

SCHOOL OF STUDIES IN ENVIRONMENTAL CHEMISTRY

Courses Offered

- M.Sc. Environmental Chemistry (in UGC Emerging Programme)
- M.Sc. Instrumentation and Commercial Methods of Industrial Analysis (MICA)
- M.Sc. Pharmaceutical Chemistry
- Ph.D.

Profile of the Department:

M.Sc. Environmental Chemistry –

This course provides a unique focus for addressing some of today's most pressing environmental and chemical problems. The study of environment commenced in 1978 by scientists who were not trained as environmentalist but experts in allied fields. This course provides major challenges in determining nature, quantity and various reactions of specific pollutants in the environment. This leading M. Sc. Course delivers a core course which provides interdisciplinary training in the following fields

Instrumental methods of chemical and pharmaceutical analysis	Pharmacokinetics of pollutants and their fate in the environment
Monitoring of various environmental problems	Environmental Impact assessment (EIA) and Toxicology
Monitoring of different pollutants in the environment	Environmental Laws and ISO 14000
Control and treatment of different kinds of effluents	Atmospheric and Pesticide Chemistry

This course is providing first hand exposure of the highly sophisticated instruments like HPLC, GC, FT-IR, CVS, AAS, ASV etc to the students for timely and accurate analysis and to meet the growing global environmental problems being faced in the 21st century. This course is an exciting field which combines knowledge and expertise of many streams viz. analytical instrumentation, computers, electronics, biology, sociology, law and of course management and chemistry. Students are encouraged to take the lead in creating environmental awareness. The **mission** of this course is to provide students with the modern and comprehensive chemical education required to live and work in technologically advanced society. Our students are trained to hold key environmental positions in industry, commerce, consultancy, education and public services. This mission is fulfilled through a range of educational opportunities that allow students to learn, discover and explore the major chemical concepts that contribute to their lives and the lives of others around the world. The course, deploying both, internal staff and environmental practitioners, provides a comprehensive post-graduate training in the fundamental and applied aspects of the origin, behaviour and fate of chemical species in aquatic, atmosphere, terrestrial and biotic environmental media. The course is intended for students proficient in undergraduate chemistry who wish to specialize in environmental chemistry and also apply their chemical education to the principles and practice of environmental and industrial control.

PLACEMENT OPPORTUNITIES –

Students of this course have got placement in R & D of pharmaceutical laboratories, in air, water and soil pollution laboratories, environmental monitoring and assessment, academic research, private consultancy, various pollution control boards, waste treatment in chemically related jobs in teaching or sales. Many students have pursued advance degree at leading university across the globe in the areas of environmental chemistry, chemistry, pharmaceutical chemistry etc. Also many students are actively working in bioanalytical studies in various pharmaceutical industries and contract research organizations (CROs).

M.Sc. in Instrumentation and Commercial Methods of Industrial Analysis (MICA) –

This course provides a broad base of scientific knowledge while learning chemical and instrumental analysis methods and systemization technologies. The present course has been designed to generate and channelise potential of manpower especially for quality control and R & D divisions of chemical industries. The present course made systematic effort to train students who are going to look after the quality of products and to fulfill long felt need of quality, which is the most important component of any industry. The **mission** of this course is to educate graduate students to pursue postgraduate degree at one of the nation's best university for employment in industry, government, or academia with doctoral students learning how to function as independent researcher. The present Post-graduate course (MICA) offers excellent opportunities for career advancement and students can look forward for being absorbed in private / public sector / autonomous organizations.

PLACEMENT OPPORTUNITIES –

After completing two year Post Graduate course in Instrumentation and Commercial Methods of Industrial Analysis, most of the students got placement through campus in various quality assurance laboratories, pollution control laboratories, effluent treatment plants of various industries, R & D laboratories, Thermal Power Corporation, ONGC, Industries manufacturing paper, dyes, drug, glass, pharmaceuticals, ceramics, cement, polymer, food and food products, alloys, fertilizer, pesticides, soaps, detergents, paint, varnishes, enamels, fine chemicals etc. The students of the course are imparted three months practical training at the end of 4th semester, in some industries/institutes and are required to submit project report after training.

M. Sc. in Pharmaceutical Chemistry –

This course provides a broad base of scientific knowledge while learning chemical and instrumental analysis methods and systemization technologies. The present course has been designed to generate and channelise potential of manpower especially for quality control and R & D divisions of pharmaceutical industries. The present course systematically train students who are going to look after the quality of pharmaceutical products and to fulfill long need of quality, which is the most important component of pharmaceutical industry.

The **mission** of this course is to educate postgraduate students at one of the nation's best university for employment in industry, government, or academia with doctoral students learning

how to function as independent researcher. The present Post-graduate course M. Sc. Pharmaceutical Chemistry offers excellent opportunities for career advancement and students could look forward for being absorbed in private / public sector / autonomous organizations.

M. Sc. Environmental Chemistry (Two years / Four Semesters)

Eligibility : B.Sc. with Chemistry as one of the subject or B.Sc. Instrumentation / Industrial Chemistry / Chemical Technology / Environmental Science with Chemistry with 50% mark.

Total Seats : Open = 15

Mode of Selection : On the basis of the merit in entrance test conducted by the University.

Contact Person : **Dr. Nimisha Jadon (Head)**
M. No. : 8463826999

M. Sc. Instrumentation and Commercial Analysis (MICA) (Two years / Four Semesters)

Eligibility : B.Sc. with Chemistry as one of the subject or B.Sc. Instrumentation / Industrial Chemistry / Chemical Technology / Environmental Science with Chemistry with 50% mark.

Available Seats : Open = 20

Mode of Selection : On the basis of the merit in entrance test conducted by the University.

Contact Person : **Dr. Nimisha Jadon (Head)**
M. No. : 8463826999

M. Sc. Pharmaceutical Chemistry (Two years / Four Semesters)

Eligibility : B.Sc. with Chemistry as one of the subject or B.Sc. Instrumentation / Industrial Chemistry / Chemical Technology / Environmental Science with chemistry with 50% mark.

Available Seats : Open = 15

Mode of Selection : On the basis of the merit in entrance test conducted by the University.

Contact Person : **Dr. Nimisha Jadon (Head)**
M. No. : 8463826999

Fees for the Courses:

Course	I Semester	II Semester	III Semester	IV Semester
Open Seats -				
M.Sc. Environmental Chemistry	Rs. 19120.00	Rs. 14800.00	Rs. 15960.00	Rs. 14800.00
MICA	Rs. 19120.00	Rs. 14800.00	Rs. 15960.00	Rs. 14800.00
M.Sc. Pharmaceutical Chemistry	Rs. 19120.00	Rs. 14800.00	Rs. 15960.00	Rs. 14800.00

Placement:

All 100 % students of School of Studies in Environmental Chemistry have been placed in different public and private sectors, R&D and Quality control of pharmaceutical and other companies all over India.

Achievements:

The School of Studies in Environmental Chemistry had organized successfully the following activities every year:

1. National conference/workshop/seminars
2. A.P.J. Abdul Kalam Azad lecture series
3. Alumni Meet
4. Industrial visit