

## Programme JED 2017

université  
PARIS-SACLAY

ÉCOLE DOCTORALE  
Sciences chimiques : molécules,  
matériaux, instrumentation  
et biosystèmes

# JED 2017

3ème Journée de l'Ecole Doctorale  
**2MIB**  
17/10/2017 ENS Paris-Saclay

**CONFERENCE PLENIERE**

**Régis Réau**  
Directeur de la recherche Air liquide

**CONFERENCIERS INVITES**

**Dario Bassani** ISM Bordeaux  
**Laurent Micouin** Université Paris Descartes  
**Clotilde Policar** ENS Paris

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école  
normale  
supérieure  
paris-saclay

Société Chimique de France

CPPS  
Fédération de Chimie Physique de Paris-Saclay

CHARM<sub>3</sub>AT  
Chimie des  
Atmosphères  
Régionales  
Molécules et Instrumentation pour les Matériaux

CST  
Centre Science Technology



## PROGRAMME DE LA JOURNEE

|             |                                                                                                                                                                                                                                       |                                                                                                                                     |                                                                                                                                    |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 8h00-9h00   | <b>Accueil des participants, installation des posters</b>                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                    |
| 9h00-9h30   | <b>Présentation d'Introduction à la JED</b> par Christophe Colbeau-Justin, Keitaro Nakatani.<br><b>Parole aux sponsors, Amphi Marie Curie</b>                                                                                         |                                                                                                                                     |                                                                                                                                    |
| 9h30-10h15  | <b>Conférence plénière</b> , Régis Réau, Directeur de la recherche Air Liquide, <b>Amphi Marie Curie</b><br>O <sub>2</sub> , H <sub>2</sub> , CO <sub>2</sub> des petites molécules essentielles pour la vie, la matière et l'énergie |                                                                                                                                     |                                                                                                                                    |
| 10h15-11h00 | Pause café / <b>posters, Hall Villon</b>                                                                                                                                                                                              |                                                                                                                                     |                                                                                                                                    |
|             | <b>Communications orales</b>                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                    |
|             | <b>Pôle CPBA, Amphi Marie Curie</b><br>Modérateur : Eric Gloaguen                                                                                                                                                                     | <b>Pôle COB, Salle Condorcet</b><br>Modérateur : Emmanuelle Schultz                                                                 | <b>Pôle CIM, Amphi Tocqueville</b><br>Modérateur : Pierre Mialane                                                                  |
| 11h00-11h15 | Arthur Viodé                                                                                                                                                                                                                          | Junjun Ma                                                                                                                           | Kevin Dedecker                                                                                                                     |
| 11h15-11h30 | Teseer Bahry                                                                                                                                                                                                                          | Yann Bourne-Branchu                                                                                                                 | Jing Tian                                                                                                                          |
| 11h30-11h45 | Simone Pezzotti                                                                                                                                                                                                                       | Sabrina Bernard                                                                                                                     | Alicia Aloisi                                                                                                                      |
| 11h45-12h00 | Coralie Ruel                                                                                                                                                                                                                          | Chaoqi Lin                                                                                                                          | Antoine Bohn                                                                                                                       |
| 12h00-12h15 | Marlène Rasschaert                                                                                                                                                                                                                    | Poster Flash                                                                                                                        | Poster Flash                                                                                                                       |
| 12h15-14h00 | Pause déjeuner / <b>posters, Hall Villon</b>                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                    |
| 14h00-14h30 | <b>Conférences invitées</b>                                                                                                                                                                                                           |                                                                                                                                     |                                                                                                                                    |
|             | <b>Pôle CPBA, Amphi Marie Curie</b>                                                                                                                                                                                                   | <b>Pôle COB, Salle Condorcet</b>                                                                                                    | <b>Pôle CIM, Amphi Tocqueville</b>                                                                                                 |
|             | Dario Bassani<br><b>Supramolecular Photochemistry :<br/>from concept to device</b><br>Modératrice : Rachel Meallet-Renault                                                                                                            | Laurent Micouin<br><b>Organoaluminum reagents as<br/>synthetic tools: preparation and<br/>reactivity</b><br>Modérateur : Joanne Xie | Clotilde Policar<br><b>Controlling inorganic complexes<br/>properties for bio-applications</b><br>Modérateur : Jean-Claude Berthet |
|             | <b>Communications orales</b>                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                    |
| 14h30-14h45 | Hélène Cazier                                                                                                                                                                                                                         | Yufeng Zhang                                                                                                                        | Timothé Godou                                                                                                                      |
| 14h45-15h00 | Cédric Crosnier De Lassichère                                                                                                                                                                                                         | Augustin Peneau                                                                                                                     | Arnaud Imberdis                                                                                                                    |
| 15h00-15h15 | Louis Potier                                                                                                                                                                                                                          | Louis Monsigny                                                                                                                      | Sébastien Préaud                                                                                                                   |
| 15h15-15h30 | Feriel Ben Nasr                                                                                                                                                                                                                       | Chenxiao Qi                                                                                                                         | Quentin De Ponfilly                                                                                                                |
| 15h30-15h45 | Xiaojing Wu                                                                                                                                                                                                                           | Lucile Marin                                                                                                                        | Lucile Fétiveau                                                                                                                    |
| 15h45-16h30 | Pause café / <b>posters, Hall Villon</b>                                                                                                                                                                                              |                                                                                                                                     |                                                                                                                                    |
|             | <b>Communications orales</b>                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                    |
|             | <b>Pôle CPBA, Amphi Marie Curie</b><br>Modératrice : Isabelle Leray                                                                                                                                                                   | <b>Pôle COB, Salle Condorcet</b><br>Modérateur : Emmanuel Magnier                                                                   | <b>Pôle CIM, Amphi Tocqueville</b><br>Modérateur : Frédéric Banse                                                                  |
| 16h30-16h45 | Yayang Tian                                                                                                                                                                                                                           | Julien Lavie                                                                                                                        | Tawfiq Nasr Allah                                                                                                                  |
| 16h45-17h00 | Christelle Dubois                                                                                                                                                                                                                     | Chang Zong                                                                                                                          | Florian Lebon                                                                                                                      |
| 17h00-17h15 | Minh Thang Le                                                                                                                                                                                                                         | Margaux Riomet                                                                                                                      | Linh Trinh                                                                                                                         |
| 17h15-17h30 | Jérémy Mathurin                                                                                                                                                                                                                       | Mohamad Maaz                                                                                                                        | Josiane Djuide-Dzugam                                                                                                              |
| 17h30-17h45 | Leo Albert Sala                                                                                                                                                                                                                       | Lucie Jarrige                                                                                                                       | Xin-yang Wang                                                                                                                      |
| 18h00-18h30 | <b>Clôture, remise des prix, Amphi Curie</b>                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                    |

### Comité d'organisation :

Anne-Laure Barthelemy, Julie Febvay, Jan Bohl, Linh Nguyen, Sébastien Préaud, Aicha Bouraoui, Quentin De Ponfilly (doctorants organisateurs), Christophe Colbeau-Justin (Directeur de l'ED), Joanne Xie (Coprésidente du comité), Isabelle Leray (Présidente du comité, Directrice-adjointe International correspondante ENS-Paris-Saclay de l'ED), Corine Simonnet (Directrice-adjointe - pôle CIM), Corinne Ruello (administratrice).

Le comité d'organisation souhaite la bienvenue aux 220 participants de la 3<sup>ème</sup> Journée de l'Ecole Doctorale 2MIB (JED 2017) et remercie très sincèrement les organismes suivants pour leur contribution financière :

Le LabEx CHARM<sub>3</sub>AT, La Fédération de Chimie Physique de Paris-Saclay (CPPS), La Société Chimique de France (SCF) via sa section régionale Ile de France et La société CST.



## Communications orales CPBA

Arthur Viodé, **Top-down and bottom-up mass spectrometry approaches for Alphasynucleinanalysis in biological fluids**, CEA-LEMM

Teseer Bahry, **Radiation-induced synthesis of conducting polymers in dichloromethane** , LCP-UPSUD

Simone Pezzotti, **SFG spectroscopy at charged solid/liquid and air/liquid interfaces: new concepts of BIL/DL layers for unraveling spectral signatures**, LAMBE-UEVE

Coralie Ruel, **Identification of a novel class of disease biomarkers due to glycosylation abnormalities**, Institut Galien-UPSUD

Marlène Rasschaert, **In-Depth Characterization of Rat Cerebellar Gadolinium Deposition by Electron Microscopy, and X-Ray Fluorescence Following Gd-Based Chelates Administration**, Institut Curie / Guerbet

Hélène Cazier, **Development of a dual imaging strategy combining radio- and mass spectrometry - imaging to study the biodistribution of <sup>14</sup>C-graphene oxide**, CEA, SPI, LEMM

Cédric Crosnier De Lassichère, **On-line preconcentration in capillary electrophoresis: how to improve molecular diagnosis of Alzheimer's disease?** Institut Galien-UPSUD

Louis Potier, **Characterisation of the alpha-Al<sub>2</sub>O<sub>3</sub>/liquid water interface by DFT-MD simulations for heterogeneous catalysis**, LAMBE-UEVE

Feriel Ben Nasr, **Laser spectroscopy study of cyclic stereoisomers dipeptides in supersonic jet**, ISMO-UPSUD

Xiaojing Wu, **Amoeba polarizable force field parameters of the heme cofactor in its ferrous and ferric states**, LCP-UPSUD

Yayang Tian, **"Click"-Based LbL Self-assembled Films for Selective Bacteria Detection**, PPSM-ENS-Paris-Saclay

Christelle Dubois, **Confirmation of sepsis pronostic biomarkers and development of rapid tests**, CEA SPI LEMM&LERI / Bertin Technologies

Thang Le Minh, **Development of an analytical strategy to detect therapeutic monoclonal antibodies aggregates**, Institut Galien-UPSUD

Jérémie Mathurin, **IR nanospectroscopy as a label-free imaging technique to characterize new antibiotics carriers**, LCP-UPSud

Leo Albert Sala, **Grafting Unsaturated Carbon Groups on Hydrogenated Diamond Under Low-Energy Electron Irradiation**, ISMO-UPSUD

## Communications orales COB

Junjun Ma, **Preparation of Synthetic Heparan Sulfates Mimetics for the pharmacomodulation of cytokines**, ICMMO-UPSUD

Yann Bourne-Branchu, **Cobalt-Catalyzed Esterification of Amide Derivatives**, LCM-X

Sabrina Bernard, **Mesoionics: new tools for click chemistry**, CEA-SCBM

Chaoqi Lin, **Synthesis and stimuli-responsive self-assembling of photoswitchable carbohydrate-based macrocycle**, PPSM-ENS-Paris-Saclay

Yu-Feng Zhang, **Electrocatalytic reduction of Nitroarenes, Sulfoxides and Phtalimides mediated by Sm<sup>II</sup>** ICMMO-UPSUD

Augustin Peneau, **Rhodium(III)-catalyzed synthesis of spirocyclic heterocycles**, ICSN-CNRS

Louis Monsigny, **Reductive depolymerization of waste plastics and lignin using molecular catalysts**, CEA-NIMBE

Chenxiao Qi, **Calcium(II)-Catalyzed Alkenylation of N-Acyliminiums and Related Ions with Vinylboronic Acids**, ICMMO-UPSUD

Lucile Marin, **Synthesis of cyclopenta[b]pyrroles through an aza-Piancatelli cyclization**, ICMMO-UPSUD

Julien Lavie, **Synthesis and optical properties of graphene quantum dots**, LICSEN-CEA

Chang Zong, **The bicyclo[3.2.0]heptane skeleton: a powerful photoadduct intermediate for functionalized four-membered ring compounds**, ICMMO-UPSUD

Margaux Riomet, **Antibody-Antibiotic conjugates, New tools for the treatment of multiresistant bacteria**, CEA-SCBM

Mohamad Maaz, **Surface initiated controlled radical polymerization of 4-vinylpyridine**, ICMMO-UPSUD

Lucie Jarrige, **Brønsted Acid-Catalyzed Enantioselective Intramolecular Cycloaddition**, ICSN - CNRS

## Communications orales CIM

Kevin Dedecker, **Selective capture of Volatile Organic Compounds with Metal-Organic Framework nanoparticles**, ILV - UVSQ

Jing Tian, **Study of writing laser polarization dependence of femtosecond laser induced circular optical properties in silica glass**, ICMMO-UPSUD

Alicia Aloisi, **H<sub>2</sub> Activation at Copper [1] for the Synthesis of Hydride Complexes**, CEA-IRAMIS-NIMBE

Antoine Bohn, **Electrochemical approach of the reductive activation of O<sub>2</sub> by iron based molecular complexes**, ICMMO-UPSUD

Timothé Godou, **Silylation of O–H Bonds by Catalytic Dehydrogenative and Decarboxylative Coupling of Alcohols with Silyl Formates**, CEA Saclay-LCME

Arnaud Imberdis, **Metal-free and alkali metal catalysts for** CEA Saclay-LCME

Sébastien Préaud, **Thermoelectricity generalities and the particular role of oxydes**, ICMMO-UPSUD

Quentin De Ponfilly, **Multifunctional inorganic clusters: synthesis, characterizations and electrochemical properties for further electro(photo)catalytic applications**, ILV - UVSQ

Lucile Fétiveau, **Coordination-based nanoparticles for theranostics**, ICMMO-UPSUD

Tawfiq Nasr Allah, **A journey into amide and alkylamine synthesis from CO**, LCMCE-CEA

Florian Lebon, **Electrical characterization of three organic electrografted layers in vertical metal-molecule-metal junctions**, LICSEN - CEA

Linh Trinh, **Switchable Core-Shell Photomagnetic Nanosensors**, ICMMO-UPSUD

Josiane Djuidje-Dzugam, **Synthesis and damage behavior of zirconia layers on Zy-4 substrate**, ICMMO-UPSUD

Xin-Yang Wang, **Conjugated polymers/carbon nanotubes hybrides for water sensing**, LPICM-X

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- 3 Kamilia Kemel, **ATR-FTIR and AFM-IR characterization of Janus nanoparticles: before and after cutaneous application**, Lip(Sys)<sup>2</sup>-UPSUD
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- 5 Chengying Yin, **Water Radiolysis in Cement Hydrates**, CEA Marcoule
- 6 Qui Pham, **Synthesis and characterization of novel fluorescent sensor for the detection of cesium in aqueous solution**, PPSM-ENS-Paris-Saclay
- 7 Caroline Chipeaux, **Quantification of four Gaucher disease biomarkers in plasma and red blood cells: Correlation with disease severity and response to therapeutic intervention**, LETIAM
- 8 Aicha Bouraoui, **Characterization and involvement of Poldip2 in the activation of NOX2**, LCP-UPSUD
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