

Symposium Program

Monday, September 26

12:30-14:00 *Arrival/registration / poster installation*

14:00-14:15 *Welcome address*

Session Chair: Kent Kirshenbaum

14:15-15:05 **PL1** **Ronald Zuckermann (Lawrence Berkeley National Laboratory, USA)**
“Protein-Mimetic Materials from Sequence-Defined Peptoid Polymers”

15:05-15:35 **KL1** **Masanori Shigeno (Tohoku Univ., Japan)**
“Non-equilibrium Thermodynamic Phenomena in Helix-Dimer Formation of Chiral Helicene Oligomers”

15:35-15:55 **SL1** **Soo Hyuk Choi (Yonsei Univ., Republic of Korea)**
“12/10-Helical β -Peptide Foldamers with Switchable Handedness”

15:55-16:25 *Coffee Break*

Session Chair: Céline Douat

16:25-16:55 **KL2** **Stefan Hecht (Univ. Berlin, Germany)**
“Remote Control over Folding by Light”

16:55-17:15 **SL2** **Annick Renevey (ETH Zürich, Switzerland)**
“The Importance of N-Methylations for the Stability of the $\beta^{6.3}$ -Helical Conformation of Polytheonamide B”

17:15-17:35 **SL3** **Sunbum Kwon (Univ. Bordeaux, France)**
“Ribosomal Translation of Foldamer-Peptide Hybrids by Flexible in Vitro Translation System”

17:35-18:05 **KL3** **Muriel Amblard (Univ. Montpellier, France)**
“Turning Peptide Sequences into Cell-Penetrating Foldamers”

20:00 *Gala Dinner at Hotel Mercure Bordeaux Cité Mondiale*

Session Chair: Vladimir Torbeev

- 9:30-10:20 PL2 Derek Woolfson (Univ. Bristol, UK)
"Constructing Complex, Functional Assemblies from De novo Peptides"
- 10:20-10:50 KL4 Huaqiang Zeng (Institute of Bioengineering and Nanotechnology, Singapore)
"Functional Aromatic Foldamers for Guest Encapsulation and Transport"
- 10:50-11:20 *Coffee Break*

Session Chair: Claude Taillefumier

- 11:20-11:40 SL4 Kent Kirshenbaum (New York Univ., USA)
"Towards Peptoid Tertiary Structures"
- 11:40-12:10 KL5 David Aitken (Univ. Paris Sud, France)
"Mapping Peptide Foldamer Space with 4-Membered Ring Building Blocks"
- 12:10-12:40 KL6 Brent Iverson (Univ. Texas at Austin, USA)
"NDI: Versatile Stacking Molecule with a Split Personality"
- 12:40-14:50 *Buffet lunch at premises and Poster Session*

Session Chair: Vojislava Pophristic

- 14:50-15:20 KL7 Kevin Burgess (Texas A & M Univ. USA)
"EKO and EKOS: A New Perspective On Discovery Of Small Molecules To Perturb Protein-protein Interactions"
- 15:20-15:40 SL5 Scott Cockroft (Univ. Edinburgh, UK)
"Quantifying Non-Covalent Interactions Using Folding Molecules"
- 15:40-16:00 SL6 Takayuki Doi (Tohoku Univ., Japan)
"Protein-Protein Interaction Inhibitor Thielocin B1"
- 16:00-16:20 SL7 Galia Maayan (Technion, Israel)
"Metal-Binding as a New Approach for Peptoids Folding"
- 16:20-16:50 *Coffee Break*

Session Chair: Yann Ferrand

- 16:50-17:10 SL8 Konstantin Kudryavtsev (Lomonosov Moscow State Univ., Russia)
"Functionalized poly- β -Prolines: Exceptional Synthesis, Structural Characteristics and Biological Activity"
- 17:10-17:30 SL9 Diane Bécart (Univ. Bordeaux, France)
"Oligourea Foldamer-based Asymmetric Catalysis"
- 17:30-18:20 PL3 Eiji Yashima (Nagoya Univ., Japan)
"Biomimetic Helical Polymers and Foldamers as Unique Chiral Materials"

Session Chair: Tamás Martinek

- 9:30-10:20 PL4 Hiroshi Sugiyama (Kyoto Univ., Japan)
"Chemical Biology of Nucleic Acids: DNA Origami and Artificial Genetic Switch"
- 10:20-10:40 SL10 David Chenoweth (Univ. Pennsylvania, USA)
"Structural and Biophysical Studies of a New Class of Collagen-Mimetic Foldamers"
- 10:40-11:10 *Coffee Break*

Session Chair: Soo Hyuk Choi

- 11:10-11:30 SL11 Jonathan Clayden (Univ. Manchester, UK)
"Information Processing with Directionally-Reversible Dynamic Foldamers"
- 11:30-11:50 SL12 Hua Jiang (Beijing Normal Univ., China)
"A Journey to Single handedness Foldamers"
- 11:50-12:10 SL13 Finn Hansen (Univ. Düsseldorf, Germany)
"Synthesis, Secondary Structure and Cytotoxicity of α -Aminoxy Peptides as a Novel Class of Anticancer Foldamers"
- 12:10-12:40 KL8 Andrew Wilson (Univ. Leeds, UK)
"Proteomimetics: Inhibitors of Protein-Protein Interactions and Beyond"
- 12:40-14:30 *Buffet lunch at premises and Poster Session*

Session Chair: Galia Maayan

- 14:30-15:00 KL9 Frank Würthner (Univ. Würzburg, Germany)
"Foldamer and Cyclophane Scaffold-Controlled Functional Properties of Aggregated Dyes"
- 15:00-15:20 SL14 Claude Taillefumier (Univ. Clermont Auvergne, France)
"Conformational Control of Peptoids: Towards new Architectures"
- 15:20-15:40 SL15 Sung Hyun Yoo (Korea Advanced Institute of Science and Technology, Korea)
"Foldamer Supramolecular Architecture as a Core Material with Anisotropic Surface Characteristics"
- 15:40-16:00 SL16 Vladimir Torbeev (Univ. Strasbourg, France)
"Studying Mechanisms of Amyloidogenesis by Chemical Protein Synthesis"
- 16:00-16:30 *Coffee Break*

Session Chair: David Chenoweth

- 16:30-16:50 SL17 Krishna Kumar (Tufts Univ., USA)
"A New Paradigm for the Design of Molecular Therapeutics"
- 16:50-17:10 SL18 Yvonne Stark (Univ. Zürich, Switzerland)
"Development of Modular Peptide Binders Based on the Armadillo Repeat Protein Scaffold"
- 17:10-18:00 PL5 Donald Hilvert (ETH Zürich, Switzerland)
"Nearer to Nature: Design and Optimization of Artificial Enzymes"
- 18:00 *Closing address*