



**Science Academies' Refresher Course on 'Spectroscopic Techniques: New Facets in Contemporary Fields of Chemical, Material and Pharmaceutical Sciences' at Vignan's Foundation for Science, Technology and Research (VFSTR Deemed to be University), Vadlamudi, Guntur 522 213, Andhra Pradesh**  
**26 May 2021–9 June 2021**

*Sponsored by*  
**Indian Academy of Sciences, Bengaluru**  
**Indian National Science Academy, New Delhi**  
**The National Academy of Sciences, India, Prayagraj**

A refresher course in Spectroscopic Techniques will be organized at Division of Chemistry, Department of Sciences and Humanities, Vignan's Foundation for Science, Technology and Research (VFSTR Deemed to be University), Vadlamudi, Guntur, Andhra Pradesh, for two weeks during 26 May to 9 June 2021. The refresher course in advanced spectroscopic techniques will include the topics: Molecular spectroscopy, MW spectroscopy, IR spectroscopy, Raman spectroscopy, UV-Visible spectroscopy, NMR spectroscopy, X-ray crystallography, ESR spectroscopy, X-ray photoelectron spectroscopy, Scanning electron microscopy, Fluorescence spectroscopy, Circular dichroism spectroscopy, Atomic absorption spectroscopy, Mössbauer spectroscopy, Electrochemical impedance spectroscopy (EIS), Mass spectrometry, ICP-OES/ICP-MS. This course is sponsored by Indian Academy of Sciences, Bengaluru, Indian National Science Academy, New Delhi and The National Academy of Sciences, India, Prayagraj.

The objective of this refresher course is to update and enlighten the basic concepts of spectroscopy keeping in pace with the newly designed courses in chemical, material and pharmaceutical sciences. The Director of the Course is **Professor Dilip Dhavale**, FASc, FNASc, Department of Chemistry, Savitribai Phule Pune University, Pune. E-mail: dilipdhavale56@gmail.com. The Coordinator of the Course is **Prof. Nagaraju Devunuri**, Associate Professor of Chemistry, Department of Sciences and Humanities, VFSTR Deemed to be University, e-mail: naag1977@gmail.com. It may be noted that UGC regulations include Refresher Courses in API scores for career advancement.

**Resource persons: Prof. Dilip D. Dhavale** (SPPU, Pune), **Prof. K. S. M. S. Raghavarao** (IIT Tirupati), **Prof. C. P. Rao** (IIT Tirupati), **Prof. R. Murugavel** (IIT Bombay), **Prof. Naresh Patwari** (IIT Bombay), **Prof. D. B. Ramachary** (University of Hyderabad), **Prof. Chandrashekar Rajdurai** (University of Hyderabad), **Dr Srinivasarao Yaragorla** (University of Hyderabad), **Prof. Ramesh Gardas** (IIT Madras), **Prof. P. Venkatesu** (Delhi University), **Prof. S. Jagannatha Swamy** (Kakatiya University), **Prof. Vaishali Shinde** (SPPU, Pune), **Dr Praveen Kumar** (IACS, Kolkata), **Dr Pooja Devi** (CSIR-CSIO, Chandigarh), **Dr Devesh Sawanth** (Central University of Rajasthan), **Dr Raghu Chitta** (NIT Warangal), **Dr Tirupati Barla** (IISER, Berhampur), **Dr M. Rajeshwarrao** (IIT Dharwad), **Dr Ch. Brahmanandarao** (IGCAR, Kalpakam).

Applications for attending the refresher course are invited from teachers with experience in teaching UG and/or PG courses in Chemistry, Physics and Pharmaceutical Sciences. The organizers may consider selecting a few interested research scholars and M.Sc. students too. Thirty five participants will be accepted (outstation = 25 and local = 10) for the course. Selected participants will be provided with round-trip bus/train (three-tier AC) fare by the shortest route and local hospitality during the course, in addition to course materials.

**Interested applicants must submit their application ONLINE by clicking on the following link**

**<https://web-japps.ias.ac.in:8443/Refreshcourse/VFSTR.jsp>**

A printed copy of the application approved by the Head of the institution should be sent by post to the Course Coordinator, at the address given below. In case of teachers, the form must also be signed and stamped by the Head of the applicant's Institution stating that leave will be sanctioned if the applicant is selected for the Course. A recommendation letter from a teacher is essential for student applicants along with bonafide certificates of the Institute. Scanned copies of the duly signed documents sent by e-mail will also be accepted.

**Address for Communication: Prof. Nagaraju Devunuri**, Course Coordinator, Division of Chemistry, Department of Sciences and Humanities and Pharmaceutical Sciences, Vignan's Foundation for Science, Technology and Research (VFSTR Deemed to be University), Vadlamudi, Guntur 522 213, Andhra Pradesh. E-mail: naag1977@gmail.com, Phone: +91 90307 84939.

Last date for receipt of applications: **5 May 2021**

Selected participants will be informed by: **10 May 2021**