

#### ICON<sup>2</sup>-2015

International conference on 
w Novel nanomaterial: engineering and properties »

9th to 11th of September 2015

Synchrotron SOLEIL

# 9<sup>th</sup> to 11<sup>th</sup> of September 2015

### Wednesday 9<sup>th</sup> September 2015 9:00 AM - 1:00 PM

8:30 - 9:30	Registration & Welcome coffee
9:30 – 9:40	Welcome word, Paul Morin, Director of Research, Synchrotron SOLEIL
	SESSION I
9:40 - 10:20	Dynamics at surfaces, studied by VUV-soft X-ray chronospectroscopy  Iwao Matsuda – Institute for Solid State Physics- University of Tokyo, Japan
10:20 – 10:35	Photo-induced phase transition between charge density wave states in 1T-TaS2  Claire Laulhé – Synchrotron SOLEIL, Saint-Aubin, France
10:35 – 11:00	Ultrafast magnetization dynamics by time resolved XMCD  Christine Boeglin –CNRS - IPCMS – Strasbourg, France
11:00 – 11:25	Coffee break
11: 25 – 12:05	Unraveling how electronic and spin structures control macroscopic properties of manganite ultra-thin films  Andrivo Rusydi – Singapore Synchrotron Light Source, Singapore
12:05 – 12:20	Spin-state switching of spin-crossover nanomaterials  Marie-Laure Boillot— ICMMO, Orsay, France
12:20 – 12:45	Probing ultrafast magnetization dynamics on the nanometer length scale by coherent X-ray diffraction at XFELs  Jan Lüning –Laboratoire de Chimie Physique-Matière et Rayonnement, Paris, France
12:45 – 13:00	X-ray absorption study of iron and cobalt clathrochelates for application in proton exchange membrane water electrolysers  Pierre Millet – ICMMO/Eriée, Orsay, France
13:00 – 14h	Lunch



### Wednesday 9<sup>th</sup> September 2015 2:30 PM - 9:00 PM

	SESSION II
14:30 – 14:25	Synthesis, encapsulation, and templating of polymers mediated by metal-organic frameworks <b>Takashi Uemura</b> – Department of Synthetic Chemistry and Biological Chemistry - Kyoto University, Japan
14:25 – 14:50	Chromophore confinement into single-walled carbon nanotubes : Supramolecular organization and physical interactions  Laurent Alvarez –Laboratoire Charles Coulomb, Université de Montpellier, France
14:50 – 15:15	One-dimensional self-assembly of semiconductor nanorods <b>Takuya Nakashima</b> – Graduate school of Materials Science, Nara Institute of Science and Technology, Japan
15:15 – 15:30	Effect of supramolecular organization of porphyrin molecules to optimize energy transfer to single wall carbon nanotubes  Geraud Delport – Laboratoire Aimé Cotton, Orsay, France
15:30 – 16:00	Coffee break
16:00 – 16:25	Structurally defined graphene nanoribbons: Bottom-up solution synthesis and characterizations  Akimitsu Narita – Max Planck Institute for Polymer Research, Germany
16:25 – 16:50	2D atomic crystals on transition metal surfaces: Silicene, germanene, and hafnene  Hong-Jun Gao –Institute of Physics - Chinese Academy of Sciences, China
16:50 – 17:15	Control of sequence and chain topology for vinyl polymers  Makoto Ouchi –Department of Polymer Chemistry, Kyoto University, Japan
17:15 – 17:40	Theoretical characterisation of STM images of assemblies of flat organic molecules in surface  Manuela Mura –School of Mathematics and Physics, University of Lincoln, United Kingdom
17:40 – 17:55	Engineering two-dimensional hybrid NaCl-organic coordinated nanoarchitectures on metal surface  David Peyrot – CEA Saclay, Gif-sur-Yvette, France
18:15	Transfer to Paris Dinner conference
21:00	Social Dinner

## Thursday 10<sup>th</sup> September 2015 9:00 AM – 2:00 PM

	SESSION III
09:00 - 09:40	Unravelling the mysteries of solar nanocells: surface and interface chemistry in quantum dots  Wendy R. Flavell – The Photon Science Institute - University of Manchester, United Kingdom
09:40 - 09:55	Molar mass versus polymer solar cell performance: Highlighting the role of homocouplings  Tim Vangerven – Institute for Materials Research (IMO-IMOMEC), Hasselt University, Diepenbeek, Belgium
09:55 - 10:20	Supramolecular preorganization of monomers for the growth of carbon nitride materials  Menny Shalom – Max Planck Institure of Colloids and Interfaces, Germany
10:20 - 10:35	Tailoring nanoscale morphologies in high-efficiency polymer-fullerene bulk heterojunction solar cells  Pierre Beaujuge –King Abdullah University of Science and Technology (KAUST),  Thuwal, Saudi Arabia
10:35 - 11:00	Coffee break
11:00 - 11:40	Non-noble metal electrocatalysts for hydrogen economy  Bruno Jousselme – CEA Saclay, Gif-sur-Yvette, France
11:40 - 11:55	Polyoxometalates-based hybrids as covalently anchored homogeneous catalysts  Richard Villanneau – Institut Parisien de Chimie Moléculaire, Paris, France
11:55 - 12:20	Nanostructures material for energy conversion: Synergic effects between carbon nanotubes and metal oxides  Giovanni Valenti –Department of Chemistry «Giacomo Ciamician», University of Bologna, Italy
12:20 - 12:35	Iron sulfide nanoparticles as cathode catalyst for PEM electrolyzers: Towards a mechanism for hydrogen evolution reaction  Marion Giraud – Laboratoire ITODYS, Paris, France
12:35 - 12:50	Optimization of nanometric epitaxial hematite films for solar water splitting by oxygen vacancy engineering  Maxime Rioult – CEA Saclay, Gif-sur-Yvette, France
13:00 - 14:00	Lunch

## Thursday 10<sup>th</sup> September 2015 2:00 AM - 5:40 PM

14:00 - 14:25	Bioinspired multifunctional coatings for advanced structural metals/alloys  Masanobu Naito –National Institute for Materials Science, Japan
14:25 - 14:40	Implementation of hybrid nano-emitters coupling fluorophores and plasmonics nanoparticles <b>Céline Molinaro</b> – CEA Saclay, Gif-sur-Yvette, France
14:40 - 14:55	Characterization of CVD graphene: Work function modulation and its opportunities for heterojunctions  Mohamed Boutchich— GeePs, Gif-sur-Yvette, France
14:55 - 15:10	Analysis and functionalization of graphene oxide with electrochemical microscopy  Renaud Cornut – CEA Saclay, Gif-sur-Yvette, France
15:10 - 15:25	Synthesis of 14C-labeled graphene  Nathalie Fresneau – CEA Saclay, Gif-sur-Yvette, France
15:25 - 15:45	Coffee break
15:45 - 17:40	SOLEIL beamline visits & Poster Session

### Friday 11<sup>th</sup> September 2015 9:00 AM – 1:45 PM

	SESSION IV
09:00 - 09:25	Mesostructured materials via the sol-gel process for energy conversion and storage  Christel Laberty-Robert –Laboratoire de Chimie de la Matière Condensée, Paris,  France
09:25 - 09:50	A double-strand approach to biomimetic multiporphyrin architectures  Mitsuhiko Morisue – Kyoto Institute of Technology, Kyoto, Japan
09:50 - 10:15	Ultrafast studies of non equilibriumelectronic states in complex materials  Marino Marsi –Laboratoire de Physique des Solides, Orsay, France
10:15 - 10:30	Stability of supported lead nanoparticles: Five-fold twinned pyramids versus single crystals  Lise Serrier-Garcia – Institut des Nanosciences de Paris, Paris, France
10:30 - 11:00	Coffee break
11:00 - 11:25	Stimuli responsive supramolecular materials through host and guest interactions  Yoshinori Takashima —Department of macromolecular science, Osaka University,  Japan
11:25 - 11:40	Supramolecular chiral nanoarchitectures and chiral phase transitin induced by the selective assembly of barbituric acide derivative enantiomers  Xianan Sun – Laboratoire ITODYS, Paris, France
11:40 - 11:55	XPS of isolated nanoparticles  Olivier Sublemontier – CEA Saclay, Gif-sur-Yvette, France
11:55 - 12:10	Hot carrier relaxation in photoexcited GaAs: The role of the electron-phonon coupling  Jelena Sjakste – Laboratoire des Solides Irradiés, Palaiseau, France
12:10 - 12:45	Closing session Best student oral presentation award
12:45 - 13:45	Lunch
13:45	Departure