

Subject: 52nd NMR-DG meeting October 20 and deadline registration/posters (October 12)

Dear NMR colleagues,

It is a pleasure to invite you to the 52nd scientific symposium of the NMR Discussion Group, to be held in Geleen on Friday October 20, 2017.

This year's meeting will be hosted by Ard Kolkman and Monique Ensink of DSM. We will benefit from the unique setting of DSM Geleen, a region rich in different NMR groups. This allowed us to compile an international program with speakers from German, Belgian and Dutch groups, such as Alina Adams (RWTH, Aachen), Manuel Etzkorn (University Dusseldorf), Dimitris Sakellariou (KU Leuven) and Ard Kolkman (DSM, Geleen). The final program will go online soon on our website <http://www.nmrdg.nl>.

We are grateful to our sponsors for their financial contribution. Hence there will be no registration fees for the symposium, but registration is required. We have restricted this mailing to our Dutch e-mail addressable members and principle investigators of the regional German and Belgian NMR groups. Please make people at your institute also aware of this NMR-DG meeting. Persons interested in the symposium who are not members of the NMR-DG are welcome to attend, free of charge, provided they register for attending the symposium.

Registration

To make the necessary preparations for the lunch and the poster session, the registration deadline has been set at Thursday October 12, 2017. Registration is possible via our website <http://www.nmrdg.nl>.

Poster session

Please send us full details on the poster to be presented (Title, Authors, Name of the presenter and Affiliation) not later than Thursday October 12 to nmrdgnl@gmail.com.

There will be the possibility to give a pitch presentation of your poster before the poster session. To make use of this opportunity, you should submit one (!) PowerPoint slide along with your poster submission. Depending on the number of contributions, you will be allowed 30-60 seconds for your pitch. The NMR-DG will award the best poster presentation with a prize.

Location and accommodation: please check our website <http://www.nmrdg.nl>.

We look forward to welcome you at the 52nd NMR-DG meeting and we hope that this symposium will be as successful as many of the preceding ones.

Board Dutch NMR-DG

John van Duynhoven (Unilever), Ernst van Eck (RU), Pieter Magusin (Cambridge University, UK), Jeanine Prompers (TU/e & UMCU) and Rolf Boelens (UU)

Program 52nd NMR-DG meeting

Friday, October 20 2017

Hosts: Ard Kolkman and Monique Ensink (DSM, Geleen)

Location: DSM, Chemelot Gate 2 (Campus), Urmonderbaan 22, 6167 RD Geleen

Route description: <https://chemelot.nl/en/contact/directions-and-location>, or as [printable pdf](#)

Upon arrival please obtain your visitor badge at reception of Chemelot Gate 2. At gate 2, you will be directed to the new building "Center Court". There are parking places available in the basement. The NMR-DG will be hosted in conference room 'Artur', 2nd floor.

All participants NEED TO SHOW their ID-card (passport, driving license or ID-card) for entering the DSM Chemelot campus!

- 09.30 Reception with coffee
- 10.00 Opening and Welcome: Genevieve Klok, Department Manager DMSC (DSM Material Science Center)
- 10.05 Introduction host: Ard Kolkman (DSM & Enabling Technologies)
- 10.15 Ard Kolkman (DSM & Enabling Technologies) Liquid and solid stat NMR at DSM to chemically and morphologically characterize materials
- 10.45 Dimitris Sakellariou (KU Leuven) Compact Magnetic Resonance: Frontiers and Challenges
- 11.15 Wouter Fransen (RU) Distinguishing satellite and central transitions in solid state quadrupolar spectra
- 11.35 Geerten Vuister (University of Leicester) Advanced and integrated data analysis using the CcpNmr Analysis program suite
- 11.55 Poster pitches
- 12.10-13.30 Poster session and lunch buffet, CCPN demonstration

- 13.30 Manuel Etzkorn (Julich Forschungszentrum) Protein-membrane interactions as modulators in hormone signaling and protein aggregation
- 14.00 Alina Adams (RWTH Aachen) New Insights into the Aging of Technical Polymers from Low- and High-Field NMR
- 14.30 Julia Krug (WUR) (Sub)cellular resolution at 22T? - Potential of microcoils at ultra-high field strength
- 14.50 Coffee break
- 15.20 Fatemeh Azadi-Chegeni (LU) Structure and dynamics an instrinsic multi-pigment protein complex in thylakoid lipid membranes investigated by solid-state NMR
- 15.40 Gorter Prize lecture: Nan Eshuis (RU)
- 16.10-16.20 Poster prize distribution and Closure

- 16.20-17.30 Drinks

List of posters, 52nd NMR-DG Meeting, Friday October 20, 2017, DSM Geleen

1. Dieuwertje Augustijn, Niels van Tol, Bert J. van der Zaal, H.J. de Groot, A. Alia (Leiden Institute of Chemistry, Leiden University, and Institute of Medical Physics and Biophysics, University of Leipzig) Using HR-MAS NMR-metabolomics to gain insight into *Arabidopsis thaliana* mutants with increased rosette surface area phenotype
2. Dimitris Argyropoulos, Sergey Golotvin, Rostislav Pol, Joe DiMartino, Arvin Moser (ACD/Labs, Toronto) Comparison of Public Chemical Structure Databases for Structure Dereplication and Elucidation.
3. H. Van As, S. van Kesteren, F.J. Vergeldt (Laboratory of Biophysics, Wageningen University and Research) Localized propagator measurements of metabolites by STEAM-PFG.
4. Henk Van As (Laboratory of Biophysics, Wageningen University and Research) PFG-MRI of flow, diffusion and exchange in complex porous bio-systems.
5. Tatiana Nikolaeva, Frank Vergeldt, Paul Venema, Henk Van As, John van Duynhoven (Laboratory of Biophysics, Wageningen University and Research) Constructing local flow curves of complex yield stress fluids based on Rheo-MRI velocity profiles
6. Anton Duchowny & Prof. Bernhard Blümich (RWTH Aachen University) Solvent ingress into technical elastomers
7. T. Überrück, O. Neudert, J. Granwehr, S. Stapf, B. Blümich, S. Han (Institute for Technical and Macromolecular Chemistry, RWTH Aachen University) Characterizing heterogeneous water populations by Overhauser DNP-enhanced relaxometry and diffusometry
8. Robin Legner, Tim Koza and Martin Jaeger (Niederrhein University of Applied Sciences, Department of Chemistry and ILOC) Using low-field ¹H NMR @ 45 MHz and 80 MHz to monitor chemical reactions in microreactors
9. M. Ensink, J. Aarts, L. Bleijlevens, D. Janssen, H. Linssen, K. de Vries, A. Kolkman (DSM Material Science Center, Geleen) Chemical composition determination of materials by liquid NMR
10. Tim Rietkerk, Annemiek Rijkens, Joke Putseys, Violet Borneman, Adriana C. de Souza (DSM Biotechnology Center, R&D Department, Analytics) Time Domain NMR in Food Applications Bread and Yoghurt
11. Frank J. Wensink, E.S. (Merijn) Blaakmeer, Ernst R.H. van Eck and Arno P.M. Kentgens (Radboud University, Solid-State NMR department) ³⁵Cl & ^{47,49}Ti NMR on Ziegler-Natta model systems
12. Carlo H.F. Vossen, Ole J. Brauckmann, Arno P.M. Kentgens (Radboud University, Institute for Molecules and Materials (IMM), Department of Solid State NMR) Solid-state NMR of Pigment-Surfactant interactions
13. F.H.M. van Zelst, S.G.J. van Meerten, J. Romanuka, P.J.M. van Bentum, A.P.M. Kentgens (Radboud University, Institute for molecules and materials), Department of solid-state NMR) Hyphenation of supercritical fluid chromatography and NMR
14. Cecilia Pinto, Deni Mance, Mark Daniels, Markus Weingarth, Klaartje Houben and Marc Baldus (NMR Spectroscopy, Bijvoet Center for Biomolecular Research, Utrecht University) Probing the structure of the 200 kDa b-barrel assembly machinery complex by solid-state NMR
15. Ulric le Paige, Shengqi Xiang, Klaartje Houben, Marc Baldus, Hugo van Ingen (NMR Spectroscopy, Bijvoet Center for Biomolecular Research, Utrecht University) (s)pinning down nucleosome-protein interactions using NMR: a novel method to map protein-binding surfaces on sedimented nucleosomes using solid-state NMR
16. R. van Schadewijk^A, K.B. Sai Sankar Gupta^A, H.J.M. de Groot^A, A. Alia-Matysik^{A,B} (^A Leiden University, Leiden Institute of Chemistry, ^B Leipzig University, Institute for Medical Physics and Biophysics) High Resolution Imaging and 3D volume reconstruction in *Arabidopsis thaliana*
17. Kawarpal Singh, Ernesto Danieli, and Bernhard Blümich (Institut für Technische Chemie und Makromolekulare Chemie, RWTH Aachen University) Desktop NMR spectroscopy for real-time monitoring of an acetalization reaction in comparison with gas chromatography and NMR at 9.4 T
18. Ole Brauckmann, René Verhoef, Prof. Arno P.M. Kentgens (Teijin Aramid and Radboud University), Characterization of finish formulations on polymer fibers