Goa University

School of Physical and Applied Sciences

And

School of Chemical Sciences

Report on Two-day Workshop on Raman Spectroscopy

1. Title of the Event/Activity/program	**Two-day Workshop on Raman Spectroscopy**
2. Date and Time	26-27th August 2024
3. Mode of conduct (Physical/Online)	Physical
4. School/ Directorate/ Section	School of Physical and Applied Sciences
5. Collaborating Agency/School/Directorate	School of Chemical Sciences
6. Detail of the Resource Person (Brief biodata)	1. Prof. Shankar Ghosh, TIFR, Mumbai 2. Dr. Adithya Lakshmanna, IISER-TVM 3. Dr. Surajit Saha, IISER-Bhopal 4. Dr. Kausthabh Kumar Maiti, CSIR-NIIST-Thiruvananthapuram 5. Dr. Nakul Chandra Maiti, CSIR-IICB, Kolkata
7. Number of Faculty attended/participated	40
8. Number of Student attended/participated	80
9. No. of external students/faculty/other participants	35 (Including from the industry)

10. The objectives of the Program/activity/event	This two-day workshop focused on introducing the concepts of vibrational spectroscopy with special emphasis on Raman scattering. It is intended to provide the basic theory behind vibrational spectroscopy and its applications in condensed matter physics, materials science, chemical sciences, and life sciences. An introduction to advanced techniques such as surface-enhanced Raman scattering (SERS), surface-enhanced infrared absorption (SEIRA), and Tip-enhanced Raman spectroscopy (TERS) will be given. It is also proposed to have demonstration lectures on the Raman and FTIR systems.
11. Description of the Program/activity/event	The workshop commenced on 26th August 2024 at 9:30 am with a formal inauguration by the Hon. Vice Chancellor of Goa University. This was followed by the first session with Prof. Shankar Ghosh, who introduced Raman spectroscopy. The succeeding sessions included talks on ultrafast Raman spectroscopy and applications for nanomaterials and 2D materials. On the second day (27th August 2024), the session began with the talk of Dr. K.K. Maiti, who presented applications of SERS for cancer diagnosis and treatment. A talk on Raman of proteins followed this. A demonstration session was organized for the external participants on the Raman system at UMCL. After another talk by Dr. Nakul Maiti, a valedictory session was held, followed by the distribution of certificates.
12. Benefit/Key outcomes of the Program/activity/event	The workshop provided a basic introduction to Raman spectroscopy and its applications in material science, chemical sciences, and life sciences. The participants greatly benefitted from the excellent sessions by the invited resource panel and experts in this domain. The participants also got to interact with these experts and share their research ideas/queries. The demonstration session was particularly useful for the participants. The feedback given by the participants was excellent, and the workshop was considered a successful attempt to introduce Raman spectroscopic techniques to students and faculty researchers of the University and colleges.

13. Enclosures with report	Brochure, Geo-tag photos, Attendance of students/faculty/external participants

Signature:

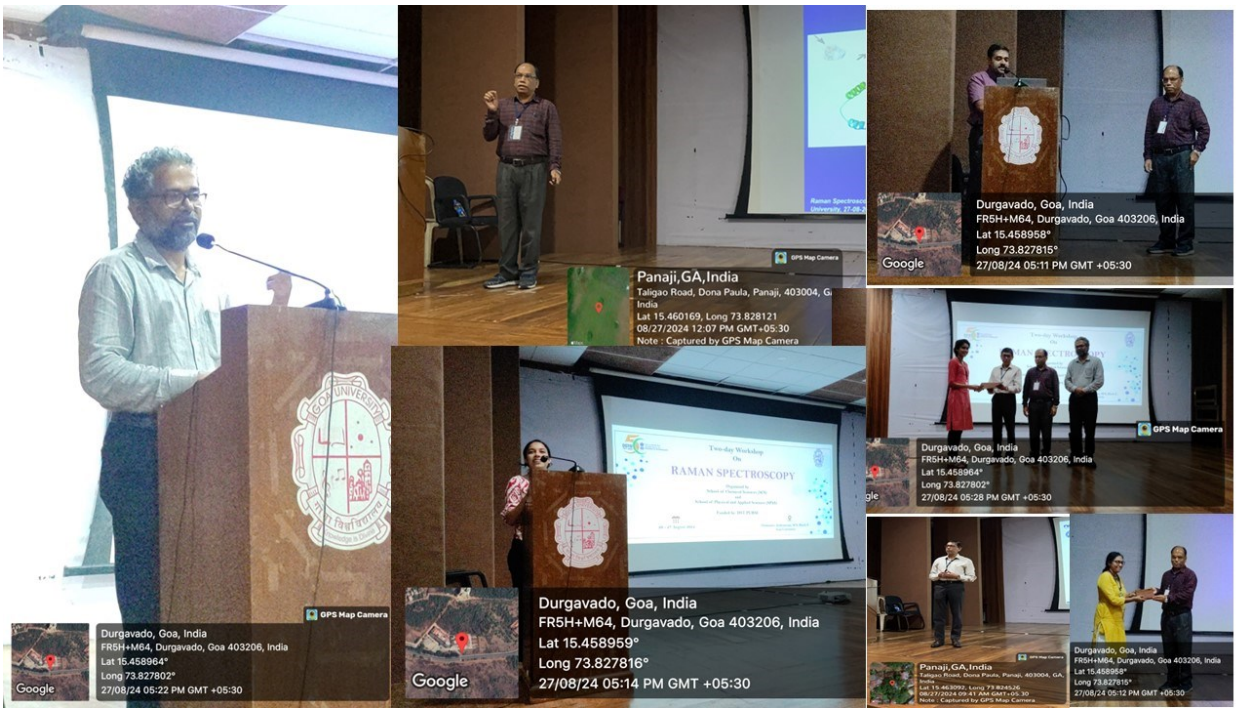
Name of convenor: Dr. Sudhir Cherukulappurath, SPAS / Dr. Rohan Kunkalekar, SCS

PURSE Coordinator

School of Physical and Applied Sciences
Goa University

Seal of the School/Directorate/University

Photographs




Example
Raman Spectroscopy of Graphene (2D)
GPS Map Camera
Panaji,GA,India
Taleigao, Panaji, 403206, GA, India
Lat 15.458866, Long 73.828025
08/26/2024 04:40 PM GMT+05:30
Note : Captured by GPS Map Camera