Online Faculty Development Programme on

Future Scope of Chemical Sciences and Research Methodology-2020 (FSCSRM-2020)

September 21<sup>st</sup> -25<sup>th</sup>, 2020 Sponsored by TEQIP-III

# **REGISTRATION FORM**

1. Name in Block letters	:
2. Designation &	:
Affiliation	
3. Male/ Female	:
4. Mailing address	:
5. Email	:
6. Mobile	:
7. WhatsApp no.	:
8. Educational	
qualification	

Paste a copy of your photo identity card			
Signature	:		
	Signature of sponsoring authorities		
N.B.: Online registra	ation is essential, the link for the same is		
	:om/forms/d/e/1FAIpQLSeL3x5XhFQ- n83HSEDIKudOziI6THREbKw/viewform		

### **Organizing Committee**

Patron Prof. J. P. Pandey Hon'ble Vice Chancellor, Madan Mohan Malaviya University of Technology Gorakhpur

Chairman Dr. R. K. Yadav Head, Chemistry and Environmental Science Department MMMUT, Gorakhpur

Convenor Dr. P. P. Pande Chemistry and Environmental Science Department MMMUT, Gorakhpur

Organizing Secretary Dr. Krishna Kumar Chemistry and Environmental Science Department MMMUT, Gorakhpur

# **TENTATIVE SCHEDULE**

Date	Session		Timing
	Inauguration		11:30 AM to
21/09/2020			12:15 PM
	Session I	Lecture I	12:15 PM to
			01:00 PM
22/09/2020	Session II	Lecture II	11:30 AM to
			12:15 PM
		Lecture III	12:15 PM to
			01:00 PM
23/09/2020	Session III	Lecture IV	11:30 AM to
			12:15 PM
		Lecture V	12:15 PM to
			01:00 PM
24/09/2020	Session IV	Lecture VI	11:30 AM to
			12:15 PM
		Lecture VII	12:15 PM to
			01:00 PM
25/09/2020	Session V	Lecture VII	11:30 AM to
			12:15 PM
		Valedictory	12:15 PM to
			01:00 PM



मदन मोहन मालवीय प्रौद्योगिकीविश्वविद्यालय, गोरखपुर Madan Mohan Malaviya University of Technology, Gorakhpur

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Future Scope of Chemical Sciences and Research Methodology-2020 (FSCSRM-2020)

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# **Organized by**

**Chemistry and Environmental Science Department** Madan Mohan Malaviya University of TechnologyGorakhpur-273010,(U.P.) INDIA



#### **About University**

Madan Mohan Malaviya University of Technology, Gorakhpur (formerly Madan Mohan Malaviya Engineering college, Gorakhpur established in 1962, upgraded to University status in December 2013) is a residential Technological University established by the Government of U. P., with an aim to evolve and impart comprehensive higher education with focus on Basic sciences, Engineering, Technology, Management and allied areas. The University is situated on state highway Gorakhpur-Deoria road about 8 km from Gorakhpur Railway and Bus Station.

### About the Department

The Chemistry and Environmental Science Department was established in the year 2019. The department aims to be a national leader in imparting quality education, carrying out research and technology development. It has well qualified, devoted and dedicated team of teaching staff. The faculty members of Chemistry and environmental science are actively engaged in research activities. Currently two major research projects funded by national agencies are running in the department. The department offers a PG program and Ph.D. in Chemistry.

## About Gorakhpur

Gorakhpur derives its name from the great ascetic saint Gorakhnath. Gorakhpur is a city located along with the banks of Rapti River in the eastern part of the Indian state of Uttar Pradesh. It is the head quarter of north-eastern railways and is well connected by rail and road to all important cities of India. It also connected by air to the metropolitan cities as well. It is about 5 - 6 hours run by road from Lucknow and Varanasi. The city is famous for its well-known Gorakhnath Temple and Gita Press.

A number of historical, cultural and tourist sites lie in the vicinity of town. Kapilvastu, the home town of Lord Buddha, is about 90 km from here. The famous Buddhist site, Kushinagar, the nirvana sthal of Lord Buddha, lies at a distance of about 50 km. Maghar, the holy place of saint Kabir Das, is very near to Gorakhpur city and the Nepal border is only 60 km from it.



#### **About the Faculty Development Programme**

The Faculty Development Programme has been projected to provide a common platform for interactions between researchers and academicians which will open new doors of scientific works to face new challenges in the area of chemistry for the betterment of life. It is aimed to explore the innovative and creative ideas through interactive sessions of the resource persons and the participants from the different parts of the country. It is also an effort to motivate the young researchersfrom the different domains of Chemical Sciences to contribute their novel ideas.

Due to countrywide pandemic COVID-19 situationit has not been possible to conduct face toface FDPat this point of time. Therefore, as per the AICTE guidelines, this FDP "FSCSRM-2020" is being conducted online using Google meet Application. All of sessions in this FDP will be conducted by resource persons via online mode and the registered participants can interact with them online using their Desktop/Laptop/Tablet/ Smart Phones etc. with internet connectivity from anywhere across the globe.

An online feedback will be conducted at the end of the program. The digital certificate will be issued to those who have attended the program without any absenteeism and who will submit their feedback.

#### **Resource Persons**

The Course content will be delivered from a pool of resource persons on the subject from leading industries and prestigious national and abroad institutions.

#### Who can attend FDP

Participation in this FDP is open to the faculty members of the UGC/ AICTE approved institutions, research scholars, PG students, Scholars, participants from industry (Bureaucrats/ Technicians/ Participants from Industry etc.) and faculty of the host institutions.

#### **Registration Fees**

There is no Registration fee for participants. Number of seats: 50 (First come, First serve)

#### Pedagogy

PPT Slides handout, online learning, demonstration videos Last date of registration: 19/09/2020 Email for Communication: <u>fscsrm@gmail.com</u>

**Please note:** FDP will be run on Google meet, please register on Google meet app by your name.

The Faculty Development Programme will cover all broad disciplines of the Chemistry/ Chemical Sciences.

#### Topics to be covered

#### ► Polymer Chemistry

- ✓ Polymerization Techniques
- ✓ Macromolecules Architecture
- ✓ Hydrogels
- ✓ Microgels
- ✓ Water Soluble Polymers
- ✓ Conducting Polymers
- ✓ Step- Growth Polymers
- ✓ Smart Polymers

#### ➤ Composite Materials

- ✓ Organic Matrix Composites
- ✓ Ceramic Matrix Composites

#### ► Energy Materials

- ✓ Batteries and Supercapacitors
- ✓ Fuel Cells
- ✓ Magnetocalorics

#### ► Nano Materials

- ✓ Metal Oxide Nanoparticles
- Carbon-Based Nanomaterials
- ✓ Quantum Dots

#### ➤ Membrane Science

✓ Intelligent Membranes

#### ➤ Catalysis/ Photo-Catalysis

- ✓ Artificial Photosynthesis
- ✓ Light Harvesting Photocatalysts
- ✓ Catalysts for Water Splitting
- ✓ CO₂ Activation and Hydrogen Generation

#### ➤ Synthetic Organic Chemistry

- ✓ Natural Product Synthesis
- ✓ Structure Elucidation
- ✓ Total Synthesis
- ► Drug Design
  - ✓ Medicinal Chemistry

#### ≻ Environmental Chemistry

- ✓ Pollution (Air, Water and Soil)
- ✓ Solid Waste Management
- ➤ Carbohydrate Chemistry

#### ► Green Chemistry

- ✓ Ionic Liquids
- ➤ Solid State Chemistry

## ✓ Crystals

- **≻**Organic Electronics
  - Nanocomposite Dielectric Materials

#### ► Organic Photovoltaics

- ✓ Organic Solar Cells
- ✓ Organic Semiconductors

#### ► Total Synthesis

✓ Natural Products for Drug Development