

Conference Program

Sunday, 2 June

17.40-18.00: Conference opening

Session 1 (chair: Angéla Jedlovszky-Hajdú):

18.00-19.00: **Miklós Zrínyi** (Budapest, Hungary): *Neutral colloidal particles and polymers in electric field*

19.00-21.00: Welcome reception

Monday, 3 June

Session 2 (chair: István Szilágyi):

09.00-10.00: **Michal Borkovec** (Geneva, Switzerland): *Forces between Colloidal Particles in Aqueous Solutions*

10.00-10.20: **Tamás Szabó** (Szeged, Hungary): *Semiconductor nanoparticle/graphene oxide composites for environmental applications*

10.20-10.40: **Dóra Barczikai** (Budapest, Hungary): *Biocompatible fibrous meshes incorporating silver nanoparticles for wound dressing applications*

10.40-11.00: **Etelka Tombácz** (Szeged, Hungary): *On the analogies and peculiarities of charging and colloidal stability of humic acids and graphene oxides*

11.00-11.30: Coffee break

Session 3 (chair: Sofia Kantorovich):

11.30-12.30: **Francesco Sciortino** (Rome, Italy): *Gels of DNA*

12.30-12.50: **Livia Naszályi-Nagy** (Gent, Belgium): *DNA building block adsorption on SiO₂@ZrO₂ NPs*

12.50-13.10: **Rita Varga** (Budapest, Hungary): *Poly(aspartic acid) based nano gel fibers for tissue engineering*

13.10-14.30: Lunch

Session 4 (chair: Dezső Boda):

14.30-15.30: **Ilan Benjamin** (Santa Cruz, USA): *Surface-active molecules influence on charge transfer reactions at liquid interfaces*

15.30-16.00: Coffee break

16.00-18.00: POSTER SESSION

Tuesday, 4 June

Session 5 (chair: Tamás Szabó):

- 09.00-10.00: **Judit Puskas** (Akron, USA): *Folic acid conjugated polymeric nanocarrier for targeted cancer detection in hepatocellular carcinoma*
- 10.00-10.20: **Kristóf Molnár** (Budapest, Hungary): *Biocompatible, biodegradable and implantable poly(amino acid) based fibrous networks*
- 10.20-10.40: **Tímea Pernyeszi** (Pécs, Hungary): *Use of microorganisms in environmental bioremediation*
- 10.40-11.00: **Ákos Juhász** (Budapest, Hungary): *Creating electrospun 3D artificial matrices for biomedical purposes*
- 11.00-11.30: Coffee break

Session 6 (chair: Etelka Tombácz):

- 11.30-12.30: **Ladislau Vekas** (Timisoara, Romania): *Magnetically controllable fluids - tuning the composition, colloidal stability, magnetic and flow properties to the requirements of applications*
- 12.30-12.50: **Anatolii Nagorny** (Dubna, Russia): *Structural characterization of aqueous magnetic fluids stabilized by sodium oleate*
- 12.50-13.10: **Deniz Mostarac** (Vienna, Austria): *The impact of structural inhomogeneities, superparamagnetism and central attraction, on the equilibrium structure of magnetic filaments*
- 13.10-14.30: Lunch

Session 7 (chair: Milan Předota):

- 14.30-14.50: **Erzsébet Illés** (Szeged, Hungary): *Multifunctional PEG-carboxylate copolymer coated nanomagnets for biomedical application*
- 14.50-15.10: **Oleksandr Artykulnyi** (Dubna, Russia): *Impact of poly(ethylene glycol) concentration and molecular mass on the structure and interaction parameters of anionic surfactant micellar solutions*
- 15.10-15.30: **Michael Bley** (Freiburg, Germany): *Molecular Simulation of Thermodynamic Properties with the Osmotic Equilibrium Approach: Accessing Activities in Complex Concentrated Liquid Phases*
- 15.30-16.00: Coffee break

Session 8 (chair: George Horvai):

- 16.00-16.20: **Ondrej Kroutil** (České Budějovice, Czech Republic): *VSGF spectrum prediction from classical molecular dynamics simulations*
- 16.20-16.40: **Dezső Boda** (Veszprém, Hungary): *Ionic transport through nanopore devices: diodes, transistors, sensors*
- 16.40-17.00: **Milan Předota** (České Budějovice, Czech Republic): *Simulations of ions and oxalic acid on rutile and quartz surfaces*
- 17.00-17.20: **Réka Horváth** (Budapest, Hungary): *Investigation of methylamine at aqueous surfaces by computer simulation methods*
- 17.20-17.40: **Gargi Joshi** (Nomi, Japan): *Controlling the Oriented Deposition of LC Polysaccharide at Evaporative Interface in a Confined Geometry*
- 17.40-18.00: **Bálint Kiss** (Lille, France): *Investigation of the thermodynamic properties and the liquid-vapor interface in formamide-water systems*
- 19.00-22.00: Wine tasting (optional event)

Wednesday, 5 June

Session 9 (chair: Angéla Jedlovszky-Hajdú):

- 09.00-10.00: **Kenneth Dawson** (Dublin, Ireland): *Nanotherapies, Risk and Opportunity; Interaction of Nanoscale Objects with Living Organisms*
- 10.00-10.20: **Viktória Varga** (Szeged, Hungary): *Investigation of different human serum albumin-based composites for kynurenic acid drug delivery*
- 10.20-10.40: **Dávid Juriga** (Budapest, Hungary): *Poly(aspartic acid) hydrogels: potential scaffold for tissue engineering*
- 10.40-11.00: **György Hantal** (Vienna, Austria): *On molecular mechanisms of general anesthesia*
- 11.00-11.30: Coffee break

Session 10 (chair: Róbert Mészáros):

- 11.30-12.30: **Giancarlo Franzese** (Barcelona, Spain): *From Nanomaterials to Perspectives for Brain Cancer Treatments*
- 12.30-12.50: **Constantinos Voniatis** (Budapest, Hungary): *Poly(vinyl alcohol) as a potential material for new surgical meshes*
- 12.50-13.10: **Krisztina Tóth** (Budapest, Hungary): *Characterization of dopamine containing fibrous polymer-drug conjugates*

13.10-14.30: Lunch

Session 11 (chair: Imre Varga):

14.30-15.30: **Imre Dékány** (Szeged, Hungary): *Protein/ polyelectrolyte/ gold self-assembled structures: drug delivery and sensor applications*

15.30-16.00: Coffee break

Session 12 (chair: Oleksandr Tomchuk):

16.00-16.20: **Róbert Mészáros** (Komarno, Slovakia): *Effect of Added Surfactant on the Poly(Ethyleneimine)-Assisted Gold Nanoparticle Formation*

16.20-16.40: **Bence Fehér** (Budapest, Hungary): *Structural Investigation of Red Fluorescent Bovine Serum Albumin-Gold Complexes*

16.40-17.00: **Łukasz Lamch** (Wrocław, Poland): *NMR studies upon aggregation behavior of hydrophobically functionalized poly(4-styrenesulfonic-co-maleic acid)*

17.00-17.20: **Abdenacer Idrissi** (Lille, France): *Self-association process in urea, acetone, acetamide and choline chloride aqueous solutions: Vibartion spectroscopy and molecular dynamics simulation*

17.20-17.40: **Eszter Mádai** (Darmstadt, Germany): *Using nanopores as sensors: The effect of the charge pattern from symmetric to asymmetric leading to a dual-response device*

17.40-18.00: **Margaret Rosenberg** (Vienna, Austria): *Self-assembly of hollow colloidal silica cubes*

18.00-22.30: Conference Banquet

Thursday, 6 June

Session 13 (chair: Pál Jedlovsky):

09.00-09.30: **George Horvai** (Budapest, Hungary): *Deeper insight into the surface tension of common solvents and of the aqueous solutions of common surfactants*

09.30-10.00: **Sofia Kantorovich** (Vienna, Austria): *In-silico study of randomly crosslinked nanogel*

10.00-10.20: **Balázs Fábrián** (Prague, Czech Republic): *Investigation of the dynamics of fluid interfaces*

10.20-10.40: **Andrew Milne** (Glasgow, UK): *Polarisation Corrections and the Hydration Free Energy of Water*

10.40-11.00: **Martin Kaiser** (Vienna, Austria): *Self-propelled Dipolar Nanocubes*

11.00-11.30: Coffee break

Session 14 (chair: Abdenacer Idrissi):

11.30-12.00: **István Szilágyi** (Szeged, Hungary): *Co-immobilization of superoxide dismutase and horseradish peroxidase on polyelectrolyte-functionalized layered double hydroxide particles*

12.00-12.30: **Oleksandr Tomchuk** (Dubna, Russia): *Fractal aggregation in tetraethoxysilane/ethanol/water solutions by SANS*

12.30-12.50: **Imre Varga** (Budapest, Hungary): *A novel method for surfactant binding isotherm measurements of polyelectrolyte/surfactant mixtures validated by neutron reflectivity data*

12.50-13.10: **Ildikó Tóth** (Szeged, Hungary): *Wetting and evaporation properties of carbon nanotube buckypapers doped by hydrophilic nanowires*

13.10-13.25 Conference closing

13.25-14.30: Lunch