Program MR2020

DAY 1 Tuesday 7th January

08:00 09:45 Registration/Coffe

09:45 10:00 Welcome, *Gøran Karlsson Swedish NMR Center*

Session 1, chair: *Tone Frost Bathen*

10:00 11:00 Plenary: Through the Chemical Looking Glass, what MRI can tell us about molecular processes in batteries, consumer products and engineering, *Melanie Britton*

11:00 11:30 When MRI came to Norway, *Hans-Jørgen Smith*

11:30 11:45 Workflow for Longitudinal evaluation of brain metastasis in response to gamma Knife surgery, *Lea Starck*

11:45 12:00 Echo planar imaging distortion correction and apparent relation to cerebral blood volume increase and tumor segments, *Ivar T. Hovden*

12:00 13:30 **Lunch**

13:30 13:45 Predictive Value of pre-treatment advanced DWI of intra- and peritumoral tissue in glioblastoma, *Oliver Geier*

13:45 14:00 MRI, prostate cancer and artificial intelligence, *Tone F. Bathen*

14:00 15:00 Plenary: Use of MRI to study lifespan changes in brain and cognition, *Anders Fjell*

15:00 16:00 Break, Voksenåsens "fika" *, Company presentations

Session 2, chair: *John Georg Seland*

16:00 16:15 Simultaneous diffusion weighting and editing of molecules using diffusion weighted MEGA edited spectroscopy, *Emilie S. Berg*

16:15 16:30 ^{2}H NMR study of propane and propylene mobility in ZIF-8, *Alexander E. Khudozhitkov*

16:30 16:45 NMR studies of the Na-sublattice of ionic conductors $Na_2Zn_2TeO_6$ and $Na_3Zn_2SbO_6$: How does structure relate to ionic conductivity, *Frida S. Hempel*

16:45 17:00 Raising the bar: New world-record 1.2 GHz NMR spectrometer, *Rainer Kümmerle*

17:15 18:00 Poster session

18:00 19:00 General assembly NSMR

19:30 23:00 Dinner

DAY 2 Wednesday 8th January

Session 3, chair: *Marcella Orwick Rydmark*

09:00 10:00 Plenary: NMR supersequences for small molecule structure elucidation, *Timothy Claridge*

10:00 10:30 When NMR came to Norway, *Bjørn Pedersen*

10:30 10:45 News from JEOL lab: Elucidating novel crystalline structures with electron and NMR crystallography, *Emeline Barbet-Massin*

10:45 11:00 CSSF-CLIP-HSQMBC: Measurements of heteronuclear coupling constants in severely crowded spectral regions, *Johan Isaksson*

11:00 11:15 Break

Session 4, chair: *Johan Isaksson*

11:15 11:30 The utilization of NMR to assess the activity of formate dehydrogenase biocatalysts for CO2 utilization, *Kaiqi Xu*

11:30 11:45 NMR studies of the interaction between nitrogen bases and zinc complexes, *Knut T. Hylland*

11:45 12:00 NMR studies of biomimetic Cu(I) complexes, *Isabella Gerz*

12:00 12:15 An NMR study of carbohydrate binding module 14 and its interaction with chitin, *Eva Madland*

12:15 13:30 Lunch

13:30 14:30 Plenary: How single point mutations in Calmodulin can cause cardiac arrhythmia & How fluorine labelling can be a superior alternative to fluorescence labelling in peptide studies, *Reinhardt Wimmer*

14:30 14:45 Structural and functional insight into the mode of action of modular lytic polysaccharide monooxygenase, *Gaston Courtade*

14:45 15:00 The solution structure of the human brain-protein arc studied by NMR, *Helene J. Bustad.*

15:00 16:00 Break, Voksenåsens "fika" * Company presentations

16:00 17:00 Plenary: Functional MRI for brain cancer monitoring, *Kyrre E. Emblem*

17:00 17:15 Closure remarks

19:00 Dinner for people staying.

*** Company presentations during the Fika-break 15.00-16.00:**

Day 1, January 7th, each for 10 minutes

- Philips
- Bruker
- Magritek

Day 2, January 8th, each for 10 minutes except for Quantum which will use 5 minutes.

- Jeol
- Nerliens Mezanski
- Mestrelab
- Quantum

The first Presentation on each day starts 10 minutes into the "Fika". The other presentations follow successively.