

Report on One-Day Workshop on Raman Spectroscopy

Date: 22nd August 2022

Venue: Campus, Ismail Yusuf College

Organized By: Department of Physics

Introduction

A one-day workshop on Raman spectroscopy was held at Campus, Ismail Yusuf College on 22nd August 2022, organized by Department of Physics. The workshop aimed to introduce participants to the principles, applications, and practical aspects of Raman spectroscopy in scientific research and industrial applications.

Workshop Sessions

The workshop featured comprehensive sessions covering various aspects of Raman spectroscopy:

Session 1: Introduction to Raman Spectroscopy

The workshop began with an introductory session on the fundamentals of Raman spectroscopy. Mr. Kartik K., Incarp a seasoned researcher in spectroscopic techniques, provided an overview of how Raman spectroscopy works, principles of molecular scattering, and the instrumentation involved.

Session 2: Instrumentation and Experimental Setup

Participants were then familiarized with Raman spectrometers and their components. Practical demonstrations included understanding laser sources, monochromators, detectors, and sample handling techniques. Emphasis was placed on optimizing experimental parameters for accurate spectral acquisition.

Session 3: Applications of Raman Spectroscopy

The workshop highlighted diverse applications of Raman spectroscopy across different fields. Case studies and examples illustrated its utility in materials science, pharmaceuticals, biology, and environmental analysis. Participants learned about the specific advantages of Raman spectroscopy in each application domain.

Session 4: Hands-on Practical Session

A hands-on session allowed participants to operate Raman spectrometers under the guidance of experts. They practiced sample preparation techniques, optimized instrument settings, acquired Raman spectra, and performed basic data analysis using software tools.

Session 5: Data Analysis and Interpretation

The workshop concluded with a session on data analysis and interpretation. Participants learned to interpret Raman spectra, identify molecular vibrations, and correlate spectral features with sample composition and structure.

Conclusion

The one-day workshop on Raman spectroscopy provided a comprehensive introduction to this powerful analytical technique. Participants gained practical experience in instrument operation, data acquisition, and analysis, reinforcing theoretical knowledge with hands-on skills.


Feedback

Feedback from participants was overwhelmingly positive, emphasizing the workshop's relevance, practicality, and the expertise of the instructors. Many expressed confidence in applying Raman spectroscopy techniques to their research and professional activities.

Conclusion

In conclusion, the workshop successfully achieved its objectives of familiarizing participants with Raman spectroscopy and equipping them with practical skills. It facilitated networking among researchers and professionals interested in spectroscopic techniques, fostering collaboration and knowledge exchange.


Overall, the workshop on Raman spectroscopy contributed significantly to enhancing participants' understanding and proficiency in this specialized field of spectroscopy.



Head of Physics Department
Government of Maharashtra's
Ismail Yusuf College of
Arts, Science & Commerce,
Jogeshwari (East), Mumbai-400 060.

The Department of Physics well organized workshop was conducted for teaching staff and M.Sc. Students on "Raman Spectroscopic characterization". Raman spectroscopic characterizations was explained by Shri Karthik from Incarp to the staff and MSc physics students on Mobile Van came to our college campus in August 2022. Total 8 students attended.




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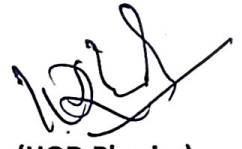
GOVERNMENT OF MAHARASHTRA
ISMAIL YUSUF COLLEGE OF ARTS, SCIENCE AND COMMERCE
Jogeshwari (E), Mumbai: 400060

Date:-12/08/2022

Department of Physics

Notice

We are pleased to inform you that the Department of physics has organized One day workshop on Raman Spectroscopic characterization on 22nd August, 2022 in M.Sc. lab at 11:00 am. It is compulsory for all TYBSc and MSc students.



(HOD Physics)

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DATE: 13/08/2023

ATTENDANCE

EVENT: Raman Spectroscopic characterization workshop

NO. OF STUDENT: 08 and staff

SR. No.	NAME OF THE STUDENT	SIGNATURE
1	Dr. RAVINDRA KALESH	
2	Mr. VAIBHAV KUMBHAR	
3	NETRA NARVEKAR	Netra
4	VIGNESH SHAAH	Vishah
5	SHIVAM SINGH	Shivam
6	BADRUDDIN SHAIKH	Badeen
7	KHAN SABA	Kaba
8	TRIPATHI SHIVAM ANIL	Shivam
9		


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