

# CSIR Integrated Skill India Initiative

## Training Course on Nuclear Magnetic Resonance spectroscopy (NMR)

**CODE: IICB-NMR**

Nuclear Magnetic Resonance Spectroscopy is an important analytical chemistry technique used in quality control and research for determining the content and impurity of a sample (drug, protein and etc.) as well as its molecular structure. The course is specially targeted to candidates having chemical/pharmaceutical background with basic knowledge in organic and analytical chemistry. This expanded analytical science training programme will develop the practical analytical knowledge and techniques for self sustainability. CSIR-IICB will offer a course on NMR Spectroscopy under the skill development program initiated by Govt. of India.

<b>Educational Qualifications</b>	:	B.Sc/ M.Sc. in Chemistry and B. Pharm/M. Pharm
<b>Venue Of the course</b>	:	CSIR-IICB
<b>Age Group</b>	:	18 and above
<b>Medium of Instruction</b>	:	English

### The course will cover-

- ✓ Principles and practical aspects of Nuclear Magnetic Resonance spectroscopy
- ✓ Types of NMR technique
- ✓ Sample preparation
- ✓ Running the NMR experiment (Hands on training)
- ✓ Spectral interpretation
- ✓ Molecular structure determination of known and unknown sample
- ✓ Practical assessment

### Salient Features of the course:

- 50% theory and 50% practical classes
- Tutorials will be provided by eminent scientists of organic and medicinal chemistry background
- Lectures will be provided with multimedia aids
- Hands-on training on NMR
- Professional skill development, case study, evaluation and certification.