

BORDEAUX 2012 SYMPOSIUM ON FOLDAMERS

a COST Action CM0803 - Marie Curie IAPP FOLDAPPI joint event
Bordeaux-Pessac January 30 - February 2 2012

Scientific Program

MONDAY JANUARY 30

- 15h00 - 16h50 *Arrival/registration* Chair: I. Huc
- 16h50 - 17h00 **Welcome address**
- 17h00 - 18h00 **PL1 W. DeGrado**, Univ. California, San Francisco, USA
“From peptides to proteins: analysis of the hierarchic organization of proteins and de novo design of protein-like architectures”
- 18h00 - 19h00 *Welcome mixer*

TUESDAY JANUARY 31

- 9h30 - 10h30 **PL2 E. Yashima**, Nagoya Univ., Japan
“Synthesis and functions of synthetic helical oligomers and polymers” Chair: O. Reiser
- 10h30 - 11h00 **KL1 G. Guichard**, CNRS-Univ. Bordeaux, France
“Delineating the rules that govern helix formation in aliphatic oligomers comprising urea linkages”
- 11h00 - 11h30 **Coffee Break** Chair: S. Mangelinckx
- 11h30- 11h50 **OC1 R. Erdmann**, ETH, Zürich, Switzerland
“Functionalized Collagen Model Peptides”
- 11h50 - 12h10 **OC2 C. Tomasini**, Univ. Bologna, Italy
“Gels and lipid layers from oxazolidin-2-ones based foldamers”
- 12h10 - 12h30 **OC3 J. Clayden**, Univ. of Manchester, UK
“Mechanism and maximization of screw-sense control in helical oligomers of Aib”
- 12h30 - 13h00 **KL2 A. Barron**, Stanford Univ., USA
“Biophysical killing mechanisms of human host defense peptides (HDPs) and their self-assembling helical peptoid mimics”
- 13h00 - 14h30 **Buffet lunch at premises** Chair: D. Aitken
- 14h30 - 15h00 **KL3 B. Kokschi**, Freie Univ. Berlin, Germany
“βγ-Foldameric sequences: promising design elements for α-helical coiled coil Mimicry”
- 15h00 - 15h20 **OC4 E. De Santis**, Univ. of Kent and Greenwich, UK
“Conformational and metal binding studies of α,β-peptoids”
- 15h20 - 15h40 **OC5 A. Sorrenti**, Univ. Autonoma de Barcelona, Spain
“New cyclobutane based scaffolds for functional and self-assembling molecules”
- 15h40 - 16h00 **OC6 S. H. Choi**, Yonsei Univ., Seoul, Korea
“Crystallographic characterization of secondary structures in unnatural peptides”
- 16h00 - 16h30 **Coffee Break** Chair: A. Wilson
- 16h30 - 16h50 **OC7 Y. Ferrand**, IECB, CNRS-Univ. Bordeaux, France
“Molecular apple peels”
- 16h50 - 17h50 **PL3 P. Balaram**, Indian Institute of Science, Bangalore
“Folded conformations of peptides with hybrid backbones”

WEDNESDAY FEBRUARY 1

- 9h30 - 10h00 **KL4 G. Roelfes**, Univ. Groningen, The Netherlands
“DNA as scaffold for new bio-inspired catalytic systems” Chair: B. Jamart
- 10h00 - 10h20 **OC8 C. Taillefumier**, Univ. Clermont-Ferrand, France
“Development of strong peptoid cis-amide side chains inducers”

WEDNESDAY FEBRUARY 1 (continued)

10h20 - 10h50	KL5 Z.-T. Li, Fudan Univ., Shanghai, China <i>"Hydrogen bonded aromatic foldamers for molecular recognition and supramolecular materials design"</i>	Chair: B. Jamart
10h50 - 11h20	Coffee Break	
11h20 - 11h50	KL6 J.-F. Lutz, CNRS, Strasbourg, France <i>"Synthetic polymers with controlled primary structures: design, (folding?) and function"</i>	Chair: G. Guichard
12h00 - 12h20	OC9 G. Callebaut, Ghent Univ., Belgium <i>"Asymmetric synthesis and selective deprotection of γ-chloro-α,β-diamino acid derivatives"</i>	
12h20 - 12h50	KL7 H.-S. Lee, KAIST, Daejeon, Korea <i>"Unprecedented 3D molecular architectures: folding into shape"</i>	
12h50 - 14h30	Buffet lunch at premises	
14h30 - 15h00	KL8 L. Brunsveld, Technical Univ. Eindhoven, The Netherlands <i>"Protein assembly and cellular targeting via self-assembling foldameric architectures"</i>	Chair: T. Martinek
15h00 - 17h00	POSTER SESSION* and Coffee	
17h00 - 18h00	PL4 S. Matile, Univ. Geneva, Switzerland <i>"Synthetic supramolecular systems (th)at work"</i>	Chair: T. Martinek

THURSDAY FEBRUARY 2

9h30 - 10h30	PL5 W. DeGrado, Univ. California, San Francisco, USA <i>"Design and pharmaceutical applications of foldamers that act on membranes and polysaccharides"</i>	Chair: U. Holzgrabe
10h30 - 11h00	KL9 P. Arora, New York Univ., USA <i>"A systematic approach for targeting protein-protein interactions"</i>	
11h00 - 11h30	Coffee Break	
11h30 - 11h50	OC10 A. Wilson, Leeds Univ., UK <i>"Structural and biological studies of O-alkylated oligomers as α-helix mimetics"</i>	Chair: L. Ghosez
11h50 - 12h10	OC11 G. Tóth, Univ. Szeged, Hungary <i>"From post-translational modifications to synthetic foldamers"</i>	
12h10 - 12h30	OC12 M. Smietana, Univ. Montpellier, France <i>"Borono-nucleic acid foldamers"</i>	
12h30 - 13h00	KL10 M. Yamaguchi, Tohoku Univ., Sendai, Japan <i>"Hierarchical buildup of helicene-containing chiral foldamers"</i>	
13h00 - 14h30	Buffet lunch at premises	
14h30 - 15h00	KL11 J.-M. Escudier, CNRS-Univ. of Toulouse, France <i>"Constrained nucleic acids: design and properties"</i>	Chair: A. Edwards
15h00 - 15h20	OC13 A. Siriwardena, CNRS-Univ. Picardie, Amiens, France <i>"Synthesis and biological activity of a library of functional "glyco"-foldamers"</i>	
15h20 - 15h40	OC14 D. Haldar, IISER Kolkata, India <i>"Soft materials from foldamers: structure and function"</i>	
15h40 - 16h10	Coffee Break	
16h10 - 17h10	PL6 D. Hilvert, ETH, Zürich, Switzerland <i>"Designer enzymes"</i>	Chair: T. Ceska
17h10 - 17h20	Closing address	
17h40	Bus departure to Chateau Carbonnieux	
18h10	Visit of the winery and banquet diner	

* Posters will be shown during the entire symposium