

# AMPERE NMR School

June 16<sup>th</sup> - June 22<sup>nd</sup> 2024, Zakopane, Poland

# PROGRAMME

SUNDAY, June 16	MONDAY, June 17		TUESDAY, June 18	WEDNESDAY, June 19	THURSDAY, June 20	FRIDAY, June 21	SATURDAY, June 22
	8:00-9:00	Breakfast		Breakfast	Breakfast	Breakfast	Breakfast
Afternoon Arrivals & Accommodation		CHAIR: DANUTA KRUK		CHAIR: MATTHIAS ERNST	CHAIR: DAVID LURIE	CHAIR: MICHAŁ BIELEJEWSKI	CHAIR: JACEK JENCZYK
	9:00-9:45	<b>Matthias Ernst</b> <i>Dynamics in solid-state NMR under MAS: What are the relevant time scales?</i>		<b>Ville-Veikko Telkki</b> <i>Ultrafast relaxation and diffusion measurements</i>	<b>Esteban Anoardo</b> <i>Low-field MRI: Dealing with inhomogenous and unstable magnetic fields</i>	<b>Daniel Topgaard</b> <i>Translational motion and magnetic field gradients</i>	<b>Giacomo Parigi</b> <i>NMR relaxometry of diamagnetic and paramagnetic proteins</i>
	9:45-10:00	<b>YRF: Michał Fajt</b> <i>Siliciclastic Rocks Pore Size Distribution Characterization and its advanced application in permeability evaluation by joint NMR and Mercury Porosimetry Analysis</i>		<b>YRF: Angel M. Chiramel Tony</b> <i>The Bottom Up Approach: Frequency Dependent Relaxation Rates from MD Simulations</i>	<b>YRF: Weronika Mazur-Rosmus</b> <i>Comparison of the Eddy Current Distortion Correction and B-Matrix Spatial Distribution Methods for Systematic Bias Removal in Diffusion Tensor Imaging</i>	<b>YRF: Dominika Tubacka</b> <i>Combined X-Ray and NMR Analysis for a Better Understanding of Enhanced Conductivity of LiBH<sub>4</sub>-LiBr Solid Electrolytes</i>	<b>YRF: Karol Kołodziejski</b> <i>Dynamics of hydrated inulin - the perspective of confectionery industry</i>
	10:00-10:45	<b>Bernhard Blümich</b> <i>Mobile NMR Relaxometry for Nondestructive Materials Testing</i>		<b>Marta Dudek</b> <i>Modelling disorder in molecular crystals with NMR crystallography</i>	<b>Diana Bernin</b> <i>Capturing coherent and non-coherent motions in chemical engineering applications with magnetic resonance</i>	<b>Janez Stepišnik</b> <i>Why biopolymers fold in glycerol-water mixtures: NMR study of diffusion</i>	<b>Danuta Kruk</b> <i>Modelling NMR relaxation data – from protein solutions to tissues</i>
	10:45-11:15	Coffee Break		Coffee Break	Coffee Break	Coffee Break	Coffee Break
		CHAIR: TOMASZ ZALEWSKI		CHAIR: BERNHARD BLÜMICH	CHAIR: DANIEL TOPGAARD	CHAIR: GIACOMO PARIGI	CHAIR: DANUTA KRUK
	11:15-12:00	<b>David Lurie</b> <i>Basics of MRI &amp; research in field-cycling imaging</i>		<b>Wiktor Koźmiński</b> <i>High dimensionality and high resolution NMR experiments for biomolecules</i>	<b>Gerd Buntkowsky</b> <i>Solid-state NMR and Dynamic Nuclear Polarization for the Characterization of Functional Materials</i>	<b>Pedro J. Sebastião</b> <i>Proton NMR Relaxometry Study of Molecular Dynamics in the N, NTB and Smectic Phases of the Liquid Crystal Dimer DTC5C7</i>	<b>Leonid Grunin</b> <i>TD-NMR Relaxometry of Colloidal Systems</i>
	12:00-12:15	<b>Sponsor Presentation</b> <i>JEOL: Felice D'Alia, Ahmed Dhifaoui</i>		<b>YRF: Samira Emadi</b> <i>Non-Invasive Imaging to Understand How Enzyme-Induced Calcite Precipitation Affects Flow and Transport in Porous Media</i>	<b>YRF: Feryal Guerroudj</b> <i>Investigating Synergistic Effects Between Cellulose and Lignin for Advanced Forest Carbon Fibers: Mass Transport Characterization with MR</i>	<b>YRF: Kahinga Kamau</b> <i>Myoglobin in H<sub>2</sub>O and D<sub>2</sub>O: Spin Relaxation Model Conundrum</i>	<b>YRF: Farman Ullah</b> <i>NMR Relaxation Features for Biomaterials - Comparison of FFC-NMR and TD-NMR Results</i>
	12:15-13:00	<b>Lionel Broche</b> <i>Basic hardware of MRI and specific hardware for FCI</i>		<b>Anna Zawadzka-Kazimierczuk</b> <i>Cross-correlated relaxation experiments for structural studies of intrinsically disordered proteins</i>	<b>Ralf Ludwig</b> <i>Reliable description of rotational and translational motion in ionic liquids by means of field cycling NMR relaxometry and molecular dynamics simulations</i>	<b>Danuta Kruk</b> <i>How to calculate relaxation rates?</i>	<b>YRF: Luísa Souza Almeida</b> <i>Study of the Relaxation Profiles of Antiviral Drugs Polymorphs</i>
	13:00-14:00	Lunch		Lunch	Lunch	Lunch	12:45 Lunch
	14:00-15:00	Free Time		Free Time	Excursion / Free time	Free Time	Free Time
	15:00-15:45	<b>Iain Day</b> <i>Getting the most out of your NMR data</i>		<b>Magdalena Wencka</b> <i>Innovative Researcher: End-user approach for Scientific Project Designing part 1</i>		<b>Magdalena Wencka</b> <i>Innovative Researcher: End-user approach for Scientific Project Designing part 2</i>	Free Time
	15:45-16:00	Coffee Break		Coffee Break		Coffee Break	Coffee Break
	16:00-17:00	<b>Pedro J. Sebastião</b> <i>NMR relaxometry group 1</i>	<b>Tomasz Zalewski</b> <i>Basics of MRI group 2</i>	Coffee Break		<b>Jacek Jencyk</b> <i>Chemical Shift Anisotropy</i>	<b>Michał Bielejewski</b> <i>NMR diffusion</i>
17:00-18:00	<b>Pedro J. Sebastião</b> <i>NMR relaxometry group 2</i>	<b>Tomasz Zalewski</b> <i>Basics of MRI group 1</i>	<b>17:00 - 19:00</b> <b>Poster session</b>			<b>17:15-17:45 - Closing ceremony</b>	
18:00-19:00							
19:45	Opening dinner	19:00	Dinner	19:30 - walk to... Dinner at the Regional Restaurant	Dinner	Dinner	Dinner

Departure