



AMITY  
UNIVERSITY  
— GURUGRAM —

# REPORT ON SUSTAINABLE DEVELOPMENT GOAL

4 QUALITY  
EDUCATION



SDG -4 Quality Education  
Year – 2023



## 1. Preamble:

***“Education mean an all-round drawing out of the best in child and man —body, mind and spirit”***

**by M. K. Gandhi.** UNESCO proclaims that SDG -4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Sustainable development cruces on every child receiving a quality education. When children are offered the tools to develop to their full potential, they become productive adults ready to give back to their communities. Amity University Haryana (AUH) is committed to long-term sustainability goals and places education at the heart of efforts to realize human rights, foster a culture of peace, harmony, and non-violence, and promote sustainable development. The university emphasizes health and education awareness, sustainable lifestyles, and global citizenship, encouraging understanding and cooperation on regional, national, and international levels, all while advocating for living in harmony with nature.

## 2. Teaching and Learnings

Amity University Haryana's 'Quality Education Programs' align with the vision of providing education that not only prepares individuals for a livelihood but also contributes to the progress of humanity through excellence in socially relevant research and community outreach. The university, driven by research and innovation, addresses local, national, and global challenges by fostering and implementing innovative approaches in its core areas of teaching, research, and community service. The university aims to ensure effective learning and the acquisition of relevant knowledge, skills and competencies, in terms of vocational and technical skills for decent work as well as for global citizenship in a plural and interconnected world.

**The contribution of Amity University towards sustainability rests on 4 pillars as under:**

1. Experiential teaching and learning activities.:
2. Research Acumens transforming the learning landscape
3. Institutional Infrastructure, Resources and Facilities
4. Various collaborations and partnerships with eminent national and international organizations and institutions.

Significant progress was achieved during the last year in all the above-mentioned 4 activities.

### 2.1 Experiential Teaching and Learning Activities:

The university's 110-acre LEED Platinum-certified green campus, rich in diverse flora, fauna, and herbal plants, provides students with an immersive learning environment, fostering a mindset that sees sustainability as a living reality.

The university is entrusted with the task to provide experiential learning to the students and promotes adoption of ICT enabled andragogy by its faculty members. The diverse undergraduate and postgraduate programs not only cover core subjects but also incorporate education on sustainability. The Curriculum Development Review Committee ensures that courses are aligned with various Sustainable Development Goals (SDGs) to foster lifelong learning among students.

Students are educated on sustainability topics such as Good Health and Wellbeing, Clean Water and Sanitation, Affordable and Clean Energy, Industry Innovation and Infrastructure, Climate Action etc. through workshops and guest lectures. Additionally, various departments offer core courses that integrate sustainability principles across both undergraduate and postgraduate programs, ensuring a holistic and responsible approach to education. **(Link for Core courses)**

Sl. No.	Name of Programme	Course Code	Course Name	SDGs Mapped with the course
1	Bachelor of Business Administration	MGT2404	Business Information & Data Base System	SDG1, SDG4, SDG8, SDG11, SDG17
2	Master of Business Administration	MGT4101	Management Process & Organizational Behavior	SDG4, SDG5, SDG8, SDG9, SDG10, SDG17
3	Master of Business Administration (Banking & Finance)	MBF4210	Business Analytics	SDG1, SDG4, SDG8, SDG11, SDG17
4	Master of Business Administration (Executive for Working Professionals)	MWP4411	Environmental Governance and Sustainability	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG16
5	Master of Business Administration (Executive for Working Professionals)	MWP4428	Predictive Analytics - I Machine Learning using R	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
6	Master of Business Administration (Executive for Working Professionals)	MWP4429	Predictive Analytics - II Machine Learning using Python	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
7	Master of Business Administration (Sustainability Management)	MSM4102	Business & Environmental Legislation	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG17
8	Master of Business Administration (Sustainability Management)	MSM4105	Sustainable Marketing Concepts	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG17
9	Master of Business Administration (Sustainability Management)	MSM4207	Sustainable Development & Sustainability	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
10	Master of Business Administration (Sustainability Management)	MSM4302	Sustainable Development & Climate Change	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
11	Master of Business Administration (Sustainability Management)	MSM4303	Sustainability Reporting & CSR	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
12	Master of Business Administration (Sustainability Management)	MSM4304	Human Dimensions of Sustainability	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17

13	Master of Business Administration (Sustainability Management)	MSM4401	Management in Action- Social, Economic & Ethical Issues	SDG3, SDG4, SDG8, SDG11, SDG16, SDG17
14	Master of Business Administration (Sustainability Management)	MSM4404	Creativity and Innovation in Designing Sustainable Solutions	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
15	Master of Business Administration (Sustainability Management)	MSM4405	Green Marketing & Environmental Product Design	SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
16	Bachelor of Hotel Management	HMC2205	Food Science & Nutrition	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG17
17	Bachelor of Hotel Management	HMC2305	Food Safety & Hygiene	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG17
18	Bachelor of Tourism & Travel Management	TRM2601	Eco-Tourism & Sustainable Tourism	SDG3, SDG4, SDG8, SDG11, SDG16, SDG17
19	Master of Social Work	SCW4204	Community Organization & Social Action	SDG3, SDG4, SDG8, SDG11, SDG16, SDG17
20	Bachelor of Technology (Civil Engineering)	CIV2601	Environmental Engineering-I	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
21	Master of Technology (Civil Engineering)	CIV4102	Sustainable Constructions	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
22	Master of Technology (Civil Engineering)	CIV4103	Disaster Mitigation and Management	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG17
23	Master of Technology (Civil Engineering)	EVE4213	Environmental Chemistry	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG17



24	Master of Technology (Civil Engineering)	EVE4311	Water Reclamation and Reuse	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
25	Master of Technology (Civil Engineering)	EVE4312	Air and Water Quality Modelling	SDG3, SDG4, SDG8, SDG11, SDG16, SDG17
26	Master of Technology (Mechanical Engineering)	IPE4302	Computer Aided Metrology & Inspection	SDG3, SDG4, SDG6, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG17
27	Master of Technology (Data Science)	DSE4205	Big Data Technologies	SDG1, SDG4, SDG8, SDG11, SDG17
28	Master of Technology (Solar & Alternate Energy)	SAE4203	Solar Energy Storage Systems	SDG3, SDG4, SDG8, SDG11, SDG16, SDG17
29	Master of Technology (Solar & Alternate Energy)	SAE4402	Green Buildings	SDG1, SDG4, SDG8, SDG11, SDG17
30	Bachelor of Science (Hons.) (Chemistry)	CHY2408	Green Chemistry	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
31	Bachelor of Science (Hons.) (Chemistry)	CHY2409	Agricultural Chemistry	SDG1, SDG4, SDG8, SDG11, SDG17
32	Master of Science (Chemistry)	CHY4313	Industrial Waste and Water Treatment	SDG1, SDG4, SDG8, SDG11, SDG17
33	Master of Science (Chemistry)	CHY4321	Environmental Chemistry	SDG1, SDG4, SDG8, SDG11, SDG17
34	Master of Science (Environmental Science & Management)	ENV4103	Environmental Biology	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
35	Master of Science (Environmental Science & Management)	ENV4201	Pollution Control and Management	SDG1, SDG4, SDG8, SDG11, SDG17
36	Bachelor of Science (Hons.) (Biotechnology)	BTH2108	Food Biotechnology	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
37	Master of Science (Biotechnology)	BTH4204	Environmental Biotechnology	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17

36	Bachelor of Science (Hons.) (Biotechnology)	BTH2108	Food Biotechnology	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
37	Master of Science (Biotechnology)	BTH4204	Environmental Biotechnology	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
38	Master of Science (Data Science)	DSC4311	Weather Prediction	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
39	Bachelor of Interior Design	IND2502	Revitalization of Arts & Crafts	SDG1, SDG4, SDG8, SDG11, SDG17
40	Bachelor of Interior Design	IND2610	Sustainable Interior Design & Materials	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
41	Bachelor of Interior Design	IND2611	Sustainable Interior Renovation	SDG1, SDG4, SDG8, SDG11, SDG17
42	B.A., LLB (Hons.)	LAW2702	Environmental Law	SDG1, SDG4, SDG8, SDG11, SDG17
43	Bachelor of Science (Dietetics & Applied Nutrition)	DAN2102	Nutritional Biochemistry	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
44	Bachelor of Optometry	OPT2310	Medical Law and Ethics	SDG4, SDG5, SDG8, SDG9, SDG16
45	Master of Science (Dietetics & Applied Nutrition)	DAN4205	Dietetic Technique and Patient Counseling	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
46	Master of Science (Dietetics & Applied Nutrition)	DAN4403	Nutrition for Health and Fitness	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
47	Master of Optometry	OPT4306	Environmental Optometry	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
48	Master of Public Health	PUH4204	Environmental Health Sanitation	SDG1, SDG4, SDG8, SDG11, SDG17
49	Bachelor of Science (Nursing)	ELEC505	Sports Health	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17

50	Bachelor of Pharmacy	BP603T	Herbal Drug Technology	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
51	Bachelor of Architecture	ARC2519	People Culture & Built Environment-I	SDG1, SDG4, SDG8, SDG11, SDG17
52	Bachelor of Architecture	ARC2520	Ecology, Environment & Sustainable Development -I	SDG1, SDG4, SDG8, SDG11, SDG17
53	Bachelor of Architecture	ARC2620	People Culture & Built Environment- II	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
54	Bachelor of Architecture	ARC2621	Ecology, Environment & Sustainable Development -II	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17
55	Bachelor of Architecture	ARC2721	People Culture & Built Environment- III	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
56	Bachelor of Architecture	ARC2722	Ecology, Environment & Sustainable Development -III	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
57	Bachelor of Planning	PLN2511	Ecology, Environment and Resource Development & Management	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
58	Bachelor of Planning	PLN2514	Eco-Tourism	SDG1, SDG4, SDG8, SDG11, SDG17
59	Bachelor of Planning	PLN2715	Environmental Impact Assessment and TOD	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
60	Environmental Studies (OE)	ENV2152/ ENV2252	Environmental Studies	SDG4, SDG8, SDG9, SDG11, SDG15, SDG17
61	Environmental Health & Climate (OE)	AST2452	Air, Water and Soil Pollution, Environmental Health Professions	SDG1, SDG4, SDG8, SDG11, SDG17
62	Physical Education and Sports Management (OE)	PED2151	Health Education and Sports	SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG16, SDG17
63	Physical Education and Sports Management (OE)	PED2251	Human Anatomy and Exercise	SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG12, SDG17

## 2.2 Value-added courses:

The university also offers value-added courses designed to directly support the Sustainable Development Goals (SDGs) for the benefit of students. It is mandatory for undergraduate students to study subjects such as Communication Skills, Behavioral Science and Environmental Studies. In

In addition, they develop problem-solving skills, critical thinking, creativity, teamwork while leadership and conflict resolution abilities are cultivated through a Military Training course. These skills are essential for success in a wide range of occupational fields, equipping students with the competencies needed to excel in today's diverse and dynamic professional environments.

Course Code	Course Name	SDGs Mapped with the course
ENV2651	Sustainable Development Practices	SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
ENV2351	Environmental Pollution and Waste Management	SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
ENV2451	Environmental Management and Industrial Safety	SDG1,SDG2,SDG3,SDG4,SDG5,SDG8,SDG9,SDG10,SDG12,SDG17
ENV2551	Environmental Economics and Globalization	SDG3,SDG4,SDG6,SDG8,SDG9,SDG11,SDG16
MGT2152	Orientation Programme Entrepreneurship	SDG1,SDG4,SDG8,SDG11,SDG17
MGT2252	Exploring Business Opportunity,	SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
MGT2452	Translating Business Model into Startup	SDG3,SDG4,SDG8,SDG11,SDG16,SDG17
LAW2252	Systems, Organizations and Instruments of Human Rights	SDG1,SDG3,SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
PSY2151	Introductory Psychology	SDG3,SDG4,SDG8,SDG11,SDG16,SDG17
PSY2551	Psychometric Testing	SDG3,SDG4,SDG8,SDG11,SDG16,SDG17
PSY2252	Optimism and Success	SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
DSM2151	Introduction to Disaster Management	SDG1,SDG3,SDG4,SDG6,SDG7,SDG8,SDG9,SDG11,SDG16,SDG17
DSM2551	Climate Change Adaptations and Sustainable Development	SDG1,SDG4,SDG8,SDG11,SDG17
GEN2051	Military Training Foundation	SDG-4

## 2.3 Learning activities- co-curricular and extracurricular activities

Faculty representatives at Amity University Haryana actively engage in a variety of co-curricular and extracurricular educational activities and services aimed at the local community and other stakeholders. These initiatives focus on raising awareness about critical issues such as poverty, vocational skilling, health, education, the environment, entrepreneurship, information technology, e-commerce digitization, and safety. The university conducts 24/7 activities to keep students meaningfully engaged, promoting constructive thinking and holistic development.

As part of their curriculum, students undertake final-year projects and social awareness initiatives that address sustainability issues such as mental health, legal aid, air quality, gender equity, solar power, waste management and plastic reduction on campus and in the community.

Students are also trained to give back to society by applying what they have learned. This is put into practice through classes and awareness programs conducted for marginalized and uneducated adults in nearby villages adopted by student clubs.

Shakti and Amity Youth Red Cross clubs are involved in providing support in social welfare, women empowerment and in organizing medical aids & health camps.

The student-led "Mission Green" plantation drive, organized by the Amigreen club, is a key initiative. Every year, on June 5th—World Environment Day—students and faculty participate in planting more than 100 saplings on and around the campus. They also engage neighboring farmers and schoolchildren in environmental activities on themes such as biodiversity, growing herbal plants and microgreens, ecology, composting, recycling, and sustainable agricultural practices.

Education at Amity University Haryana is seen as a powerful tool in addressing issues like extreme poverty, development of vocational skills, communal conflicts, environmental conservation, and sustainability awareness. The university's education system emphasizes instilling a spirit of patriotism, love for humanity, and commitment to achieving the Sustainable Development Goals (SDGs) through various practices and initiatives.

## 2.4 The faculty at Amity University Haryana (AUH) is actively engaged in developing **online teaching materials** that are made freely accessible to students and the broader

community. These resources are available on multiple platforms such as **e-PG Pathshala, MOODLE, Google, LMS, the university website, and YouTube**, providing diverse online learning tools. (Dr Anu Youtube video link)

[https://www.amity.edu/gurugram/2\\_3\\_2.aspx](https://www.amity.edu/gurugram/2_3_2.aspx)

## 2.5 Digital Learning accessible to public:

The university frequently organizes webinars, guest lectures, workshops etc covering a wide range of educational and contemporary issues open for public. These webinars are freely accessible, promoting open access to knowledge and engaging both students and the community in ongoing educational discussions. This initiative reflects AUH's commitment to **inclusive and accessible education**, leveraging digital platforms to enhance learning experiences.



## 2.6 Free Certification Program by Bausch and Lomb Contact lens - Mastermind In- Campus program:

The Bausch + Lomb Contact Lens Training Program is a comprehensive initiative designed for Optometry students to provide them with an in-depth understanding of soft contact lenses. Conducted by the professional service team of Bausch + Lomb, this structured training program spans 10 days of intensive training followed by a 6-month course of study consisting of 6 modules. During the course, students engage with various aspects of contact lens fitting, care, and management, ensuring they gain practical and theoretical knowledge. Upon successful completion of the training and passing the final examination, candidates are awarded a certificate endorsed by Bausch + Lomb. This certification not only enhances the students' qualifications but also equips them with valuable skills for their future careers in optometry.





## 3. Research Contribution

### 3.1 Research Acumens transforming the learning landscape:

AUH strategic plan emphasizes the pursuit of relentless groundbreaking research in pursuit of sustainable development with significant global impact. The university's research efforts are geared towards addressing societal needs and designing innovative intellectual property that contributes to the sustainability goals of both rural and urban communities.

To support these efforts, the university provides robust resources and infrastructure to encourage research among its faculty members. Additionally, faculty have secured major grants from key government agencies as stated below:

- **Dr. Sarika Jain, Associate Professor** at the Amity School of Applied Sciences, has been awarded a project titled “**Development of High-Resolution Future Climate Scenarios for the NCR Region under Climate Change and Urbanization**” by the Department of Science and Technology (DST) through the SERB SURE grant scheme, amounting to 22,40,000. This research will investigate the interplay between climate change and urbanization, focusing on their combined impacts on the region's future. The outcomes of this project will provide valuable insights for policymakers in formulating strategies aimed at achieving sustainability, while also enabling scientists to assess the health implications associated with these environmental changes.

- **Dr Manoj Kashyap** of Amity Medical School received an extramural grant from the Indian Council of Medical Research (ICMR), New Delhi (Ref #2020-3471), for a project titled “**Differential Inhibition of Visfatin-PAK4 as a Novel Strategy in Esophageal Squamous Cell Carcinoma for Therapeutic Purposes,**” amounting to Rs. 48.5 lakhs. The Molecular Oncology Laboratory (MOL) was established with the aim of conducting cutting-edge research in oncology and regenerative medicine. At MOL, various molecular and cellular biology approaches are utilized to not only delineate pathophysiology but also to identify potential cancer biomarkers that can differentiate between cancerous and normal cells. Among ongoing efforts using integrative OMICS methods to analyze transcriptomic and proteomic changes in cancer and normal stem cells, identifying dysregulated alternative RNA splicing events in these cells, and how we can target those in cancer cells to achieve a therapeutic window in comparison to normal cells is another primer focus.

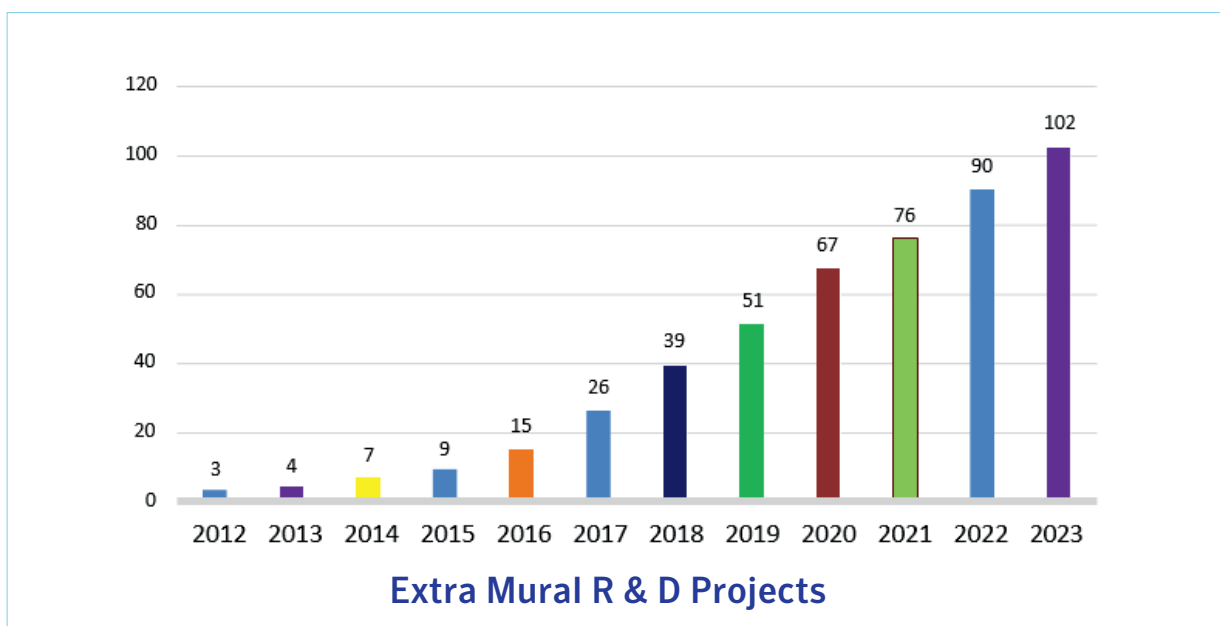
- **Dr Ravi Dutt Sharma** at Amity Institute of Biotechnology has been awarded a project on – “**Identification of early diagnostic biomarkers for GBM using differential Alternative Splicing and deep learning**” by ICMR, (BMI/12(67)/2022 amounting to Rs 18.25 lakhs. A glioblastoma is a grade IV glioma, which is the most aggressive form representing approximately 57% of all gliomas and 48% of all primary malignant central nervous system (CNS) tumors, with a median survival of <2 years. Diagnosis of the tumor includes surgery followed by radio therapy with temozolomide and concurrent use of low intensity alternating electric fields. However, on recurrence the tumor is more aggressive and there is no standard cure for the same. The recent classification of GBM based isocitrate dehydrogenase (IDH) mutation profiling has shed some light to pathogenesis of disease though undermine the other import factors. Despite recent advances in therapy for glioblastoma including surgery, radiotherapy, targeted therapy and supportive care, the overall prognosis remains poor, and survival time of patients remains a matter of great concern. Clearly, there is a need to explore better therapeutic options given the significant challenges implied by biological factor such as blood brain barrier, unique and immune microenvironment of tumors. Advancement in next generation sequencing has enabled us to quantify and characterize not only the gene



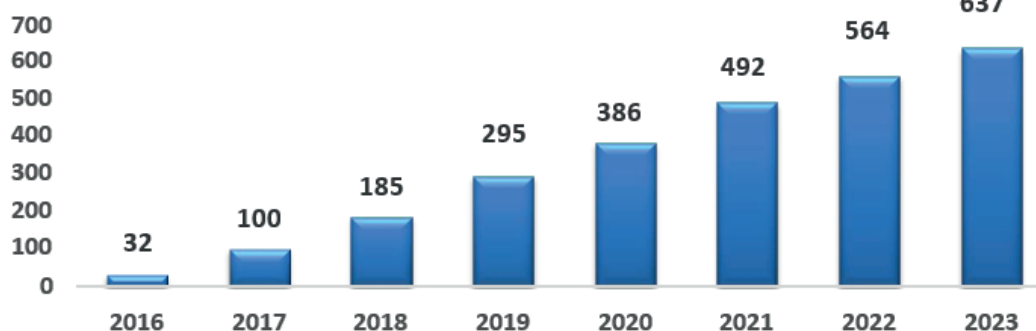
expression data but also finding the specific biomarkers related to disease state and better correlation to clinical outcomes. On the other hand, deep learning-based approaches that allow to extract hidden features which are otherwise hard to handcraft, are being applied to address several biological related problems including image classification, prediction of protein structure etc.

·Faculty members are provided with infrastructure support for establishing project research labs such as **Biomaterials and Biostructure Mimicking Lab** for Ph. D scholars under **Dr Deepa Suhag**.

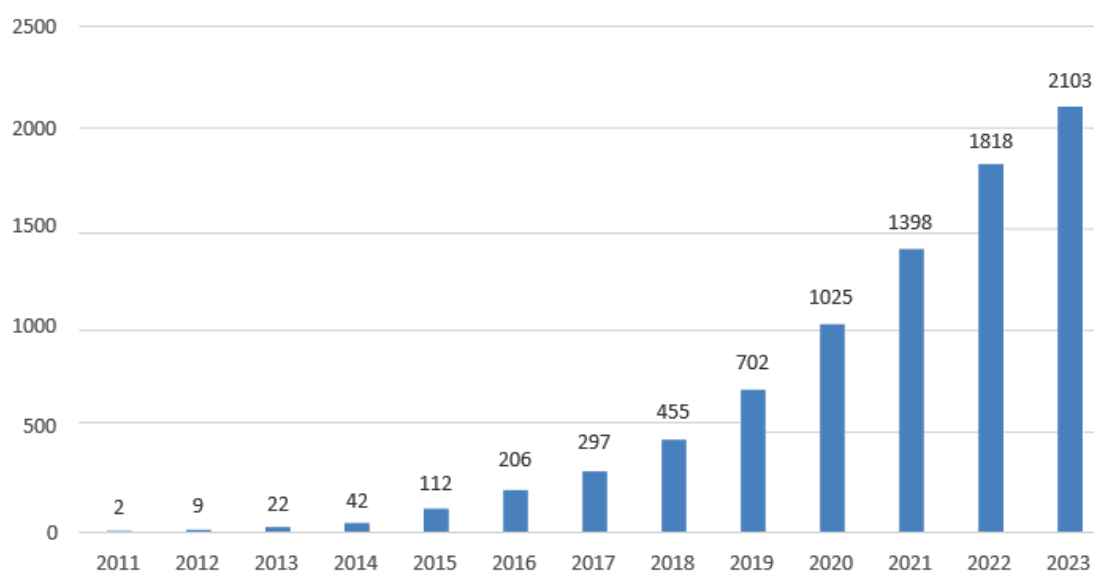
**3.2 Research highlights AUH:** In the calendar year 2023 alone, faculty members published 429 research papers in prestigious national and international journals with high impact factors. The details are as under:



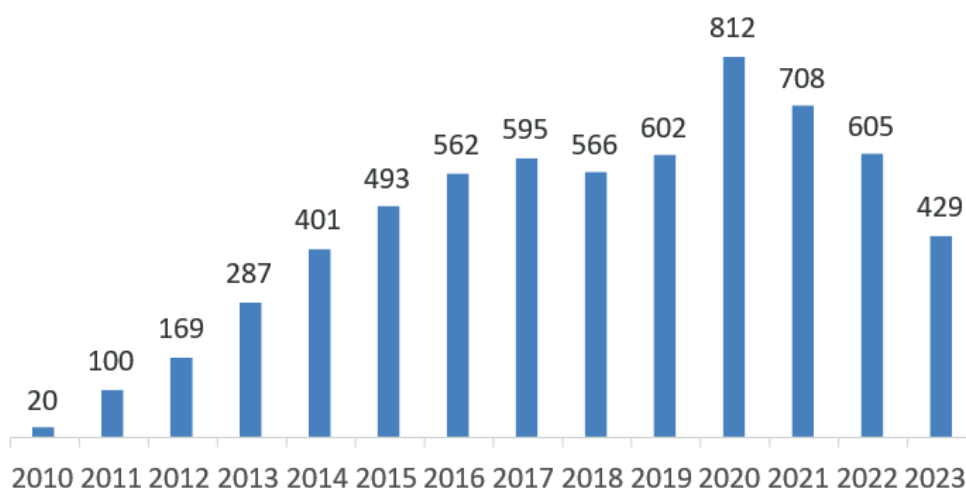
**Total Submitted R&D Projects - 637**  
**Total Amount - 456 Cr.**



**Submitted R & D Projects**



**Scopus Listed Publication (2103)**

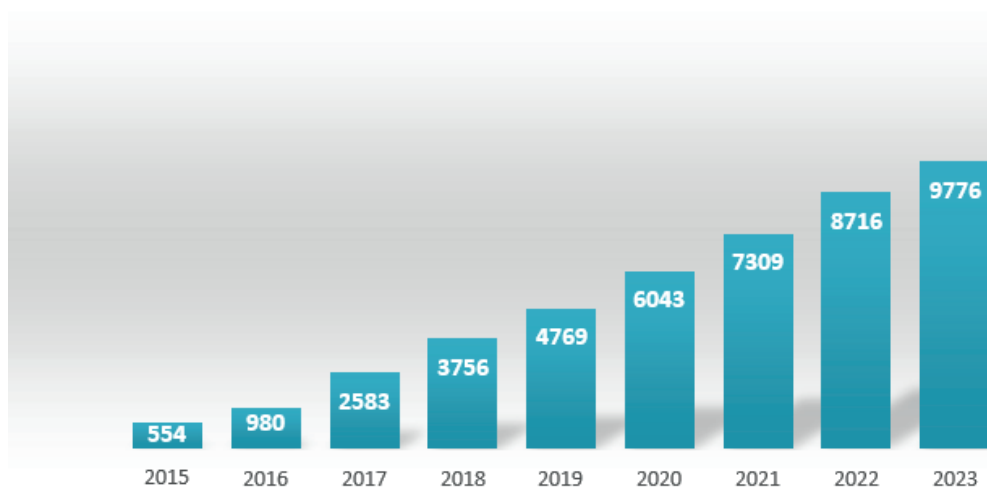


**Year Wise Publication**



**New Articles Book Chapter, Conference Proceeding & Research Article**

Citation - 18785    h-index- 52    i10 index 470

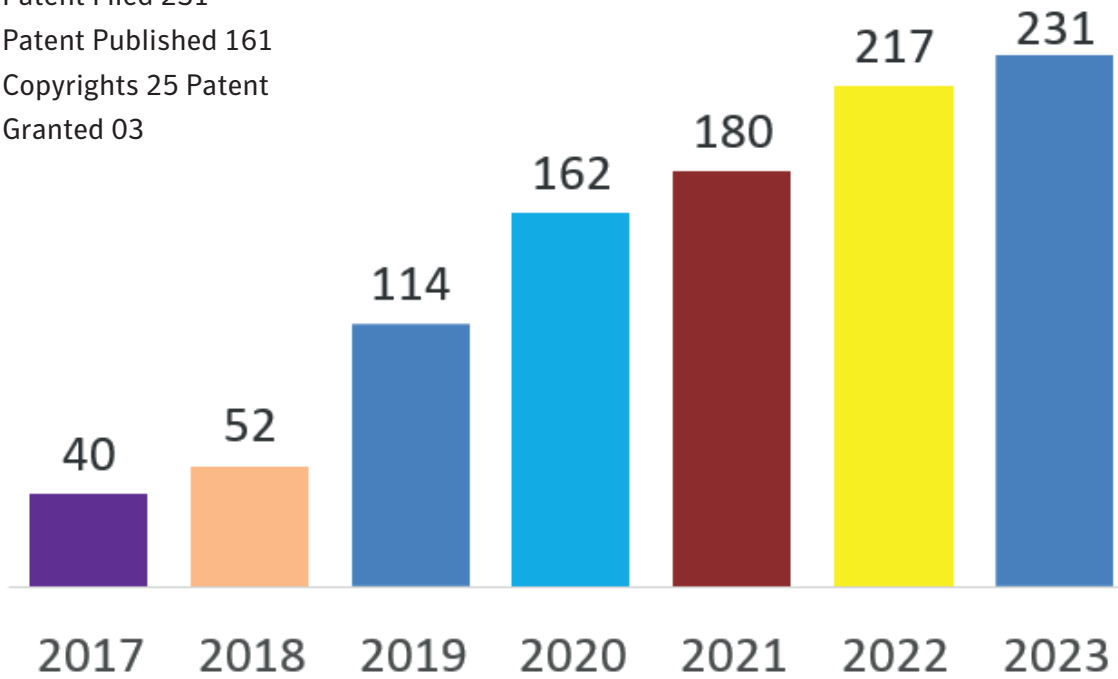


**Scopus Citation**



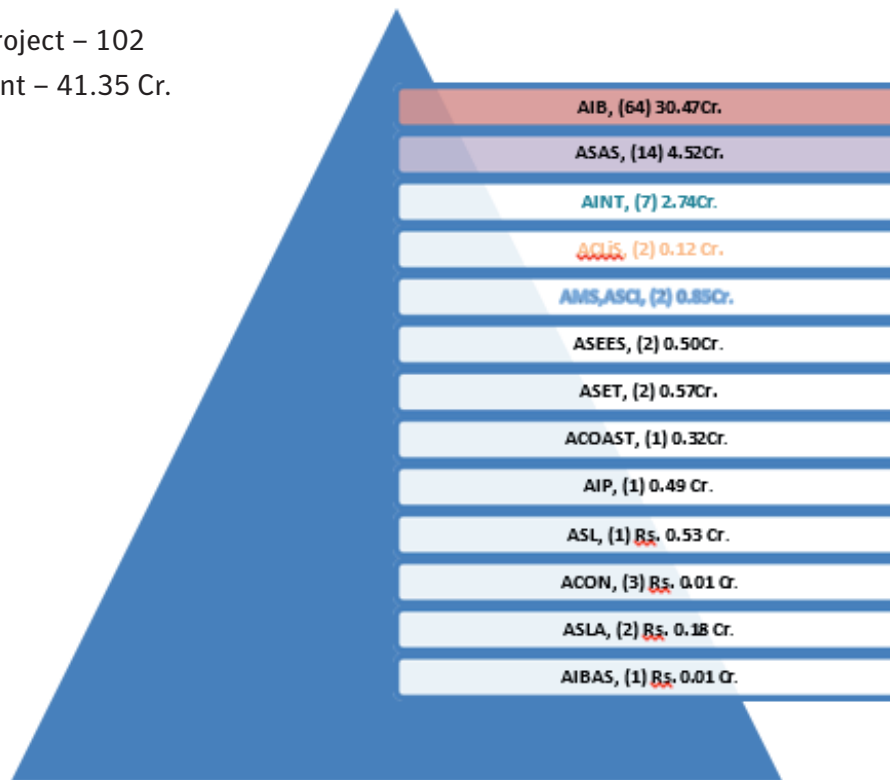
**Cumulative Impact Factor**

Patent Filed 231  
 Patent Published 161  
 Copyrights 25 Patent  
 Granted 03



Patents: Published & Filed

Total No. Project – 102  
 Total Amount – 41.35 Cr.



R & D Projects Details Dept. Wise

3.3. The Seven scientists of Amity University Haryana have been listed amongst the top 2% of most cited scientists in Stanford University's World Scientists List 2023.



### 3.4 Research highlights the faculty for societal issues on wellbeing:

· Dr. Vijay Kumar, an Associate Professor in the Department of Audiology and Speech- Language Pathology, is actively researching the factors that influence language and literacy development in typically developing children with hearing loss who have been rehabilitated with cochlear implants. with various cognitive-communicative disorders such as autism, learning disability, cerebral palsy, hearing loss etc. Dr Vijay along with UG and PG students of Audiology and Speech-Language pathology are involved in early identification and intervention of children with speech language and hearing deficits at Amity University Haryana and at various collaboration centres such as Heritage School Gurgaon, Khusboo Welfare Society, Gurgaon and Pallawanjali Inclusive School, Gurgaon. Recent research interest of Dr Kumar is to explore phonetics and phonological ability in typically developing children and in children with developmental delay. Dr Kumar has incorporated the role of artificial intelligence in developmental phonology. Recently, he has published a research paper titled, "Assessment of development of phonology using artificial intelligence: A preliminary study" which was published in "Current Material Science" Journal, 17, (2023) DOI:10.2174/0126661454266606231020074225.

· Besides, Dr Kumar is also investigating impact of hearing loss on emotional and psychological wellbeing of persons with disability. He observed that rehabilitation of hearing loss through hearing aids can restore emotional, social and psychological wellbeing which can lead to better overall quality of life.



Speech therapy session for children with Autism



Learning Disability at Khusboo Welfare Society, Gurgaon, A center for inclusive education

### 3.5 Build and Upgrade Inclusive and Safe Schools a commitment to community & society:

Dr. Vijay Kumar, Associate Professor in the Department of Audiology and Speech- Language Pathology, has research interests that also encompass the socio-cultural aspects of health. Recently, he and his team investigated the impact of hearing aid usage on the emotional and social skills of individuals with severe to profound hearing loss. This type of hearing loss significantly affects verbal communication, as well as social interactions, emotional well-being, and overall quality of life. His team is actively involved in ensuring inclusive and safe schooling by facilitating Speech, Language and Hearing assessment and intervention related services in and around the AUH campus.

His studies revealed that individuals using hearing aids exhibited notable improvements in their social skills compared to their emotional skills, even after six months of usage. This finding led to the conclusion that social rehabilitation occurs more rapidly than emotional rehabilitation in individuals with severe to profound hearing loss. Based on these insights, the researchers emphasized the need for customized counseling to support both social and emotional well-being, as these two aspects improve distinctly. Further, Dr Kumar and his team had conducted a series of school screenings for hearing and speech assessment in reputed schools in Gurugram such as Heritage School, Sector-56. The findings were published as “Impact of Hearing Aid Usage on Emotional and Social Skills in Persons With Severe to Profound Hearing Loss” in Journal of Audiology & Otology 27 (1), DOI: 10.7874/jao.2022.00290



Hearing and speech screening of primary grade children in Govt. Primary school, Panchgaon3.



BASLP students are involved in speech therapy session for children with speech-sound disorder to promote inclusive schooling



**3.4 Research focusing on Sustainable Development Goals:** A few articles published by faculty members in high impact journals are listed below:

- (i) Dalal, S., Seth, B, Radulescu, M., Cilan, T. F. & Serbanescu, L. (2023). ***Optimized Deep Learning without Forgetting (LwF) for Weather Classification for Sustainable Transportation and Traffic Safety. Sustainability (Switzerland)***, 15(7), doi: 10.3390/su15076070.

**Abstract:** Unfortunately, accidents caused by bad weather have regularly made headlines throughout history. Some of the more catastrophic events to recently make news include a plane crash, ship collision, railway derailment, and several vehicle accidents. The public's attention has been directed to the severe issue of safety and security under extreme weather conditions, and many studies have been conducted to highlight the susceptibility of transportation services to environmental factors. An automated method of determining the weather's state has gained importance with the development of new technologies and the rise of a new industry: intelligent transportation. Humans are well-suited for determining the temperature from a single photograph. Nevertheless, this is a more challenging problem for a fully autonomous system. The objective of this research is to develop a good weather classifier that uses only a single image as input. To resolve quality-of-life challenges, we propose a modified deep-learning method to classify the weather condition. The proposed model is based on the Yolov5 model, which has been hyperparameter tuned with the Learning-without-Forgetting (LwF) approach. We took 1499 images from the Roboflow data repository and divided them into training, validation, and testing sets (70%, 20%, and 10%, respectively). The proposed model has gained 99.19% accuracy. The results demonstrated that the proposed model gained a much higher accuracy level in comparison with existing approaches. In the future, this proposed model may be implemented in real-time.

**Key words:** accidents; accuracy; deep learning; sustainable transportation; traffic safety; weather challenges; weather classification

- (ii) Khan, A.A., Garsa, K., Jindal, P., Devara, P.C.S., Tiwari, S., & Sharma P.B. (2023). ***Demographic Evaluation and Parametric Assessment of Air Pollutants over Delhi NCR***. Atmosphere, 14(9), doi: 10.3390/atmos14091390

**Abstract:** The impact of air pollution on people and the environment is a severe issue that has recently been the subject of extensive research. This study has looked at the factors that contribute to the seasonal and spatial variability of pollutant concentration over Delhi NCR from 2019 to 2021. Additionally, the causes of changes in air quality during the COVID-19's lockdown period in 2020 have been discussed, along with comparisons to the pre-lockdown year (2019) and the post-lockdown year (2021). Seven pollutant parameters, viz., (PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, NH<sub>3</sub>, and O<sub>3</sub>) wereretrievied from the air quality monitoring stations spread over Delhi NCR. The results show a significant temporal (seasonal) and spatial variability in the air pollutants' concentration. The highest pollutant level was observed in winter and the lowest in summer seasons. The results suggest that the concentration of atmospheric pollutants was already lower (20–30%) before the implementation of the lockdown. Meteorology played an important role in emission reduction during the lockdown, in particular, and seasonal, in general. The results also suggest that Bhiwadi is not the most polluted city, as claimed in the World Air Quality Report 2022. The most polluted sites in terms of pollutant concentration were observed over Delhi in all the years considered.



**Keywords:** air pollution; CO; Delhi; NOx; PM10; PM2.5

(iii) Sharma, J., Kumar, V., Prasad, R. & Gaur, N. A. (2023). ***Engineering of Saccharomyces cerevisiae as a consolidated bioprocessing host to produce cellulosic ethanol: Recent advancements and current challenges***. Biotechnology Advances, 561, doi: 10.1016/j.biotechadv.2022.107925

**Abstract:** Lignocellulosic biomass, a rich and inexpensive source of fermentable and renewable carbon, is the most abundant material on earth. Microbial bioprocessing of lignocellulosic biomass to produce biofuels (bioethanol, biobutanol, biodiesel) is a sustainable blueprint to reduce our depleting energy reserves and carbon footprint. *Saccharomyces cerevisiae*, being an excellent industrial ethanologenic organism, is an ideal candidate to engineer as a consolidated bioprocessing (CBP) host, a concept that integrates the different steps of cellulosic ethanol production, from hydrolysis of cellulose to glucose and fermentation of glucose to ethanol in one step. Owing to the developments in the field of genetic engineering and sequencing technologies, research in the past two decades has made pivotal achievements to realize CBP enabling yeast suited for industrial applications. However, overcoming major limitations such as incomplete substrate catabolism, low titres of heterologous protein expression, sub-optimal operational conditions and impediment due to toxic inhibitors/by-products accumulation is still challenging. This review focuses on the progress achieved in constructing *S. cerevisiae* to produce bioethanol in a CBP framework. The different techniques of developing cellulolytic yeast strains are initially explained followed by relevant strategies to tackle the key bottlenecks associated with the process. Additionally, engineering efforts towards designing hemicellulose-derived sugar utilizing yeast strains are discussed. © 2022 Elsevier Inc.

**Keywords:** CBP, Cellulases, Ethanol, Fermentation, Hemicellulose, Lignocellulosic biomass, *Saccharomyces cerevisiae*, Xylose

(iv) Maheshwari, N., Thakur, I.S. & Srivastava, S. (2022). ***Role of carbon-dioxide sequestering bacteria for clean air environment and prospective production of biomaterials: a sustainable approach***. Environmental Science and Pollution Research, 29(26), 38950 – 3897, doi: 10.1007/s11356-022-19393-7.

**Abstract:** The increase in demand of fossil fuel uses for developmental activity and manufacturing of goods have resulted a huge emission of global warming gases (GWGs) in the atmosphere. Among all GWGs, CO<sub>2</sub> is the major contributor that inevitably causes global warming and climate change. Mitigation strategies like biological CO<sub>2</sub> capture through sequestration and their storage into biological organic form are used to minimize the concentration of atmospheric CO<sub>2</sub> with the goal to control climate change. Since increasing atmospheric CO<sub>2</sub> level supports microbial growth and productivity, microbial-based CO<sub>2</sub> sequestration has remarkable advantages as compared to plant-based sequestration. This review focuses on CO<sub>2</sub> sequestration mechanisms in bacteria through different carbon fixation pathways, involved enzymes, their role in calcite, and other environmentally friendly biomaterials such as biofuel, bioplastic, and biosurfactant.

**Keywords:** Biosurfactant production, CO<sub>2</sub> sequestration, Microorganisms, PHA.

## 4. Governance & Mandates

The university has established a policy that ensures equal access to its activities for all individuals, regardless of ethnicity, religion, disability, immigration status, or gender. The institution is committed to lifelong learning, recognizing that education is an ongoing and evolving journey that extends beyond specific timeframes.

Embedded within the university's policy is a dedication to providing diverse opportunities for individuals of all ages and backgrounds to engage in high-quality, continuous education. The university actively promotes lifelong learning through flexible course structures, accessible online programs, and a comprehensive framework for continuing education.

This policy emphasizes the belief that learning is a transformative force that empowers individuals to adapt to the dynamic challenges of the modern world. It aims to create an inclusive learning environment that goes beyond traditional boundaries, highlighting the importance of skill development, personal enrichment, and career advancement throughout an individual's life journey. Through this commitment, the university seeks to ensure that all members of the community could benefit from its educational resources and programs.

**Evidences:** Policy Reviewed- Lifelong Learning it is as last year as it is still valid.

<https://www.amity.edu/gurugram/sdg/sdg4/lifelong%20learning%20access%20policy.pdf>

## 5. University Infrastructure

### 5.1 ERP Amizone – The Learning Management System:

The university's robust Learning Management System (LMS) provides a comprehensive platform for students to engage with faculty and access a wealth of educational resources. These include e-library services, digital notes, recorded lectures, and other reading materials. The LMS also allows students to make use of campus facilities and equipment, ensuring a well-rounded learning experience.

In addition, the university offers virtual labs and simulated practical, which promote deeper, more extensive learning by providing students with hands-on experiences in a digital environment. This integration of technology enhances the overall educational process and supports continuous learning.

### 5.2 Centres of Excellence:

At Amity University Gurugram multiple Center of Excellence has been established to promote Research & Development in diversified areas. These are established in the university for bringing together Indigenous and Western scientific knowledges and ways of knowing expanding horizons of science applications and science outreach to industry and community.

#### · The Centre for Big Data and Computational Biology.

This is first of its kind program aimed at reducing Industry-Academia gap and exposing students to latest technology training in basic and advanced technique of Data Science. The main purpose of the centre is to impart hands on training to the participants with respect to latest advancements in data science, machine learning and artificial intelligence, which will help them to enhance their

existing technical skills under the supervision of qualified professionals.

· **The Centre of Innovation in Education:**

The Academic Staff College at the university offers numerous opportunities for lifelong learning through its range of public lectures, seminars, webinars, workshops, Management Development Programs (MDPs) and Faculty Development Programs (FDPs). These initiatives are designed not only for students and faculty but also for the broader community, fostering continuous professional and personal development. Through these engagements, the university promotes a culture of learning that extends beyond the classroom and contributes to the growth and development of all participants.

### 5.3. Institutional Resources and Facilities:

· **Innovation Ecosystem and Entrepreneurship:** The university provides a robust platform for establishing startups and fostering an innovation culture, acting as an accelerator for the commercialization of its research outcomes. The Amity Incubation Centre, supported by the Ministry of Electronics and Information Technology under the MeitY Startup Hub TIDE 2.0 G3C initiative, is dedicated to encouraging and incubating technology-based new enterprises. The incubator center has successfully supported four startups to help aspiring entrepreneurs turn their innovative ideas into viable businesses.

The Entrepreneurship Cell (E-Cell) and the Institution's Innovation Council (IIC) play a pivotal role in organizing entrepreneurial events and activities that inspire students to develop innovative business ideas. AUH- IICs has attained 4-star rating for two consecutive years and has also been declared as a Mentor Institution by the Ministry. A grant of INR 2,25,000 was awarded by AICTE to mentor 5 universities (3 in Haryana, 1 in Delhi and 1 in Punjab) to have their own functional IIC and carry out various activities related to innovation and entrepreneurship. This initiative not only benefits entrepreneurs by connecting them with industry, society, and government entities but also aims to achieve maximum efficiency in company development.

· **Research clusters for promoting societal research and community welfare:**

Amity Institute of Pharmacy has established a center of excellence with the thrust areas of research as follows:

- Drug discovery and development
- Development of novel formulations and dosage forms
- Herbal Drug Technology
- Design and synthesis of novel bioactive chemical scaffolds
- Extraction, purification and screening of natural products
- Development of nano formulations and Nano catalysis
- Development of greener and environmentally benign synthetic methodology



· A state-of-the-art new Pharmaceuticals and Pharmaceutical chemistry laboratories with all latest Equipment's such as Lyophilizer, dissolution apparatus, tablet punching machine, friabilator, viscometer, UV-spectrophotometer, HPLC, stability chamber, zeta sizer, confocal microscope, drug discovery software to name a few has been established for promoting advanced research activities at AUH. The laboratory is also equipped with a triple door aseptic chamber with laminar airflow facility.

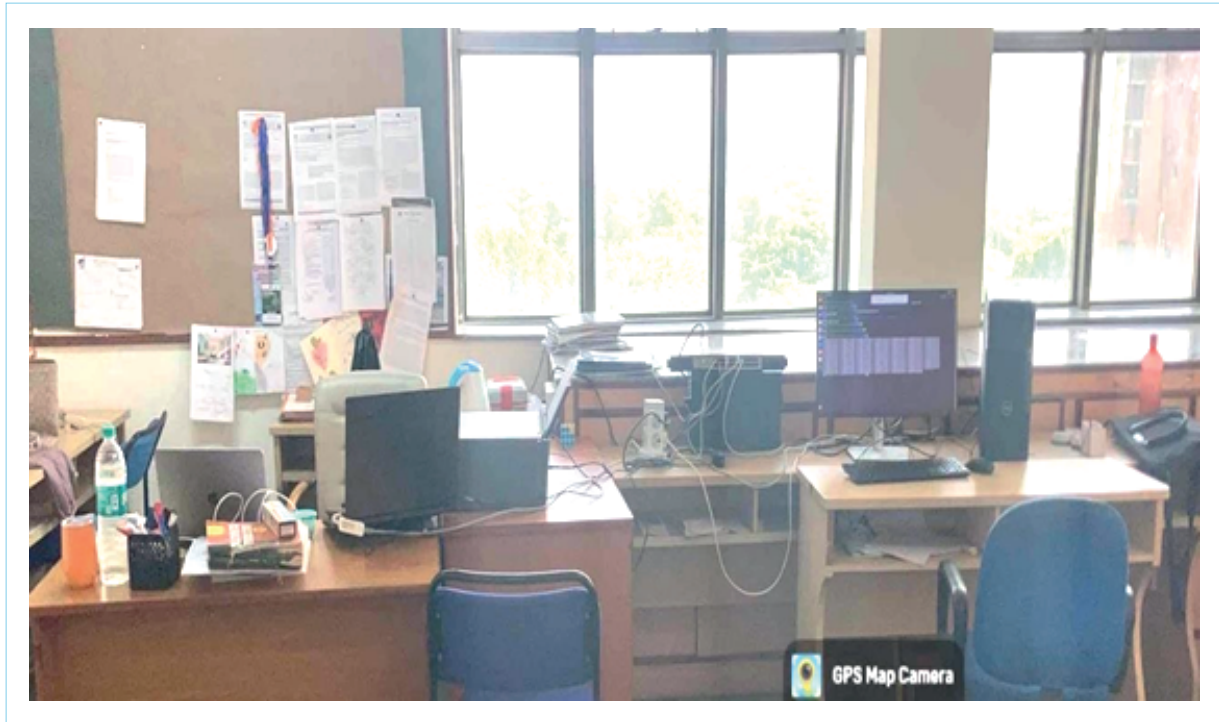
Glimpses of New labs established at AUH:





- The research facility in the mathematics department help in interpreting data of the community. The mathematical project lab will explore the interplay between climate change and urbanization, focusing on their combined impacts on the region's future for formulating strategies aimed at achieving sustainability with these environmental changes.

Glimpses of the setup:



- The new labs established for research scholars in nanotechnology is instrumental in promoting advanced research in applied areas. The Biomaterials and Biostructure Mimicking lab is dedicated to developing cost-effective, indigenous polymeric materials for 3D matrix applications in high-throughput drug screening and tumor modelling for research scholars' efforts to push boundaries in biomedicine.

Few pics of the lab

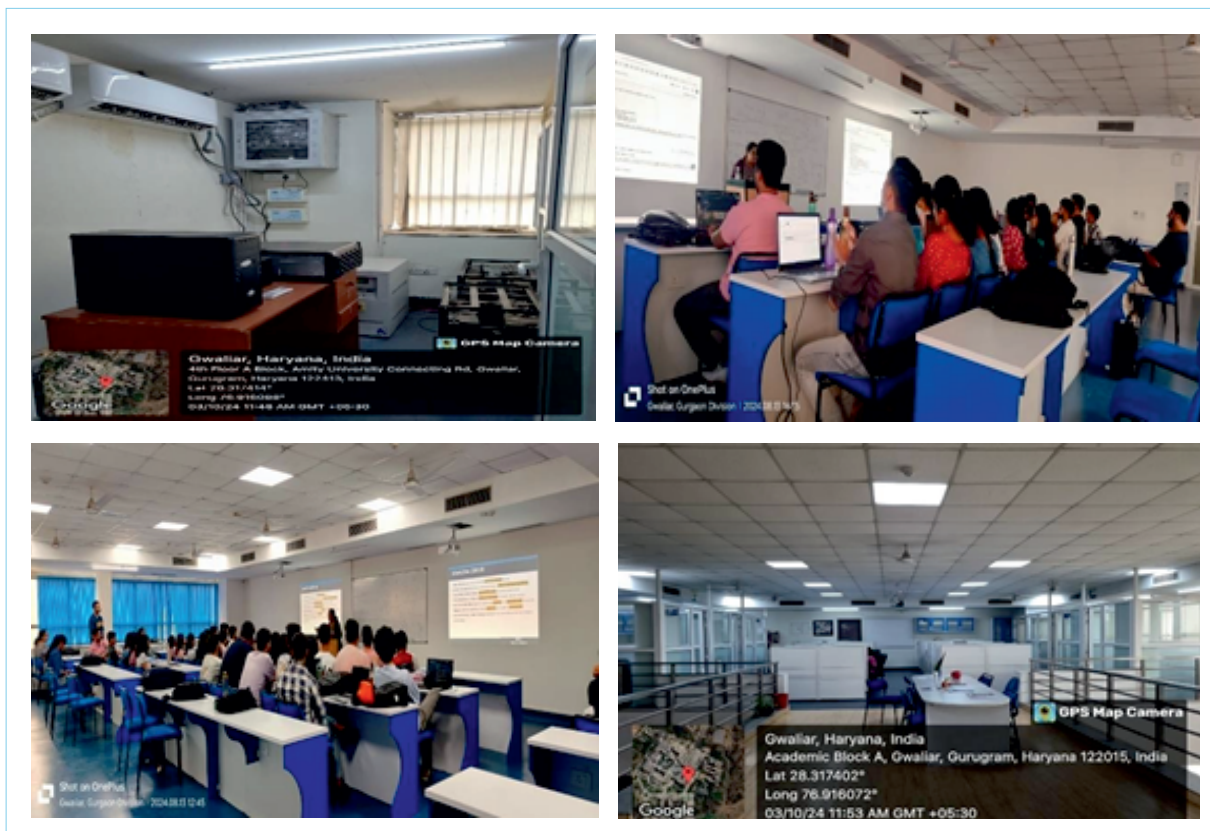


#### 5.4 Public Resources Lifelong Learning

Amity University Haryana, situated in a rural-urban location, provides open access to its diverse facilities, including the library, laboratories, computer labs, studios, and herbal garden, all under the supervision of faculty members. These resources are made available to participants from nearby schools, other universities, research labs, and the community free of charge. This initiative supports the university's mission to foster collaborative learning, research, and community engagement, ensuring that the available educational and research resources benefit a wider audience, particularly in the surrounding areas.

- The New research facilities created at the university focuses on promoting research relevant to solving societal problems. The data analytic lab provides access to outsiders for analysing big data and its interpretation. Students trained through Theory & Hands on sessions, Demos & Peer to Peer Learning, case studies in the data science lab.





The Central Instrumentation Research Facility (CIRF), established in September 2019 at Amity University Haryana, provides cutting-edge analytical services to both internal and external researchers from academia and industry. CIRF promotes skill development by offering workshops on topics such as imaging, cell analysis, and molecular separation, ensuring that students, researchers, and industry professionals are trained in the latest analytical techniques. It also focuses on developing **new analytical methods** for diverse sample analyses, enhancing technology-enabled R&D.

<https://www.amity.edu/gurugram/central-instrument-research-facility.aspx>

The Amity Lipidomic Research Facility (ALRF), established in 2018 with funding from the Department of Science and Technology (DST-FIST), Government of India, and Amity University Haryana, provides cutting-edge mass spectrometric techniques for the scientific community.

<https://www.amity.edu/gurugram/lipidomics-research-facility.aspx>

### 5.5 Access to Central Library: Resource sharing with other Libraries through DELNET:

The **Central Library** at Amity University Haryana is a well-equipped facility offering a comprehensive collection of **textbooks, reference books, journals, magazines, e-resources, and newspapers**. It spans **50,000 sq. ft.** and is located in **D-Block**. The library is fully automated and computerized, utilizing **Open- Source Library Management Software (LMS) "KOHA"** for efficient resource management. All materials are organized using the **Dewey Decimal Classification (DDC) International Classification Scheme** and are barcoded for easy access.

In addition to the Central Library, there are specialized departmental libraries for law, architecture, pharmacy, and nursing, each equipped according to the norms set by respective



councils such as BCI, PCI, COA, INC, and AICTE. These libraries provide tailored resources to meet the specific needs of their disciplines, ensuring high-quality education and research support for students and faculty.

The mobile library initiative created enthusiasm in the minds of students for quenching thirst for knowledge. The separate areas earmarked for concentrated studies and introduction of holy books, Vedas and Upanishads have ignited the spark amongst the amity fraternity and outsiders to study the Indian Knowledge System (IKS).



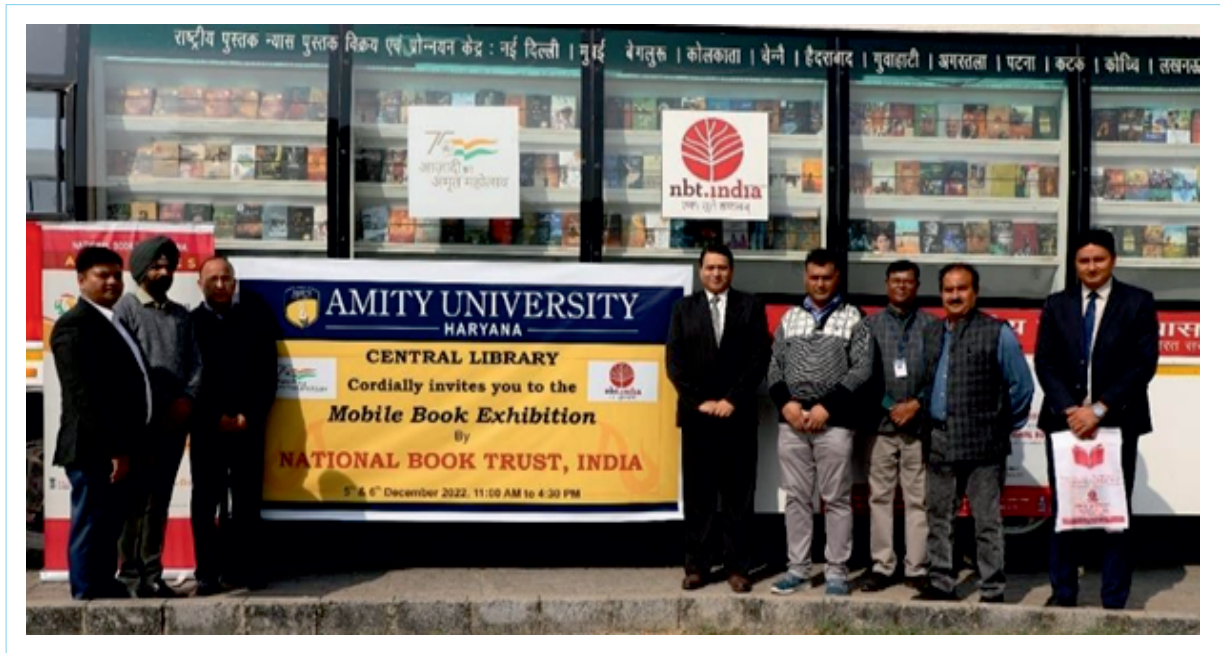
Introduction of Holy Books, Vedas and Upanishads



Library Orientation Awareness Program for Community Users

## Mobile Library Initiative

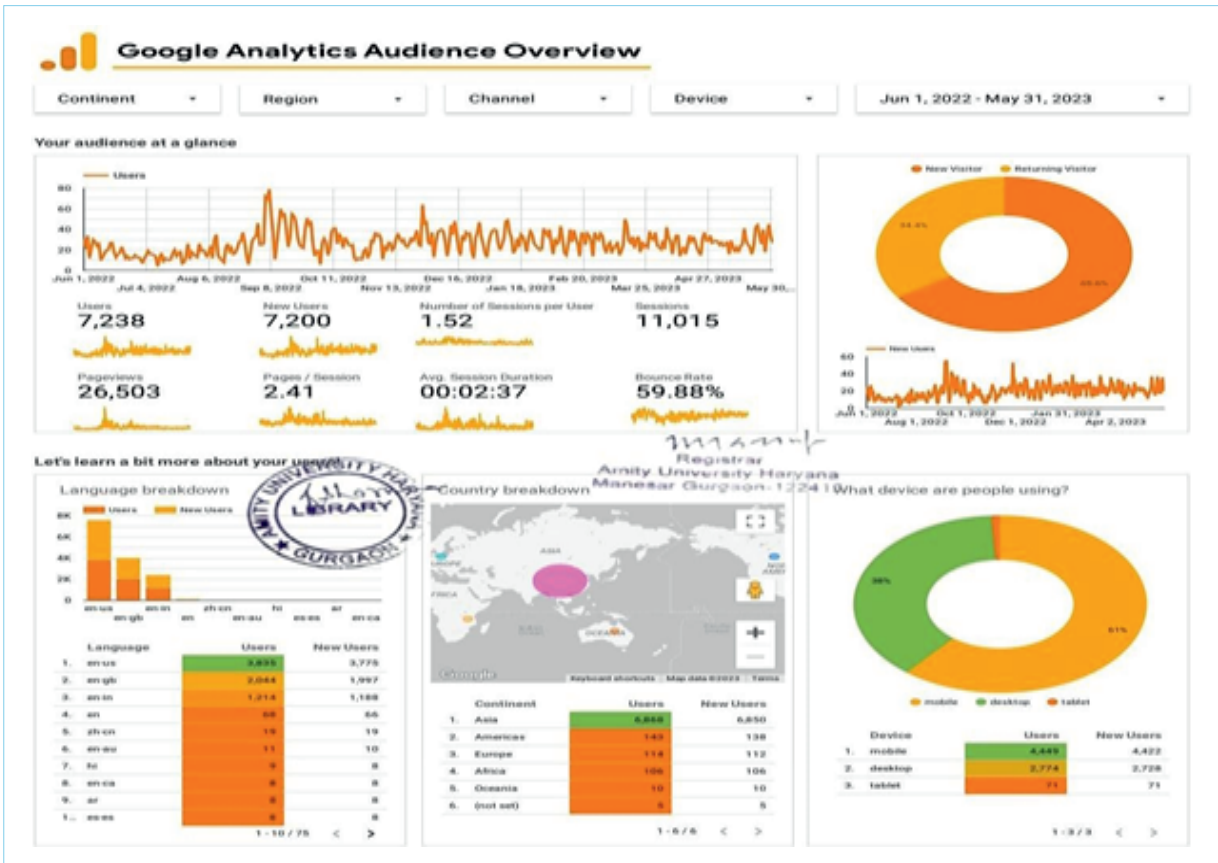
The NBT's Mobile Book Exhibition Van recently visited the Amity University campus, creating a fantastic experience for book lovers! This event showcased a diverse range of titles, making it easier for students and faculty to explore new reads and enrich their literary collections. The well-received mobile bookshop brought the joy of reading right to the heart of the campus, promoting a love for literature among the university community. It's great to see such initiatives that make books more accessible and encourage a vibrant reading culture.







### Access to Outside Users



## 6. Events and Social Outreach

### 6.1 Public Events- Life Long Learnings

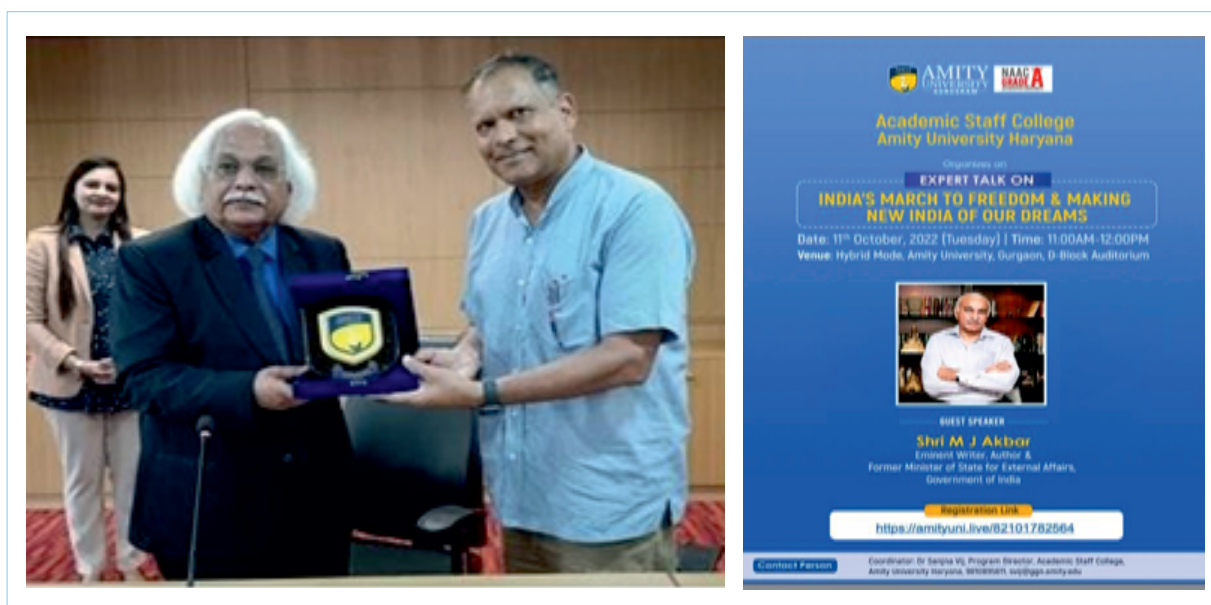
The university actively fosters a culture of learning and community engagement by providing free access to a variety of **educational resources**. This includes **webinars, guest lectures, conferences, and counselling sessions** that are open to the public. Such events are either pre-scheduled or organized on an ad hoc basis, catering to various contemporary topics and interests.

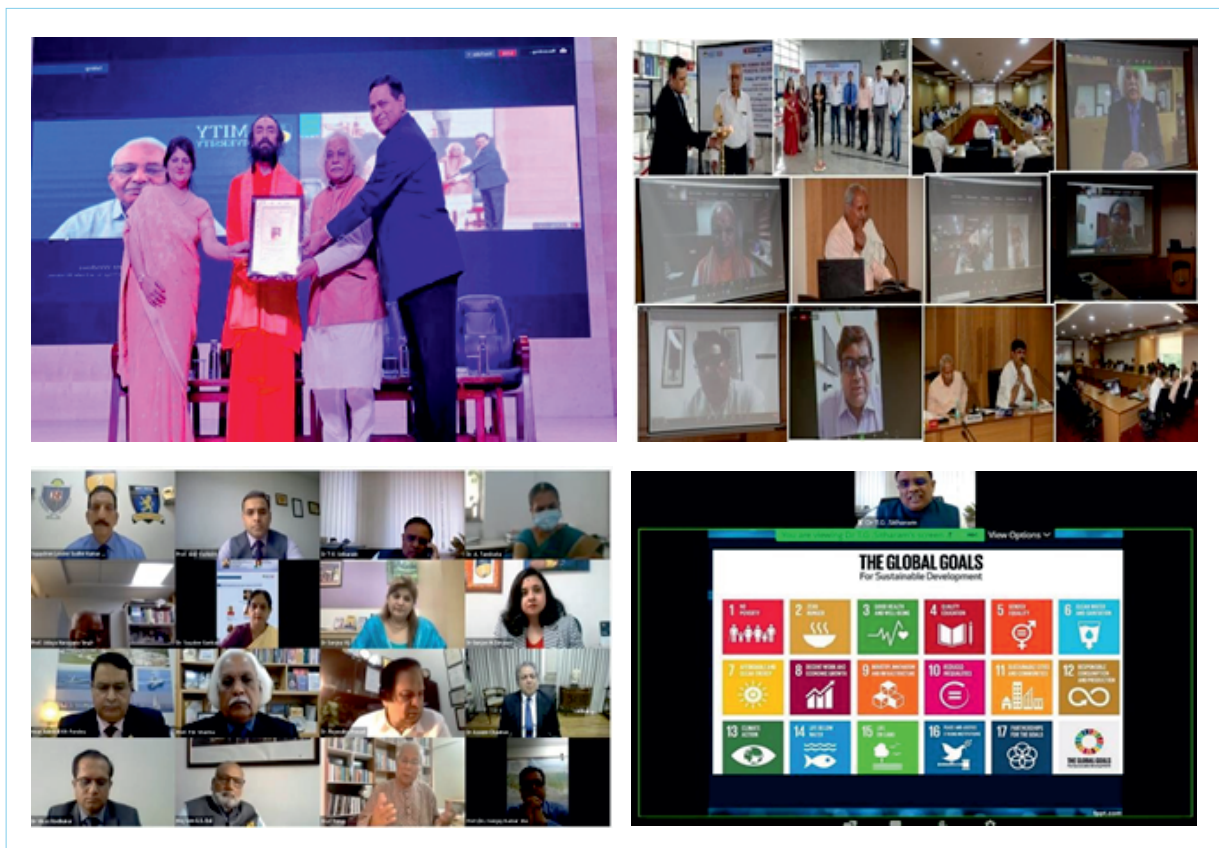
Some notable events include:

- Five Days Faculty Development Program-Short Term Professional Development Program (FDP-STPDP) on “Universities & Colleges Leading by Example in Attainment of SDG's: Role of Teachers” by Academic Staff College, Amity.
- Amity Centre of Excellence for Innovation in Education in association with Amity School of Communication Organizes Faculty Training Workshop on 'Innovative Teaching Practices in Higher Education in the Digital Era'.
- Expert Talk on India's March to Freedom & Making New India Of Our Dreams by Shri M J Akbar, Eminent Writer, Laureate & Former Minister of State for External Affairs, Government of India.
- Organised Swami Mukundanada lecture on " of Values and Ethics in Life” for Orientation Program 29th August 2022.
- Amity School of Liberal Arts (ASLA), Amity Academic Staff College organised one- day National Seminar on Promoting Human Values & Culture for Peaceful Co- Existence sponsored by ICPR.

These events not only enrich the learning experience but also encourage community involvement and awareness on various pressing issues. The university continues to adapt its programming to align with the needs and interests of the community, thus promoting lifelong learning and engagement.

### Glimpses of the Events





The primary objective of organizing such programs at the university is to **raise awareness** about the **Sustainable Development Goals (SDGs)**, particularly focusing on areas such as **digital literacy, education, mental health, well-being, environmental conservation, and climate change**.

By engaging participants in discussions and activities centered around these critical issues, the university aims to:

- **Create awareness and inspire participants:** Encourage individuals to reflect on their roles and responsibilities in addressing these challenges.
- **Foster feelings for uplifting the society:** Inspire action and solutions that contribute to the betterment of society, fostering a sense of community involvement and responsibility.
- **Motivate & Encourage Lifelong Learning:** Facilitate continuous education and awareness on contemporary issues that impact individuals and communities, emphasizing the importance of knowledge in driving change.

Through these programs, the university not only contributes to the global agenda for sustainable development but also empowers participants to become advocates for positive change within their communities.

## 6.2 Vocational Training- Lifelong Learning

The university is actively engaged in **skill-based training** for the community through programs like **YUNUS Business Centre & Unnat Bharat Abhiyan**, which focuses on establishing small, self-sustaining businesses. This initiative provides essential support in various aspects, including:

- **Business Growth:** Offering guidance on how to start and manage small businesses effectively.



- **Knowledge and Skills:** Equipping participants with the necessary skills to run nano or micro businesses, ensuring they are well-prepared for entrepreneurial endeavours.
- **Approach to financial liability:** Facilitating connections to financial resources that can help launch and sustain these businesses.
- **Entry to Markets:** Providing insights into market trends and helping participants identify opportunities for their products or services.
- **Amity Skill Institute:** The Skill Institute at the university acknowledges that learning is a lifelong endeavor and emphasizes the importance of enhancing skill development among youth. It aims to provide vocational education and information technology training to create lifelong learning opportunities. The university focuses on capacity building by offering a diverse range of skill tracks and minor degrees, enabling students to secure decent employment and become entrepreneurs and job creators.

Amity Skills Institute and Yunus Social Business Centre at Amity University Haryana planned to create a network of mentors within AUH fraternity that will help women start and grow their small business to become self-sustainable pillars within their communities. In the above context as first stride Amity Skills Institute and Yunus Social Business Centre at Amity University Haryana organized a workshop on “Entrepreneurship Opportunities” for women in village Sabras, Haryana.



These initiatives are designed to make one self-reliant and contribute to the broader goals of sustainable development.

Furthermore, the curriculum across various institutes and schools at the university—including the **Amity Fashion Design and Technology**, **Amity Institute of Design**, **Amity School of Fine Arts**, **Amity School of Earth and Environment Sciences**, **Amity School of Architecture and Planning**, **Amity School of Hospitality**, **Amity Medical School**, and **Amity School of Engineering and Technology** - is meticulously aligned with the requirements of various sustainable development elements.

**Key aspects of this approach include:**

- **Exploratory Learning:** Students are immersed in hands-on experiences that extend beyond traditional textbook learning, fostering creativity and innovation.
- **Pioneering Projects:** Students are encouraged to showcase their work by creating innovative products that incorporate various green initiatives, promoting sustainability in their designs and practices.

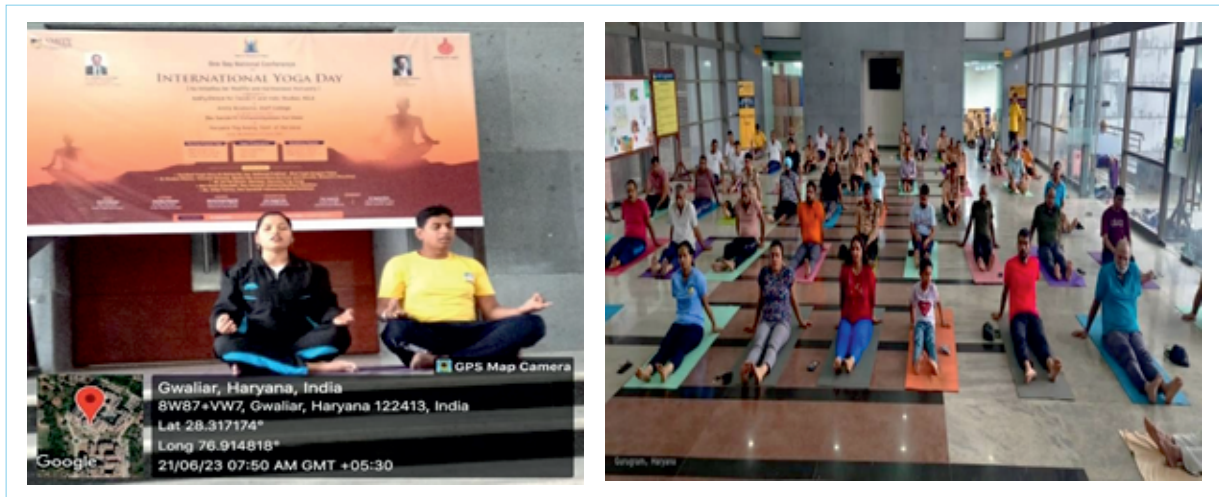
Through these efforts, the university not only enhances the skill sets of its students but also plays a vital role in community development and the achievement of the Sustainable Development Goals (SDGs).



The **Amity Skill Institute** plays a pivotal role in enhancing the personal and professional development of outsourced local staff and transport personnel at the university. The institute organizes a variety of activities in several key areas:

- **Communication Skills:** Workshops and training sessions focused on effective communication help improve interpersonal skills and confidence among participants.
- **Hospitality:** Training in hospitality equips staff with essential service skills, enhancing their ability to provide excellent support and service within the university environment.
- **Arts:** Activities in the arts foster creativity and self-expression, providing an outlet for personal growth and enjoyment.
- **Management:** Management training sessions provide insights into organizational skills, leadership, and teamwork, which are crucial for personal and career advancement.
- **Health and Wellbeing:** Yoga sessions and health workshops promote physical well-being and mental health, encouraging a balanced lifestyle.





These activities not only contribute to the personal grooming and professional development of the participants but also create a more positive and productive work environment within the university. By investing in the skill development of its local staff, the university fosters a culture of continuous improvement and community engagement.

### 6.3 Education Outreach activities beyond Campus

The university is committed to providing inclusive and equitable quality education while promoting lifelong learning opportunities for all, in alignment with the UN Sustainable Development Goals. As part of its mission, the university has adopted five villages to enhance education and uplift both rural and urban communities, working towards a more sustainable future for everyone. Students are encouraged to embody the values of social upliftment by sharing their knowledge and skills. This is implemented through classes designed for marginalized and uneducated adults in the adopted villages.



6.4 Student clubs and institutions, such as the Amity College of Nursing and Amity Medical School, collaborate with the Rotary Club, healthcare industries, and NGOs to organize various initiatives, including blood donation drives, health awareness camps, environmental sustainability efforts, women's empowerment workshops, and gender sensitization programs. Activities like "Role play on Family Planning and Counselling," Eye Screening Camp, "Educate on Paralysis, Anaemia and Hypertension," "School Health Awareness Program on World Teen Mental Wellness Day" and "Community Visit to CHC Tauru for awareness on Osteoporosis" etc. have been conducted to raise awareness for community upliftment and address both local and national issues. Apart from, this the university also celebrates important world days such as – World Autism Day, World Cancer Day, International Day for people with Disabilities, World Alzheimer Day etc. for spreading knowledge and awareness amongst students and community about the important health issues being faced by people across the globe and how important it is for all of us to face these challenges and come up with possible solutions and promote universal literacy.



Glimpses of Outreach and Community Activities



Primary Health Centre Visit



Eye Screening Camp



Community Visit to Fazalwas, Anganwadi, Panchgaon, Manesar



Community Visit to CHC, Tauru





World Autism Day



World Cancer Day



International Day for People with Disabilities



World Alzheimer's Day

## 7. Collaborations, Awards & Recognitions

Partnership for sustainable environment in collaboration with the Indian Institute of Tropical Meteorology (IITM-MoES), Pune.

Amity University Haryana is actively involved in a multi-lateral collaborative research project focused on mapping air quality and human health. This project is part of the CAL-VAL (Calibration and Validation) of NASA's MAIA (Multi-Angle Imager for Aerosols) satellite, which is set to launch in 2024. The university hosts the second Indian network station in this series, contributing to the calibration and validation of satellite data that will be used to assess the impact of air pollution on public health.



This collaboration signifies a major contribution to global environmental and health research, with the **MAIA satellite** designed to gather critical data on airborne pollutants and their effects on human health. By participating in this project, Amity University Haryana strengthens its role in advancing research on the intersections of air quality, climate science, and health outcomes, providing valuable data for policymaking and mitigation strategies.

**Partnership for community welfare with The Ministry of Education**

**Project: Unnat Bharat Abhiyan (UBA), Sept 2021-till date (Ongoing Project)**

The university provides access to the students from the community to attend Solar Training workshop at the university along with the engineering students of Amity. Faculty members (Prof. Subhra Das and Prof. Anil Yadav) and non-teaching staffs of engineering school taking active role in creating an environment of mutual learning and respect.



Solar training for outside students and community people at AUH: The university provides access to the students from the community to attend Solar Training workshop at the university along with the engineering students of Amity. Faculty members (Prof. Subhra Das and Prof. Anil Yadav) and non-teaching staffs of engineering school taking active role in creating an environment of mutual learning and respect.



Prof. (Dr) Subhra Das demonstrating the different instruments used for measuring solar radiation, wind speed, temperature, tilt angle used for site survey for solar installation.



Demonstration of I-V characteristics of Solar PV cell in Solar Lab



·Memorandum of Understanding / Partnerships with renowned national and international organizations:

Amity University Haryana fosters **numerous collaborations and partnerships** that create opportunities for **collaborative research** with industry and educational institutions. These partnerships promote **teaching, learning, and industry-academia relationships through exchange programs**. During 2022-2023, the university has signed **12 New Memoranda of Understanding (MoUs)** with reputable organizations, enabling students and faculty to engage in joint research initiatives, innovation projects, and skill-building activities. These collaborations strengthen the university's academic and research environment, while also contributing to the development of practical industry solutions and fostering a global network of knowledge exchange.

### List of MOUs

Sr. No.	Organisation with which MoU is signed	Year of Signing MoU	Duration	List the actual activities under each MOU year wise
1	McKinley Rice, Inc.	01-06-2022	3 Years	The objective of this MoU is to strengthen the industry integration initiatives of AUH by way of collaboration with McKinley & Rice in the areas of summer internships, Field project work, Long -term internships, and Campus placements. This MoU will also help us in reducing the lack of industrial exposure and job readiness disconnect.
2	Karat Lawz Academy	07-07-2022	3 Years	For internsh ip purpose
3	India Meteorologic al Department (IMD), New Delhi	01-07-2022	5 years	<ul style="list-style-type: none"> <li>* To foster Academic and Research Collaborations at National and International levels</li> <li>* To plan and execute joint research, capacity building, field studies and consultancy projects in the field of Earth / Environmental / Atmospheric Sciences</li> <li>* To develop Patents, Participate in Industrial Collaborations and Campaigns</li> <li>* To establish the PREDE-SKYNET Radiometer in Conjunction with NASA -AERONET at AUH</li> <li>* To take up joint supervision of Research Projects/Dissertation work of students with IMD, New Delhi faculty as co -guide.</li> <li>* To undertake development of case studies, conduct research, and bring out publications and reports</li> </ul>
4	Legal Bites	30-07-2022	5 Years	For placement & Internship purpose

5	Strategic Educational Professional Pvt. Ltd. (SEPPL)	02-08-2022	3 Years	For placement & Internship purpose
6	Aarvy Healthcare Super Speciality Hospital	07-09-2022	5 Years	Students were exposed to various departments of the hospital for their clinical experience like ICU, Wards, OPD, OT area and Emergency.
7	S.S. Rana & Co.	01-12-2022	3 Years	For placement & Internship purpose
8	National Central University	11-01-2023	5 Years	For placement & Internship purpose
9	The Sixth Element	02-02-2023	5 Years	An organization which caters to versatile design practice work and seamlessly weaves the five elements of nature and also brings alive the unique dimension. Students of Architecture and planning have an
10	Minin University	20-03-2023	5 Years	For placement & Internship purpose
11	National Mission for Clean Ganga	12-04-2023	3 Years	Panel Discussion on innovation day on reverse of India- A journey through past, present and future (Exploring the Namami Gange programme), and initiatives for a new India, organised by Amity Academic Staff College, AUH in Virtual Mode on 22-09-2023.
12	School of Pharmaceutical Sciences, University of Sao paulo, Brazil	22-06-2022	Ongoing	Student Exchange Program & Research Activity

# Faculty Achievement



## Students Achievement





## University Achievement



The high quality of education at the university is reflected in the impressive placement rate, with above 89% of students securing positions in reputable organizations, including Fortune 500 companies like Amazon, Cisco, EY, TCS, Infosys, and HashedIn by Deloitte. Additionally, the university has numerous industry partnerships that offer students valuable internship opportunities.

In summary, the university integrates sustainability principles across various academic disciplines to address global challenges related to the SDGs. This quality education enhances the research ecosystem, encouraging students to think creatively, develop entrepreneurial ideas, and create innovative products. It prepares students to contribute to a more sustainable, inclusive, and equitable future.

***“The Journey of Quality Education and Innovative Practices for promoting Sustainable Development Goals continues at Amity .....*”**



**Sustainable Development Goal 4** aims to ensure inclusive and equitable education and promote lifelong learning opportunities. The United Nations Sustainable Development Goals (SDGs) are the focus of Amity University Haryana of Eminence. The four pillars of our approach to the SDGs are Experiential teaching and learning activities, Research acumens transforming the learning landscape, Institutional infrastructure, resources and facilities and various collaborationsand partnerships organizations with eminent globally.



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Amity University, Amity Education Valley, Gurugram, Manesar  
Helpline: 7303 399 399 | [admissions@ggn.amity.edu](mailto:admissions@ggn.amity.edu) | [amity.edu/gurugram](http://amity.edu/gurugram)