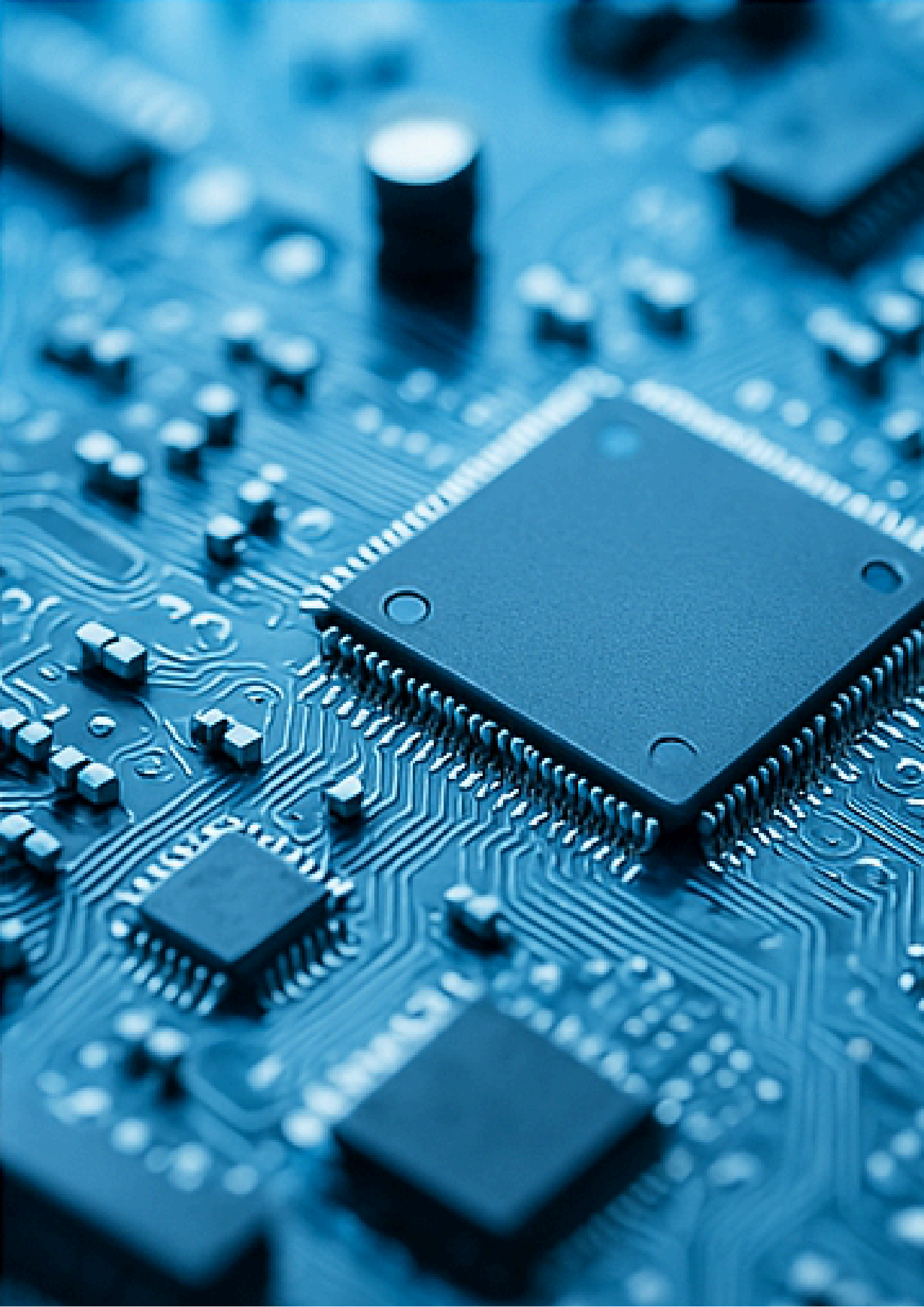


अन्वेषण



UPES
UNIVERSITY OF TOMORROW

**RESEARCH &
DEVELOPMENT**



R&D Newsletter, June 2025, Vol. 7

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President Dr. Sunil Rai



As we reflect on the remarkable progress made over the past few months, I'm both proud and deeply encouraged by the trajectory of research and innovation at UPES. What we're witnessing is not just academic output—it's a culture taking root. A culture where curiosity meets impact, where ideas are not just explored but applied, and where every research effort is aimed at making a real difference.

This year, our faculty, researchers, and students have pushed boundaries—developing cutting-edge solutions in clean energy, healthcare, advanced materials, AI, and more. What stands out is not just the quality of work, but the intent behind it: a commitment to solving problems that matter. Our partnerships with national and international institutions have only strengthened this effort, helping us bring global perspectives into local relevance.

What excites me most is the direction we're heading. With our expanding infrastructure, increased focus on interdisciplinary collaboration, and an ever-growing community of passionate innovators, UPES is poised to be a hub of transformative research. But let's be clear—this is just the beginning.

To everyone who contributes to this ecosystem—thank you. Your work is shaping not only the reputation of UPES but also the future we all want to build. Let's keep pushing. Let's keep questioning. And let's continue to lead with purpose.

Dean R&D Prof. Ashwini K. Nangia



Charting the Future of Research at UPES

As I reflect on my first six months as Dean of Research & Development, one thing is clear: UPES is standing at the cusp of something larger. The energy within our research community is real—and it's beginning to take shape in ways that matter.

The year began with a powerful signal—the 3rd IYRC Annual Science Festival brought students, scholars, and mentors together around bold ideas and critical inquiry. It wasn't just a university event; it was a statement that research at UPES is moving with a purpose.

Since then, we've navigated demanding transitions—from the closeout of major DST SERB-funded projects to the adoption of the new Vigyan Dhara system of ANRF. These are not small shifts; our faculty responded with speed and coordination, supported by the finance team. That several investigators have already secured grants in the new financial year is no coincidence—it reflects a research culture that is becoming both agile and accountable.

But operational efficiency is not the end goal—it's the foundation. Our real focus is on building a robust R&D platform: better systems, stronger proposals, clearer pathways from lab to society. We've begun by listening—through structured dialogues with faculty across schools—and we're acting on what we've heard. You'll see those changes reflected in how research support is evolving at UPES.

We've also expanded our footprint. Regular R&D engagement at Kandoli ensures that our work includes management, law, media and liberal studies—because real-world problems cut across disciplinary silos.

What comes next? Beyond chasing grants and metrics, we are building a research culture that asks better questions, serves society, and shapes the future. One that is confident, collaborative, and consequential.

Thank you for being a part of this exciting journey at UPES to build a sustainable future.

Vice-Chancellor Dr. Ram Sharma



At UPES, research is not a siloed pursuit—it's embedded in our identity. It powers our vision, shapes our relevance, and defines our contribution to the world. In the last six months, we've seen a surge in impactful work—solutions rooted in science and engineering, yet responsive to the social, environmental, and industrial needs of our times.

Our faculty and researchers have demonstrated what's possible when intellectual rigor meets purpose. High-impact publications, new patents, funded projects, and prototypes ready for real-world application—all speak to the strength and maturity of our R&D ecosystem. More importantly, they reflect our commitment to translating ideas into value.

We've also seen strong upward movement in national and international rankings—an outcome of strategic investment in talent, infrastructure, and interdisciplinary collaborations. Recognition from platforms like NIRF, QS, and Shanghai Rankings isn't just about numbers—it's a validation of the work our researchers do every day to push boundaries and deliver meaningful change.

As we look ahead, the challenge is clear: stay relevant, stay bold, and stay focused on impact. Let's continue to fuel a research culture that asks hard questions, builds smart solutions, and contributes to a future that is equitable, sustainable, and innovative. Thank you to each researcher, faculty member, and student driving this vision forward. Your work is the engine of UPES's progress—and its promise.

Dean Emeritus Prof. D.K. Avasthi



I'm pleased to share that research at UPES has continued to gain momentum through the latter half of 2025, solidifying our position as a growing hub of innovation and academic rigor. The dedication of our faculty and students is evident in the data, milestones, and breakthroughs showcased in this edition of the newsletter.

Our research infrastructure is expanding steadily—supported both by internal investment and competitive grants from national and international funding agencies. The Central Instrumentation Centre remains a critical enabler, fueling interdisciplinary collaborations across schools and catalyzing high-impact projects that are pushing the boundaries of knowledge.

Our global presence is also on the rise. UPES researchers have presented at top-tier international conferences this year, strengthening our academic networks and enhancing the university's global visibility. We're especially proud of our students' accomplishments—ranging from INSPIRE awards and Visvesvaraya Fellowships to several Ph.D. scholars qualifying CSIR-NET-JRF and GATE.

Looking ahead, the direction is clear and promising. I'm deeply grateful to our faculty, researchers, and students whose collective commitment drives our progress. With your continued passion and perseverance, we are shaping UPES into a center of transformative research and impact-driven innovation.

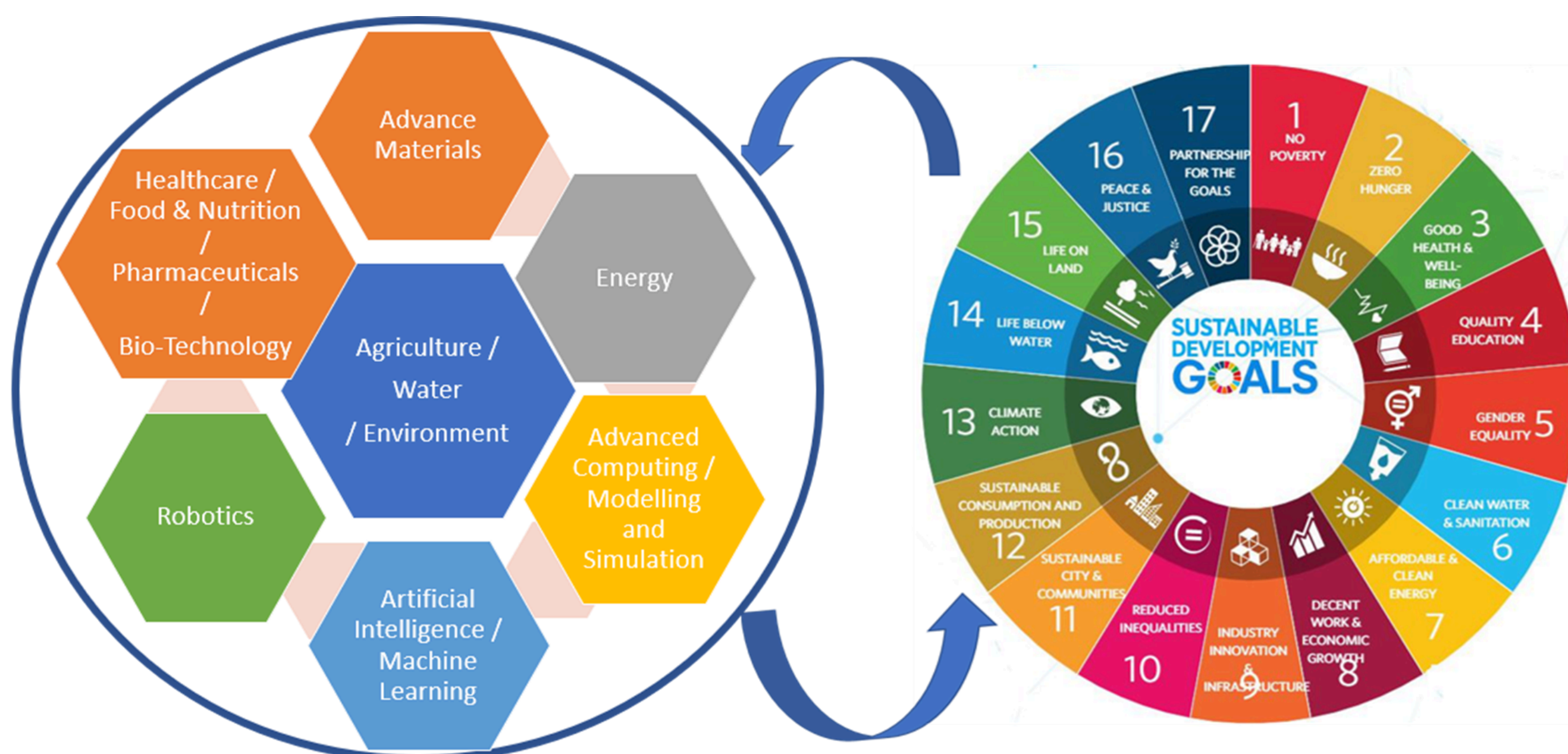
Vision

- To be an Institution of Global standing for developing professionally competent talent contributing to nation building.

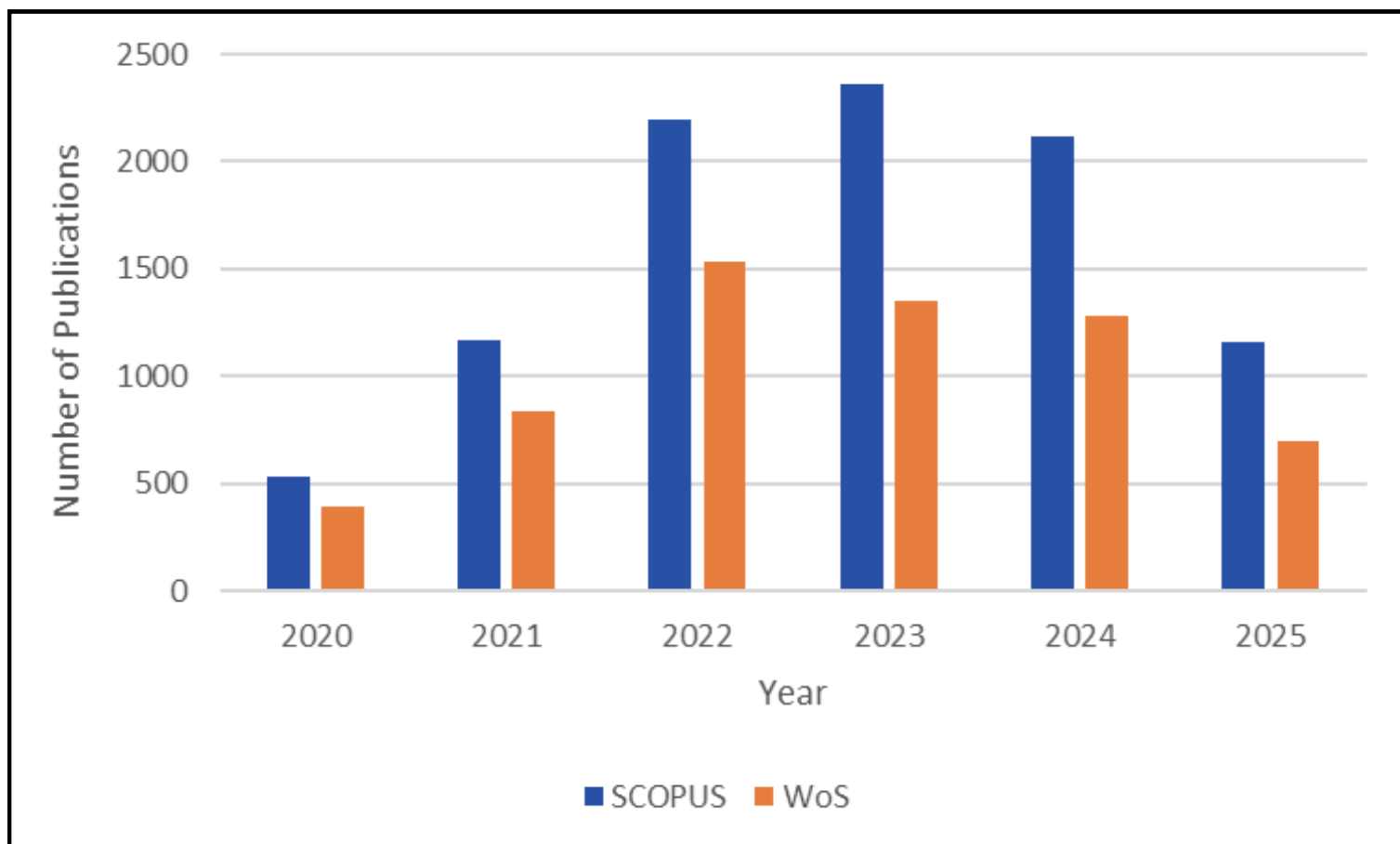
Mission

- Develop industry-focused professionals with an international outlook.
- Foster effective outcome-based education system to continually improve teaching-learning and research.
- Inculcate integrative thought process among students to instill lifelong learning.
- Create global knowledge eco-system through training, research & development and consultancy.
- Practice and promote high standards of professional ethics and develop harmonious relationship with environment and society.

R&D FOCUS @ UPES



Publication Growth @ UPES



Highest Impact Factor

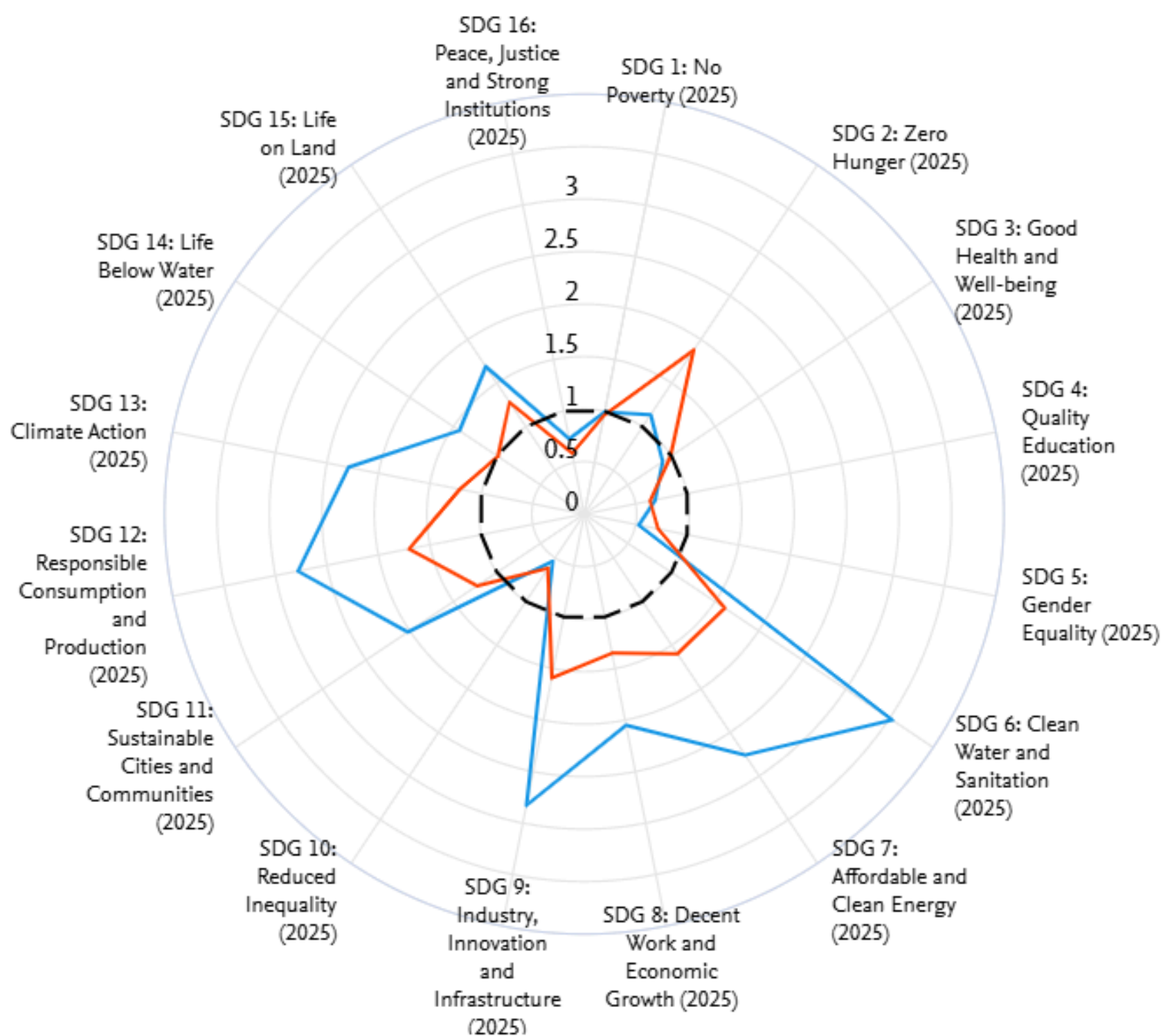
23.8

H-Index

117

Publications by SDG - Relative Activity Index

— University of Petroleum and Energy Studies — India — World



% of papers with
foreign collaborators

45%

Publication per
faculty

3.1

% publications in Q1
and Q2

80

#Source: SciVal

Cumulative R&D Statistics at a Glance*

14396+	108788	2025	117	167+
Research Articles	Citations	IPRs	H-index	Funded Projects

* <https://vidwan.inflibnet.ac.in>

*as on June, 2025

**Total
publications
1161**

**225
IF < 3**

**191
3 < IF < 5**

**94
5 < IF < 10**

**15
10 < IF < 15**

**11
15 < IF < 20**

**2
IF > 20**

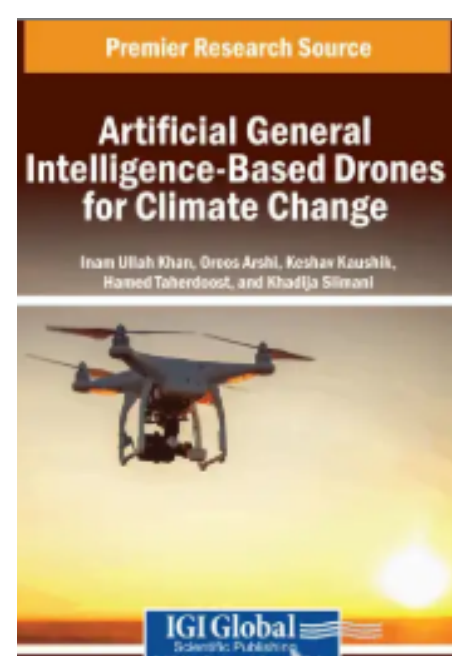
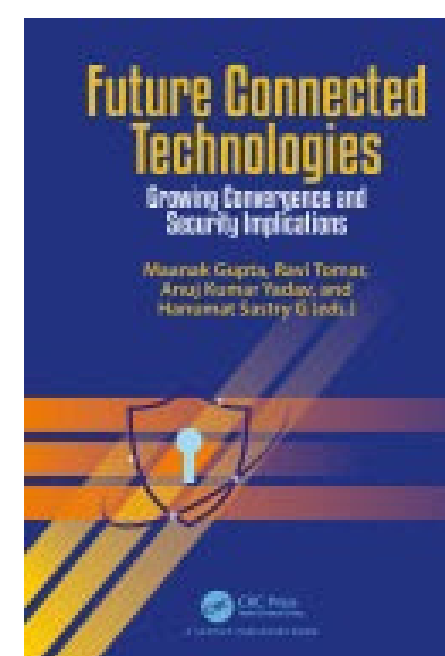
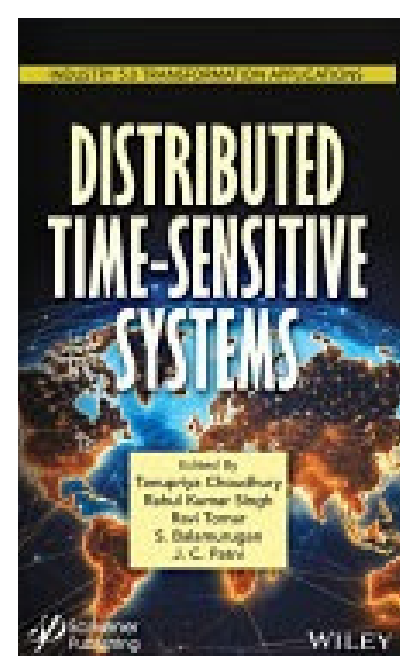
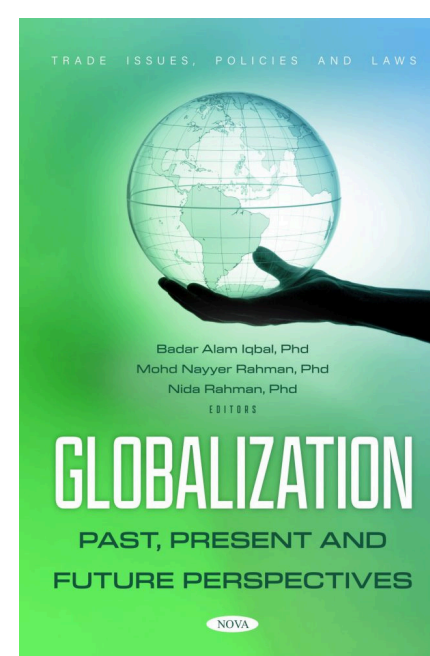
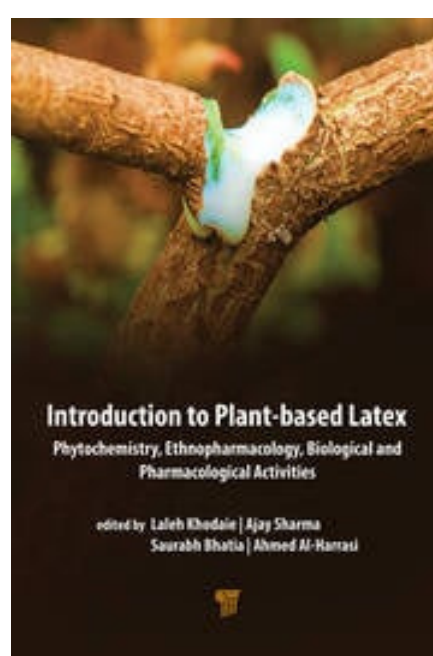
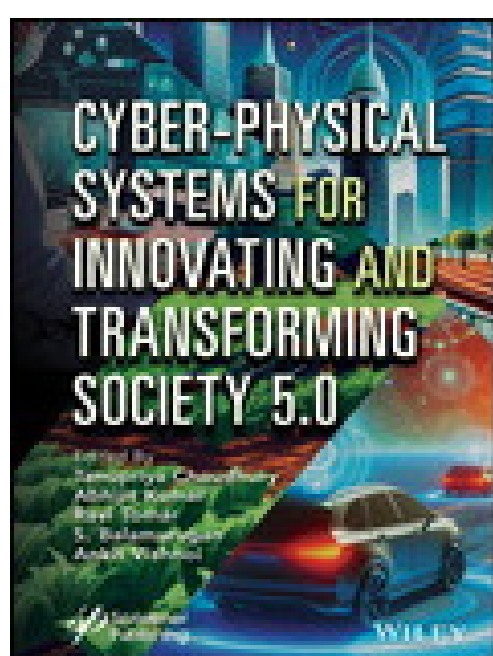
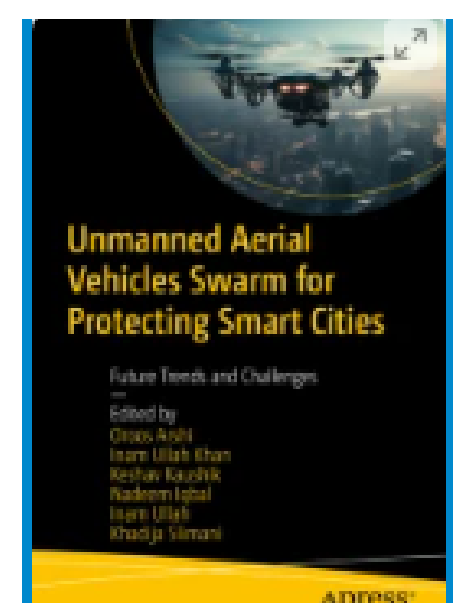
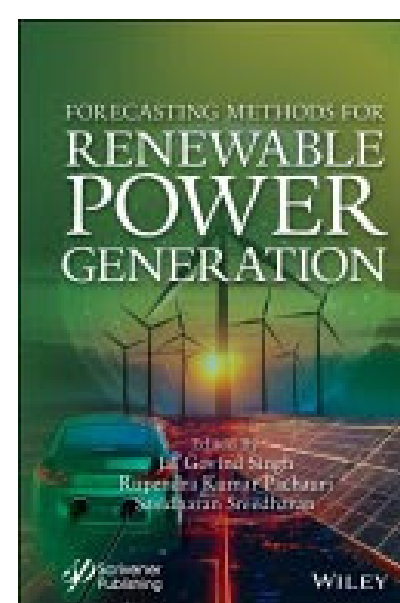
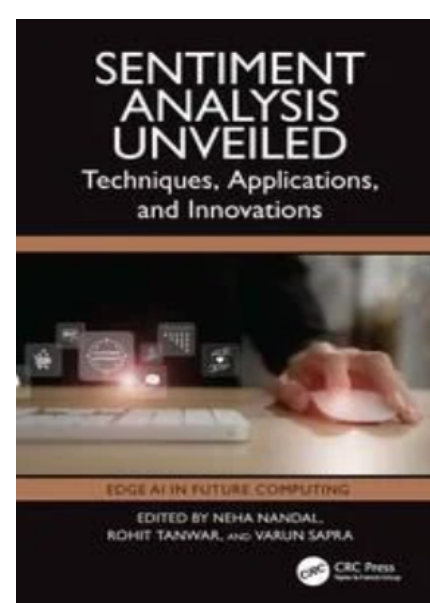
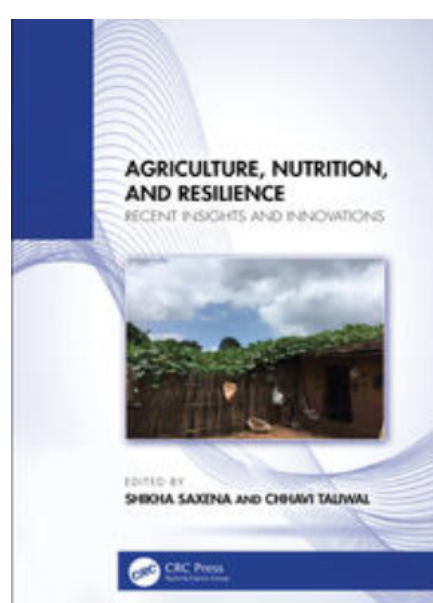
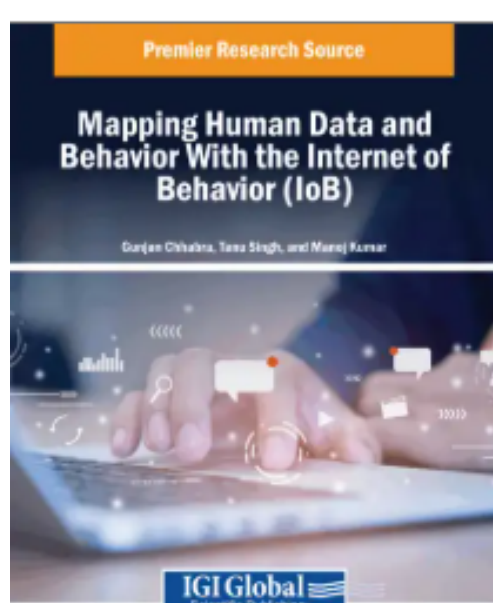
**45 % publications are
with international
collaborators**

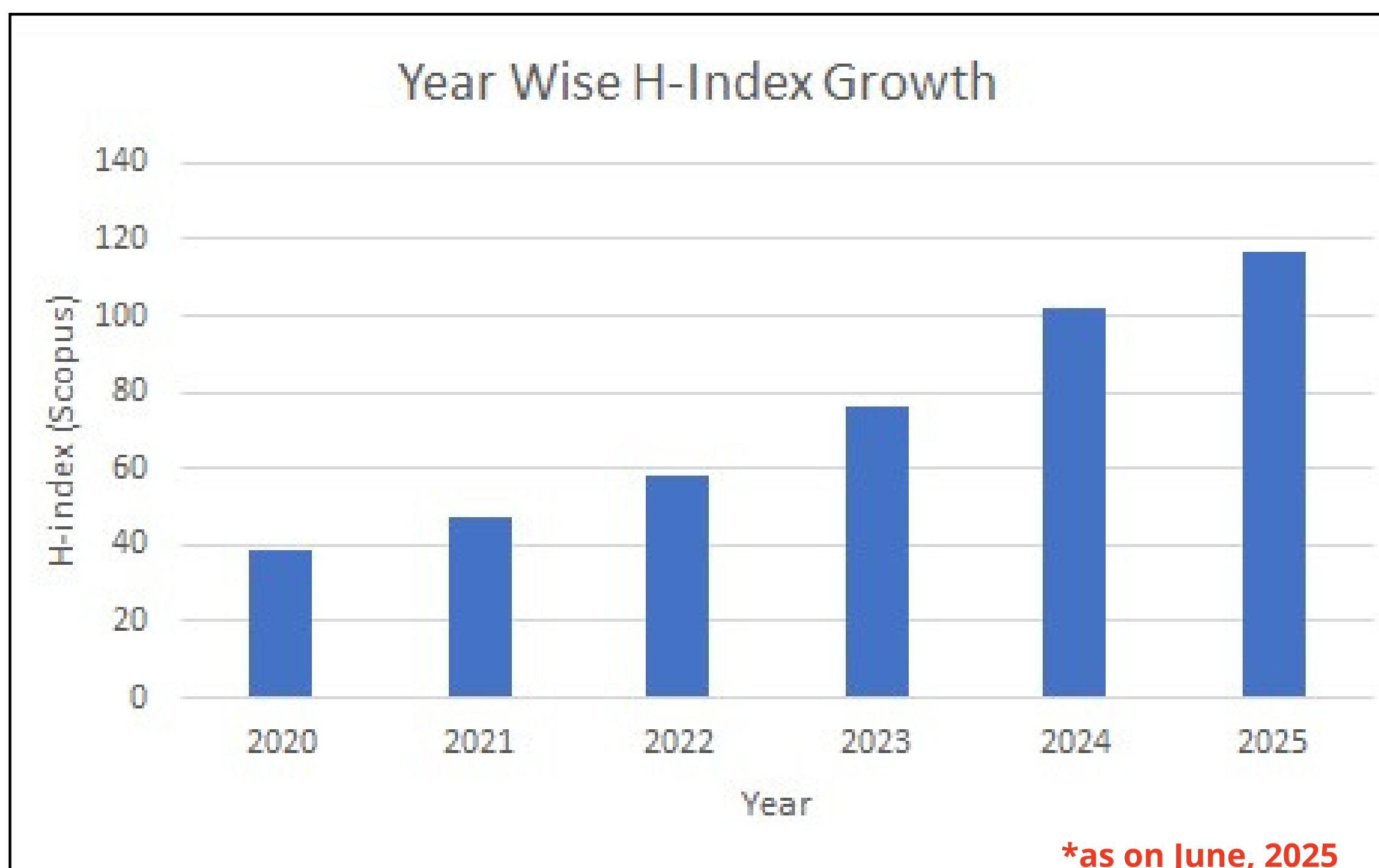
**Field weighted
citation impact is 1.63**

**Publications in top
journal percentiles -
top 10% by cite score
percentile 79.9**

***from Jan-June, 2025**

BOOKS





Research output per capita has increased by 344% over 5 years. H-Index: 39 to 117 in last 6 years

MEGA PROJECTS**Bajaj Engineering Skills Training (BEST)**

Flagship CSR initiative of Bajaj Auto Ltd.

**Empowering Youth
SKILLING IN ADVANCED
MANUFACTURING**

Industry-linked Course for Engineering
and Diploma Graduates

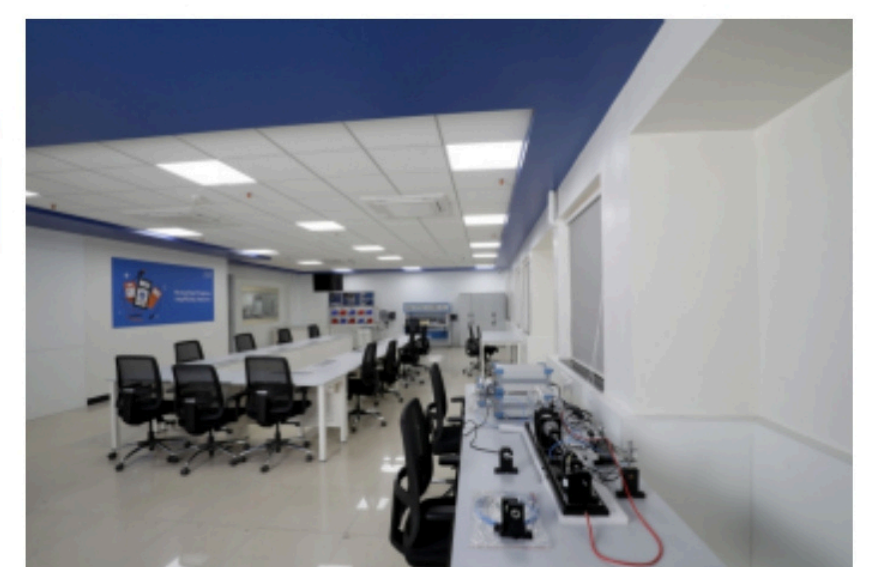
Bajaj Auto Ltd. has launched its flagship Corporate Social Responsibility (CSR) initiative, BEST – Bajaj Engineering Skills Training, to upskill engineering and diploma holders in cutting-edge technologies. UPES, Dehradun and Bajaj Auto jointly established the BEST Centre. This Centre features advanced laboratories designed to provide hands-on training in contemporary technologies viz. Mechatronics, Motion Control and Sensor Technology, Robotics & Automation, and Smart Manufacturing & Industry 4.0.

These programs equip trainees with the technical expertise and practical experience required to be industry-ready. The curriculum focuses on future-oriented domains in Mechatronics, Motion Control and Sensor Technology, Robotics and Automation, Industry 4.0, and Smart Manufacturing. The BEST Centre initiative reaffirms Bajaj Auto's commitment to developing a highly skilled engineering workforce by bridging the skill gap and fostering industry-academia collaboration.

01 MECHATRONICS



02 MOTION CONTROL & SENSOR TECHNOLOGY



03 ROBOTICS & AUTOMATION



04 INDUSTRY 4.0 & SMART MANUFACTURING



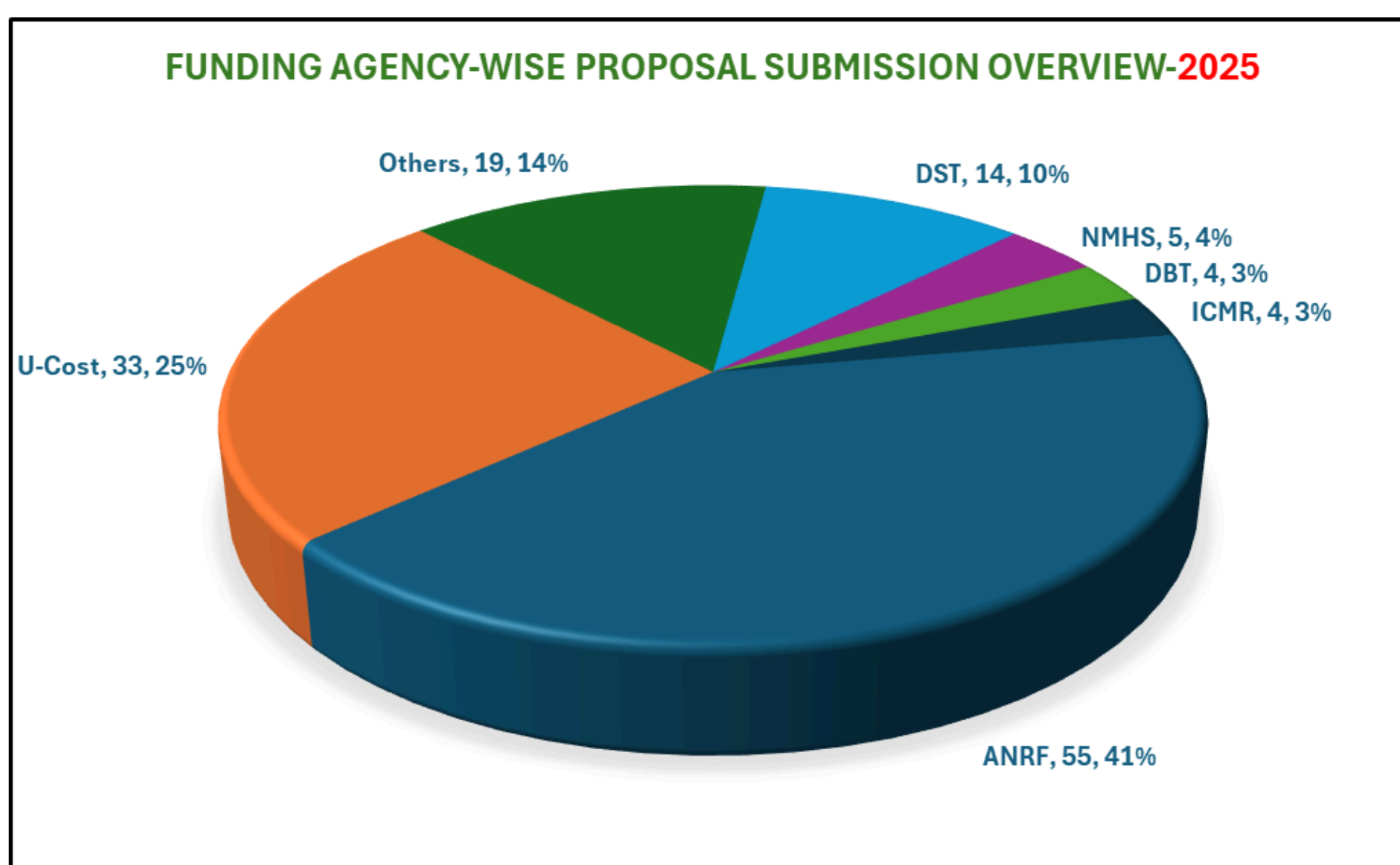
PROJECTS-2025

61
**ONGOING
EXTERNAL**

56
SEED

107
SHODH

**as on June, 2025*



UPES has successfully secured numerous prestigious projects with substantial funding from external sources across a diverse range of sectors, encompassing energy, water, environment, and food. Notably, since January 2025, the university has been awarded a total of 12 research and development projects worth INR 280.24 lakh. Additionally, 165 SEED and SHODH projects, with a combined budget of approximately INR 208.65 lakh, were funded by UPES. These projects underscore UPES's ability to attract significant research funding and its commitment to addressing critical challenges across diverse domains.

**as on June, 2025*

SEED projects: SEED is in-house financial support, available for consumables, mini equipment, travel grant, fees for characterization, software purchase and other operational expenses.

SHODH projects: This scheme aims to enable the students to innovate through investigations and validations under the guidance of expert faculty members. The scheme introduces the students to the research eco-system at UPES to promote product development and entrepreneurship.

IPR AT UPES

Total 2025*+ IPR @ UPES

(*Cumulative till June 2025)

736
Patents

902
Designs

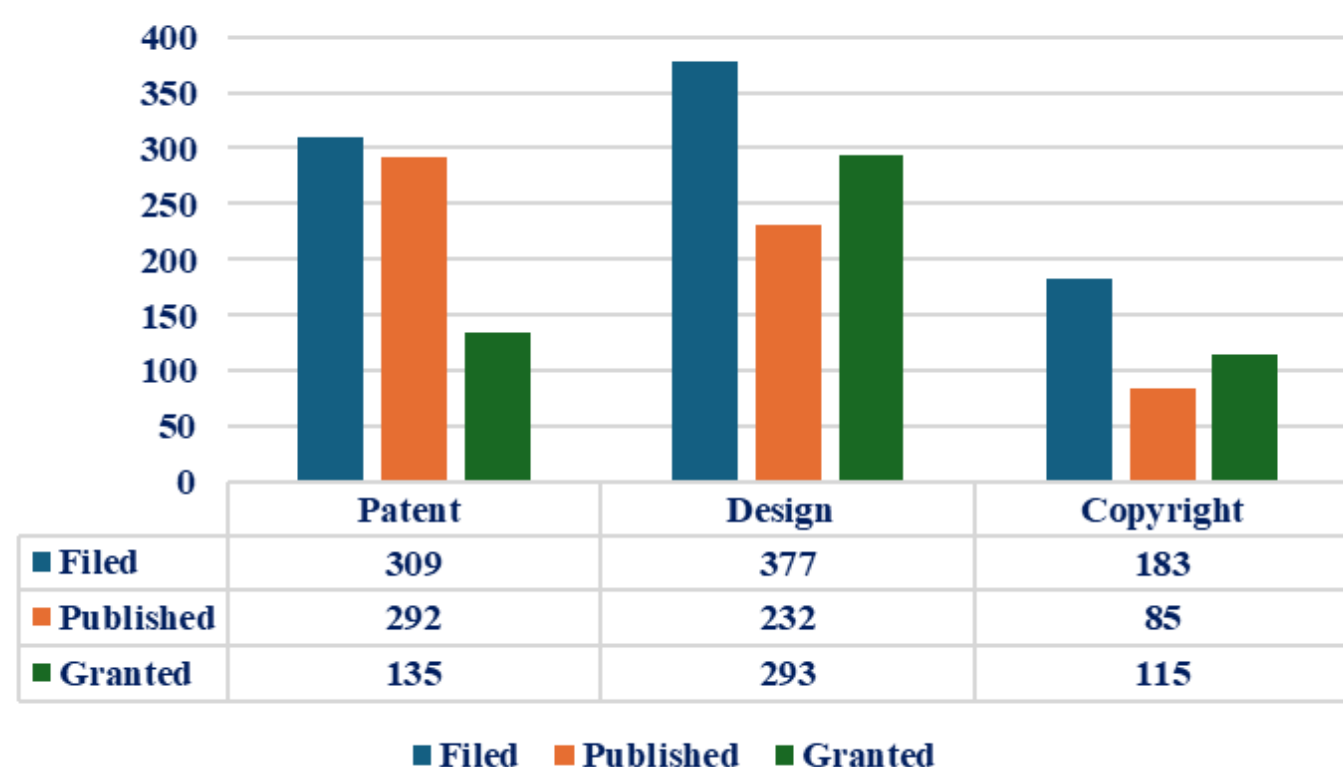
135
Granted

383
Copyrights

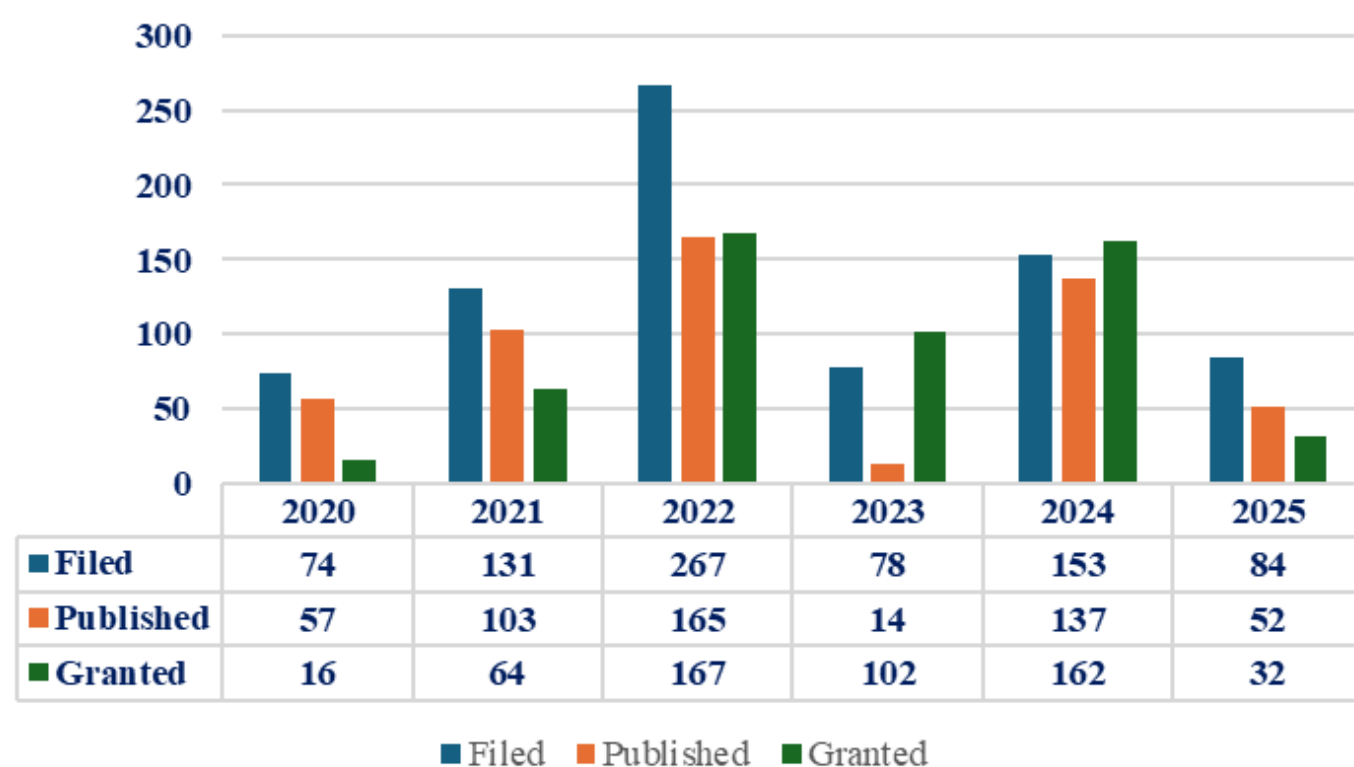
*as on June, 2025

UPES sets itself apart from other Indian universities by having made significant progress in recognizing, advancing, and defending intellectual property rights (IPR). UPES has acknowledged that in a time of rapid technological innovation and advancement, intellectual property rights (IPR) are extremely important. The academic atmosphere at the university has undergone a significant transition because of its proactive attitude to IPR. Several notable accomplishments have highlighted UPES's path to IPR excellence.

IPR's Filing Status

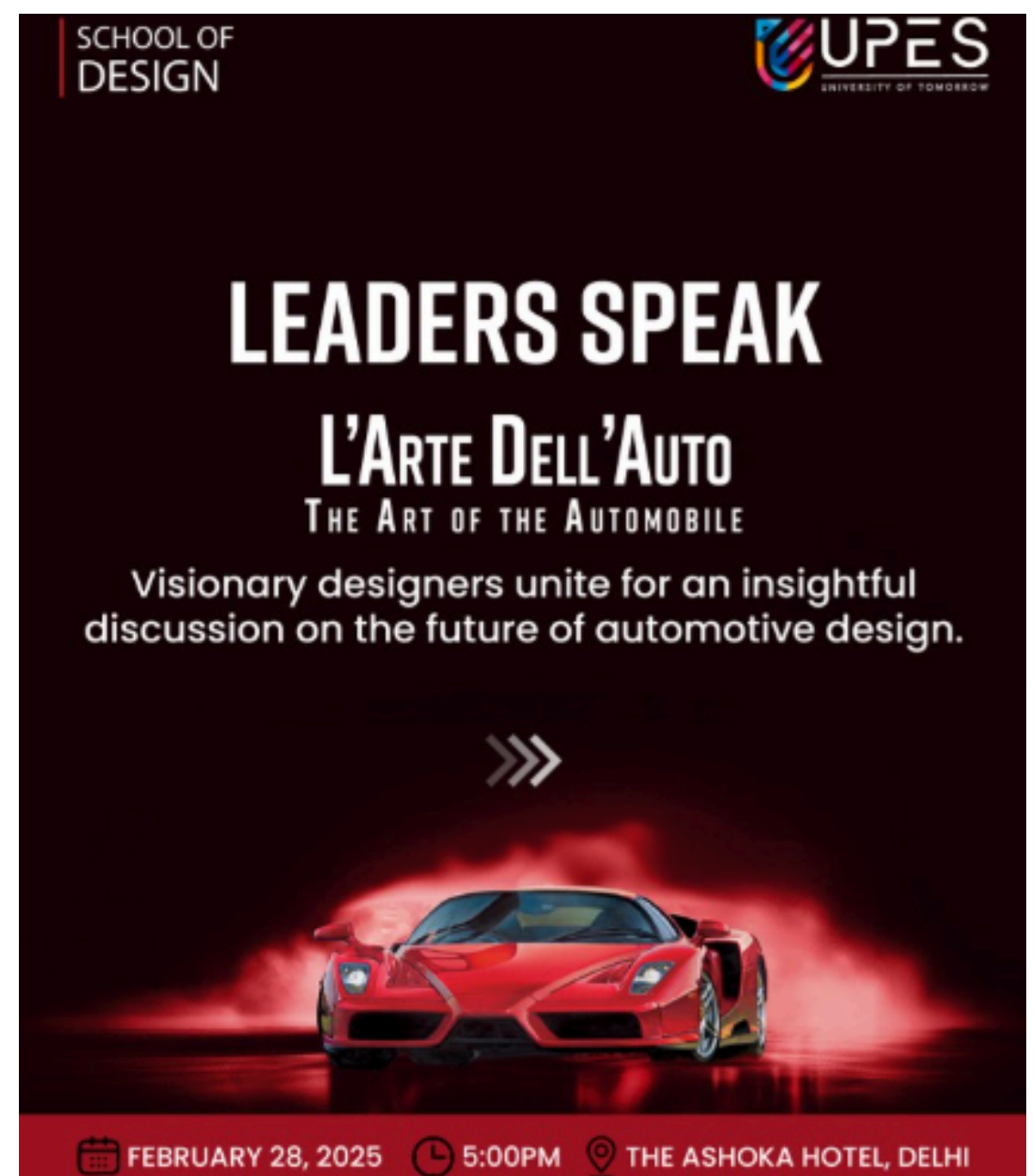


IPR's 2020 onwards



UPES is rapidly establishing itself as a prominent university in India's IPR environment. Its dedication to IPR, innovation, and research, together with its collaborative and educational culture, are having a long-lasting positive effect on the nation's larger academic and innovation ecosystem. The university's path serves as an encouraging example for other educational establishments in the country as it grows and contributes to the expansion of intellectual property in India.

UPES is a recognised Technology & Innovation Support Centre (TISC) of Uttarakhand since 2023

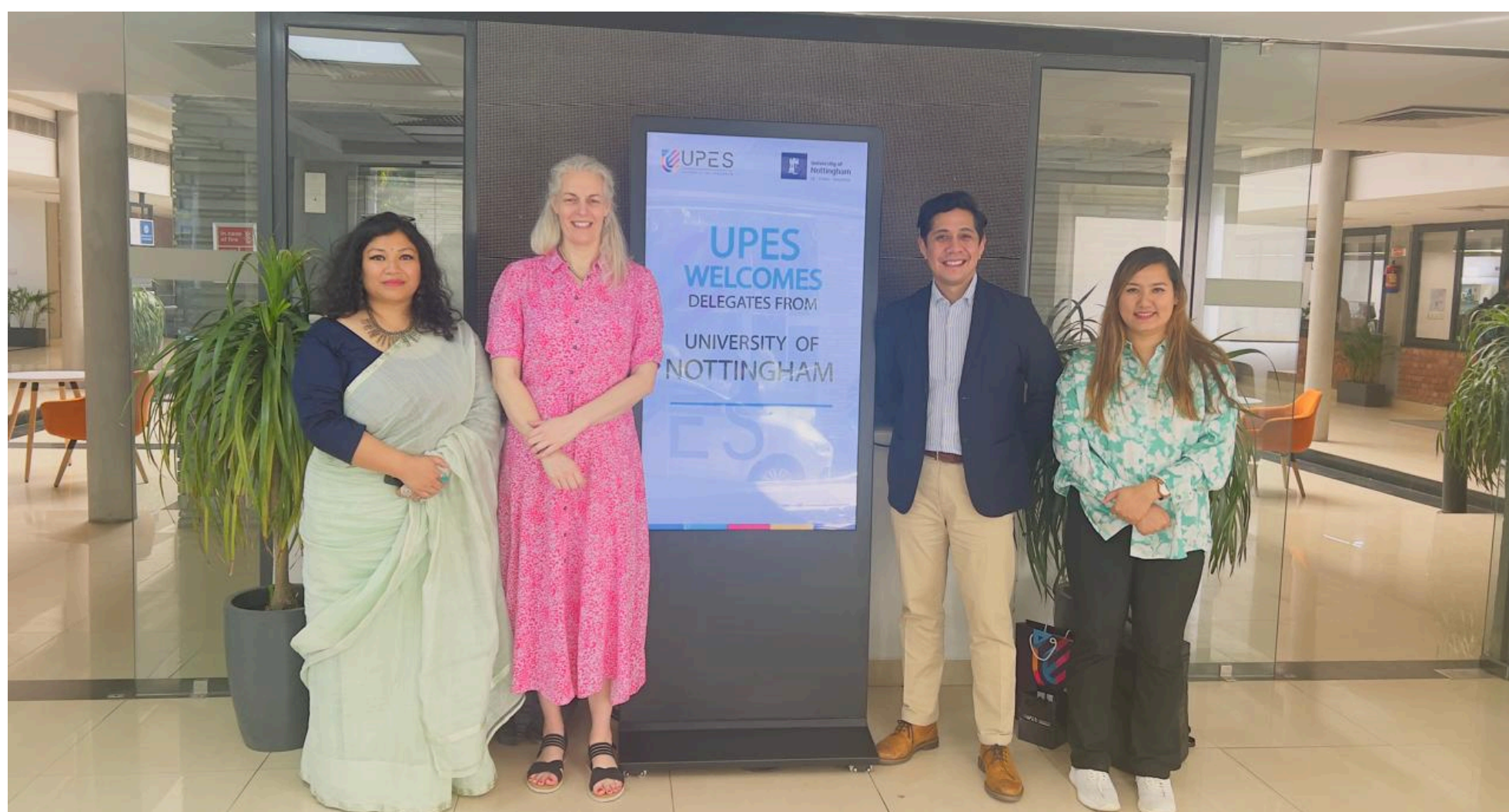
VISITS AT UPES

UPES School of Design had the privilege of hosting renowned automotive designer Maurizio Corbi for the event 'L'Arte Dell'Auto - The Art of the Automobile' in Delhi. Corbi, celebrated for designing iconic Ferrari models at Pininfarina, shared invaluable insights from his 35-year design journey, spanning from 'Markers to AI,' inspiring both students and industry professionals. He discussed his design evolution, explaining how he transitioned from using just three initial studio designs in the early years of his career to leveraging AI for multiple prototypes in recent years to finalize car designs.

Corbi's exhibition showcased the evolution of Ferrari from 1939 to 2008, captivating the audience with his exceptional design expertise. Prof. Bhaskar Bhatt, Dean of UPES School of Design, delivered the opening address, highlighting the significance of new-age design technology and UPES' journey towards becoming a transdisciplinary university.



UPES was delighted to host Ms. Donna Busby, Acting Regional Manager – South & Southeast Asia, and Ms. Smitha Shankar, Student Advisor, from the Ulster University South Asia Regional Team (UK). The visit reinforced the strong and evolving partnership between UPES and Ulster University, aimed at fostering international collaboration. Discussions focused on deepening ties through student and faculty mobility, joint research initiatives, and dual-degree programs. Both institutions, known for their commitment to innovation and global engagement, explored impactful ways to expand academic and research cooperation.



University of Nottingham Visit at UPES on 21 March 2025



Universiti Malaya Visit at UPES on 24 March, 2025



Guest Lecture by Dr Fiona Freeman on “Co-creating fulfilled and highly skilled postgraduates”, engaging in a modern outcome focussed, educational experience in the Biosciences. This visit was from Nottingham Trent University on 20 March, 2025



Guest talk by Prof. Dr. Vannajan Sanghiran Lee on the topic “Quantum Computing in Precision Medicine: A New Era of Drug Repurposing through Gene Search and Molecular Dynamics,” held on 24th March 2025 at UPES.

www.upes.ac.in/research



University of Edinburgh visit to UPES on 1st April, 2025

Unique features of PhD @ UPES

1. 100 full time PhD students shall be awarded fellowship upto ₹ 34,000/- per month.
2. NET-JRF qualified candidates, INSPIRE fellows (student) are exempted from RET written exam and can apply anytime for walk-in interview
3. Such candidates will be given an annual cash award worth ₹ 2,00,000/- which can be used for scholastic purpose including carrying out research related work such as participation in national/international conferences/seminars, buying consumables, carrying out field research etc.
3. Applications are also invited for Part Time PhD students
4. UPES has state of art infrastructure at central instrumentation center and internationally acclaimed faculty to mentor the PhD scholars.
5. We have 42 faculty members appearing in the list of top 2% researchers of the world, as per the report by Stanford University

School	Degree name	Program Domain
School of Engineering	PhD (Physics)	-
	PhD (Chemistry)	-
	PhD (Mathematics)	-
	PhD (Geosciences)	-
	PhD (Engineering)	Aerospace, Chemical, Civil, Safety, Electrical, Electronics, Mechanical, Petroleum, Renewable Energy and many more
School of Computer Science	PhD (Computer Science and Engineering)	For M.Tech Students
	PhD (Computer Science)	For M.Sc / MCA students, - AI-ML, Cyber security, Data Science
School of Business	PhD (Economics)	-
	PhD (Management)	Energy, General, Transportation
School of Law	PhD (Law)	Law
School of Design	PhD (Design)	Industrial, Transportation, Fashion
School of Health Sciences	PhD (Pharmaceutical Sciences)	-
	PhD (Food & Nutrition Sciences)	-
	PhD (Microbiology)	-
	PhD (Biotechnology)	-
School of Liberal Studies	PhD (Economics) PhD (Political science) PhD (Literature) PhD (Psychology) PhD (Applied mathematics) and PhD (Applied statistics)	-
School of Modern Media	PhD (Communication)	-

Admission of PhD students to CIDRI and HILL centers started from January 2025

Number of PhD Scholars #

Full time: 379
Part time: 279

Abstract submitted /
pre-PhD seminars*

61

PhD viva completed*

36

#Cumulative

*From Jan - June 2025

*Full-time + part-time

New Centers for PhD Intake

- **Center for Data-Science and Artificial Intelligence (C-DSAI):** It is established to contribute towards the growing significance of the role of Data Science, AI, and AI-enabled technologies in various application domains.
- **Center for Stochastic Modelling and Simulation (CSMS):** The center aims to focus on the development of application-driven theories and methodologies for understanding uncertainty and its management.
- **Center for Inter-Disciplinary Research and Innovation (CIDRI):** CIDRI at UPES provides a platform for interaction across the boundaries of various disciplines – such as science, engineering, health environment, computer science, design, management, humanities, law, etc. – and address the key technical, organizational and logistical challenges that currently hinder truly transdisciplinary research.
- **Himalayan Institute for Leadership & Learning (HILL):** The aim of HILL is to achieve sustainable solutions for the challenges faced in the Himalayan region by fostering collaboration between academia, R&D institutions, and industries.

Externally funded research scholars

Thirty Four full time PhD scholars are getting financial support from external funding agencies e.g. SERB, NMHS, UCOST, DAE-BRNS, ICSSR and DST.

INSPIRE/CSIR-SRF/CSIR-JRF Qualified PhD scholars



CSIR-SRF Qualified PhD scholars



Mr. Kamal Singh
School of Advanced Engineering ,
Physics



Ms. Viranchika Bijalwan
School of Advanced Engineering,
Chemistry



Ms. Nehal
School of Advanced Engineering,
Chemistry



Mr. Dinesh Bafila
School of Computer Science



Mr. Satyasadhan Dowrah
School of Advanced Engineering ,
Physics



Ms. Archana
School of Advanced Engineering ,
Physics



Ms. Moulika Todaria
School of Advanced Engineering ,
Physics



Ms. Reema Rawat
School of Health Sciences

INSPIRE Fellowship Awardee PhD scholars



Mr. Atharv Pethe
School of Health Sciences



Ms. Akruti Singh
School of Health Sciences



Mr. Rahul Kumar Singh
School of Advanced Engineering

IYRC 2025



3rd INTERNATIONAL YOUNG RESEARCHERS' CONCLAVE (IYRC 2025)



Prof. G. D. Yadav
Padma Shri, Bhatnagar
Awardee, National Science
Chair (SERB/DST/Gol), Emeritus
Professor of Eminence and
Former Vice Chancellor Institute
of Chemical Technology



Dr. Amitabh Chattopadhyay
Bhatnagar Awardee, Professor
and Founding Dean, Biological
Sciences, Academy of Scientific
and Innovative Research, CSIR-
Centre for Cellular & Molecular
Biology



Prof. Absar Ahmad
Professor & Founder Director,
Interdisciplinary
Nanotechnology Centre, Aligarh
Muslim University



Prof. Soma Venugopal Rao
Professor, School of Physics
and ACRHEM,
University of Hyderabad



**Dr. Sanong
Sukswaeng**
Director of
Translational
Medicine Program,
Institute of Medicine,
Suranaree University
of Technology,
Thailand



**Dr. Soodkhet
Pojprapai**
Associate Professor,
School of Ceramic
Engineering,
Institute of
Engineering,
Suranaree University
of Technology,
Thailand



**Prof. Y. K.
Mishra**
Professor MSO in
Nanomaterials, Mads
Clausen Institute,
Nano SYD,
University of
Southern Denmark,
Denmark



**Prof.
Nageswara
Rao**
Professor, Center for
Advanced Studies in
Electronics Science
and Technology
(CASEST),
University of
Hyderabad



**Dr Prabhat K.
Dwivedi**
Principal Scientific
Officer, Center for
Nanosciences
IIT Kanpur



**Dr. Chaitali
Singhal**
MKB-YRFP Fellow,
Translational Health
Science and
Technology Institute,
BIRAC



**Dr. Vinish
Kumar Agarwal**
Assistant Professor,
Dept of ENT,
Himalayan Institute
of Medical Sciences,
Jolly Grant
Dehradun



**Dr. Krishna
Raghav
Chaturvedi**
Outreach Manager,
American Chemical
Society, ACS
International India



**Mr Prateek
Kanaujia**
GTM
Specialist, XLSCOUT

Organized by: R&D, CIDRI in association with ACS International Student Chapter UPES Dehradun



FEBRUARY 27-28, 2025



09:00 AM TO 06:00 PM



UPES Dehradun



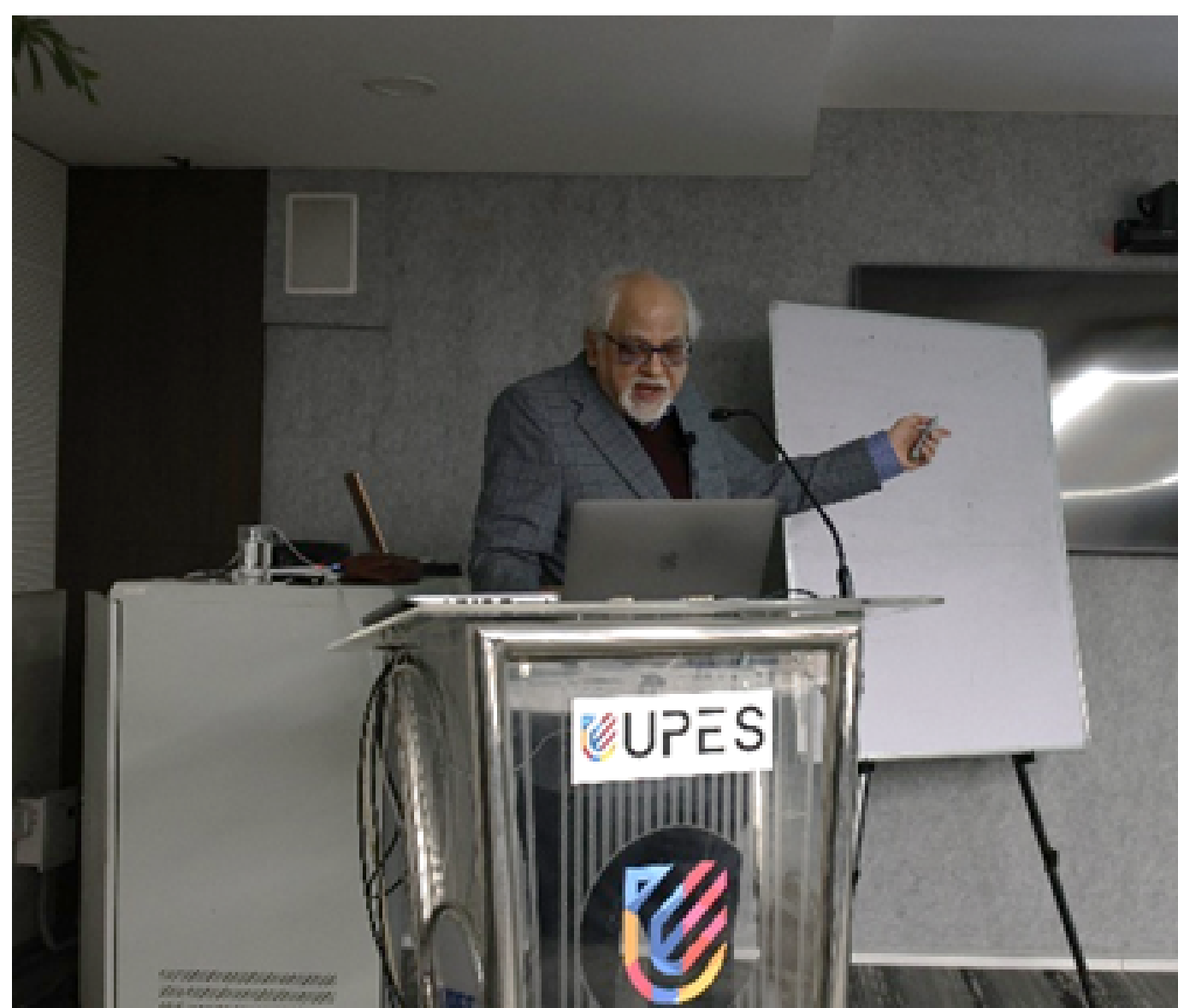
ACS Publications
Most Trusted. Most Cited. Most Read.



GLIMPSE OF IYRC 2025



Dr. Ashwini Nangia, Dean – Research and Development (R&D), UPES, delivered a thought-provoking talk encouraging researchers to adopt innovative approaches in their work. His address sparked engaging discussions on addressing global challenges through impactful research. In the keynote session, Professor G. D. Yadav highlighted the need for Indian universities to evolve from degree-granting institutions to engines of knowledge creation. He stressed the importance of Intellectual Property (IP)-driven research, patents, technology transfer, and academia-industry collaboration. Emphasizing the establishment of Technology Transfer Offices (TTOs) and incubation centres, he cited global models such as Fraunhofer Institutes (Germany) and the Massachusetts Institute of Technology Technology Licensing Office (MIT TLO).



Dr. Amitabha Chattopadhyay, CSIR Bhatnagar Fellow at CCMB, highlighted the critical role of cholesterol in regulating G protein-coupled receptors (GPCRs), especially the serotonin_{1A} receptor. His pioneering work showed that membrane cholesterol is vital for receptor function, and a single point mutation can disrupt cholesterol sensitivity, offering insights for therapeutic advancements.

APPLICATIONS OF SYNCHROTRON BASED X-RAY FLUORESCENCE TECHNIQUE

by

Dr Manoj Tiwari

Raja Ramanna Centre for Advanced Technology, Indore, (M.P), India



Date: 06th May 2025, Time: 10:00 AM, Venue: Board Room AB1



On Tuesday, May 6, 2025 UPES hosted an expert lecture by Dr. Manoj Kumar Tiwari, Scientific Officer, Accelerator Physics and Synchrotron Utilization Division at Raja Ramanna Centre for Advanced Technology (RRCAT), Indore. The session, titled “Applications of Synchrotron-Based X-ray Fluorescence Technique”, offered a comprehensive insight into the working principles, infrastructure, and diverse scientific applications of synchrotron-based X-ray fluorescence (XRF) methods. The session aimed to bridge the gap between fundamental knowledge and advanced applications of XRF, especially its utility in cutting-edge material characterization, environmental studies, and industrial research. The event attracted a broad audience including faculty, researchers, and postgraduate students across disciplines.

EVENTS ORGANISED

An interaction was organized at UPES with Dr. Meenakshi Munshi (Fulbright Fellow, Professor, SOHST, and Former Adviser/Sci. G, DBT), aimed at supporting faculty who have received or applied for SEED grants, as well as those engaged in externally funded projects. The session created a platform to share insights on project writing, research collaborations, funding formats, and effective project management. The session was attended by over 50 faculty members in person, with an additional 70 faculty members joining online. It featured active discussion, live Q&A, and contributions from various departments including Health Sciences and Engineering. Faculty shared their experiences with proposal submission, difficulties in forming collaborations, and challenges in receiving reviewer comments.

Workshop

on

Writing Research Proposals and Grants

Date: June 20th, 2025

Time: 10.30AM – 12:00 PM

Venue: Trust Board Room, UPES

Speaker: Dr. Meenakshi Munshi

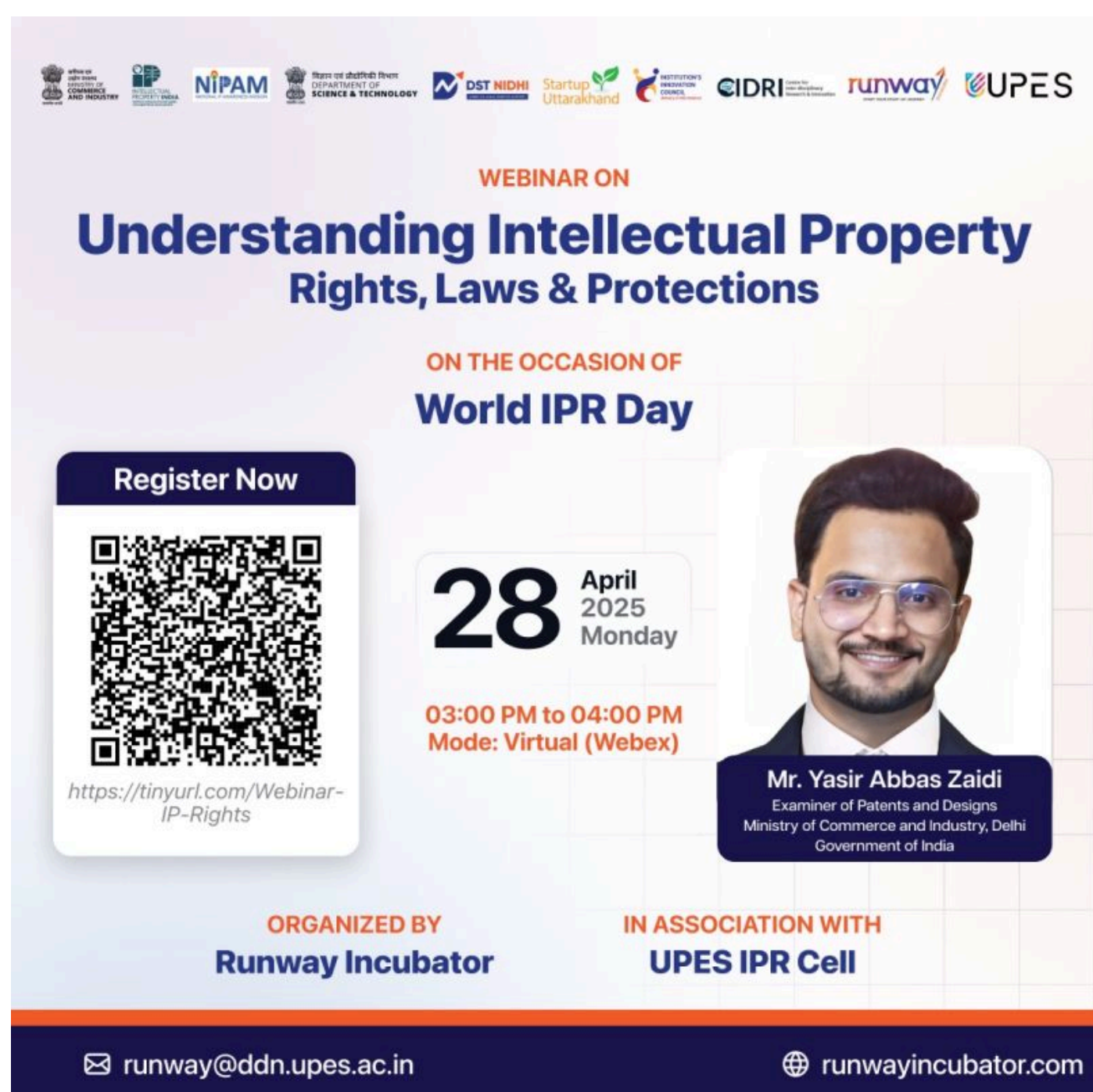
Fulbright Fellow, Professor, SOHST, Former Adviser/Sci. G, DBT





Dr. Rajesh Kumar, Member Secretary – RDI & PFRI, IT-eG, Department of Scientific & Industrial Research (DSIR), Government of India, visited UPES for an enriching interaction focused on "Innovation and Product Lifecycle for Technology Development & Transfer." During his visit, Dr. Kumar shared valuable insights into key DSIR programs such as PRISM (Promoting Innovations in Individuals, Startups and MSMEs), PACE (Patent Acquisition and Collaborative Research and Technology Development), and CRTDH (Common Research and Technology Development Hubs). His address highlighted the critical role of faculty and student-driven innovations and emphasized the support mechanisms available to translate research into market-ready solutions.

On the occasion of World Intellectual Property Rights (IPR) Day, Runway Incubator, in collaboration with the UPES IPR Cell, organized an insightful webinar titled: “Understanding Intellectual Property Rights, Laws & Protections.” The session featured Mr. Yasir Abbas Zaidi, Examiner of Patents and Designs, Ministry of Commerce and Industry, Government of India, who shed light on the critical importance of IP in the startup ecosystem. Emphasizing that “ideas are currency” in today’s innovation-driven world, the webinar provided valuable guidance on protecting innovations through appropriate IP rights, laws, and frameworks – a must-know for aspiring entrepreneurs and researchers alike.



WEBINAR ON
Understanding Intellectual Property Rights, Laws & Protections
 ON THE OCCASION OF
World IPR Day

Register Now

28 April 2025 Monday
 03:00 PM to 04:00 PM
 Mode: Virtual (Webex)

Mr. Yasir Abbas Zaidi
 Examiner of Patents and Designs
 Ministry of Commerce and Industry, Delhi
 Government of India

ORGANIZED BY
Runway Incubator

IN ASSOCIATION WITH
UPES IPR Cell

runway@ddn.upes.ac.in runwayincubator.com

पोर्टेबल डिवाइस से सर्वाइकल कैंसर की होगी सस्ती जांच

आसान होगा शुरुआती जांच में
बीमारी का पता लगाना

dehradun@inext.co.in

DEHRADUN (19 Mar): महिलाओं में होने वाले सर्वाइकल कैंसर के लिए यूपीईएस यूनिवर्सिटी के प्रोफेसर डॉ. आशीष माथुर व शोधार्थी रीमा रावत ने एक पोर्टेबल डिवाइस सर्वाइकल तैयार की है। इस डिवाइस के माध्यम से सर्वाइकल कैंसर की शुरुआती जांच सस्ती, सरल और सुविधाजनक हो जाएगी।

सर्वाइकल कैंसर खतरनाक

डब्ल्यूएचओ के अनुसार दुनिया भर में 1.4 मिलियन महिलाएं सर्वाइकल कैंसर से पीड़ित हैं। इनमें से 70 परसेंट मामलों का कारण एचपीवी-16 वायरस होता है। आमतौर पर इस बीमारी का पता तब चलता है जब यह दूसरे या तीसरे स्टेज पर पहुंच चुकी होती है, जिससे इलाज मुश्किल और महंगा हो जाता है। फिलहाल पारंपरिक जांच तरीके जैसे कोलपोस्कोपी, क्युरेटेज और आरटी-पीसीआर महंगे और जटिल हैं। खासकर ग्रामीण इलाकों की महिलाओं की पहुंच से यह बाहर है। इसके अलावा, प्राइवैसी से जुड़ी चिंताओं के कारण भी कई महिला जांच कराने से कतराती हैं।



सस्ती है पोर्टेबल डिवाइस

यूपीईएस की शोधार्थी रीमा रावत ने बताया कि प्रो. डॉ. आशीष के मार्गदर्शन में एक इलेक्ट्रोकेमिकल बायोसेंसर विकसित किया है। जो सर्वाइकल कैंसर के बायोमार्कर एचपीवी-16 से शुरुआती जांच कर सकता है। इस डिवाइस को टाइटेनियम कार्बाइड मैक्सिम से तैयार किया गया। जिससे इसकी लागत कम है।

ग्रामीण इलाकों की महिलाओं को मिलेगा डिवाइस से लाभ

सर्वाइकल डिवाइस का सबसे बड़ा लाभ ग्रामीण महिलाओं को होगा। शुरुआत में इसे उत्तराखंड के पांच गांवों में आशा कार्यकर्ताओं को सौंपा जाएगा। ताकि, वे घर-घर जाकर महिलाओं की जांच कर सकें। इस पहल का लक्ष्य ग्रामीण महिलाओं को जागरूक बनाना है। यह डिवाइस कैंसर से लड़ाई में एक नया मोड़ लाएगी और लाखों महिलाओं की जिंदगी बचा सकती है। प्रो. डॉ. आशीष माथुर ने बताया कि हमारा लक्ष्य विज्ञान को सिर्फ प्रयोगशालाओं तक सीमित रखना नहीं है, बल्कि इसे उन महिलाओं तक पहुंचाना है जिनकी जिंदगी इस पर निर्भर करती है। सर्वाइकल न सिर्फ एक डिवाइस है, बल्कि यह महिलाओं के लिए एक नई उम्मीद है।

A low-cost portable device has been developed to detect cervical cancer in women, aiming to make diagnosis more affordable and accessible, especially in rural areas. This innovative device was developed by Ph.D. scholar Ms. Reema Rawat under the guidance of Prof. Ashish Mathur at UPES, Dehradun. The project has been funded by the Department of Science and Technology (DST), Government of India. This device enables a simple and low-cost screening method that could significantly benefit women in remote regions where advanced healthcare facilities are scarce.

VISITS ABROAD FOR INTERNATIONAL CONFERENCES



Mr. Uma attended the 25th International Conference on Wear of Materials 2025, held from April 13 to 17, 2025. His abstract was selected for an oral presentation, giving him the opportunity to present his research at an international platform. His participation in the event was supported through sponsorship provided by UPES.



Mr. Piyush visited the NANOCAT Centre, Institute of Advanced Studies, University of Malaya, Malaysia, from March 1 to 9, 2025. His abstract was selected for an oral presentation at this prestigious event. His participation was made possible through sponsorship provided by UPES, supporting his engagement with an international research community.



Ms. Kanika Dogra attended the European Geosciences Union (EGU) General Assembly 2025, held in Vienna from April 27 to May 2, 2025. She presented a poster showcasing her research at the event, engaging with an international community of geoscientists. Her participation was made possible through sponsorship provided by UPES.



Ms. Mrinalini Sharma attended the International Workshop on Advanced Materials, held at Ras Al Khaimah, UAE, from February 17 to 20, 2025. She presented a poster highlighting her research contributions during the event. Her participation was made possible through sponsorship provided by UPES.

SCHOLARS' ACHIEVEMENTS



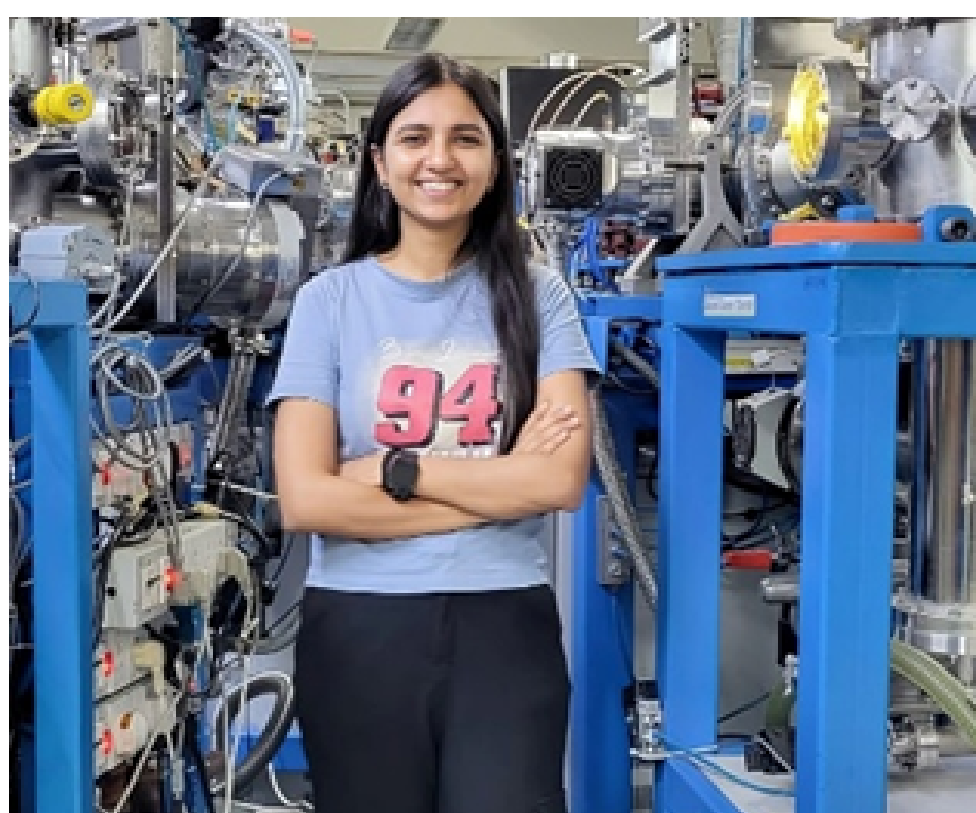
Ms. Reema Rawat participated in the Biosensors 2025 – 35th Anniversary World Congress on Biosensors, held in Lisbon, Portugal, from June 19 to 22, 2025. Her research abstract was selected for an oral presentation, providing her an opportunity to showcase her work to an international scientific audience. Her participation was supported by UPES.



Mr. Niladri Mohan Das attended the EMRS Spring 2025 conference held in Strasbourg, France, from May 26 to 30, 2025, where he presented a poster. He was honored with the Best Poster Presentation Award for his outstanding work. His participation was supported by UPES.



Ms. Gargi Dhiman attended the EMRS Spring 2025 conference held in Strasbourg, France, from May 26 to 30, 2025, where she presented a poster. She was awarded the Best Poster Presentation Award in recognition of her excellent research. This opportunity was generously supported by UPES.



Ms. Disha Yadav participated in the 12th International Conference on Materials for Advanced Technologies (ICMAT) held in Singapore from June 30 to July 4, 2025. She received the prestigious International Travel Support (ITS) grant awarded by ANRF, DST, India, which supported her attendance at this prominent international conference.

SCHOLARS' ACHIEVEMENTS

Ms. Avantika Chauhan has been selected to participate in the Joint ICTP-IAEA Advanced Workshop on Single Ion Technologies for Bio-medical and Materials Sciences, scheduled at the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy, from June 30 to July 4, 2025. This participation is supported through funding from ICTP/UNESCO.

VISIT TO INTERNATIONAL LABORATORIES

Mr. Niladri Mohan Das visited the Ion Beam Centre at Helmholtz-Zentrum Dresden-Rossendorf (HZDR), Germany, from June 2 to 6, 2025, for beamtime research. This laboratory visit was made possible through sponsorship provided by UPES.



Mr. Vaishnav visited DESY, Hamburg, Germany, to conduct Small Angle X-Ray Scattering (SAXS) experiments at the P03 beamline of PETRA III from April 4 to 6, 2025. This laboratory visit was supported by DST, Government of India, under the India@DESY cooperation program.



Mr. Anurag visited DESY, Hamburg, Germany, to perform Small Angle X-Ray Scattering (SAXS) experiments at the P03 beamline of PETRA III from May 1 to June 4, 2025. This laboratory visit was made possible through sponsorship by UPES and DESY.

SCHOLARS' ACHIEVEMENTS

Ms. Tasmia Falaque along with her supervisor **Dr. Sunita Varjani** attended the International Conference on Solid Waste 2025-Waste Management for Carbon Neutrality and Circular Economy (ICSWDG 2025) at Dongguan, China held from 9th – 12th June 2025.

NATIONAL & INTERNATIONAL CONFERENCE VISITED IN INDIA

Mr. Sanjay attended the Sun, Space Weather, and Solar Stellar Connection workshop held at the Indian Institute of Astrophysics, Bengaluru, from January 20 to 24, 2025. He presented a poster during the event. His participation was supported through sponsorship by UPES.



Mr. Anurag attended the ICMAGMA 2025 conference held at IISc Bengaluru from February 12 to 14, 2025. He presented a poster during the event. This opportunity was supported through funding from UPES and DESY.



Ms. Rituparna Choudhury attended the IM Pec 2025 conference held at Shambarpur from January 30 to February 1, 2025. She delivered an oral presentation during the event. This achievement was made possible with the valuable support of UPES.



Ms. Savita Prasad Kunwer attended the 4th International Marketing Conference (iMarC-IV) held at IIM Shillong from January 23 to 24, 2025. She presented an oral presentation at the event. This opportunity was made possible through the steadfast support of UPES



Ms. Udisha Duhan attended SNOAR 2025 held at IIT Roorkee from February 21 to 22, 2025. She presented a poster during the event. This opportunity was made possible through the generous support of UPES.



Ms. Heena attended SNOAR 2025 held at IIT Roorkee from February 21 to 22, 2025. She presented a poster during the event. This opportunity was supported by UPES.



Mr. Dinesh Bafila attended the International Conference on Recent Trends in Intelligent Computing and Communication (ICRTICC) 2025 held at Galgotias College of Engineering and Technology, Noida, from February 20 to 21, 2025. He presented a poster during the event. This opportunity was supported by UPES.



Mr. Shiv Singh attended the International Conference on Recent Trends in Intelligent Computing and Communication (ICRTICC) 2025 held at Galgotias College of Engineering and Technology, Noida, from February 20 to 21, 2025. He delivered an oral presentation during the event. This opportunity was supported by UPES.



Mr. Himanshu Prasad Mamgain attended the 3rd International Conference on Recent Trends in Materials Science and Devices (ICRTMD-2025) at V.M.G.R.R. College, Charkhi Dadri, Haryana, from March 26 to 28, 2025, where he presented an abstract. He also participated in the International Conference on Advanced Materials for Sustainable Future (ICAMSF-2025) at Chitkara University, Punjab, from March 28 to 29, 2025, presenting an abstract at this event as well. His participation in both conferences was supported by UPES.



Ms. Shraddha Shukla attended the Frontier Research in Material Science and Technology (FRMST) – 2025 conference held at CCS University, Meerut, from March 4 to 5, 2025. She presented a poster during the event. This opportunity was made possible with the valuable support of UPES.



Mr. Kamal Kumar attended the Frontier Research in Material Science and Technology (FRMST) – 2025 conference held at CCS University, Meerut, from March 4 to 5, 2025. He presented a poster and was honored with the Best Oral Presentation Award at the event. This opportunity was made possible through the support of UPES.



Ms. Harsha Pungaliya attended the International Conference on Digital Transformation: Leapfrogging into the Future (ICDT 2025) held at IIM Kashipur from March 21 to 23, 2025. She presented a poster during the event. This participation was supported by UPES.



Ms. Anjali Bharti attended the International Conference on Sustainable HealthCare from Biological Resources held at BITS Pilani, K K Birla Goa Campus, from May 20 to 22, 2025. She presented a poster during the event. This participation was supported by UPES, promoting research excellence.



Ms. Sameeksha Rawat attended the International Conference on Advanced Materials for Sustainable Future (ICAMSF-2025) at Chitkara University, Punjab, from March 28 to 29, 2025. She presented a poster and was honored with the Best Poster Presentation Award. This opportunity was supported by UPES.



Mr. Prashanth Kumar attended the Advances in Sustainable Solutions for Energy Transitions (ASSET-2025) conference held at IIT Guwahati from January 2 to 4, 2025. He delivered an oral presentation and was honored with the Best Oral Presentation Award. This participation was supported by UPES, underscoring the university's commitment to research excellence.



Mr. Abhishek Dhasmana attended the Frontier Research in Materials Science and Technology (FRMST-2025) at Chaudhary Charan Singh University, Meerut, Uttar Pradesh, from March 4 to 5, 2025. He presented a poster and was honored with the Best Poster Presentation Award. This opportunity was supported by UPES.



Ms. Priyanka Halsi attended the 3rd International Conference on Energy, Functional Materials/Molecules and Nanotechnology & National Workshop on Solid Waste Management (ICEFNM & NWSWM-2025) at Kumaun University, Nainital, from March 20 to 22, 2025. She presented a poster and was honored with the Best Poster Presentation Award. This opportunity was supported by UPES.

NATIONAL LABORATORY VISITS

- **Ms. Akanksha Dobriyal visited NITRA LAB for Fiber Extraction and Yarn Development at Ghaziabad from 7th - 10th March 2025. The visit was supported by UPES sponsorship.**
- **Mr. Kaushal Kumar visited BITS Pilani at Rajasthan for XPS and FESEM sample testing from 4th - 6th February 2025. The lab visit was made possible with support from UPES.**
- **Mr. Bhushan Kumar visited BITS Pilani at Rajasthan for XPS and FESEM sample testing from 4th - 6th February 2025. UPES sponsorship facilitated this lab visit.**
- **Mr. Sarthak Sharad Patel visited the Kachchh Heritage Craft Resource Center in Bhuj, Gujarat, from 10th to 22nd February 2025 for a qualitative study on upcycled plastic weaving. This visit was enabled by funding from UPES.**

NATIONAL VISIT FOR WORKSHOP AND TRAINING

- **Mr. Rahul Kumar Singh** attended the 'EAGE workshop on carbon capture and storage in basalts' at IIT Gandhinagar held from 2nd – 6th February 2025 and his paper titled “assessment of CO2 storage potential of Deccan volcanic provinces (DVP), India using python” was presented in the workshop. This workshop was possible through sponsorship by UPES.
- **Ms. Jaya Sarkar** attended a series of academic workshops at IIT Roorkee in 2025, all sponsored by UPES. These included a 5-day Winter School held from 13th to 17th January on contemporary theories of globalization, labour markets, and development; a 10-day Research Methodology Course from 12th to 21st May covering research methods in social sciences and economics, including fieldwork and applied econometrics; and a 20-hour GIAN Course conducted from 26th to 30th May.
- **Ms. Preeti Upreti** attended SETU Ayog Stakeholder Consultation Workshop at UPES held from 26th- 28th May 2025. This workshop visit was supported by UPES.
- **Mr. Abhishek Ranjan** attended SETU Ayog Stakeholder Consultation Workshop at UPES held from 26th- 28th May 2025. This workshop was possible through sponsorship by UPES.
- **Mohit Bhatt** visited RRCAT Indore from 3rd – 12th May 2025 and this lab visit was supported by UPES sponsorship.
- **Kajal** visited RRCAT Indore from 3rd – 12th May 2025 and This lab visit was made possible through sponsorship by UPES.
- **Mandeep Singh** visited UGC DAE CSR Indore from 2nd – 20th April 2025 and This lab visit was made possible through sponsorship by UPES.
- **Niladri Mohan Das** visited IUAC Delhi from 24th – 25th April 2025 and The visit was supported by UPES sponsorship.
- **Disha Yadav** visited IUAC Delhi from 26th – 28th March & 22nd - 24th May and 24th – 27th June and this lab visits were made possible through sponsorship by UPES
- **Avantika Chauhan** visited IUAC Delhi from 9th – 19th June and The visit was supported by UPES sponsorship.

AWARDS & HONOURS**VISITOR'S AWARD- PROF ASHWINI NANGIA, DEAN R&D**

The Visitor's Award for Research in the field of Physical Sciences for the year 2023 is being awarded to Prof. Ashwini Kumar Nangia, School of Chemistry, University of Hyderabad for his seminal research in the discovery and development of high bioavailability drugs and pharmaceuticals with enhanced efficacy at affordable cost, suited for the Indian R&D ecosystem.

The work is expected to make advancements in the field of Drug discovery and pharmaceuticals development leading to application-oriented translational research. The contribution provides new opportunities for generic drug manufacture.

The supramolecular synthon approach to drug discovery, including Multicomponent Cocrystals and Salts (MCCS), overcomes limitations of traditional drugs by improving solubility and permeability, enhancing bioavailability and therapeutic efficacy. His research focuses on developing pharmaceutical cocrystals, reducing R&D costs and time significantly. Ideal for India's generics pharma industry, this method enables affordable healthcare solutions for diseases like diabetes, cardiovascular conditions, and cancer, with several promising drugs in the clinical pipeline.

PRESTIGIOUS AWARD ON FUNDAMENTAL PARTICLE PHYSICS



Prof. J.B. Singh was one of the recipients of the prestigious 2025 Breakthrough Prize in Fundamental Physics — often referred to as the “Oscars of Science.” This \$3 million honor recognizes groundbreaking contributions made at the Large Hadron Collider between 2015 and 2024.

🏆 Ashish Mathur is this year's Science and Sustainability #StudyUKAlumniAwards winner!



🌱🔬 Through his work in #nanotechnology, he is shaping a better future.
 🙌 Let's celebrate his incredible journey!

@studyuk_britishcouncil #StudyUK #HE

Prof. Ashish Mathur has been honored with the British Council Study UK Alumni Award 2025 in the Science and Sustainability category. This prestigious award recognizes his outstanding contributions to nanotechnology and its transformative impact on healthcare, sustainability, and societal well-being. His work exemplifies the journey from cutting-edge research to real-world, accessible innovations, driven by a deep commitment to science-led entrepreneurship and meaningful change.

He has also been inducted as an Affiliate Member of the Royal Society of Chemistry (RSC), UK, recognizing his contributions to research and innovation in the field of chemistry. This prestigious honor encourages his continued pursuit of scientific advancement.



Dr. Ruchika Rai, Ph.D. has been awarded the 2025 INTACH Research Scholarship for her pioneering research on the Kumaoni Ramlila—a centuries-old cultural tradition rooted in the hills of Uttarakhand. Her research explores how this vibrant folk art preserves intangible heritage and powers a local economic ecosystem, supporting artisans, engaging communities, and sustaining livelihoods through performance, craftsmanship, and tradition.



Dr. Ajay Gupta, Professor Emeritus, Department of Physics, has had his groundbreaking research on nanoscale Kirkendall shift in thin films using x-ray waveguide structures featured in the Top 10% of works at the French Synchrotron SOLEIL – 2024 Highlights.

And that's not all, he's also been nominated to the Beamline Review Panel by Department of Atomic Energy (DAE), Government of India, for the ₹10,000 Cr Indus-3 project, one of the country's most ambitious upcoming scientific missions.

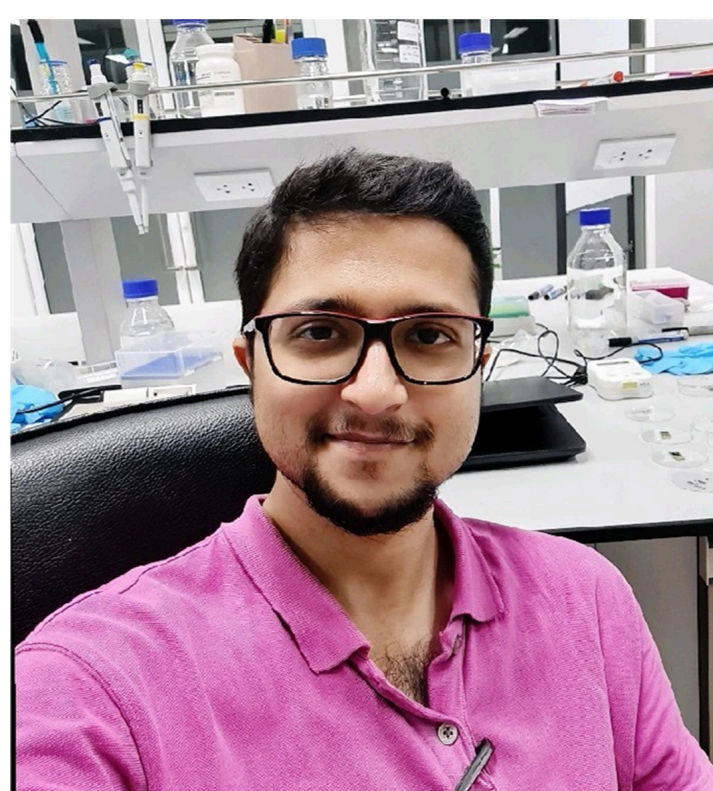
EMPOWERING EMERGING RESEARCHERS: ANRF EARLY CAREER GRANT AWARDEES FROM UPES



Dr. Divya Tripathi
 Assistant Professor, SoHST

Project title: A Tech-Driven Approach to the Diagnosis and Treatment of Women's Menstrual Health Using Artificial Intelligence

The project aims to develop a wearable device integrated with AI-powered diagnostic algorithms for early detection of menstrual disorders like PCOS and endometriosis. Clinical trials will validate its effectiveness, while public awareness initiatives and policy advocacy will support the adoption of wearable health technologies in women's healthcare.



Dr. Souradeep Roy
 Assistant Professor, SoHST

Project title: Design and development of a point-of-care nano-biosensing device for the early detection of diabetes and cardiac disorder

The core remit of the proposed project is to develop an innovative, affordable nanotechnology-based solution for the early detection of diabetes and cardiac disorder – specifically Acute Myocardial Infraction (AMI). The solution is envisioned to facilitate affordable detection of diabetes and AMI, along with real-time data capturing by healthcare personnel, which will undoubtedly save countless lives.



Dr. Sambit Prasanajit Naik
 Senior Assistant Professor, SoAE

Project title: High Resolution Holocene Slip Rate for the Kangra Valley Fault, NW Himalaya using 3D Trenching: implications for better seismic hazard assessment of Epicentral area of 1905 Kangra Valley Earthquake

Through detailed 3D trenching along the Kangra Valley Fault, this study will quantify precise Holocene slip rates and identify past surface-rupturing events. The findings will refine our understanding of fault behavior and earthquake recurrence in the 1905 Kangra earthquake zone, contributing vital data for seismic hazard modeling and disaster mitigation planning in northwestern India.

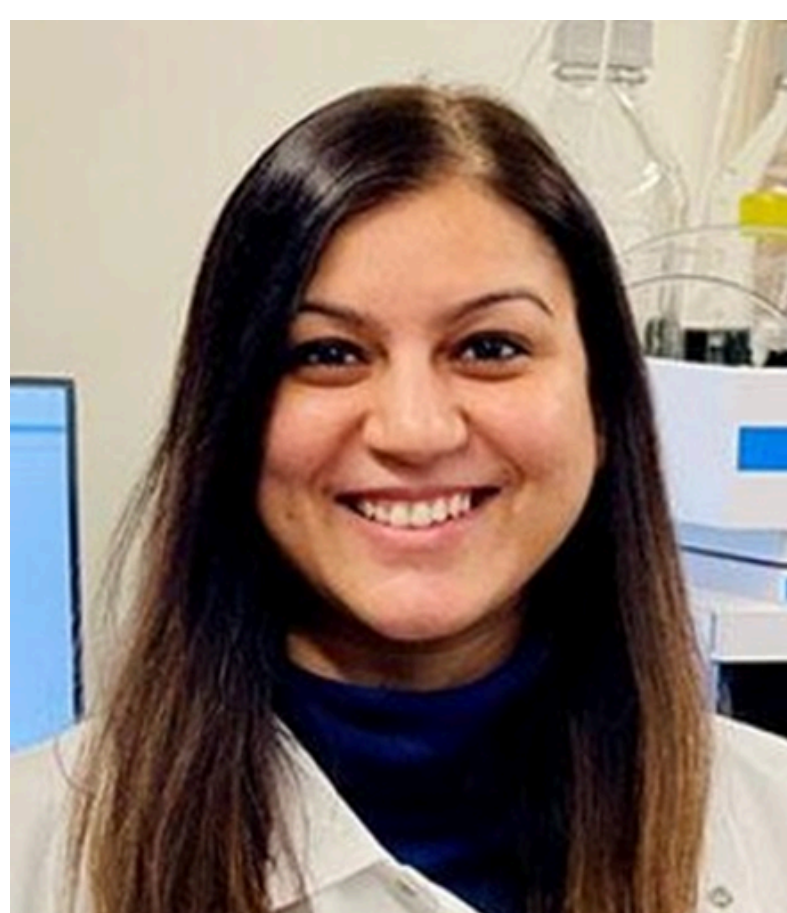
EMPOWERING EMERGING RESEARCHERS: ANRF EARLY CAREER GRANT AWARDEES FROM UPES



Dr. Anand Gaurav
Professor, SoHST

Project title: Development of Dual Inhibitors of PDE1B and PDE10A as Therapeutic Agents for Schizophrenia

Schizophrenia treatment faces challenges due to limited efficacy of current antipsychotics on cognitive impairment and negative symptoms. PDE1B and PDE10A inhibitors show promise, but PDE10A inhibitors alone cause extrapyramidal side effects. A dual PDE1B/PDE10A inhibitor, compound 2, demonstrated efficacy in animal models. This research project aims to optimize compound 2 through extensive molecular modeling studies followed by synthesis, and in vitro/in vivo evaluation to develop potent, selective inhibitors as potential drug candidates for schizophrenia treatment. The identified inhibitor will be a clinical trial candidate, potentially revolutionizing treatment. The project will also produce a PhD with training in molecular modeling, synthesis, and schizophrenia models. Potential outcomes include high-impact publications and a patent. The research will benefit society, academia, industry, and healthcare by advancing drug discovery.



Dr. Suchita Pande
Assistant Professor, SoHST

Project title: Cardiac-Targeted MLK3 Activation using nanoparticles for Preventing Hypertension-Induced Heart Failure

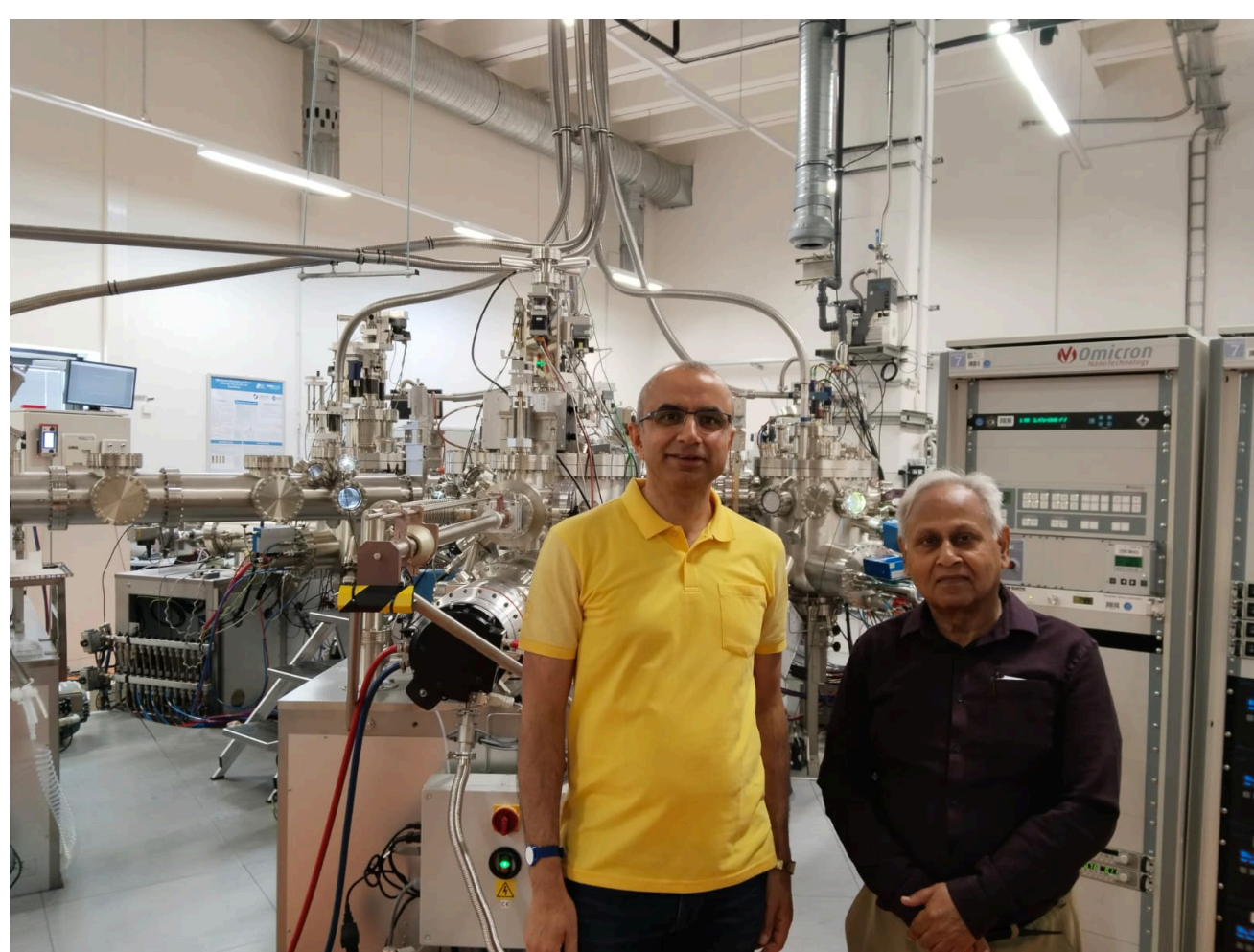
This proposal aims to develop a pharmacological strategy to activate MLK3 as a novel treatment for hypertension-driven heart failure (HF). With high HF prevalence in India due to poor blood pressure control, targeting MLK3 could prevent cardiac remodeling. As a key cardioprotective regulator, MLK3 lacks selective activators. This research seeks to bridge that gap, offering new therapeutic solutions

IMPORTANCE OF PATENT

Dr. Shailey Singhal, professor at School of Advanced Engineering, UPES, Dehradun, has developed a method to convert old, unused clothes into cellulose—a material used as raw input in industries. Her innovation has been granted a patent and is opening new avenues for self-employment, especially for women in remote hilly regions. Additionally, Dr. Shailey is working on converting agricultural and kitchen waste into biogas through scientific recycling methods. She is also raising awareness about waste management and exploring new technologies for efficient biogas production in high-altitude areas.



R&D OUTREACH



Dean Emeritus Prof. D. K. Avasthi has actively represented UPES at several prestigious academic and research platforms in 2025. He delivered an invited talk at the Workshop on Low-dimensional Materials (WLDL-2025) held at IIIT Noida from 14–15 February, followed by another invited lecture at AMP 2025, organized by the Central Institute of Petroleum Engineering and Technology (CIPET) in Lucknow from March 8–10. In Sofia, Bulgaria, he spoke at the International Symposium on Emerging Memory and Computing from 3–7 June, presenting on “Defect Engineering in Functional Metal Oxides for RRAM Applications.” Subsequently, from 8–13 June, he participated in the International Conference on Radiation Effects in Insulators in Madrid, Spain, as a member of the international committee representing India, where he also chaired a technical session. Continuing his engagements in Europe, Prof. Avasthi visited DESY Hamburg, Germany, on 16 June for scientific discussions on in-situ experiments related to hydrogen absorption in materials with Dr. Arka Dey. This visit was supported by UPES and DESY. On 17–18 June, he visited Juelich Forschungszentrum, Germany, to deliver a seminar and for discussions on scientific cooperation with Dr. Vikas Rana and his team.



Prof. Bhuvanesh Gupta, Centre for Interdisciplinary Research and Innovation (CIDRI), UPES, was invited as Guest of Honor at the HSCA International Conference on Sustainable Materials and Bioresource Integration, held on June 14–15, 2025, in Shimla. Two of his Ph.D. students, Megha Yadav and Pooja Badsara, presented posters at the conference. Megha Yadav presented her work on “Development of Bioreceptive Polylactic Acid Films for Biomedical Applications”, while Pooja Badsara showcased her research on “Fabrication and Characterization of Bioactive Sodium Alginate-based Membranes”. Pooja Badsara received a Poster Award for her outstanding contribution in this conference. In addition to his academic engagements, Prof. Gupta also undertook two industry visits—on 7th June 2025 in New Delhi, to discuss the creation of a joint Materials Research Centre at UPES, and on 10th June in Faridabad, to explore collaboration for a joint research facility on biomaterials.



Prof. Ashish Mathur from the Centre for Interdisciplinary Research and Innovation (CIDRI), UPES Dehradun, delivered an insightful presentation titled: “Innovative Nano-Biosensors for Point-of-Care Applications: Transforming Diagnostics and Healthcare” at the International Conference on Advancements and Innovations in Biotechnology (ICAIB-2025). The conference, organized by the Department of Biotechnology and the Centre of Excellence for Nanosensors and Nanomedicine at Bennett University, successfully concluded on February 18, 2025. Prof. Mathur’s talk showcased the potential of nano-biosensor technologies in enabling rapid, accessible, and accurate healthcare diagnostics—paving the way for impactful innovations in medical science.

Students Engagement



The trekking expedition was organized specifically targeting PhD scholars to promote their physical fitness, mental resilience, and connection with nature. The trek was led by Dr. Devesh Kumar Awasthi, Dean Emeritus at UPES, Dehradun, who guided the scholars through scenic trails and natural landscapes. The trek, conducted during the early hours of the day, focused on building endurance, fostering teamwork, and providing a rejuvenating break from academic routines. Key highlights included nature walks, mindfulness activities amidst serene surroundings, and interactive discussions on environmental awareness. Participants reported a significant boost in morale, physical vitality, and mental clarity. Beginners especially valued the motivating guidance and safe trekking strategies shared by Prof. Awasthi. The initiative not only enhanced the scholars' well-being but also sparked interest in regular outdoor activities as a form of self-care.

Strengthening our Research Core:

Welcoming Dr. Lokesh Chandra Tribedi and Dr. Bhuvanesh Gupta to the R&D Department



Dr. Lokesh Chandra Tribedi,
 Director, Research & Development
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Prof. Lokesh C. Tribedi recently joined UPES as Research Director after 31 years at TIFR, Mumbai. A PhD from TIFR (1993), his early training began with the TIFR-Poona University M.Sc. program. He also completed postdoctoral research at Kansas State University. Prof. Tribedi is internationally known for his pioneering work in atomic and molecular collisions, meso-bio-nano science, and advanced instrumentation. He established and led the ECRIA ion-beam facility at TIFR—now widely used by researchers across India. His group has conducted groundbreaking experiments involving atoms, clusters, biomolecules, and nanoparticles.

With nearly 200 publications and 230+ invited talks worldwide, he has represented India on numerous global advisory boards, including ICPEAC. He serves on key scientific committees (VECC, SERB, IUAC, GANIL-France) and has received top honors like the Swarnajayanti Fellowship, INSA Medal, and JSPS Fellowship. A mentor to dozens of PhDs and postdocs, Prof. Tribedi brings deep expertise in experimental physics, international collaboration, and facility building to his new role at UPES.



Dr. Bhuvanesh Gupta,
 Professor, SoHST
 Research & Development
 Email: bhuvanesh.gupta@ddn.upes.ac.in

Dr. Bhuvanesh Gupta has joined as professor in CIDRI in April this year and is also associated with the School of Health Science at UPES. Prof. Gupta was associated as professor at IIT Delhi for 27 years worked in the field of polymeric materials and biomaterials for human health care. Dr. Gupta did his PhD from IIT Delhi in 1985 and spent a few years as post-doc in Paris. Subsequently, Dr. Gupta worked for eight years in France, Sweden and Switzerland under different capacities in several laboratories. His research activities involve Medical Textiles, as well as Nanomaterials in collaboration with AIIMS New Delhi, PGI Chandigarh, NEHU Shillong, Indian Institute of Ayurveda, New Delhi, MLSU Udaipur, and Sikkim Manipal Medical Institute, Gangtok. Prof. Gupta has been the president of Asian Polymer Association and has been associated as President with several other international bodies, Society of Biomaterials Artificial Organs India (Delhi), Society of Tissue Engineering & Regenerative Medicine, India and Indo-Italian Forum on Biomaterials & Tissue Engineering.

Winner of several awards and medals, Dr. Gupta has around 250 publications in International journals and 500 conference presentations in India and abroad along with 40 patents to his credit. Several of these patents and technologies have been transferred to industries. Dr. Gupta has been invited by several laboratories across Europe for delivering talks. , Prof. Gupta's group is engaged in different areas of polymeric biomaterials and nano biotechnology

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