

## **Seminar**

# **Advances in Electron Spin Resonance Technology and its Applications**

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In recent years, Electron Spin Resonance (ESR) has become an essential technology to study organic and inorganic materials as well as proteins. This is due ESR's unique ability to study paramagnetic species at various environments and at low concentrations. More importantly, it provides localised interaction that leads to precise information and quantification. This talk will focus on modern methods of ESR and their applications in biomedical and materials research. It will discuss instrumentation technologies (continuous wave and pulse ESR, and 2D ESR), computational methods (data processing and simulations), and latest studies in protein dynamics, catalytic reactions, carbon capturing, and clinical diagnosis.

***Thursday, Jan 30<sup>th</sup> 2025***

***16:00 Hrs (Tea / Coffee 15:45 Hrs)***

***Auditorium, TIFRH***