

Tenth Cristofor I. Simionescu Symposium

Frontiers in Macromolecular and Supramolecular Science

Location: Aula Magna, Romanian Academy, Bucharest

Scientific Program

Monday, June 11

09:30 – 10:00

Opening

- Welcome address – **Bogdan C. Simionescu**, Vice-President of Romanian Academy
- Evocation of Cristofor I. Simionescu – **Virgil Percec**, University of Pennsylvania, Philadelphia, USA

10:00 – 10:50

Wetting-Dewetting Transitions, Nature's Sensing Machines, and Unveiling the Molecular Mechanism of Pain **

Michael L. Klein, Temple University, Philadelphia, PA, USA

*** In collaboration with: Daniele Granata, Marina A. Kasimova, & Vincenzo Carneva*

10:50 – 11:40

Materials Made of Synthetic Polysaccharides

Peter H. Seeberger, Max Planck Institute for Colloids and Surfaces, Potsdam, Germany

11.40 – 12.30

Moving HAIRS, or Designing Hydrogel-Actuated Integrated Responsive Systems

Joanna Aizenberg, Harvard University, Cambridge, MA, USA

12:30 – 14:00

Lunch

14.00 – 14.50

Stimuli-Responsive Nanostructures and Hydrogels and Their Applications

Itamar Willner, The Hebrew University of Jerusalem, Israel

14.50 – 15.30

Conjugated Polymers in Biomedical Applications: The Modulation by Structural Design of the Materials' Properties **

Ioan Cianga, "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania

*** In collaboration with: A. D. Bendrea, L. Cianga, L. J. del Valle, S. Timur, C. Aleman, Y. Yagci*

15.30 – 16.00

Coffee brake

16.00 – 16.40

Dynamic systems with tunable properties for *in vitro* nucleic acids delivery

Lilia Clima, Bogdan Craciun, Dragos Peptanariu, Gabriela Pricope, Bogdan C. Simionescu, Mariana Pinteala, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

16.40 – 16.50

Supramolecular host-guest assembly for fluorescence cell imaging

Gabriela Pricope, Laura Ursu, Bogdan Craciun, Mariana Pinteala, Alexandru Rotaru, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

16.50 – 17.00

Supramolecular citril-imino-chitosan hydrogels as drug delivery systems

Daniela Ailincai, Luminita Marin, Bogdan C. Simionescu, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

Tuesday, June 12

10.00 – 10:50

Colloidal Crystal Engineering with DNA

Chad Mirkin, Northwestern University, Evanston, IL, USA

10.50 – 11.40

In Pursuit of the Perfect Plastic

Geoffrey W. Coates, Cornell University, Ithaca, NY, USA

11.40 – 12.30

Alginate polymers and gels for stabilization of nanoparticles and non-invasive refillable therapeutics

Michael Aizenberg, Harvard University, Cambridge, MA, USA

12:30 – 14:00

Lunch

14.00 – 14.40

Chitosan hydrogelation with monoaldehydes. A straight pathway to biomaterials

Luminita Marin, Daniela Ailincai, Bogdan C. Simionescu, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

14.40 – 15.20

Preliminary Approaches in Designing and Investigation of Materials Inspired by Mussel Adhesive Protein

Ana-Maria Albu, Politehnic University of Bucharest, Bucharest, Romania

15.20 – 15.30

New ligands and materials developed on silicone substrates

Georgiana-Oana Turcan-Trofin, Mirela-Fernanda Zaltariov, Sergiu Shova, Maria Cazacu, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

15.30 – 16.00

Coffee brake

15.30 – 16.00

New liquid crystalline water self-assembling systems

Elisabeta I. Szerb, Institute of Chemistry of Romanian Academy, Timisoara, Romania

16.00 – 16.40

Smart polymeric materials for programmable drug delivery

Gheorghe Fundueanu, Marieta Constantin, Sanda Bucatariu, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

Wednesday, June 13

10.00 – 10.50

From Synthetic Methods to Synthetic Cells

Virgil Percec, University of Pennsylvania, Philadelphia, PA, USA

10.50 – 11.40

Interfacial activity of microgels and arborescent polymers - molecules or colloids

Martin Möller, DWI – Leibniz-Institute for Interactive Materials and RWTH Aachen University, Aachen, Germany

11.40 – 12.20

Versatility of silane/siloxane building blocks in coordination driven self-assembling

Mirela-Fernanda Zaltariov, Georgiana-Oana Turcan-Trofin, Sergiu Shova, Carmen Racles, Maria Cazacu, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

12.20 – 12.30

Closing of the Symposium