

Programme JED 2018

université
PARIS-SACLAY

ÉCOLE DOCTORALE

**Sciences chimiques : molécules,
matériaux, instrumentation
et biosystèmes**

JED-2018

4^{ème} Journée de l'Ecole Doctorale

2MIB

18-Oct-2018

IUT d'Orsay

CONFÉRENCE PLÉNIÈRE

Claire-Marie PRADIER

Directrice Scientifique

Adjointe de l'Institut de Chimie du CNRS

CONFÉRENCIERS INVITÉS

Laurent Bouteiller

(Sorbonne Université)

Sylvie Ferlay

(Université de Strasbourg)

Frédérique Courant

(Université de Montpellier)

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CPBS

Fédération de Chimie Physique de Paris-Saclay



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PROGRAMME DE LA JOURNEE

8h00-9h00	Accueil des participants, installation des posters		
9h00-9h45	Présentation d'Introduction à la JED par Christophe Colbeau-Justin et Gilles Laschon (directeur de l'IUT d'Orsay). Programme de mentorat Femme et Science par Marina Kvaskoff (Directrice Ile de France du programme de mentorat Femme et Science), Parole aux sponsors, Amphi Coudane		
9h45-10h30	Conférence plénière, Claire-Marie Pradier , Directrice Scientifique adjointe de l'Institut de Chimie du CNRS, Amphi Coudane		
10h30-11h15	Pause café / Posters, Main Hall		
	Communications orales		
	Pôle CPBA, Amphi Coudane Modérateur: Martine Mayne L'Hermite	Pôle COB, Amphi 2 Modérateur: Arnaud Voituriez	Pôle CIM, Room D015 Modérateur: Mohamed Haouas
11h15-11h30	Jeremy Donon	Ali Nasrallah	Aurélien Adenot
11h30-11h45	Fabrizio Creazzo	Benjamin Large	Lidie Rousseau
11h45-12h00	Michaël Ougier	Sakna Bazzi	Raphaëlle Belchi
12h00-12h15	Xiaojiao Yuan	Maxime Jarret	Asma Khadhraoui
12h15-12h30	Yoann Peperstraete	Mathieu Carlier	Laura Altschmidt
12h30-14h00	Pause déjeuner / Posters, Main Hall		
	Conférences invitées		
	Pôle CPBA, Amphi Coudane Frédérique Courant La spectrométrie de masse : différentes applications pour répondre à des questions environnementales Modérateur: Philippe Lesot	Pôle COB, Amphi 2 Laurent Bouteiller Supermolecular polymers as responsive and chirally amplified platforms for catalysis Modérateur: Anton Granzhan	Pôle CIM, Room D015 Sylvie Ferlay Assembling Molecular Crystals Modérateur: Bertrand Poumellec
	Communications orales		
14h30-14h45	Delphine Dessaux	Tanguy Jousselein-Oba	Somia Tomane
14h45-15h00	Philipp Gotico	Coralie Caron	Youngju Ro
15h00-15h15	Aline Rigal	Nicolas Glinsky-Olivier	Luqiong Zhang
15h15-15h30	Flavio S. Brigiano	Thi Phuong Thu Nguyen	Antoine Desrues
15h30-15h45	Antoine Allard	Yong-Peng Liu	Anshuman Agrawal
15h45-15h55	Caroline Chipeaux (CPPS)		
15h45-16h30	Pause café / Posters, Main Hall		
	Communications orales		
	Pôle CPBA, Amphi Coudane Modérateur: Jérôme Mathé	Pôle COB, Amphi 2 Modérateur: Angela Marinetti	Pôle CIM, Room D015 Modérateur: Clotilde Berdin
16h30-16h45	Ioanna Christodoulou	Kalani Kariyawasam	Nhat Tam Vo
16h45-17h00	Sarah Bernardi	Gianluca Destro	Arcadie Fuior
17h00-17h15	Tristan Texier Bonniot	Antonio Del Vecchio	Louis Mazaud
17h15-17h30	Hanh Linh Nguyen	Guillaume Levitre	Florian Lebon
17h30-17h45	Xiaomin Yang	Julie Febvay	Timothé Godou
17h45-18h00	Clôture, remise des prix, Amphi Coudane		

Comité d'organisation:

Jad Rabah, Laura Altenschmidt, Prantik Chakraborty, Gabriela Moran, Asma Khadhraoui, Axel Labattut (doctorants organisateurs), Christophe Colbeau-Justin (Directeur de l'ED), Frédéric Avenier (Présidente du comité), Corinne Ruello (administratrice).

Le comité d'organisation souhaite la bienvenue aux 250 participants de la 4^{ème} Journée de l'Ecole Doctorale 2MIB (JED 2018) et remercie très sincèrement les organismes suivants pour leur contribution financière :

Le LabEx CHARM3AT, La Fédération de Chimie Physique de Paris-Saclay (CPPS), La Société Chimique de France (SCF) via sa section régionale Ile de France, Université Paris-Saclay et Université Paris-Sud via IUT d'Orsay.



Communications orales CPBA

Jeremy Donon, **Combining Experiment and Theory to Characterise Ion Pairs: from Gas Phase to Solution**, LIDYL/CEA

Fabrizio Creazzo, **Electrocatalysis & water splitting At Co_3O_4 -aqueous solutions interfaces: DFT-MD simulations & metadynamics**, LAMBE/UEVE

Michaël Ougier, **Deposition and characterization of Cr-Al-C thin films for Accidents tolerant zircaloy claddings**, SEARS/CEA/UPSUD

Xiaojiao Yuan, **Polypyrrole nanostructures for water depollution and hydrogen generation**, LCP/UPSUD

Yoann Peperstraete, **Combined *ab initio* and experimental investigations for the study of the IR spectroscopy of $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$** , SOLEIL/ICMMO/UPSUD

Delphine Dessaux, **Coarse-grained molecular dynamics of ionic current through alpha-hemolysin**, LAMBE/UEVE

Philipp Gotico, **A Glimpse on the "Light" and "Dark" States of Artificial Photosynthesis: Visible-Light-Driven Reduction of CO_2 to CO and Its Subsequent Valorization in Carbonylation Chemistry**, I2BC/CEA/UPSUD

Aline Rigal, **An innovative multi-parametric approach to evaluate the "very aging" impact on skin barrier function, using "omic" analytical methods, *in vivo* Raman spectroscopy and biometric measurements**, Lip(Sys)²/UPSUD

Flavio S. Brigiano, **Investigating the origin of life at the air/water interface by biased DFT-based molecular dynamics simulations**, LAMBE/UEVE

Antoine Allard, **Mechanical role of actin biopolymer dynamics on a membrane nanotube**, LPC/Institut Curie/LAMBE/UEVE

Caroline Chipeaux, **UHPLC-MS/MS simultaneous determination of sphingolipids and phospholipids in red blood cells**, Lip(Sys)², UPSUD

Ioanna Christodoulou, **New insights into the degradation mechanism of Metal Organic Frameworks**, ISMO/UPSUD

Sarah Bernardi, **Bacteriostatic Polymer Surfaces**, NIMBE/CEA/UPSUD

Tristan Texier Bonniot, **Developpment of Optimized Natural Abundance Deuterium WET-QUOSY 2D Experiments in Lyotropic Liquid Crystals: A new Tool for the Authenticity Control?**, ICMMO/UPSUD

Hanh Linh Nguyen, **Selective detection of aluminium ion in drinking water by Molecular fluorescent probes**, PPSM/ENS

Xiaomin Yang, **Toxicity evaluation of platinum nanoparticles on proteins using Synchrotron Radiation Circular Dichroism**, ISMO/UPSUD

Communications orales COB

Ali Nasrallah, **Catalytic enantioselective intermolecular C(sp³)-H amination**, ICSN/CNRS/UPSUD

Benjamin Large, **Selective C-H arylation of naphthalenes: a key entry towards linear and angular extended fluorenones**, ILV/UVSQ

Sakna Bazzi, **Sm(II)-catalyzed the carboxylation of benzyl chloride derivatives : a new method to access carboxylic acids**, ICMMO/UPSUD

Maxime Jarret, **Bioinspired Oxidative Cyclization of the Geissoschizine Skeleton for the Total Synthesis of (-)-17-nor-Excelsinidine**, ICMMO/UPSUD

Mathieu Carlier, **Glycan metabolic engineering, a powerfull tool for cell labeling**, ICSN/CNRS/ UPSUD

Tanguy Jousselin-Oba, **Novel Naphto-tetracenone core based fluorophores**, ILV/UVSQ

Coralie Caron, **Studies of DNA abasic-site binders as inhibitors of DNA base excision repair**, CMIB/UPSUD

Nicolas Glinsky-Olivier, **Gold-catalyzed Synthesis of Spirofused Indolo-Quinuclidines**, ICSN/CNRS/UPSUD

Thi Phuong Thu Nguyen, **Surface-Initiated Polymerization of Pentafluorophenyl Methacrylate from Poly(Ethylene Terephthalate) Films**, SM₂B/CEA/UPSUD

Yong-Peng Liu, **Toward the Total Synthesis of Microsclerodermin D**, ICMMO/UPSUD

Kalani Kariyawasam, **Artificial Metalloenzyme based on the artificial proteins α Rep**, ICMMO/UPSUD

Gianluca Destro, **Carbon Isotope Exchange (CIE) for the synthesis of radio-labeled compounds**, SCBM/CEA/UPSUD

Antonio Del Vecchio, **New Methodologies for the Late Stage Labeling of Drug Candidates**, SCBM/CEA/UPSUD

Guillaume Levitre, **Evaluation of new supported photocatalysts for the trifluoromethylation of alkenes**, ICSN/CNRS/UPSUD

Julie Febvay, **New family of P-Stereogenic Phosphahelicenes**, ICSN/CNRS/UPSUD

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Communications orales CIM

Aurélien Adenot, **Development of a sulfonylative Hiyama cross-coupling**, NIMBE/CEA/UPSUD

Lidie Rousseau, **Iron-Catalyzed Aryl-Aryl Cross-Coupling Reaction Homo- versus Hetero-Coupling Reaction**, NIMBE/CEA/UPSUD

Raphaëlle Belchi, **TiO₂/graphene nanocomposites synthesized by laser pyrolysis for third generation solar cells**, NIMBE/CEA/UPSUD

Asma Khadhraoui, **Development of new catalysts for CO₂ reduction**, ICMMO/UPSUD

Laura Altenschmidt, **Multi-scale control of magnetic properties by the incorporation of metal oxide nanoparticles inside the ordered mesoporosity of silica monoliths**, ICMMO/UPSUD

Somia Tomane, **Synthesis and Characterization of Polyoxometalate/Antibiotic/Gold Nanoparticle Hybrid Materials for Antibacterial Applications**, ILV/UVSQ

Youngju Ro, **Light-induced electron transfer by Copper(II) complex**, ICMMO/UPSUD

Luqiong Zhang, **Temperature-, Light-, and Soft X-rays Induced Spin Crossover in a Submonolayer of Fe^{II}-Pyrazoly Molecules in Direct Contact with Copper**, ICMMO/UPSUD

Antoine Desrues, **Core@shell silicon carbon nanoparticles and their performances as battery anodes**, NIMBE/CEA/UPSUD

Anshuman Agrawal, **Multiscale architectural characterisation of transport properties in composite Li-ion positive composite electrodes**, ICMMO/UPSUD

Nhat Tam Vo, **Oxidation of alkanes and alkenes catalyzed by artificial iron complex**, ICMMO/UPSUD

Arcadie Fuior, **Investigating the antitumor properties of new Mo₂O₂S₂-based coordination compounds with thiosémicarbazones**, ILV/UVSQ

Louis Mazaud, **Pincer ligands containing iminophosphorane : coordination and reactivity**, LCM/X

Florian Lebon, **Electrical measurements of electrografted thin layers on patterned gold electrodes in vertical metal-molecule-metal geometry**, NIMBE/CEA/UPSUD

Timothé Godou, **Silylation of O–H Bonds by Catalytic Dehydrogenative and Decarboxylative Coupling of Alcohols with Silyl Formates**, NIMBE/CEA/UPSUD

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Communications par affiche

- 1 Benjamin Poggi, **Mechanofluorochromic polymers as mechanical stress probes**, PPSM/ENS
- 2 Prantik Chakraborty, **Calculating Plutonium self-diffusion in hyper-stoichiometric mixed oxide using the bulk properties**, SCCME/CEA/UPSUD
- 3 Sarah Al Gharib, **Nucleation mechanism of silver nanoparticles in the Turkevitch method**, LCP/UPSUD
- 4 Luca Polacchi, **Fluorescent response to forces at the nanoscale of polydiacetylene thin films and single crystals: a new lead on fluorescent force sensors**, PPSM/ENS
- 5 Inès Aloui, **Contribution of electron-based fragmentation methods for the study of synthetic polymers by tandem mass spectrometry**, LAMBE/UEVE
- 6 Pauline Maury, **Processes study in the amplification effect by nanoparticles in hadrontherapy**, ISMO/UPSUD
- 7 Jingwen Qiu, **Core-shell nanoparticles for biomedical application**, ISMO/UPSUD
- 8 Carolina Villamil Franco, **Ultrafast Multi-Exciton Dynamics in Hybrid Perovskite Colloidal Nanostructures studied by Time-resolved Laser Spectroscopy**, LIDYL/CEA/UPSUD
- 9 Joudi Bakar, **Morphological and molecular modifications during keratinocytes differentiation process**, Lip(Sys)²/UPSUD
- 10 Jordan Dezalay, **Excited state dynamics of protonated RNA/DNA bases in a cryogenically cooled ion trap: the case of uracil**, ISMO/UPSUD
- 11 Hana Illichova, **Active state of NADPH oxidase: Decrypting the protein-protein interactions in live cellular system**, LCP/UPSUD
- 12 Kathleen Rousseau, **¹³C-metabolic labeling of mice for quantitative metabolomic analyses**, SPI/CEA/UPSUD
- 13 Emilie Rossi, **Search of new Plasma Biomarkers for the Diagnosis of Alzheimer's Disease**, Institute Galien/UPSUD
- 14 Malvika Sardana, **visible-light enabled carbonylation of alkyl iodides**, SCBM/CEA/UPSUD
- 15 Yoan Chevalier, **Artificial flavoenzymes for radical chemistry and activation of dioxygen in water**, ICMMO/UPSUD
- 16 Viktor Pfeifer, **tritium and deuterium labelling of bioactive molecules catalyzed by ruthenium nanoparticles**, SCBM/CEA/UPSUD
- 17 Mégane Valero, **highly selective directed iridium-catalyzed hydrogen isotope exchange (hie) of unactivated c(sp³) centers in aliphatic amides**, Sanofi/UPSUD

- 18 Maroua Hamami, **Hybrids nanomaterials MoS₂/polypyrrole as platform of aptasensors for electrochemical detection of antibiotic as water contaminant s**, ICMMO/UPSUD
- 19 Lucie Jamgotchian, **Development of fluorinated micelles for ¹⁹F MRI**, ICMMO/UPSUD
- 20 Marina Thierry, **Efficient microwave-assited dealkylation of methoxyphenols in ionic Liquids**, ILV/UVSQ
- 21 Charlotte Lorton, **Phosphine-Promoted Synthesis of 9H-Pyrrolo[1,2-a]indole Derivatives via an γ -Umpolung Addition/Intramolecular Wittig Reaction**, ICSN/CNRS/UPSUD
- 22 Zeinab Imani, **Synthesis and conformational analysis of peptides containing noncanonical thioether amino acids**, ICMMO/UPSUD
- 23 Céline Dorval, **C-X Activation in Cobalt-Catalyzed Reductive Cross-Coupling**, LCM/X
- 24 Oksana Reznichenko, **Development of bis(acylhydrazone) libraries of G-quadruplex DNA binders: synthesis, pull-down assay and virtual screening**, Institut Curie/UPSUD
- 25 Zheiwai Jiang, **Enantioselective Synthesis of *trans*-Cyclopentene via Formal [3 + 2] Annulation of Enal Catalyzed by Bifunctional *N*-Heterocyclic Carbene/Thiourea Catalysts**, ICMMO/UPSUD
- 26 Pauline Quellier, **Synthesis of Heparan Sulfate fragments integrating a sulfamate moiety as tools in the molecular optimisation of HSulf-2 inhibitors**, ICMMO/UPSUD
- 27 Remi Pelletier, **Development of new fluorination methods for fluorine-18 labelling of non-activated aromatic compounds**, IMIV/CEA/UPSUD
- 28 Eddy Elisée, ***In silico* analysis of the active site in metallo- β -lactamases using quantum and free energy calculations**, ICSN/CNRS/UPSUD
- 29 Pauline Aubert, **Optimization of glycan metabolic labeling: toward a new strategy for glycoconjugate vaccines preparation**, ICSN/CNRS/UPSUD
- 30 Blaise Gatin-Fraudet, **New probes for cellular imaging of hydrogen peroxide: Synthesis and kinetic evaluations**, ICMMO/UPSUD
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- 32 Julie Le Bescont, **Design and Synthesis of Photoactivatable Inhibitors of the TAM Family**, Institut Curie/UPSUD
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- 40 Aurélien Doublet, **Synthesis and characterization of a CrVI-Free organic adhesion primer for aeronautic metals**, PROTEC/CEA/UPSUD
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- 43 Nicolas Osenciat, **Transport properties in High Entropy Oxides (HEOx)**, ICMMO/UPSUD
- 44 Qiqiao Lin, **Luminescent hybrid materials for LED lighting**, LPICM/X