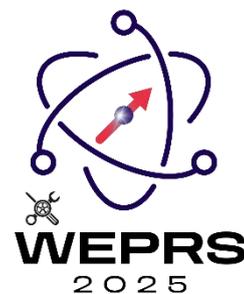




Workshop on Electron Paramagnetic Resonance Spectroscopy (WEPRS 2025)



Programme Schedule Day 1: 03 Feb 2025

Monday (03/02/25)	Speaker	Title	Location
9:15-9:30	Prof. Ruchi Anand (HOD), Prof. R. Murugavel and Prof. Maheswaran Shanmugam	Inauguration and Welcome Remarks	LH 21, 2 nd Floor, VMCC
9:30-10:15	Prof. Eric J. L. McInnes	<ul style="list-style-type: none"> • Basic Principles and Fundamentals of EPR • Isotropic (fluid solution) spectra 	LH 21, 2 nd Floor, VMCC
10:15-11:00	Prof. Stephen Hill	Meaning of hyperfine interaction	LH 21, 2 nd Floor, VMCC
11:00-11:30	Tea Break (Ground Floor, VMCC)		
11:30-11:45	Reach the respective labs/Bruker/JEOL/Bytes centre		
11:45-12:45	Practical session for <i>B1</i>	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Room temperature); X-band CW-EPR) EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for <i>J1</i>	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Room temperature); X-band CW-EPR) EPR Laboratory, SAIF, IIT Bombay
	<i>B2, B3,</i>	EasySpin	Simulation of the Bytes lab, Computer

	<i>J2, J3</i>	simulation training by Profs. Eric, and Stephen along with student TAs	S=1/2 samples	Centre, IIT Bombay
12:45-13:45	Lunch Break (Ground Floor, VMCC)			
13:45-14:00	Reach the respective labs/Bruker/JEOL/Bytes centre			
14:00-15:00	Practical session for <i>B2</i>	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Room temperature ; X-band CW-EPR)	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for <i>J2</i>	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Room temperature ; X-band CW-EPR)	EPR Laboratory, SAIF, IIT Bombay
	<i>B1, B3, J1, J3</i>	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S=1/2 samples	Bytes lab, Computer Centre, IIT Bombay
15:00-15:15	Reach the respective labs/Bruker/JEOL/Bytes centre			
15:15-16:15	Practical session for <i>B3</i>	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Room temperature ; X-band CW-EPR)	EPR Laboratory, Ground Floor, Dept. of Chemistry

	Practical session for <i>J3</i>	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Room temperature ; X-band CW-EPR)	EPR Laboratory, SAIF, IIT Bombay
	<i>B1, B2, J1, J2</i>	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S=1/2 samples	Bytes lab, Computer Centre, IIT Bombay
16:15-17:00	Tea Break (Ground Floor, VMCC)/Reach the second floor, LH 21 VMCC			
17:00-17:45	Session by all the speakers (Profs. Lorenzo, Stephen, Eric, and Dr. Muralidharan)		Round-up of labs	LH 21, 2 nd Floor, VMCC
17:45-18:30	Dr. Tobias Hett (Bruker Application Scientist)		Latest trends in sensitivity enhancement and data simulation (Virtual)	LH 21, 2 nd Floor, VMCC
19:30-onwards	Dinner			

Day 2: 04 Feb 2025

Tuesday (04/02/25)	Speaker	Title	Location
9:00-10:00	Prof. Lorenzo Sorace	What happens when we immobilize a sample?	LH 21, 2 nd Floor, VMCC
10:00-11:00	Prof. Eric J. L. McInnes	Introducing to Electronic structure	LH 21, 2 nd Floor, VMCC
11:00-11:30	Group Photo (Second Floor, VMCC)/Tea Break (Ground Floor, VMCC)		

11:30-11:40	Reach the respective labs/Bruker/JEOL/Bytes centre			
11:40-12:40	Practical session for B1	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for J1	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, SAIF, IIT Bombay
	B2, B3, J2, J3	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S=1/2 frozen samples	Bytes lab, Computer Centre, IIT Bombay
12:40-13:40	Lunch Break (Ground Floor, VMCC)			
13:40-13:50	Reach the respective labs/Bruker/JEOL/Bytes centre			
13:50-14:50	Practical session for B2	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for J2	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, SAIF, IIT Bombay

	<i>B1, B3, J1, J3</i>	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S=1/2 frozen samples	Bytes lab, Computer Centre, IIT Bombay
14:50-15:00	Reach the respective labs/Bruker/JEOL/Bytes centre			
15:00-16:00	Practical session for <i>B3</i>	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for <i>J3</i>	Hands on Training by Prof. Lorenzo Sorace TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S=1/2 systems (Frozen samples ; X-band CW-EPR)	EPR Laboratory, SAIF, IIT Bombay
	<i>B1, B2, J1, J2</i>	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S=1/2 frozen samples	Bytes lab, Computer Centre, IIT Bombay
16:00-16:30	Tea Break (Ground Floor, VMCC)/Reach the LH 21, 2nd Floor, VMCC			
16:30-17:15	Session by all the speakers (Profs. Lorenzo, Stephen, Eric, Debamalya and Dr. Muralidharan)		Round-up of labs	LH 21, 2 nd Floor, VMCC
17:15-18:00	Prof. Stephen Hill		More than one unpaired electron	LH 21, 2 nd Floor, VMCC
18:00-18:45	Prof. Lorenzo Sorace		More than one unpaired electron (continued)	LH 21, 2 nd Floor, VMCC
18:45-onwards	Dinner			

Day 3: 05 Feb 2025

Wednesday (05/02/25)	Speaker		Title	Location
9:00-10:00	Practical session for B1	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S>1/2 systems; X-band CW-EPR	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for J1	Hands on Training by Prof. Debamalya TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S>1/2 systems; X-band CW-EPR	EPR Laboratory, SAIF, IIT Bombay
	B2, B3, J2, J3	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S>1/2 samples	Bytes lab, Computer Centre, IIT Bombay
10:00-10:10	Reach the respective labs/Bruker/JEOL/Bytes centre			
10:10-11:10	Practical session for B2	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S>1/2 systems; X-band CW-EPR	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for J2	Hands on Training by Prof. Debamalya TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S>1/2 systems; X-band CW-EPR	EPR Laboratory, SAIF, IIT Bombay
	B1, B3, J1, J3	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S>1/2 samples	Bytes lab, Computer Centre, IIT Bombay

11:10-11:45	Group Photo (Second Floor, VMCC)/Tea Break (Ground Floor, VMCC)			
11:45-11:55	Reach the respective labs/Bruker/JEOL/Bytes centre			
11:55 –12:55	Practical session for B3	Hands on Training by Dr. Muralidharan Shanmugam TA: Dr. Sahoo, Mr. Narendra and Miss Vasudha	S>1/2 systems; X-band CW-EPR	EPR Laboratory, Ground Floor, Dept. of Chemistry
	Practical session for J3	Hands on Training by Prof. Debamalya TA: Mr. Nilesh, Mr. Nitin and Miss Vijaya	S>1/2 systems; X-band CW-EPR	EPR Laboratory, SAIF, IIT Bombay
	B1, B2, J1, J2	EasySpin simulation training by Prof. Eric, and Prof. Stephen along with student TAs	Simulation of the S>1/2 samples	Bytes lab, Computer Centre, IIT Bombay
12:55-13:55	Lunch Break (Ground Floor, VMCC)			
13:55-14:05	Reach the respective labs/Bruker/JEOL/Bytes centre			
14:05-14:50	Session by all the speakers (Prof. Lorenzo, Prof. Stephen, Prof. Eric, Prof. Debamalya and Dr. Muralidharan)		Round-up of labs	LH 21, 2 nd Floor, VMCC
14:50-15:35	Prof. Debamalya Banerjee		Introduction to Pulsed EPR and its application	LH 21, 2 nd Floor, VMCC
15:35-16:20	Prof. Stephen Hill		Introduction to Pulsed EPR and its application	LH 21, 2 nd Floor, VMCC
16:20-16:40	Tea break (Ground Floor, VMCC)			
16:40-17:40	Dr. Muralidharan Shanmugam and Mr. Adam Brookfield		Pulsed EPR demonstration (Virtual)	LH 21, 2 nd Floor, VMCC
17:40-18:00	Prof. Maheswaran Shanmugam		Concluding	LH 21, 2 nd Floor,

		remarks	VMCC
19:30- onwards	Dinner		

†The timings for "Lectures" and "Labs" are flexible, and the Workshop combines theory, measurement, and analysis into a unified framework, reflecting the attendee's usage and practice of EPR Spectroscopy techniques.

Note: The configuration of the spectrometers will be:

- Bruker EPR, Department of Chemistry, IIT Bombay: cw X-band (Measurements at 298,110 K)
- JEOL EPR, SAIF, IIT Bombay: cw X-band (Measurements at 298 and 77 K)