

About the SRM IST:

SRM Institute of Science and Technology (formerly known as SRM University) is one of the top-ranking universities and premier engineering destinations in India. Established in 1985 by Founder Chancellor Dr. T. R. Paarivendhar, SRM IST operates across four campuses: Kattankulathur, Vadapalani, and Ramapuram in Tamil Nadu, and a fourth campus in Modinagar, Ghaziabad. With over 50,000 students and 3,200 faculty members, the institution offers a wide range of undergraduate, postgraduate, and doctoral programs in Engineering, Management, Medicine and Health Sciences, Law, and Science and Humanities. The institution has achieved global excellence through international alliances and collaborative initiatives. Over 150 students have been sponsored to 35 foreign universities, including MIT, Carnegie Mellon, UC Davis, Warwick, and the University of Western Australia. The institute enjoys an unparalleled reputation in academic and corporate circles and is recognized as a world-class learning institution.

SRM IST is deemed as Category A by the Ministry of Human Resource Development (MHRD), Government of India. It has also been reaccredited by NAAC with an A++ grade in 2024 and classified as a Category I university under Section 12B by UGC. NIRF has placed SRM IST at university rank 12. QS-IGAUGE has awarded SRM IST a Diamond University rating, and it has also received a Four-Star rating from Quacquarelli Symonds (QS).

About the NCR Campus:

The SRM Institute of Management and Technology (SRMIST Delhi-NCR Campus), located in Modinagar, Ghaziabad, Uttar Pradesh, was established in 1997. With student body exceeding 5,000, the institute offers a diverse range of programs in Engineering and Technology, Management, Computer Applications, Pharmacy and Hotel Management at the undergraduate, postgraduate, and doctoral levels.

The campus is renowned for its 'Green Campus' initiative, which creates an environment conducive to focused learning. Its world-class infrastructure merges academic rigor with practical relevance, supported by extensive industry interactions and research aimed at addressing real-world challenges.

Educational experiences are enhanced through a variety of activities, including workshops, seminars, model exhibitions, special lecture series, projects, and technical paper presentations. The institute also hosts national-level cultural and technical fests to further enrich the learning experience.

Programs at SRM Institute of Management and Technology are accredited by AICTE and PCI, affirming their quality and relevance.

About the Department:

The Department of Mechanical Engineering at SRMIST was established in 2009. The Department is continuously striving to achieve excellence in education, academic and industry oriented research to prepare the manpower that are globally competitive and capable of leading in industry, academia and government organizations in both India and abroad. Besides the Bachelor degree, Department offers Ph.D. programme also.

About the FDP:

This Online Faculty Development Programme on "Future Trends in Novel Material" will cover majorly the basic and advanced concepts related to novel materials. It starts with deeper discussion on engineering materials with special emphasis on smart materials. Emphasis has also been laid on advanced joining, machining and processing methods of novel materials.

Outcome of the FDP:

It starts with deeper discussion on engineering materials with special emphasis on advance materials. The programme introduces participants to cutting-edge materials such as nanomaterials, biomaterials, and smart materials, while also covering advanced characterization and fabrication techniques, like electron microscopy and 3D printing. It emphasizes the interdisciplinary nature of material science, highlighting its integration with fields like nanotechnology, biotechnology, and explores their applications in electronics, healthcare, aerospace, and energy.



SRM
INSTITUTE OF SCIENCE AND TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)
DELHI-NCR CAMPUS, GHAZIABAD (U.P.)

Six Days **Online** Faculty Development Program
On
FUTURE TRENDS IN NOVEL MATERIALS

9th to 14th December, 2024



Organized by
Department of Mechanical Engineering
SRM Institute of Management and Technology
Modinagar, Ghaziabad, Uttar Pradesh (201204)
Website: www.srmup.in



Sponsored by
AICTE Training and Learning
(ATAL) Academy

AICTE Training & Learning Academy (ATAL):

The main objective of ATAL Academy is to plan and help in imparting quality technical education in the country and to support technical institutions in fostering research, innovation and entrepreneurship through training in various emerging areas.

In a world characterized by rapid change, complexity, and uncertainty, the skills of the past are no longer sufficient for today or tomorrow. Covid 19 has brought in revolution in thinking, formulating, shaping, discussing and executing the ideas in a much closer environment through the digital world. Adapting to the pace and adjusting to the needs of the academia, the Council has decided to offer Faculty Development Programme in online mode through the AICTE Training and Learning (ATAL) Academy for Financial Year 2024-25 in addition to the offline FDPs already announced. The popularity and widespread acceptance received for the online FDPs during the COVID period is also a catalyst for this decision.

Resource Persons:

- ◆ Dr. Kaushik Pal, Professor IIT Roorkee
- ◆ Prof. Suresh Verma Professor, DCRUST
- ◆ Dr. Subhas, Associate Professor IGDTUW
- ◆ Dr K K Dwivedi, Researcher, Washington University
- ◆ Dr. Manoj Kumar Pal, Researcher, Wigner Research Centre for Physics Hungary.
- ◆ Dr. Swati Gangwar, Assistant Professor NSUT Delhi
- ◆ Dr. Sankalp, Nanjing University of Science and Technology, Nanjing 210 094, China
- ◆ Dr. Suhrit Mula, Professor, IIT Roorkee
- ◆ Dr Prasenjit Chanda, Senior Technologist, Tata Steel
- ◆ Dr Nilmadhaba Sahu, Principal Researcher , Tata Steel
- ◆ Dr. Amit Kumar Yadav, Lab Specialist -TOPPAN
- ◆ Dr. Jayant G. Thakre, GE Aerospace
- ◆ Dr. Pushpendra Singh Gola, R&D Manager, GODI

Focus Areas:

- ◆ Advancement in Nanomaterials
- ◆ Functionally Graded Materials (FGMs)
- ◆ Materials from monolithic to advanced stage
- ◆ Advanced Materials Processings
- ◆ Mechanical Engineering A future hope of medical science
- ◆ High Temp materials
- ◆ Tribology and Materials characterizations
- ◆ Nano-lamellar structures by severe plastic deformation
- ◆ Advanced Materials Processing and characterization
- ◆ Steel advance Structure
- ◆ Rare Earth Materials

Target Audience:

The faculty members, Research scholars & PG Scholars of the AICTE approved institutions and Industry Personnel are invited for registration.

Registration:

- **Registration Fee-Nil**
- The participants are advised to apply online at AICTE ATAL registration portal using <https://www.aicte-india.org/atal>.
- Programme will be delivered through online mode through Google Meet.

Address for Correspondence:

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Chief Patrons:

Dr. T. R. Paarivendhar
Founder Chancellor, SRM IST

Shri Ravi Pachamoothoo
Pro- Chancellor (Administration), SRM IST

Prof. (Dr.) P. Sathyanarayanan
Pro- Chancellor (Academics), SRM IST

Patrons:

Prof. C. Muthamizhchelvan
Vice-Chancellor, SRM IST

Prof. Dr. S. Ponnusamy
Registrar, SRMIST

Dr. S. Viswanathan
Director, SRM IST NCR Campus

Dr. R. P. Mahapatra
Dean, SRM IST NCR Campus

Dr. Navin Ahalawat
Dean SH, SRM IST NCR Campus

Dr. N. M. Mishra
Dean Management, SRM IST NCR Campus

General Chairs:

Dr. Dhowmya Bhatt
Dean IQAC, SRM IST NCR Campus

Coordinators:

Dr. Mahesh Kumar Gupta (Coordinator)
Assistant Professor
Department of Mechanical Engineering

Dr. Gyanendra Prasad Bagri (Co-Coordinator)
Assistant Professor
Department of Mechanical Engineering

ATAL Online 6 Day Faculty Development Programmes Schedule

FDP Thrust Area: Advanced Materials, Rare-earth & Critical Minerals

FDP Title: Future Trends in Novel Materials

Start Date: 09-12-2024

End Date: 14-12-2024

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
6:00PM to 6:30PM	6:00PM to 7:30PM	6:00PM to 7:30PM	6:00PM to 7:30PM	6:00PM to 7:30PM	2:00PM to 3:30PM
Inaugural Session	Session 3	Session 5	Session 7	Session 9	Session 11
	Topic: Fundamentals of Materials from monolithic to advanced stage Name of the Expert: Dr. Subhas Designation & Organization: Associate Professor IGDTUW Years of Exp: 15+	Topic: Mechanical Engineering A future hope of medical science Name of the Expert: Dr K K Dwivedi Designation & Organization: Researcher, Washington University Years of Exp: 10 Years	Topic: Recent Trends in Battery Manufacturing Name of the Expert: Dr. Pushendra singh Gola Designation & Organization: R&D Manager, GODI Enrgy Pvt. Ltd Years of Exp: 11	Topic: Tribology and Materials characterizations Name of the Expert: Dr. Swati Gangwar Designation & Organization: Assistant Professor NSUT Years of Exp: 10+	Topic: Advanced Materials Processing and characterization Name of the Expert: Dr. Suhrit Mula Designation & Organization: Professor, IIT Roorkee Years of Exp: 13+ Years
6:30PM to 8:00PM	7:30PM to 9:00PM	7:30PM to 9:00PM	7:30PM to 9:00PM	7:30PM to 9:00PM	3:30PM to 5:00PM
Session 1:	Session 4	Session 6	Session 8	Session 10	Session 12
Topic: Advancement in Nanomaterials Name of the Expert: Dr. Kaushik Pal Designation & Organization: Professor IIT Roorkee Years of Exp: 20+ Years	Topic: Advanced Materials Processings Name of the Expert: Dr. Jayant G. Thakre Designation & Organization: Research Scientist, GE Aerospace Years of Exp: 10 Years	Topic: High Temp materials Name of the Expert: Dr. Amit Kumar Yadav Designation & Organization: Lab Specialist - TOPPAN Pvt.Lt Years of Exp: 11 Years	Topic: Preparation of SAC305 solder composite by PM method, Growth kinetics and IMCs layer analysis. Name of the Expert: Dr. Manoj Kumar Pal Designation & Organization: Research Scientist , Wigner Research Centre for Physics Budapest, Hungary. Years of Exp: 15+	Topic: Nano-lamellar structures by severe plastic deformation Name of the Expert: Dr. Sankalp Designation & Organization: Nanjing University of Science and Technology, Nanjing 210 094, China Years of Exp: 11+ Years	♦ Topic: Steel advance Structure Name of the Expert: Dr Prasenjit Chanda Designation & Organization: Senior Technologist, Tata Steel Years of Exp: 11 Years
8:00PM to 9:30PM					5:00PM to 7:30PM
Session 2					Session 13
Topic: Functionally Graded Materials (FGMs) Name of the Expert: Prof. Suresh Verma Designation & Organization: Professor, DCRUST Murthal Years of Exp: 23 Years					Topic: Rare Earth Materials Name of the Expert: Dr Nilmadhaha Sahu Designation & Organization: Principal Researcher , Tata Steel Years of Exp: 11 Years
					6:30PM to 7:30PM Online test & feedback
					7:30PM to 8:00PM Valedictory Session