

PATRON

Dr. BHVS NARAYANA MURTHY
Vice Chancellor, DIAT, Pune

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Prof. S Banerjee, Convener
Sr. Prof. P. K. Khanna, Member
Prof. P. S. Kulkarni, Member
Dr. Chetan J. Bhongale, Member

COORDINATION COMMITTEE

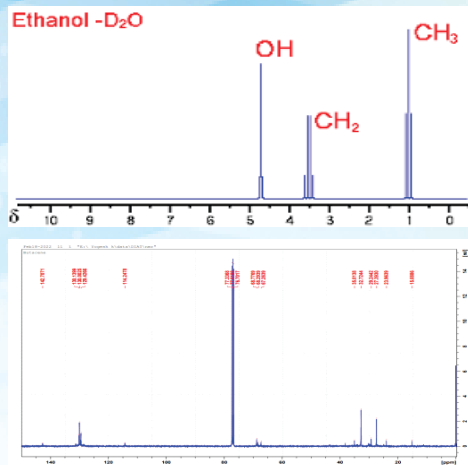
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Mr. Prashant B. Rule, Member
Mr. Mayur R Chhahare, Member
Mr. Nitin V. Patil, Member
Mr. Dinesh S. Yadav, Member

LIST OF SPEAKERS

Dr. Jeetendra Chugh, Asso. Professor, IISER, Pune
Dr. R B Pawar, Sc. 'G', HEMRL, Pune
Mr. Sachin R. Kate, Application Scientist,
BRUKER INDIA SCIENTIFIC Pvt Ltd.

VENUE

Room No 204, Dept. of Applied Chemistry,
DIAT (DU), Pune-25.



CONTACT

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FOR ANY INQUIRY, PLEASE CONTACT

Prof. Shaibal Banerjee, Email: banerjeess@diat.ac.in



One Day Workshop on Principles and Applications of NMR Spectroscopy

on
25th October 2024

Organized by

Department of Applied Chemistry
Defence Institute of Advanced Technology
(Deemed to be University), Girinagar, Pune- 411025

NAAC 'A' GRADE and NIRF RANK - 63

in association with

Bruker India Scientific Pvt Ltd.



INTRODUCTION:

The NMR facility is well-equipped with sophisticated analytical instruments to carry out spectral measurements, structure determination and chemical analysis. In addition to providing high quality spectra / data to the scientific community for their research.

ABOUT DIAT (DU), PUNE: The Defence Institute of Advanced Technology, (DIAT) as it is known today, came into existence as the Institute of Armament Studies in 1952 in the CME campus. In 1967, the Institute was renamed as "Institute of Armament Technology, (IAT)", which moved to its present location at Girinagar, Pune. From relatively narrow scope of Armament Studies alone in Fifties, the role of the Institute was considerably enlarged by the Defence R&D Council in 1964 and further in 1981. On the basis of accreditation by the All-India Council of Technical Education (AICTE), Pune University recognized eight courses for the award of ME degree in 1980. In the year 2000, the Institute acquired the status of a Deemed University. IAT has been renamed as DIAT w.e.f. 1st April 2006

ABOUT THE DEPARTMENT: The department of Applied Chemistry started in 1985 with the aim to impart education and training to DRDO work force in the area of high energy materials and propellants. Over the years Department has moved on to cater to the need of DRDO and civilian students in order to bring the DRDO achievements closer to our society. The Department's aim is to contribute the knowledge through excellence in observational, theoretical and experimental science and to extend quantitative and other appropriate methodologies to address problems in the fields of applied chemical science. In Applied Chemistry, we are endowed with faculties who are dedicated teachers and distinguished researchers that carry out cutting-edge research in all modern areas of Applied Chemistry, as well as in inter-disciplinary areas like nanosciences and nanotechnology, high energy materials, polymer science and technology. From July 2023 academic session, the dept is commencing MSc in Applied Chemistry to cater the need of industry and defence sector. The first PhD degree of DIAT (DU) was awarded to a student from the department of chemistry and so far, department has produced over 30 PhDs and currently 15 scholars are pursuing their PhD degree. In addition, we provide a vibrant and creative learning environment for our M. Tech and Master of Sciences (Applied Chemistry & Food Technology) students and researchers through internal training and expert lecture series. We also participate in R&D with various DRDO labs and industries. Department boasts of highest number of PhDs in DIAT as well as highest number of research publications. In recent times, Department has contributed highest revenue generation through grant-in-projects and Customized Course

Topics List of Speakers

• High Resolution NMR – Theory • Applications of NMR • Two-Dimensional NMR Techniques • Basic Instrumentation of NMR • Interpretation of 1D & 2D NMR spectra

About the Workshop: This workshop will deal with the theory, instrumentation and applications of modern NMR spectroscopic techniques, starting from fundamentals to the most advanced levels. Eminent speakers from IISER, PUNE, HEMRL, PUNE and Bruker India Scientific Pvt Ltd. will deliver lectures on various topics related to NMR. Demonstration of the complete capabilities of the Bruker AVIII 400 instruments including setting up of various experiments, processing and interpretation of the data will also be done.

Who will Benefit:

The Students of Department of Applied Chemistry, Materials Engg. and Applied Physics. Further Scientist & Technical staff from HEMRL and NMRL who are interested in using NMR spectroscopy in their research are also welcome. The maximum number of participants is restricted to thirty (30).

Registration form:

NAME: -----

DESIGNATION: -----

DEPARTMENT:-----

ADDRESS: -----

MOBILE NO:-----

Email id:-----

Time	Event	Dignitary
10-1030	Registration	
1030-1100	Inauguration	Vice Chancellor, DIAT, Deans, HoD, App. Chemistry
1100-1200	Lecture-1	Dr. Jeetendra Chugh, Asso. Professor, IISER, Pune
1200-1300	Lecture-2	Dr. R. B. Pawar, Sc. 'G' HEMRL, Pune
1300-1400	Lunch	-
1400-1500	NMR Instrument Introduction	Sachin Kate, Application Scientist. Bruker India Scientific Pvt. Ltd.
1500-1630	Hands on Training 1D & 2D Expt	Sachin Kate, Application Scientist. Bruker India Scientific Pvt. Ltd.
1630-1715	Multinuclei 19F, 31P, 77Se, 125Te	Sachin Kate, Application Scientist. Bruker India Scientific Pvt. Ltd.
1715-1730	Vote of Thanks	Prof. Shaibal Banerjee, DIAT, Pune.