



Dr Ashok K Chauhan
Founder President,
Amity Education Group



Dr. Aseem Chauhan
Chancellor,
Amity University

Amity Centre of Nanotechnology

in association with

Academic Staff College, Amity University Haryana

Organizes

A 5 day Faculty Development Program

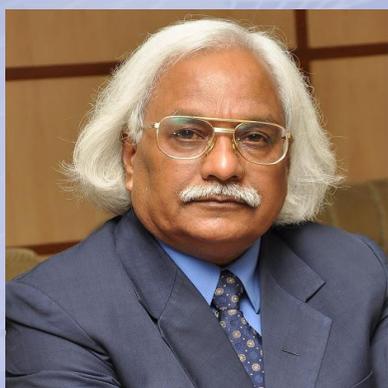
on

*Recent Advances, Trends and Challenges in the field of
Nanotechnology*

from

12th July 2021 – 16th July 2021

Time: 10:00 AM – 5:00 PM Venue: ZOOM Platform



Mentor
Prof. P.B. Sharma
Vice Chancellor
Amity University Haryana



Program Chair
Prof. Atul Thakur
Director, Amity Centre of Nanotechnology
Amity University Haryana

Eminent Resource Persons for FDP



Dr. Ratheesh Ravendran
Director
CMET Hyderabad



Prof. R.P Tandon
Professor
Delhi University



Dr. Raghunath Bhattacharya
Professor
IIEST



Prof. Ravi Kumar
Professor
NIT Hamirpur



Prof. S.V.S Rana
Professor
CCSU



Prof. Agnishwar Girigoswami
Professor
CARE, Chennai



Dr. Rajendra S Dhaka
Associate Professor
IIT Delhi



Dr. Sunil Singh Kushvaha
Scientist
NPL



Dr. Vinod Singh
Associate Professor
DTU

Eminent Resource Persons for FDP



Dr. Dhruv Pratap Singh
Assistant Professor
IIT Bhilai



Dr. M.S. Mehta
Assistant Professor
DTU



Dr. Sanjay Kashyap
Assistant Professor
Thapar University



Dr. Manika Khanuja
Assistant Professor
Jamia Millia Islamia

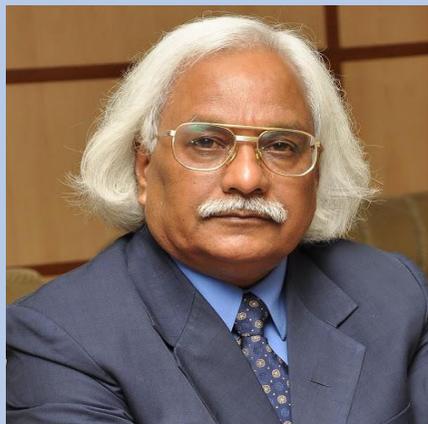


Dr. Paresh Patel
Assistant Professor
UkaTarasadia University



Dr. Khushboo Aggarwal
Senior Research Associate
Lancaster University

Our Inspiration



Prof. P.B. Sharma
Vice Chancellor
Amity University Haryana



Maj. General B.S. Suhag
Deputy Vice Chancellor
Amity University Haryana



Prof. Padmakali Banerjee
Pro-Vice Chancellor
Amity University Haryana

Organizers



Program Chair
Prof. Atul Thakur
Director, Amity Centre of Nanotechnology
Amity University Haryana



Program Chief Coordinator
Dr. Lucky Krishnia
Assistant Professor,
Amity Centre of Nanotechnology
Amity University Haryana



Program Coordinator
Dr. Ankur Kaushal
Associate Professor,
Amity Centre of Nanotechnology
Amity University Haryana



Rear Admiral Kishan K. Pandey
Director, Academic Staff College
Amity University Haryana



Dr. Sanjna Vij
Program Director, Academic Staff College
Amity University Haryana

About Amity University Haryana

Amity University Haryana (AUH) is a part of Amity Universe and has been established under the aegis of Ritnand Balved Education Foundation (RBEF), a nonprofit education trust under which all Amity institutions are running. AUH has been established by the Haryana Act 10 of 2010 by Government of Haryana on April 26, 2010. The University is imparting UGC recognized programmes both at undergraduate, postgraduate and Doctorate levels in various disciplines. The 110 acres of Amity University Haryana campus is situated in the close vicinity of Aravali hills land virtually provides experience of living in the lap of nature and creates apt environment to the students for study, learning and growth. The overall campus life is very exciting and vibrant where students are involved in various activities which provide them a host of opportunities to constantly reinvent themselves, handling new situations & technology, understanding people management skills and experimenting new things which prepare them to become not only accomplished professionals but also good human beings.

The campus provides multi-cultural environment with the presence of students from across India and more than 30 countries, who share diversity of regions, ethnicities, flavours and cuisines giving them global outlook. The Academic & Research canvas of the University is organized into seven Faculties viz., Faculty of Management, Faculty of Arts, Faculty of Science and Technology, Faculty of Law, Faculty of Architecture and Planning, Faculty of Pharmacy and Faculty of Medical and Allied Health Sciences, which have 19 institutions, currently offering about 137 programmes at UG & PG levels, besides offering the Ph.D programmes, in the areas, such as Engineering and Technology, Applied Sciences, Biotechnology, Environment Science, Nano-sciences & Technology, Law, Pharmacy, Vision Science & Optometry, Audiology & Speech Language Pathology, Nursing, Medical and Allied Health Sciences, Media and Mass Communication Engineering, Management, Hospitality, Economics, Commerce, Psychology, English, Fine Arts and Fashion Designing etc.

About Academic Staff College

The Amity Academic Staff College is a world class facility to facilitate the growth of world class faculty and a university environment tuned to Quality, Relevance and academic, research and service excellence.

The purpose of Academic Staff College, Amity University Haryana is to prepare and enrich the faculty members and administrative officers and staff with required professional and character skills and to develop them professionals of the new age deeply committed to serve the university, society, industry and corporates in line with national and global aspirations

About Amity Centre of Nanotechnology

The Amity Centre for Nanotechnology was established at the Amity University Haryana, Manesar campus to accomplish the goal of enhancing advanced research in the areas of Nanoscience and Nanotechnology.. The centre is undertaking research and development (R&D) projects from various agencies and offering consultancy services to different industries and research organizations in India. In addition to research, the centre also aims to conduct training and awareness programmes, workshops national and international conferences on recent trends and developments of Nanoscience on various themes of national and international interests.

The centre is also actively involved in publications of the research in various leading areas and journals and has published 45 research papers and 3 book chapters so far in internationally reputed journals. The centre has also filed 15 patents so far. In addition to research, the centre also aims to conduct training and awareness programmes, workshops national and international conferences on recent trends and developments of Nanoscience on various themes of national and international interests. The leading area of research includes nanomaterials, nanocomposites, nanoelectronics, nanofabrication, nanobiotechnology, ferrites for microwave applications, high frequency applications, radar absorbing materials, water purification, DNA biosensors, Nanosensors, diamond synthesis, metamaterials, agricultural applications of nanomaterials, renewable energy.

ACNT research is mainly focused on application based research such as different translational aspects of Nanotechnology viz. 3D printing and fabrication technology, Agriculture applications, Nanosensor development & synthesis of diamonds etc.

About the Faculty Development Program

Nanotechnology is one of the increasingly important multidisciplinary area from engineering applications to designing medical devices, to manufacturing super computing devices to better batteries, and from manipulating the atomic molecules to manufacturing. This course is aimed to provide an insight to understand and utilize the unique properties and interaction of matter, and thus their physics and chemistry for the design, analysis, and operation of state-of-the art next generation electronic and photonic devices.

The main aim of this faculty development program is to understand the recent advances, trends and challenges in the field of Nanotechnology. Nanotechnology is the fastest growing field in case of all areas of sciences. Nanotechnology has proved to be a promising tool for the treatment of malignant growth as it offers newer and better treatment modalities by using nanomaterial. The FDP will have experts from various fields of nanotechnology such as batteries, agriculture, chemistry, biology, biotechnology and many more. The recent advances in the field of Nano-drug delivery systems (NDDSs) would also be a part of the FDP and nano materials have the abilities to increase the stability and water solubility of drugs, prolong the cycle time, increase the uptake rate of target cells or tissues, and reduce enzyme degradation, thereby improve the safety and effectiveness of drugs.

This FDP would bring experts in the above fields to showcase cutting edge technologies in the state-of-the-art of various multi-disciplinary areas using nanomaterials and their use with the knowledge of various challenges being faced by researchers from bringing the nanomaterials from lab top real world adaptability.

The objective of this course is to provide a platform to gather, provide clear cut ideas regarding various nanomaterials and their use in biomedical, automotive, electronics and various other fields to researchers who are working and planning to work in this field. The program will also motivate research ideas with practical applications by the experts in this field of research.

Content of the Faculty Development Program

- Introduction to Nanotechnology
- Synthesis of Nanomaterials
- Characterization of Nanomaterials
- Semiconductor Nanocrystals
- Nanotechnology in Defense
- Nanoelectronics
- Nano Fabrication and nanodevices
- Understanding the working of targeted drug delivery techniques and role of nanoparticles
- Advanced fabrication methods to design highly directional nanoantenna.
- Targeted drug delivery and therapeutic applications
- Materials for Nanoelectronics and photonic devices
- Electronic transport in Nanostructures
- High electron mobility transistors (HEMT)
- Micro-electromechanical systems (MEMS)
- Challenges in Magnetic materials
- Characterization and simulation of nanostructured Composites
- Biodegradable Nanomaterials
- Nanotoxicity
- Applications of Novel Materials (Biomedical, automotive, electronics)

Who should attend FDP

- Scientists/Engineers from Industry and Research Organizations
- Faculty from Universities/ Engineering Institutes/ Colleges
- Ph.D., M.Tech Students/ JRFs/ SRFs

How to Register



Registration Fee:

National: Rs. 500 (INR)

International: \$10 (USD)

Registration Link: <https://www.amity.edu/gurugram/fdp-ratc2021/>

Instructions

- ❖ Certificates will be issued to the participants after successful completion of the course.
- ❖ The participants need to regularly attend the FDP.
- ❖ After the FDP is over, the candidates have to appear for a test and fill the feedback form to acquire certificate for FDP.
- ❖ Participants having attendance of 80% and more and also score more than 60% in the test will be eligible and issued a digital certificate

Important Dates

- Last Date of Registration : *10th July, 2021*
- Date of confirmation : *11th July, 2021*
- Dates of the Event : *12th July, 2021 – 16th July, 2021*

Contact Person

Dr. Lucky Krishnia

Program Chief Coordinator

Assistant Professor, Amity Centre of Nanotechnology

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