



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)

A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION

AICTE Approved & NAAC Accredited

Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

Nuclear Magnetic Resonance Spectrometer – NMR-300 MHz

A Nuclear Magnetic Resonance Spectrometer has been installed in the Department of Applied Chemistry, Karunya Institute of Technology and sciences. The facility will be available to record NMR spectrum (^1H and ^{13}C only) for the internal as well as external samples.

NMR Instrument

300 MHz – FT- NMR Spectrometer

Make – Bruker

Magnet –Unshielded super conducting magnet

Console – Avance III

Software – Topspin

Probe – Multi nuclear probe for solution studies.

Switchable between high frequency range (^1H nucleus) and broadband frequency (^{13}C nucleus)



Charges (Including GST)

Nuclei	Academic (External) samples	Academic (Internal Samples)	Industrial sample	
			CDCl_3	MeOD-d_4 and DMSO-d_6
Solvents	CDCl_3 , DMSO-d_6 MeOH-d_4	CDCl_3 , DMSO-d_6 MeOH-d_4	CDCl_3	MeOD-d_4 and DMSO-d_6
^1H	413	118	590	708
^{13}C	472	118	590	708
^1H & ^{13}C	767	236	1062	1298

Sample submission: Sample must be submitted either through courier/speed post (address given under staff in charge) or in person along with duly completed requisition form (Link) and payment details.

Sample requirement: Kindly ensure that your sample (20-35 mg for ^1H , 60-70 mg for ^{13}C) is completely soluble in 0.6 mL of required solvent. The expected structure should be neatly given to process the spectrum (In case of confidentiality, it is not required)

Payment: Withdraw a Demand Draft (DD) in favour of **The Registrar, Karunya Institute of Technology and Sciences** payable at **Coimbatore** and send the DD along with the sample. No cash will be accepted even if you come in person.

Staff in-charge Contact details:

Dr. L. Emmanuvel

Assistant Professor

Department of Applied Chemistry

Karunya Institute of Technology and Sciences

E-mail: emmanuvel@karunya.edu

Ph: 9042678370/8072745003



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)

A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION

AICTE Approved & NAAC Accredited

Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

NMR - Sample Submission form

Name & Institute Address		
E-mail ID & Phone Number		
Number of samples		
Sample code	(Separate sheet may be attached for more number of samples with following information)	
Required Analysis	<input type="checkbox"/> ^1H NMR	<input type="checkbox"/> ^{13}C NMR
Solvent	<input type="checkbox"/> CDCl_3 <input type="checkbox"/> DMSO-d_6 <input type="checkbox"/> MeOH-d_4 <input type="checkbox"/> D_2O	
Expected Compound Structure		
Nature of samples/Handling Instruction/Health Hazards		
Name, e-mail id and contact number of guide		
Payment Details	Copy of proof attached <input type="checkbox"/> Yes <input type="checkbox"/> No	

Note:

Provide your sample in sample vial. Check the solubility of the sample before submission

Signature of the Research Scholar/Student

Signature of the HoD/Research Guide with Seal

Office Use only

Sample Received on

Analysis completed on