

# **Two Days Workshop On Synthesis of Nanoparticles (Nano ferrite Materials)At Shoolini University SOLAN**

## ***Introduction:***

On 23<sup>rd</sup> and 24<sup>th</sup> of September 2024 , under the guidance of our worthy Principal Prof. Bharti Bhagra, the Department of Chemistry and Physics of COE Sanjauli went for Hands on training of Nanoparticles at Shoolini University under DBT Star College Scheme.

## ***Event Details:***

### ***Day1:***

On the very first day of visit, 15 students and two teachers from COE Sanjauli had an interactive and demonstrative session with Dr. Rohit Jasrotia (Head and Assistant Professor at department of Nanotechnology at Shoolini University). He is one of the scientist who are in the list of (2%) world's top scientist issued by Stanford University. He highlighted the various topics like the preparation of Nanoparticles in which he certainly described about the preparation of Nano ferrites through Sol-Gel Auto combustion method. He discussed the fundamental principal governing the behavior of these materials at nanoscale, applications of Nano ferrite material, their structure and their different properties.

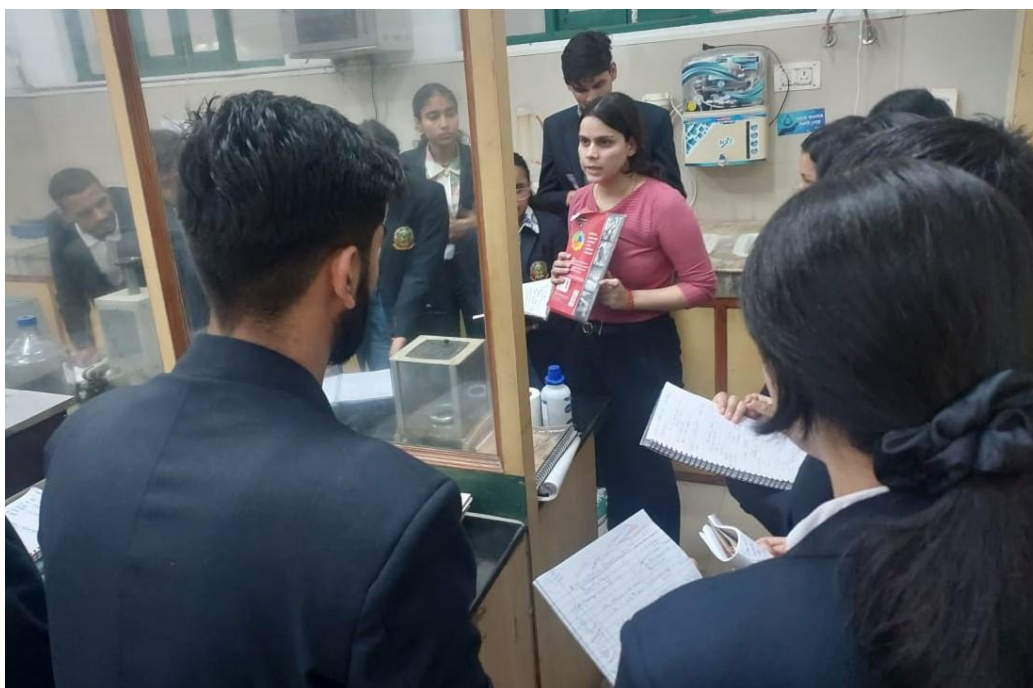
Interactive Session by Miss. Himanshi Malik, PhD scholar of the university demonstrated the preparation of Nano ferrites through hands on experiment.

Apart from this student also visited their F block specifically department of Nanotechnology.

Students also learned about the Sol-Gel Autocombustion method for the preparation of soft ferrites of  $ZnFe_2O_4$  practically. They also shared their working experience with the students.



Dr.Jasrotia giving key points during Synthesis of Nanoferrites Fabrication.



Research Scholar Ms. Himanshi interacting with the students explaining the steps for the Preparation of Ferrites





### **Day 2:**

On the 2<sup>nd</sup> day, students further got to see the remaining process which was left on Day 1. They saw how the material forms the gel and autocombust by itself. Further they got to know about how it will be processed further and about the test that will determine its structural and magnetic properties. They got familiar with machineries that are involved in the analysis of the final product.



Apart from this student had a visit to campus exploring the various areas like –

## Department of Chemistry



## Library



## Department of Physics

### Photo Gallery





## Sports Complex



### ***Conclusion:***

The visit to Shoolini University was very much informative. It provided lots of knowledge in the research field and hands-on-experiment. The positive response and active participation of the students indicate a growing awareness in the experimental and research field.

DEPARTMENT OF CHEMISTRY

C.O.E G.C. Sanjauli

Shimla-171006