

## Symposium Program

Monday, 2<sup>nd</sup> December

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09:00 **Registration, Welcome Coffee, Poster Setup**

10:40 *Educational Session 1*

Bruno Kieffer (IGBMC, Strasbourg)

**Relaxation to probe macromolecular interactions**

11:40 **Break**

12:00 *Educational Session 2*

Robert Muller (Université de Mons-Hainaut)

**Water relaxation times and their alteration, keys of contrast in MRI**

13:00 **Lunch**

14:00 **Symposium Opening**

*Plenary Session 1*

14:10 Silvio Aime (University of Torino, Italy)

**Exploring routes to enhance sensitivity and specificity of MRI probes**

15:20 Evelyne Louis (Hasselt University)

**<sup>1</sup>H-NMR spectroscopy to detect lung cancer by metabolic phenotyping of blood plasma**

15:40 Lucia Rubio (Vrije Universiteit Brussel)

**Unravelling the allosteric effects of SHP2's C-SH2 domain through NMR relaxation experiments**

16:00 **Poster Session 1 – Coffee Break**

*Plenary Session 2*

17:20 Adeline Hannecart (University of Mons)

**Polymer-grafted USPIO as thermosensitive contrast agents for MRI**

17:40 Luca Fusaro (Université Libre de Bruxelles)

**Insights into the lanthanide-DOTA complexes by <sup>17</sup>O NMR**

18:00 Sébastien Delangre (University of Mons)

**Numerical and experimental study of on-resonant water suppression, an MRI sequence for positive contrast with superparamagnetic particles**

18:20 Caroline Montagner (Université de Liège)

**Equilibrium unfolding of *Bacillus cereus* zinc β-lactamase gives insights into the role of loops in the enzyme activity**

18:40 Florence Colliez (Université Catholique de Louvain)

**Non invasive MRI mapping of tumor oxygenation (“MOBILE”): preclinical and clinical application**

19:30 **Reception**

20:30 **Dinner**

22:00 **YBMRS Party (until 01:00)**

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07:30 **Breakfast**

*Plenary Session 3*

- 09:00 Hanne Damm (Hasselt University)  
**From precursor towards incorporated Al inside ZnO TCO film**
- 09:20 Freya Van den Broeck (Ghent University)  
**Full NMR characterization of amino acid linker molecules on a micro-sized hydroxyapatite powder**
- 09:40 Sayuan Liang (KU Leuven)  
**Using fluorinated contrast agents for labeling  $\beta$ -cells/pancreatic islet and *in vivo* imaging using  $^{19}\text{F}$  MRI**
- 10:00 Flore Keymeulen (Université Libre de Bruxelles)  
**Use of Paramagnetic Relaxation Enhancement experiments for the localization of molecular receptors in micelles**

12:20 **Poster Session 2 – Coffee Break**

*Plenary Session 4*

- 11:50 Hong Giang Thi Ly (KU Leuven)  
**Hydrolysis of peptides with different amino acid side chains catalyzed by a dimeric zirconium(IV)-substituted keggin type polyoxometalate**
- 12:10 Gregory Absillis (KU Leuven)  
**Integrating  $^{31}\text{P}$  DOSY NMR spectroscopy and molecular mechanics as a powerful tool for unravelling the chemical structures of polyoxomolybdate based amphiphilic nano-hybrids in aqueous solutions**
- 12:30 Rainer Wechselberger (Janssen Pharmaceutica N.V.)  
**Title to be announced**

13:00 **Lunch**

*Plenary Session 5*

- 14:00 Janez Plavec (National Institute of Chemistry, Ljubljana)  
**High resolution NMR studies of DNA G-quadruplexes**
- 15:00 Amy De Schutter (University of Antwerp)  
**Incorporation of globins in different synthetic matrices for biosensor applications – an EPR study**
- 15:20 Andrew S. Tatton (Université de Liège)  
**Using the DECRA method to distinguish between solid pharmaceutical materials according to  $^1\text{H}$   $T_1$  values**
- 15:40 Krisztina Fehér (Ghent University)  
**NMR spectroscopic characterization of the lipid encapsulation of peptidoglycan derivatives for the targeted delivery of immunomodulators**

16:00 **Awards Ceremony**

16:30 **Closing Words**