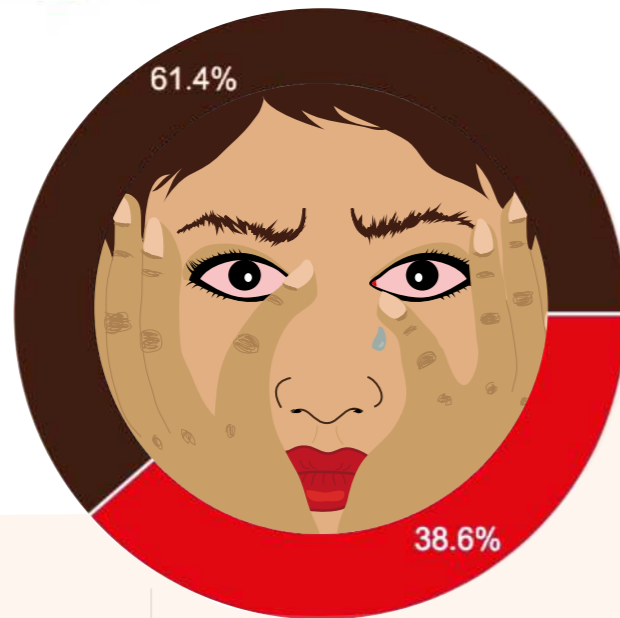
Demographics of the survey takers



561 responses



561 responses

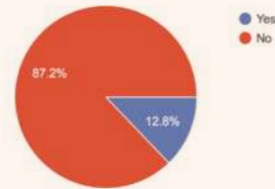


Have you ever witnessed/ heard of gender-based discrimination or harassment on campus?

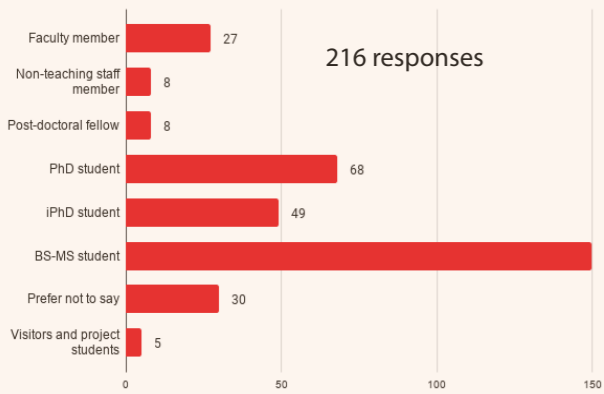
● Yes
● No

562 responses

% willing to be interviewed about their experience

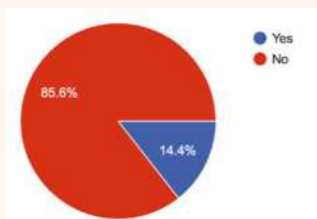


Who committed this (these)?



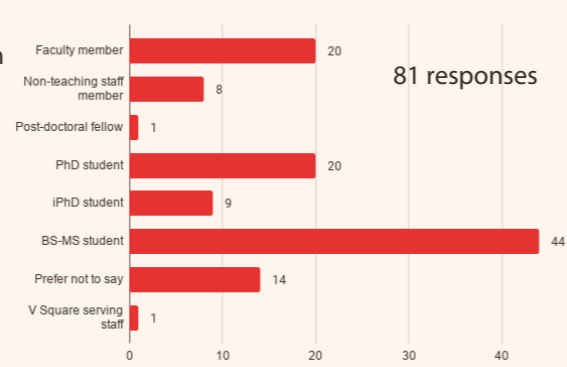
216 responses

Have you ever personally experienced gender-based discrimination or harassment on campus?



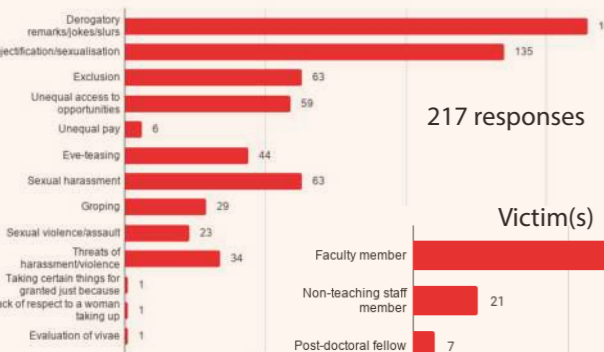
562 responses

Who committed this (these)?



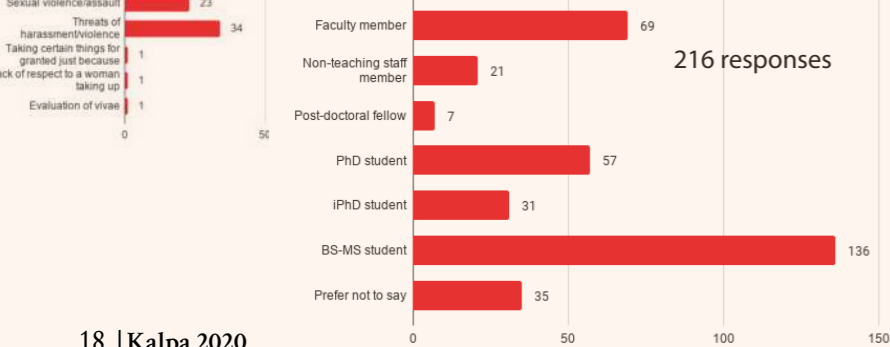
81 responses

Nature of the harassment



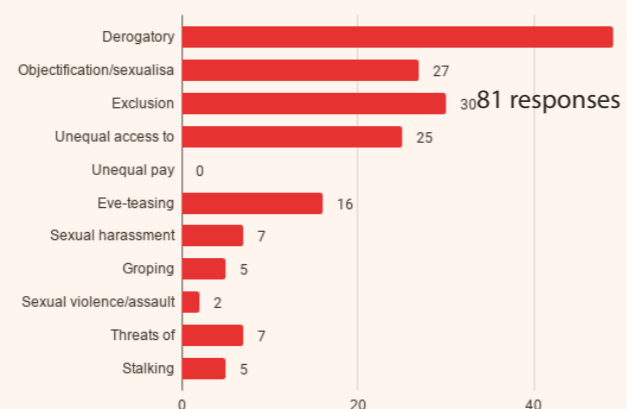
217 responses

Victim(s)



216 responses

Nature of harassment:



81 responses

when they turn into deeds, it can derail lives and more often than not, the perpetrator is someone close. Ria* spoke to us about an experience which still haunts her till this day. "I had made it very clear that I did not want to get physical, at least for a while. However, he tried to kiss me nonetheless, when we got there." She had walked away and he apologized, promising never to repeat it. Three or four days later, however, it happened again. "I went rigid and showed no reciprocation. But he continued to touch me all over." Though she broke up with him after this, he continued to call her, saying that his apology should be enough for her to forgive him, and he eventually tried to gain sympathy from her friends. "While this was happening, I went through one of the worst depressive episodes I have ever had. The smallest thing would trigger me and I would end up crying for hours." In the end, she decided to go to the IC. "Even though they were very cooperative," she said, "it is never easy to talk about it with so many people."

In Razia's* case, she realized she was in an abusive relationship. "Some of the things that I did were consensual, but a lot of the things weren't. I consented to the acts at that time because I thought he wouldn't hurt me in the future. It wasn't informed consent."

"He used to send me Psychology Today articles that 'justified' why 'women are shallow human beings that care about only physical attractiveness and money.' He even started insinuating I knew nothing about anything."

He would rate other women and their body parts and compare them with hers. He sent her porn videos, pestered her into sending nudes. "I could feel myself throwing away everything that mattered to me – he turned me into a mere shell of who I used to be." After a pregnancy scare that he dealt with very dismissively, she realized that it was 'narcissistic abuse'.

Razia* told us that she is still reeling from the impact. "It would be great to wake up one morning and forget this ever happened. But you can't, you have to live with it and confront it." The incident took a toll on her mental health and her academics. "I couldn't focus in class, I used to get flashbacks. It totally trashed my self-esteem."

Recounting her own experiences, Ria* expressed, "For months after, I was afraid to walk alone on campus. Years later, I still get flashbacks and anxiety attacks which affect me for hours. Everyone deserves to feel safe in their body, but assault victims are robbed of that basic right."

The perpetrator's friends often have trouble believing such allegations. Ria* added, "People seemed to be more worried about his reputation than my safety." One of her classmates made light of the situation. Though he was rebuked, "There were no repercussions, no change in his social life. Mine was irrevocably altered though. I stayed away from the group. It was very isolating though, and still is."

When Razia* told her friends, they either reduced contact with him (the perpetrator) or cut it down entirely. "But my best friend (whom I have since cut off contact with) still continues to talk to him because 'it is too difficult to make new friends' and tries to invoke sympathy for him. But I have no sympathy left and I'm sick of being treated as a doormat and playing into men's ideas of how women should respond to trauma."

These aren't isolated incidents, and we received accounts of many more cases, across the spectrum of severity—from sexist remarks to alleged cases of rape on campus.

The stories we have talked about are soul-crushing for the victims but they only worsen when power hierarchies step in. Abhinaya, a PhD scholar in the HSS department, revealed that she knows of three cases of harassment by Dr Basheer*, a man considered charismatic and talented by many. She had personally spoken to two of his victims. "One of them, Parvati*, told me that she had faced something inappropriate, but she did not tell me the nature of the incident itself, she was just very upset about what had happened. The other person, Tarini*, spoke to me at length about what had happened, about receiving text messages and emails from him that were sexually loaded." Abhinaya learnt that Dr Basheer* seemed to believe that he was romantically involved with Tarini*, even getting upset when she dated another student, accusing her of not spending enough time with him. Abhinaya also mentioned having heard that this professor had been formally charged with harassment within the institute a few years prior to these incidents. She remarked that by not taking those charges seriously, the institute has failed to protect its



students, as the same behaviour continued to take place unchallenged.

Dr Vidya* recalled being shocked when she heard about the allegations. She explained what she called the 'stereotypical assessment of a serial harasser'—"They enjoy strong support and they enjoy a strong fanbase."

But one professor who turned up repeatedly in our investigation was Dr Kawade*, a popular figure around campus. We have had similar accounts given to us by different people. "His eyes would wander." "He would stare at my breasts, not my face, while talking to me."

Aari*, a PhD student in his lab recounted his experience, "This was something that I was told about earlier, in informal circles. I have seen this happen twice, once in his office and once in the lab, there weren't a lot of other people."

As we reached out, we met Aisha* who joined his lab after her MSc. "Once, I was in his office off-campus and he was sitting very close to me. He came up from behind and put his hand around my waist. That is when I got very furious. I got up and I went home." When we asked her why she had not approached the then Women's Cell, she said, "When it was actually happening I didn't know about it. I should have talked, now I realize that. But I had talked to my lab members, who said that this was common. I thought if they didn't say anything, should I?"

Aari* confirmed that people had confronted Dr Kawade* directly, "His response is that these are cases of misinterpretation and that all he had was 'paternal affection.'"

We asked Aari* about how practical it is to leave the lab in such circumstances, "This might be true on paper. But anyone doing a PhD knows how impractical it is, even if your department is being completely cooperative. Let's say it happens 3 years into your PhD, even if the new advisor is okay with you working on the same project, it is not easy."

Dr Srabanti Chaudhury elaborated on dealing with PhD cases, "IC can ensure they will solve the case but we cannot ensure anything afterward. That is the hard truth. If the faculty decides to not write you a recommendation then that's it." Later in an interview with another IC member, we came to know that the guide can be removed from the referee list and the Director or the Dean can provide a recommendation in their stead.

These cases are far from isolated, as our statistics clearly show. But we were in for a rude surprise when we came to know that the Internal Committee has had a mere 10 cases brought before it since its creation a year and a half ago. Dhriti says, "There is a lot of embarrassment associated with the idea that 'I was sexually harassed,' where it is absolutely uncalled for, it is the perpetrator who should be embarrassed—but this is so

rampant. Many people think that they were responsible for having led them on."

Abhinaya spoke about the normalisation of sexual harassment and violence on campuses. "You share a laugh about it, so this guy is a creep. You don't think that somebody saying something to you that makes you feel uncomfortable is sexual harassment. You don't think your PI (Principal Investigator) rubbing his hands down your back is harassment. It is sexual harassment and it's important to recognize that it comes in various forms," she said, suggesting that while there is a need for institutional changes in policy, it is important that a culture of dialogue and discussion about all these issues develops within the student community, to enable people to combat sexual harassment despite the fear of the professors.

Dr. Suneeta Vardarajan said, "If such an incident has happened, they have to report. They have to bring it to the notice of the authorities. It will get worse if they don't. Even if it's stressful, they need a circle of friends who will support them." She also emphasized that one must try to report as early as possible as evidence is lost with time. "Your complaint has to be investigated. And the person you are complaining against has [their own] rights. So the IC is limited by how much investigation it can do, given the evidence that it has. But it stops the harassment."

Many of our conversations revealed that it isn't easy to overcome the initial period of denial, especially when one isn't able to communicate well. Ria* said, "It took me a long time to come to terms with what had happened. There are still days when I wonder whether it (complaining) was worth all the pain. And then I remember how he had done this to other girls, how he had even taken one to the same place to assault her, months before he did the same to me. And that it could have happened to someone else had I not spoken up. It helps to know that I was part of breaking that cycle of serial abuse."

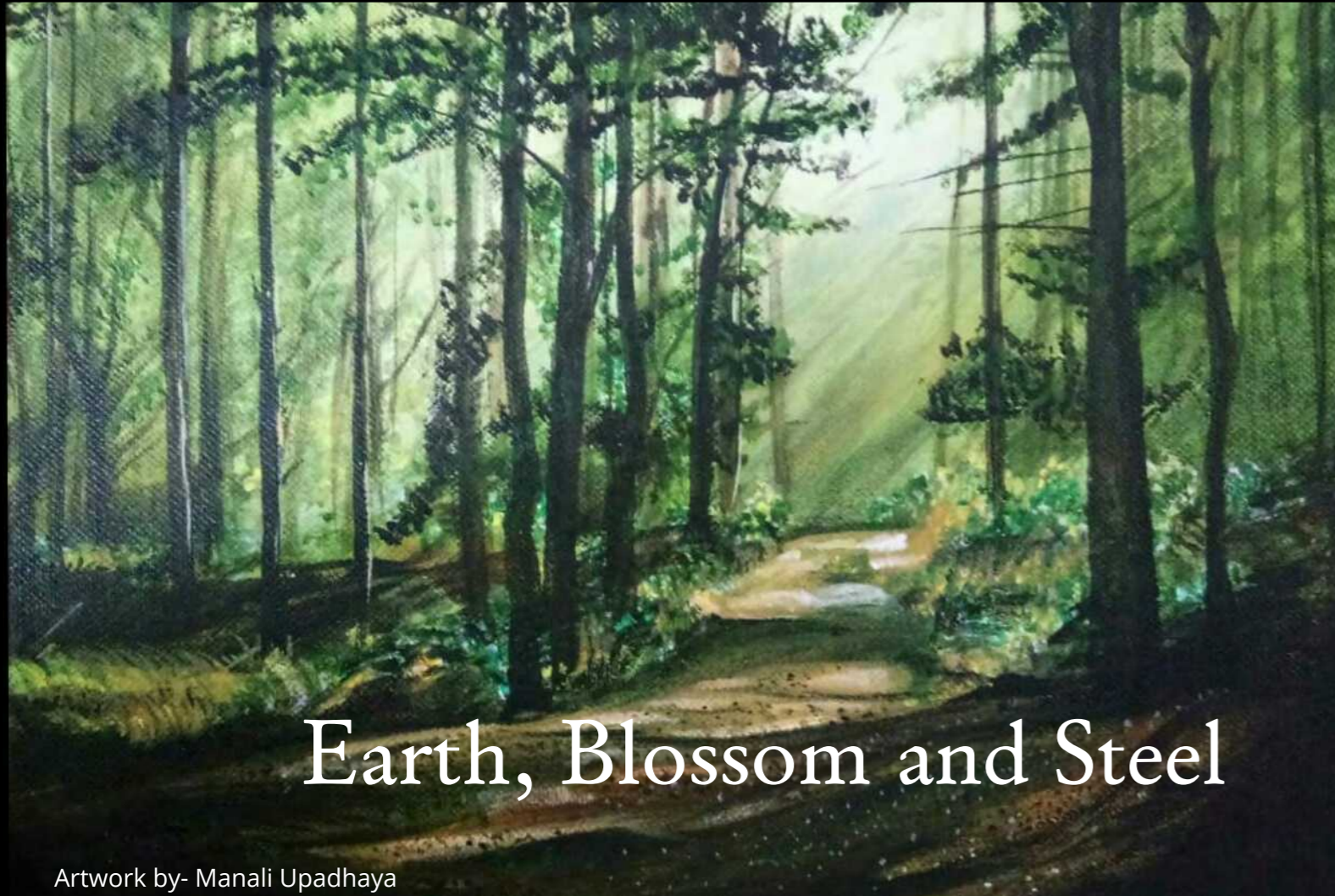
But this structured oppression we see all around doesn't begin when a hand is forced up your skirt. It begins when we fail to call out those remarks made in passing that had made us laugh nervously. As Ria* puts it, "People believe that if they are not the person making the comment, they are doing their best. But this does not absolve them of their collective responsibility. If you don't call out problematic behavior in your circles, if you choose to look away from a comment or a rape joke, which may make a survivor relive one of the worst things they have been through, then you are part of the problem."

* Name changed

Gowri Niranjana, Kunjal Parnami, Likhith Chandragiri, Misaal Bedi, Nikita Gupta, Saismit Naik, Satavisha De

Note- If any incident(s) similar to those above have happened to you, you have the right to act on it. Complaints from students of all genders are accepted by the Internal Committee of IISER Pune and we urge you to reach out to them formally or informally.

- The IC can be contacted at ic@iiserpune.ac.in
- The presiding officer of the IC can be contacted at ic.po@iiserpune.ac.in
- Visit the IC webpage: <https://www.iiserpune.ac.in/links/internal-committee-posh> for contact details of all IC members including that of the student representative.
- IISER Pune's Policy and Procedures on the Prevention and Redressal of Sexual Harassment at the Workplace can be found at [http://www.iiserpune.ac.in/userfiles/files/IC%20\(IISER%20Pune\)%20Policy%20and%20Procedures%20Jan%202019.pdf](http://www.iiserpune.ac.in/userfiles/files/IC%20(IISER%20Pune)%20Policy%20and%20Procedures%20Jan%202019.pdf)



Earth, Blossom and Steel

Artwork by- Manali Upadhaya

Trees are not the wealth that we inherit from our ancestors; they're the loan we owe our posterity that we have to repay with interest. As we stride along the path of progress, accelerating our expansion at a rate faster than ever before, this precept is something we can not lose sight of, if we want to achieve the regenerative development that we should be striving for.

The first time you come to IISER Pune's campus, just as the seventh month rolls into the eighth, you can see it brimming with life - from the grasses that grow in the cracks of paved stones to the tall teaks that obscure the main building, there's vivid green life all around.

As the monsoon takes strong roots in Pune, you'd be amazed at how gorgeous all the trees look and how inviting the dew on the grass looks, even as you juggle an umbrella and fail to keep your socks dry.

But had you been at the same spot 15 years ago, you would be drenched in NCL's gardens where teaks, bamboos, and acacia were grown for experimental purposes. Given the climate of Pune and the topography of the region, naturally, this area would have been a scrub forest with a lot of grasses, stunted shrubs, and trees, similar to the top of the Panchvati Hill. Owing to the rocky terrain, shallow soil in many areas, and the rain shadows, the great evergreens haven't had a chance to conquer this region.

Fast forward to 10 years later, and you'd still be soaked, but on a campus with a lot of buildings, expansive lawns, and manicured hedges. This increase in infrastructure came with its own inevitable deforestation but Dr. Deepak Barua, who chairs the Biotic Landscape Committee, tells us that, "...in the initial phase of the construction of campus, they [the institute] planted around a thousand trees." But during Director KN Ganesh's time, the fundamental approach to landscaping accorded importance to well-manicured, resource-intensive lawns overlooked by the main building, and to horticultural, decorative plants like the palms, which were a considerable drain of resources in terms of water, fertilizers, manpower, and money.

When the Landscape Committee was first set up in November 2017, they were charged with

the job of developing the green cover on campus - now that the majority of the construction work had been completed, with the buildings standing straight and true. One of their first initiatives was to plan a campus-wide plantation drive to increase the tree cover in order to make the campus greener and more habitable by providing natural shade to passers-by. About 18 acres of land, out of the 98, were made available for them to develop various plant communes, apart from the avenue plantation. So the drawing boards were brought out, plans were chalked out and a list of potential trees that could be planted was prepared. This plan of action, as outlined in an internal document available on the IISER Pune intranet, is claimed to have been outlined in collaboration with various committees and environmentally active student groups, such as Prutha - a claim we were unable to verify independently.

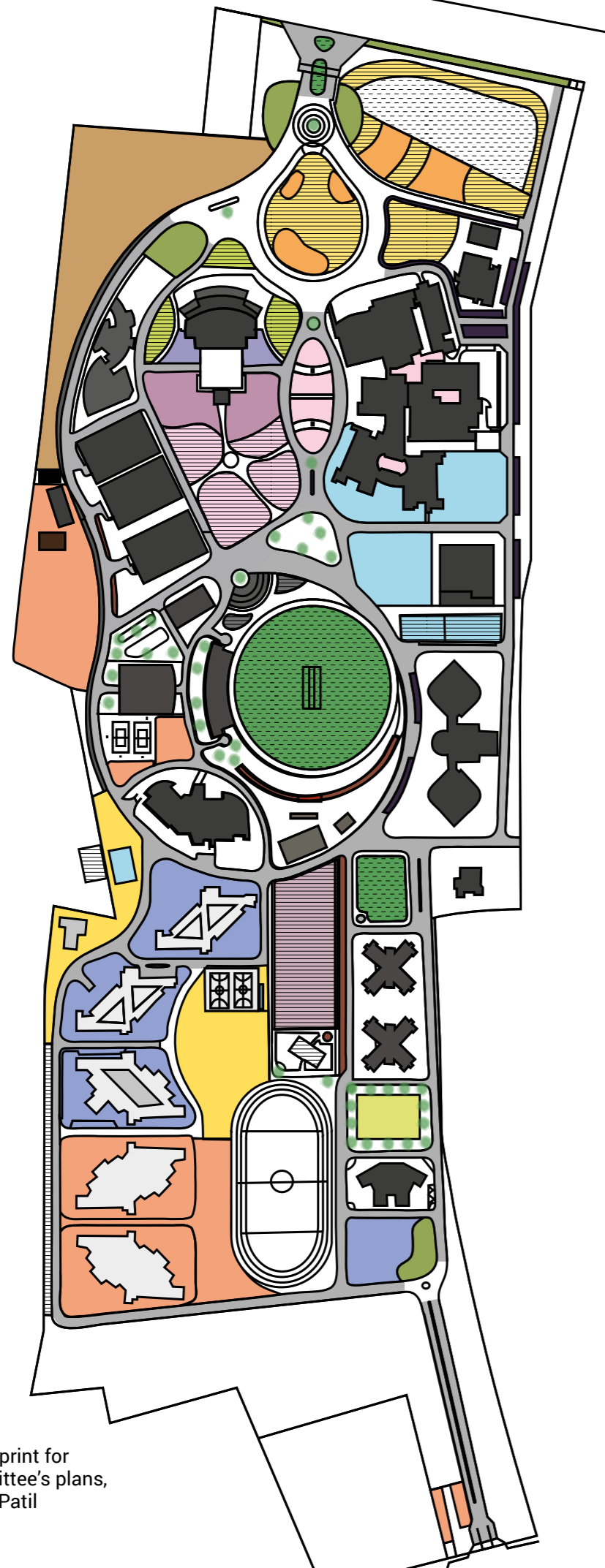
This list, and the proposed idea of planting trees (which is available on the intranet), was mainly drawn up by Ex-Prof. Milind Watve, who headed the Landscape Committee then. As Dr. Barua puts it, "All of the species were carefully chosen - it's a balancing act between choosing trees which are native to this area, which will do well given the climate of this region...and trees which are available, easy to look after, require minimal water and other maintenance, and grow reasonably fast." There was a paradigm shift in the landscaping plans - from maintaining decorative lawns to growing native trees that were less water-intensive and required minimal care and effort to grow. It was decided that only two patches of lawn would be maintained - the one in front of the main building and a conference lawn near faculty housing. Instead, the water previously used on lawns is now being directed to watering trees, which need more care in their first few years. Committee member, Supriya Pisolkar, tells us that, "To solve this [inconvenience caused by having to connect pipes and hoses] problem, ...we have placed an STP water grid." This grid facilitates regular watering of the trees near the Baner gate and behind the main building, although we can all recount the innumerable times we've stepped on puddles and soaked our socks, all the way from the hostels to the main building, thanks to the leaky pipes and the deceptive paved stones.

Before the drive, an external audit was conducted to count the number of trees on campus, mark, tag and classify them. As the survey hasn't been completed as of yet, the data of this tree census was not made available to us. The results of the census, whenever out, would perhaps serve as an interesting counterpoint to the allegations made by Dr. Milind Watve before he left the institute - he claimed that over 500 trees had been cut illegally, without the permission of PMC, in the course of the construction of the Baner gate. He provided Google satellite images as evidence of his allegations. There is no official record of tree felling at any point in time and no internal inquiry, as far as we know, was made in response to these allegations. While some people recuse themselves from commenting due to not knowing the particulars, most of our sources are of the opinion that there was no proper basis for his allegations. They claim that the methodology of comparing satellite images does not amount to evidence as images from two different seasons of the same year could vary vastly just due to the difference in grass cover - particularly when the resolution of the images is not good enough to differentiate between trees and smaller plants. Hence, these allegations were dismissed due to a lack of evidence.

Adhering to this list, about 700 to 800 trees were planted during the monsoon of 2018, around the Lecture Hall Complex and along the road behind the main building. Students, faculty, administrative staff and other campus residents took part in this plantation drive. Striking the right balance between infrastructure and green cover, especially on a small campus smack within city limits, might be a tall order, but everyone we interviewed thought the balance between the two was optimal. They also unanimously



Ornamental plants



-  GRASSLAND AND EXPERIMENTAL PLOT
-  BAMBOO GROVES
-  TREES WITH SITTING
-  EVERGREEN TREES
-  DECIDUOUS TREES
-  SHRUBS, HERBS AND SMALL TREES (FUTURE CONSTRUCTION SITE)
-  FORMAL GARDEN
-  ALL SEASON FLOWERING GARDEN (TREES)
-  ALL SEASON FLOWERING GARDEN (SHRUBS AND SMALL TREES)
-  MEDICINAL AND AROMATIC PLANTS
-  WILD EDIBLE FRUIT
-  NECTAR RAIL, FRAGRANCE AND BUTTERFLY ATTRACTING SP.
-  KITCHEN GARDEN
-  WILD MANGO GERMPLASM
-  WESTERN GHATS SPECIES, RED WILD PATCHES
-  GREENHOUSE AND NURSERY
-  COMPOSTING AND VERMICULTURE
-  ROOT ZONE TECHNOLOGY
-  LARGE CANOPY TREES (E.G. BANYAN, PEEPAL & TAMARINDI)
-  CACTUS + ROCK GARDEN

Summarising blueprint for Landscape Committee's plans, remade by Srishti Patil

support the recent development in sports facilities, as it is vital to students' life and believe that land utilization was done mindfully. Dr. Srinivas Hotha, who was on the Infrastructural Works Committee and in charge of planning the layout of these plans, points out that there is going to be a football field inside the athletic track, and once the construction is complete, they plan to plant many trees around the tracks. Pratyush MR, one of Prutha's coordinators, tells us that, "Especially for the tennis courts, the land used was mostly barren land - not much of the vegetation has been removed to build the tennis courts."

The trees to be planted were chosen carefully by the committee in contact with the horticulturist; most of them are native to this climate and region and would thrive here. The on-campus horticultural consultant, Bhanudas Chavan, tells us that, "We have chosen trees like *Kadamba* and *Nandruk* which are big, evergreen trees with a huge canopy, *Asana* which is like a magnet for the

birds and many species of *Ficus* which are keystone species." A few select exotic species have been picked for certain characteristics like their large canopy cover and low water requirements. Dr. Anand Krishnan who is with the biology department, warns us of exotic trees by giving an example of Panchvati hills, where a afforestation drive of non-native trees in the lower stretches led to several native birds losing their natural habitat of low lying scrub trees and grasses.

However, not all exotic plants have uniformly bad impacts on the ecosystem. For example, the bamboo groves on campus are not native and mostly meant for aesthetic purposes, yet they support a dense racket of birds. Similarly, not all ornamental plants are redundant, even though they are costlier to maintain. Dr. Hotha is of the opinion that in the absence of big trees, these small ornamental plants are significant in providing aesthetics to the campus; and that they are an outlet for them to reuse the wastewater that is treated at STP. Dr. Krishnan also adds that these ornamental plants attract a lot of birds and bees, which can be observed and studied when they come near the plants. As the plantation drive was only a short time ago, it's too soon to tell if they have affected the biodiversity on campus but one of the aims is to draw in more birds and butterflies. The ecosystems of IISER, NCL, and Panchavati Hill are closely linked, and so movement between these habitats may still be able to support biodiversity on campus.

The committee has many plans for the future - planting fruit trees to create an orchard, building outdoor seating benches between the hostels and LHC, another plantation drive in the upcoming monsoon, and creating community gardens where students and people in the faculty housing can grow seasonal plants in their own plot of land. The gardeners have removed some of the overlying rubble in front of the girls' hostel and replaced it with soil for this purpose, but it needs to be cleared of cement and gravel rocks before we start growing the first batch of leafy vegetables. Monsoons here are tipped for an unabashed deliverance unto the realm of the chlorophyll - with the enhanced greenery lush for landscape photography and speckled frogs alike.

All these plants and trees are looked after by a small army of 25 hardworking gardeners, as of now. They have various duties around the campus - weeding, watering, mowing, pruning, planting whenever necessary and fertilizing. They work under the direction of their supervisors, following the instructions of the committee. Unfortunately, there is no system in place to ask for their feedback and opinions about the current plan to improve upon it. One of the major problems they encounter is the spread of many invasive species on campus that require regular weeding to be kept in check. *Alternanthera* is a straggling, creeping plant with white flowers that proliferates rampantly if it's not curbed. *Leucaena leucocephala* is an exotic, invasive and highly destructive tree that can be seen throughout the region. It's a species that can actively harm the ecosystem and will take over the area if the saplings are not actively weeded out. So, they have a policy of actively removing these saplings when they're smaller than a certain girth size. The committee



Hebivory

members assured us that none of the trees are cut. *Cosmos* and *Petunia* are some of the invasive herbs on campus. Another issue that directly affects the plantation drive is the management of construction rubble. In the past year, with the construction of the new girls' hostel and the Chemistry wing, quite some rubble waste was generated. For projects of such magnitude, there are Government of India rules and Pune Municipal Corporation (PMC) regulations that require the construction company to take responsibility for the waste and dispose of it properly.



Alternanthera: Invasive plant

In this case, however, they have been dumping that waste in open spaces, through much of the campus, as exemplified in front of the girls' hostel and opposite the dining block. This construction rubble mixes with the soil and contaminates it, making it detrimental to the growth of the trees. When questioned about this practice, Dr. Hotha replied that, "What happens is, [if we have to remove and process the debris] the cost of construction increases phenomenally...I agree that it shouldn't be done, but it's going to add considerably to the budget. Within the limitation, whatever best we can do, we're doing... Not all construction debris is bad. They will become naturalized or whatever, it gets into the soil. Cement and some rocks and such kinds of things, it will take longer." So our practices of managing the waste seem to be quite dependent on the funds we're allotted. Dr. Barua also clarified, "Any time plans are made for construction, disposal of your wastes should be a part of the plan. When the Bajaj hostel was built, part of the deal for the construction company that's hired to do this is that they're liable for the disposal of waste."

When we further looked into the regulations and the facilities the PMC has provided, we discovered that they have a system in place to collect the waste from the construction site and earmarked some land in Wagholi as a processing plant to recycle it. We were able to independently verify, with a call to their helpline, that the collection system is functional and they provide this service free of cost. Given this, it seems inexplicable as to why we are not taking advantage of this and this remains to be explored. We also found out that when trees are planted above such soil, their roots can't access optimal aeration and it hinders their ability to absorb water, leading to stunted growth. It was noted that the gardeners have to dig deep and clear away layers of rubble before replacing it with soil and peat so that they could plant trees. This means the institute may be incurring unnecessary extra costs in the management of rubble.

Despite the good intentions and efforts of the committee, the gardeners, and the supervisors, some of the trees that were recently planted seemingly don't appear to be well cared for. Some of the first set of young trees in front of the LHC seem to be infected with fungus and affected by herbivory. When we asked for a clarification, Bhanudas Chavan informed us that some of the trees are dry deciduous and are preparing to shed their leaves, only to sprout new foliage soon. As for the others, they don't use pesticides on them because many butterfly larvae feed on their leaves and would be adversely affected by it. Conscious of the biodiversity of the campus, they refrain from using chemical pesticides and fungicides unless they absolutely have to.

The upcoming challenge to maintaining the balance between infrastructure and the green cover on campus, is the increasing number of students but the limited space we have. As the institute accepts more and more students every year, the number of people on campus will increase, and to accommodate all of us, more buildings, including hostels, labs, and classrooms will have to be built. The land for these buildings has been



Construction rubble in front of Girls' hostel (Feb 15, 2020)

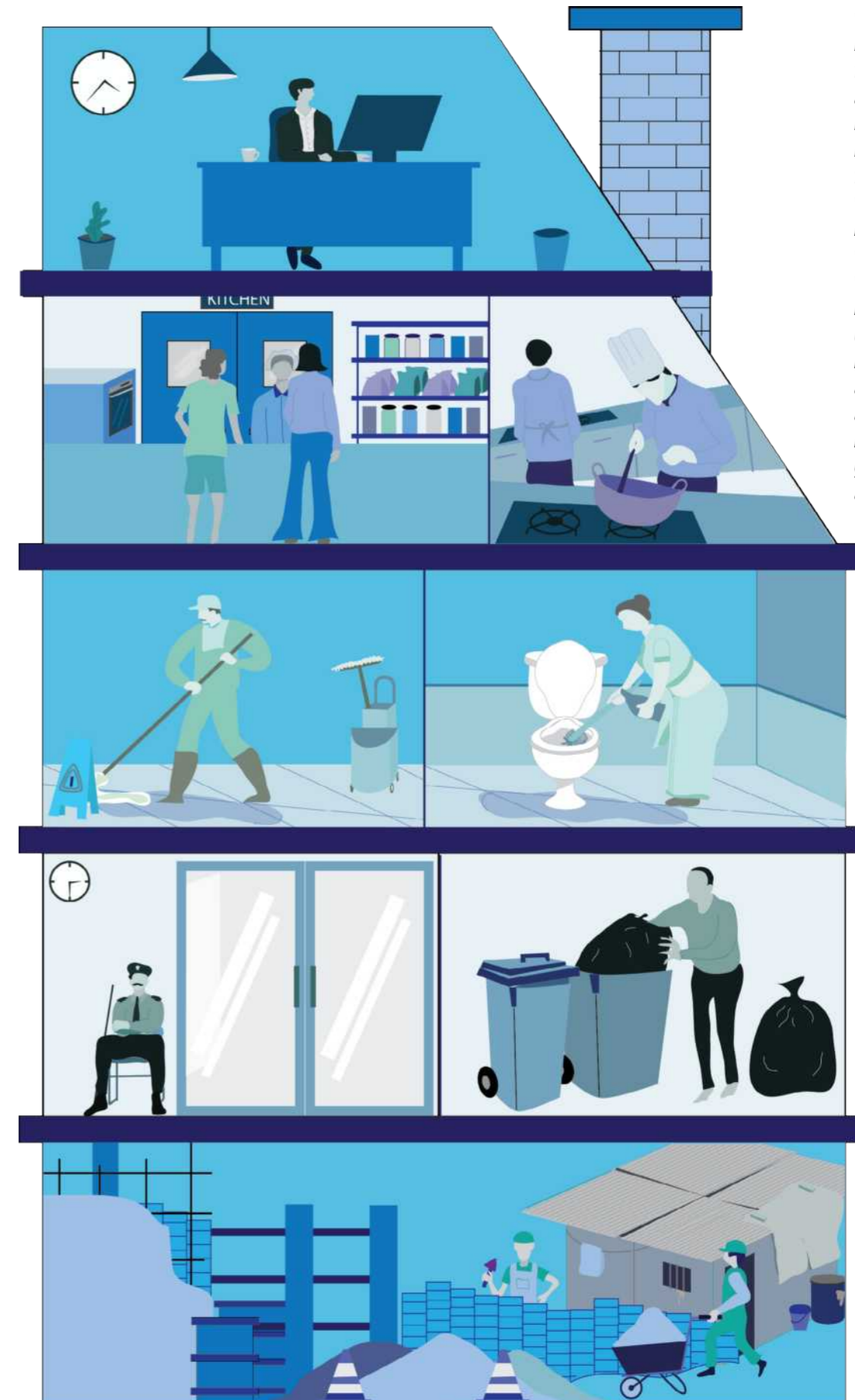
earmarked (and plantation projects have been planned around it) but this sentence could possibly be read as, 'the trees to be cut and the dumping sites to landfill rubble have been earmarked'. We need to be aware of the facts and realities of today, to make mindful, informed, and long-sighted decisions that will steer the development of the campus in a regenerative and sustainable manner. The efforts are already underway, as can be seen in the switch to forego lawns and plant native trees. But if we stray too far from the current precept and go ahead with these plans in the framework of the old definition of 'development' fogging our glasses, without sparing a thought to the ecosystem of these 98 acres and to how it will affect the residents in the longer run, we would be betraying ourselves and the loan we've been entrusted with.

Akash Dutta, Dhrubojyoti Patra, Koustav Halder, Shaswat Nair, Vasudha Kulkarni;
Photographs by- Vasudha Kulkarni

Blue Collar Blues

"I don't like going to school." says Alam, while emptying a sack of cement in front of the Hostel. "How old are you?" we ask him. The contract worker is slight, frail—doesn't look a day older than twelve. He thinks for a while and replies, "Seventeen." But when asked again, he mumbles, "I don't know." Alam is one among the hundreds of workers who earn their living in the bricks, floors, kitchens and toilets of the Indian Institute of Science Education and Research, Pune. Apart from the faculty and administration staff, IISER Pune—either directly or indirectly, through contractual leases/tenders—employs hundreds of men and women to keep the institute running*

around the clock. The lives of some of these workers start early in the morning. Even before the messes start dishing out food at 7:30AM, the night shift security guard gives over the plastic chair to the next on duty at 7AM, briefing them regarding any important events or details, while the janitors have the toilets clean before the early morning rush makes them dirty again. On the other hand, many of the workers have to work late into the night. V-square and Shiv Sagar close as late as midnight, while the MDP night canteen remains open all through the night closing off with the last nocturnal orders around 4:30–5AM. The security guards, too, stand witness to the night life in the Institute.



The students of the institute bear an immense debt to the workers who come in to work everyday from near and far, assuring our comfort in exchange for a livelihood. The odour from the toilets that we complain about has not kept sanitation workers away from work; the spouts of muddy water from under loose bricks has not kept sweepers and cleaners at home, and unholy hours have not stopped us from getting a cup of tea and a bowl of Maggi.

Almost all services in IISER such as housekeepers, drivers (ambulance or otherwise), civil, mechanical or technical repair persons who you meet via the ticketing interface are contracted through the company MORIA. Five years ago, all of these contracted workers were hired through the company called PRISM, which left the business but transferred all the existing workers to MORIA, resulting in a purely nominal shift with the employees remaining the same, the pay and policy unchanged.

Talking to a housekeeper in Hostel-1, who has been here for nine years, we realized that they do not have any agency to report civil, mechanical, or technical complaints via the ticketing system. It requires an IISER email ID for setting up an account and, therefore, due to the absence of floor representatives for over a year (who would have been the first point of contact), the housekeepers request the students—the handful they are familiar with—to create a ticket regarding issues that arise, which range anywhere from clogged latrine pipes to broken lights. Their shifts are from 7AM to 4PM. For Hostel-1, there are six male and three female housekeepers, one assigned to each floor—a remnant from the pre-Hostel-3 era. From another housekeeper, Ram, we come to know that some students spit paan on and around the door-side dustbins, painting even the sides of the walls, which have to be scrubbed off every time. Given how common an occurrence this is—a walk around Hostel-1 third floor would be proof enough—it's not a stretch to infer on whom we assume the responsibility for maintaining our residential spaces falls exclusively on. Ram says that they cannot choose to behave as indifferently by not cleaning and leaving the place as it is. The housekeepers also choose not to remove the clothes left lying on the drying stands for weeks on end, even though they have been instructed to. When asked if they have anything specific to ask from the student community, Ram replies that if they cooperate, that'd be more than enough.

The Security Guards, on the other hand, are contracted via UNIVERSAL. All guards have 8-hour shifts, and at any point in time, there are 10+2 security guards. The extra two of them are called relievers, who fill up in case of absence due to emergency on the part of the rest. The place of duty and the shift (morning, evening or night) of a guard alternates weekly. After every eight days of work, the ninth day is an official leave for them.



Bathrooms and toilets used by the workers living behind the girls' hostel

IISER Pune is a relatively young institute and thus has seen a lot of construction work over the last fourteen years. The sports complex and the new girls' hostel have come up only in the last year or two. Before the prime minister's visit here in December 2019, the institute undertook large amounts of maintenance work that included modifications to the dining block, maintaining some of the roads on campus, furnishing and beautifying the entire campus, and a large scale remodelling and reconstruction of the Guest House. Even now, there is work ongoing between

the dining block and the sports complex, overseeing the construction of some pipelines for drainage. All of this causes a huge requirement for labourers. There are over sixty such workers currently employed in IISER. These workers aren't employed directly by IISER—the institute gives out specific contracts of projects to contractors, who employ the workers. The wages of the labourers are typically around Rs 300–350 per day. As they are daily wage workers, they are not entitled to any paid leave. On being interviewed, labourers told us that they were free to take days off at their own risk, without pay. The terms of contract of the labourers vary too. Unlike the contracts of housekeeping or teaching staff, the contracts of workers are often very short, sometimes a few months, but at times can extend to more than five years. One worker told us that he was here long enough to oversee the entire construction of the girls' hostel. The workers are often not local to Maharashtra and are brought by contractors from as far as Bihar, Jharkhand, Chhattisgarh and Karnataka, among other places. After their work is done, they move out and go wherever the contract takes them. It is not unusual for the migrant workers to not know how long they're going to work at IISER. One woman who had been here for a month said, "We have not been told how long we are going to stay here. Just as long as the work lasts. If the work is done in one month, we will leave in one, if it takes two, then two. They have not told us anything."

The workers do not come to IISER alone. They come here with their children. One afternoon, in the slums behind girls' hostel, we saw some twenty odd children—boys and girls, under the age of twenty—running about in the sun. But not all of them were playing. We saw Chintu*, an eleven year old, coating the underside of a large vessel with cement, before his mother began cooking on it. "Do you go to school?" we asked him. "No." he said—the same answer that we received from the other children. Most of them did go to school back home in their villages, but ever since their parents had taken up work here, they had not set foot in a school. It is unfortunate that despite clause 5 of Chapter III of the Right to Education Act ensuring a transfer from one school to another—anywhere in the country, irrespective of the reason why the student has shifted—none of the children are enrolled in any of the schools nearby.

The Right (of children) to (free and compulsory) Education Act of 2009, describes free education as a compulsory right of children in the age group of 6–14. Yet, children living in a premier educational institute do not go to school—some haven't in months, others in years. Most of the children supplement their working parents by doing menial work and household chores. And the less fortunate ones, like Alam*, who was either too young or too malnourished, work as a construction labourer for a few hundred rupees a day.

The workers are housed in tin shacks in the slums behind Hostel-3 (although students have reported seeing workers, who were hired just before the prime minister's visit, living in wooden crates near the sports complex). The shacks are typically small rooms roofed and walled with tin sheets, all in a cluster. The men and the women have separate bathing areas. The men bathe in the open, in front of a big tank of water, while the women have a roofless enclosure designated for them. In total, the workers have access to only 2 toilets—one for men and one for women. The student-toilet ratio in Hostel-1 is approximately 5:1—the worker-toilet ratio is at least 30:1, given that there are over sixty inhabitants in the slum and only 2 toilets. The conditions of the toilets are extremely unsanitary. On our visit, we saw a flush-less Indian style toilet clogged with faeces. Not just the commode, but as can be seen in the following picture, even the surrounding area was filthy with large pieces of faeces strewn.

"There were more toilets before, but they stopped working and nobody tried to fix them," said a woman, "Nobody has been employed to clean the toilets since before the construction of the girls' hostel was completed. Once in a while, we bring cleaners from the market."

A second year BS-MS student says that a worker told him, “We feel disgusted using these. The children refuse to put up with these and choose to defecate in the open instead, but we have no choice, we have to use these.” Incidentally, according to the Swachh Bharat Abhiyan, Pune has an ODF+ rating, a prerequisite of which states, “On any given day, not a single person defecates in the open.”

* * *

“IISER follows strict government guidelines for hiring workers,” says Dr. Deepak Barua, the current Head of the Landscape Committee, an internal body that was constituted in 2017 to oversee the landscaping on campus, “There are standardized regulations regarding the wages of the gardeners.” Dr. Anjan Banerjee, Chair of the Institutional Committee on Administration, another recently instituted committee for supervising administrative decisions of the institute, sheds more light on this, “Contractors are employed under the 1970 Contract Labour Act, wherein the employer requires the contractors to ensure minimum wage payment and paid festival holidays, among other things.” The Act also bids the principal employer (IISER) to make sure that the contractor provides appropriate living conditions vis-a-vis canteens and restrooms. However, the Contract Labour Act is not applicable to casual and intermittent labour, under which most civil work in the campus falls. “The hiring of the housekeeping, security and gardening staff is subject to these laws, but not the labourers. Nevertheless, we try to ensure that the civil contractors we employ are reliable, and we are willing to terminate the contracts at the slightest transgression. In fact,” Dr. Banerjee adds, “we have done so in the past, when a gardening supervisor was suspected of underpayment.” “Gardeners working overtime during the Prime Minister’s visit were duly compensated,” says Dr. Barua, “we did not hire any supplementary staff.” The same, however, was clearly untrue for the civil labourers. The months of November–December 2019 saw a huge influx



‘Despite everything’ (the workers’ settlement in campus behind girls’ hostel)

of construction workers whose mismanagement resulted in the workers reportedly sleeping in crates around campus. “I was not aware of this,” claims Dr. Banerjee. He conjectures, “A possible explanation could be labourers who weren’t supposed to be living on campus worked overtime and decided to sleep there instead of leaving and returning the next day. Or it could be the contractors hiring some extra help and not managing it properly.” He wishes that the incident had been reported to him earlier. But what about the issue of open defecation? “I am very surprised to hear about this,” exclaims Dr. Banerjee, “We need to look into it soon. This is unacceptable and a health hazard.” But does the institute claim responsibility? “It’s difficult to say, because it is the contractors’ job to ensure amenities, but as it is happening on institute grounds, IISER bears the responsibility of remedying it once we have been made aware of it.” Open defecation, in fact, is not a secret. Multiple students and a professor have noticed it, although no one reported it. Does this mean that a campus resident’s right to hygienic living conditions should be at the mercy of the vigilance of others? Does the institute believe that a systemic change is in order? “Yes, it would be a good idea to have a forum for workers to lodge complaints directly, that is something to be discussed,” says Dr. Banerjee.

* * *

Given how the Covid-19 pandemic has disproportionately affected daily wage earners, we reached out to the Registrar, Col. G. Raja Shekhar, to find out how the labourers have been dealing with the crisis. Of the seventy odd population of migrant workers, five have been reported to leave IISER before the lockdown. As most of the labourers in IISER remained in Pune owing to the travel restrictions, they were provided with basic necessities of ration and money with the help of their contractor. Hostels were closed, and housekeepers were off-duty. The labourers soon resumed work internally with the ongoing (at the time of the report) installation of a transformer and Guest House renovation. There was an endowment fund collection to cover further living expenses of the labourers. During the lockdown, workers were only given holidays, and there were no layoffs or reduction in the gardening, housekeeping or the security staff.

We also spoke to the registrar about our concerns regarding the sanitation facilities of the workers—a problem especially relevant during the pandemic. We were asked to write to him formally, and soon after the relevant employees were directed to ensure the cleaning of the toilets. We further requested the registrar to have more toilets built, which we have yet to receive an update on.

With the nationwide migrant crisis and the impending relaxation of labour laws, it isn’t difficult to see how calamities and their consequences scale unfairly for the labour class—and how the shackles of poverty and prejudice keep countless such Alams from school. Therefore, while we commend the institute’s commitment in ensuring a campus environment that is fair and considerate to its residents, we certainly believe there is space for dialogue and action, and that the onus of change lies on all of us. Vigilance and voice are the surest weapons at our disposal to build a campus community that looks out for one another.

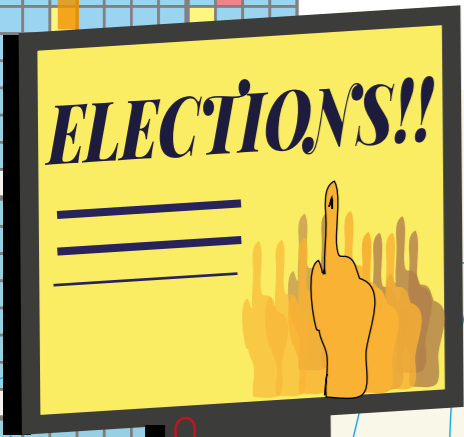
*Name changed

Arya Samanta, Ipsa Bezbarua, Ishwari Mulkalwar, Suryadepto Nag; Photographs by- Ananda Shikhara Bhat

REPORTS

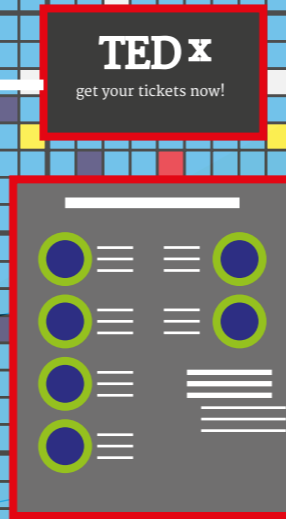
The Student Council

After a long wait of almost two years, the Student Council Constitution got approval from the Board of Governors and we had our first ever elections on 4th March 2020.



TEDx IISERPUNE

IISER Pune now has its own chapter of an independently organised TED event, having its first TEDx event organised on 2nd February, 2020.



PARAM Brahma: The Supercomputer

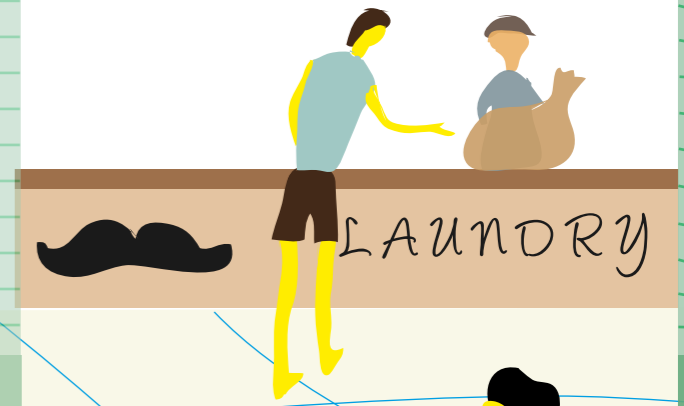
It is a supercomputer offering a computational power of 850 TeraFlop with 1 PetaByte storage capacity. Now IISER Pune can boast about hosting the 14th and latest addition to the renowned PARAM series on the ground floor of the north wing of the Academic Building.

Student Media Body

Kalpa, founded in 2007 as the annual students' magazine of IISER Pune, now has its presence as the official students' media body of the institute. This media body aims at facilitating in-house communication within the institute, a platform for campus journalism and a forum where the students can feel free to voice out their opinions.

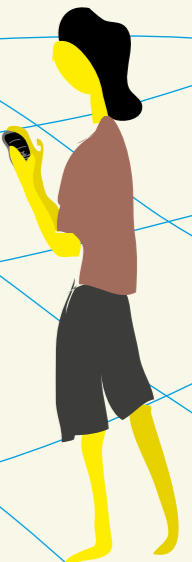


Moustache Laundry
We now have a contract with Moustache Laundry, sitting at the mess-facing side of Hostel 1, ground floor. They will offer their services at ₹95 per kg of garments.



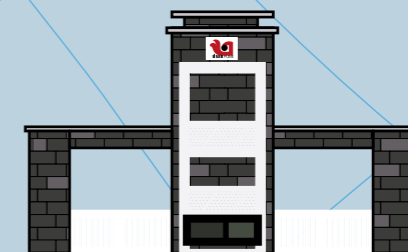
Indoor Sports Complex

The new indoor sports complex houses 4 badminton courts and 1 basketball court. The Gymnasium will also be operating from this complex from now on.



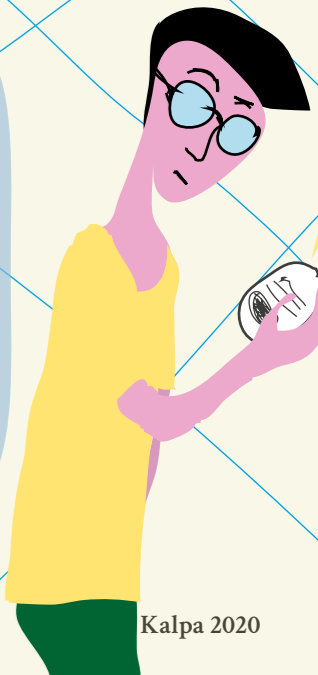
CIPLA Building

Cipla Foundation-IISER Pune Centre for Chemistry Education and Research, situated to the south of Academic Building, houses chemistry research labs for outreach activities involving teacher and student training and will be a platform for industry-academia interaction.



IISER Main Gate

This year Pashan Gate lost its glory to the newly constructed spectacular Baner Gate, which has now become the main entrance to the campus.



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Colloquiums are weekly talks conducted by the outreach centre to spread ideas about exciting advances in the various fields of research and academia. In 2019, we had some amazing speakers coming by and talking about their research, covering a wide range of topics from talking about the challenges ahead in studying black holes to modeling structures to inferring animal behaviour using mathematical theories and discussing about why humans compete. vering a wide range of topics from talking about the challenges ahead in studying black holes to modeling structures to inferring animal behaviour using mathematical theories and discussing about why humans compete.

- Ritvee Talele

modeling 3D curved structures by selective heating

COLLOQUIUM

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evolution of social life in animals

hydrology in anthropocene

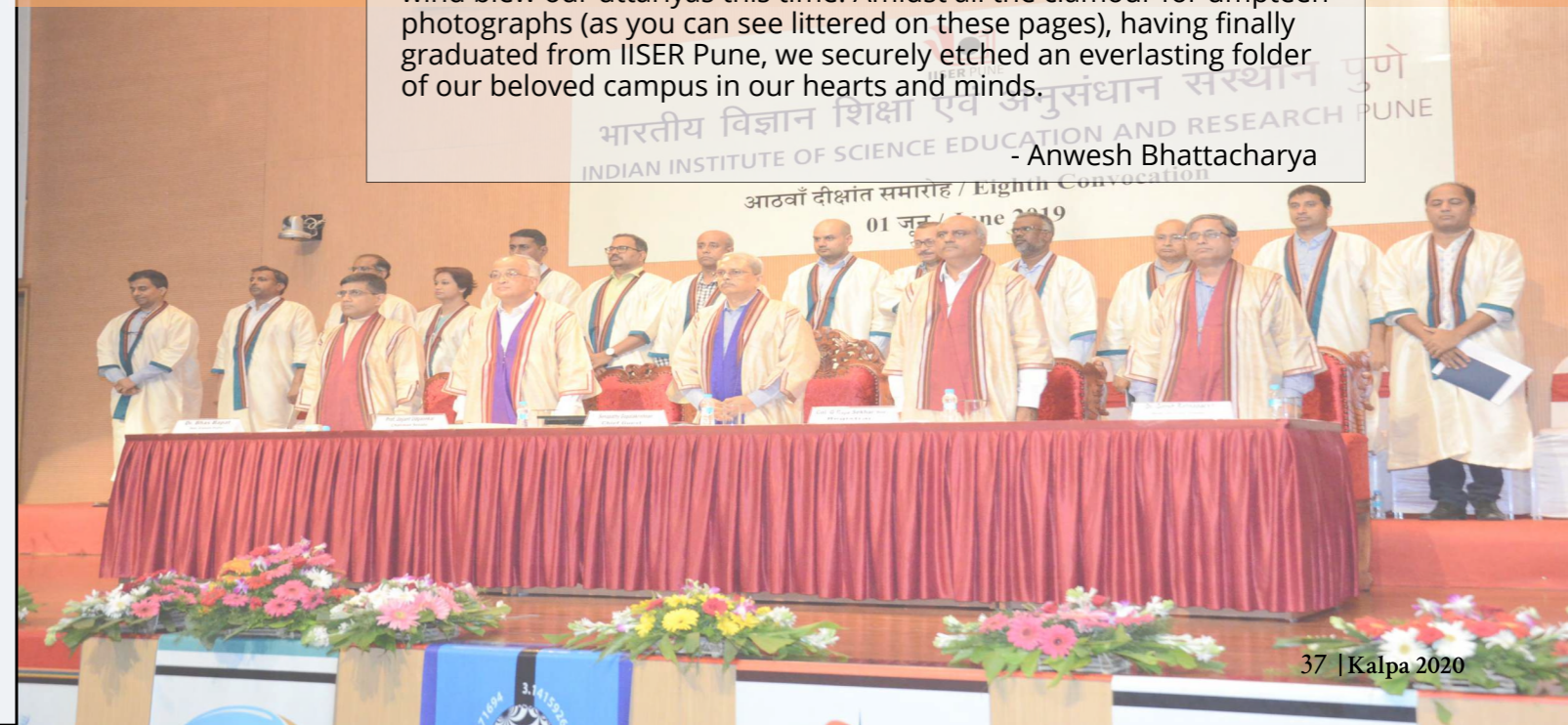


CONVOCATION

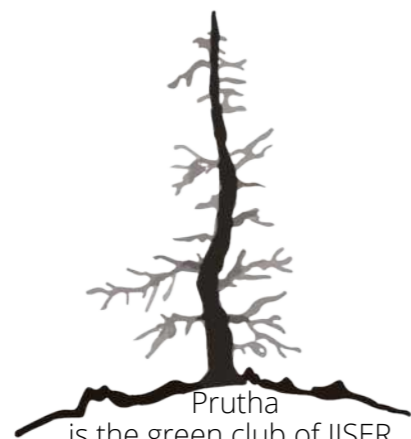
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The institute convocation is a day that almost everyone invariably thinks of during their stay at IISER Pune. During the gruelling coursework and research projects, there are times when one craves for the convocation to magically appear. However, when it does finally arrive, it becomes a grim reminder of the finality of our happy sojourn in the campus. As all good things come to an end, as they should, we too had to prepare for our convocation that took place on 01 June 2019. The week before our convocation, all of us scurried to get traditional clothes, a new addition this time, and understand all the rules and traditions of the event. The walk from the hostels to LHC on 01 June 2019 was very different, everyone brimming with a sense of pride as friends, parents and professors poured their joys into the collective pot of happiness brewing in the campus. As the formal ceremony took place, and students were awarded their BS-MS, i-PhD, and PhD degrees, co-graduates cheered with a sense of accomplishment. The Chief Guest, Kris Gopalakrishnan, and our director, pointed out that this was only the first milestone in an arduous yet intellectually challenging journey we would all have to undertake to make the world a better place to live in, instilling in us a zealous sense of purpose. As is tradition, the convocation finally ended with a common photograph, where instead of the caps, the wind blew our uttariyas this time. Amidst all the clamour for umpteen photographs (as you can see littered on these pages), having finally graduated from IISER Pune, we securely etched an everlasting folder of our beloved campus in our hearts and minds.

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे
 INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH PUNE
 आठवाँ दीक्षांत समारोह / Eighth Convocation
 01 जून / June 2019
 - Anwesh Bhattacharya



Prutha



Prutha is the green club of IISER. Guided by Prof. Sudha Rajmani and the ideals of environmental conservation, we at the club take initiatives and organise activities to help the campus progress in a sustainable and regenerative manner. With Dinesh, Pratyush and Rishabh at the helm this year, we had several exciting events and initiatives. We had two treks - to the Panchvati and Parvati Hills. We also organised Vastrasamman - a drive to donate old clothes to the poor. We further took initiatives to display posters on the screens that aim to increase awareness among IISERites regarding the wastage of resources. Another similar endeavour was to write on a blackboard the amount of food wasted in the dining block everyday. We are excited to work on many more of our plans and look forward to your active participation!

- Vasudha Kulkarni

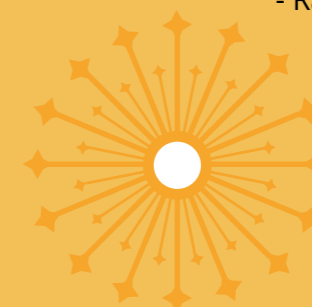


Artwork by- Ningnung,
edited by- Soorya Narayan

V I J Y O S H I

Vigyan Jyoti Shivir, or Vijyoshi, a National Science Camp, is a venture organized by KVPY (Kishore Vaigyanik Protsahan Yojana) in collaboration with INSPIRE and IISER Kolkata to host a national science camp for students every year, funded by the Department of Science and Technology. Vijyoshi acts as an interactive forum for students and leading researchers in various branches of science and mathematics. This year, two consecutive camps were organized in IISc Bangalore and IISER Kolkata. From IISER Pune, around 25 students went to IISc for the camp and were introduced to some fascinating concepts of science and mathematics across diverse research areas. The first talk was on Single Molecule Spectroscopy and Optical Tweezers by Professor Kankan Bhattacharyya. These two discoveries had recently been awarded the Nobel Prize. The attendees were next introduced to the astounding structure and complexities of the human brain by renowned neurobiologist Professor Vijayalakshmi Ravindranath. Professor Peter R. Saulson propounded the concept of Gravitational Waves and their measurement by LIGO (Laser Interferometer Gravitational-Wave Observatory). Topics like Sexual Selection and the Evolution of Animal Signals were also introduced to the students in an enthralling manner by Professor Marlene Zuk. In addition, there was a mesmerizing program comprising performances of various dance forms glorifying Indian culture. Overall, it was a wonderful experience for the students, starting from a plethora of seminars, widening their view of the research field, to making new friends across the country, and enjoying the lip-smacking food and accommodation in the lush environment of IISc.

- Ranojoy Baisya and Soorya Narayan



ASIAN SCIENCE CAMP

The thirteenth Asian Science Camp was held at Shantou, in the Guangdong province of China from July 28 to August 3, 2019. It brought together around 250 campers from 25 countries across Asia, Australia, and Oceania. The theme for this year was Science Youth Future, to highlight the responsibility of the younger generation to carry forth the flame of curiosity handed down to us.

It featured numerous eminent speakers like Nobel Laureate Prof. Aaron Ciechanover, Prof. Jean-François Le Gall, Prof. Thomas Yang, and Prof. Zhang Shuguang along with video messages from Prof. TU Youyou and Prof. YANG Chen-Ning. The lectures were on a wide range of topics ranging from personalized medicine, containment of epidemics, and more efficient methods of harvesting sources of renewable energy, to Lasers and the dynamics of random walks and Brownian motion.

Along with lectures and in-depth sessions there were Scientist office hours, where you could visit the speakers and have one on one interactions. Further discussions and interactions between campers from different nations were stimulated during the poster making sessions.

In addition to classroom sessions we also had a visit to the Human Life Science Museum at Shantou University. On the cultural front we had an excursion to Chen Ci Hong's Residence - a large overseas Chinese residence, and Bai Shi Yuan - Craft Master's Garden where traditional Chinese art was on display.

Towards the end of the camp we had a cultural night, where we experienced little elements of dance forms, music and poetry from the participating countries. This further highlights a very important conclusion. The academic discussions and lectures, though forming the premise of the camp, turns out only to be secondary. The interactions with the other campers, the time spent during poster making, and the friendships we made will be remembered even after the academic details have been forgotten.

- Mihir Dingankar



Artwork by- Sanjana Vasanth

Pride March:

a beginning

Pride has been in our collective consciousness since 1969. Ever since a group of butch lesbians and transgender sex workers decided to brick the police back in the day, we've had the idea of "Pride." Right now, in India, pride parades are regular, and more cities participate every day, and most metropolitan cities have colleges holding their version too.

Except for IISER Pune, here it is different.

Since Pride as a form of protest is such a huge sign, it's challenging to start a movement directly with that. Traditional art colleges that teach queer theory have had a lot more experience with pushing through the veil and having a concrete support system behind them before having an event of this scale. Here, we had two months. In academic terms, this translates to joining a new lab and presenting a poster on your work in the third week of the assignment.

However, I think IISER has always had a queer community. We are, after all, significant minorities in this day and age, and even if we don't reveal ourselves at first, we exist. Plus, queer is not only about who you are but, also about what you believe. You can't ride in the coattails of people who have rejected citizenship offers from Hitler, who've coded to break the World War 2 code, who have given their lives in service to people and refused monetary gain and not become a little queer itself.

1st anniversary of the scrapping of 377. The 1st year wherein whichever pride march I went to, I did not chant the number in the streets, and that's where we started. The discussion was afoot, and all the organizers came about discussing the nitty-gritty of the protest. You see, it was IISER, we were talking of long term goals, about a Queer Club, about bringing together everyone, about uniting.

There were days of despair, of course, because you see the "Pride" experiment had a success rate that was so very low. I remember days when these kids would call up agency after agency to look for speakers, and no one would respond. Till the last hour, we debated about speakers. And I can't even imagine the sheer stamina of the people who were managing Karavaan and this without missing a beat.

The poster making activity was a joyous occasion, a few people just sitting there building their narratives and expressing. And then there was the beautiful coming together of it all. Look, we did Pride in IISER; we had trans women, asexuals, lesbians singing out slogans in Marathi, Gujrati, Hindi, and everything else. We had kids who just joined for the heck of it, and kids who were in it from the beginning. And no matter how many times I wondered if it was right, it was.

Our protest was by no means perfect, and several times I've been asked by people from my community about the caveats we had, and it leaves me heartbroken. The truth is, often, Pride starts from the corner of a specific five-star hotel and includes people who wish for a party. This started from a small discussion room, and it was filled with kids. And I know that the flamboyant queens who wear their hearts on the sleeves joined in, but, it was something made by the kids, and that's the proudest any pride has made me.

- Uttiya Roy





KARAVAN

*The rains poured on and on
And the circumstances looked bleak,
But, as they say, the show must go on:
Boosted by the power of a "Rap God" (?)
And the soulful melodies of Fusion
It was a weekend to remember indeed.*



Kicking off with events tailor-made for freshers (Soirbee and Zabava) to introduce them to the IISER environment, pre-Karavaan events quickly moved on to other fun-filled games like Capture the Flag and Tapmaq to create a festive hype amongst all. Side by side, there were several welfare events being organized, which included IISER's first ever pride parade and a blood donation camp. Blurring the line between science and technology, there was a two-day robotics workshop, at the end of which the attendees were equipped with a knowledge of robotics that could help them solve a number of real-world problems. Around the same time, the Literary Club organized IISER's first inter-college debating competition, which was won by the team from Symbiosis School of Economics.

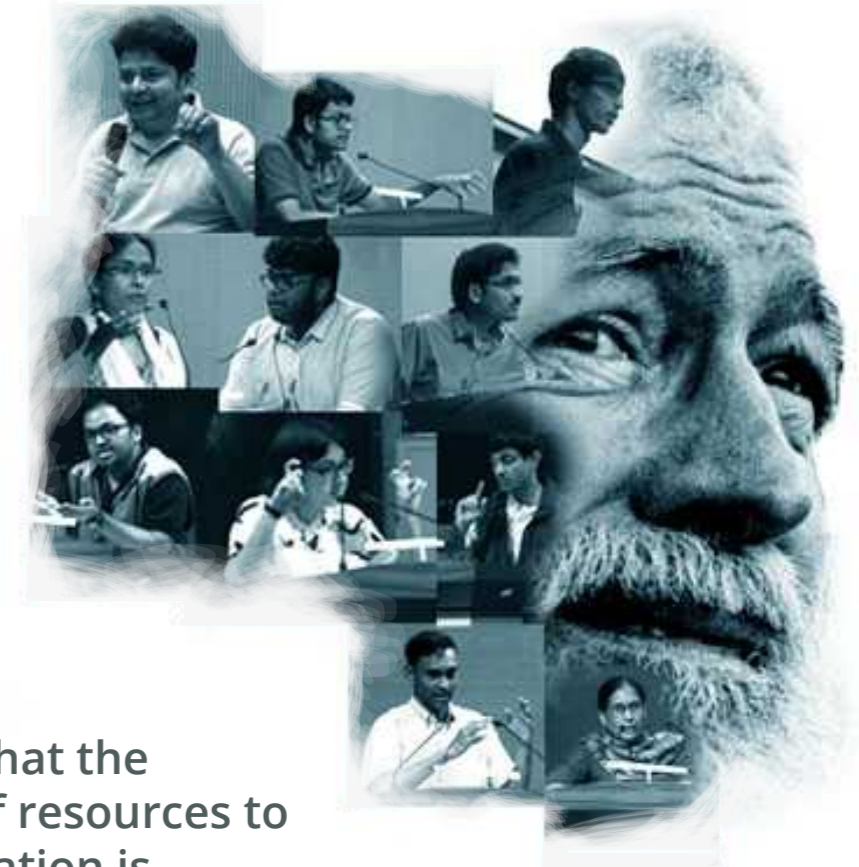
The main Karavaan events started on the 17th of October, with mesmerizing Showcase performances at the CV Raman auditorium on that day, and dances, including Navarasa 2.0 on stage the next day. That night, the Lit Club conducted their yearly murder mystery, Crime Scene Investigation, which was won by a team of first years - Swayam, Divyansh, Jezer and Vatsal.

Due to the torrential rains playing spoilsport, Showcase mainstage events and the much anticipated Band Wars finals all had to be called off, though Nupura took place on a much smaller scale in the CV Raman auditorium. Despite this, the well-known rapper, Emiway Bantai entertained a large audience on the 19th. Finally on the 20th, Anand Bhaskar Collective bewitched the audience who danced in the rain to their foot-tapping tunes, making Karavaan 2019 a success despite all the trials and tribulations abound.

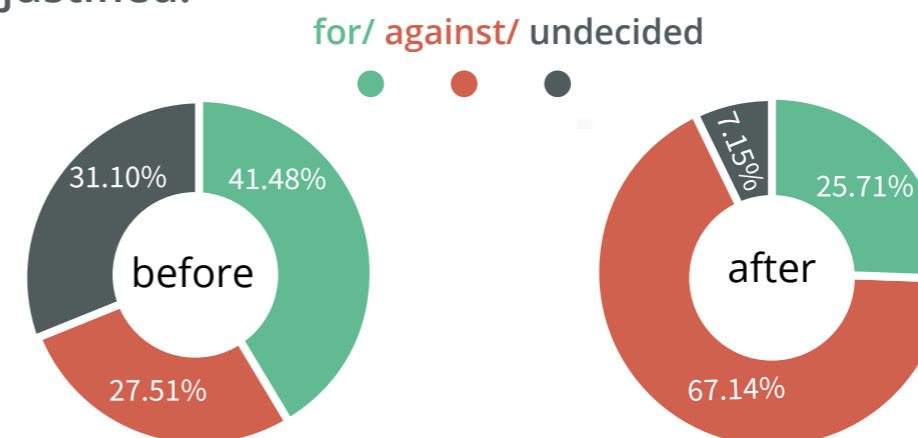
Ipsa Bezbarua



The third Hemingway Memorial debate



Motion: This House believes that the disproportionate allocation of resources to elite institutes of higher education is justified.



Audience poll results before and after the debate

The 3rd Hemingway Memorial debate was held on the 3rd of February, 2020 in the CV Raman auditorium. The debate was held in two rounds with each speaker speaking for 5 minutes in the first round and 3 minutes in the second rebuttal round. While the proposition spoke about brain drain, limited resources and the success of disproportionate allocation of funds in First World countries, the opposition questioned the whether the practice might be discriminatory and brought into notice the large number of privileged individuals in institutions of repute and the dismal drop out rate in high school. The ambiguity of the word disproportionate was brought up. The audience was encouraged to vote for or against the motion once before the debate and again after the first round. The debate ended with remarks from the moderator, Dr. Pushkar Sohoni, questions from the audience and a vote of thanks from Lit club coordinator, Kunjal Parnami.

- Atreyi Chanda

list of speakers

for the motion

- Vasundhara Laad (Joint Registrar)
- Dr. Pooja Sancheti (HSS Department)
- Anish Rao (iPhD)
- Abhishek Vaidyanathan (BS-MS)
- Akash Dutta (BS-MS)

against the motion

- Prof. M S Madhusudhan (Biology Department)
- Prof. Anirban Hazra (Chemistry Department)
- Shree Hari Mittal (iPhD)
- Aditya Kolhatkar (BS-MS)
- Misaal Bedi (BS-MS)

Art Club

This year, the Art Club chose to mostly pick up events that use art as a tool for social initiatives. Beginning with reliving the forgotten art form of Movie poster painting, Diya painting for Mindspark students, Stationery donation drive with the help of TAG - The Artists' Group, and their Marquee event, in collaboration with Khula Aasman and Science Activity Center, held an open painting competition for students of all ages! Apart from these, they also held CellPaint and Blender workshops, with the help of Science Media Center, for students interested in Scientific illustration.

- Sultan Nazir

Aakashganga

On a clear moonless night, Aakashganga is armed with its telescopes to observe the magnificent starlit sky, come what may. From telescope building sessions to regular skywatching nights, be it in front of LHC or the Amphitheatre, this semester has been pretty action-packed for the club. Its events included talks by eminent professors from IUCAA and NCRA, not to forget the enthusiastic inputs by our very own

students on General Relativity and Supernovae in the form of Frequent Astronomy Discussions (FADs). The semester culminated with an amazing night trek to Visapur Fort. After an exhausting climb that lasted for nearly four hours, the limitless night sky studded with shimmering stars that greeted us proved to be worth the sweat.

- Neev Shah

The Lesser Equal

The Lesser Equal series, a Bookworm's initiative was a set of enlightening talks and discussions around feminism and the struggle for equality, commemorating the centennial of Women's Suffrage in America. It covered the early fight for suffrage in its various forms, as well as the later Second and Third Wave movements. It also included informal discussions about contemporary feminism and representations of women in literature and poetry.

Illustration by- Satavisha De

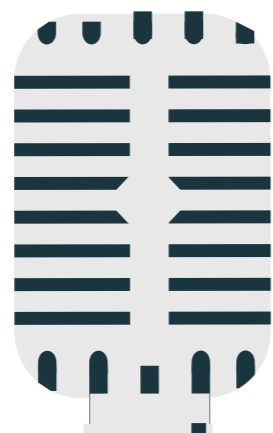
Speaker's forum

Launched on 22nd August 2019, the Speakers' Forums are informal discussion forums, overseen by a moderator, intended to spark conversations about significant issues. They serve to create an environment of honest expression and spread awareness about the topic. Several regularly spaced forums have been held on issues like Section 377, feminism, CAA and NRC, and Kashmir.

- Kunjal Parnami

Lit club

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हिन्दी क्लब

This year, the Hindi Club started by putting up a memorable show for Hindi Diwas which was celebrated for two days 13th & 14th September. The first day of the celebrations mainly consisted of competitions ranging from poetry, shayari, short story writing to poster making. The participants from all over the student community were seen putting their best foot forward, some looking to express themselves in their native tongue, while some looking to amend those broken connections, broken since their school days. The next day was devoted to uphold Hindi not only as a language but also the culture it's an indispensable part of. The audience witnessed some great music and dance performances and were moved by a beautifully put together (by the Drama Club) play 'Khol do', written by Saadat Hasan Manto. The club then kept meeting on a monthly basis, sharing poetry and verses written by themselves or discovered by them in 'Kaavi Sammelan' and 'poetry nights'.

Summer of '19

Harini Sudha J G , BSMS 1st year, Understanding the locomotion of C. elegans using a neuromuscular model
Sitabhra Sinha, Institute of Mathematical Science
Cular model

Thejas C.S., BSMS 3rd year, Adv. LIGO Laser stabilisation and fused silica suspension system
Prof. Giles Hammond, University of Glasgow

Nikhil Gupta, BSMS 4th year, Ramification in Local Fields
Prof. Laurent Berger, ENS de Lyon

Writam Sinha Roy Choudhuri, BSMS 4th year, Synthesis of Intermediate Compounds for Total Synthesis of Tricyclic Diterpenoids
Prof. Pavel Nagorny, University of Michigan

Kshitij Deshpande, BSMS 2nd year, Catalytic methods of glycosylation
Prof. Srinivas Hotha, IISER Pune

Rajdip Sarkar, BSMS 2nd year, Magnetic properties of thin conducting sheets
Dr. Satish Chandra Ogale, IISER Pune

Samarendra Pani, BSMS 2nd year, Investigating the regulatory role of histone acetyltransferase PfGCN5 under nutrient stress in P. falciparum
Dr. Krishanpal Karmodiya, IISER Pune

Aishwarya Singh, BSMS 1st year, Quantum chemistry
Professor Balanarayan, IISER Mohali

LApurva Saha, BSMS 3rd year, Determining the Mechanism of FMN2 Mediated Nuclear Actin Reorganization in Response to DNA Damage
Dr. Mayurika Lahiri, IISER Pune

Rishabh singhal, BSMS 3rd year, Place cells in intermediate hippocampus
Dr. Brendon Watson, University of Michigan

Sankalp Choudhuri, BSMS 3rd year, Materials in Crackle Pattern and Unidirectional Strain Sensors,
Prof Giridhar Kulkarni Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) and Centre for Nano and Soft Matter Sciences (CeNS), Bangalore, India

Hassan Yazdani, BSMS 3rd year, Sub-Micron thick metasurfaces and their effect on incident light
Prof. R Vijaya, IIT Kanpur

Raghavendra Meena, BSMS 4th year, Magnetic properties of Zigzag graphene nanoribbons
Prof. Prasenjit Ghosh IISER Pune

Soubhadra Maiti, BSMS 2nd year, Quasinormal mode analysis of Black hole
Dr. Sumanta Chakrabarty, Indian Association for the Cultivation of Science, Kolkata

sourajit saho, BSMS 2nd year, Petrography and geochemistry of the Kuh-e-Som pyroclastic monogenetic cone in Makran Chagai Volcanic arc, South-Eastern Baluchestan, Iran
Dr Raymond A Duraiswamy, Savitribai Phule Pune University

Satyam Saurabh, BSMS 3rd year, Design, Synthesis and Characterization of Various MOF Derived Composite Materials
Dr. Sujit K. Ghosh IISER, Pune

Chinmay Patwardhan, BSMS 1st year, Applications of Coupled Oscillatory Networks
Collins Assisi, IISER Pune

RESHMA REJI, BSMS 2nd year, Design and synthesis of glucuronic acid building blocks
Dr. Raghavendra Kikkeri, IISER PUNE

Deepshikha Sen, BSMS 3rd year, Anemotaxis in mice
Dr Nixon Abraham, IISER Pune

Simantini Paul, BSMS 2nd year, Structure of Polymers at Spherical Interfaces using Density Functional Theory and Monte Carlo Simulations
Chandra N Patra, Bhabha Atomic Research Centre (BARC), Mumbai

Yogeshraj Nambisan, BSMS 2nd year, Study of Anisotropic Flow in pp collisions at 13 TeV
Dr. Sudipan De, NISER, Bhubaneswar

Sagnik Ghosh, BSMS 3rd year, Dynamics of Quantum Superfluid of Light in a Disorder Potential
Quentin Gloreux, Labrotoire Kastler Brossel, ENS-Sorbone Universite-College de France, Paris

Sujay Paranjape, BSMS 3rd year, Effects of Dicamba on agricultural weed communities
Dr. Regina Baucom, University of Michigan

Akshay Shanbhag, BSMS 1st year, Database Connectivity in Python (Worked alone with help of internet)
IISER Pune

Chitvan Chandolia, BSMS 3rd year, Tauopathies in Drosophila
Dr. Surajit Sarkar, Delhi University, South Campus

Shriya Hirve, BSMS 3rd year, Inhomogeneous Cosmology
Prof. Thomas Buchert, ENS Lyon, France

Omkar Joshi, BSMS 3rd year, The Activation Kinetics of and downstream Gene Regulation by Notch3 Signalling Pathway in Ovarian Cancer Cells
Dr. Pritha Ray, Advanced Center for Treatment, Research and Education in Cancer (ACTREC)

SPIC MACAY



SPICMACAY (The Society for the Promotion of Indian Classical Music And Culture Amongst Youth) is a nationwide non-profit organization that aims at popularizing Indian culture by organizing classical music and dance concerts, workshops and lecture demonstrations.

The SPICMACAY sub-chapter at IISER was able to successfully conduct numerous events these two semesters thanks to the tireless work done by all the volunteers and the prompt sanctioning of the budget by the institute.

The August semester kick started with a Hindustani vocal concert by Kaivalyakumar Gurav on the 24th of August. This event was followed by another interactive vocal recital by Nagaraj Havaladar on the 8th of September. The movie-"The Making of the Mahatma" directed by Shyam Benegal was screened on the occasion of Gandhi Jayanti. Our next event took place on 31st October when we invited Ashok Rane, the director of the movie-"Anthony Gonsalves...The Music Legend" for a screening of the movie and an interactive session on the Goan music arranger who was instrumental in



“ A grand **Hindustani Violin Concert** by Padma Bhushan Dr. N Rajam on 10th November, 2019 ”

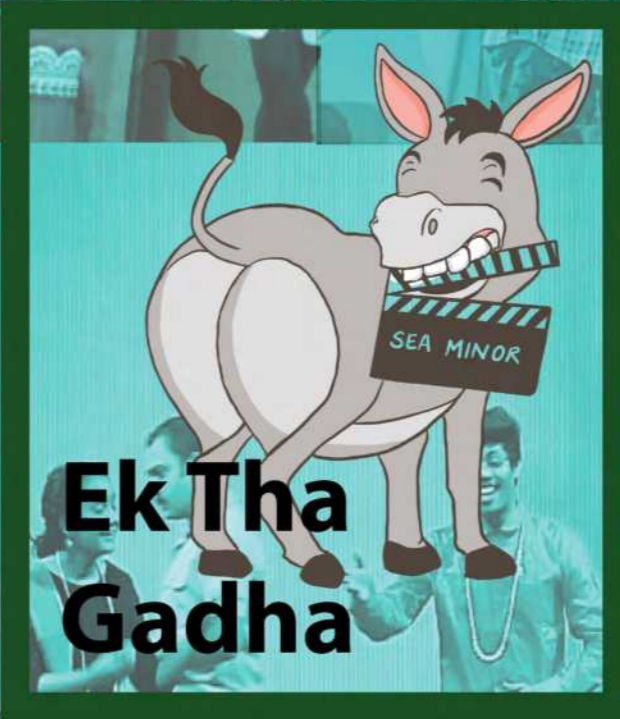
developing Bollywood music. The next event organized by us was a grand Hindustani Violin Concert by Padma Bhushan Dr. N Rajam on 10th November, 2019. This concert witnessed enormous crowds and it has by far been the only time I have seen CV Raman Auditorium be filled to its maximum capacity.

The next event, dubbed as "Parijaat: Music of the Night" was an overnight concert featuring one dance and four musical performances by some world-class artists. The event started at 9:00PM on 7th February, 2020 and went on till 5:00AM the next day. I attribute the success of this concert to the efficient volunteer force that worked the entire night to ensure a glitch-free experience.

- S.Rohan



Sea Minor, over the years, has evolved into a grand yearly production by the students of IISER Pune which displays a magnificent amalgamation of drama, music, dance, art and literature. After directing grand productions like 'Aaina' and 'Naqaab', our director, Dr. Amogh Aparna Maheshchandra took up the grave responsibility of congregating a huge team of around seventy proficient students to present a rendition of the play 'Ek Tha Gadha, urf Aladad Khan' penned by the famous playwright, Sharad Joshi. After a tumultuous effort of four months, we staged the first show in IISER Pune which was graced by the presence of Neha Sharad, the daughter of the playwright, who duly appreciated our efforts.



This time we took the production outside IISER and staged it in prominent auditoriums in Pune. We got the exclusive opportunity to perform in Jyotsna Bhole which is associated with the deemed Maharashtra Cultural Centre. Following this, we staged our third and final show at Pandit Bhimsen Joshi Kalamandir in Aundh. Both the shows were appreciated by theatre lovers all across Pune, especially since it showcased the talents of the students pursuing science.

- Sukanya Chakraborty

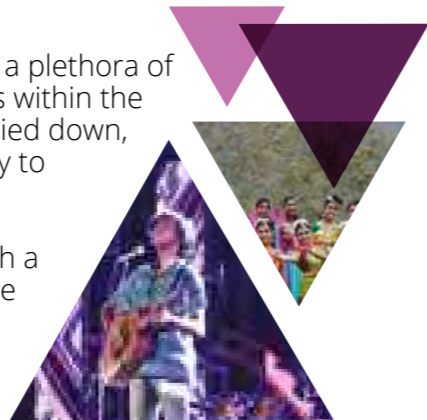


Sea Minor

This winter break, right after an exhausting Fall 2019 semester, had a plethora of events lined up for us to exhibit our mettle and earn bragging rights within the IISER community. Before the excitement in the air from IISM 2019 died down, the first-ever contingent from IISER Pune set out on a scenic journey to participate in the 2nd Inter IISER Cultural Meet, held in IISER Thiruvananthapuram.

Reaching the campus at 11:30 pm in the night, we were greeted with a cool breeze and warm food as we walked into this retreat amidst the lap of nature. The first impressions of this place were nothing short of heavenly - pretty much like the rest of the carnival, kudos to the organizers.

The event kicked off with the General Quiz, where one of our teams had a (very) close shave from the finals. Next up was the Opening Ceremony, where an energetic crowd from all the premier science institutions in India was subjected to visual and sensory treats through enthralling cultural performances. And it kept getting better, as Battle of Bands & Mudra (Group Dance) kept the audience captivated late into the night. The best of all, you ask? Those unbounded leaps of joy when our band was adjudged the runner-up in Battle of Bands.



In no time, we were into Day 2, which had exciting events lined up throughout the day - Debate, Synchro, Footloose, Short story-writing, Face Painting, Vyaktitva, JAM, and whatnot ! Our contingent made us all proud by putting up strong performances in each of these events. Then came the biggest surprise. That evening had in store the moment of jubilation for all of us - being arbitrated the Champions in the Drama event! As a cherry on top, Shrihar Kanikar (BS-MS 2nd year) brought even more laurels by winning the Best Actor award.

All the mad rush over the past three days culminated in the concluding day, which started with Aalap (duet singing), an exhibit of soul-soothing melodious voices. Next up were Short Film screening & Interactive Session - where new, everlasting friendships were forged. Finally, the tipping point of this fest was reached in the closing ceremony with a captivating performance by the band "When Chai Met Toast", followed up by the Prize Distribution. While we keep relishing the fond memories that we made here, let's all gear up for the upcoming edition - there's no one stopping us from being the overall champions next year!

- Amitaprajna Mallik



IISM



2019



Who doesn't love the frolicsome atmosphere of a sports meet? The Inter IISER Sports Meet (IISM) 2019 was hosted by IISER Pune, and it was a highlight of the fall semester — everyday, players would be seen practicing for their respective sport with a lot of energy, hard work and enthusiasm. The contingents of the 10 participating colleges arrived on campus on the 8th of December and were treated hospitably. On the 9th of December, the Director declared the meet open after the March Past by the sportspersons. With the commencement of the event, every athlete was seen putting their best foot forward, and the energy was at its peak when the crowds cheered for their teams. Sportsmanship and chivalry worked hand in hand over the course of 5 days as participants from different colleges interacted with each other. While the overall Championship Trophy was picked up by IISER Bhopal, IISER Kolkata received the Best March Past trophy, and IISER Trivandrum won the Champions Trophy for Athletics. The meet drew to a close with a gala dinner and DJ night where all the participants celebrated their hard work of the past months.

- Akshata Kotwal



Institute	Gold	Silver	Bronze	Fourth	Points
IISER Bhopal	11	4	3	3	2400
IISER TVM	5	5	9	6	2320
IISER Tirupati	2	5	4	5	1320
IISER Pune	4	5	3	1	1180
IISER Kolkata	0	4	2	7	1000
IISER Mohali	2	1	3	3	780
IISc	3	0	0	2	380
NISER	0	2	2	2	360
IISER BHM	1	1	0	0	180
CEBS	0	2	0	0	160



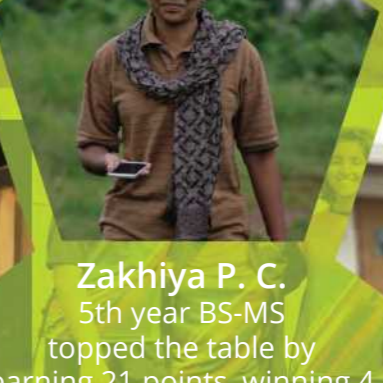
Yuvraj Date
5th year BS-MS earned a total of 13 points winning 2 golds and 1 silver



S. Santhosh
5th year BS-MS, earned a total of 13 points, winning 2 golds and 1 silver



Deepak Sharma
final year Int.Ph.D. earned a total of 8 points bagging 1 gold and 1 silver



Zakhya P. C.
5th year BS-MS topped the table by earning 21 points, winning 4 golds and 1 bronze



Advait Phanse
final year Ph.D. earned a total of 8 points, winning 1 gold and 1 silver

IISER Blues



Disha, IISER Pune's social club, aims to increase the circumference of quality education around IISER. Being an integral part of Disha, Mindspark has a substantial impact on this initiative. Mindspark focuses on providing quality education to enthusiastic students of the 8th standard, which can be considered one of the most crucial years of their lives..

Students from municipality schools of Pune come to IISER every weekend for Mindspark sessions. They are taught some basic concepts in Mathematics, English, and General Sciences by student volunteers from IISER Pune. The method of teaching adopted by the students for these kids makes this learning experience unique. The primary goal of this enterprise is to include activities in the teaching-learning process, and to make their young minds curious about how and why things happen. Moreover, students are encouraged to ask questions, and their doubts are clarified completely. Hence it not only makes this activity a fun experience for students but also helps them understand concepts in a brighter way.

- Atharva Bhide



Disha

Abhyasika is a nearly ten-year-old family that intends to bring together a bunch of kids from Lamaanvasti and educate them to the best of our capabilities. Every day, a few people from our thirty-five member volunteer group would go to the community hall in the vasti, where we taught the kids everything- from subjects like Math and English to Environmental Science - in the hope that they would break through the shackles holding them down and reach out for the stars. It was an immensely heart-warming experience for all of us to see these children grow up to be more eager and passionate about the outside world, and be more open and ready towards facing the obstacles on the way.

-Ashli Jain



mimamsa 2020



What does it take to create India's largest student-run undergraduate science challenge? A handful of crystal-clear concepts, a spoonful of guidance and a dash of self-belief. IISER-Pune's Mimamsa started out as a competition only for Pune-kars, and has slowly, but surely, carved a name for itself in the undergraduate science community of India. Mimamsa only demands a knowledge of concepts learnt till 12th grade; the essence of the challenge is in using these to critically deconstruct the mind-boggling questions posed. There are four question-making teams, one each for Physics, Chemistry, Maths and Biology. The 2020 edition also saw several major administrative changes - the most important of these being joining hands with Praj Enterprises to make the event even bigger than it has ever been. It also saw the highest ever registration count, with 900+ teams of four students each from across the nation and most centres hitting a record turnout. Although 20 centres were initially planned (Jaipur, Nagpur, Goa and Ahmedabad being the new additions), a very large number of registrations from Hyderabad led to the introduction of the 21st centre at Nalgonda nearby. Prelims was successfully conducted on the 18th of January, and after an intense night of correcting the answer scripts one week later, we had our finalists - IIT Delhi, IIT Bombay, IISc Bangalore and IISER Kolkata. The fab four shall duel for the crown on the 21st and 22nd of March. Alas, Kalpa has her own deadlines to keep, so we shall carry the news of the victors in the subsequent edition.

- Ipsa Bezbarua

IISER Pune has been ranked twentieth in a list of top Young Universities in the world published by the prestigious Nature Index. The Index classifies institutions younger than fifty years in this category. Of the ten Indian institutes which have made it to the top 100 Young Universities list, **IISER Pune is second after Homi Bhabha National Institute, Mumbai.** Four other IISERs are also featured in the list.

Dr. Siddhesh Kamat is the Assistant Professor in Biology at IISER Pune and Wellcome-DBT IA Fellow, has been selected for the **UAA-ICT Distinguished Alumnus Award in the Young Achiever category for the year 2019.** Dr. Siddhesh Kamat's group studies biological processes involved in lipid signalling and metabolism. The group employs chemical probes in conjunction with advanced mass spectrometry based metabolomics and proteomics techniques.



He has been selected as European Molecular Biology Organisation (EMBO)'s **Young Investigator** for four years starting January 2020. He is one of 27 life scientists from across the globe chosen for this award.

INSA Young scientist medal to Dr. Siddhesh Kamat Jul 27, 2019. His medal citation reads "Dr. Kamatb has uncovered lipid changes in PHARC human disease where he showed important changes in lipase function. Currently he is mapping lipid epoxide changes during cellular oxidative stress. His collaborative help is significantly contributing in their areas of work involving lipid vesicle recycling and proteome charges."

Prime Minister Research Fellowship

Three IISER Pune students are among those selected for the Prime Minister's Research Fellowship (PMRF). Our congratulations to BS MS student Kumar **Aanjaneya Ajay** an Integrated PhD students **Priya Batra and Rituparna Ghosh** on their selection for this prestigious fellowship.



Prof. Shyam Rai has been selected to receive the **Profesor Naha Memorial Medal for 2019** by the Indian National Science Academy (INSA), New Delhi.

Prof. Sanjeev Galande (Professor, Biology and Dean, Research & Development) is one of the awardees of the prestigious **J. C. Bose National Fellowship for 2019.** Prof. Galande is among the thirteen awardees of the J. C. Bose National Fellowship declared in July 2019.



Dr Saikrishnan Kayarat, Associate Professor in Biology at IISER Pune, has won the Department of Biotechnology (DBT), Govt. of India's **S. Ramachandran National Bioscience Award** for Career Development for the year 2019.

Dr Saikrishnan Kayarat, Associate Professor in Biology at IISER Pune, has been selected for CSIR's **Shanti Swarup Bhatnagar Prize** in the area of Biological Sciences for the year 2019.

Dr Kayarat is one of the two winners of the Prize this year in the Biological Sciences discipline. A total of 12 scientists and technologists have been chosen for the 2019 Prize.

Dr Kayarat works on understanding the molecular mechanism of how complex enzymes coordinate their action employing the tools of structural biology, biochemistry and biophysics. His group's studies on an enzyme that can cut DNA have revealed a new mechanism of double-strand DNA-break formation.

Congratulations to Dr Saikrishnan Kayarat on winning the Bhatnagar Prize!

IISER in

The Prime Minister visits IISER Pune

Honorable Prime Minister of India Shri Narendra Modi visited IISER Pune and met with some of the faculty members and students in a brief but highly interactive gathering. IISER Pune Director Prof Jayant Udgaonkar presented an overview of the institute profile outlining the institute's objectives, achievements, and aspirations. He also spoke about the importance of basic science in paving the way for new discoveries and developments that have a broad impact the society. The research areas that were presented included energy and materials, antimicrobial resistance, embryo development, the epigenetics of malnutrition, mathematical finance, climate science, natural resource mapping and activities of LIGO-India. The Prime Minister then visited two research facilities on the campus: the supercomputer facility **PARAM Brahma** that is



being deployed at the institute by C-DAC through the National Supercomputing Mission: and the NMR facility that helps researchers determine molecular structure and enables quantum computing.



IISER Pune has been **ranked 23** in the overall category of the 2019 National Institutional Ranking Framework (NIRF) India Rankings.



Dr. Sujit K. Ghosh and Dr. Angshuman Nag have both been chosen to receive the **Materials Research Society of India (MRSI)'s Medals for 2020.**

Dr. Sujit K. Ghosh's group works on the development and functional studies of various advanced microporous materials for applications in the chemical industry, energy and environment sectors. Dr. Angshuman Nag's group is developing functional inorganic materials using solution processed semiconductor nanocrystal modules. The group's work involves material design, photophysics, and prototype device fabrication.



Prof. LS Shashidhara has been elected as **President of the International Union of Biological Sciences (IUBS).** The announcement was made at General Assembly of the Union which took place this week at Oslo, Norway where the new Executive Council of the Union was chosen. His term will be for the next three years.



IISER Pune faculty member Dr. R. Vaidhyanathan's work has been granted a **US patent for the preparation of a covalent organic framework (COF)** that can serve as an electrocatalyst to split water. The COFs prepared by Dr. Vaidhyanathan and team offer a promising alternative to some capping agents required for the relevant reaction and make the reaction significantly faster.



Dr. S. G. Srivatsan (Associate Professor, Chemistry) has been chosen to receive the **Chemical Research Society of India (CRSI)'s Bronze Medal for 2020.**

Exploring the Constitution

From the inception to the final draft

- Dr Pushkar Sohoni

Understanding the Council and the Constitution

What can the Council do or what can we do with the Council?

- Abhilash Kumar

From the inception to the final draft

A representative body to advocate students' interests and make them participants in the governance of the Indian Institute of Science Education and Research (IISER) Pune, was always mandated since the institution was set up. But it would take over a decade to formalise it when the student strength reached a critical mass. The Director of IISER Pune, Prof. Jayant Udgaonkar, appointed a committee on 15th June 2018 to create a constitution for a proposed Student Council. This document would provide the framework for the Student Council to operate. Members of this committee were drawn from the faculty and staff of IISER Pune: Dr. Argha Bannerjee, Dr. Amrita Hazra, Ms Shanti Kalipatnapu, Dr. Sunil Mukhi, Dr. Suhita Nadkarni, Mr. Prabhas Patankar, Dr. Sudha Rajamani, Dr. Naresh Sharma, and Dr. Pushkar Sohoni (Convener). The two student representatives on the committee were Vibishan B. and Sandeep Varkey.

On 6th August 2018, students presented their proposals for a constitution of the Student Council in an open meeting. There was consensus amongst the students regarding what changes were required. This was followed by several months in which the draft constitution was discussed with various committees and faculty members who suggested amendments and changes. The students who put in great efforts towards the creation of a Constitution for the Student Council were Harsha M.B., Prajwal Udupa, Vibishan B. and Vishnu Vardhan. Their inputs were truly invaluable and their contribution towards the Student Council needs to be recognised. The final draft was prepared in February 2019 by after months of discussions with other students and faculty members. In March and April 2019, it was presented to the Committee for Student Affairs (COSA), and the Committee of Deans and Faculty Chairs (DFC); various other faculty members also deliberated upon it and all suggestions were considered and the changes were incorporated in the draft constitution. The Constitution of the Student Council was finally approved by the Board of Governors and issued as an Official Memorandum on 18th November 2019.

As this issue of Kalpa goes to press, elections are to be held on the 15th of February 2020 and one of the first issues to be deliberated by the new Student Council is to determine the calendar for the cycle of elections hereafter. We all hope to see increased student participation in the institution that belongs to us and is our collective responsibility.

Understanding the Council and the Constitution

The founding principles for the Council, as outlined in the Preamble of the Constitution, can be understood as Representation, Accountability, Transparency, and Decision Making.

To achieve these, the Constitution dictates the primary role of any member in the Council: membership in an Institute Committee to represent student interests. The Constitution lists 11 Committees (e.g. COSA, Dining Committee), into which the Council members will be elected through self-nomination followed by an internal vote within the Council. The Council will consist of a maximum of 30 members, elected from two separate Electorates/Constituencies: a) BS-MS b) iPhD-PhD. The number of Council Members from each electorate will be proportional to the number of students in the respective Constituencies. The Candidate with the highest vote share will assume the position of General Secretary, who is to coordinate discussions and meetings.

The Elections adopt a Single Transferable Vote system, wherein every voter will not merely cast a vote to their favourite candidate, but rank the list of candidates in order of their preference. This is intended to allow diversity. The number of votes to get elected is determined by dividing the Total votes within an electorate by the number of Representatives (plus one, simply to determine the minimum number of votes) for that electorate (One more than the resulting number, to be precise). The candidate with the least votes is eliminated and the second preference of all the voters to this candidate is considered. This is repeated till all seats are filled.

What can the Council do or what can we do with the Council?

While issues that hinder student life continue to exist, it would be conducive if communication with appropriate authority was made easier and was given a structure and regularity in a manner that issues can be systematically handled. A democratically elected Council of student members is a perfect structure to do precisely this. However, one must understand that while the Council will be able to handle issues that arise, it also has the capacity to legislate by virtue of being an elected body. This dual dimension of the Council is not to be ignored and is enshrined in the foundations of the Student Council by the Preamble that calls for active participation in Decision-making and self-administration. Simply put, by electing members to Committees, the Student Representatives are themselves a part of the Administration and are not independent mediators. The Council does not act as a pressurizing body to the Administration, but a constructive medium for decisions influencing student life.

These substantial powers and responsibilities are often missed while we think about what the Council can achieve. One must realise that the repair of a lift is a mere phone call, but to address mental health issues on campus requires data collection, deliberation and arrival at a solution. This will allow us to realise our full potential, well over and above the minimum of resolving complaints.

Some thought would lead us to a realisation that most problems are fallouts of Policy failure or inadequacy. It is crucial, as the first voters, to develop a culture of a Policy-making Council which will also not compromise on everyday needs and complaints of the Student Body.

“I’d like to get back to my playing routine”



Dr Saikrishnan Kayarat, IISER’s Bhatnagar awardee of this year, opens up before Kalpa... shares how societal pressure for pursuing mainstream engineering or medical was even more in his times, and how a BSc in Physics eventually helped in Biology!

You recently won the Shanti Swaroop Bhatnagar prize, what does it feel like to win the highest award a scientist can get in India?

Getting that award is something that is quite desirable, something that scientists in India aspire to. And it’s a great feeling. And in particular because the science that we are doing in the laboratory is being recognised for its quality. Being Scientists what we want is recognition for the science that we do. Most of our work is driven by students. Be it graduate students or the undergrad BS-MS students. So, it’s an important recognition of the hard work that they are putting in. I think both these aspects have been recognized which makes us feel very happy. It is also important because now it is acting as a motivation for us to achieve better heights

You did your BSc. in physics and then went on to do master’s in Biology. What made you shift? What attracted you to Biology?

My fascination for biology precedes my fascination for Physics. My brother and sister both did their bachelors in Biology and my brother subsequently went on to do a PhD in Life Sciences. And so there was a condition in the household that I got to read books that were more towards biology than any other thing. I went to a college, where I did a bachelor’s in physics because the physics department was reputed there. I find that it was a good foundation that was laid, learning physics, because I think everything that matters in the end is how molecules interact with one another and that governs all the aspects at different levels, and what we know of biology. So, the foundations of the bachelors I did in Physics have always been helpful.

What was your upbringing like? Was it considered good to get into the sciences? What was the environment at home like? You mentioned that your siblings also got into the sciences. I think that the societal pressure to do engineering or medicine was possibly even more when I was doing my studies. I don’t know how it is now. Because you have many more options. You have master’s in business administration...

We have institutions like IISER

Yeah, you have IISERs now coming up which are going to attract a lot of masses which have already started flourishing. So there are many more I think fields of livelihood that are being recognized as something that students or kids should look at. But when I was a student possibly engineering and medicine were the primary goals amongst students. But my parents...uhh we didn’t have a house where we talked about science or anything, it was a normal upbringing. My parents weren’t in any way involved in science, but I think they were very open minded and they gave us complete freedom to do whatever we wanted. They thought that education is most important. And as I said I was influenced by my siblings doing sciences, and I just continued what they did.

It’s been 10 years since you have been here at IISER. How has this institution evolved according to you?

I think my growth has basically been a reflection of the growth of IISER Pune. Whatever growth I that I have had in my career is a result of the enormous growth that IISER has seen over the last 10 years. And when I started here a few years later, by then it has established itself, it had been 3-4 years. Then we were at an ad-hoc place in Pashan. I think the institute was built with a clear plan. It was very clear from the beginning that the main agenda, the driving motive, was to achieve greater heights, achieve perfection in whatever one may dream. That has been the aim, and that has what has driven the institute so far.

What does your daily schedule look like? What does the schedule of a structural biologist look like?

It can vary from lab to lab and from person to person, because an individual has their own habit of how to go about a day’s routine. My day in the lab begins at around 8.30-8.45 and I just talk to students who are around and get an update on what is happening, share thoughts and then we keep going with the day’s schedule, which could include speaking to other students, taking classes, handling administrative work for the institute. So, all of this put together is what constitutes my day.

What do you do to unwind, to relax in your leisurely time? What are your interests other than biology?

I like to watch movies. In the small screen, on TV. But if given the time I prefer to watch movies on IMAX, if it’s a 3D movie. Some good quality movie. The last one that I watched was Guillermo del Toro’s The Shape of Water. That was something that really was visually enticing to me. It’s not very frequent, but there are some good movies that come out. I am not a fan of the superhero movies of the comics. I haven’t watched any of them. Then I like to read news articles a lot, that’s something that keeps me connected to the outside world. Whenever time permits, I go through some preferred news rooms like BBC, the Hindu etc. There are some newspapers that I read very often online. I would like to get back to my playing routine. I used to play badminton and table tennis as a PhD student, but now I have been totally out of sync.

What’s your preferred choice of drink to keep yourself going? Tea or Coffee?

I prefer black coffee, otherwise tea is fine.



What do you look for in an undergrad student when they are applying to you for summer projects and such? What qualities do you look for in them?

I try to see if they are interested in the questions that we are asking. And often students come when they are in their third year. So, they are aware of the kind of experiments that we do. You have a very good program to get introduced to Python. There have been students who have developed their Python skills while working in my group. If they are interested in addressing the questions that we are asking, it doesn't matter whether they are already equipped to do it. Because it doesn't require you to be equipped. All you require is interest. Once you have the interest you will equip yourself to address the question.

What do you think are the key qualities in a good scientist? What would you suggest people aspiring to be good scientists to cultivate?

I would suggest that anything that they want to do as part of their career, they should check whether they are passionate about it. If you want to be a scientist, you should inherently get immersed in science. And there is nothing that will prevent you from being a good scientist. There are people who are amateur scientists who are as good or even better than professional scientists. So, it's all about what you enjoy the most.

Interviewer: Diyansh Gupta
Picture edited by: Pritam Pathak



Contributions



आज अचानक ...

आज एकटा मी जरी , सारे नव्याने आठवे मनी दाटले काहूर , आणि डोळ्यांत आसवे

ओढ पुन्हापुन्हा तुझी , आज दाटून ये मनी समजूत काढायला ना जिवलग कोणी

मनी सारखेच आज , प्रश्न साटून गं येती आज निसटून गेली , कधी कळलेली नाती

तरी पुन्हा एकदा, आज आपली भेट व्हावी आणि शब्दांची बंधने , मग झुगारून द्यावी

तेव्हा मागे सोडलेले सारे गवसेल पार माझ्या उजाड मनात , नव्या स्वप्नांना बहार

उमजले मला सारे, आता नाही हे होणार तुझ्या आठवणीतच मी विरून जाणार

तुझ्यासंगे घालवले क्षण मनी साठवले तुझ्या साथीनेच मला सर्वकाही सापडले

तुझ्या आठवणी खोल, हसू ओठावर आले का ग उदास मी होतो , आता सारे शांत झाले

नाहीस तू दूर, तू मनात मनात तुझे नाव माझ्या ठायी , प्रत्येक क्षणात

- Atharva Bhide

धूलिया वक्त

सफर में राहों की आस
जिंदगी गुजर के पास,
अभिलाषा का नया नायाब
अभी वक्त ही है ख्वाब ।

हम समुद्र में मझधार
नांव की है दरकार,
तरंग की वह तेज लहर
संस्मरण का दे गयी ज़हर ।

मन में बसी है ऐसी ज्वाला
जैसे दीपक तले होता उजाला
बंद हो गए मेरे नैना
बस परछाई है अब मेरा आईना ॥

मितभाषी की वह रेखा
खाई मनसा नहीं हुआ लेखा-जोखा,
बजे तमन्ना का एक ही गाना
गले में माला , हाथ में मधुशाला ॥

- Satyam Saurabh

অসত্য

বিদগ্ধ অস্ত্র শানায়, কারাগার দেয় মন্ত্রণা -
রক্ত শেখায় কূটনীতি-জোট, বিষাদ বিষের সান্ত্বনা ।
অস্ত্র যখন খুব ধারালো, নির্যাতিতার কলজে খায়,
শান্তি তখন যমদুয়ারে, হারিয়ে যাবার প্রতীক্ষায় ।
তারপরেই যে জন্ম নেয়, নিরোধকেও মানিয়ে হার,
আস্কালনের অঙ্ক-আচার , একুশ শতকের যন্ত্রণার ।
একটি কলম পড়েই থাকে, হাইড্রেন্টের গা ঘেঁষে,
শিউরে ওঠে দৃশ্য দেখে, ফুটপাতে লাল রঙ মেশে ।
আকাশ কেনো নীরব থাকে, কোথায় যত ন্যায়-সোপান?
বিশ্বনেতাই সঞ্জীবনী, সত্য শুধু ব্যর্থ গান ।

- Lubdhak Mondal

The c y c l o n e

What remains of the forty year old building
Painted the colour of coffee ice cream,
With striations of black cracking through
The quake-resistant walls?

What remains of the woman who sat reading
The little red book, dog-eared at page forty seven,
Waiting for her curry to heat up, and the rice to cook
And for her children to come home from the playground?

What remains of the swings,
Where countless girls have let their long hair ripple through the
benign winds,
Attempting to escape the gravitational pull
Of the strange mustached men who followed them home from
school

In a minivan with tinted windows, and waiting until the dark-
ness spread like a shroud over
Their backs, cloaking them from unwavering unwanted stares?

What remains of the fountain,
Long dry from drought - the stones
Sizzling under the heat

Of a monsoon that arrived bashfully
And left in equal hurry? All the men are gone;
Some from stepping onto a spark,
Some from the falling hoardings,
Others from trying to seek shelter
Under a bridge. But the trees

Are safe and greener, and the vines crawl
All over the forty year old building,
All over the woman and her red book

And the red blood, all over the children and the swings, now
peaceful upon the drowning soil,
All over the men and the hoardings,
And the neon lights, flickering feebly.

As the dust settles, the water-goddess
Looks hellward, and exclaims,

"I think this much will be enough for today,"
And she turns around and goes to sleep.
Her work is done. Tomorrow is the Fire's turn.

- Jane Doe

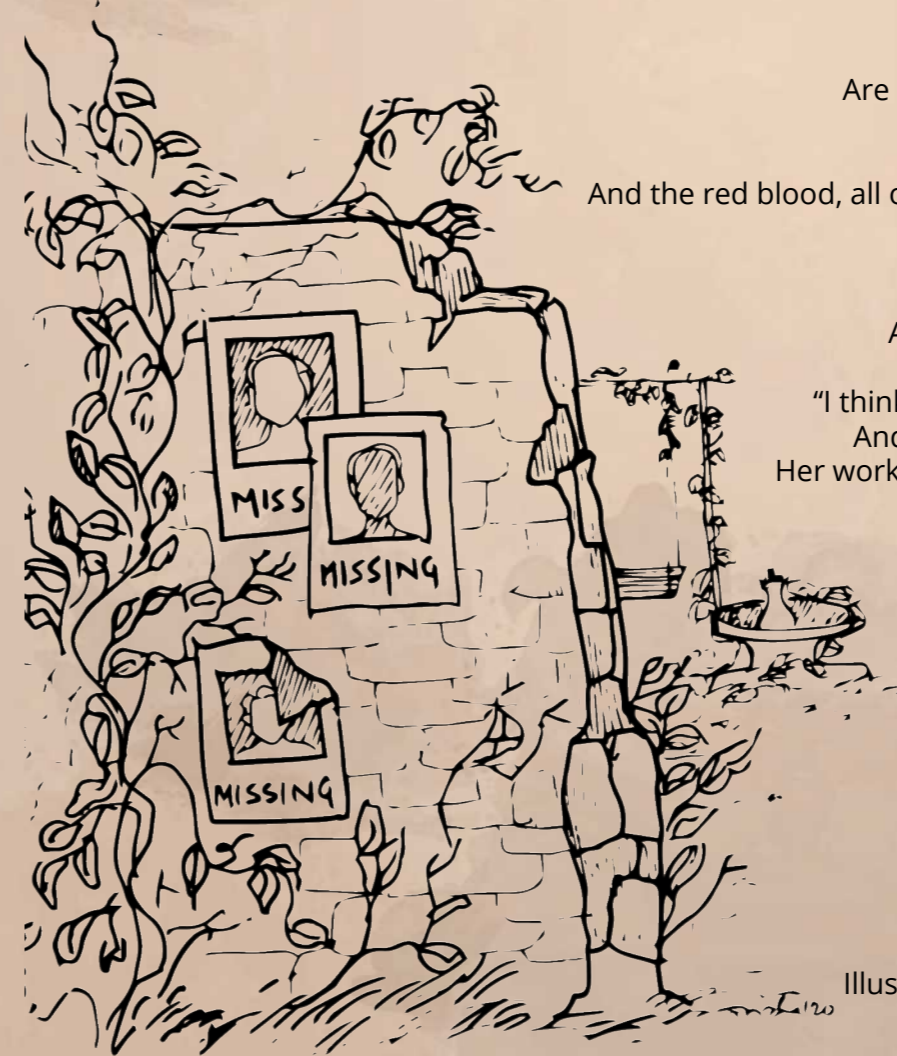


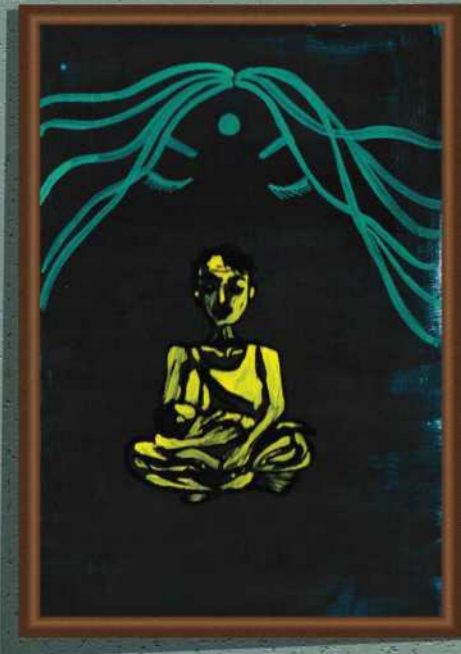
Illustration by- Devatrisha

Painkiller

A helpless infant meekly cries,
 people walk by, too busy to stop.
 A crippled widower with sunken eyes,
 waiting and wishing for his next meal.
 The curse of polio, a permanent limp.
 Should he beg, or should he steal?
 With cracked lips and parched throat,
 he carried the burden left by his wife.
 She had it easy, a cold night,
 a prolonged cough and she was gone.
 Leaving him with this child.
 How he wished he was the one.
 He let out a cough, with specks of blood.
 Not long now he thought with morbid curiosity,
 what might take him first? His hunger?
 His disease? Or would it be his thirst?
 What of his child then? Would it die too?
 Perhaps someone would finally open their eyes.
 See this orphaned child,
 Give it a new life, a safe home.
 Something more than he could provide.
 The shrieking child stopped his thoughts.
 He dragged himself to his little alley,



to his plastic tent "home sweet home".
 The little milk left, he fed his son.
 Another cough, he wasn't a coward.
 He would not wait for death like this,
 he was just vermin in this cruel world.
 Living each day, craving the sweet release of death.
 As he looked at his son, the only reminder of his loving wife,
 his confusions vanished.
 He knew what was to be done.
 A glint of metal and eyes closed,
 it was done so quickly.
 He could not bear to see, preferring his happy memories of his only son.
 All he could here were cries that faded with the wind.
 Now it was his turn, with breath held and racing heart and with all the courage he could muster,
 he plunged the knife.
 An electrifying pain, but he plunged again
 Repeatedly till his hands gave way.
 His mind went numb, only picturing his lovely family
 And everything was black and gone.



-Varna Shenoy

Illustrations by- Saanchi Thawani

രൂപങ്ങൾ

The story is about a common man, someone among us. But he is different, in the sense that he is searching for something, that others will not. One point in his life, he realizes that he had lost his identity, due to a lot of things that happened in the past. But he could notice that the world is becoming narrower. The story is about his struggle to break from that and attain his freedom from that system. But even after doing that, he fails. The internal conflicts are depicted as the madness of the outer world.

അവൻ കണ്ണാടിയിലേക്കുതന്നെ തുറിച്ചുനോക്കിക്കൊണ്ടിരുന്നു. അതിൽ പ്രത്യക്ഷമായിരിക്കുന്ന രൂപം കൂടുതൽ കൂടുതൽ അപരിചിതമാവുകയായിരുന്നു. ജീവിതത്തിൽ ആദ്യമായി ഏതോ ഒരു അതുടത വസ്തുവിനെ കണ്ടുപോലെ കണ്ണുകൾ അതിനെ അരിച്ചുപെറുക്കിക്കൊണ്ടിരുന്നു. പക്ഷെ ഒരിടത്തും അവ ഉടക്കിനിന്നില്ല.

“ആരാണു് നീ?”

മൂന്നുമായ നിശബ്ദതയിൽ പുതഞ്ഞുപോയ ആ ചോദ്യം ആർക്കോ തീരെ ദഹിച്ചില്ല. “ആരാണു് ഞാൻ?”

ഉത്തരമില്ലാത്ത എന്തിനോ വേണ്ടിയുള്ള ഒരു നിലവിളിയായി അത് പുറത്തുവന്നിരിക്കാം. കണ്ണാടിയുടെ വിരസമായ പ്രതലത്തിൽ അള്ളിപ്പിടിച്ചിരിക്കുന്ന തന്റെ കണ്ണുകളെ വലിച്ചുരിയെടുത്തു അവൻ അരണ്ട വെളിച്ചം പടർന്നുകിടക്കുന്ന ഇടനാഴിയിലേക്ക് കടന്നു.

അന്നാദ്യമായി ആ ഇടനാഴി വല്ലാതെ ഇടുങ്ങിയതായി അവനു തോന്നി. അവിടെ സാധാരണമായി കണ്ടിരുന്ന വെട്ടും അന്നില്ലായിരുന്നു. തന്റെ ചുറ്റും കാണുന്നവരോടൊക്കെ ഒരുതരം അപരിചിതത്വം തോന്നിക്കൊണ്ടിരുന്നു.

പെട്ടെന്നാണ് ഒരു രൂപം അവന്റെ മേൽ വന്നിടിച്ചതു.

“ഓ മനു നിയെങ്ങോട്ടാ പോവുന്നു?”

ആർക്കോ വേണ്ടി ഒരു ചോദ്യം എറിഞ്ഞുകൊടുത്തുകൊണ്ടു ആ രൂപം എങ്ങോട്ടോ പോയ് മറഞ്ഞു, അല്ല ഓടി ഒളിച്ചു. എന്തിനോ പിറകെയുള്ള ഓട്ടം. അയാൾ ആരാണു്?

ആരാണു് മനു? ഒന്നും അവനു മനസ്സിലായില്ല. ഒടുവിൽ ഇരുട്ടിൽ കണ്ണുകൾക്ക് തിരിച്ചറിവ് വന്നുതുടങ്ങിയപ്പോൾ കൂടുതൽ കൂടുതൽ രൂപങ്ങൾ കണ്ടുതുടങ്ങി.

അവയെല്ലാം ചാടുലമായി ഒരേ ദിശയിലേക്കു ചലിച്ചുകൊണ്ടിരുന്നു. എവിടെയോവച്ച് അവർ തമ്മിലുള്ള വ്യത്യസ്തം ഇല്ലാതായിക്കൊണ്ടിരുന്നു. എല്ലാത്തിനും ഒരേ മുഖം, ശരീരപ്രകൃതി.

ഒരു വിറയലോടെയല്ലാതെ അയാൾക്ക് തനിക്കു നേരെ വരുന്ന രൂപത്തെ നോക്കാനായില്ല. നേരത്തെ കണ്ണാടിയിൽ കണ്ട അതേ രൂപം. തന്റെ നേരെ ഒരു വേട്ട മൃഗത്തെ പോലെ അത് പാഞ്ഞടുക്കുകയാണെന്നു അയാൾ തിരിച്ചറിഞ്ഞു. പക്ഷെ ഒഴിഞ്ഞുമാറാനാകാത്തവിധം ആ പാത ഇടുങ്ങിച്ചോയിരുന്നു. അവനെയും

വലിച്ചുഴച്ചുകൊണ്ടു അത് മറ്റുള്ളവരോടൊപ്പം നീങ്ങാൻ തുടങ്ങി. എതിർ ദിശയിൽ നീങ്ങാൻ ശ്രമിച്ചെങ്കിലും തീരെ അശക്തമായിരുന്നു. ഒടുവിൽ ഒരു രോധനമായി ആ ശ്രമം മാറി. അത് ഒരു തരം വേദനയിൽ നിന്നുള്ളതായിരുന്നോ? എന്തായിരുന്നു അത്?

താൻ വലിച്ചുഴക്കപ്പെടുന്നില്ലെന്നു കണ്ടു അവൻ ഇറുക്കിയഅടച്ചിരുന്ന കണ്ണുകൾ തുറന്നു. താൻ രക്ഷപ്പെട്ടിരിക്കുന്നു! ചുറ്റും വ്യക്തമായ കാഴ്ച. ഇതുതന്നെ അവസരം. എന്തോ തിരയുന്ന ഒരുവനെ പോലെ അവൻ എതിർ ദിശയിലേക്കു കുതിച്ചു.

പക്ഷെ, അപ്പോഴേക്കും ആ രൂപങ്ങളുടെ കയ്യിൽ അവന്റെ ചിത്രങ്ങളും പ്രതിമകളും പ്രത്യക്ഷപ്പെടുത്തുടങ്ങിയിരുന്നു!

- SwaragT.



Cloud

Illustration by- Sanjana Vasanth

I used to love flying. There was a time when the attractiveness of the prospect of visiting a new place with a new culture and whatnot paled in comparison to the hurtling to and from it that capped its ends. Perhaps that was because the new place was always Mumbai and the new culture was

in fact my own, but that notwithstanding, air travel produced quantities of Pavlovian saliva in my buck-toothed mouth. It wasn't any specific aspect of the process that captured my fancy. Many of my peers would presumably crave for the window seat and perhaps cry waiting at the baggage carousel, but I had risen above their 33000 feet, so to speak. I enjoyed every moment of it, right from the ride to the airport, which was a cocktail of anticipation and heady excitement, to the ride back home or to my grandparents', where I would recall the hours gone by with eyes glazed over, with a degree of satisfaction that has eluded me since. The luxury and apparent sophistication of air travel were its most attractive features. The airport and the plane smelled it. The air

Nein

was cold, but mildly fragrant. I had to pee more often, but I didn't really mind. Window-shopping at fancy outlets and chuckling at the price tags was entertainment that only the airport could provide, and meticulous planning went into ensuring that we parked ourselves at the airport well in advance. Oh, did I mention the in-flight crew? Wispy water vapour superstructures be damned, I was there for the smiling lipstick-ed ladies and (non-lipstick-ed) gentlemen who called me Sir. For years, every insurance salesperson, holiday salesperson, investment salesperson, NGO volunteer and grandfather calling on the landline at home mistook my then girly voice for a girl's and finally, I was getting the respect I deserved. "Welcome, sir. Have a nice flight." "No, you have a nice flight, madam. Thank you. I will have a very nice flight now. You have a nice rest-of-your-life, in fact. Have it!" I don't mind telling you, a flight attendant asked me out once when I was thirteen. I declined, obviously. I would have to ask my mum and even so, a varying-distance relationship is always hard. Besides, she was pulling my leg. The pinnacle, the unchallenged highlight, of the whole affair was airline food. The silliness of the statement leaps out of the page, no doubt, but that is how it was. Recently, my brother and I flew with Vistara, and the level of interest with which we speculated upon the menu, the hushed whispers we screamed to each other when we saw the cart coming, the way we craned our necks to take one look at the sheer treat we were no doubt in for and the tingling anticipation we felt when the elegantly assembled trays were finally placed before us, was all a bit touching. I suppose that there is yet some hope for the child in me. However, my relationship with the Airline Industry didn't really, if you will pardon the expression, take flight, not in small part due to my considerable lengthening. Adolescence may not have made me stronger and sharper, but it made me conspicuously taller, and the Industry, which I had for years showered with

love and respect (and money) refused to make room for my legs. It's plain cruel. I don't need seat belts any more. My knees fasten me against the row in front more solidly than any silly belt can. The sight of my fellow passengers being able to shift weight, fidget, move around and Gawd! stretch their legs is more than I'd like to see, but I can't sleep either; my head and shoulders tower above the seat, so with my eyes closed and head thrown back in obvious but silent discomfort, I look rather like Stephen Hawking having a concussion. The reader has no doubt concluded from the previous passage that I am a spoiled child of the never-popular, ever-rich top-one-percent clan, that I have a remarkable aptitude for finding despondency in the sunniest of circumstances and that I am tall. The reader is not wrong, but the problem, however maddeningly trivial, exists. The only feasible solution, the emergency exit seat, costs a sizeable fraction of your ticket fare and all of your pride. The scorned lover is quick to find substantial flaws in his partner, and with my rose-tinted aviators off, shortcomings have become visible: for some time now, airlines have been cutting costs left, right and (for international flights) centre, becoming stingy with their wet face towels and dry goodie bags. Much has been said about the arrogance of low-cost fliers, who de-plane passengers who are microseconds too late for their sacred 25-minute razor-sharp cut-off. The newest addition to airline arrogance is the DIY airport, where the passenger is expected to print boarding passes and baggage tags, in addition to ensuring that he is completely free of (old) MacBooks, Note 7s, power banks (in check-in luggage), ganja and the expectation of comfortable travel. It is an unfortunate situation and as matters stand, a re-kindling of my old romance isn't on the cards. The Industry will continue moving towards more punctual and less loving operations and as a scientist, I probably won't be able to afford business class. At least that way, I will feel deserving of the peanuts that IndiGo will introduce, sans doubt, into its repertoire of decorated dry fruits, because I will be earning them.

-Aditya Kolhatkar

ଜୀବନ ନିରାଶର ସନନଶ

The contemporary world is witnessing new surges in intolerance, conflict, and terror. Not a very insignificant role in all this is played by widely circulated half-baked wisdom and lightning-fast judgments by keyboard warriors. Knowledge is the key to success, only if we know the right lock to put the key in. If we demarcate our lifespan, of say 100 years, into four distinct quarters, the first one, in which most of us are in right now, bears paramount importance in gaining the appropriate wisdom. These are the founding pillars of human life, which form the basis for the last three quarters. We need to know the secrets of the primordial essence, the meaning of life, the sorrows amidst happiness, the futility of wealth, the thread of success. This article aims to collect a few drops from the eternal springs of knowledge. Aim? Maybe to look deeper into our soul and help shape a good life.

ସାମାଜିକ ସମୟର ପରିବାର, ସମାଜ, ରାଷ୍ଟ୍ର ତଥା ସମଗ୍ର ବିଶ୍ୱର ଅସହିଷ୍ଣୁତା, ଶତତା, ଅଶାନ୍ତି, ସଂଘର୍ଷର ଆତତର ବାତାବରଣ ପ୍ରମାଣିତ। ଏ ସବୁର ମୁଖ୍ୟ କାରଣ ରହୁଛି ଆଜିର ବହୁଳ ପସାରିତ ଅଶୁଦ୍ଧ ଚିନ୍ତା ଓ ଅଶୁଦ୍ଧ ଜ୍ଞାନ । ଜ୍ଞାନ ହିଁ ଜୀବନର ନିୟମ ନକ । ଉପଯୁକ୍ତ ଶୁଦ୍ଧ ଜ୍ଞାନ ଅଜରନ କରିବା ପାଇଁ ଜୀବନ କାଳର ପଥନ ବିଦୁର୍ଥରାଂଶ ହିଁ ବହୁତ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ । ଜୀବନ କାଳକୁ ସାଧାରଣତଃ ୧୦୦ ବର୍ଷର ଅନୁଭବରୁ ପଥନ ୨୫ ବର୍ଷରୁ ଶୁଦ୍ଧ ଜ୍ଞାନ ଅଜରନର ପଦ୍ଧତି ସମୟ। ଏହାହିଁ ମାନବ ଜୀବନର ଭିତ୍ତି, ଯାହା ଉପରର ଜୀବନର ଅବଶିଷ୍ଟ ତିନିବହୁର୍ଥରାଂଶ ନିଭରଣଶୀଳ । ଏହି ଅବଧିରୁ ହଲ ବିଦାୟରା ଜୀବନ। ଏଥିରୁ କି ନିରନର କରଠାର ପରିଶମ ପ୍ରବରକ ନିଜର ଶାରୀରିକ, ମାନସିକ ଓ ଆତ୍ମିକ ରଯାଗାତ ବୃଦ୍ଧିନିମ ରନ ପଯତ କରର । ଶୁଦ୍ଧ ଜ୍ଞାନ ଅଜରନ ଅବସରରର ଆମକୁ ପାଥମିକ ସରରର, ଜୀବନର ଅଥର, ଆରମ୍ଭ ରକଉଁ ମାନତ୍ ନିକ ଟରର ରଷୀ, ଦୁଃଖ- ସୁଖର ସରୁପ, ପରରାପକାରିତା, ସତ୍ତ୍ୱ ମହତ, ଧନ- ସମତର ଅସାରତା, ସଫଳତାର ସୂତ ଆଦିକିଛି ଜାଣିବା ଦରକାର। ରକରତକ ସଂଗୃହୀତ ରମୌଳିକ ତତକ୍ତ୍ୱ ଏଠାରର ଅବତାରଷା କରାଗଲା । ଜୀବନ ନିମ ରାଷର ସରନଶ ଭାବରର । ଉରଦଶ ଭଲ ମସିଷ ନିମ ରାଷ। ଜୀବନରର ଖାଲି ସୁଖ ନଥାଏ। ଏଥିରର ତିକ ଓ ମଧୁର ଅନୁଭବ ପତିଦିନ ରହାଇ ଥାଏ। ଏସୁସମୟା ସହିତ ଲଜିଆରଗଲବାକୁ ରହୁର । ରକୌଷସିବସୁଯଦିମିଲିଲ । ନାହିଁ, ରତରବ ତା ପାଇଁ ଦୁଃଖ କର ନାହିଁ। ରକରବ ରକରବ ପରାଜୟ ପାଇଁ ବିପସୁତ ରୁହ, ସବୁରବରଲ ବିଜୟ। ରହୁଞ୍ଜା ସମବ ନୁରହୁଁ । ଜୀବନଟା ପିଆରନା ସଦୃଶ । ଧଳା ବଟନ ସୁଖ ସରୁପ ଓ କଳା ବଟନ ଦୁଃଖ ସରୁପା ଉଭୟ ବଟନକୁ ମିଶାଇ ବଜାଇରଲ ହିଁ ଜୀବନର ସଂଗୀତ ସୁନର ରହାଇ ଥାଏ। ଲପିତ ଓ ଅନୁକୂଳ ଅନୁଭୂତିକୁ ସୁଖ କହୁନା ଲତା କରାଯାଇନଥିବା ପତିକୂଳ ଉପଲବି ଓ ଅନୁଭୂତିକୁ ଦୁଃଖ କୁହାଯାଏ। ଦୁଃଖ ତିନି ପକାର। ନିଜ ତତି (ଅଜତା) ରୁପାପ ଦୁଃଖକୁ ଆଧାତ୍ମିକ ଦୁଃଖ କୁହାଯାଏ, ଯଥା: ନିଜ ର ଅସାବଧାନତା ରଯାଗ, ଜର, ସଦର, ବଦ ହଜମିଆଦି ଶାରୀରିକ ଅସୁସତା; ତଥା ଈଷରା-ରଦଷ- ରକାଧ ରହୁପାପ ମାନସିକ ଦୁଃଖ। ଅ ଗଣୁ, ପକୀ, ମନୁଷ୍ ଆଦିପାଷୀ ଦାରା ପାପ ଦୁଃଖକୁ ଆଧିନଭୌତିକ ଦୁଃଖ କହୁନା ପୃଥିବୀ, ଜଳ, ବାୟୁ, ସୁସ୍ଥ ଆଦିପାକୃତି କ ଦ୍ୱି ବସୁକାରଷରୁ ସୃଷ୍ଟ ଭୂମିକମ, ଅଂଶୁଘାତ, ବ୍ନା, ବାତା ଆଦି ବିପ ଯର୍ଯ୍ଯର ଦୁଃଖକୁ ଆଧିନଦୈବିକ କୁହ । ଯାଏ ଦୁଃଖ ରଯଭ

କାରଣରୁ ରହୁଉ ପରଛ ତାହାକୁ ରକହି ଆତୀୟକୁ ଜଷାଇ ରଦବା ଉଚିତ । ଏହା ଦାରା ମନ ହାଲୁକା ରହୁଞ୍ଜା ସହିତ ଦୁଃଖ ଦୂର ବିରହାଇ ଯାଇ ପାରର। ଅନୁ ଖୁସିର ଭାଗିଦାରୀ ନ ରହାଇ କାରଣ ରହବାକୁ ରତଷା କର। ଅନୁ ଦୁଃଖର କାରଣ ନ ରହାଇ ଭାଗିଦାରୀ ରହବାକୁ ବତୀ ହୁଆ ସତ୍ କହିବା ଦାରା ସବୁଠାରୁ ବଡ଼ ଲାଭ ହୁଏ ଏହା ରଯ ଆମକୁ ମରନରଖିବାକୁ ପରତ ନାହିଁରଯ ପୂବରରୁ କଷ କହିଥିରଲ । ନିଜ ର ଭୁଲରୁ ଶିକା ଗହଷ କରିବା ଅରପକା ଅନୁ ଭୁଲରୁ ଶିଖିବା ସହଜ ଅରଟ। ଆରମ୍ଭ ଅନୁାନଟର ଭୁଲରୁ ଶିଖିରନବା ଉଚିତ , କାରଣ ଆମକୁ ଏରତ ସମୟ ମିଲିବ ନାହିଁରଯ ଆରମ୍ଭ ସବୁଭୁଲ ନିରଜ କରିରସଥିରୁ ଶିଖିବା। କିକୁତାଗ କର ନାହିଁ, ସମତକୁତାଗ କରି ପାର। ଧନ- ସମତପାଇଁ କିସହ ସମକରଛିନ କରିବା ଅନୁଚିତ। ଧନ ଠାରୁ କିଅଧିକ ମୂଲ୍ୟାନା ଆନରିକତା ସହିତ ନିଜ ର ରଦାଷ -ଗୁଷ, ଭଲ-ମନ, ଶୁଭ- ଅଶୁଭ ବିଚାରକୁ ରଦଖିବା ଓ ଜାଣିବାକୁ ଆତ ନିରାକଷ କୁହା ଯାଏ। ଏହା ଦାରା କିନିଜର ରଦାଷକୁ ଦୂର କରିଗୁଷକୁ ହାସଲ କରିବାକୁ ସମଥର ହୁଏ । ସଂସାରରର ଜୁଗହୁଷ କରିଥିବା ପରତକ ମସିଷ ଉପରର ତିରନାଟିରଷ ଅଛି। ଯଥା:- (୧) ରୁଷିରଷ, (୨) ପିତୃ ରଷ ଓ (୩) ରଦବ ରଷ ଆଜିଆମର ଅଧୟନ ପାଇଁ ବହୁବିଧ ଜ୍ଞାନ , ବିଜ୍ଞାନ, ସହଜରର ଉପଲବ ଓ ଅଳ ପରିଶମିରର ଆରମ୍ଭ ବହୁଜ୍ଞାନ- ବିଜ୍ଞାନ ଲାଭ କରି ଉପକୃତ ରହାଇ ପାରୁରଛା ମାତ ଏହା ସମବ ରହାଇଛୁ ରୁଷି- ମନାଷୀ ଓ ରବୈଜାନିକ ମାରନ ରସମାନଟ ପରିଶମ ଲବ ଜାନକୁ ଅକାତରର ଆମ ମାନଟ ନିକଟରର ପହୁଞ୍ଚାଇବାର କସା କରିଆମର ତିର କ୍ଳାଷ ସାଧନ କରିଥିବାରୁ। ଏସୁରୁଷି-ମନାଷୀ- ରବୈଜାନିକ- ଗରବଷକ ଆଦିଟ ରଷ ଆମ ଉପରର ରୁଷିରଷ ରୁରପ ସବରଦା ରହିଛି। ବହୁକଷ ସୀକାର କରିମାତା- ପିତା ଆମକୁ ସଂସାରକୁ ଆସିଛୁନି: ଅସହାୟ ରଶେଶିବ ରର ଆମର ସବୁକାୟ କରିଛୁନି, ଖାଦ୍, ବସ, ଶିକା, ତିକିତା ଆଦିଯାବତୀୟ ଆବଶ୍ଯତା ବହୁବଷରପଯନି ପୂରଷ ପ୍ରବରକ ଆମର ପାଳନ- ରପାଷଷ କରିଛୁନି, ଆମକୁ ସଭୁ, ଶିକିତ, ସୁସଂସୃତ କରିବା ପାଇଁ ଅହନରଶ ପୟତ କରିଛୁନା ରତଷୁଆମ ଉପରର ତାଟର ରଯଭ ରଷ ଅଛିତାହା ହିଁ ପିତୃ ରଷ । ସତରର- ପିତା ମାତା ପରିଆଉ ରକ ଅଛି ସଂସାରର, ଧ୍ୱ ରସ ରଯ ଥାଏ ସଦା ତାଟରିରସବାରର ।

ସଂସାରରର ଜୀବନ ଧାରଣ କରିବା ପାଇଁ ଆମକୁ ଅରନକ ପଦାଥରର ଆବଶ୍ଯତା ରହାଇଥାଏ । ଆମ ଜୀବନକୁ ସୁଖ- ଶାନ୍ତିମୟ କରିବା ପାଇଁ ଈଶରଟ ଦାରା ସୁଷ ପୃଥିବୀ, ଜଳ, ଅଗ୍ନି, ବାୟୁ, ଆକାଶ, ସୁସ୍ଥ, ଚନ୍ଦ୍ର, ବୁଦ୍ଧ- ବନସତିଆଦି ଆମକୁ ବଂଚିବା ପାଇଁ ଆବଶ୍ଯ ଉପାଦାନ ରଯାଗାଇ ରଦଉଥିବାରୁ ଏମାନଙ୍କୁ ରଦବ ବା ରଦବତା (ରଦବାର ସାମଥ୍ୱ ଥିବାରୁ) ରବାଲିକୁହ । ଯାଏ । ଏ ସବୁରଦବତା ମାନଟ ଠାରୁ ଆମକୁ ମିଳୁଥିବା ସହାୟତା ଓ ଉପକାର ହିଁ ଆମ ଉପରର ' ରଦବ ରଷ' ଆକାରରର ରହୁ । ଏ ସମସ୍ତ ରଷକୁ ସବରଦା ସରଷ ରଖିତହିଁରୁ ମୁକ ରହବାକୁ ସତତ ପୟାସ କରିବା ଉଚିତ ।
ରଶଷରର:-
ଆଉ ରକହିଭଲ ରହୁଉ ବା ନ ରହୁଉ ନିଜ କୁମୁଭଲ କରିବଇଁ,
ଏହା ରହୁଉ ପତିପାଷର ଶପଥ ଜୀବରନ ସିଦିଲାଇ ପାଇ ।

- Amitaprajna Mallik

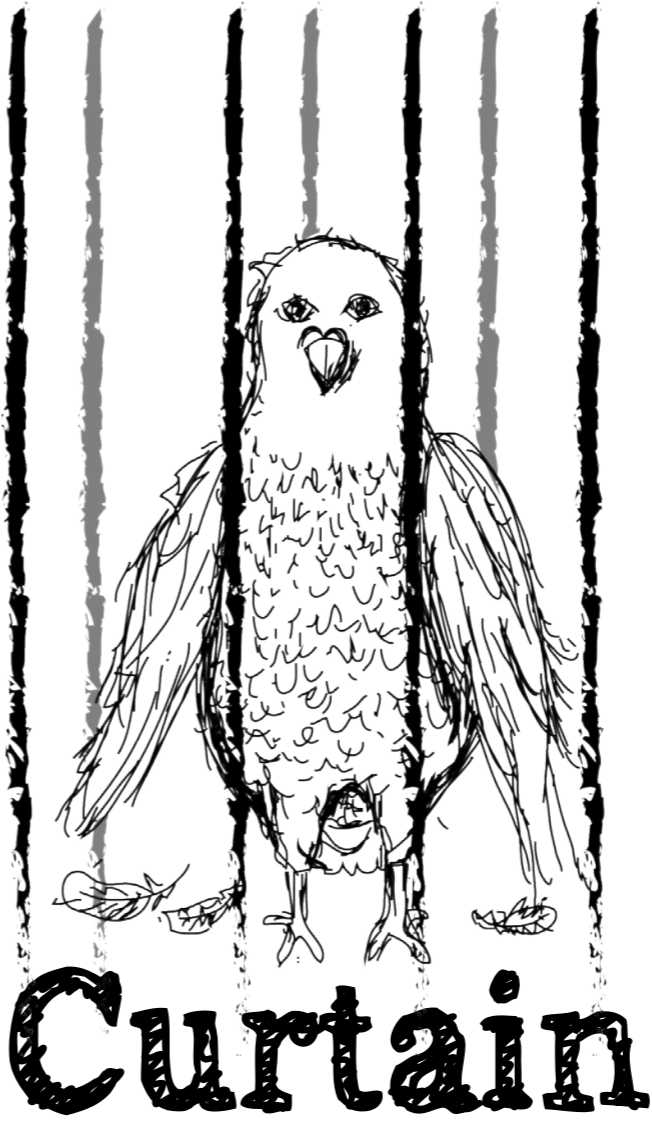
I was once a bird that never flew much
But managed to reach a decent height
The winds had been kind
And I had had (some) stamina
To many, it may've seemed
That I was poised for
A longer, nobler, skiey journey ahead
I, too, thought the sky was a nice place to
be
And I was, perhaps, right

Over time, some indolence took over
Did I forget what my altitude was?
I gradually built a cage around myself
And ever so deftly trapped myself in it
I suspect strongly that its bars
Were invisible to all those around
Except, of course, to me
The cage soon became a home

This was no ordinary cage, mind you
It stank of unambition, of a lack of stamina
And of cigarettes, to be sure
I should be glad that, at least
I did not encourage any other birds around
To emulate the mess that was I
Didn't they all realize this? Was it known
That I was not in possession of even
A microdrop of Felix Felicis?

I might well leave the cage someday
When, perhaps, the weather is more favor-
able
But I had also gradually clipped my own
wings
Which brings me to my question
Shall I fly – ever – again?

- Farhan S. Amin



Tummy Trouble

Recently, I skipped a period. My belly began to swell overnight. I fear that I will soon be the mother of a gas giant fathered by aloo, chana and rajma. I have become a balloon leaking at both ends. Flatulence has gone from occasional visitor to way of life. All this because of some fetish for foods that are the cycle pumps of the human tummy. My digestive tract and what goes through it controls every aspect of my waking hours, and some of my sleeping ones too. This is an ode to that divine mistress (mister? master?) that has my tongue enslaved and my stomach growling, and that dictates my physical, mental and emotional well-being. To say that I am a foodie is to say almost nothing. I don't just live to eat; I love, laugh, think, walk, talk, sing – even wake up in the morning, all because I know I will be get to eat. While food sustains my body, the thought of eating sustains my very existence.

I plan my day around food. I select three points of time that are uniformly distributed in my waking hours and assign a meal to each. This is to ensure that I am sufficiently hungry to enjoy all the food I consume, without ever being ravenous enough to push anything I deem non-poisonous down my throat. The finest pleasure in my life is to approach a table of well-prepared food, suitably famished, and rise from it with a full stomach, and not a morsel too many. This is the ideal I strive towards for all my meals. This the way I hope to live my life. If I exercise, it is to build this ideal hunger. If I immerse myself in any form of entertainment, it is to pass the time till that golden moment when my stomach is growling just the right amount. If I want to earn a living, it is to buy that amount of food that will just satiate me, without stretching out my stomach. This ideal influences every decision I make in my life.

My mother taught me that love can be expressed through food. I was fortunate enough to grow up without want, so I have never known what it is to starve. My mother always made sure to make me feel the abundance of food. Eating as slowly as possible,



- Megha Dinesh Bhat
Illustration by- Devatrisha

she always made sure I was full and proceeded to scrape the bottom of the vessel herself. She would never deny me any quantity of food, even if it was food she planned to eat herself. Of course she could eat it and make more for me; but her selfless behaviour in the matter of food was inspired purely by love for her child and not by any pragmatism. Therefore I tend to trust anybody who gives away their own food freely, for they can surely mean no harm. My reaction to anyone who takes from my plate is a big indicator of what I feel for them – if I am annoyed it means that I hardly care for them, and if I am benign I feel very warmly for them. Cooking is my hobby. I do not enjoy making fried, extremely spicy or junk food of any kind, because heavy-handedness with a popular ingredient is cooking's version of capitalism – lazy cooking that aims to sell. It needs no skill and rarely has much nutritional value. I enjoy knowing that I can feed myself healthy food and hence need no one to take care of me. It is the truest form of independence. Cooking for others has an altruistic feeling associated with it, and if they cannot cook, it feels like charity. All this is not to say that I do not enjoy cooking for the sake of it – I do. I love working with flavours and finding that perfect balance of savoury, sweet and tangy that defines every dish. I love getting the texture just right, so that the mouth can feel the goodness of the food as much as the tongue can taste it. I enjoy the whole process, even if a lot of it is monotonous labour. The thought of the finished product spurs me on.

Of course, what happens during and after digestion is also very important to me, and I always pray that everything goes smoothly. But to return to my gas issue: living off a mess has really taken its toll. Alas, the sacrifices one has to make for education's sake. The mess capitalizes on people's masochistic love for gassy ingredients and fiery masalas in oils. The blatantly unsubtle food upsets my gentle soul, and also my poor stomach, and now I walk around leaving a little bit of my gas wherever I go.

The Stone Pelter and the Flowers



Illustrations by- Sultan Nazir

Ten year old Azad spent most of his Saturday mornings pelting stones. It was not uncommon among the children in my neighbourhood, or in other parts of the Kashmir valley. But for a boy of his age, Azad was brilliant at it. "I am Islamabad's best." I had heard him proclaim more than once. "Is that so?" I had asked, "You must show me then." "I will show you, today." he had said with a familiar assertiveness in his tone that was dying out of most voices in Kashmir. He had held me by the cuff of my shirt and dragged with him to the nearest lake. Islamabad has many lakes, thus the origin of its alias Anantnag, which is Sanskrit for innumerable lakes. He stood at the confluence of the blue water and the grey pebbles and positioned himself appropriately. He scanned for his choice of weapon and picked up a flat pebble, turned to look at me to ensure that I was watching and then flung the stone on the cold water. The stone took four jumps on the surface of the

water, skipping across the lake before drowning near the opposite end.

My applause seemed to have proved rather valuable for since that day, Azad had come to me with numerous invitations of Skipping Stones contests. So when Azad came knocking on my door early today, I assumed it was for similar reasons. I had just left my bed and I made my way to the door rubbing my hands against each other to free them from their erstwhile coolth. Azad stood in front of me with his arms folded, the early morning sun glimmering on his dark right partitioned hair and the cold forcing his cheeks into a shade of pink. It was surprising that unlike what one would expect, he had not worn a thick woolen skull cap, and instead had chosen to leave his head exposed to the weather. Winter was not too close but Azad was already wearing a woolen Phiran. The long grey robe covered him from shoulder to toe such that his wrinkled cotton shirt was almost unseeable from outside.

"Another tournament?" I asked with awe on my face. The awe was not baseless. Islamabad and Kashmir had not been the same, the past fifty days or so. Curfews were in effect, and there was a dense military presence in the valley. Communication was difficult without mobile networks or the internet. The government of India had thought it best, in its effort to integrate Kashmir with the rest of India, to completely cut it off.

"You should stay indoors Azad, this is not the best time for a tournament." I advised him. Azad shook his head, "Not a tournament." He

held his hands out. In one hand was a brush and in the other he held a small bottle of shoe polish. "Do you need your shoe polished? For only five rupees."

"Polish?" I raised my brow. "From when do you polish shoes?"

"I need some money, and my parents are not giving me any. They are all afraid. They want to save money. So I ran away with the polish." I wished I could explain to him why their fear was justified, but there was an innocence in his voice that I didn't want to maim.

"Go back home, Azad. What will you do with the money? The shops are all closed. The roads aren't safe for you either. Come, I'll drop you home."

"But who will put flowers on my uncle's grave? He was born today." he asked with demanding eyes. "It is more unsafe for my aunt."

I wondered what we had been taught in the last thirty years, that a ten year old boy could say with as much conviction that the roads were more unsafe for his aunt. Nowhere else would one feel as insecure, despite the presence of security forces. Perhaps, we had overrated paradise after all. "You know something, I'll buy you the flowers. You don't even have to polish my shoes, or anyone else's." I offered. I looked at my wallet, I had a few hundred rupees in it. "How much do you think you will need?"

"I have already paid most of it with some money my aunt had saved. I need only a hundred more."

I locked the door and walked with him to the

shop. There were a lot of people on the streets, but only five civilians - they were a group of teenage boys playing a sort of makeshift football with a half torn grey shoe that was too small to even fit Azad. In times like these, it would be foolish to wonder what a child's shoe was doing scattered in the middle of the road. It made sense, however, to ask how those boys could play without fear in the world. Perhaps, one gets used to it, here. Perhaps, everything is normal here. Perhaps, this is our normal. We reached the shop. An old man stood with two sacks near his foot. The shop had its shutters down and it was evident that the man had the shop open only in anticipation of Azad. The only souls around were the horses and the driver of a tonga that stood in front of the shop. "We were waiting for you." The old shopkeeper told Azad. Shifting his gaze towards me, he said, "Are you with him, sir?" I nodded as I handed him the hundred rupees. As soon as I did the shopkeeper thanked me and began loading both the sacks on the tonga. Azad climbed on enthusiastically. It was then that I realised that the sacks were for Azad. That was a lot of flowers. It seemed as if Azad had bought out the entire shop, but from what little I knew about human sentiment, I knew better than to ask.

"What flowers did you get for your uncle?" I asked.

"Tulips." he replied. "Will you come with me to the graveyard?"

"Sure!" I replied unhesitantly. It would make

little sense now to deny myself the sight of the joy on his face when he dumps the sack of tulips on his uncle's memory. Happiness was a rare sight, and I wasn't prepared to risk missing it. Azad's uncle's grave was quite far from our neighbourhood. Azad was getting more and more restless as the journey progressed. It took over an hour on the tonga and when we reached there, we were already on the outskirts of the city. We got off the tonga, each carrying a sack. Azad led me to the graveyard. As I stood outside, I looked at the gates of the graveyard - nothing more than a wooden arch. In death, humility was quite pronounced. On walking inside I looked at the graveyard. It was bigger than any graveyard I had ever seen. There were over a hundred graves. Between the graves, small grasses grew, and on the far end of the graveyard stood a tall tree, with red leaves blowing away with every stroke of the wind. But soon I made an observation that made me shudder. None of the graves had markings, none of the graves had tombstones.

I looked at Azad who was already dragging a sack to the graves. I was going to ask Azad how he knew which grave was that of his uncle's, as they were all unnamed, but before I could, I saw Azad sit down in front of the nearest grave, whisper something and lay down a flower. Then he moved on to the next grave and did the same. By the time he moved to the third grave, I understood what was happening. The shivers on my back were intensifying and I could feel the blood rush faster through my veins, as I realised that he did not know the answer to my unuttered question.

- Suryadepto Nag



Our Father's Sons

Apples don't fall far from their trees
Peaches don't grow from grapevines
Men are like these apples and peaches
We are all our fathers' sons

We are born from their lives,
Offshoots that they hope to nurture and thrive.
Their flesh, their blood and their bones,
We are all our fathers' sons

We grow in their shadows,
hearing their tales and legends
and bit by bit, they grow larger than life;
the fathers of sons whose fathers we loved

But as we grow, their halos fade,
and their idols appear fake.
They seem stupid, stagnant and old.
Yet we still are our fathers' sons

As time raises us up, the lesser our fathers seem,
until time makes us take their place.
slowly and steadily, we morph into them
the fathers of sons that hated what they are

we begin aping our fathers, the only ones we knew
to just realise that they were aping theirs.
we repeat the same mistakes they did,
those fathers of sons, who made mistakes

We try to love our sons, like our fathers loved us
to live up to those legends that were woven around us
but gradually, time turns them against us
like the sons, whose fathers we failed

they seem unreasonable, our sons
the gems we held dear, our diamonds in the rough
slowly and steadily we drift apart,
like the fathers and their sons, who just didn't see
we fight and quarrel, driving them further away
not recalling the apples and their trees
we wail of our ignorance of our sons
we the sons who hated our fathers

like a wheel this fate cycles
from fathers to sons and then so on
not listening to the past and ignoring the present
sons ignorant of their fathers and their sins

Years go by, aging us into husks
until we see our mistakes long past
only to watch our sons, who watch their sons fail
the fathers of sons, whose fathers we failed

- Nandu T S

Sky's Soliloquy

There was solace in his presence- an unfathomable depth.
Sea had a profound calmness; I underestimated his strength.
Him wasn't toxic but neither was he warm-
Colder than the arctic; no tinge of a storm.

When the wilderness took over & all charms had obliterate-
The solitude germinated on me, with words left unsaid.
Oh! How the cry of silence has now bestowed upon me-
The yearn of a long-lost dream, where the sky touched the sea!

Far away I hear, rippling of the waves,
My verses plod their way all along the shore-
For all we know the sky was once a phoenix-
Concealing beneath all the black she wore.

- Meghamala Sarkar



Mulling mutiny.

My man mustn't miss magical mail,
many mails may mirage malaise,
my man may musk malevolence.
Must maverick minions mitigate mayhem,
meany menace(move)?

My man = Superior/ context based

- Karl Ohm Turk

Illustration by- Ningnung





ज़िंदगी

Illustration by- Aishwarya Juneja

ज़िंदगी चलती नहीं, चलानी पड़ती है,
कुछ चीजें भूलानी, तो कुछ दोहरानी पड़ती हैं।
यूं ही समंदर पार नहीं होता पलभर में,
पतवार भी थोड़ी तेज़ चलानी पड़ती है।

ये जो बैठे हैं, झोपड़ियों में मौन होकर,
कोई पूछे कितनी गालियां इन्हें खानी पड़ती हैं।
दो वक्त की रोटी के लिए, तो कभी मोहब्बत में
इन्हें अपनी आबरू तक लुटानी पड़ती है।

ये जो उड़ते हैं हवाओं में दौलत के बल पे,
पूछो इन्हें कितनी रातें भागादौड़ी में गंवानी पड़ती हैं।
कभी पैसे के पीछे, तो कभी समय की मार में,
इन्हें करवटें भी गैर घर लगानी पड़ती हैं।

ये जो रात को नींद लेते हो तुम चैन वाली,
मालूम है !! कितनी गोलियां इसके लिए खानी पड़ती हैं?
कभी जाकर देखो.. फूरसत में उस सरहद पर,
कितने फौजियों को अपनी नींद तक उड़ानी पड़ती है।

ज़िंदगी चलती नहीं, चलानी पड़ती है,
कुछ चीजें भूलानी, तो कुछ दोहरानी पड़ती हैं।
यूं ही समंदर पार नहीं होता पलभर में,
पतवार भी थोड़ी तेज़ चलानी पड़ती है।

- Hitesh Kumar



जानाला

कफि- कापटा हाते निजे
बसलाम आमि एसे,
येथाने वर्षा आलो माथे
ठिक सेइ जानलार पाशे।

आमार छोट्टे उदस स्मृति
शुधु कफिर धुसर धोया,
थाके म्दुमन्द आकाश
येमन तोमार आर्द्र होया।

आमार जीवन एदिक ओदिक
शुधु बईछे तोमार देहे,
नाना छन्दे, नाना गाने
येन आनन्द आर बिरहे।

कखनो देखेछि बापसा साजे
वृष्टि कणा तोमार माथे,
बुबि दाँडिये आछे तुमि
तोमार आलगा खोँपार ताजे।

ठिक रात्रि याबार आगे
यखन घुम आसेना चोखे,
यखन खुँजि पुबेर आलो
केवल तोमार नामे मिशे।

यखन मेघला नदीर स्रोते
तोमार जाहाज भेडे घाटे,
आमार जानलाभरा तुमि
खेलो किशोर सबुज माठे।

छुटिर घन्टा बाजार आगे
आमार नाम धरे तुमि डारको,
देखि लुकिये गेछि आमि
तोमार गल्ल बलार फाँके।

आमार पागल पाड़ेर सुजन
तोमार उपचे पड़ा ভালो,
सब छाड़ते पारि एखन
यदि एकवार एसे बलो।

- Debesh Bhattacharjee

Tour de France – Beauty and the beasts



The Tour de France is an annual men's multi-stage bicycle race primarily held in France, while also occasionally passing through nearby countries. Since its founding in 1903, the Tour has arguably become the toughest and most prestigious bike race in the world. The trained cyclists ride on the most breathtakingly beautiful routes in the French countryside. Traditionally, the race is held primarily in the month of July. While the route changes each year, the format of the race stays the same each year and the riders complete the race on the famous Champ de Elysis, in Paris. In the modern editions of the Tour de France the riders compete over 21 day-long segments (stages) over the course of 23 days and cover around 3,500 kilometres (2,200 mi). Originally covering the perimeter of the country, now the race alternates between clockwise and counterclockwise circuits of France. The route meanders through some of the most picturesque and beautiful parts of France traversing all kinds of terrains (Photo 1). The quintessential part of the Tour is the local towns and cities that the Tour visits for the start and finish of each of the stages. These are quite a spectacle that usually shuts these towns down for the day resulting in a very festive atmosphere and these events usually require months of planning and

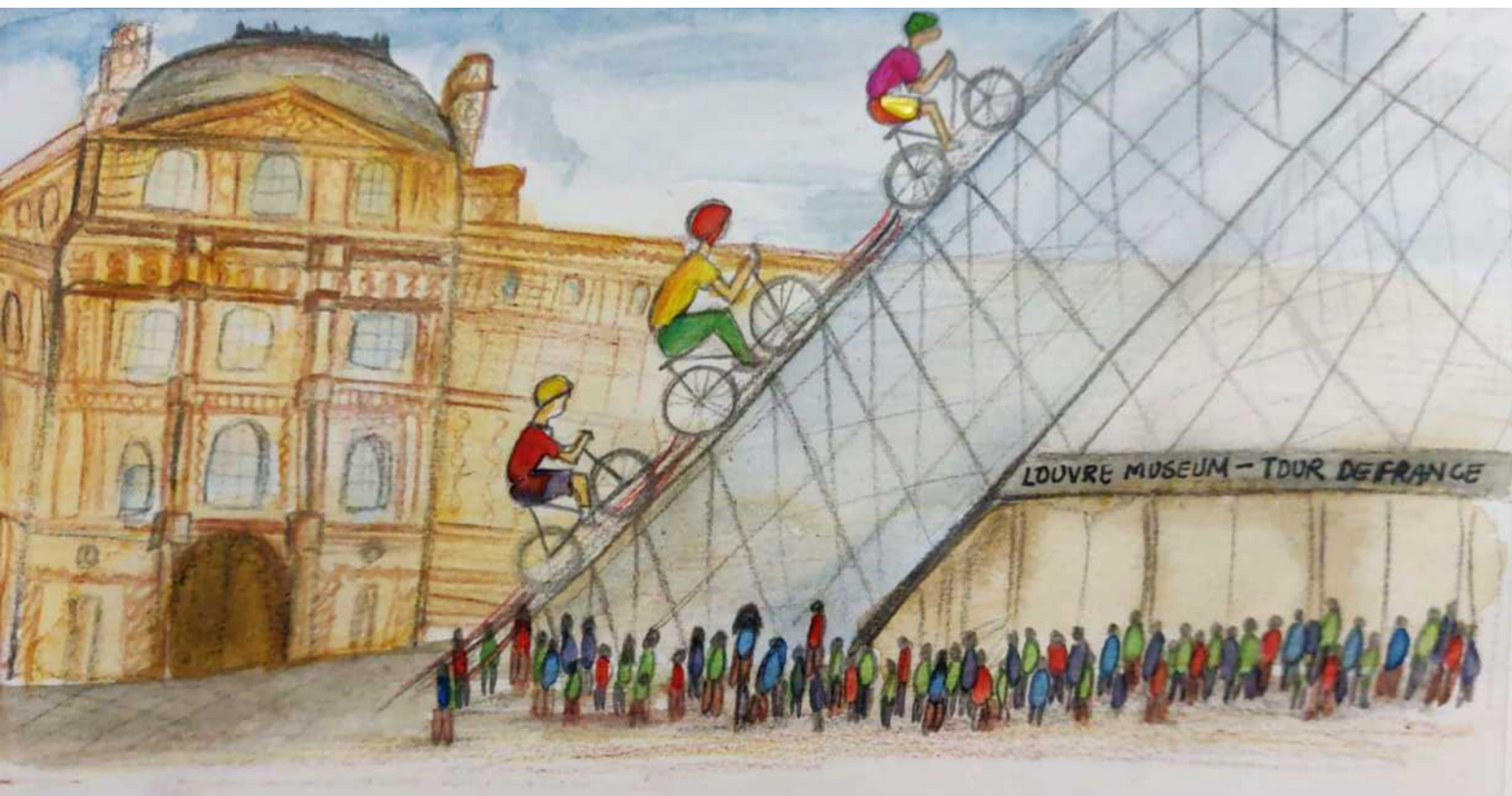
preparation (Photo 2). The villages and towns are decorated all along the route that the riders will follow, and people wait for hours to greet and cheer the riders (Photo 3). Over 12 million people line up the route every year and over 3.5 billion watch it on television around the world, making it the largest sporting event in the world.

Tour de France is considered as one of the most impressive feats of athletic endurance in sports. It owes a lot of this fame to a specific part of the race: the climbs. Much of the strategy revolves around the mountain stages, where riders climb thousands of meters on steep roads in the French Pyrenees, the Vosges, and the Alps. That's when the strongest riders make their moves, and it's where the Tour's best moments happen. The 106th edition of The Tour de France happened last year in June-July 2019. The 2019 tour was touted as the 'Highest in history' because of the number of climbs. The route features 30 categorized climbs, including seven in the Tour's most difficult category. For an averagely fit person, these climbs will be tough even to walk, forget about getting up on the saddle and peddling up all the way. In this article, I will therefore elaborate on how these arduous climbs made the Tour de France famous, why they are the most important part of the race, and what it takes to conquer them.

The teams are composed of 8 riders and about 22 teams compete in each year's Tour. Cycling as a sport apparently seems tactless to many, but actually involves careful strategizing and planning. For the most part of the stage, the team members ride in front of the team leader. Much of the resistance that the riders face is due to the wind coming from the front, and to reduce the drag they use a technique called drafting. The simple principle is that it is much easier to pedal when there's someone in front of you to cut the wind. The various teams in the Tour tend to ride in one tight clump, called a peloton, such that each competitor gets the benefit of drafting. All cyclists ride

together even at great speeds in a 'bumper-to-bumper' manner, each rider separated by just a few inches from the other. Such tight riding manouvres require great practice such that the riders don't crash into each other. Hence, the team members take turns to do so. When the time is correct, the leader then attacks! The most interesting and critical part of the team's strategy is when and how to 'attack'. The attack here means a sudden burst of high speed pedalling that can lead to a breakaway of few riders. Once a few riders separate from the peloton, they try to maintain their lead and increase the distance between the leading pack versus the peloton. In the last few kilometres of the race it is really interesting to watch how the riders keep strategizing about when to attack and the most important final sprint to the finish line- attack too early and you may be exhausted before the finish, or attack too late might also cost you the winner's podium. It is impressive to note that the riding speeds are about 40 km on an average for about 5 hours of cycling per day. However, the actual cycling speed ranges from above 80 km downhill to an average of 15 km on the toughest slopes. The riders easily put in about half a million peddle strokes (at 90 per minute) in three weeks. They burn around 4000-5000 calories during each stage of the Tour. Even on the Tour's rest days, most cyclists don't rest. They ride for at least 2 hours to flush out the lactic acid and keep their mind and body focused on the tour. After completing a stage everyday the cyclists have to continue pedalling for about half an hour, which they do on stationary bicycles, to slowly bring their heart rate down.

To achieve this level of fitness, the cyclists go through a miraculous transformation of their bodies into a highly tuned physiological machine. It is a testimony of what modern methods of training coupled with advances in sports medicine and nutrition can it make possible for the human body to achieve. I therefore call these athletes metabolism freaks or beasts! Their metabolism is highly efficient and their hearts are bigger than normal. The cardiac output (amount of blood pumped in a minute) of a normal healthy individual is 5 litres per minute, which rises to upto 20 litres at peak exercise level. However, in case of elite cyclists, the cardiac output can exceed 50 litres a minute. Additionally, their blood contains very high level of hemoglobin in the RBCs and the RBC count is also very high (high hematocrit), turning it very thick. As a result of this, the VO2 max, the amount of oxygen consumed, also increases tremendously, giving a direct advantage to the working muscles of the rider's legs. The VO2 max for an average fit person is about 40, for elite sprinters it is above 80, and for elite cyclists it is in upwards of 100! Such gel-like blood works wonders for high performance, but is a great disadvantage at rest. At night, when the heartbeat naturally shows down, the sheer density of their blood becomes a liability. Therefore, the athlete has to set his heart-rate monitor to beep whenever the pulse drops below 35 beats per minute. When the alarm sounds, the rider has to



wake up and exercise to coax the straining heart into action. Many elite athletes have passed away in their sleep or at early age due to these factors.

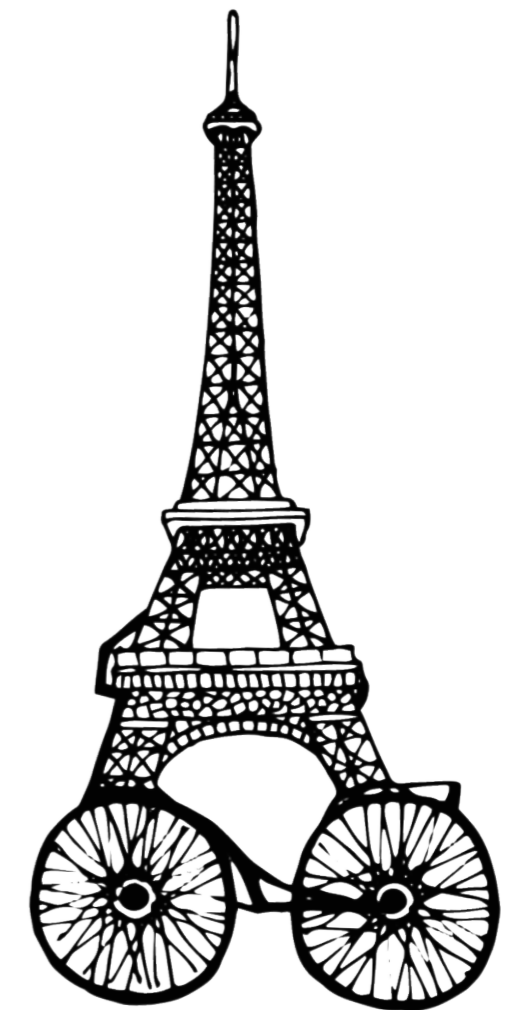
The number of banned substances for athletes keep changing with time. With advent of newer and sensitive technologies, the riders and their medical support staff also adopted to these evolving standards. It is very difficult to stay competitive in any international sport – and cycling is no exception, without the supporting medical team assisting the athletes to make sure that their customised diet and various nutritional supplements are not compromised. However, the doping scandal that plagued the cycling world is like no other. For an entire decade in the ninteties a large number of teams systematically underwent a 'doping program' that was uncovered much later exposing the ugly side of professional athleticism.

In the beginning of the dope-era, Erythropoietin (EPO) that stimulates blood formation was introduced as a new wonder drug which the prevalent drug tests were not able to detect. However, later on more and more substances were added to the list that always managed to stay ahead of the detection technologies. After EPO was banned, the dope-era also witnessed periodic blood transfusions that used to happen in the team's medical assistance vans. In the blood transfusion program, the rider would 'donate' his own blood and store it in the days before the commencement of the Tour, and then the blood from these bags was transfused back into the same rider through the stages. Since the blood was from the same person, it made detection rather difficult, however, offered a huge advantage to the rider during the mountain stages or the time trials. After revoking many of the titles and taking strict punitive measures, the sport is now trying to rebuild its image and set the right example for the future generation of riders. Thankfully, the generation from the mid 2010s and beyond seems to be competing on a level playing field without having to give in and start doping like an entire generation of riders in the previous decades (1990 to 2010) did.

The bikes have also evolved over these years – just like the shoes of a marathon runner. The bike frames have moved from steel to carbon composites. The overall weight reduction due to introduction of advanced composites has not compromised the rigidity and strength of the frames, infact increased it. The gear shifting mechanism, tires and brakes have benefitted from very large number of inventions. The rider's attire including helmets, gloves, shoes

and jerseys have also changed dramatically over the past few decades. A fleet of support vehicles of all teams carry the spare parts and fully assembled replacement bikes with them throughout the course (Photo 4). All of these improvements have contributed tremendously towards enhancement of the performance of the riders. Here too, every second counts. The smallest margin for winning this 3500 km race has been 8 seconds! These improvements add to the performance of only the specially trained riders. For all other healthy individuals, it is still a nearly impossible feat to complete this race. Five-time winner Bernard Hinault of France once commented on the Tour de France, "An amateur should think long and hard before attempting one of these stages. Two would probably necessitate a visit to a doctor, and three would require a psychiatrist – any more and you should be checking if that person has written a will."

- Sanjeev Galande



Illustrations by- Saanchi Thawani

Poem of a poem

If a poem knew it was a poem, then
Would it cease to exist anymore?
And would its meaning scrawled in pen
Crash and burn in a heap on the floor?

Or would this shattered poem now rise
And begin to wander about, now free
Under the scattered starlit skies
Trying to find what it could be

It could walk over the hills and vales
And through every grassy blade
Traversing knolls and verdant trails
Through swampy fen and glade

Searching for its inner essence
It walks the lands and ponders
Beneath the heavens' luminescence
The lonely poem wanders.

Finally in a mountain grotto dim
The poem rests, to pause and think
About what's the true meaning for him
How he and the universe link.

And in that moment he realises his goal
And the meaning he held within
He suddenly felt complete and whole
In the universe he had entered in.

His true purpose was to hold the words
Of tragedy and joy and of fear
To capture the song of a 1000 birds
And to hold a single fallen tear.

To store into words all memories and songs
All feelings and thoughts and prayers
To treasure all rights and terrible wrongs
All of our hopes and cares

And in that moment that poem it seems
Saw the unspoken truth of verse
As a reliquary for human dreams
And the feelings of the universe.

This self aware poem then thought of its state
As illumined lines to ponder
And for the world to use it as an empty slate
It disappeared to lands down yonder.

Krishna Grish

Illustration by-
Sanjana Vasanth

प्यार के रंग

अगर प्यार के रंगों को,
अपनाया होता दुनिया ने,
तो आज मैं कैसी होती?

छुपाए हुए कुछ रंगों से,
अपनी दुनिया अलग बनाती,
जब वो कागज़ सा बिछा होता,
मैं रंग सी बिखर जाती।

सिर्फ चार दीवारी नहीं,
खुले आसमां के साये में,
मैं अपने रंग उसे देती,
और उसके रंग चूम लेती।

आँखों के उजालों में,
सजा देती पल पल को,
जैसे खुशबु मिले हवा से,
मैं अपने रंगों में घुलती।

अगर प्यार के रंगों को,
अपनाया होता दुनिया ने,
तो आज मैं कैसी होती?

- Raghini Patil

आई

जीवनाने साद घालावी
नि जन्माला मी यावे
तुझ्या अलगद कुशीत
मला बालपण यावे

माझ्या येण्याने डोळे भरले तुझे
नि तुझ्या येण्याने जीवन स्वर्ग झाले माझे
जेव्हा रात्र रात्र तु माझ्यासाठी जागलीस
तुझ्या दुधाने माझी तहान भागवलीस

जन्मभर तुझ्या घरट्यात आसरा तु द्यावा
नि त्या घरट्याचा प्रत्येक धागा मी व्हावा
प्रेमळ तुझ्या ममतेने ओंजळ माझी भरली
संस्काराची शिदोरी आई तुझी जन्मभर नाही सरली

- Darshan Dhanajkar

Delicacies

Forms galore,
Some with mighty roars,
Some with meeker force,
Some form full course,
Some a side discourse,
All coming together,
From a single source.

Four types belie,
This breadth of the sky,
In the land of the stone,
Where it is still grown.

One forms that nightly rest,
Escaping the day's slugfest,
Foil and red meander,
Plain with fresh coriander.
A stop after workovers,
At the gossip pullover.

Two more lie in the spawn,
Dark-skinned ones,
Of dusk and dawn,
One for who on tons,
Of work to finish are lost,
Other for those who pay,
The social cheques and cost,
To revel in the mellowing fray.

The last one is joined,
By cocoa in meadow coin,
A cup of extra,
A plate of plain,
Well, not so plain,
But the colours embody not,
Naught but the singular knots,
It clears the airway,
Forces the thought-wave,
A go-to stratagem,
After a day of wearing hem.

Pristine combinations persist,
Of day and night, they consist,
Plain and stained,
Of molecular lamed,
But it comes down to need,
And then we all come down for
We all need a fresh delicacy.

- Aditya Chincholli



The Diary of a 'Monster'

"Blache, Blache" the faint sound of my name echoed in my ears "Stay with us Blache" the voice, as I faintly remember, belonged to a woman from the military. How long has it been since I heard my name being called out loud? All I heard in my life were whispers around me telling me how much of 'not a human' I was. I could feel my shirt clinging on to my back, as if my whole body was covered in sweat; but I knew very well that it was blood. It was the same red blood as other humans, yet I was treated as an outcast. A 'monster' would be a more fitting term I would say. But then again, even if I was treated as an outcast, I wanted to get accepted; I wanted acknowledgment which in the end cost me my life. Was it worth it? I ask yet again. Was it worth giving up my life for these pitiful creatures? I don't know and I don't hope to find answers anytime soon; but I can't resist the weird feeling elating my heart. Is this happiness?

Two years later

"Let's go Deputy Commander Alona. Today is the day when a law would be imposed against killing those monster children. Weren't you the one most excited for this event? Why are you still holed up under your sheets reading that good for nothing old diary?" Alona glared at her friend "They weren't monsters! They were just different; and Blache had proved it to the world" "Yeah. Yeah. Suit yourself. Make sure you come out on time. You wouldn't want to get punished by the bear commander." Alona opened the diary in her hands for the nth time. "A Monster's Diary" was the title given to the book, which looked measly and dirty, certainly handwritten.

Blache...



I was five when I first realized I was an orphan; a lone kid in the monster's dormitory, or that's how 'normal people' referred to it as. There was only one caretaker in the whole dormitory, so it didn't really feel like one. It was only when I started grade school, kids started calling me one. Not that I was particularly against it, but I didn't bother. There was this story the caretaker drilled into my memory which was about these 'unique kids' who were ~~abnormal~~ abnormal from a 'normal human's' perspective.

"Over the course of thousand years or so, there were many children who were born unique and different from 'normal humans'. These were children with horns on their head, or with one eye, or with empty eye sockets, or with excessively developed body and brain, who were without respite wiped out from this world before they could get out of the maternity hospitals. You were really lucky that you escaped unscathed from such a predetermined fate. You ^{owe} your parents for letting you live rather than hate them for the fact that they abandoned you."

I never really understood his words as a kid; but when I started attending grade school, I understood the intricate message hidden in his words. I was not normal! I understood where he came from because my body was pale blue in color, ears pointed, eyes straight, grey hair and pale red lips. But it was too much for a 5 year old kid to bear. When kids, their parents and their teachers, started avoiding me just because I fit the description of Perseus, it hurt me more than I could imagine. I entered high school much earlier than other kids, partly due to the reason that I aced all my subjects with minimal efforts and partly due to the reason that 'normal teachers' didn't want monsters looming in the class. Did I bother? To be frank, a big **no**. I stopped thinking about how others perceived me and lived in my own world which included observing these pitiful creatures mess up in their day to day lives. Why should I bother liking the so-called 'normal humans' if all they do is spread the message of hatred against people who are different from them?

I watched high school students play pranks on me and other weak kids, a phenomenon the 'normal humans' labelled as "bullying". But I didn't bother helping myself or the weak kids, because I was too bored to stoop myself to the level of 'normal humans'. Certainly, according to religious teaching I was going down the wrong road, but I was least bothered about it since I wasn't a 'normal human'. It was around this time that my caretaker left me alone in this cruel yet beautiful world, with enough money that could take me through college. I was a bad profligate, since I didn't have anything to spend money on. Friends, video games, computer, camping, alcohol, cigarettes? Don't bother asking. There was another thing I realized. People love only beautiful things. I didn't come to this conclusion just because 'normal humans' were ~~avoiding~~ avoiding me like plague, but after a more profound observation and extrapolation. There was a time when a dog on the campus gave birth to two healthy brown puppies back when I was in high school. 'Normal humans' played with those puppies many times throughout the day, fed them with nutritious high grade food, and treated them with love and care. But the rate at which puppies grow is much faster than 'normal humans' owing to which they were abandoned within a span of six months. Let alone high grade food, people didn't even bother feeding them with leftovers. I continued feeding the grown up puppies in shadows throughout my three years of high school, following which I don't know if they survived.

I aced my high school but discrimination and disparity followed me to college. Am I complaining? Not in the slightest. I was never once acknowledged throughout my life, even when I scored 100/100 in an international quiz organized by **Just Education For All**. Rather I was shunned for cheating in the quiz and was debarred from ever competing in it again; so ironic! Ultimately I concluded that 'normal humans' were ~~not~~ hypocrites.

While still in college, I attended this talk by Professor Sterkn, whose words later became an inspiration to my insignificant life. I personally talked to him on several occasions, and he treated me like one of his own kind. And indeed I was, because he was also a 'monster' like me. He confessed this fact on our third encounter where he said to me "Just are not those who accept the obvious right. But just are those who accept the inevitable consequences of a right decision" and he placed my hand towards the left side of his chest. He didn't have a heart-beat.

He died shortly after, within 26 days of meeting me, and asked me to find a purpose in life. For the first time in my life, I felt lost because his words struck me hard. I was drifting in this good for nothing world with no goals or aspirations; but I felt I should do something worthwhile. Not for the sake of 'normal humans' but for my successors who would be treated as outcasts in the society. Like how my caretaker had provided me with enough, and like how Professor Sterkn helped lost humans of his ^{own} kind; I wanted to make a difference. Again, not for the sake of patriotism or society but for the sake of myself and for my own selfish reasons.

This is the reason why I decided to enlist in the military after my formal education. Because the military had one simple rule 'everyone dies only once'. I expected the discrimination to follow me around in the military academy and it did. But there was this one girl who looked beyond my outward flaws; right into my pure but cynical heart. I wasn't particularly interested in interacting with this girl, since I had long ago gotten used to being an outcast and it came so naturally that I stayed as far as possible. I thoroughly indulged myself in military training because the commander of the army ruled the nation. Hence, I was bent on becoming the commander of the army so that my kind wouldn't have to face the same injustice I felt in my short life. I would impose a law against killing my type of kids and would build special schools for the sake of them if the 'normal people' continued their discriminatory actions. Thanks to my better physique, I climbed up the ranks very soon and today I am the deputy commander of the army at the age of ~~21~~ 22. Just one more step until my purpose has been fulfilled, following which I can gladly go back to my caretaker and Professor Sterkn, the two people responsible for me of today. I visited the commander's office this afternoon and he informed me that I had to get back the stolen documents from under the nose of the neighboring nation; a mission which would most probably result in my death. I know the commander does not want a 'monster' such as me to succeed him, but he can't stop me; since in the military, achievements speak better than words.

If you have bothered to read this diary, that means I am no longer in this world and I am on my way to my caretaker and Professor Sterkn. I never once imagined that I would be forced to ask a favor from 'normal humans' but I will gladly give up my grudges if it can prevent the suffering of someone else of my kind. I am never going to beg your kind; but if you have it in you to repent for the sins your kind committed as per your religious beliefs, then I will ask you to help the ones you labelled as 'monsters'.

I am not expecting this will to land in the right hands because until the end 'normal humans' never gave me a chance to live. Until the end, they were disgusted by 'monsters' such as me. But even I am disgusted by your self-gratification over your own fake self-righteous acts. I hope, at least, this book lands in the hands of a good person I never encountered; and I hope you, the good person I never thought existed, would help me to fulfill my purpose.

May you have the good will to help a 'monster' in need.

Alona got up from her bed and dressed up in her new deputy commander uniform, which she had received a day ago. She tied her short hair to a pony, exited her quarters and made her way towards the town hall where a new law would be enforced as of today. She had found Blache's diary right after his death, as she had rushed into his room to take whatever little was left of him; since she was sure that everything of him would be disposed of along with his body. Thus, finally after two years of hard work she was finally able to fulfill his last wish.

"I am not done yet Blache. I will become the commander in your stead and will be sure to protect your kind. Make sure you have peaceful days with your caretaker, whose name you never disclosed, and Professor Sterkn." She entered into the town hall where ear deafening cheers and curses greeted her; while she just smiled.

-Zenisk



Shefali Dharmakirti Sonarkar



Nandu T S



Arsh Shaikh



Ashli Jain



R. Charvee



Manali Upadhyaya



Hitesh Kumar



Avadhoot Jadav



Pallav Khandekar



Lubdhak Mondal



See you on the dark side of the moon
~Vaishnavi Patil
(aka Chutki)

Peas and Lube
~ Akhil
(aka Babu)



Hi, I'm going to/coming back from lab
~Aarcha Thadi
(aka Thado)

Live in the moment
~Mahendra Pawar
(aka Mahi / Mandy)



खुद को तलाश लो, बाकी सब ठीक है।
~Devesh Verma
(aka Chacha)

If things don't go as you planned then plan them as you go.
~Charvee Ravichandran
(aka Chaivee)



Insert a cliché line that fails to describe me in one sentence
~Yash

Maje aak
~Aysha Basheer
(aka Shibumon, Gold Digger)



Sab moh maaya hai
~Nikhil Gupta

To avoid nightmares, avoid
Mayank Goyal
- Himanshu Lagachu
~Mayank Goyal
(aka Daynasore)



Padh le beta mauka hai, pyar vyar sab dhoka hai, lekin kabhi kabhi drama bhi zaruri hai..
~Sinjini Bhattacharjee
(aka Maate)

Never skip meals :P
~Rajlakshmi Sawale



Sab moh Maya hai, par Maya hot hai!
~Jaideep Mahajan
(aka Jd Baby)

To never rely on your roommate's alarm clock, to not run in the dining hall and that books can have multiple uses.
~Madhav Sinha



Drink a lot of coffee since the alternative will make mom sad.
~Hrishidev
(aka Hrishi)

Study just enough to save kvpy scholarship.
~Aditi Agarwal
(aka Atti)



~Prasanna Joshi
(aka Pras)

THE MOST ALGIA

~Arghya Rakshit



Worrying means you suffer twice.
~Shreya Lakhera

Batch of 2020 ☺

I meme therefore I am.
~Varun M
(aka that short guy with the beard)



Boo
~Sriram Raghunath

I'm leaving IISER with fond memories, great friends and an unhealthy obsession with aerated drinks!
~Meher Kantroo
(aka Meh)



Possibility over probability, a compass not a clock, equity over equality, try or die.
~Zakhiya Pulukkoll Cheriyaandintakath
(aka Jhakka)

Zindagi ek fann hai lamho ko apne andaaz se gawaane ka
~Snehal Bhartiya



Chill! We are going to die anyway.
~Arindam Sharma

Simplicity is the ultimate sophistication.
- Leonardo da Vinci
~Raghavendra Meena
(aka RV)



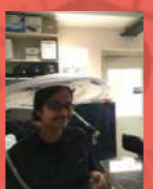
Live life the pure way, only listen to KidzBop
~Prashnam Jain
(aka The Cool Guy!)

I'm hungry but I'm not hungry!!
~Shephali Dansana
(aka Shiffi)



Go Hard or Go Home
~Tushar
(aka Dada)

~Gayathri K
(aka Gay-tree :D)



~Aarti Kejriwal

Live life, Stay high
~Adarsh Koul
(aka Mota)

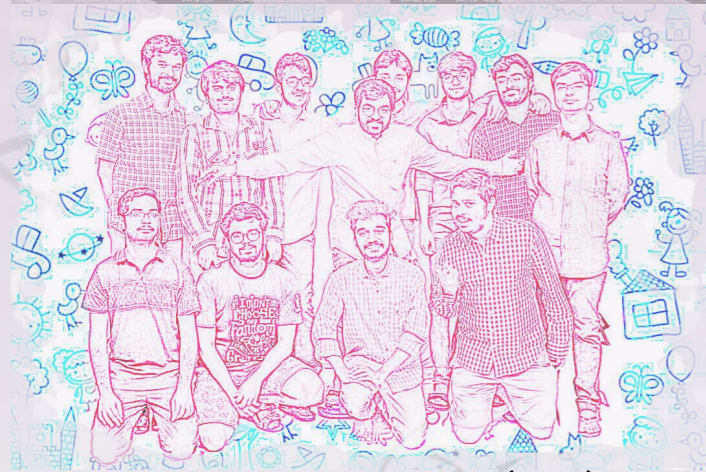


~Kush Mohan



~MS Dhawale





After our first Mid-semester exams (2015) I planned an all batch Imagica trip and sent an invitation email to my faculty advisor to forward it to the entire batch and I was asked to contact COSA :P Since, emailing didn't work out I invited people personally and some 20-30 agreed to come. On the final day of the trip only 6 random people (including me) showed up. A bunch of people still tease me saying, "Aarti Imagica chalte hain!" - Aarti



A genius stepped up to imitate Sriram, who had a habit to walk very close to walls. A fire-extinguisher came in the way of this "imitation game". This genius ducked, the fire-extinguisher burped. The mystery of this extinguisher remains unsolved, but remember the right-wing is trending when you look at the photo! - Kush Mohan

Two exams, one day. After pulling a caffeinated all-nighter, walked into the exam hall at 10 am with zero sleep, expecting the worst. Skimmed the paper and figured, it was one of those two-hour papers you could finish in one, fortunately. But my mind drew a complete blank. I'd hit that point where my brain was an empty wasteland with elevator music playing, and one plus one equalled three. Sentences frame I couldn't. Realised the only thing I could do was take a nap. I woke up roughly an hour later, to the stares of the invigilators, in a now almost empty exam hall. It all worked out somehow as I regained partial functionality, and did an okay-ish job in the end. Protip- Do not not sleep n attend end sems. - Varun M

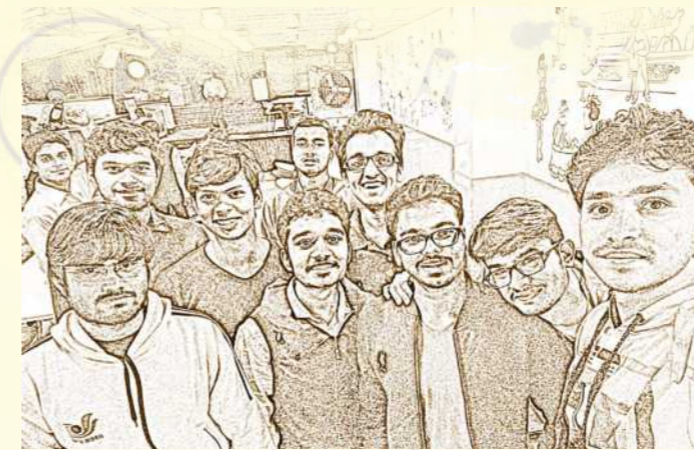


Once i dropped some acid in chem lab, the TA's were angry and said something about chem's being expensive. i said i know i know my chems, just chill out, they freaked out and said now you have to pay up. repent for my sins. i said, please it's just a dream. They wouldnt take it, so then i had to drop the bass, neutralized. everyone was calm again, and life went on. moral of the story: dont drop acid in chem lab kids. - Akhil

Too many memories, though love for pizza tied a lot of us together! Smoking Joe's perpetual BOGO; end of semester pizza party prank emails; celebrating my birthday with pizza every year starting of the Quiz Club pizza dinner tradition; pineapple on pizza escapades and so much more! - Aarcha Thadi



That Goa experience every college kid has :p - Aditi Aganwal



Woke up in the middle of the night to see a half-naked man on my roommate's bed. Scared to death, I jumped like a fat ass ninja and closed the door behind me. I realized that the poor guy (a proud resident of Gurgaon) had too much yellow fluids to drink (probably gau mutra). Soon, he started vomiting on my roommate's bed, and all over the floor. His next target was the bucket. The vomit was perfectly aimed and score: What a player!! Cursing the universe as well as confessing his love for Jaideep and multiple girls of our batch, he fell asleep. - Tushar

Winning the IPL-2018 quarterfinal for Renegades against mighty Alchemists - the 5-time champions. Best ever game. Maiden 5-wicket haul, nerve-wracking chase, last-ball reverse-sweep four and crowd running to the pitch wildly in joy. Felt like we conquered the (IISER cricketing) world! -Devesh Verma



The 2015 batch was the first one to have a group biology project in first sem. So we were assigned a group roll number wise and it was an all girls group! As expected, we procrastinated the model making till the last couple of days! We decided we will describe colour changing in chameleons. We had to buy lots of LEDs, wires, and stationary items. We had to make repeated visits to the shops because we would remember a new thing for project every time we got back to room. While rest of our group (Theja, dhvuti, malavika etc) were rocking the poster, we (Zakhiya, me, Thadi, and Harsha) took turns to stay awake and work on the project :D By 4 am we were so tired that we were laughing at anything and everything. It occurred to us halfway through that our circuit needs to be in parallel and not series. The whole board needed another 2 hours of correction. At 7, we finished and realised it's too late to go to sleep, so we went to watch the sunrise. Later in the morning, we managed to explain our project in our heavily sleep deprived state. Still can't believe we pulled it off! - Gayathri



Those fights in our first year when my roomie Dada (Tushar) and Motu (Adarsh) when nothing was out of bound. The round dustbin covers would be used as shields. One would give threats of throwing har oil while the other would go and bring a dustbin and would return with threats of garbage from the bin. They would chase each other all around the first floor - Nikhil Gupta



Winning the IISER Football League (IFL). - Raghavendra Menna

It will obviously be silly if i try to pick one. This 99 acres is a memory palace so saturated that a few more days and its gonna pour out of my eyes. Every being associated is a chapter, every location a book mark and every day a story.

Still Can say a quick short relatable one. During iGEM in my 5th sem I had physics courses as well. So, I had gone to an exam even more ill prepared than usual and heavily sleep deprived. I ran in some 20 min late with a tooth brush instead of a pen. The then dean, who was taking the course wakes me up during the exam and tells me 'Zakhiya, write the exam' I said okay and slept again, then I realized and got all alerted and acted as though I was writing the paper. I really wanted to leave, but already so much had happened that I didn't think leaving would be smooth. So, I ended up designing my plasmid on that answer sheet. Seems like they must have had a good laugh, since I wasn't called upon later and she was sweet. - Zakhiya Pulukkoll Cheriyaandintakath



After giving last paper of that semester at 12pm, we were all waiting for midnight show of Avengers Endgame. With almost 12 hours to spare, I did what every hostelite does in his free time after exams, I started drinking (obviously not chai). The operation bewda started at 2pm and ended at around 10 pm with almost 2 litres of beer and half a litre of vodka (ikr !). The discussions went from from how I fucked up my last and how our education system sucks to 'Aaj gaadi Tera bhaini chalayega'. After a while, in this hammered stage, I found myself in the middle of theater watching Endgame. Although a Maharashtraian, I hope I made my Gurgaon folks very proud that day.
- Jaideep Mahajan



I ran out of a class to play with puppies. We built box houses for spiders. - Shreya Lakhera

Celebrating Diwali with friends, seniors and hostel security in first year. - Madhav Sinha

For studying or mostly just procrastinating, it's been my go-to place with an endless supply of coffee and people. CCD was and forever will be my favourite place in IISER. As a self-proclaimed communist, I feel like a massive hypocrite for saying this. Sipping a large latte with six sachets of sugar, while having conversations about stuff ranging from middle school level gossips to the absurdity of human experience with some of the smartest minds I have met, this place holds most of my fond IISER memories. Thank you CCD. - Hrishidev



Financial Independence also means doing weird things to try and save money. I planned a 80 rupees per day plan (20 rupees pohla for breakfast, 30 rupees khichdi for lunch and a SS chai for snacks and 25 rupees for sada dosa for dinner). Within a week, I got gas troubles and became breathless and started screaming out of pain and then zak, anwasha took me to AIMS. On the way the pain went away and the nurse still refused to not treat me with an injection telling 'Hospital aa gaye na injection lagaana hi padega. Nahi toh ghar mein hi baitneka'. Upon relapse few hours later, I tried to exercise and get rid of the gas but when it wasn't working, zak and others started punching me in the stomach and ribs and all to get rid of the gas. Well, it worked. Only to realise few weeks later, I could have tried a more non-violent method of chewing on some narthangai. Since then I have been having no plans of budgeting on food. In another incident I remember cooking for a sick friend and fed him some corn. And half an hour later his condition got much worse. People have since then doubted my cooking skills. Well, it was my first time, guys!!! I know shouldn't have tried it on a sick person :p - Charvee Ravichandran



Late night MDP chai, early morning pohla at pahihar chowk, group studies a day before exams but then not studying at all, smoking 'hamburgers', bike trips to lonavala, lavasa, mumbai the list never ends. But the most funniest memory I have is of my tall (he thinks so) roommate Harsh Jain who tried to jump from one bed to another but instead slipped and banged his face into the wall (he survived with negligible injuries)
- Adarsh Koul

Memorable..there are so many incidents that happened in our last five years, some of them are good and some of them are bad but all of them are good memories now. We were in the fourth year and it was my birthday. I wasn't really hoping for any big celebrations because exams were going on at that time and people were busy, but once the clock struck 12:00 AM people poured a bucket of extremely cold detergent water on me while I was working. They didn't give me any time to react and the feeling was very very bad. After that, they cut the cake (It was my fav flavored cake with a frog face on top of it...ugh). Downstairs some of my other friends were also waiting with another cake. While I was cutting the cake they put my entire face on the cake and after that, it was a complete war zone!! It was definitely not one of my cleanest birthdays but surely it was memorable :).
- Shephali Dansana



It was in our second year at IISER when a bunch of us went to Tarkali, our first group trip. By our third day there, me, Aarti and Akshay had managed to get ourselves bitten by puppies. So, instead of exploring beaches, our group ended up looking for a hospital in the small town so that three of us could get rabies shots!
-Meher Kantroo



Going to IISM Mohali was an amazing experience. Had a lot of fun and made many new friends in the journey.
- Mahendra Pawar

Went around the campus catching spiders for a project! Hahaha -
Rajlakshmi Sawale

- We all knew what we had to study until Sutirth's course happens. And then we are all completely messed. His Evolution course in the second year was one of the most beautiful things that happened to me. Gave me a new interest for life.

- Won gold medal for IISER Pune basketball team! One achievement I am not forgetting for life. - Snehal Bhartiya



Well even 50 pages won't be enough I guess! -
Sinjini Bhattacharjee

So there was this guy who sat in front of me in classes for 2 years. Daily I used to tap on his back, he turned, and I used to say a swear word. Few months later, when I tapped, he would turn and swear before I could. For a while, he went on to swear intuitively at anyone who tapped his back. I'm so proud.
- Prasham Jain

From endless pranks with Aarti (remember 1st April group birthday) to making Imagica happen after so much turmoil, to trying to pull off Karavaan, to trespassing in Panchavati (and 1-6 floors :p), to learning to play football, and to chilling at negative. IISER was the best of times and the worst of times. -
Vaishnavi Patil



Int.PhD Class of 2019



Bs-MS Class of 2024

