

Presentations - Late Breaking Abstract (as of August 18)

1. Solution NMR: New Methods

- (P2-2-LB13) **Parallel NOAH Supersequences for Structure Elucidation of Oligosaccharides and Other Complex Organic Molecules**

Ēriks Kupče, Jonathan R. J. Yong, Göran Widmalm, Tim D. W. Claridge

4. Solid-State NMR: New Methods

- (P2-3-LB19) **0.2 MHz MAS**

Ago Samoson

* Core time is not 18:30-19:30 but 19:30-20:30.

6. Solid-State NMR: Materials Science

- (P2-4-LB4) **Phase Composition of Phosphorus-Enriched Nickel Phosphide Coatings via ³¹P Solid-state NMR**

Ilya V. Yakovlev, Sergey S. Perevoznikov, Ludmila S. Tsybulskaya, Olga B. Lapina

- (P2-4-LB19) **Study of Phase Composition of Phosphorus-Enriched Nickel Phosphide Coatings by ³¹P Solid-state NMR**

Ilya V. Yakovlev, Sergey S. Perevoznikov, Ludmila S. Tsybulskaya, Olga B. Lapina

8. DNP/Hyperpolarization

- (P2-5-LB1) **Singlet-Triplet Transitions Driven by Modulated Low-Field Allows Hyperpolarization**

Laurynas Dagys, Christian Bengs, Malcolm H. Levitt

3. Solution NMR: Metabolomics

- (P2-7-LB19) **In vitro spatially and temporally resolved NMR metabolomics of living 3D cell models**

Robert Knitsch, Mohammad AlWash, Hannes Raschke, Jörg Lambert, Roland Hergenröder

9. ESR: New Methods

- (P2-7-LB20) **Anatomy of a dipolar EPR signal**

Luis Fábregas-Ibáñez, Gunnar Jeschke, Stefan Stoll

11. ESR: Biological Applications

- (P3-6-LB17) **Electron Transfer on Tyrosine Yz in Plant Photosystem II Detected by High Frequency Modulation**
Tasaki Sumi, Hiroyuki Mino
- (P3-6-LB18) **High-precision measurement of trigger factor domain replacement by NMR and EPR**
 Dan Cheng, Xing Zhang, Yin Yang, Xun-Cheng Su
- (P3-6-LB19) **Quantification of protein binding effects on spin-labeled SOMAMers EPR lineshapes**
Shutian Lu, Sheela Waugh, Cate Fowler, Brian Ream, Stefan Stoll, Jason Cleveland, Larry Gold
- (P3-6-LB20) **Comparative Evaluation of Cysteine Reactive Spin Labels for Protein Structural Studies**
Maxx Tessmer, Elizabeth Canarie, Stefan Stoll

1. Solution NMR: New Methods

- (P3-7-LB1) **Metabolic flux analysis using distortion-free ^{13}C isotopomer NMR analysis**
Jin Wook Cha, Xing Jin, Sihyang Jo, Yong Jin An, Sunghyoun Park

2. Solution NMR: Biological Applications

- (P3-7-LB2) **The Interactions between the Antimicrobial Peptide P-113 and Living *Candida albicans* by NMR Spectroscopy**
Jya-Wei Cheng, Kuang-Ting Cheng, Chih-Lung Wu, Ya-Han Chih, Kuang-Li Peng, Su-Ya Hsu, Hui-Yuan Yu

5. Solid-State NMR: Biological Applications

- (P3-7-LB3) **NMR Structural Studies and mechanism of antimicrobial peptides, LPein analogs**
Minseon Kim, Yongae Kim
- (P3-7-LB4) **NMR Structural study of ion channel forming amyloid protein**
Minseon Kim, Yongae Kim
- (P3-7-LB5) **Carbohydrate-Aromatic Interface and Molecular Architecture of Lignocellulose**
Wancheng Zhao, Alex Kirui, Fabien Deligey, Frederic Mentink-Vigier, Tuo Wang
- (P3-7-LB6) **Remodeling of the Fungal Cell Wall Structure by Antifungal Drug**
Malitha C. Dickwella Widanage, Frederic Mentink-Vigier, Jean-Paul Latgé, Ping Wang, Tuo Wang
- (P3-7-LB7) **Reveal the Complex Structure of Fungal Cell Walls Using Solid-State NMR, Functional Genomics, and Principal Component Analysis**
Liyanage D. Fernando, Arnab Chakroborty, Malitha C Dickwella Widanage, Andrew S. Lipton, Nancy Washton, Jean-Paul Latgé, Liqun Zhang, Tuo Wang
- (P3-7-LB8) **^{13}C Natural Abundance DNP and Solid-State NMR of Plant Biomaterials**
Fabien Deligey, Wancheng Zhao, Frederic Mentink-Vigier, Tuo Wang

- (P3-7-LB9) **Magnetic Resonance Imaging -based radiomics signature for preoperative prediction of Ki67 expression and outcome in bladder cancer**
Zongtai Zheng, Xudong Yao

6. Solid-State NMR: Materials Science

- (P3-7-LB10) **Dynamics of Small Molecules in Metal-Organic Frameworks (MOFs) via Solid-State NMR**
Haiyan Mao, Farhana Gul-E-Noor, Jun Xu, Yining Huang, Jeffrey A. Reimer

7. In-cell/In vivo NMR: Life Science & Medicine

- (P3-7-LB11) **Site-specific Delivery of Lanthanide Ions into Live Cells for Paramagnetic Resonance Study**
Jia-Liang Chen, Yin Yang, Xun-Cheng Su

8. DNP/Hyperpolarization

- (P3-7-LB12) **Advances in Sensitivity of NMR based Metabolomics through Hyperpolarization**
Hiromu Koyama, Victoria Placentra, Natalya Degtyareva, Paul Doetsch, Geoffrey Mueller, Thomas Theis
- (P3-7-LB13) **Quantifying A Central Spin's Influence On Hyperpolarized Bath Relaxation Dynamics**
William Beatrez, Otto Janes, Arjun Pillai, Ashok Ajoy
- (P3-7-LB14) **Temperature Cycling Enables Efficient ^{13}C SABRE-SHEATH Hyperpolarization and Imaging of $[1-^{13}\text{C}]$ Pyruvate**
Patrick TomHon, Mustapha Abdulmojeed, Isaiah Adelabu, Shiraz Nantogma, Mohammad Shah Hafez Kabir, Isaiah Adelabu, Thomas Theis

9. ESR: New Methods

- (P3-7-LB15) **Phase effects in DEER spectroscopy under high spin polarization**
Sarah R. Sweger, Vasyil Denysenkov, Lutz Maibaum, Thomas Prisner, Stefan Stoll
- (P3-7-LB16) **A Complete Bayesian Inference Approach for Analyzing DEER Spectroscopy Data**
Stephan Pribitzer, Stefan Stoll
- (P3-7-LB17) **Proton-Driven Electron Spin Decoherence In Partially Deuterated Matrices**
Samuel Jahn, Lizzy Canarie, Stefan Stoll
- (P3-7-LB18) **Proton Exchange in a Semiquinone Radical Cation Studied by X-Band 2D ELDOR**
Boris Dzikovski, Ralph Weber

14. MR Imaging: Life Science & Medicine

- (P3-7-LB19) **Whole brain functional MRI study of mice olfaction: from perception to behaviors**
Mitsuhiro Takeda, Yumiko Tsubakihara, Sosuke Yoshinaga, Hiroaki Terasawa