

**Subject: 49<sup>th</sup> NMR-DG meeting October 31 and deadline registration/posters (October 23)**

Dear NMR colleagues,

It is a pleasure to invite you to the 49<sup>th</sup> scientific symposium of the NMR Discussion Group, to be held in **Oss on Friday October 31, 2014**. This year's meeting will be hosted by Frederic Girard (Spinovation) and Paul van Tilborg (ChemConnection). We have compiled a program which is a cross-section of a range of activities in the Netherlands and surroundings. The program is attached and also available at our website <http://www.nmrdg.nl>. We are grateful to Spinovation, Pivot Park, Bruker, ACD/Labs, Anaspec Solutions, Oxford Instruments, Agilent, Buchem, Eurisotop, Praxair and Sigma Aldrich 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 e-mail addressable members. 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 23, 2014**. 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 23** to [nmrdgnl@gmail.com](mailto:nmrdgnl@gmail.com).

This year there will be the possibility to give a **pitch presentation of your poster** before the actual 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**

Location: Pivot Park Oss, Auditorium, Molenstraat 110, 5342 CC Oss

Route description: [2014DirectionsPivotParkvisitors.pdf](#)

We look forward to welcome you at the 49<sup>th</sup> 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 (KU Leuven)

Jeanine Prompers (TU/e)

Rolf Boelens (UU)

## Program 49<sup>th</sup> NMR-DG meeting

Friday, October 31 2014

Location: Pivot Park Oss, Auditorium, Molenstraat 110, 5342 CC Oss

Route description: [2014DirectionsPivotParkvisitors.pdf](http://2014DirectionsPivotParkvisitors.pdf)

Hosts: Dr. Frederic Girard, Spinnovation, and Dr. Paul van Tilborg, ChemConnection

- 09.30 Reception with coffee
- 10.00 Opening and Welcome
- 10.05 Introduction hosts: Dr. Frederic Girard (Spinnovation)
- 10.15 Prof. dr. Martin Jaeger (Instrumentelle Analytik) Low-field NMR - A tool for process analysis
- 10.45 Prof. dr. ir. Jan Lagendijk (UMCU) A radiotherapy accelerator with integrated 1.5T MRI functionality
- 11.15 Poster pitches
- 11.25 Dr. Young Choi (LU) Metabolic fingerprinting, profiling and metabolOMICs of plants by NMR: why, how, and what to do
- 11.50 Dr. Ries de Visser (IsoLife BV) New applications in NMR research using highly <sup>13</sup>C-enriched materials
- 12.15 Poster pitches
- 12.25-14.00 Poster session and lunch buffet
- 14.00 Prof. dr. Sabine Van Doorslaer (Universiteit Antwerpen) Electron paramagnetic resonance - a versatile tool for protein research and material sciences
- 14.30 Elwin van der Crujisen MSc (UU) Study on the membrane protein KcsA: from DNP to TLC
- 14.55 Coffee break
- 15.10 Dr. Lidia Nieto (TU/e) Protein-protein interactions by NMR: Nuclear Receptors as a case study
- 15.35 Drs. Ole Brauckmann (RU)  $\mu$ MAS - High resolution solid state NMR of nanoliter samples
- 16.00 Gorter Prize lecture: Dr. Ot Bakermans (TU/e) Cardiac magnetic resonance spectroscopy - Applications in a mouse model of fatty acid oxidation deficiency
- 16.30-16.40 Closure
- 16.40-17.30 Drinks

Posters NMRDG 2014, Oss

1. K.G. Neumüller, A. Carvalho de Souza, J.H.J. Van Rijn, H. Streekstra, H. Gruppen, H.A. Schols, Positional Preferences of acetyl esterases towards acetylated xylo-oligosaccharides determined by Kinect NMR studies, Laboratory of Food Chemistry, Wageningen University and DSM Biotechnology Center, Royal DSM
2. K. Hendriks, E. van der Crujisen, K. Houben, M. Baldus, Dynamics of a potassium channel gating cycle using solid-state NMR, Bijvoet Center for Biomolecular Research, Utrecht University
3. Ö. Gezici, S.J.F. Erich, H.P. Huinink, O.C.G. Adan, L.G.J van der Ven, Magnetic Resonance Imaging of Moisture Transfer through Pores in Coated Wood, Department of Applied Physics, Eindhoven University of Technology
4. P.A.J. Donkers, L. Pel, O.C.G. Adan, Dehydration of  $MgSO_4 \cdot 7H_2O$  studied by NMR, Department of Applied Physics, Eindhoven University of Technology
5. N. Eshuis, B.J.A. van Weerdenburg, M.C. Feiters, F.P.J.T. Rutjes, S.S. Wijmenga, M. Tessari, Quantitative Trace Analysis in Complex Mixtures Using SABRE Hyperpolarization, Institute for Molecules and Materials, Radboud University Nijmegen
6. W.M.J. Franssen, A.P.M Kentgens, High Radio Frequency Field Nutation Spectroscopy of Quadrupolar Nuclei, Institute for Molecules and Materials (IMM), Radboud University Nijmegen
7. N. Noethling, M. Voigt, M. Jaeger, Applications of low-field NMR, Niederrhein University of Applied Sciences and ILOC, Krefeld, Germany
8. S. F. H. Lambregts<sup>1</sup>, A. P. M. Kentgens<sup>1</sup>, E. R. H. van Eck<sup>1</sup>, S. Suwarno<sup>2</sup>, P. E. de Jongh<sup>2</sup>, Structure and dynamics of nanoconfined  $LiBH_4$ , a promising battery material, <sup>1</sup>Institute for Molecules and Materials, Radboud University Nijmegen and <sup>2</sup>Debye Institute, Utrecht University
9. Donny Merks, Ewoud van Velzen, Seenakshi Dauwan, John van Duynhoven, Quantitative assessment of polysaccharide mixtures by NMR, Unilever R&D, Vlaardingen
10. K.C.H. Tijssen, S.G.J. van Meerten, J.W.G. Janssen, P.J.M. van Bentum, W.T.S. Huck, A.P.M. Kentgens, Towards Reaction-Diffusion Measurements Using Radio Frequency Gradients, Institute for Molecules and Materials, Radboud University Nijmegen
11. N. Hermkens, N. Eshuis, B. Van Weerdenburg, M. Feiters, F. Rutjes, S. Wijmenga, M. Tessari, SABRE Hyperpolarization on Natural Product Extracts, Institute of Molecules and Materials, Radboud University Nijmegen
12. M. Oikonomou<sup>1</sup>, J.A. Hernandez<sup>2</sup>, A.H. Velders<sup>1</sup>, M.A. Delsuc<sup>2</sup>, Improved DOSY accuracy in complex reacting mixtures by randomized gradient strength arrays, <sup>1</sup>Laboratory of BioNanoTechnology, Wageningen University, <sup>2</sup>IGBMC, Université de Strasbourg, France
13. E. S. Blaakmeer<sup>1,2</sup>, G. Antinucci<sup>2,3</sup>, E.R.H. van Eck<sup>1</sup>, Vincenzo Busico<sup>3</sup>, A. P.M. Kentgens<sup>1</sup>, Solid State NMR Investigations of  $MgCl_2$ , <sup>1</sup>Institute for Molecules and Materials (IMM), Radboud University Nijmegen, <sup>2</sup>Dutch Polymer Institute (DPI), Eindhoven, <sup>3</sup>Laboratory of Stereoselective Polymerizations (LSP), Federico II University of Naples, Italy
14. A. Prusova, F.J. Vergeldt, J.M. Philippi, H. Van As, Effect of light on phloem transport in tomato plants, Department of Biophysics, Wageningen University
15. S. Pagadala, H. Van As, Diffusion associated <sup>1</sup>H NMR spectra in *Chlamydomonas reinhardtii*, Department of Biophysics, Wageningen University
16. M. Tassi, G. Reekmans, M. Vanhamel, R. Carleer, P. Adriaensens, <sup>31</sup>P SS-NMR and ATR-FTIR characterization of  $TiO_2$  functionalized with phosphonic acids for separation and purification processes in green technologies, TANC, Hasselt University, Belgium
17. C.J. Kuijpers, H.P. Huinink, O.C.G. Adan and N. Tomozeiu, Transport of complex mixtures in porous materials studied with NMR imaging, M2i, Eindhoven University of Technology
18. P. Sabatino, A. Kimenai, S. van Belzen, Determination of molecular mass of oligosaccharides by means of diffusion NMR, Analytical Technology Centre, Dow Chemical Terneuzen
19. K. Houben, uNMR-NL: The Ultra-high field NMR facility for the Netherlands, Bijvoet Center for Biomolecular Research, Utrecht University
20. Okan N. Ciftci, Leo Pel, Olaf Adan, Alkali-Silica reaction, Department of Applied Physics, Eindhoven University of Technology