

Monday, April 2th 2012

12H00 Registration

13H30:14H00 Welcoming Remarks

1. Structure: Helix and Beta-turn

14H00:14H45 **Plenary Lecture 1-Brigida Bochicchio:** *Polyproline II conformation in elastomeric proteins.* Department of Chemistry "A.M. Tamburro", University of Basilicata, Potenza, Italy. [PL1]

14H45:15H00 **Ana I. Jiménez:** Influence of a β -phenyl substituent on the β -turn propensity and pyrrolidine puckering of proline. [O1]

15H00:15H15 **Philippe Karoyan:** Prolineoamino acids: tools in the design of somatostatin β -turn mimetics. [O2]

2. Proline Analogues and Cis/Trans Isomerization

15H15:15H30 **Adeline René:** Silylated proline surrogate in neurotensin analogues. [O3]

15H30:15H45 **Mathieu Y. Laurent:** Synthesis of quaternary oxaproline derivatives and developments. [O4]

15H45:16H00 **Samuel Couve-Bonnaire:** Asymmetric synthesis of both cisoid and transoid conformers of fluorinated pseudopeptides AA-Y[CF=CH]-Pro. [O5]

16H00:16H30 *Coffee Break & Posters*

16H30:17H15 **Plenary Lecture 2 - Ernest Giralt:** *Prolyl oligopeptidase NMR Tales. A journey towards discovery of new POP inhibitors.* Institute for Research in Biomedicine (IRB), University of Barcelona, Barcelona, Spain. [PL2]

17H15:17H30 **Lucie Flauder:** Synthesis and conformational analysis of δ -azaproline for its use for the measurement of PPIase's activity. [O6]

17H30:17H45 **Grégory Chaume:** Methodological study for the peptide coupling of the *N*-deactivated stable proline surrogate CF₃-pseudoproline [O7]

17H45:18H00 **Isabel Calaza M.:** Synthesis of proline analogues with an octahydroindole core. [O8]

18H00:18H15 **David J. Aitken:** Cyclobutane β -amino acid-proline PNA: a ring size effect? [O9]

18H15:19H30 Poster Session

20H30 Gala Dinner at the Hotel Magnol, Montpellier Downtown

Tuesday, April 3th 2012

3. Proline-apparented Monomer and Polymerization

- 08H30:09H15** **Plenary Lecture 3 - Helma Wennemers:** *From Azidoproline to Functionalizable Molecular Scaffolds and Collagen* Laboratorium für Organische Chemie, ETH Zürich, Zürich, Switzerland. [PL3]
- 09H15:09H30** **Charlotte Martin:** Synthesis of homopolypeptides with PPII structure. [O10]
- 09H30:09H45** **Cécile Caumes:** Foldamers derived from β -prolines and prolineamino acids. [O11]
- 09H45:10H00** **Céline Douat-Casassus:** Helical Folding Propensity of Aliphatic Urea Oligomers with Multiple Adjacent Pyrrolidine Units. [O12]
- 10H00:10H15** **Guilhem Chaubet:** Polyproline II bio-inspired folded structures based on original spirolactam scaffolds. [O13]
- 10H15:10H45** *Coffee Break & Posters*

4. Structural Considerations of Proline-containing Peptides

- 10H45:11H30** **Plenary Lecture 4 - Jean-Christophe Gelly:** *Type II PolyProline helix assignment: analysis and sequence - structure relationship* [PL4] Dynamique des Structures et Interactions des Macromolécules Biologiques (DSIMB), Université Paris Diderot, Paris, France.
- 11H30:11H45** **Jean-François Guichou:** Rational design of small molecules (proline mimetic): inhibitors of human cyclophilins and HCV replication. [O14]
- 11H45:12H00** **Emeric Miclet:** Local control of peptide backbone geometry using trifluoromethylated pseudoproline. [O15]
- 12H00:12H15** **Nikolay Pydiura:** Investigation of the structure and mechanisms of action of proline flanked peptides – inhibitors of fibrin polymerization. [O16]
- 12H15** **Concluding Remarks**