Inter-College Summer Training Program Report

The Inter-College Summer Training Program was organized by the Department of Chemistry, Shivaji College, University of Delhi under the aegis of DBT Sponsored Star College Scheme on "Green Fabrication of Nanostructures and their Characterization" under the of supervision of Dr. Rangnath Ravi from 15thJune - 30th June 2023. The program convenor was Dr. P.K.Sahu and Co-Convenor Dr. Richa Arora of Department of Chemistry. Total 25 students participated in this program from different colleges of University of Delhi.

The inaugural day of the program was felicitated by Professor Sharif Ahmad and the faculty members of the Department of Chemistry. The inauguration was commenced with auspicious lamp-lighting ceremony, followed by introduction of the workshop by Dr. Bhasha Sharma. This was then followed by an interactive lecture on green fabrication of nanoparticles and a brief discussion on its applications and characterization by Professor Dr. Sharif Ahmad.

About the Speaker

Dr. Sharif Ahmad, as Pro-Vice-Chancellor (Research & Consultancy) SGT University, Gurugram, NCR-Delhi, INDIA, is a Superannuated Professor of Materials Chemistry, did his Masters (1976) and Doctoral (1981) in Chemistry from AMU, Aligarh. In recognition of his work, He was nominated as a member of the prestigious American Chemical Society for three years (2015 - 2018) and had a membership of Royal Chemical Society, UK. Former Dean, Natural Science, Jamia Millia Islamia.

On the 2nd day, a lecture on green chemistry was conducted by Dr. Bhasha Sharma, followed by lecture on evolution of green chemistry and nanoparticles by Dr. Abhijeet Mishra. All the students were then given an assignment on the previous lecture. This was followed by a lecture on research protocols and publishing of articles by Dr. Rangnath Ravi. On Day 3, synthesis of iron oxide nanoparticles was introduced using co-precipitation method of FeSO₄ and FeCl₃.

In the 2nd week of the Summer Training Program, synthesis of iron oxide, silver oxide, bimetallic nanoparticles and composites was conducted by students divided into 5 groups of 4-5 students each, using plant extract from different sources such as mulberry leaves, champa leaves, bougainvillea petals, etc.. The samples were then collected to be characterized later. Also a guest lecture was organised on the 9th day by Dr. Abhijeet Mishra on the green synthesis of nanoparticles.

In the 3rd week, after collecting samples from synthesis done, a visit was organised to Jamia Millia Islamia on 27th June 2023 for the characterization of the samples for each group such as UV-Visible Spectroscopy, X-Ray Diffraction, Zeta potential analyzer and FT-IR. On 28th June 2023, another visit was organised to IUAC to understand the working of various other characterization techniques like XRD, XRF, SEM and ICPMS.

The Valedictory Ceremony was then organized on 3rd July 2023 to mark the end of the workshop followed by submission of the reports by each student and also felicitation by the then Peincipal Professor Shiv Kumar Sahdev.

The resource person of the program

Dr. Rangnath Ravi, Department of Chemistry, Shivaji College, University of Delhi

Posters



Photographs



























Shivaji College Star College Scheme

Department of Chemistry
Inter-College Summer Training

on

"Green Fabrication of Nanostructures and their Characterization" from 15.06,2023 to 30.06.2023

Convenor: Dr. P. K. Sahu Co-Convenor: Dr. Richa Arora

Attendance

Time: 10:00 AM to 4:00 PM

Name of the Participant	Name of the College/In stitute	University	Name of the Course	Seme ster	19.06.2023	20.06.2023	Signature 21.06.2023	22.06.2023	23.06.2023
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