

Department of Chemistry

The department of chemistry is known for its academic ambience. Ours is the biggest department in the college with ten faculty members teaching UG and PG students. The faculty members strive hard for the all round development of students. The department runs a Post-graduation course (M.Sc.) with specialization in Organic Chemistry and Polymer Chemistry as elective papers. The department is recognized as a centre for higher learning by R.T.M. Nagpur University, Nagpur and eight students are pursuing Ph.D under the guidance of our teachers. The department has four well-equipped laboratories for conducting usual practicals and research activities. In order to ensure accuracy in the research pursuit, major instruments like spectrophotometer, conductivity meter, pH meter, flame photometer, UV Visible Spectrophotometer, ultrasonicator, centrifuge machine and digital balance etc are available in the laboratory. The research output is quite substantial. The faculty members have published research papers in reputed national and international journals.

Departmental Activities:

1. **"How to File Copyright in India"** a hands-On Training Session was organized by the Department of Chemistry and Shivaji Science Innovation and Incubation Centre of the College on 31 October 2023. The primary objective of this session was to educate Postgraduate (PG) and Undergraduate (UG) students from various academic streams about the intricacies of copyright filing in India. Dr. Sarang Dhote was the in-charge of Centre. The success of this workshop can be attributed to the guidance and unflinching support provided by Dr. R. U. Khope, who played a pivotal role in organizing and structuring the event.
2. **4-Day Self-Paced Virtual International Symposium on Water** was organized by Department of Chemistry on the eve of World Water Day on 22nd to 25th March 2024 . The symposium aimed to address critical issues related to water management, quality, and sustainability. Participants from various educational institutes across Kenya, Nigeria, Uganda, Zimbabwe, Amravati, Chandrapur, Nagpur, Katol, Malkapur, and Coimbatore joined this enlightening event. Dr. Sarang Dhote, Dr. Bongani Ndhlovu Yalala Cholera, , Dr. Vijay D. Raut , Dr.

Vijay S. Nagpurkar and Dr. K. Saminathan delivered the talks on different topics in different sessions.

3. Celebration of the World Ozone Day

Department has organized a Guest Lecture of Mrs. Hema Deshpande, Regional Officer, Maharashtra Pollution Control Board (MPCB) on ozone depletion and an Intercollegiate Poster competition was also held on the occasion of "World Ozone Day" on 16th September 2023. The goal was to raise awareness about the phasing out of ozone depleting substances among the students, teachers, and the general public and measures to be taken to preserve it. In her deliberation she discussed tropospheric ozone, usually known as bad ozone, and stratospheric ozone, also known as good ozone. The ozone in the stratosphere is referred to as stratospheric ozone by absorbing the UV radiation, shields all life on Earth from the Sun's deadly UV rays. Department has organized "Intercollegiate Poster competition" for UG and PG students, About 51 students actively participated in the same. Prof. Punita Tiwari, Department of Botany and Prof. Kalpana Pawar, Head Department of Mathematics judged the posters of the competition.

4. Workshop on Research Methodology ;

The Department of Chemistry, in collaboration with the Shivaji Science Innovation and Incubation Center organized a three-day workshop on research methodology on 20th, 25th and 27th October 2023. The workshop aimed to provide valuable insights into various aspects of research, including Intellectual Property Rights (IPR), scientific writing, and bibliography arrangement using advanced tools like Mendeley and Zotero. The event was open to students from various departments, research scholars from different institutes, and faculty members from various departments within the same institute. The success of this workshop can be attributed to the guidance and unflinching support provided by Dr. R. U. Khope, who played a pivotal role in organizing and structuring the event. Dr. S. Kene PG coordinator Department of Chemistry also supported for this workshop.

5. "What's behind the Science"

On the occasion of science day the students of our department created awareness in the society about science by showing different demonstrations on 28th February 2024. In it, they demonstrated many science-based experiments like non-burning notes in currency, hands that turn red with water, magical paper, and a fire pit that burns with water and many more. The program was organized by department under the guidance of Dr.Rashmi Urkude. Ayesha Jabeen, Annaya Sulakhe, Aryaman Srivastava, Kshitij Gupta and Yugansh Kanoje were the student participants in this event. Prof. Mahendra Dhore, Principal , Prof. R. U. Khope ,Head ,Department of Chemistry extended their support for making event a grand success.

Visits:

The Department of Chemistry has organized one day visit to Mahatma Gandhi Institute for Rural Industrialization (MGIRI) Wardha for hands-on training workshop on 18th October 2023 at. The main objective of the workshop was to provide various career opportunities for students and holistic development while taking education. As a part of experiential learning hands on activities were performed during the event. At the end of all activities oral and written feedback and suggestions were collected from all participants. Total 30 participants from post graduate chemistry department participated and got the benefit of this workshop.

Guest Lectures:

Invited Talk on “Advanced Sustainable Functional Nanomaterials”

Department of Chemistry has organized a Invited Talk of Dr. W.B. Gurnule, Head Department of Chemistry, Kamla Nehru Mahavidyalaya,Nagpur on, “Advanced Sustainable Functional Nanomaterials” on 14th February 2024. He emphasized on the applications of nanomaterials in field of medical science, tissue engineering, aerospace etc for the benefit of mankind .Hon’ble Principal Prof. M.P. Dhore presided over the function.. Introductory remarks was given by Prof. R.U. Khope, Head ,Department of Chemistry. Mr. S. V. Dautpure was organizing secretary of this event.. Ms. Ayesha Khan, student B.Sc. Sem I

compered the session and vote of thanks was proposed by Ms. Anaya Sulakhe. About 150 students of UG and PG actively participated in the program.

Staff Achievements:

The faculty members of the department have noteworthy accomplishments to their credit. All the staff members were actively engaged in research work. They published their papers in the journals of national and international repute.

All the staff members of the department attended online, offline Conferences and Workshops organized by various Colleges.

Alumni of the Department are holding key positions in the industry and academic institutions.

Patent :

One patent has been registered individually by Dr.Rashmi Urkude(Indian),.Dr.P.S.Utale(Germany),Dr.VrushaliR.Kinhikar(Indian) Dr.P.D.Deshmukh and Dr S.S.Dhote have published one and three Indian patents, respectively.

Awards-

Dr. Vrushali R.Kinhikar bestowed by "Dr.Sarvepalli Radhakrishnan Best Teacher Award". Dr.Sarang Dhote bestowed by 1) "Global Nature Green Peace Award".2) Achary Award and Dr.P.N. Deshmukh by "Young Scientist Award"

Student Achievements :

1)Aishwarya Mendwade from B.Sc. Sem IV (PCM) secured 2nd position in a seminar competition held on 7th March 2024 at Jawaharlal Nehru Arts, Commerce and Science College, Wadi Nagpur

2) Sakshi Mohite (M.Sc) participated in Khasdar Krida Mohatsav and also in International Taekwon-do Fedration.She has been selected in the ALL INDIA INTER UNIVERSITY WUSHU (WOMEN) Championship held at Jammu in Feb 2023.

3) Sakshi Kothe and Vishakha Misal ,students from M.Sc.II presented paper at International Conference in Chemistry-2024 at Hyderabad.