Scientific program of the Minisymposium

MRI contrast Agent Research in the 21st Century: Current Achievements and Future Directions

April 12th 2024

Center of Debrecen Regional Committee of the Hungarian Academy of Science (MTA DAB Székház) Thomas Mann u. 49, H-4032, Debrecen, Hungary

15.00 – 15.10: Welcome: **Zsolt Baranyai** (Bracco Imaging S.p.A, Trieste, Italy) and **Gyula Tircsó** (Head of the Department of Physical Chemistry, University of Debrecen).

15.10 – 15.40: **Mauro Botta** (Amedeo Avogadro University of Eastern Piedmont, Alessandria, Italy) *Water exchange in paramagnetic metal complexes and MRI diagnostic probes*

15.40 – 16.10: **Carlos Platas-Iglesias** (University of A Coruña, Spain) *Towards paramagnetic MRI agents based on the chemical exchange saturation transfer (CEST) mechanisms*

16.10 – 16.30: **Tibor Csupász** (Department of Physical Chemistry, University of Debrecen, Hungary) *Mn(II) complexes formed by bis(amide) derivatives of O-pyclen: synthesis and chemical characterization*

16.30 – 17.00: **Kristina Djanashvili** (TU Delft, The Netherlands) *Exploiting smart porosity of nanozeolites: from MRI-based theranostics to production of therapeutic radioisotopes*

17.00 – 17.30: **Zsolt Baranyai** (Bracco Imaging S.p.A, Trieste, Italy) *Proton exchange as an additional route to enhance the relaxivity of paramagnetic MRI contrast agents*

17.30 – 17.50: **Gergő Zoltán Sajtos** (Department of Physical Chemistry, University of Debrecen, Hungary) *Bispyclen as a new macrocyclic platform for Mn(II) complexation*

17.50 – 18.10: **István Kapus** (Department of Physical Chemistry, University of Debrecen, Hungary) *Pyclen derived macrocyclic ligands possessing 8-hydroxyquinoline pendant arms for Mn(II) complexation: synthesis and characterization of the complexes*

18.10 – 18.30: **Gyula Tircsó** (Department of Physical Chemistry, University of Debrecen, Hungary) *Improving the physicochemical properties of possible Mn(II)-based pH-responsive probes*