

October 12, Sunday

10:00 - 12:00 am **Welcoming, Incriptions**

12:00 - 2:00 pm **Lunch**

2:00 - 2:30 pm **Official Opening Pascal Dumy and Jean Martinez**

Chair: Pascal Dumy

2:30 - 3:30 pm **Deborah Berti** **Smart lipid assemblies for programmable nanomaterials**

3:30 - 3:50 pm **Zhanhu Sun** Design, construction, self-assembly of cholesteryl-modified ureido Crown Ethers and their Application in Ionic Transport

3:50 - 4:10 pm **Robert Pascal** Stability and self-organization in chemical systems

4:10 - 4:30 pm **Coffee Break**

Chair: Michael Smietana

4:30 - 5:30 pm **Ronald T. Raines** **Self-Assembly of Synthetic Collagen: Stronger and Longer**

5:30 - 5:50 pm **Yogesh Kadam** Temperature, pH and salt dependent viscoelastic behavior of selfassembled gelatin hydrogels

5:50 - 6:10 pm **Frédéric Coutrot** A diverted strategy to yield rotaxanes Devoid of any Template

6:10 - 6:30 pm **Assala Al Samad** Easy & scalable synthesis of amphiphilic polymer drug vectors by post-modification and click photochemistry

8:00 - 9:30 pm **Diner**

October 13, Monday

8:30 - 9:00 am **Official Introduction**

Chair: Frédéric Coutrot

9:00 - 10:00 am **Philippe Barthelemy** **Making hybrid amphiphiles; supramolecular systems and using them for biomedical applications**

10:00 - 10:20 am **Grégory Durand** Self-assembled systems for the study of membrane proteins in aqueous solution

10:20 - 11:00 am **Coffee Break**

Chair: Jean-Jacques Vasseur

11:00 - 12:00 am **Cynthia J. Burrows** **Single-molecule studies of G-quadruplex folding and assembly in a yoctoliter protein cavity**

12:00 - 12:20 am **Eline Bartolami** In situ expression of multivalent recognition of DNA

12:20 - 12:40 am **Gaëtan Bellot** Self-assembly of DNA origami into 3D shapes for structural biology

12:40 - 2:00 pm **Lunch**

Chair: Hervé Cottet

2:00 - 3:00 pm **Monica Olvera De La Cruz** **Electrostatic self-assembly of biomolecules**

3:00 - 3:20 pm **Vladimir Lorman** Physical principles of virus self-assembly and symmetry selection rules for protein density distribution

3:20 - 3:40 pm **Joël Chopineau** Voltage- and calcium-dependent translocation of the CyaA toxin across a tethered lipid bilayer

3:40 - 4:00 pm **Gilles Subra** Biomimetic materials obtained by assembly of hybrid peptide blocks

4:00 - 4:20 pm **Sébastien Ulrich** Degradable hybrid materials based on cationic acylhydrazone dynamic covalent polymers promote DNA complexation through multivalent interactions

4:20 - 4:40 pm **Sonia Cantel** Sensitive MALDI MS quantification of modified peptides for receptor-ligand targeted binding assays

4:40 - 7:00 pm **Coffee Break / Posters and discussions**

Chair: Florine Cavalier

7:00 - 8:00 pm **Helma Wennemers** **Proline-rich Peptides – Versatile Platforms for Selective Intermolecular Interactions**

8:00 - 9:30 pm **Diner**

9:30 - 11:00 pm **Beer and wine after diner - Posters and discussions**

October 14, Tuesday

Chair: Evelina Colacino

- 9:00 - 10:00 am **Serge Van Calenbergh** **Modulating the capacity of a-GalCer to glue iNKT cells to CD1d by synthetic modifications of its sugar part**
- 10:00 - 10:20 am **Andrey Kajava** Breaking the amyloidogenicity code: predicting risk of neurodegenerative diseases by reading genomes

- 10:20 - 10:35 am Coffee Break
10:35 - 10:40 am *Gathering for the traditional conference group picture*



Chair: Evelina Colacino

- 10:40 - 11:40 am **Stephen Kent** **Design of a Chemically Synthesized D-Protein Antagonist of VEGF-A: X-ray Structure of a Heterochiral Protein Complex by Racemic Crystallography**
- 11:40 - 12:00 am **Florine Cavalier** Neurotensin analogue design: Stability and affinity improvement for in vivo analgesic activity
- 12:00 - 12:20 am **Boris Nachtsheim** Self-assembly of minimalistic dipeptides – From Novel Soft Materials to Enzyme Mimetics

- 12:20 - 2:00 pm Lunch

Chair: Gilles Subra

- 2:00 - 3:00 pm **Andrei K. Yudin** **Advances in Peptide Macrocyclization**
- 3:00 - 3:20 pm **Anita Schulz** Drug-induced morphology switch in poly(2-oxazoline) based drug delivery systems
- 3:20 - 3:40 pm **Frédéric Lamaty** Mechanochemistry and its applications: From organic and peptides synthesis to catalysis
- 3:40 - 4:40 pm **Luca Bertinetti** **Force balance in swelling and deswelling of wood with humidity**
- 4:40 - 5:00 pm **Hervé Cottet** Size-characterization of nanoassemblies by Taylor dispersion analysis
- 5:00 - 5:20 pm **Lubomir L. Vezenkov** Intracellular inhibition of Cathepsin D enzyme associated to an anti-cancer activity

- 5:20 - 6:50 pm Coffee Break / Posters and discussions

Chair: Robert Pascal

- 7:00 - 8:00 pm **Sjibren Otto *NJC Lecture*** **Systems Chemistry: Self-Replication and Self-Synthesizing Materials Driven by Peptide Self-Assembly**



- 8:00 - 9:30 pm Diner
9:30 - 11:00 pm Beer and wine after diner - Posters and discussions

October 15, Wednesday

Chair: Thierry Durand

- 9:00 - 10:00 am **Antoni Riera** **Syntheses and Structure of New Somatostatin Analogues. Fine tuning the non-covalent interactions between aromatic residues**
- 10:00 - 10:20 am **Marie Rosselin** Design of amphiphilic nitrones with improved spin-trapping and antioxidant properties

- 10:20 - 10:50 am Coffee Break

Chair: Jean-Yves Winum

- 10:50 - 11:50 am **Ned Porter** **Sterols, Free Radicals and Oxidative Stress**
- 11:50 - 12:10 am **Jean-Marie Galano** Non-Enzymatic Lipid Mediators of Polyunsaturated Fatty Acids: from Total syntheses to novel biological roles

- 12:10 - 12:35 pm **Conclusions**

- 12:35 - 2:00 pm Lunch