

## NMR Spectrometer (500 MHz)

Nuclear magnetic resonance spectroscopy is used to study 1. Molecular conformation in solution II) Quantitative analysis of mixtures containing known compounds III) Determining the content and purity of a sample IV) Through space connectivity (overhauser effect)

### Make and Model:

Bruker (Germany) Avance III HD

### Specification/ Features

- Magnet : Bruker Ascend™ 500
- Probe : Tuneable Multinuclear Probes ( $^1\text{H}$ ,  $^{11}\text{B}$ ,  $^{13}\text{C}$ ,  $^{31}\text{P}$ ,  $^{19}\text{F}$ ,  $^{77}\text{Se}$ ,  $^{125}\text{Te}$ ,  $^{199}\text{Hg}$ )
- Bruker NMR software : Topspin 2.1
- Variable temperature capability (-40 to +60° C)
- Various 2D experiments

### Available mode of use:

- Solid
- Liquid



Whether the facility is open to external users: yes

### Location:

Room no: CL 16, Ground floor

Department: Chemical engineering, IIT Bombay, Powai, Mumbai-400076

Contact details: 022-25764181

Convenor/incharge Name : Prof. S. J. Gharpure (sjgharpure@chem.iitb.ac.in)

Prof. Suvarn Kulkarni (suvarn@chem.iitb.ac.in)