

INTRODUCTION

Biological systems being complex entities bring to life elegant and efficient strategies to make materials that often outperform man-made materials of similar composition. One of the main goals of the interdisciplinary field of bioinspired materials is to unlock the secrets of these systems - the composition, processing, self-assembly, hierarchical organization and properties of biological materials - and use this information to synthesize and engineer novel functional materials for a variety of practical applications. Bioinspired concepts are becoming increasingly integrated into materials and devices intended for food safety, cosmetic formulation and drug delivery systems.

7 SEPTEMBER 2015

12H00 Registration/Welcome Lunch

14H00 Official opening

- President of LE STUDIUM Ary Bruand
- Scientific director of LE STUDIUM, Pr Nicola Fazzalari

14H20 Scientific opening

- LE STUDIUM RESEARCH FELLOW at the ICMN Laboratory, Dr Arayik Hambardzumyan

SESSION ONE

INTERFACIAL ADSORPTION LAYERS AND MULTILAYERS

Chairwoman: Dr Amandine Mahieux

14H30 Dr E. Guzmán

Assembly of Multilayers, Nanocapsules and Multicapsules by the Layer-by-Layer Method

15H00 Dr Gabriel Ohlsson

Experimental methods to study viscoelastic properties and phase transitions of lipids and protein films

15H30 Dr Marie-Hélène Ropers

The role of the interfacial film in the control of lipid oxidation in O/W emulsions

16H00 Coffee break

SESSION TWO

NANO-OBJECTS

Chairwoman: Pr Chantal Pichon

16H30 Dr Nathalie Tarrat

Functionalized gold nanoparticles for antimicrobial therapy: from in silico modeling to growth by nano-epitaxy

17H00 Pr Sylvie Bégin-Colin

Dendronized magnetic nanoparticles designed for targeting, MRI and hyperthermia

17H30 Dr Faiza Annabi-Bergaya

Clay minerals as nano-objects Performance of tubular halloysite as drug carrier

18H00 Poster session

18.30 LE STUDIUM® LECTURE

Dr Roger Douillard

Qualités et facteurs de qualité du Champagne (The qualities and the factors of quality of champagne)

LE STUDIUM®
LECTURES
ORLÉANS | 2015

ENTRÉE LIBRE

7 Septembre 2015 - 18h30

Qualités et facteurs de qualité du champagne



Centre International
Universitaire pour la Recherche
1, rue Dupanloup
45000 Orléans

INTERVENANT

Roger Douillard
UMR « Fractionnement
des Agro-Ressources et
Environnement »

Cette lecture publique est organisée
dans le cadre de la conférence :
Bioinspired molecular
assemblies as protective and
delivery systems

INFORMATIONS
lecture@lestudium-ias.fr
www.lestudium-ias.com

19H30 Free evening

8 SEPTEMBER 2015

SESSION THREE

SELF-ASSEMBLY AND NANOSCALE ORGANIZATION. DRUG DELIVERY SYSTEMS

Chairwoman: Pr Sylvie Bégin-Colin

09H00 Pr Ivan Panaiotov

Interfacial reorganization of molecular assemblies used as drug delivery systems

09H30 Pr Chantal Pichon

Bioinspired nanoassemblies for efficient delivery of nucleic acids therapeutics,

10H00 Dr Charles Sennoga

Microbubble contrast agents: from laboratory bench to clinic

10H30 Coffee break

SESSION FOUR

LANGMUIR-BLODGETT FILMS AND BIOLOGICAL MEMBRANES

Chairman: Dr Charles Sennoga

11H00 Dr N. Abraham

Application of phospholipid Langmuir monolayers as model membrane systems

11H30 Pr Jurriaan Huskens

Multivalent interactions: from molecular design to biological function

12H00 Lunch

14H00 Dr Dorota Matyszczyńska

Model lipid membranes and their interactions with biologically active species

14H30 Pr Maryam Tabrizian

Rapidly Gelling Injectable Sponges as a Potential Therapy to Target Remyelination Post-Spinal Cord Injuries

15H00 Poster Session

15H30 Visit to the ICMN Laboratory (CNRS)

17H30 Visit of Orleans historical city center

20H00 Gala dinner

9 SEPTEMBER 2015

SESSION FIVE

ULTRATHIN NATURAL AND ORGANIC POLYMER FILMS

Chairman: Pr. Ivan Panaiotov

09H30 Dr V. Aguié-Béghin

Bioinspired molecular assemblies based of lignocellulosic polymers: spectroscopic and physico-chemical properties

10H00 Dr Tomasz Martynski

Ultrathin organic films for application in electronics

10H30 Coffee break

11H00 Dr Gohar Khachatryan

Formation and properties hyaluronan/nano Ag and hyaluronan-lectin/nano Ag films.

11H30 Scientific conclusion

12H00 Lunch-sandwich bar & take away

SPEAKERS

Dr Véronique AGUIE BEGHIN

INRA - UMR FARE INRA/URCA, Reims - FR

Dr Nora ABRAHAM

MTA-SZTE Supramolecular and Nanostructured Materials Research Group, University of Szeged - HU

Pr Sylvie BEGIN COLIN

IPCMS UMR CNRS UNISTRA 7504 - FR

Dr Faiza BERGAYA

ICMN/CNRS Centre Limousin/University of Orleans - FR

Dr Eduardo GUZMAN

Universidad Complutense de Madrid - ES

Pr Jurriaan HUSKENS

University of Twente Enschede - NL

Dr Gohar KHACHATRYAN

Institute of Chemistry and Physics University of Agriculture, Cracow - PL

Dr Tomasz MARTYNSKI

Chair of Optical Spectroscopy, Faculty of Technical Physics, Poznan University of Technology - PL

Dr Dorota MATYSZEWSKA

Biological and Chemical Research Centre, University of Warsaw - PL

Dr Gabriel OHLSSON

Biolin Scientific AB - SE

Pr Ivan PANAIOTOV

University of Sofia - BG

Pr Chantal PICHON

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UR1268 Biopolymères Interactions Assemblages, INRA, Nantes - FR

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Dr Nathalie TARRAT

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Pr Maryam TABRIZIAN

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LE STUDIUM

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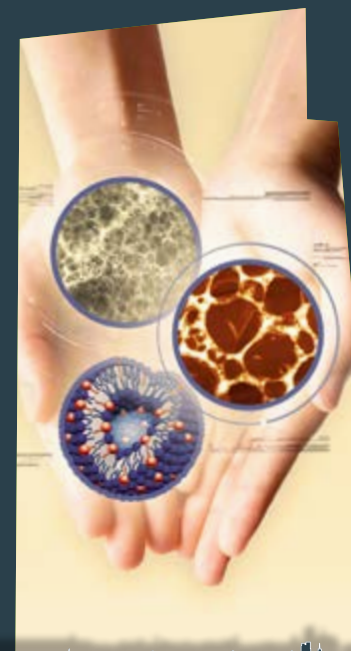
CONFERENCES

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PROGRAMME

7-9 September 2015

Bioinspired molecular assemblies as protective and delivery systems



LOCATION

Centre International Universitaire
pour la Recherche
1, rue Dupanloup
45000 Orléans

CONVENORS

Dr Arayik Hambardzumyan

LE STUDIUM RESEARCH FELLOW
FROM

Yerevan State University - Armenia

IN RESIDENCE AT

Interfaces, Confinement, Matériaux et
Nanostructures (ICMN) - UMR 7374 -
CNRS, Université d'Orléans

Dr Samuel Guillot

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