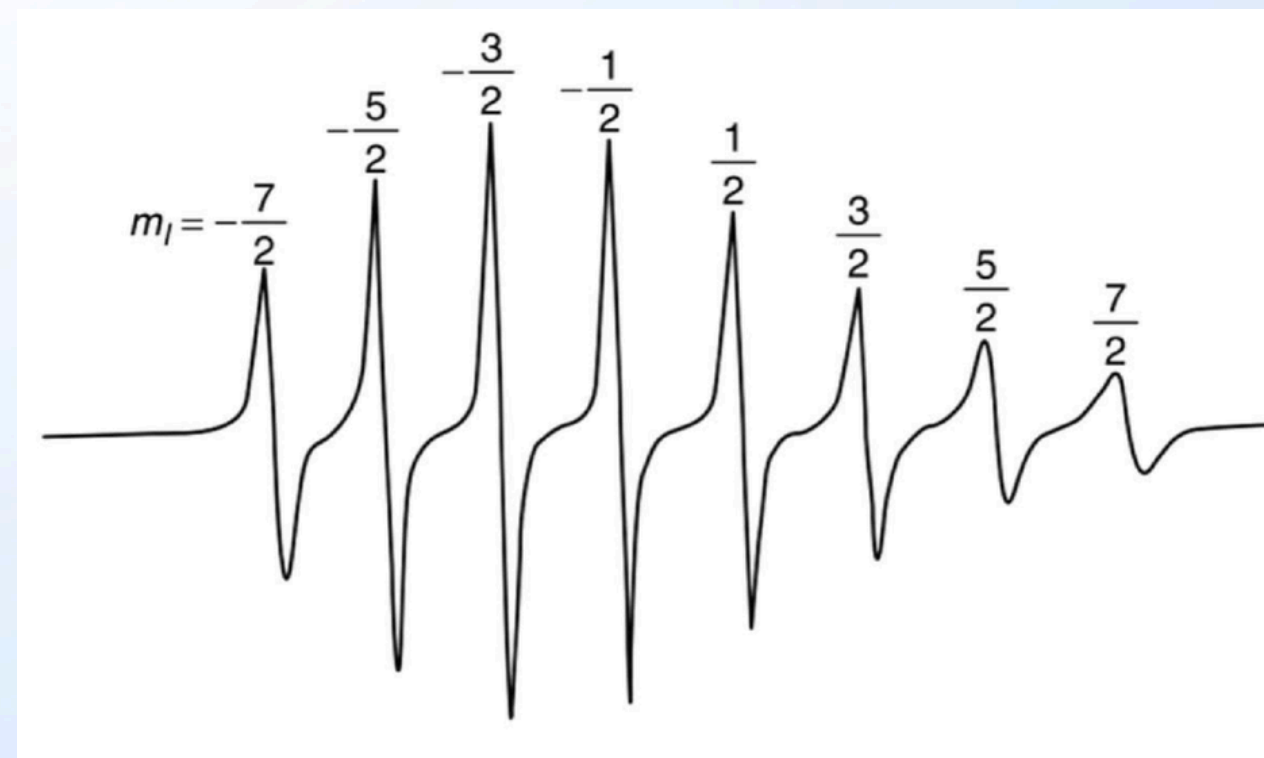


WORKSHOP ON ELECTRON PARAMAGNETIC RESONANCE SPECTROSCOPY AND ITS APPLICATIONS (WEPRSA 25)

*Jointly Organised by
IISER Thiruvananthapuram & Bruker India*



07 February 2025
09:00 AM
CSB Seminar Hall
IISER Thiruvananthapuram



SPEAKERS



Florida State University
USA

Prof. Stephan Hill's research has focused on fundamental studies of quantum phenomena in molecular magnets and correlated electron systems (quantum magnets and superconductors), as well as structure property relationships in a wide variety of polynuclear transition metal complexes. He has an extremely strong track record in terms of instrument development, having assembled the world's highest field/frequency instruments for both continuous-wave and pulsed EPR measurement.



IIT Kanpur, India

Prof. Mazumdar's research is directed towards the study on structural and functional aspects of the active site formed by the metal ion and the surrounding amino acids in iron and copper containing metalloenzymes and metalloproteins. Mazumdar has made significant contributions to unraveling the role of the active site environment on the stability and function of cytochrome P450 enzymes with EPR as a spectroscopic tool.



IISER TVM, India

Dr. Apparao Draksharapu's research has focused on mimicking the reactivity and functions of various metalloenzymes such as superoxide dismutase, Methane monooxygenase, Ribonucleotide Reductase etc., His group has been involved in characterizing several active intermediates that are responsible for their remarkable reactivity using EPR and other spectroscopic methods.

HANDS-ON TRAINING ON ELECTRON PARAMAGNETIC RESONANCE (EPR) SPECTROSCOPY

Objectives:

Students will learn how to acquire EPR spectra, to optimize experimental parameters, and to use the acquisition and processing software.

Topics:

- Introduction to the basic theory of EPR.
- The spectrometer and its acquisition techniques.
- Optimization of EPR measurements.
- Introduction to the EPR software packages.
- Data transfer and analysis.
- Quantitative EPR.

Venue: Central Instrumentation Facility, IISER TVM

Time: 2:30 - 5:30 PM

