RESEARCH HORIZONS

THE OFFICIAL NEWSLETTER OF THE UNIVERSITY GRANTS OFFICE

In This Issue

Ahmedabad
University

Modelling Built Form and Transport in Indian Cities

In conversation: Bhargav Adhvaryu

Bhargav Adhvaryu is a Professor of Urban Science at the Amrut Mody School of Management. He has over two and a half decades of experience in research, teaching, and consulting. His research focuses on modelling urban land use and transport interaction, measuring and mapping public transport accessibility, and urban spatial analysis. Over the years, he has taught courses on urban and transport planning, statistics, and quantitative analysis. In his consulting career, he was the project manager for the Sabarmati and Musi riverfront development projects and led several traffic and transport planning and development plan-making projects. In addition to teaching and research, Professor Adhvaryu is the Chair of the PhD programme and the Technology, Operations, and Decision Sciences (TODS) Area at the Management school and the Coordinator for Data Science courses at Ahmedabad University. He has received several laurels. Most noteworthy are three gold medals at Bachelor of Civil Engineering, being a British Chevening Scholar at Imperial College London and University College London (UCL), and being a Fulbright Nehru Visiting Professor at the University of California, Los Angeles (UCLA).

What is your current research work about?

Mathematical models are as good as the data used to build and run them. Developed countries, over centuries, have had a legacy of rich urban and socioeconomic data availability. In developing countries (like India), we are yet to reach such levels of public data repositories. However, I took it upon myself as a challenge to explore modelling in a data-constrained scenario for my doctoral research. I was successfully able to develop a land use–transport interaction model (I named it SIMPLAN: SIMplified PLANning model) for Ahmedabad city that was built on minimum data available from the census and some sample transport studies. This was a proud moment for me, as very few people in the world have a land use–transport interaction model in their name. Later, I got an opportunity to successfully apply SIMPLAN model to Rajkot city.

Currently, I work on measuring and mapping public transport accessibility for Indian cities. Over the past few years, we have created public transport accessibility maps for Ahmedabad, Surat, Pune, Bangalore, Lucknow, Hubli-Dharwad, Raipur, and Chennai. We have demonstrated several policy applications of these maps, such as integrating transport and urban development, parking, enhancing the mobility of urban poor and locating their housing, urban infill and redevelopment, transit-oriented zones, and making climate-responsive cities.

What are your future research plans?

My future research would continue strengthening the applications of public transport accessibility modelling to urban and transport planning for making cities more sustainable. In addition, some upcoming research areas are analysis of the urban spatial structure and built-form, addressing sustainable development goals (SDGs) at the city level, low-carbon cities, urban governance and management, and water-sensitive urban planning.

What was your motivation for a career in research?

During my undergraduate civil engineering education at REC, Surat (now SVNIT), we used to study in groups during the preparatory exam
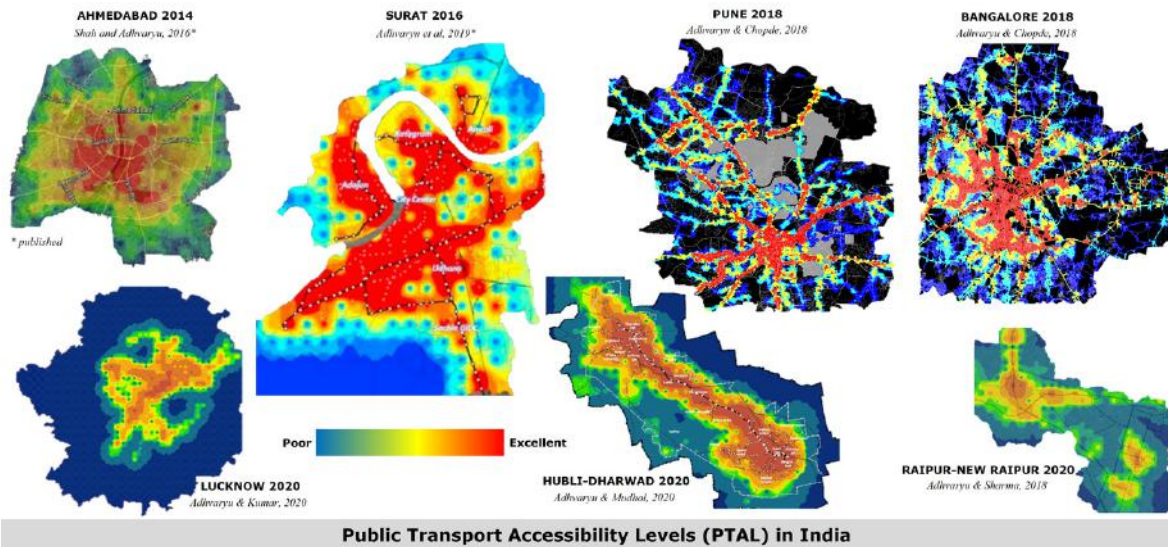
PTAL maps the accessibility levels of public transport (PT) in a city. Graded on a scale of 1 to 10, level 1 (blue) shows an area with no PT accessibility and level 10 (red) shows areas with excellent service accessibility.

period. Somehow, I ended up teaching most of my batchmates. They told me I should consider a career in teaching. I am sure they were joking, but I took it seriously. Teaching and research are two sides of the same coin. Eventually, my passion for teaching motivated me to gain higher knowledge and pursue a career in research as well.

Who are your heroes—those who inspire and influence you?

When I was studying civil engineering, one of my teachers, Professor BK Katti, got me interested in traffic and transport planning. From there, I got interested in understanding the bigger picture and ended up pursuing higher studies in urban and transport planning and modelling.

While pursuing MSc Transport at Imperial College London and University College London (UCL), I did my dissertation on accessible (barrier-free) design for Brighton bus station. My dissertation supervisor, Professor Nick Tyler, UCL, encouraged me to think outside the box. Motivated by his example, I learnt how to apply this thinking in research. My supervisor during doctoral studies at the University of Cambridge was Professor Marcial Echenique whose work on land use–transport modelling is considered pioneering worldwide. He influenced me the most. His approach to research of fusing theory and practice was great learning. Like most PhD students, I too had periods of difficulty, but his subtle mentoring style always made me believe that I would come through.

During my doctoral studies, I worked as a research associate in a UK government-sponsored mega-research project led by

Surgical interventions to improve walkability using micro-PTAL mapping in Ahmedabad

Cambridge University and partnered by UCL, the University of the West of England (Bristol), the University of Leeds, and Newcastle University. There were several world-renowned planners and modellers on the steering committee of this project. I was particularly impressed by the work and attitude of another world-renowned urban modeller, Professor Mike Batty. In addition to their technical expertise, Professors Tyler, Echenique, and Batty were down-to-earth. Their most noteworthy quality was their nobility - they never let their ego drive conversations and always made you feel like you were talking to a peer and not a superior.

You are the Chair of the PhD programme in Management. Please share some information about this role.

My role is to set up systems and processes that help in the smooth functioning of the programme. One key responsibility is to mentor students and connect them with appropriate faculty members to shape their research ideas better. As part of this mentoring, I have created shared resources for the PhD students on academic writing, managing a PhD research project, etc.

What is your role as the Chair of TODS?

I took over this role in January 2023, so it is early days. TODS area is characterised by immense diversity and is ably supported by the matching faculty expertise. As TODS team, we plan to do the following: enhance the course contents with more practical applications in all areas of management; introduce new specialised courses for advanced students; strengthen the backward and forward linkages between courses; generate more interest amongst the students for majoring/minoring in TODS; explore the creation of interdisciplinary research clusters; and of course, attract good PhD students in TODS.

Ridima Verma, School of Engineering and Applied Sciences

Ridima Verma is a PhD student in the School of Engineering and Applied Sciences. As a new research student, she shares her motivation for choosing Ahmedabad University and expectations from a career in research.

I was born in Phagwara, Punjab, and grew up in Chandigarh. My education has been from various institutions in Chandigarh and Punjab, including Chitkara University and Thapar Institute of Engineering and Technology. I view a career in research as incredibly motivating and rewarding. It is an opportunity to explore and uncover new knowledge, solve complex problems, and contribute to the advancement of humanity. As a researcher, one gets many opportunities to take pride in their accomplishments and the satisfaction of having made a difference. PhD is the period to learn, grow and develop the skills and expertise needed for a successful research career.

I applied for the full-time PhD programme at Ahmedabad University last year after learning about the dedicated research culture here. The decision to join Ahmedabad University has been a good one till now. For a new PhD candidate like me, the ecosystem here is quite supportive of one's needs. My expectation from a PhD is that I will be able to develop a comprehensive understanding of the subject I am researching and become an expert in the field. I want to be able to apply my research to solve practical problems and contribute to the society in a meaningful way. I also look forward to gaining a better understanding of the research process and effectively communicating my findings to a broad audience. Finally, I hope to build strong relationships with peers and supervisors in the field and be able to work collaboratively to advance research in the area.

Outside research, I am interested in arts. I had participated in and won many competitions in the past. I also like reading good novels and have a keen interest in philosophy and history.

Awarded Grants

(for the period November - December, 2022)

External Grants

Biological and Life Sciences Division, School of Arts and Sciences

Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions
5 years; INR 2.5 crores
Department of Science and Technology, Government of India
This grant will facilitate the creation of a centre for imaging and data processing to support researchers and industries in the region. The centre will support researchers in the areas of cancer biology, stem cells, neurobiology, nanotoxicology, plant biology, and structural biology to carry out experiments using advanced instrumentation.
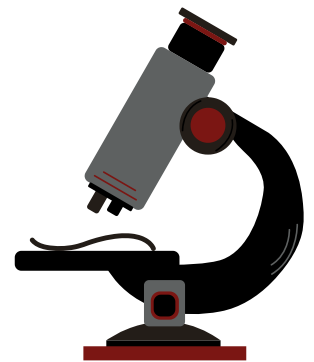
Mousa Mohammadian, School of Arts and Sciences

Charles Sanders Peirce and Logical Empiricism
3 months
Institute Vienna Circle, University of Vienna
Professor Mohammadian plans to study the interactions between early logical empiricism in the US and the philosophy of American pragmatist C.S. Peirce, especially his philosophy of science. He will spend the summer of 2023 at the Faculty of Philosophy and Education, University of Vienna as part of the fellowship.
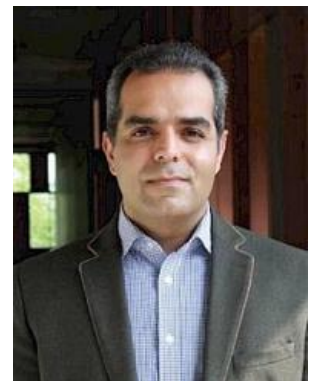
Aditya Prakash Kanth, Centre for Heritage Management
The Living Heritage of Vadnagar: Documentation and Comparative Analysis
1 year
Directorate of Archaeology and Museums, Government of Gujarat
This project aims to document the cultural landscape and heritage elements of Vadnagar focusing on economic development. The project objectives also include a comparative analysis of Vadnagar and international living heritage sites and identification of internationally acclaimed best practices of heritage management for Vadnagar.

Ahmedabad University Grants

Start-up Grant

Bhuvan Pathak, School of Arts and Sciences

Deciphering molecular mechanism of calcium deficiency in peanuts and tissue culture optimization using cotyledonary node as an explant
INR 25,00,000; 3 years
In this start-up grant, Professor Pathak has proposed to study the molecular basis of calcium uptake by developing peanut pods and optimize the peanut tissue culture protocol with the reduced timeframe and Agrobacterium mediated transformation. A potential outcome of the grant is identification of potential candidate genes which play a major role in the calcium uptake during peanut seed development.

Ashim Rai, School of Arts and Sciences

Structure-function mapping of Salmonella-host cytoskeleton interactions
INR 18,30,400; 3 years
Professor Rai will employ an interdisciplinary approach to study the mechanisms by which the pathogen Salmonella hijacks the host cellular machinery to achieve cellular entry, pathogenic replication and spread.

Seed Grant

Pallavi Vyas, Amrut Mody School of Management

Impact of the Covid-19 Pandemic on Sex Ratios in India: The Case of Gujarat
INR 70,309; 6 months
Professor Vyas will measure the impact of COVID-19 induced lockdowns and the resultant difficulties in accessing ultrasound and abortion clinics on the at-birth sex ratio in the state of Gujarat.

Four students pursuing PhD in different Schools of Ahmedabad University were selected for the Scheme of Developing High Quality Research (SHODH) scheme of the Government of Gujarat for 2021-2022 round. Suman Mallick from the School of Arts and Sciences and Rajshree Liya, Mansi Sonaiya and Srishti Sharma from the School of Engineering and Applied Sciences were selected for the award. The SHODH scheme has been instituted "to develop and encourage the research capacity of the students of Gujarat". The award includes a monthly stipend and incidental expenses.

Applications are currently being accepted for the 2022-23 round of the SHODH scheme till 31 January 2023. Information about the scheme and the application process are available at https://mysy.guj.nic.in/shodh/. PhD students are encouraged to make use of this opportunity for a scholarship from the state government.

Using nanotechnology to fight food adulteration

Ritesh K Shukla

Ritesh Shukla is an Assistant Professor in the Biological and Life Sciences division of the School of Arts and Sciences. His research on nanomaterials and toxicology, with over 37 research articles, 18 book chapters and 3 books edited, is recognized internationally. He was featured in Stanford University's list of the world's top 2% of researchers in 2022. In this issue of Research Horizons, Professor Shukla shares his work on developing nanotechnology tools to fight food adulteration.

Food is essential for life. But adulteration of food, its contamination with various chemicals, dyes, toxins, etc., is a major concern as it poses a serious threat to human health. Colours and dyes are added to enhance the appearance of the food to attract consumers. On the other hand, the application of pesticides is a routine agricultural exercise to reduce the losses caused by pests and insects. Most of the food contaminants, whether MSG, non-permitted dyes, or pesticides, are carcinogenic in nature. Additionally, they are difficult to digest, leading to physiological disruption and damage which poses a public health challenge. In the Nanomaterial and Toxicology laboratory we rely on a preventive approach to conquer the issue of food safety and security where the adulterants are detected prior to their consumption and thus, protecting the consumers from adverse health effects. Our research group is working on developing a multiplex nano-sensing platform (using synthesized nanoparticles and nanozymes) where different pesticides and food additives (non-permitted dyes/chemicals) can be detected simultaneously on a single platform. The devices/platforms being designed are expected to be cost-effective, user-friendly, rapid, robust, sensitive, and specific and do not require any specialized skill to operate.
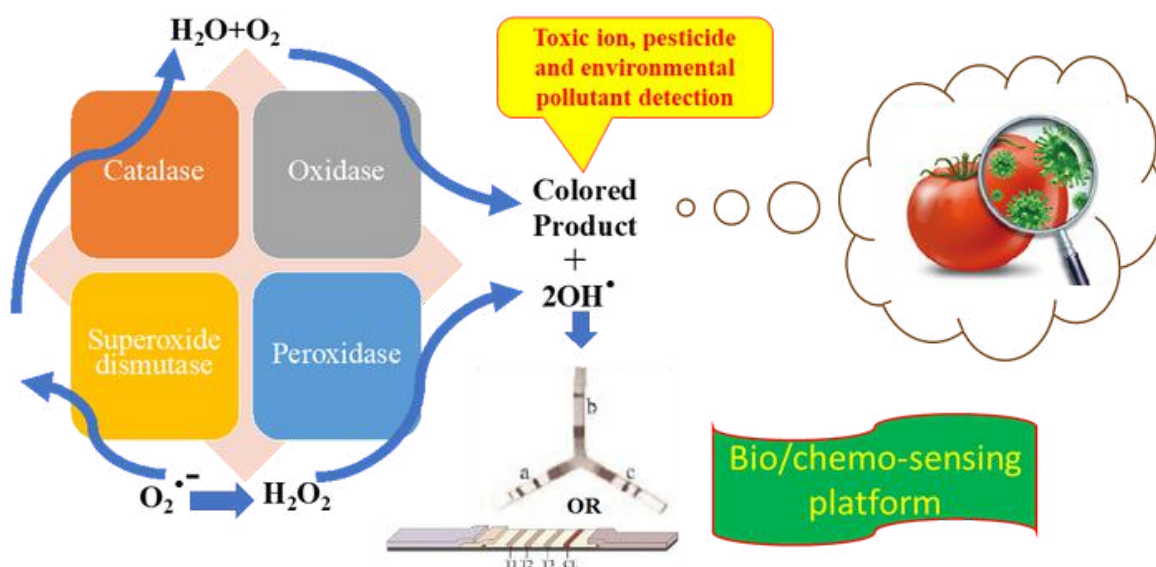
Insights From COP 27

Minal Pathak

Minal Pathak, Associate Professor at the Global Centre for Environment and Energy at Ahmedabad University was one of more than 30,000 attendees in Egypt at the November 2022 Sharm El-Sheikh United Nations Framework Convention on Climate Change, or UNFCCC, Conference of the Parties, also known as COP27. She served as a panellist, moderator and presenter on behalf of Ahmedabad University and the Intergovernmental Panel on Climate Change (IPCC), sharing information and insights on climate change mitigation. In this issue of Research Horizons, Professor Pathak shares her experience of participating in the conference.

COP 27, the twenty seventh iteration of the annual meeting, was a two-week event full of intergovernmental negotiations and press conferences. At the Sharm El Sheikh Conference, countries came together to take action towards achieving the world's collective climate goals. The 30,000 participants at the meeting included over 100 heads of state and other government representatives, scientists, representatives of research and non-government organisations including environmental NGOs (ENGO), youth NGOs (YOUNGO), and Business and Industry NGOs (BINGO). Beyond the official government activities, the conference included side events spread across dozens of pavilions showcasing climate change research, climate-relevant technologies and climate action around the world and across different sectors.

Professor PR Shukla and I authored the Summary for Urban Policymakers (SUP) series of reports which was released at COP27. The SUP initiative brings together the world's leading scientists with local government policymakers and businesses to co-generate and advance a scientific evidence base to propel and deepen implementation of climate action in cities around the world. I spoke at the Special Event on gender-related aspects of the IPCC Sixth Assessment Report and highlighted some key elements for gender inclusive pathways including a transition to clean energy and gender responsive finance. At the IPCC Session on Delivering a Sustainable Future: Feasibility and Policy, I shared results from IPCC AR6 and how the climate mitigation transition links to sustainable development.

As my fellow colleagues, I returned with the recognition, perhaps even more than before, that it's not enough for researchers to simply develop great science and amazing technologies and then throw them over the fence, hoping they get taken up by the wider world. It is really important to get out there and spread the word. Whether its talking on the floor of the United Nations or in the hallways of local community organizations – it's about communicating science to society and then taking in learnings that help improve your science the next time around.

Aditi Patel, School of Arts and Sciences

Aditi Patel is a PhD student in the Biological and Life Sciences division of the School of Arts and Sciences. For her thesis project, she is developing novel cancer detection tools. She shares her experience of being a student at Ahmedabad University, the support she received here, and her future plans.

I was born and raised in Ahmedabad, where I studied till graduation. I was keen on pursuing a PhD in cancer biology. This aligned with the expertise of Professor Vivek Tanavde and the research programme in his lab at Ahmedabad University on understanding the functionality of miRNA (micro ribonucleic acids) in cancer. For my doctoral thesis, I am working on identifying a biomarker for non-invasive prediction of oral cancers risk. This could replace the current invasive tumor monitoring approaches. With my mentor, we have filed a patent describing a method to use miRNA derived from saliva as biomarker for oral cancer detection. This invention has applications in prognosis and survival rate prediction in oral cancer patients. In future, I am keen on exploring the field of liquid biopsies in oral cancers and taking it forward from laboratory set-up to clinics.

The PhD program in Life Sciences at Ahmedabad University provides a unique interdisciplinary approach and access to cutting-edge resources, which has helped me conduct insightful research. The research seminars at the university give us an opportunity to interact with researchers from around the world, which motivates us and drives our research journey ahead. Pursuing a PhD has helped me reach a step closer to my goal of translating research from bench to bedside. Apart from research, I enjoy painting and dancing.

A paper titled "Indian Commercial Truck License Plate Detection and Recognition for Weighbridge Automation" presented by Professor Keyur Joshi, School of Engineering and Applied Sciences, and Mr Siddharth Agrawal won the best conference paper award for the last two days of the conference at the IEEE 28th International Conference on Mechatronics and Machine Vision in Practice (M2VIP 2022). The conference was held virtually from 16 to 18 November 2022 and was organized jointly by Northeastern University, USA and Southeast University, China. The paper was the outcome of a UGRP project.

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(for the period October - December, 2022)

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Investigating the Influence of Bribery and Resistance to Bribery on Workers' Response to Victims of Corruption

Ekta Sharma

Ekta Sharma is an Associate Professor at the Amrut Mody School of Management. She studies organizational behavior and human resource management. She has authored over 30 papers published in peer-reviewed, indexed journals and a book titled "Strategic human resource management and development". In this issue of Research Horizons, Professor Sharma shares her recent work investigating the influence of previous exposure to corruption on how employees respond to victims of corruption.

Corruption is a parasitic issue that sucks the world economy. The United Nations reports that corruption amounts to $3.6 trillion each year. The Corruption Perception Index (CPI) published by Transparency International, an index that ranks 180 countries and territories based on their perceived level of public sector corruption on a scale of 0 (highly corrupt) to 100 (very clean) shows New Zealand (88), Denmark (88), and Finland (88), among the least corrupt, and Syria (13), Somalia (13) and South Sudan (11) among the most corrupt. Two-thirds of the indexed countries have scored below 50 on CPI.

In our research, we investigated corruption as a moral issue, with particular emphasis on corporate bribery in the banking industry. We studied the reactions of workers to other workers who, as customers of a bank, have either succumbed to or resisted the solicitation of bribes by an official of the bank. Basic research shows that observing someone else committing a moral infraction or acting in a laudatory manner when pressured to commit a moral infraction often automatically leads to certain negative or positive emotions in the observer.

Our integrative approach suggests it is neither the situation alone nor the person alone that underlines the behavior of workers in ethical contexts, but rather a person-situation intersection. The observation of moral rectitude or moral impropriety as a situational stimulus elicits spontaneous emotional reactions toward the perpetrator. Yet the full meaning and effect of this on felt affect depends on self-regulation in the sense of the amplifying or dampening function of personal empathy and social identity. Our research also highlights specific implications of felt affect on tendencies to support the person resisting making a bribe or succumbing to solicitation of a bribe.

Monitoring Machines, Detecting Faults

In Conversation: Akhand Rai

Akhand Rai is an Assistant Professor in the School of Engineering and Applied Science of the Ahmedabad University faculty. His research work is focused on studying problems in mechanical engineering such as conditional monitoring of rotating machines, nonlinear dynamics and vibration analysis, fault diagnosis, fault prognosis, and pipe leak diagnosis. He has recently turned attention to interdisciplinary research studying mental stress employing signal processing and machine learning techniques for the analysis of EEG data. He was featured in Stanford University's list of the world's top 2% of researchers in 2022. In this issue of Research Horizons, Professor Rai shares his career path, research plans, and some advice to up-and-coming researchers.

My path to a career in academic research

I studied Mechanical engineering at the College of Engineering, Roorkee. After qualifying GATE exam, I joined the master's course in Machine Design at IIT BHU in Varanasi and graduated the course with a gold medal. I was selected through campus placement for a job at General Electric and moved to Bangalore. The 6 months I spent working at GE helped me realize that a routine, repetitive job was not a good outlet for my creative abilities. So, I moved back to academics and took up a teaching position at Jaypee University of Engineering and Technology, Guna. When I joined this position, I intended to use the opportunity to figure out my true calling. In due course, I registered for a PhD there to research tool chatter and vibrations during machining operations.

Very early into PhD, it became clear to me that an interdisciplinary approach and tools from other areas such as signal processing and machine learning are required to address these problems. When the limited resources at Jaypee University slowed down the progress of my research, I moved to IIT Roorkee to continue my PhD work. At this point, I should highlight the influence of a teacher from IIT BHU who left a lasting impression on me, Professor VP Singh. He used to teach us vibrations and he did such a wonderful job that I was motivated to pursue research on vibrations at IIT Roorkee.

Research scholars normally spend the initial year or more of their PhD trying to identify and define a research problem. But, I was fortunate that my PhD project at IIT Roorkee was part of a sponsored project from DRDO which meant that from day one I had a predefined problem. This is also a piece of advice I like to share with junior colleagues and students. If you can work on a sponsored project for your PhD, it is always a good idea to take that opportunity because then the proposal has already been scrutinized and approved by a funding agency. My research was in the area of conditional monitoring of rotating machines, specifically bearings. Every machine contains some rotating elements such as bearings, gears, shafts, etc. When machines operate continuously in industries, over time, they develop faults. If these faults remain unmonitored, the machine will suddenly fail which could compromise the safety of workers or lead to downtime in production which result in economic losses. I worked on developing ways and means to detect these faults early and prevent the failure of machines.

I worked really hard during the 3 years of PhD with very little rest or other activities. As a result, in just 4 months I was able to publish a paper in a prominent journal, Tribology International which surprised even my supervisor. This also helped establish a level of confidence with my supervisor; he started trusting my analysis and quickly approved manuscripts for submission to journals. I particularly highlight this because I have often
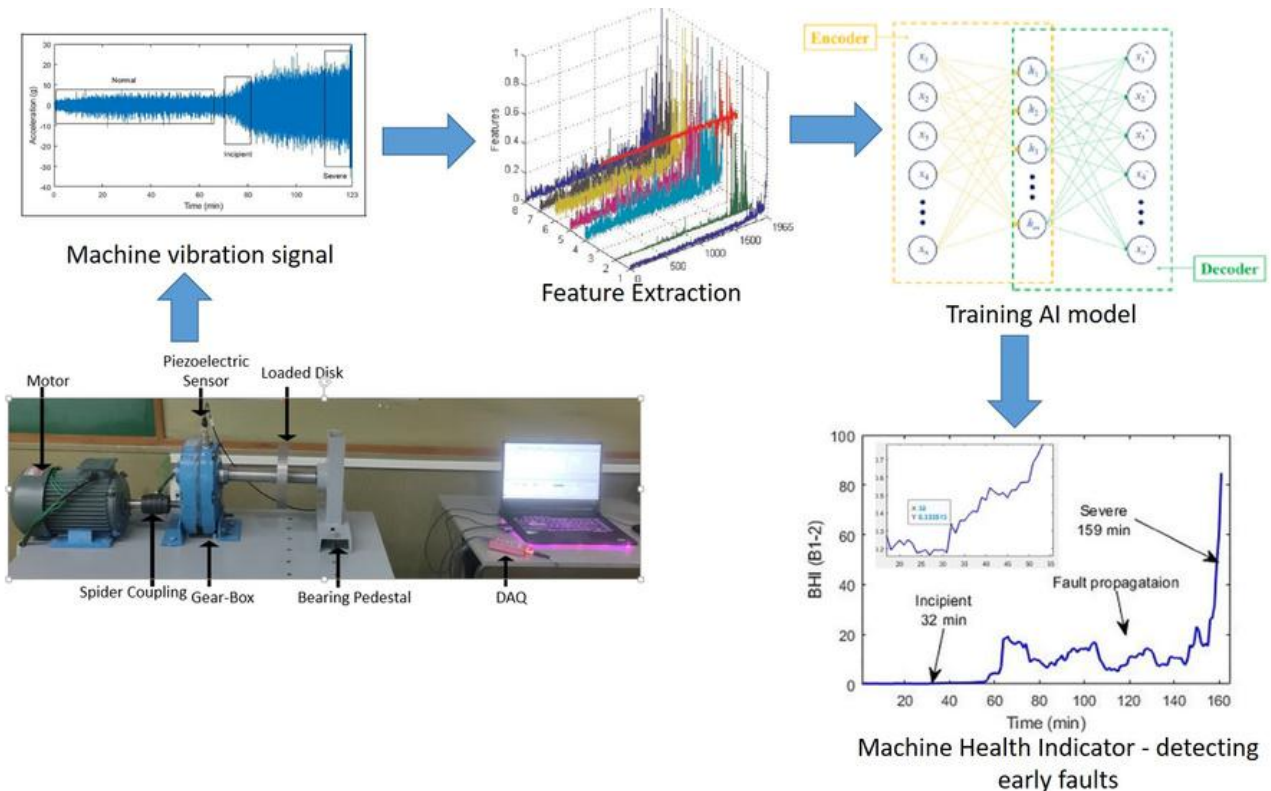
noticed many of my colleagues getting dejected and losing motivation after their manuscripts were held up for publication because their supervisors took a long time to review them. By the end of my PhD, I published 6 papers in reputed journals.

After PhD, I took up a faculty position at Thapar Institute of Engineering and Technology, Patiala. This was a very different experience from Jaypee University and I developed a new style of teaching by adding an application angle to the teaching material. After about 11 months at Thapar, I moved on to take up a postdoc position at the University of Ulsan in South Korea. I worked on a new problem in condition monitoring related to the detection of leaks in pipelines. One interesting aspect of my postdoc experience was that all the projects I worked on were in collaboration with the industry. This gave me an opportunity to visit a number of industrial units in South Korea and witness their culture of attention to safety and cleanliness. Though I enjoyed doing research in South Korea, I found it difficult to overcome the language and cultural barriers. That is another insight I would like to share with students who plan to travel abroad for a postdoc position. They should be mentally prepared that research is not the only challenge they will face.

My Ahmedabad experience

I returned to India from South Korea in the middle of COVID pandemic and applied for a faculty position at Ahmedabad University in early 2020. When I came here, this felt like the place I wanted to be. One reason was that the faculty profile here is such that I will have colleagues from whom I will be able to learn new things. During my interaction with the Vice Chancellor, I could relate to his vision of creating an institution with solid fundamentals in research, and imparting project-based learning. Since I had some experience in the past with experiential and project-based learning. Since I had some experience in the past with experiential and project-based learning, I wanted to be a part of that vision. Another motivating factor for me to join Ahmedabad University was the city itself, which I have loved since I came here.

When I joined Ahmedabad in July 2020, we were still in the middle of the COVID pandemic, and the place felt a little lonely because there weren't many people on the campus. During my first semester here, the classes were online and I started off by teaching a course on automobile engineering and fluid mechanics. Though this was not my area of expertise, I was able to take up the challenge because I had

Machine vibration signal

Feature Extraction

Training AI model

Machine Health Indicator - detecting early faults

teaching and administrative experience during my PhD. The feedback I received from students at the end of the course was positive and overwhelming.

Soon after I joined here, I was awarded a seed grant by the University for my research work. The research programme in my lab is divided into two paths. On one side, I am taking forward the research I pursued during PhD and post-doctoral work in condition monitoring of rotating machines. I believe there are many interesting problems still in the field that need to be studied. In parallel, I am slowly transitioning to different domains, exploring problems in the detection of pipeline leaks and analysis of brain signals to identify mental stress. More recently, I have been working on the early detection of faults in batteries for electric vehicles.

My future projects

In the near future, I plan to work on 2 projects, railway track monitoring and harvesting energy from machine vibrations. Most train accidents are due to failure in the tracks or the rails themselves. I plan to develop a means to monitor the tracks and detect any ruptures or fractures in the rails. This could be done either with vision cameras that move over the tracks or by installing sensors that record the vibrations of tracks. These sensors could additionally be used to collect data on the long-term impact of train traffic on the structure of an adjoining building. To harvest energy from the vibrations of machines, I plan to use devices called triboelectric nanogenerators. These are multiple layers of electrodes that when deformed generate electricity which can be used to power small devices, for example, sensors on the machine. These generators have a dual purpose in that they can also be used to detect faults in the machines by monitoring changes in the vibrations.

My advice to students who are taking up research

Students should be clear about what they need to do to have an effective PhD experience. I have often seen, even during my PhD days, that students are confused about whether they should publish their papers quickly or wait for a long time to collect a lot of data that can be published in a very prestigious journal. Sometimes students wait till the end of their PhD to publish one paper or maybe not even that. My opinion is if you manage your time effectively and work hard, it is possible to do good quality work and publish in a short time. It does not have to be an either-or kind of a situation. It is important to acknowledge that publishing papers is necessary because if you do good research in your lab and rest of the world does not know what you are doing, then your work will not have any visibility. When publishing papers, you also get feedback from your peers and experts in the field which will help improve your work further.

The relevance of your work is determined by many factors such as how many times your papers are cited, popularity of journals in the research area you are pursuing, appreciation of your work from peers in the field, etc. and not solely on the impact factor of the journal. Even if the paper is published in a low impact factor journal, if it gets cited in other papers published in quality journals, the work will be recognized in the field. I advise students to target good quality journals that are also popular in their area of work; don't only chase high impact factor journals.

Another piece of advice I would like to share is from my experience of being involved in some non-research-related activities during my PhD. When I was a teaching assistant to my supervisor, he was very particular that I am involved in preparing assignments, grading exam papers, and other administrative activities. I was also responsible for setting up our laboratory. Initially, this felt like a drain on my time which could have otherwise been used to complete my PhD research. However, this experience came in very handy later on when I took up faculty positions in managing my administrative responsibilities along with teaching and research. So, whenever possible it is advisable for PhD students to take up any administrative or supervision responsibilities as part of their training. This will give them an edge over their peers.

Research Seminars

(for the period October - December, 2022)

School of Arts and Sciences

Seminar and Lecture Series

Suhas Doshi and Maitreya Parikh, GIPS Hospital, Ahmedabad. Mind Your Mind. October 10, 2022.

Jayraj Pandya and Tushar Chakrabarty, PRS Legislative Research, New Delhi. Understanding the Indian Parliament. October 15, 2022.

Waqar Zaidi, Lahore University of Management Sciences, Lahore. Machines for Peace: Aviation, Atomic Energy, and the Search for Collective Security, 1920-5. November 2, 2022.

Sushmita Pati, National Law School of India University, Bangalore. How Rent Shapes Our Cities: Cartels, Controls and the Making of a House Market. November 9, 2022.

Sharmila Bapat, National Centre for Cell Science, Pune. Transcriptional Plasticity-Enhancing Molecular Diversity in a Cell Through Chimeric Transcripts. November 9, 2022.

Gabrielle Kruks-Wisner, University of Virginia, Charlottesville, USA. Claiming the State: India's Active Citizenship in Global Perspective. November 16, 2022.

Mahesh Rangarajan, Ashoka University, Sonepat. Rethinking the Anthropocene: Environmental History as if Asia mattered. November 17, 2022.

Research Seminar Series

Chandan Singh Dalawat, Harish-Chandra Research Institute, Allahabad. Other Worlds are Possible. October 9, 2022.

Paturu Kondaiah, Indian Institute of Science, Bangalore. Bench to Bedside and Bedside to Bench: Research leading to discovery and translation. October 20, 2022.

Udayan Darji, University of Louisville, Louisville, USA. Social Networks and the Random Graphs. November 2, 2022.

School of Engineering and Applied Science

Recruitment Seminar

Rahul Sahay, National University of Singapore, Singapore. Experimental analysis of flow regimes pertaining to electrospinning and its applications. October 6, 2022.

Bimal Das, Indian Institute of Technology Patna, Patna. Cornering fatigue life evaluation of DP600 steel wheel disc: Experimental and numerical modelling. December 14, 2022.

Industry Expert Lecture Series

Vinod Kumar Mall, Ahmedabad University, Ahmedabad. Indian Diversity and Evolution of Composite Culture. November 16, 2022.

Sunil Dhole, Technorbital Advanced Materials Pvt. Ltd., Kanpur. Newton's Laws of Entrepreneurship. November 10, 2022.

Amrut Mody School of Management

Research Seminar

Jeemol Unni, Ahmedabad University, Ahmedabad. Demonetisation and Labour Force Participation in India: the Impact of Political Alignment. October 12, 2022.

Bijal Mehta, Ahmedabad University, Ahmedabad. Fostering the Inclusion of Women as Entrepreneurs in the Sharing economy Through Collaboration: a Commons Approach Using the Institutional Analysis and Development Framework. November 2, 2022.

Ramadhar Singh, Ahmedabad University, Ahmedabad. Responding to Negative Events: Thoughts Provoked by Covid-19 Disruptions. November 22, 2022.

Aasheesh Dixit, Ahmedabad University, Ahmedabad. Algorithmic Mechanism Design for Egalitarian and Congestion-Aware Airport Slot Allocation. November 23, 2022.

Recruitment Seminar

Abhinav Sharma, Indian Institute of Management Ahmedabad, Ahmedabad. Managerial Discretion in the Context of Employee Stock Options Repricing Activity. October 14, 2022.

Tanmoy Majilla, Indian Institute of Management Lucknow, Lucknow. Household Income Shocks, Demand for Deposits, and Real Activities. October 17, 2022.

Soumyatanu Mukherjee, University of Southampton, Southampton, UK. To Acquire or to Ally? Managing Partner's Environmental Risk in International Expansion. November 11, 2022.

Kumar Dasgupta, Judge Business School, Cambridge, UK and Consultant, World Bank. Accounting Standards: Challenges and New Horizons for Accounting Research. November 17, 2022.

The Conversation Series

Aanchal Malhotra, Museum of Material Memory. Human History of Partition: Not Lines on Maps, But Stories, Memories, and Objects. October 15, 2022.

Rohini Nilekani, Rohini Nilekani Philanthropies. From Self To Society: The Role of Active Samaaj For Social Change. October 29, 2022.

Alex Tabarrok, George Mason University and Marginal Revolution University. Unbanking the Banked: is the World of Finance on the Verge of Disruption? November 5, 2022.

Shrutika Parihar, a PhD student in the Amrut Mody School of Management, participated in the Marine Alliance for Science and Technology for Scotland (MASTS) workshop at the University of Strathclyde, Glasgow from 08 to 10 November 2022 and presented a poster titled "Unlocking the potential of blue carbon: Land Use trends of Kachchh coast, Gujarat, India". She was visiting Scotland to conduct fieldwork for her PhD research and the visit was supported by the UK NERC DEI Flexible Funding Award. Shrutika's thesis research is being mentored by Professors Priyadarshi Shukla and Minal Pathak at the Global Centre for Environment and Energy.

Ahmedabad University