

EUROMAR

30 June - 4 July  Palacio Euskalduna

info@euromar2024.org

BILBAO
2024

The 20th European Magnetic Resonance Congress

EUROMAR

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2024

The 20th European Magnetic Resonance Congress

30 June - 4 July  Palacio Euskalduna

SCIENTIFIC PROGRAM

www.euromar2024.org

SUNDAY, 30TH JUNE

10:00 – 12:00

ROOM 0C

JEOL BREAKFAST SYMPOSIUM

12:00 – 16:00

ROOM 0D

BRUKER LUNCH SYMPOSIUM

14:00 – 19:00

REGISTRATION

16:00 – 19:00

ROOM 0B

OPENING & PRIZE SESSION

16:00 -16:10 Welcome from the City Major

16:10 -16:20 Welcome from AMPERE

16:20 -16:30 Welcome from EUROMAR

16:30 -16:40 Welcome from Local Organizing and
Scientific Committees

16:40 -17:05 Raymond Andrew Prize Lecture

17:05 -17:30 Varian Young Investigator Award

17:30 -18:30 Richard Ernst Lectures

19:00

EXHIBITION AREA

WELCOME RECEPTION



MONDAY, 1ST JULY

08:45 - 19:00

REGISTRATION

08:45 - 10:15
ROOM 0B

PLENARY 1 & 2

Chair: Oscar Millet, CIC bioGUNE

PL001: Solution NMR Provides the Missing Link to Understand Function in Large Complexes

Lewis Kay, University of Toronto.

PL002: Heme proteins at the interface - EPR as a tool to investigate hybrids of proteins and metal oxides for biosensing

Sabine van Doorslaer, Universiteit Antwerpen.

10:15 - 10:45
EXHIBITION
AREA

COFFEE BREAK

10:45 - 12:45
ROOM 0B

PARALLEL SESSION: NMR OF BIOLOGICAL SYSTEMS 1

Chair: Art Palmer, Columbia University

INV001: Enzymatic regulation by a conformational equilibrium shift within a protein condensate

Julie Forman-Kay, Sickkids Hospital, Toronto.

PT-001: A well-balanced combination of order and disorder: The transient structural properties of the Rho GTPase nucleotide exchange inhibitor RhoGDI

Rasmus Linser, TU Dortmund

10:45 - 12:45
ROOM 0B

PT-002: Multivalent Dynamic Colocalization of Avian Influenza Polymerase and Nucleoprotein by Intrinsically Disordered ANP32A Reveals the Molecular Basis of Human Adaptation

Aldo Camacho Zarco, CNRS, Grenoble

PT-003: A dynamic NMR view on the complex interactions of xylanase BcX and its substrate
Mahin Saberi, Leiden University

INV002: Dynamics of IDPs investigated using high-resolution relaxometry

Pavel Kadeřávek, Masaryk University

10:45 - 12:45
ROOM 0E

PARALLEL SESSION: MATERIALS

Chair: Luis Mafra, CICECO

INV003: Molecular Recognition in Organic Mechanochemistry: Insights from Solid-State NMR Spectroscopy

Thomas Wiegand, Max Planck Institute For Chemical Energy Conversion/ RWTH Aachen University

PT-004: Multinuclear MAS NMR Reveals Cation Disorder and Oxide Ion Diffusion Mechanism in Complex Oxides

Frédéric Blanc, University Of Liverpool

PT-005: How ultra-high field NMR spectroscopy can contribute to the design of advanced functional materials?

Olivier Lafon, Université de Lille

FLASH: Proton Migration and Halide Ordering in Lead Halide Perovskites.

Michael A. Hope, University Of Warwick

FLASH: Unveiling Surface Secrets: Atomic-Scale Exploration of Lecithin-Capped Lead Halide Perovskite Nanocrystals Using Solid-State and DNP NMR Spectroscopy.

Diganta Sarkar, University of Alberta, Edmonton.

FLASH: Uncovering the Dynamics of CO₂ Adsorption in Covalent Organic Frameworks Using Solid-State NMR and molecular dynamics.

Mariana Sardo, University of Aveiro

INV004: NMR Crystallography on Pharmaceutical Cocrystals

Mattias Edén, Stockholm University

10:45 - 12:45
ROOM 0D

PARALLEL SESSION: MRI 1

Chair: Stefen Gloeggler, Max Plank Institute for Multidisciplinary Sciences

INV005: Diffusion MRI analog of NMR relaxation dispersion and isotropic-anisotropic correlation

Daniel Topgaard, Lund University

PT-006: MRI4All: A Week-Long Hackathon for the Development of an Open-Source Ultra-Low-Field MRI System

Chengtong Zhang, New York University

PT-007: Unbeatable super-resolution of voxel-based MR spectroscopy of zebrafish brain achieved at 28.2 T

Rico Singer, Universiteit Leiden

PT-008: Optical Widefield Nuclear Magnetic Resonance Microscopy

Nick von Grafenstein, TUM, Munich

INV006: Advances in MR Metabolic Imaging - Towards Clinical Translation

Jeanine Prompers, UTC, Utrecht.

12:45-13:45
EXHIBITION
AREA

LUNCH AND SPONSORED SYMPOSIUMS

13:45 - 15:45
POSTER AREA

POSTER SESSION

15:45 - 17:45
ROOM 0B

PARALLEL SESSION: NMR OF BIOSOLIDS 1

Chair: Joanna Long, UFHealth

INV007: Nanodiscs for NMR based Structural Studies of Membrane Proteins

Ayyalusamy Ramamoorthy, Florida State University

PT-009: Unveiling Rare Phosphonate Modifications in Velvet Worm Slime through NMR and DNP

Isabelle Marcotte, Université du Québec à Montréal

PT-010: Nonsecular Resonances revealed by Fast-field-cycling NMR in CaF₂

Michael Jurkutat, Karlsruhe Institute Of Technology

PT-011: Structure and kinetics of E22G Aβ₄₀ fibrils illuminate how Aβ₄₀ rather than Aβ₄₂ can trigger familial Alzheimer's

Yoshitaka Ishii, Tokyo Institute of Technology

INV008: An Efficient means for heteronuclear (1H-14N) magnetization transfer enabling measurement of 14N spin-lattice relaxation constant at fast magic angle spinning

Yusuke Nishiyama. JEOL

15:45 - 17:45
ROOM 0E

PARALLEL SESSION: COMPUTATION

Chair: Anna Zawadzka-Kazimierczuk, University of Warsaw

INV009: Optimal control and visualization of quantum dynamics in NMR and beyond

Steffen Glaser, TUM, Munich

PT-012: Beyond traditional NMR data processing with AI
Amir Jahangiri, University Of Gothenburg

PT-013: Exploring Water in Diphenylalanine Nanotubes: A Molecular Dynamics Perspective

Márcio Soares, Ciceco - Aveiro Institute Of Materials

PT-014: Toward 4D protein structures: solution ensembles from a NOESY-based R-factor

Murray Coles, Max Planck Institute for Biology, Tübingen

INV010: Characterizing Methyl Dynamics in HET-s(218-289) Fibrils with NMR and MD

Albert Smith-Penzel, Universität Leipzig

15:45 - 17:45
ROOM 0D

PARALLEL SESSION: EPR 1

Chair: Marina Benatti, Max Plank Institute for
Multidisciplinary Sciences

**INV011: The two faces of calmodulin measured by
double electron electron resonance (DEER) EPR: the
protein to study, and the model system to utilize**
Janet Lovett, University Of St Andrews

**PT-015: Exploring and extending the resolution limits of
19F ENDOR for distance measurements in proteins using
high-spin Gd(III) labels**
Alexey Bogdanov, Weizmann Institute of Science, Rehovot

**PT-016: Improved excitation of electron-nuclear
coherence with pulsed dynamic nuclear polarization
sequences**
Nino Wili, Aarhus University

**PT-017: X-band single chip integrated pulsed electron
spin resonance microsystem**
Reza Farsi, EPFL, Lausanne

**INV012: Water as Modulator of Electron Transfer and
Activity in Biological Systems**
Müge Kasanmascheff, TU Dortmund

17:45 - 18:15
EXHIBITION
AREA

COFFEE BREAK

18:15 - 19:00
ROOM 0B

PLENARY 3

Chair: Christian Bonhomme, Sorbonne University

PL003: Applications of Magnetic Resonance to Porous Materials: From Mesoporous Catalysts to Packed-Bed Reactors

Lynn Gladden, University of Cambridge.

19:00
ITSASMUSEUM

BRUKER NIGHT



TUESDAY, 2ND JULY

08:45 - 19:00

REGISTRATION

08:45 - 10:15
ROOM 0B

PLENARY 4&5

Chair: Anne Lesage, ENS, Lyon

PL004: New insight into food, digestion and physiology using NMR technology

Gary Frost, Imperial College, London.

PL005: Solid-State NMR Analysis of Fungal Cell Wall: The Carbohydrate Armor Resisting Antifungals

Tuo Wang, Michigan State University.

10:15 - 10:45
EXHIBITION
AREA

COFFEE BREAK

10:45 - 12:45
ROOM 0B

PARALLEL SESSION: NMR METHODOLOGY 1

Chair: Flemming Hansen, UCL

INV013: Co-solute paramagnetic relaxation (sPRE) to study dynamic molecular interactions

Frans Mulder, Johannes Kepler Universität, Linz

PT-018: Optimal control pulses for improving filtered NOESY experiments

David Joseph, Max Planck Institute for Multidisciplinary Sciences, Göttingen

PT-019: High-Intensity Light NMR: Unraveling Details in Photo-Induced Reactions

Mathias Wiech, Graz University of Technology

FLASH: Fully Automated Characterization of Protein-Ligand Binding by Microfluidic 2D NMR.

Joern Martin Werner, University of Southampton

FLASH: Accelerating the Structural and Thermodynamics Characterisation of Low Affinity Protein-Ligand Interactions - A Computationally-Assisted STD NMR Toolkit .

Juan C. Muñoz-Garcia, Instituto de Investigaciones Químicas (CSIC), Sevilla

FLASH: Full droplet characterization of RNA/protein condensates by diffusion NMR.

Mihajlo Novakovic, ETH, Zurich

FLASH: Nuclear Magnetic Resonance Spectroscopy of Chiral Molecules in an Electric Field.

Piotr Garbacz, Univeristy Of Warsaw

INV014: Playing RASGADO (RAPid-Scan with Gapped excitation with Dual-mode Operation), savoring DONUT (DOuble NUTation), and having fun on a VACATION (VARIABLE COIL ANGLE TEST INFORMING ORIENTATION IN NQR).

Kazuyuki Takeda, Kyoto University

10:45 - 12:45
ROOM 0E

PARALLEL SESSION: HYPERPOLARIZATION 1

Chair: Thomas Prisner, Goethe University Frankfurt

INV15: Endogenous Dynamic Nuclear Polarization Solid State NMR Spectroscopy for Investigating Buried

Interfaces

Michal Leskes, Weizmann Institute of Sciences, Rehovot

PT-020: Time Domain Magic Angle Spinning Dynamic Nuclear Polarization Combined with Electron Decoupling

Marthe Millen, ETH, Zürich

PT-021: Exchange Mediated Overhauser Dynamic Nuclear Polarization

Yu Rao, EPFL, Lausanne

PT-022: Solution-State NMR signal enhancement of small molecules via intermolecular cross relaxation from PHIP polarized source molecules

Anna Parker, Nvision Imaging Technologies, Ulm

INV016: HP-pyruvate by means of h-[PHIP] for metabolic investigations in cells and in-vivo.

Francesca Reineri, University of Torino, Torino

10:45 - 12:45
ROOM 0D

PARALLEL SESSION: HARDWARE

Chair: Michael Tayler, ICFO

INV017: MRI of Plant Roots in the Greenhouse

Hilary Fabich, ABQMR, Inc., Albuquerque

PT-023: Optical Chopper for Longitudinal-Detected (LOD) EPR

Kong Ooi Tan, Ecole Normale Supérieure, Paris

PT-024: Beta-NMR measurements on short-lived radioactive isotopes at CERN - for applications in nuclear physics, chemistry, and materials science

Amy Sparks, Conseil Européen pour la Recherche Nucléaire (CERN), Geneva

PT-025: Magnetic Susceptibility Modeling of Magic-Angle Spinning Modules for Part Per Billion Scale Field Homogeneity

Jasmin SchöNZart, ETH Zurich and Resonance Explorations Technologies AG

INV018: Multinuclear Multidimensional NMR 19F-photo-CIDNP in a microfluidic chip with an untuned microcoil

M. Victoria Gómez-Almagro, University of Castilla-la Mancha (UCLM), Ciudad Real

12:45-13:45
EXHIBITION
AREA

LUNCH AND SPONSORED SYMPOSIUMS

13:45 - 15:45
POSTER AREA

POSTER SESSION

15:45 - 17:45

TUTORIALS

Tutorial #1: NMR based metabolomics.

Tony Reinsperger and Claire Cannet, Bruker

Tutorial #2: NMR of intrinsically disordered proteins.

Miquel Pons, Univeristat de Barcelona.

17:45 - 18:15
EXHIBITION
AREA

COFFEE BREAK

18:15 - 19:00
ROOM 0B

PLENARY 6

Chair: Frans Mulder, Johannes Kepler Universität, Linz

PL006: The spinhub project: towards an NMR 'Krios'
Andrew Baldwin, University of Oxford.

WEDNESDAY, 3RD JULY

08:45 - 19:00 REGISTRATION

08:45 - 10:15
ROOM 0B

PLENARY 7&8

Chair: Jesús Jiménez-Barbero, CIC bioGUNE

PL007: Structural Characterization of Inorganic Materials by Sensitivity-Enhanced Solid-State NMR Spectroscopy

Aaron Rossini, Iowa State University.

PL008: Protein stability in living cells & under crowded conditions in vitro

Gary Pielak, University of North Carolina at Chapel Hill

10:15 - 10:45
EXHIBITION
AREA

COFFEE BREAK

10:45 - 12:45
ROOM 0B

PARALLEL SESSION: NMR OF BIOLOGICAL SYSTEMS 2

Chair: José Martins, Ghent University

INV019: Cracking Nature's Recipes to Design Lipid-Targeting Antibiotics

Markus Weingarth, Utrecht University

PT-026: Combined novel NMR-, AlphaFold- and MD-based approach reveals a key role of interdomain motions for understanding allostery in MALT1

Tatiana Agback, Swedish University Of Agricultural Sciences, Uppsala



PT-027: A Deterministic Analysis on the Effect of Cell Number, Membrane Transporters and Kinetic Rates on Hyperpolarised NMR

David Gomez-Cabeza, IBEC, Barcelona

FLASH: NMR-guided design of antiviral small molecules targeting the SARS-CoV-2 pseudoknot.

Jenifer Adam, Goethe University, Frankfurt

FLASH: ¹³C-methyl methionine provides insight into the natural and drug-mediated regulation of the 60 kDa full length myristoylated Src.

Alejandro Fernández-Martínez, University of Barcelona.

FLASH: Hydraulic Activation of AsLOV2 Revealed by EPR and NMR Studies.

Shiny Maity, University of California Santa Barbara

FLASH: Structural Insights into the recognition of cancer-associated glycoprotein CD24 by Siglec-10 receptor.

Pablo Valverde, CIC bioGUNE, Bilbao.

INV020: Selective targeting of an intrinsically disordered domain by a drug-like small molecule

Xavier Salvatella, IRB, Barcelona

10:45 - 12:45
ROOM 0E

PARALLEL SESSION: NMR OF SMALL MOLECULES 1

Chair: Jesús Angulo, IIQ-CSIC

INV021: ¹³C and ¹⁹F probes to monitor glycan - protein interactions.

Ana Arda, CIC bioGUNE, Bilbao.

PT-028: Insights into the self-assembled crystalline phases of fampridine hydrochloride by multinuclear NMR in liquid and solid-state

Luca Fusaro, University Of Namur

PT-029: Multi-way analysis of diffusion NMR data for the monitoring of a click chemistry reaction

Yuliia Horbenko, CNRS, Nantes Université

PT-030: 6JFH coupling in the conformational analysis of fluorinated drugs

Cassia Chiari, University of Campinas

INV022: Characterising Weak Interactions in Dilute Solutions

Mate Erderly, Uppsala University

10:45 - 12:45
ROOM 0D

PARALLEL SESSION: EPR 2

Chair: John Morton, UCL

INV023: Detecting single erbium ion ESR by microwave photon counting

Emmanuel Flurin, CEA, Saclay

PT-167: Structural and mechanistic insights into single-atom catalysts through EPR.

Mikhail Agrachev, ETH, Zurich.

PT-032: Revealing the Nanostructure of Ionic Liquids by Combined Pulsed EPR and Paramagnetic Relaxation Enhancement NMR Spectroscopy

Ciarán Rogers, Imperial College London

PT-033: Generation and transfer of long-lived electron spin polarization in peptide bridged porphyrin-radical conjugates

Marilena Di Valentin, University Of Padova

INV024: Interplay of electron spin and photophysics in luminescent organic radicals

Sebastian Gorgon, University of Cambridge



12:45-13:45
EXHIBITION
AREA

LUNCH AND SPONSORED SYMPOSIUMS

13:45 - 15:45
POSTER AREA

POSTER SESSION

15:45 - 17:45
ROOM 0B

PARALLEL SESSION: NMR METHODOLOGY 2

Chair: Bernhard Brutscher, IBS

INV025: DNP-enhanced NMR at 20-50 K with sustainable He spinning

Gael de Paepe, Université de Grenoble

PT-034: Studying micro to millisecond protein dynamics using simple amide ^{15}N CEST experiments supplemented with major-state R_2 and visible peak-position constraints

Nihar Khandave, Tata Institute of Fundamental Research, Hyderabad

PT-035: Looking at complex dynamical processes in RNA using site specific insertion of ^{19}F probes

Laura Troussicot, CNRS, Lyon

FLASH: Optimal control pulses for improving filtered NOESY experiments.

David Joseph, Max Planck for Multidisciplinary Sciences, Goettingen.

FLASH: Applications of real-time band-selective pure shift in 1H - ^{15}N HSQC experiments for ^{15}N -labelled proteins.

Jorge Moreira, University of Manchester.

FLASH: Determining the Physico-Chemical Composition of Biomolecular Condensates from Spatially-Resolved NMR.

Christian Pantoja, Max Planck for Multidisciplinary Sciences, Goettingen.

FLASH: Backbone assignment of an isotopically diluted ^{13}C , ^{15}N -labelled fibrillar protein using the CPMAS cryoprobe in solid-state NMR.

Paula Polonio, IQFR-CSIC, Madrid.

INV026: Advances in Solution NMR Spectroscopy of Paramagnetic Metal Complexes

Markus Enders, Heidelberg University

15:45 - 17:45
ROOM 0E

PARALLEL SESSION: BENCHTOP NMR

Chair: Patrick Giraudeau, Université de Nantes

INV027: Parahydrogen-enhanced benchtop NMR spectroscopy for analytical applications

Meghan Halse, University of York.

PT-036: Boosting 1H and ^{13}C NMR signals by orders of magnitude using DNP on a bench

Charlotte Bocquelet, CRMN, Lyon

PT-037: Ultralow-field NMR for direct nondestructive observation of electrolyte composition and degradation through battery housing

Anne Fabricant, Helmholtz Institute, Mainz

PT-038: Phase separations and preferential adsorption of binary fluids in mesoporous materials - a relaxation and diffusion study

Siegfried Stapf, Technische Universität Ilmenau

PT-104: 7 Tesla Magic Angle Spinning Pulsed EPR.

Ilya Kaminker, Tel-Aviv University.

15:45 - 17:45
ROOM 0D

PARALLEL SESSION: NMR IN DRUG DISCOVERY

Chair: Robert Konrat, Universität Wien

INV028: Insights into the gelation mechanism of hydrogels for tissue engineering and drug delivery through an NMR potpourri

Ann Christin Pöppler, University of Würzburg

PT-039: On-cell Saturation Transfer Difference NMR of ion channels to provide NMR validated 3D molecular models of two antagonists as bound to P2X7 receptor

Serena Monaco, University Of East Anglia

PT-040: Ultrafast Fragment Screening by Fluorine NMR using Photoinduced Hyperpolarization

Gabriela Stadler, ETH, Zürich

FLASH: High Resolution 2D HSQC Measures Intact Glycan Structure and Composition of Therapeutic Monoclonal Antibodies at ¹³C Natural Abundance.

Kang Chen, US Food And Drug Administration, Maryland

FLASH: Design of pharmacological chaperones targeting FAH for the treatment of Tyrosinemia type 1.

Riccardo Scarin, Atlas Molecular Pharma S.L., Bilbao

FLASH: In vitro and In-cell recognition of Quadruplex-duplex hybrids: conformation, folding, and recognition by drug-like ligand molecule.

Anirban Gosh, Masaryk University, Brno

INV29: The Molecular Chaperone SlyD: From Basic Research to Marketed Pharmaceutical Product

Jochen Balbach, Martin Luther University Halle-Wittenberg

17:45 - 18:15
EXHIBITION
AREA

COFFEE BREAK

18:15 - 19:00
ROOM 0B

PLENARY 9

Chair: Matthias Ernst, ETH

PL009: Ultrafast Laplace NMR for sustainability

Ville-Veikko Telkki, University of Oulu

20:30
GUGGENHEIM
MUSEUM

GALA COCKTAIL

THURSDAY, 4TH JULY

08:45 - 19:00

REGISTRATION

08:45 - 10:15
ROOM 0B

PLENARY 10&11

Chair: Miquel Pons, Universitat de Barcelona

PL010: NMR in Post-Structural Biology

Robert Konrat, Universität Wien, Vienna

PL011: NMR in Photo- and Organocatalysis - Pushing the Limits

Ruth Gschwind, Universität Regensburg

10:15 - 10:45
EXHIBITION AREA

COFFEE BREAK

10:45 - 12:45
ROOM 0B

PARALLEL SESSION: IN CELL NMR

Chair: Gary Pielak, University of North Carolina

INV030: Multi-target ligand binding assay in human cells by real-time in-cell ^{19}F NMR

Enrico Luchinat, CERM, Florence.

PT-042: Monitoring Drug-Protein Interactions in the Bacterial Periplasm by Solution Nuclear Magnetic Resonance Spectroscopy

Jean-Pierre Simorre, IBS-CNRS, Grenoble

PT-043: 19F Dynamic Nuclear Polarization: A Powerful Tool for Protein Structural Biology in Mammalian Cells

Kumar Tekwani Movellan, University Of Delaware

PT-044: Characterizing protein structure and interactions in living human cells synchronized in defined physiological states using NMR spectroscopy

Lukas Trantirek, Central European Institute of Technology

INV031: Towards single-cell NMR spectroscopy with quantum sensors in diamond

Dominik Bucher, TUM, Munich

10:45 - 12:45
ROOM 0E

PARALLEL SESSION: HYPERPOLARIZATION 2

Chair: Geoffrey Bodenhausen, ENS

INV032: Moving Beyond 13C-Pyruvate Imaging with Parahydrogen Enhanced Contrast Agents

Stefan Gloeggler, Max Planck Institute for Multidisciplinary Sciences, Goettingen

PT-045: One- and two-dimensional liquid-state nuclear magnetic resonance enhanced by Overhauser effect dynamic nuclear polarization

Luming Yang, Max Planck Institute for Multidisciplinary Sciences, Göttingen

PT-046: High dynamic nuclear polarization of 13C spins using P1 clusters in diamonds under magic angle spinning from 35 K to room temperature at 14 T

Quentin Stern, Northwestern University, Illinois

FLASH: Unravelling Hyperpolarization Pathways in Strongly Coupled Bisnitroxides: Implications for MAS DNP NMR.

Satyaki Chatterjee, University Of Iceland

FLASH: Long-Lived Coherences in the Direct Dimension: Hyperpolarized Persistent Oscillations.

Aude Sadet, Universität Wien, Vienna

FLASH: Maximising relayed ^1H hyperpolarization transfer by slow-fast MAS.

Saumya Badoni, EPFL, Lausanne

FLASH: A Comprehensive Process for Hyperpolarized $^1\text{-}^{13}\text{C}$ Pyruvate using PHIP-SAH.

Stephan Knecht, NVision Imaging Technologies, Ulm

INV033: The crucial requirements for enabling the assessment of cellular metabolism in vivo with hyperpolarized ^{13}C MR

Arnaud Comment, Cancer Research UK, Cambridge

10:45 - 12:45
ROOM 0D

PARALLEL SESSION: NMR OF SMALL MOLECULES 2

Chair: Ignacio alfonso, IQAC-CSIC

INV034: Carbohydrates as keywords in the molecular dialogue: an NMR perspective

Alba Silipo, University of Naples Federico II, Naples

PT-047: The Many Faces of Rhodium NMR: from the Chemistry of Catalysts, to the Physics of Nuclear Singlet States and Molecular Parity Violation

Mohamed Sabba, University Of Southampton

PT-048: Isotope Shifts, Geometric Double-Quantum Excitation, and Singlet NMR

Urvashi Heramun, University Of Southampton

PT-049: Application of a novel triphenylphosphine-bearing alignment medium to elucidate the structures of pharmaceutically relevant organic compounds

Jan Rettig, Technical University Of Darmstadt

INV035: Lead Generation without an X-Ray Crystal Structure: An NMR Method to Probe Protein-Ligand Complexes

Julien Orts, Universität Wien, Vienna

12:45-13:45
EXHIBITION AREA

LUNCH AND SPONSORED SYMPOSIUMS

13:45 - 15:45
ROOM 0B

PARALLEL SESSION: NMR OF BIOSOLIDS 2

Chair: Douglas Laurents, IQFR-CSIC

INV036: Alternative structure of teixobactin-lipid II complex

Jozéf Lewandoski, University of Warwick

PT-050: Uncovering the distribution of motion in POPC membranes by temperature dependent detector analysis

Kai Zumpfe, Leipzig University

PT-051: Investigating the localization of the disordered C-terminal Domain of the Hepatitis B Virus Capsid using Paramagnetic solid-state NMR

Lauriane Lecoq, MMSB / CNRS

PT-052: A Purely Experimental Approach for the Prediction of NMR Shifts in Paramagnetic Inorganic Solids

Daniel Jardon-Alvarez, Weizmann Institute Of Science, Rehovot

INV037: Seeing double: the persistent dimer-of-dimers structure of drug resistant influenza A M2

Loren Andreas, Max Plank Goettingen.

13:45 - 15:45
ROOM 0E

PARALLEL SESSION: METABOLOMICS

Chair: Claudio Luchinat, CERM

INV038: Is NMR ready for medical applications?

Ulrich Guenther, University of Lübeck.

PT-053: NMR assay for a rapid detection of Pyrazinamide resistance in Mycobacterium tuberculosis from patients Sputum Samples and absolute Metabolite Quantification by Pure Shift NMR

Juan Lopez, NIH, Bethesda

PT-054: A Versatile Microfluidic Platform for in situ Metabolomics of in vitro Models

Sylwia Barker, Karlsruhe Institute Of Technology

FLASH: Innovative Solutions for Pediatric Tuberculosis Diagnosis: Exploring Benchtop NMR Metabolic Fingerprinting.

Pilar Alonso-Moreno, Complutense University of Madrid

FLASH: Quantitative NMR of blood and cerebrospinal fluid elucidates cognitive and sex-specific alterations of metabolites and lipoproteins in Alzheimer's disease patients.

Georgy Berezhnoy, University of Tübingen

FLASH: Exploring the Chrysochromulina rotalis Metabolic Landscape Under Various Indoor and Outdoor Photobioreactor Conditions.

Ana Isabel Tristán Hernández, Universidad de Almería

FLASH: Gut in tube - continuous measurement of metabolic crosstalk between gut microbiota and colonocytes by NMR imaging.

Trey Todor Koev, University Of East Anglia

INV039: From biological exploration to clinical translation: Lipoproteins in Inflammation

Julien Wist, Murdoch University, Perth.

13:45 - 15:45
ROOM 0D

PARALLEL SESSION: MRI 2

Chair: Melanie Britton, University of Birmingham

INV040: Innovative Nanoparticle-based Contrast Agents for Theranostic MRI

Jesús Ruiz-Cabello, Ikerbasque Research Professor
CIC biomaGUNE, UCM, and Ciberes

PT-055: Boosting Resolution and Sensitivity for Operando NMR and MRI Studies

Igor Koptug, International Tomography Center, SB RAS, Novosibirsk

PT-056: Accelerated screening of protein-ligand interactions via parallel T2-weighted ¹⁹F-MRI

Dilara Faderl, Karlsruhe Institute Of Technology

PT-057: Turbulent flow in 3D-printed triply periodic minimal surface porous media: Cross-validation between imaging and simulations

Daniel Clarke, Victoria University of Wellington

INV041: Can radioactive waste escape? Novel use of deuterium μ -MRI to track fluid migration through barrier materials

Galina Pavlovskaya, SPMIC, University of Nottingham

15:45 - 16:15
EXHIBITION AREA

COFFEE BREAK

16:15 - 19:00
ROOM 0B

CLOSING CEREMONY AND PRIZES

AMPERE Chair Closing remarks, Anja Bockmann
EUROMAR BoT Chair Closing remarks, Anne Lesage
EUROMAR 2025, Ville-Veikko Telkki
EUROMAR 2024 LOC Closing Remarks

PLENARY 12

Chair: Ayyalusamy Ramamoorthy, Florida State University

PL 12: EPR methods to unravel nucleic acid dynamics and structure

Thomas Prisner, Frankfurt University