

40th Danish NMR meeting

January 21th-22th 2019

*Musholm Konference Center
Musholmsvej 100, 4220 Korsør*

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January 21st-22nd 2019

PROGRAMME

International invited speakers underlined

Monday January 21st

11:00 – 12:00 JEOL USER'S MEETING (Optional)

12:00 – 13:00 Lunch

13:00 – 15:00 Session 1 (Chair: Kresten Lindorff-Larsen)

13:00 Welcome by the Organizers

13:10 "Solid-state NMR combined with cryo-EM to determine the structure of a large enzyme", Paul Schanda, Institute Biologic Structurale, Grenoble

13:55 "Digital filters use in automating diffusion NMR", Andrew Benie, Novo Nordisk A/S

14:20 "Computational assignment of solid state NMR studies of paramagnetic metal-organic complexes", Anders Bruhn Arndal Andersen, Syddansk Universitet

14:35 "19F-amino acids as an alternative to fluorophore labelling in studies of cell-penetrating peptides", Malene Vinther Christensen, University of Copenhagen

14:50 "Identifying Unknown Structures using Predicted 13C NMR Spectra and Known Structure Resources", Dimitris Argyropoulos, ACD/Labs

15:00 – 15:30 Coffee

15:30 – 17:00 Session 2 (Chair: Frans Mulder)

15:00 "Conformational exchange dynamics revealing allosteric signaling pathways and ligand binding mechanisms", Mikael Akke, Lund University, Sweden

15:45 "Exploring NMR spectroscopy in chemical biology", Charlotte Held Godtfredsen,

16:10 "Structural and functional background for cardiac arrhythmia caused by the F141L mutation in Calmodulin", Christian Holt, Aalborg University

16:25 Sponsor presentation, Air Liquide

16:35 "Celebrating the 40th Danish NMR Meeting", Klaus Bock

17:10- 19:00 Science and Cocktails – PhD/MSc presentations and posters

19:00 Dinner and Dance

Tuesday January 22nd

9:00 – 10:30 Session 3 (Chair: Ulla Gro Nielsen)

9:00 "NMR at the Magic Angle: Atomic-level Detail in Intact Cells and Assemblies.", Lynette Cegelski, Department of Biochemistry, Stanford, USA

9:45 "False positives in hydrogen exchange protection revealed by co-solute PRE: The C-terminus of alpha-synuclein is not shielded from solvent", Rupashree Dass, Aarhus University

10:10 Ullrich Koch, Magritek A/S

10:20 "News from Bruker – an overview", Jens Christian Madsen, Bruker Nordic AB

10:30 – 11:00 Coffee

- 11:00 – 12:00 Session 4 (Chair: Charlotte Held Gotfredsen)
- 11:00 **"_Clinical Translation of Hyperpolarized MR – recent advances in dissolution Dynamic Nuclear Polarization", Jan Henrik Ardenkjær-Larsen, DTU, Denmark**
 - 11:45 "SISPI Analysis", Anders Bodholt Nielsen, Aarhus University
- 12:00 – 13:00 Lunch
- 13:00 – 14:30 Session 5 (Chair: Reinhard Wimmer)
- 13:00 **"New theory and methods for spin relaxation in macromolecules", Art Palmer, Columbia University, USA**
 - 13:45 "Human domesticated retroviral GAG proteins", Kaare Teilum, University of Copenhagen
 - 14:10 "Quantification of Silicone oil and its degradation products by ¹H-NMR spectroscopy", Joan Malmstrøm, Novo Nordisk A/S
 - 14:25 "Assignment of ²⁷Al resonances in zeolites - keep it simple?", Jørgen Skibsted, Aarhus University
 - 14:40 "Speeding up structural elucidation with NMR", Adolfo Botana, JEOL
 - 14:50 Goodbye, the Organizers.
- 15:00 – 16:00 BRUKER USER'S MEETING (Optional)

Posters

Aneta Lenard, <i>Miss</i>	University of Copenhagen	The structure and dynamics of the growth hormone receptor extracellular domain - what are we missing?
Chengxin Li, <i>PhD student</i>	DTU Chemistry	Structural elucidation of capsular polysaccharides from <i>Streptococcus pneumoniae</i> serotype 16F and 16A
Gaston Courtade, <i>Dr.</i>	NTNU Norwegian University of Science and Technology	Structural and functional insights into the mode of action of a modular lytic polysaccharide monooxygenase
Idd Christensen, <i>Msc</i>	NTNU	Characterization of minimal LPMO by NMR
Joan Malmstrøm, <i>Principal Scientist</i>	Novo Nordisk A/S	Analytical support for chemical process development at Novo Nordisk A/S
Katja Desiree Pedersen, <i>PhD student</i>	Technical University of Denmark	Exploring functionalized graphene as alignment media in NMR
Katrine Bugge, <i>Postdoc</i>	University of Copenhagen	TBD
Kim Søholm Halskov, <i>Research Scientist</i>	Novo Nordisk A/S	Analytical support for chemical process development at Novo Nordisk A/S
Laura Lundehøj, <i>PhD Student</i>	University of Southern Denmark	Investigation of the mechanism for the phosphate uptake by MgAl LDHs
Laura Schmidt Arenkiel	BioNMR, Aarhus University	³¹ P SUPER NMR for determination of lipid dynamics in vesicles
Luiz Ferreira Neves Junior, <i>PhD student</i>	DTU Chemistry	Evaluation of increased spectral dispersion in NMR using nanoparticles
Malene Sønnichsen, <i>PhD student</i>	Aarhus University	Novel Assay To Study Drug Binding To Human Serum Albumin
Marta Børve, <i>Master student</i>	NTNU (Norwegian University of science and technology)	Characterization of mannuronan C-5 epimerase reaction kinetics using NMR
Mikkel Madsen, <i>Ph.d student</i>	Technical University of Denmark	Investigation of the binding between Beta-lactoglobulin and designed alginate oligosaccharides
Sarah Wittmann, <i>Master student</i>	University of Southern Denmark, FKF	Multinuclear NMR investigations of waterglasses
Sheng-Yu Yang, <i>PhD student</i>	Aarhus University, Department of Chemistry	The role of aluminum in calcium-silicate-hydrate phases: A multinuclear solid-state NMR investigation
Shuai Nie, <i>Post Doc</i>	Aarhus University/Department of Chemistry	Mg substitution in CaO-Al ₂ O ₃ -SiO ₂ glasses studied by ²⁵ Mg, ²⁷ Al and ²⁹ Si MAS NMR
Thanussan Tharumathas, <i>MSc Student</i>	Aarhus University	Proton exchange rate determination of unfolded T4 lysozyme with NMR
Theodorus Felix Darpieto Abik, <i>Master student</i>	Laboratory for Biomolecular NMR Spectroscopy, Aarhus	NMR Lipidomics for Milk Lipids
Thomas Biedenbänder, <i>M.Sc. student</i>	Interdisciplinary Nanoscience Center Aarhus	Preparation of isotope labeled Initiator-tRNA(fMet) from E. coli for NMR analysis
Yulian Gavrilov, <i>Postdoc</i>	University of Copenhagen	An NMR Confirmation for Increased Folded State Entropy by Loop Truncation