

RAYAT SHIKSHAN SANSTHA'S  
**RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR**  
**DEPARTMENT OF CHEMISTRY**  
**Report on Guest Lecture**  
**"NMR AND MASS SPECTROSCOPY AS ANALYTICAL TOOLS"**

**Date: 27/01/2026**

The department of chemistry organised a guest lecture on "NMR and Mass Spectroscopy as Analytical Tools" on 27<sup>th</sup> January 2026 at M.Sc. lecture Hall (Digital Classroom) Rajarshi Chhatrapati Shahu College, Kolhapur. The guest Dr. Heena Sanghani. Associate professor Department of Chemistry D.Y. Patil Pratishthan's College of Engineering , Kolhapur the head of department Prof. Dr. P. B. Piste introduce and welcomes by offering bouquet to Dr. Heena Sanghani.

Dr. Heena Sanghani began the session by introducing the importance of analytical tools in chemistry. The First part of the lecture focused on Mass Spectroscopy. She explained the working principle of mass spectrometers, including ionization, fragmentation, and detection of ions based on mass-to-charge ratio (m/z). Applications of mass spectroscopy in pharmaceuticals, environmental analysis, and forensic science were also discussed. During the lecture, she also elaborated on the basic principles of NMR spectroscopy, including nuclear spin, magnetic fields, resonance, and chemical shift. She discussed different types of NMR such as <sup>1</sup>H NMR and <sup>13</sup>C NMR .Overall, the guest lecture was highly beneficial and informative. It helped students gain a clear conceptual understanding of NMR and Mass Spectroscopy as essential analytical tools, bridging the gap between theoretical knowledge and practical application.

Lecture was very interactive and students participated enthusiastically. As per the feedback received from the students it was very good learning experience , the lecture helped them in their understanding the "NMR and Mass Spectroscopy as Analytical Tools".

At end of the Guest lecture Mrs. S. S. Hendre gives Vote of thanks.

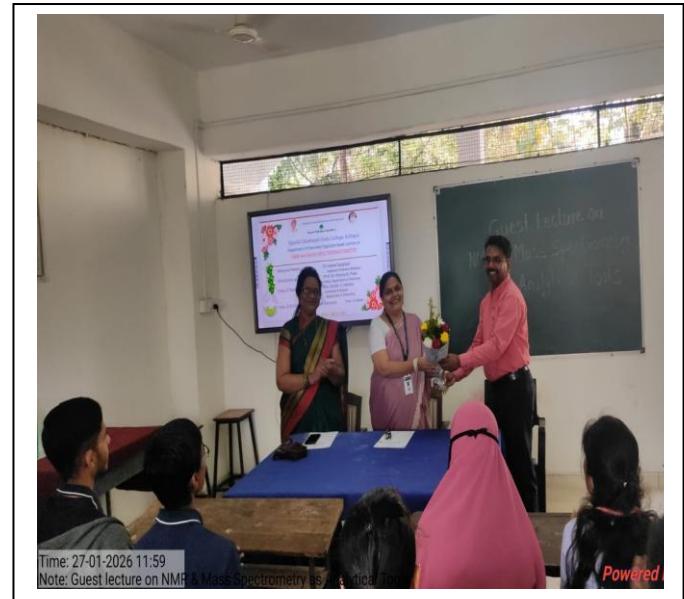
**❖ OUTCOME**

- Connects theoretical concepts of Mass Spectrometry, NMR Spectrometry to real –Words Application .
- Build the Confidence of handling Instruments in Pharmaceutical Company.
- Encourage curiosity and critical thinking in essential analytical tools.

**NO. OF BENEFICIARIES = 26**



## Photo Gallery



### Introduction and welcome by Prof. Dr. P.B. Piste



### Guest Lecture given by Mrs. Dr. Heena Sanghani and participants students of M.Sc. I and II





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### Vote of Thanks given by Mrs. Sonali Hendre

Head,  
Department of Chemistry



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