



**FACULTY DEVELOPMENT CENTRE  
(Human Resource Development Centre, UGC)  
Guru Nanak Dev University, Amritsar**

**Organizing a Scientific Workshop**

**ON**

***“Principles, Chemical and Biological  
Applications of NMR”***

**March 13 – 17, 2018**

**Introduction:** NMR spectroscopy is one of the spectral techniques, which is capable to solve the structure of the simple to complex molecules including proteins, synthetic polymers and other Biomolecules. Keeping in mind the widespread usage of NMR spectroscopy, it is planned to update our scientific fraternity about the latest developments in this spectral techniques by organizing a workshop. The workshop will be useful for the routine users of the NMR as well as the beginners to comprehend the correct implementation of the technique.

**Objectives:**

The workshop will cover the following:

- Conceptual understanding of NMR spectroscopy
- Analysis of NMR spectra
- Chemical applications of NMR
- Relaxation time calculations in drug-receptor interactions
- Heteronuclear NMR interpretation.
- Advanced techniques in high resolution NMR
- Solid state NMR-Biological applications
- 3D-4D NMR for structure elucidation of proteins & nucleic acids
- NMR in metabolomics and protein dynamics

The lecture sessions will be supplemented with the practical demonstration as well as the problem solving sessions. This workshop will be useful for all science disciplines including Chemistry, Biology, Physics, Material science, Pharmaceutical science, Biomedical science, Biophysical science, Forensic science, Geosciences, etc. There is no registration fee for this Workshop. Detailed Programme will be circulated shortly.

(Travelling allowance will be reimbursed only to those teachers whose University/College/Institute comes under the purview of Section 2(f) and 12B of the UGC Act)

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