AMITY UNIVERSITY MAHARASHTRA

Established vide Maharashtra Act No.13 of 2014, of Government of Maharashtra, and recognized under Section 2 (f) of UGC Act 1956.

AMITY UNIVERSITY MAHARASHTRA

Progress on SDG 9

Industry, Innovation and Infrastructure

Report on SDG 9

Reporting Year: 2025



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Index of activities

No.	Activity	Date
1	Drone Engineering for the Built Environment	2 May 2025
2	Drone Making Workshop	13 May 2025
3	Animation, VFX and Generative AI Workshop	10 March 2025
4	Creativity and Artificial Intelligence Workshop	3 March 2025
5	Aerospace Engineering: Future Prospects Webinar and Follow-up	23 May 2025 (webinar); 4 December 2025 (follow-up report)
6	AmiPharma Inspire: Entrepreneurs and Tablet Quality Control	2 May 2025
7	NIRMAN 25 – 48-Hour Hackathon	28–30 January 2025
8	HackSetu 1.0 – National-Level Hackathon	3–4 November 2025
9	TECHNICIA 2025	27–28 March 2025
10	Design Thinking Workshop	5 August 2025
11	Fashion-Tech: AR and VR in Fashion Retail	24 November 2025
12	Faculty Development Programme: Fundamentals of Remote Sensing	2025 (exact dates to verify)
13	Faculty Development Programme: Multidisciplinary Applications of AI	2025 (exact dates to verify)
14	Webinar on Artificial Intelligence and Big Data Analytics	11 August 2025
15	IC-RACT 2025: Advances in Computational Techniques	13–14 November 2025
16	Sanrachna 2025: Architecture and Industry Exposure	17 and 19 March 2025
17	Prospects and Career Opportunities for Designers and	20 June 2025

	Stylists	
18	Workshop at Venture Center: Building a Start-up and Venture Capital	9 April 2025
19	Two-Day IIC Programme on Tourism Trends and Research	27–28 February 2025
20	Careers in Fashion and Digital Portfolio for Corporate Profiling	30 April 2025
21	Webinar on LEED Certification and Sustainability	25 September 2025
22	Domain Expert Lecture on Strength of Materials	2025
23	Industry Visit to Gini and Jony Pvt. Ltd.	19 November 2025
24	Textile Testing and Quality Control Workshop	27 November 2025
25	Expert Domain Lecture on Aircraft Structural Bending	2025
26	Expert Domain Lecture on Propulsion Systems I	2025
27	Online Workshop on Advanced Research Methodology	9 October 2025
28	Tourism Industry–Academia Conclave	9 October 2025

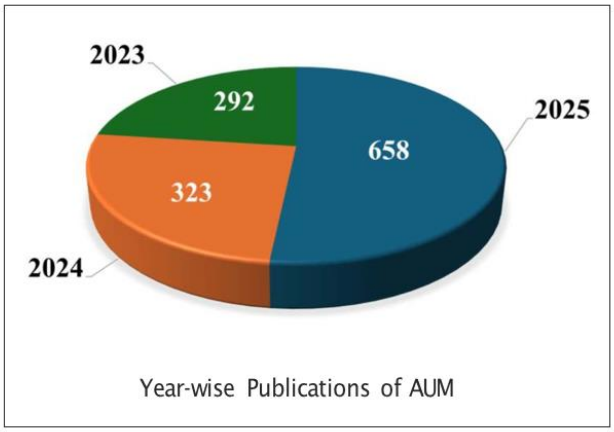
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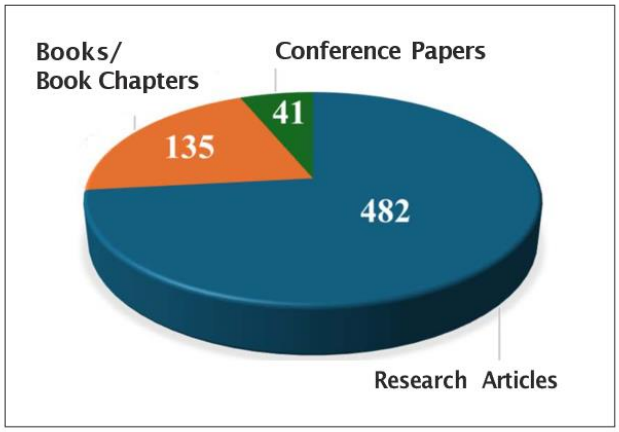
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Research

Amity University Maharashtra (AUM) is committed to path-breaking research and innovation in science and technology. Its globally benchmarked infrastructure and forward-thinking teaching practices have positioned the University among the most sought-after educational destinations. With the establishment of six Centres of Excellence in frontier areas of science and technology, AUM promotes integrated, interdisciplinary research and academic initiatives aligned with the national vision of becoming a global knowledge superpower. The University stands at the forefront of cutting-edge scientific research, supported by a robust R&D ecosystem, advanced laboratories, and state-of-the-art facilities. Today, AUM has emerged as a vibrant hub of scientific learning, innovation, and high-end research, reflected in over 12,621 citations and an H-index of 54.

Publications





Funded Projects

Funded projects play a vital role in strengthening research and innovation within an academic institute. These projects, supported by national and international funding agencies, enable faculty and researchers to undertake advanced, impactful research. They promote interdisciplinary collaboration, capacity building, and knowledge generation. Funded projects also contribute to infrastructure development, student training, and societal advancement.

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School	Funding Agency	Amount Sanc-tioned
SANCTIONED		
AIB	ANRF-ARG	180 Lakhs
AIB	Ministry of Mines, GoI	47.00 Lakhs
ASET	ANRF	2.50 Lakh
School	Funding Agency	Amount Sanc-tioned
SANCTIONED		
ASET	UK-India Education and Research Initiatives (UKERI)	120 Lakhs
AIB	DBT	83.16 Lakhs
AIB	CSIR-ASPIRE	24.35 Lakhs
ASAS	DST	23.76 Lakhs
AIB	DST-SERB	119 Lakhs
AIB	DST-SERB	119 Lakhs
ASAS	SERB-SRG	30 Lakhs
ASET	SUNBEAM CO., LTD.	20 Lakhs
AIB	DST-SERB	18 Lakhs
ASET	IEEE-GRSS, USA	8.55 Lakhs
AIB	DST-NIDHI PRAYAS	8 Lakhs

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Patents

Patents reflect the institute's commitment to innovation, original research, and intellectual property creation. Faculty and researchers actively translate research outcomes into patented technologies with potential societal and industrial impact.

Schools /Institutes	Invention Title; Inventor, Application Number/Patent File No.
AIB	3D Clinostat System Designed to Simulate Microgravity Environments for Scientific Research and Working Method Thereof, Smiraj Ramekar, Penna Suprasanna, Sneha A Gokani, R. Selvakumaran, A W Santoshkumar, 202521006634
ASET	A System for Supporting Indic Languages in Retail Commerce and a Method for the Same, Deepa Parasar, Swetta Kukreja, Shrikant Charhate, 202421086261
AITT	A Model for Enhancing Decesion-Making Effectiveness: The Role of AI Capabilities, Data Quality and Trust Factors, Bivek Datta, 202511008559
ALS	Design Patent-AI Based Judicious Decision Support for Hearing Against the Victim, Ms. Ravina Parihar, 436582-001
ASFT	Garment Design, Bhawana Chanana, Oinam Roselyn Devi, 437340-001
ASFT	Home Textiles with Embedded Thermal Regulation and Antimicrobial Features, Arpita Grover, 202511008457 A
ASET	Integrated Biochar-Phytoremediation - MICP Method for Heavy Metal Stabilization in Contaminanted Soil, Vedprakash Maralapalle, Jayatheja Muktinutalapati, 202521046042
ABS	AI-Driven Succession Planning and Employee Engagement System, Neha Chaudhary, 202531029848
Schools/ Institutes	Invention Title; Inventor, Application Number/Patent File No.
ASFT	Unveiling the Titualistic Significance of Divine Darbha grass (Desmostachya Bipinnata) textile, Bhawana Chanana, N. Gayathri, 202441028174
ABS	Intelligent Garbage/ Material Sorting Device Using Solar Energy, Vishal Chavan, 448750-001
AIB	Novel Formulation Process of Superfood Blends Creating Synergistic Effects, Ashily Rajendran, A. W Santosh Kumar, Suprasanna Penna, Saloni Jain, Sruthi Pillai, Geethu S, Pranali Ghadole, Bashi Hamdani, Ayesha Sabir, 448422-001
ASET	A System and Method for Spatio-Temporal Air Pollution Assessment Using GIS Based Weighted Overlay Analysis, Sangita Mishra, Sujaya Wadekar, 202521045230
ASET	A Sensor Based Devide for Detecting Seawater Intrusion in Coastal Region, Shrikant Charhate, Sangita Mishra, Vishal Kushe, 202521029140
AIIT	Age-Adaptive Dialect-Aware Punjabi Speech Recognition System and Working Method Thereof, Manoj Devare, 202521059323

AMITY UNIVERSITY MAHARASHTRA

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ASFT	Neckerchiefs Made from Post Consumer Garments with Craft Revival Ensuring Zero Wastage, Bhawana Chanana, Deepti Chaturvedi, 462892-001
ABS	Impact of Social Media Monitor Tool for Brand Reputation Management, Sameer Kulkarni, 202541045434
AIP	Nanoparticle Based Drug Delivery System for Oral Cancer, Vaibhav A. Bhadange, 450276-001
AIIT -	Modular Dialect- and Age-Adaptive Automatic Speech Recognition System for Multilingual Low Resource Contexts, Manoj Devare, Manish Thakral, Anita Devare, 202521067500
AITT	Models of Customer Engagement with AI Personalisation, Bivek Datta, 202511064533
ASAS	Portable Green Hydrogen Plant with Precious Metal Refining for Wastewater Treatment, Arghya Basu, 202421055591
AIP	Microfluidic Device for Synthesis of Neuroprotective Drug-Loaded PLGA Nanoparticles, Pankaj Chudaman Bhamare, 6466170
ASET	An Advanced System and Method for NLD Simulation of PSC segmental Structures, Sushree Sangita Mishra, Shrikant Charhate, 202521044077
ASFT	Pen Stand with Hand Painted Mosaic Art, Arpita Grover, 471794-001
AITT	Artificial Intelligence Enabled Rechargeable 3D Notebook, Archan Mitra, Anamika Srivastava, Sindhu Madala, Supratim Mukherjee, Navya Singh, Sayan Mondal, A Prakash 468256-001
AIIT	Three-Phase Optical Flow Refinement Method for Accurate Drone-Based Vehicle Speed Detection, Manoj Devare, Vishal Nagpal, Anita Devare, 202521079865
AIIT	Automated System and Method for Identification and Classification of Plant Diseases Using Machine Learning and Image Processing Techniques, Narayan Kulkarni, 202521072234 A
AIIT	Optimized Feature Selection Using Enhanced Ensemble Models for predicting diabetes Mellitus, C Kalpana, 202541063386
Schools / Institutes	**Invention Title; Inventor, Application Number/Patent File No.**
AIIT	System for Real-Time UAV Video Georeferencing and Working Method thereof, Manoj Devare, Vishal Nagpal, Anita Devare, 202521082248
ASET	A System for Intelligent Automatic Dishwashing With Integrated Robot Arm Control, Deepika Shekhawat, A47L 15/37
ABS	AI-Based Framework for Evaluating Human Capital Management Influence on Academic Employee Productivity in Higher Education, Reshma Nair, 202511072649
AIP	AI enabled molecular docking and drug discovery apparatus, Pankaj Bhamare, 466310-001
ASET	An Innovative Asset Encryption Device Using Machine Learning to Securely Protect Patient Records and Medical Research Data, Jeyavel Janardhanan, Saranya A, Deepika Shekhawat, 20254109741

ASET	Smart Metamaterial Communication Array for Interplanetary Missions and Working Method Thereof, Rajiv Iyer, Saranya A, 202411075005
AIB	Design and evaluation of novel drug delivery system, Jaya Lakkakula, 202521067497
AIB	Nanoparticulate film forming formulation based on transdermal drug delivery and method for preparation, Jaya Lakkakula, 202521064656
AIB	Transdermal antifungal gel formulation for enhance solubility and sustained drug release and method, Jaya Lakkakula, 202521105113
AIIT	System and Method for Centroid Augmented Homography in UAV Pixel-to-Geospatial Transformation, Manoj Devare, Vishal Nagpal, Anita Devare, 202521112836

Institution's Innovation Council (IIC)

Amity University Maharashtra, Mumbai has established an Institution's Innovation Council in the campus as per the norms of Innovation Cell, Ministry of Education, Govt. of India during the academic calendar year 2020-21. IIC-AUM engages faculty members and students in various innovation and entrepreneurship-related activities such as Ideation, Problem Solving, Proof of Concept Development, Design Thinking, IPR, Project Handling and Management. IIC-AUM organizes periodic workshops or seminars or interactions with entrepreneurs, investors, professionals and creates a mentor pool for student innovator. IIC-AUM has conducted several activities to encourage innovation and entrepreneurship at the university campus.

Name of the event	Date of conduct
IGNITE	Jan 2025
AUM Decadal Celebration: largest commercial advertising production lesson	Jan 2025
Nirman Hackathon 2025	Jan 2025
START-UP synergy	Feb 2025
EXPERT TALK- Basics of IPR and its importance for Innovators and Entrepreneurs	Feb 2025
EXPERT TALK - Problem solving and ideation workshop	Feb 2025
2 Days IIC Event	Feb 2025
EXPERT TALK - Motivation session by succession innovators	Feb 2025
New Age Journalism workshop	Feb 2025
Vice Chancellor lecture series on leverage AI for academic writing	Feb 2025
Vice Chancellor lecture series on Beyond Grades: AI's role in developing 21st century skills	Feb 2025
Expert Talk on Achieving problem-solution fit and problem-market fit with zero waste fashion approach	Feb 2025
Colour matching technology in fashion: How machines analyse colours	Feb 2025

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EXPERT TALK on International careers in travel and tourism	Feb 2025
IIC Webinar on Building success: entrepreneurial motivation in built environment	Feb 2025
Tourism Trends, Research Opportunities, and Sustainable Development	Feb 2025
Creativity and AI workshop	Mar 2025
French for Tourism	Jul 2025
English as a Lingua Franca: Opportunities and Challenges	Jul 2025
Future of Design: Exploring Careers in Architecture	Jul 2025
Career Prospects in Fine Arts	Jul 2025
Career Prospects in Social Science	Jul 2025
Biotechnology for Healthcare: Prospects and Career Opportunities	Jul 2025

Name of the event	**Date of conduct**
Careers in Animation, VFX & Gaming	Jul 2025
Demystifying the Doctoral Degree: Navigating the PhD Process	Jul 2025
Engineering Placements 360°	Jul 2025
French for Career and Commerce	Jul 2025
Multidisciplinary Applications of AI (FDP)	Jul 2025
Dialogue with Alumni Constellation	Aug 2025
Emerging Paradigms in AI & Big Data	Aug 2025
Remote Sensing & Smart Materials (FDP)	Aug 2025
Framed: The Art of Shaping Perception	Aug 2025
Design Fest: Fashion Detox 2.0	Aug 2025
Shaping Global Leaders: SAP, 3C & GSP	Aug 2025
Mixed Method Research in Tourism (FDP)	Sep 2025
The Origin of Origins	Sep 2025
MPowering Day	Sep 2025
Utsav: Heritage, Diversity & Peace	Sep 2025
Bonjour France, Step into Your Future	Sep 2025
Collaborative Discussion on Academic Exchange	Sep 2025
Valuation of Plant and Machinery	Sep 2025
LEED Certification and Sustainability	Sep 2025
Innovation Day 2025	Sep 2025

AMI–MUN '25 Opening Ceremony	Oct 2025
Inauguration of Amity Faculty Club	Oct 2025
Culture Cinema Film Festival (C2F2)	Oct 2025
Ethics in Research and Publication (FDP)	Nov 2025
Future of Cargo Management	Nov 2025
Life Under Water	Nov 2025
IC-RACT 2025	Nov 2025
World Animation Day	Nov 2025
Cosmic Quest 2025	Nov 2025
AI Innovations in Google App Script	Nov 2025
Real Estate Law in Practice	Nov 2025

Entrepreneurship Cell (E-Cell)

The E-cell has been started by the students at Amity University Maharashtra under the guidance of Amity Innovation Incubator–Noida to foster entrepreneurship among the students on Campus. E-Cell focuses on encouraging students to start their enterprises which is instrumental to develop and aspire to cultivate fundamental skills required for real-world business, like Critical thinking, Team Building and Group Dynamics, Networking with Partners, and understanding the legalities of starting their entrepreneurial journey. E-Cell also conducts various inter-school workshops, seminars, and events to induce an entrepreneurial ecosystem and helps in providing a platform for individuals with creative minds and potential to become an entrepreneur in all spheres of life. During the year E-Cell has conducted ---events.

Name of Activity	Date of conduct
IGNITE 2025	Jan - 2025
Startup Synergy	Feb - 2025
Vice Chancellor's Lecture Series on 'Strategic Innovation and Disruptive Entrepreneurship'	Mar - 025
Vice Chancellor's Lecture Series Leveraging AI for Business Growth and Innovation	Apr - 2025
BIZTRIKS 2025 International Finance Syposium	Apr - 2025
AMI Emerge 2025: Startup Carnival	Apr - 2025
Startup Sprint	May - 2025
Workshop with Mr. Pratham Thakkar	May - 2025
In-Ovation Week 2025 (Project Presentation a Poster Presentation Competition)	Sep - 2025
"Logistics Startups and Venture Opportunities in India and Beyond" Guest Lecture	Sep - 2025
World Pharmacist Day Celebration	Sep - 2025
Innovation Day 2025	Sep - 2025

BIO-IN-VATE 2025, (Idea Pitching)	Sep - 2025
Guest Lecture on Trends, Opportunities and Movements in Tourism Industry/ Travel Tech	Sep - 2025
Product Prototype Exhibition	Sep - 2025
Life Beyond Architecture: Journey through IIT, ISB, and Startup	Sep - 2025
Art of Argument- Debate Competition	Sep - 2025
Jacket Making Competition (Best Out of Wastepaper)	Sep - 2025
Project Display and Guest Talk on "Introduction to the Nuclear Energy Mission for Viksit Bharat"	Sep - 2025
Pick and Pitch	Sep - 2025
Green Building Quiz– Sustainable Practices for a Better Future	Sep - 2025
Consume with Care, Create with Purpose–SDG 12 E-Campaign	Sep - 2025
Psych-innovation Fest	Oct - 2025
Guest Lecture on Startup Trends in the field of Law	Oct - 2025
Founders' Expo 2025: Biz-Blaze	Oct - 2025
Incubators Meet: Catalyst Forum	Oct - 2025
In-Ovation Week 2025 Valedictory Ceremony	Oct - 2025

Campuspreneurs 2024-2025

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Mr. Sai Kamalesh Amara, ABS

Amara Studio Sphere Pvt. Ltd.

Specializes in VR/AR for construction, design, and campus navigation, including a VR campus guidance system. Expanding into entertainment.



Mr. Maharsh Jayawant

Q-Drug

AI and quantum-based platform for drug discovery and in-silico testing targeting pre-clinical trials.



Ms. Khushi Ghodekar

Kreative Khushi

Jewellery for disabled or mentally weak individuals, promoting inclusivity and self-expression.



Ms. Rutuja Bhand

The Inspire Studio

Interior design firm combining aesthetics, functionality, and user-centric innovation.

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Mr. Nitesh Bandekar

Nexol Studio, Availed Bounty

Social media consultancy with international clients (UK/US).



Mr. Arpit Singh

Asterism Services

Dispatch service startup in Michigan, USA, connecting loads to truck drivers



Ms. Ketki Bansode

Pickit Handicraft

Resin art products including keychains, fridge magnets, earrings, and custom items.



Mr. Prathamesh Sarak

Flics Advertising Media

Media startup creating ad films, brand videos, and event coverage.

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Mr. Vansh Thakkar

ProblemoSolvieo

Consulting firm offering personalized expert solutions for diverse customer needs.



Mr. Shubhankar Patil

Stratent

Business improvement agency offering sales-boosting consulting services.



Mr. J S S Karthikeya Prasad

Helmiä

Fashion accessories brand offering bags, jewelry, and scarves.



Mr. Mukesh Jyani

Tajani Metal & Alloys

Global supplier of industrial metals and components for sectors like defence and automotive.

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Ms. Hafsa Shaikh

Hafsas Collection

Fashion accessories brand enhancing personal style with handcrafted items.



Mr. Dhananjay Joshi

LedgerPe

Offers instant, cross-border digital payments using secure fintech solutions.



Mr. Chaitanya Buran

SamanKhoj

Platform for renting, selling, or finding daily-use items locally and sustainably.



Mr. Pranav Aher

CrackTheTrend

Platform offering market analysis, competitive analysis, and investment opportunities.

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Ms. Shrushti Gambhire

TexMix

Ready-to-mix protein-rich milkshake with low sugar in 4 flavors.



Ms. Manasa Venkatesh

Spot Land

Accessories brand focused on style and personal transformation.



Ms. Nandini Jaiswal

Namigo

Customized clothing start-up offering modern, expressive tees and hoodies.



Mr. Dushyant Singh Chauhan

Nomad Threads

Street-style clothing brand focused on simplicity, comfort, and authenticity.



Ms. Navnidhi Sharma

Ekaam

HR tech startup for recruitment and employee management for SMBs.

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Centre for Computational Biology & Translational Research (CCBTR)

Vision:

To improve human health through the pursuit of academic and research excellence in translational science

Mission:

Create a multi-disciplinary research environment wherein biologists, physicist, chemists, computer scientists, mathematicians, statisticians, work as teams and adopt an integrated approach to find solutions to complex biological challenges

- Impart world class higher education and research in relevant applied areas (Computational Biology & Regenerative Medicine)
- Develop research partnerships with leading Institutes at the National & International level
- Disseminate the knowledge by presenting the work in renowned conferences and publish in high impactor factor journals
- Collaborate with Industry Scientists and Clinicians to promote clinical application of the research

Research Areas:

1. Genomic Data Science:

In this age of "big data", and with the advent of newer and relatively inexpensive technologies, like Next Generation Sequencing (NGS), the need of the hour is to tackle massive amounts of data to make sense of it all. Realizing that growth in data-driven biology requires developing appropriate computational and statistical tools for data analysis, we will bring together, researchers with experience in cell & molecular biology, genomics, bioinformatics, statistical computation and data analysis, programming, and machine learning, thus providing an interdisciplinary platform to find solutions towards improving human health and disease. The focus would be to apply statistical tools to data generated from high-throughput technologies (microarray/NGS); analysing results using programming languages (R/Python); Development of algorithms for data analysis & visualization. Thus, this would result in obtaining high-quality data driven research, for better understanding of a particular disease condition and in turn will help with better prediction of disease outcomes.

2. Integrated Omics

The advancement of high throughput technologies, like genomics, proteomics, metabolomics, has greatly increased the ease and reduced the costs of collecting multi-omics data. However, a major challenge lies in attempting to integrate the data sets from various omics platforms to create more meaningful biological and clinically relevant knowledge. Machine learning techniques and methodologies that can facilitate the cross talk of the multi-omics platforms would be employed to understand the complexity of heterogenous data sets. A systems biology approach would be undertaken to study the complex interplay of a host of genes/proteins/metabolites, to provide a more comprehensive view on human diseases, which would help in biomarker discovery.

3. Structure-based drug design

Drug discovery and development is an expensive process and is time-consuming. Computer-aided drug designing tools can help shorten the timeline, thus substantially reducing the R & D costs. Various software will be used for identification and design of small molecules as inhibitors /probes against various drug targets of therapeutic importance. Further, using computer-assisted analysis In silico designing (epitope mapping) for development of vaccine/diagnostic markers for infectious diseases will be undertaken.

4. Biomaterials & Tissue Engineering

Stem Cells have emerged as an attractive alternative source of cells for cell therapy due to its inherent property of multiplication and differentiation into a variety of cell types upon giving proper cues and stimulation with suitable growth factors. Although a lot of research has been able to report efficient differentiation, there has been some concerns regarding the generation of mature cell types and also the low percentage of differentiation efficiency when using a two-dimensional (only culture dishes) approach. Thus, successful generation of mature cell types would depend on a combination of cells, growth factors and a suitable 3-D environment to maintain functionality. Various scaffolds/biomaterials will be synthesised and tested for its potential to support differentiation. The research will include optimization of protocols for stem cell differentiation using organoid cultures/ artificial niches to mimic stem cell differentiation, with particular focus on liver diseases.

5. Patient-derived Induced pluripotent stem cells (iPSCs) research

Stem Cell research is a rapidly evolving area, despite being fraught with innumerable challenges and hurdles that have yet to be overcome to realize its ultimate potential and clinical application. The path breaking discovery of induced pluripotent stem cells (iPSCs) in 2006, has revolutionised the field of stem cell research and translational science and has brought in a lot of excitement and optimism in this area. We will be looking at developing model systems for studying human development/disease using normal/patient derived iPSCs. Further, the Centre will also focus on the application of genome editing through CRISPR/Cas9 system in patient derived iPSCs. This research will open up newer avenues for studying human diseases and development.

6. Stem cell tracking and Imaging

Despite the clinical data appearing promising, there are severe limitations to realizing the potential of stem cell-based therapies. One major obstacle has been monitoring the bio-distribution and homing of implanted or injected stem cells in the human body. Hence, an urgent need exists to develop non-invasive and sensitive imaging techniques, which will prove valuable for optimisation of therapeutic delivery for cell therapy. We would focus on synthesising novel biocompatible nanomaterials for molecular imaging and tracking of stem cells. Earlier work carried out in the lab has shown the potential of nanomaterials to be promising agents for tracking/imaging. We would also look at in vivo tracking systems for visualising the nanoparticles. Various animal models for the disease/disorder of interest would be created to study the in vivo tracking of stem cells.

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List of members:

1) (Chairperson)
2) Dr. Sagar Barage (Deputy Chairperson)
3) Dr. Virupaksha Bastikar (Member Secretory)
4) Dr. Jaya Lakkakula (Member)

Infra structures currently available:

Computer Lab: 1 computer lab with 25 Desktop PC with LAN connection.

1 workstation (128 GB RAM, 2TB HD, 16 cores, GPU: RTX5000)

Animal cell culture facility: we utilize animal cell culture facility available at AIB.





Objectives and the Outcomes of the research work carried out under these Centers.

The center for drug discovery and development (CD3) was established in 2022 at the Amity university Maharashtra, Mumbai with the goal to discover novel drugs to fight against life threatening infectious diseases caused by multi drug resistant ESKAPE pathogens and Mycobacterium tuberculosis from natural products. Center will also focus on anticancer drug development aiming novel molecular targets with the help of computational approaches. The center consists of a young group of enthusiastic and experienced scientist actively pursuing collaborative research with external collaborators in academic community as well as with industrial partners both in India and abroad.

Objectives

1. To be a part of drug discovery process, from basic discovery to applied and translational research, creating cooperative pre-clinical and clinical prospects, and foster an entrepreneurial and innovative culture.
2. To be a state-of-the-art resource for a highly productive and renowned group of faculties with research interests overlapping with drug discovery.
3. To expand of the bandwidth of our members and enable multidisciplinary projects beyond our current capabilities towards drug discovery and development.
4. To focus on the natural products converting into commercial & non-profit libraries and encourage the biological assessment of these entities through internal and external partnerships.

Research equipment's established under these centers.





Specific Administrative Support for Interdisciplinary Research Teams Amongst Science Disciplines

Honourable Vice Chancellor, the statutory bodies and the Management of the Amity University Maharashtra has full support for the interdisciplinary science research. Each project proposal abstracts are reviewed by the honourable Vice Chancellor of the university. Dean Research of the university has the specific actions to review the Research aspects and provides all the inputs for the constructive enhancement of the research proposals, and the outcomes of the research projects. The research project proposals are scrutinized at the office of Dean Research, and the committee approves the proposal with the specific recommendations to win the funding. The research clusters are created for the

effective research proposal writing, and knowledge exchange among the faculty members. The team of managers are appointed to identify the research project funding opportunities and disseminating information about the project proposals. Complete support is provided for getting the endorsement letter from the office of Registrar. The financial matters of the receiving of the funds in the bank account of the Amity University Maharashtra is handled by the CFO of the university.

The CFO is coordinating with the Central CFO Ritnand Balved Education Foundation (RBEF). All the transactions are ethically handled, and the smooth administrative support is provided to the Principal Investigator and the co-investigator of the research projects. The approval for the expenditure of the funds is securitized and smoothly processed, as per the guidelines provided by the funding agencies. The ethical committee checks the ethical concerns of the research work. The procurement of any research equipment's is done through the ethical practices and follows the lowest prize quotations in the purchasing in the transparent manner. Similarly, it is the practice to follow the sustainable practices during the material purchase for all kind of research projects. The security team takes care of the material handling coming to the university campus and going outward from the university campus.

Measures of Success of Interdisciplinary Research

Amity University Maharashtra has the system to publish the quality research papers in reputed indexing agencies such as Scopus, and Web of Science for the science and engineering disciplines. It is highly recommended to publish the higher impact factor original research papers in the reputed and peer reviewed journals. The inter-disciplinary research projects including the science, life science and engineering branches is highly expected from the faculty members, post-doctoral fellows, and research fellows. The other disciplines such as social sciences, and related streams are also encouraged. Universities have measures on the various established mechanisms those are accepted worldwide such as H-index calculations by Scopus, Web of Science, and the Google Scholar. The better impact has been observed at the implementation stages of the technology handover and the start-ups created based on the products developed through this interdisciplinary research. The

University has shown the significant footprints in the intellectual property rights. The patents, designs and copyrights are filed by the faculty members of the Amity University Maharashtra. It is the planning of the university to encourage the product design for the successful business. The success is also measured in terms of the social impact created on the lives of the citizens, the poor sections, and the general public. Following are the mechanisms for the measurement of the success of the interdisciplinary research.

- The measurement of the methodology of the research funds utilized for the betterment of the society.
- The research success for the improvement in the new knowledge production, that can be the part of the education system and curriculum.
- Conversion of the research outcomes into the well-established research methodologies for the curriculum design and the enrichment outcomes.
- Outcomes in terms of the high impact factor research paper publications, blogs and social media postings to reach out to the target group.
- Continuation of the similar research after the tenure of the research project and thinking out-of-the-box concepts as a by-product of the research outcomes.
- Improvement in the h-index, i-1o of the Amity University Maharashtra and the involvement of the faculty individuals and the students in the research work.
- Product development for the further wealth generation for the nation building.
- Creating ethical system of the research methods and generating the research outcomes of the research.
- Filing of the Intellectual Property Rights in terms of the Patents, Design, and Copyrights. Further extending it to the business and start-up registrations to convert it into tangible outcomes.
- Successful establishment of the business to the profit generation and providing the significant amount of funds for the social benefits.
- Raising the funds for the interesting product development, and novel ideas generated during the research work.
- Inclusion of the results or the newly applied research methodology in the curriculum of the UG and PG programs, and PhD Programs.
- Use of the research in the design of the new policy documents.
- Appearance of the articles in the newspaper and popular online platforms.
- Portraying the tangible outcomes of the research for all stakeholders of the university.

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Promotion System in Place that Recognizes Interdisciplinary Research Amongst Science Disciplines

Human Resource (HR) Policy of Amity University Maharashtra follows the Promotion includes the University Grant Commissions (UGC) guidelines on the Career Advancement Schemes (CAS) for the Promotion from the Assistant Professor-1 to Assistant Professor-2, and Assistant Professor-2 to Assistant Professor 3. Similarly, the promotion from the Associate Professor to Professor Position requires the quality research publications in the reputed peer reviewed and Scopus or WOS indexed Journals. • The original research articles published in the Science, Engineering, Technology are highly recommended. • Incentives is given to the faculty members having the high impact factor publications at which also includes the interdisciplinary research outcomes in terms of the research papers, Intellectual Property Rights, and Policy documents. • The university provides the financial support for the Travel, Accommodation expenses to attend the Conferences, Meetings, and for research collaborations, if the researcher has convinced as high potential outcomes of the proposed research work. • The Promotion and tenure decisions are given based on the collaboration in the field of the Inter-disciplinary Science and Engineering research. • The target given to each faculty to publish four high quality Scopus; Web of Science indexed research papers in an academic year. These targets of the research paper publication, IPRs are mapped with the annual appraisal system of the faculty member and the researcher at the university

Event-wise documented activities

1. Drone Engineering for the Built Environment

Date: 2 May 2025

Venue: Art Guild House, Kurla, Mumbai

Organising school: RICS School of Built Environment

This workshop introduced drone applications in surveying, inspection, real estate and built-environment monitoring. Its technical emphasis supported understanding of emerging digital infrastructure practices and industry-oriented drone operations.



2. Drone Making Workshop

Date: 13 May 2025

Venue: RICS School of Built Environment, Amity University Mumbai

Organizing school: RICS School of Built Environment

Participants were introduced to drone components, assembly, electronics, control, calibration and testing. Practical exposure connected aerial technology with potential uses in surveying, construction inspection and mapping.

3. Animation, VFX and Generative AI Workshop

Date: 10 March 2025

Organizing school: Amity School of Communication / Amity Film School

The workshop introduced creative applications of animation, VFX and generative AI. It provided participants exposure to computational tools and digital content workflows used in the media industry.



4. Creativity and Artificial Intelligence Workshop

Date: 3 March 2025

Organizing school: Amity School of Communication / Amity Film School

The workshop explored generative AI for creativity, communication and digital storytelling. Participants were introduced to emerging tools and their potential applications in contemporary media work.



5. Aerospace Engineering: Future Prospects Webinar

Date: 23 May 2025 (webinar); 4 December 2025

Organizing school: Amity School of Engineering and Technology

The aerospace engineering webinar and recorded follow-up explored professional prospects and the evolution of the aerospace sector. Its contribution was technology awareness and discipline-specific knowledge exchange.

6. AmiPharma Inspire: Entrepreneurs and Tablet Quality Control

Date: 2 May 2025

Organizing school: Amity Institute of Pharmacy

The event combined an entrepreneurial perspective with a demonstration related to tablet quality control. It exposed pharmacy learners to applied analytical practice, innovation and industry-oriented pharmaceutical processes.



7. NIRMAN 25 – 48-Hour Hackathon

Date: 28–30 January 2025

Venue: Amity University Mumbai laboratories and auditorium

Organizing school: Amity School of Engineering and Technology

This 48-hour hackathon challenged participants to collaboratively develop technology-focused responses to practical problems, including themes involving AI, Web3 and smart infrastructure. It encouraged prototyping, coding and solution development.



8. HackSetu 1.0 – National-Level Hackathon

Date: 3–4 November 2025

Venue: Amity University Mumbai

Organizing school: Amity School of Engineering and Technology

The national-level HackSetu event provided a collaborative technology challenge through which participants applied technical and problem-solving skills. Its contribution is evidenced by the organized hackathon.

9. TECHNICIA 2025

Date: 27–28 March 2025

Organising school: Amity School of Engineering and Technology

TECHNICIA 2025 brought together technology-oriented activities and student engagement. The recorded initiative supported applied learning and a campus environment for scientific and technical exchange.

10. Design Thinking Workshop

Date: 5 August 2025

Organizing school: Amity School of Communication

The Design Thinking Workshop introduced approaches to user-centred problem identification, creative ideation and iterative solution development. It strengthened innovation processes relevant to multiple industries.



11. Fashion-Tech: AR and VR in Fashion Retail

Date: 24 November 2025

Organizing school: Amity School of Fashion Technology

This outreach activity introduced school students to augmented and virtual reality applications in fashion retail. It highlighted the interface between immersive digital technology, customer experience and emerging fashion-industry practices.



12. Faculty Development Programme: Fundamentals of Remote Sensing

Date: 2025

Organising school: University faculty development programme

This faculty development programme focused on remote sensing methods and their applications. Its contribution was building academic capacity in geospatial techniques relevant to research, mapping and planning.

13. Faculty Development Programme: Multidisciplinary Applications of AI

Date: 2025

Organising school: University faculty development programme

This faculty development programme explored multidisciplinary applications of artificial intelligence. It supported staff knowledge development and interdisciplinary engagement with contemporary computational methods.

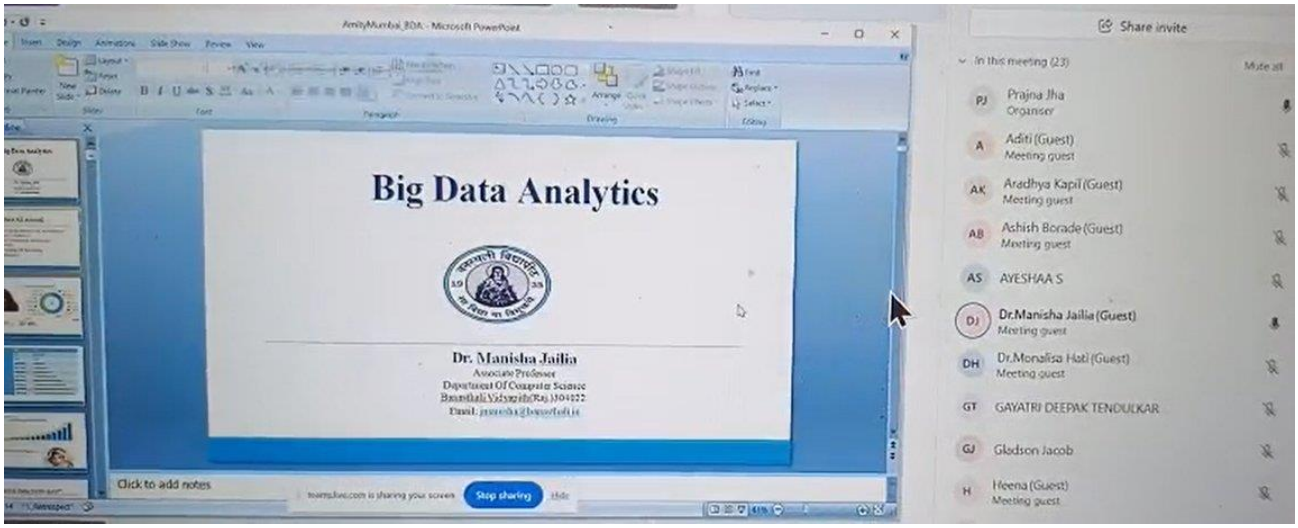


14. Webinar on Artificial Intelligence and Big Data Analytics

Date: 11 August 2025

Organizing school: Amity University Maharashtra

The webinar examined advances in artificial intelligence and big data analytics and their uses across sectors. It provided a structured forum for knowledge exchange on emerging digital technologies.



15. IC-RACT 2025: Advances in Computational Techniques

Date: 13–14 November 2025

Organizing school: Amity School of Engineering and Technology

The international conference focused on recent advances in computational techniques, offering a platform for research presentations, technical exchange and discussion of computing-based approaches.







16. Sanrachna 2025: Architecture and Industry Exposure

Date: 17 and 19 March 2025

Organising school: Amity School of Architecture and Planning

Sanrachna 2025 included architectural industry engagement and activity-based learning. The event provided contact with professional practice and contemporary approaches to design and the built environment.



17. Prospects and Career Opportunities for Designers and Stylists

Date: 20 June 2025

Organizing school: Amity School of Fashion Technology

This event introduced design and styling career pathways and professional expectations. Its relevance to SDG 9 is limited to knowledge exchange with the design industry.



18. Workshop at Venture Center: Building a Start-up and Venture Capital

Date: 9 April 2025

Venue: Venture Center, Pune

Organizing school: Amity Institute of Pharmacy

The visit to Venture Center in Pune introduced pharmacy learners to start-up creation and funding opportunities. The activity highlighted an innovation ecosystem linking specialized knowledge, industry mentors and entrepreneurship support.



19. Two-Day IIC Programme on Tourism Trends and Research

Date: 27–28 February 2025

Organizing school: Amity Institute of Travel and Tourism

The two-day programme addressed tourism trends, research opportunities and sustainable development in the sector. It encouraged exchange of practice-oriented knowledge and dialogue between academic and tourism stakeholders.

SDG 9 relevance: Industry–academia knowledge exchange, technology awareness or sustainable infrastructure practices, as supported by the specific activity.



20. Careers in Fashion and Digital Portfolio for Corporate Profiling

Date: 30 April 2025

Organizing school: Amity School of Fashion Technology

The fashion portfolio workshop connected creative students with professional digital presentation tools and employer-facing portfolio practices. It illustrates industry-aligned capacity building.

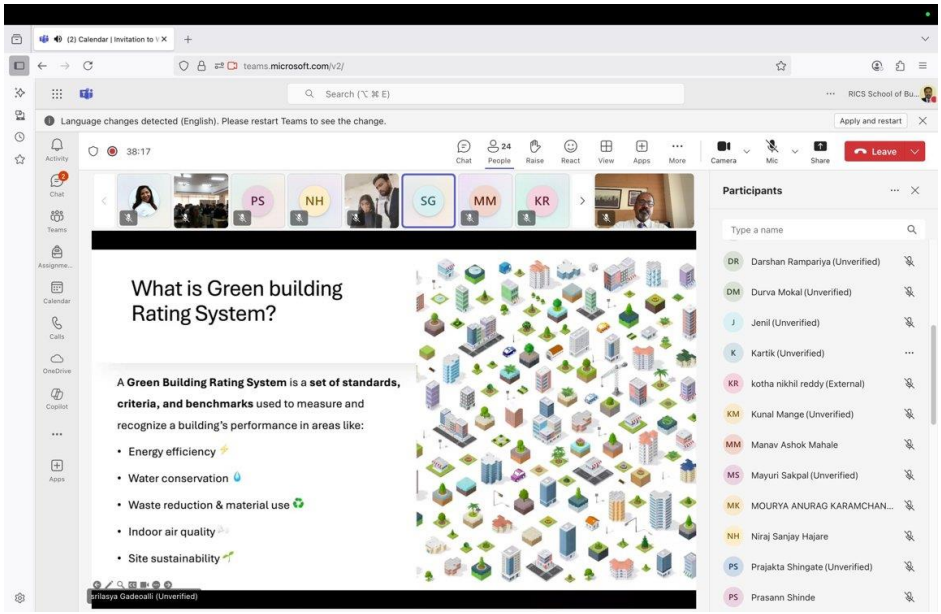


21. Webinar on LEED Certification and Sustainability

Date: 25 September 2025

Organizing school: RICS School of Built Environment

This webinar introduced LEED certification and sustainable building practice. It addressed standards and methods relevant to improved environmental performance in the built environment.

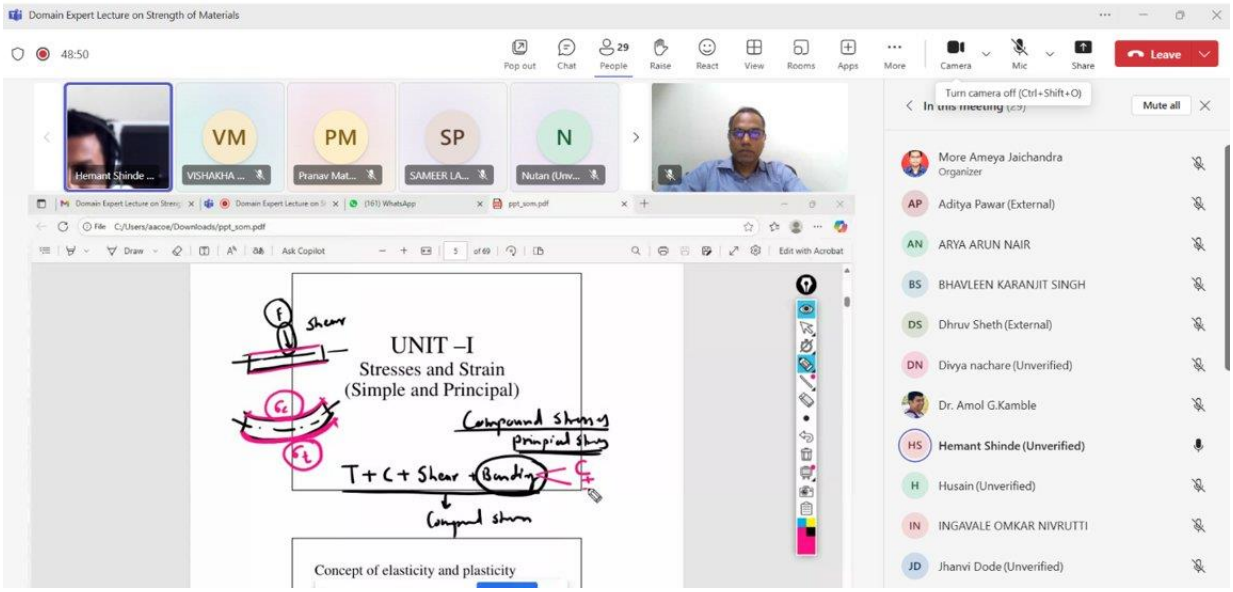


22. Domain Expert Lecture on Strength of Materials

Organizing school: Amity School of Engineering and Technology

The domain lecture discussed strength-of-materials concepts used in engineering analysis. The activity linked theoretical mechanics to technical competencies relevant to industrial design and infrastructure.

SDG 9 relevance: Industry–academia knowledge exchange, technology awareness or sustainable infrastructure practices, as supported by the specific activity.



23. Industry Visit to Gini and Jony Pvt. Ltd.

Date: 19 November 2025

Venue: Gini and Jony Pvt. Ltd.

Organizing school: Amity School of Fashion Technology

The visit to Gini and Jony Pvt. Ltd. provided students with industry exposure to fashion-sector production and professional practices. It offered observational learning about organized manufacturing and enterprise operations.



24. Textile Testing and Quality Control Workshop

Date: 27 November 2025

Organizing school: Amity School of Fashion Technology

The workshop introduced textile testing and its importance in product quality assurance and quality control. It connected laboratory methods with industry standards and responsible manufacturing practice.

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25. Expert Domain Lecture on Aircraft Structural Bending

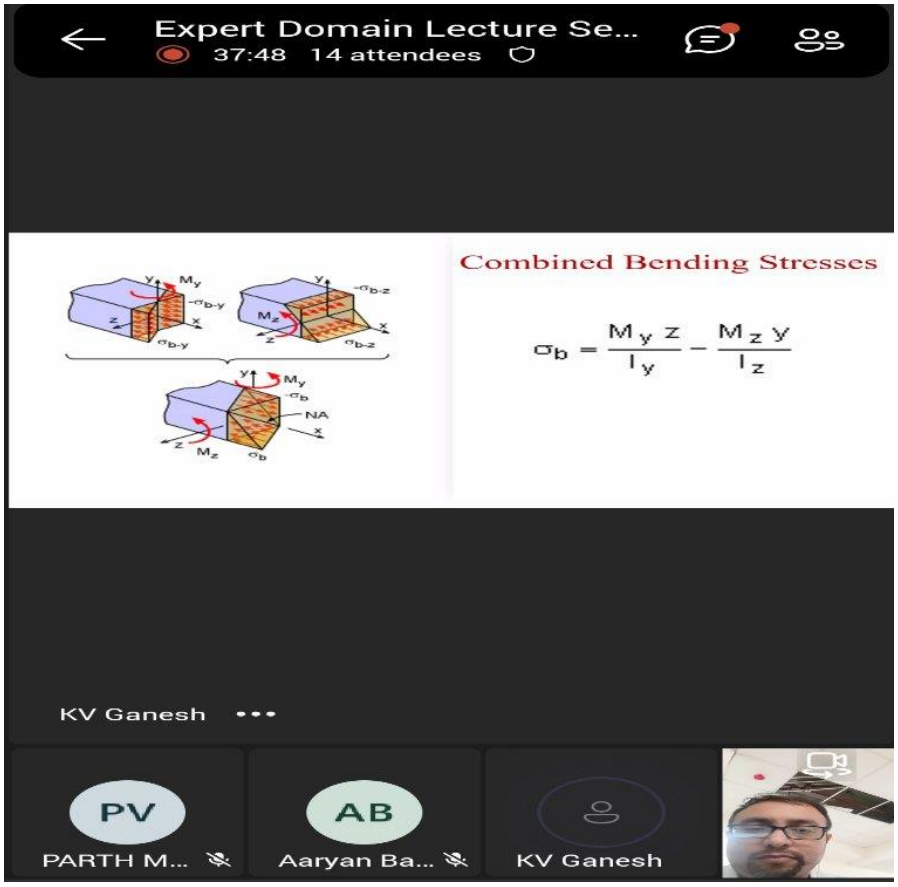
Date: 2025

Organizing school: Amity School of Engineering and Technology

The aircraft structures session addressed symmetrical and unsymmetrical bending, a technical topic relevant to structural engineering and aerospace design. It enhanced exposure to specialist analytical methods.

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26. Expert Domain Lecture on Propulsion Systems I

Date: 2025

Organizing school: Amity School of Engineering and Technology

The domain lecture on propulsion systems introduced engineering concepts related to aircraft power and motion. It provided discipline-specific technical learning relevant to aerospace-sector innovation.

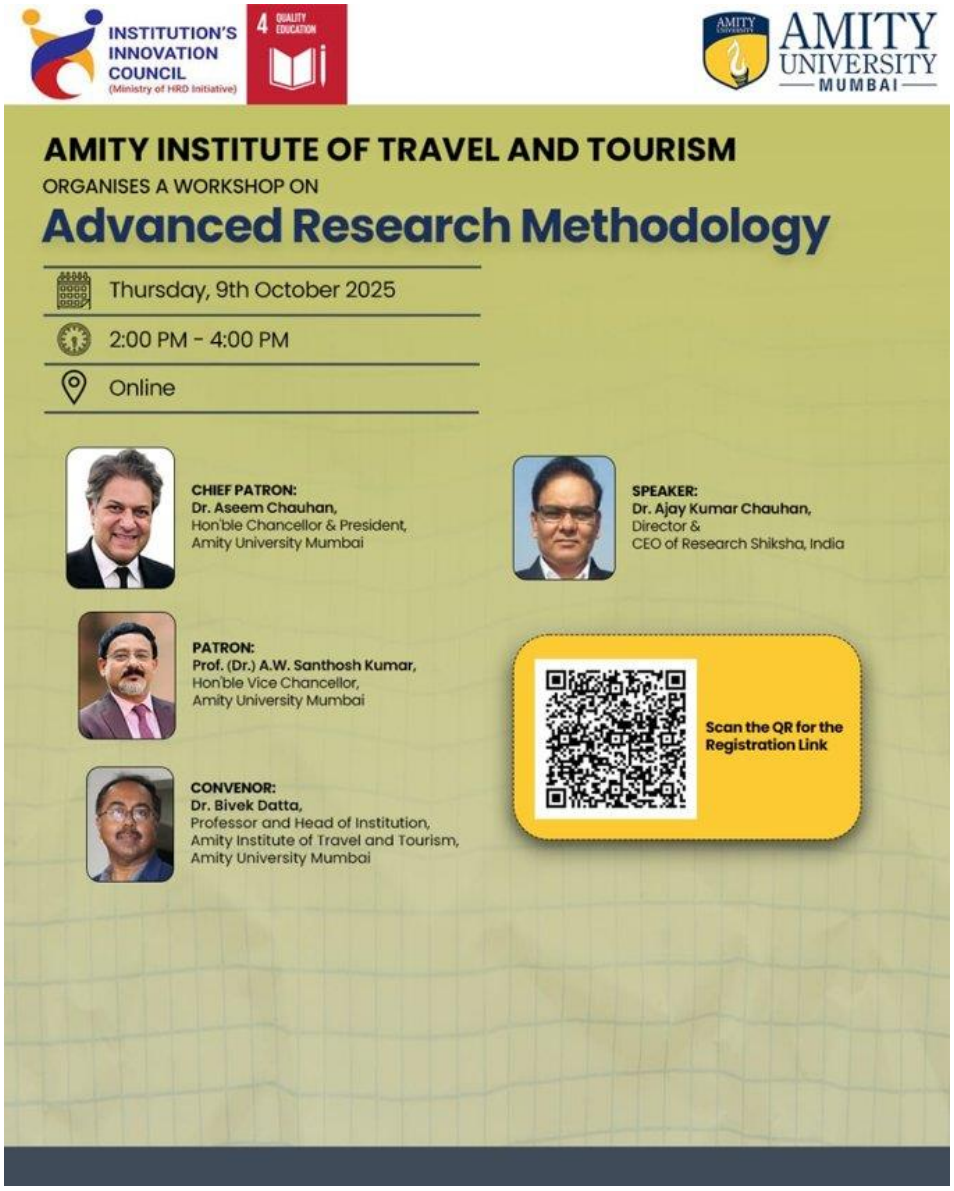


27. Online Workshop on Advanced Research Methodology

Date: 9 October 2025

Organizing school: Amity Institute of Travel and Tourism

The advanced research methodology workshop engaged participants with research skills and scholarly methods. Its contribution to SDG 9 is indirect through research capability-building.



28. Tourism Industry–Academia Conclave

Date: 9 October 2025

Organizing school: Amity Institute of Travel and Tourism

The tourism industry–academia conclave created a forum for professional and academic perspectives on transforming tourism. It highlighted collaborative discussion of sector practices and emerging challenges.

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