

French-Japanese Seminar on “Bioinspired Methods and Applications”

4 February 2013
at the Embassy of France, Tokyo
and
5 and 6 February 2013
at LIMMS (Seminar Room An 301-302), Institute of Industrial Science,
Tokyo University

PROGRAM

Monday 4 February 2013
Embassy of France

08:30	<i>Opening of the registration desk at the Embassy of France</i>
09:00 – 09:05	<i>Opening Remarks</i> Dr. Florence RIVIERE-BOURHIS (Counselor for Science and Technology, Embassy of France in Japan)
09:05 – 09:45	<i>Introduction: Bioinspired Methods to Investigate and Design Complex Systems.</i> Pr. Teruo FUJII and Dr. Jean-Pierre AIME LIMMS, University of Tokyo CNRS, University of Bordeaux
<i>Session 1: Biological Interfaces & Applications</i> Moderator: Dr. Patricia Bassereau	
09:45 – 10:15	<i>“Smart Supramolecular Nanostructures from Block Copolymers for Gene and Drug Delivery”</i> Pr. Kazunori Kataoka Tokyo University
10:15 – 10:35	<i>Novaptech Production of Aptamers, “Perspectives & RNA network in France”</i> Dr. Jean-Jacques Toulmé INSERM, Bordeaux

10:35 – 10:55	<i>“Single-Molecule Biophysics of ATP synthase: 15 Years for Comprehensive Understanding of the Smart Molecular Motor”</i> Pr. Hiroyuki Noji Tokyo University
10:55 – 11:15	<i>“Development of Biosensors for Biology and Health”</i> Dr. Patrice Marche Immunaalp, INSERM, Grenoble
11:15 – 11:45	<i>Group photo and Coffee break</i>
<i>Session 2: Bioinspired Collaborative Networks</i> Moderator: Pr. Daisuke Kiga	
11:45 – 12:05	<i>“The Carnot Institutes in France: a major research task force for economical development through technologies and innovation”</i> Pr. Jean-Marie Devoisselle Carnot Institute CED2, Montpellier
12:05 – 12:25	<i>Overview of the National Research Project, “Synthetic Biology for the Comprehension of Biomolecular Networks”</i> Pr. Masahiro Okamoto Kyûshû University
12:25 – 12:55	<i>“A European Network Dedicated to BioInspired Nose Devices”</i> Dr. Edith Pajot INRA, Paris
13:00 – 14:30	<i>Lunch break</i>
<i>Session 3: Networks and Regulation</i> Moderator: Dr. Juan Elezgaray	
14:30 – 14:50	<i>“SMART FORCE”: the microfluidic tool to explore your colloidal solution (self-assembly, ultrasensitive analysis...)”</i> Dr. Julien Cordeiro LTM-CNRS c/o CEA MINATEC, Grenoble
14:50 – 15:20	<i>“Information-Theoretical Approach towards Robust Information Processing in Noisy Intracellular Systems”</i> Pr. Tetsuya J. Kobayashi UT IIS, Tokyo

15:20 – 15:50	“Artificial Evolution and Collective Adaptive Systems” Pr. Nicolas Bredèche ISIR, Pierre et Marie Curie University, Paris
16:00 – 16:30	Coffee break
Session 4: Membrane, Protein and Single Molecules Moderator: Pr. Hiroyuki Asanuma	
16:30 – 17:00	“New Generation Protein Engineering by Using “Simplified” Genetic Code” Pr. Daisuke Kiga Tokyo institute of technology
17:00 – 17:30	“Membrane Nanotubes for Deciphering Intracellular Traffic” Dr. Patricia Bassereau CNRS, Institut Curie, Paris
17:30 – 18:00	“Toward Deciphering Molecular Individuality in Systems Biology” Pr. Tamiki Komatsuzaki Hokkaido University
Closing remarks	
18:00 – 18:20	Dr. Barbara Rhode Minister Counsellor for Science and Technology, Delegation of the European Union to Japan
18:20 – 18:30	Dr. Yannick Rondelez LIMMS, Tokyo
Reception (18:30 – 20:30)	

Attendance to the seminar at the Embassy is by invitation only

Contact: Ms. Sanae WATANABE
bioinspired2013@ambafrance-jp.org
+81 (0) 3 5798 6035

Location: Embassy of France - Main Conference Room-1F
4-11-44, Minami-Azabu, Minato-ku, Tokyo 106-8514
<http://www.ambafrance-jp.org/>

Tuesday 5 February 2013
LIMMS, IIS, Tokyo University

08:30	<i>Opening of the registration desk at LIMMS</i>
Moderator: Dr. Cécile Leduc	
09:15 – 09:30	<i>Welcome in LIMMS and IIS</i> Dr. Dominique Collard & Pr. Teruo Fujii LIMMS, IIS, Tokyo
09:30 – 10:00	<i>“Annexin-5: a Membrane Protective Shield and a Disease Biomarker”</i> Pr. Alain Brisson CBMN, University Bordeaux
10:00 – 10:30	<i>“DNA Nano-engineering for the Construction of Photon-fuelled Molecular-machine with Azobenzenes as Molecular Engine”</i> Pr. Hiroyuki Asanuma Nagoya University
10:30 – 11:00	<i>“Aptamers: Clever Oligonucleotides for Nanodevices”</i> Dr. Jean-Jacques Toulmé Bordeaux University
11:00 – 11:30	<i>Coffee break</i>
Moderator: Dr. Masahiro Takinoue	
11:30 – 12:00	<i>“From Epigenetics-driven Evolution to Epigenome Engineering”</i> Pr. Ichizo Kobayashi Tokyo University
12:00 – 12:30	<i>“Biomimetic Chemistry at the CED2 Carnot Institute: from Biomolecules to Functional Materials”</i> Pr. Jean-Marie Devoisselle Institut Gehrhardt, Montpellier
12:30 – 14:00	<i>Lunch break</i>

Moderator: Dr. Hervé Isambert	
14:00 – 14:30	<i>“DNA Computing”</i> Dr. Andre Estevez-Torres LPN, Paris
14:30 – 15:00	<i>“Nano/micro-technologies for the Construction of Non-equilibrium Artificial Cell Models”</i> Dr. Masahiro Takinoue Tokyo Institute of Technology
15:00 – 15:30	<i>“Molecular Crowding Creates Traffic Jams of Kinesin Motors on Microtubules”</i> Dr. Cécile Leduc Institut Pasteur, Paris
15:30 – 16:00	<i>Coffee break</i>
Moderator: Pr. Tamiki Komatsuzaki	
16:00 – 16:30	<i>“Interfacing DNA Computation with Electronics – the First Steps”</i> Dr. Alexis Vlandas BioMEMS Group, IEMN, Lille
16:30 – 17:00	<i>“RNA Switches and Nanostructures under Transcriptional Control”</i> Dr. Hervé Isambert Institut Curie, Paris
17:00 – 17:30	<i>“Homeostasis and Memory by Autonomous Regulation of Time-scales by Enzyme-limited Competition”</i> Pr. Kunihiro Kaneko Tokyo University

Wednesday 6 February 2013

LIMMS, IIS, Tokyo University

Moderator: Dr. Andre Estevez-Torres	
09:00 – 09:30	<i>“Folding of DNA Origami, a Cooperative Self –Assembling Process”</i> Dr. Juan Elezgaray Bordeaux University
09:30 – 10:00	<i>“Design Principle of F₁-ATPase Rotary Molecular Motor”</i> Pr. Hiroyuki Noji UT Tokyo
10:00 – 10:30	<i>“Magnetic Control of Signaling Pathways using Nanoparticles”</i> Dr. Zoher Gueroui ENS, Paris
10:30 – 11:00	<i>“Chemical Biology that Controls DNA Structure and Function: DNA Origami and Artificial Genetic Switch”</i> Pr. Hiroshi Sugiyama Kyoto University
11:00 – 11:30	<i>Coffee break</i>
Moderator: Pr. Ichizo Kobayashi	
11:30 – 12:00	<i>“Switching Mechanism of Cyclic Enzyme System: Role as a Chemical Diode”</i> Pr. Masahiro Okamoto Kyūshū University
12:00 – 12:30	<i>“Colloidal Manipulations and Nanodevices”</i> Dr. David Peyrade LTM-CNRS c/o CEA MINATEC Grenoble
12:30 – 13:30	<i>Lunch break</i>

Moderator: Dr. Zoher Gueroui	
13:30– 14:00	<i>“Is Molecular Programming a Good Model of Biological Circuits?”</i> Dr. Yannick Rondelez LIMMS CNRS/IIS, Tokyo University
14:00 – 14:30	<i>“From DNA Nanotechnology to Molecular Robotics”</i> Pr. Satoshi Murata Tohoku University
14:30 – 15:00	<i>“Safety Assessment of Nano-materials: Interference with the Immune System”</i> Dr. Patrice Marche ImmunAlp, INSERM, Grenoble
15:00 – 15:45	<i>“Expression of Life in Contemporary Biomedicine Art: An alternative ‘Synthetic’ Approach”</i> Pr. Hideo Iwasaki & Dr. Juan Manuel Castro Lab for Molecular Cell Network & Biomedicine Art, Waseda University
15:45 – 16:00	<i>Closing remarks</i>
16:00	<i>Visit of LIMMS</i>

Contact: Dr. Yannick RONDELEZ
rondelez@iis.u-tokyo.ac.jp
+81 (0) 3 5452 6036

Location: LIMMS – Room An 301-302
Institute of Industrial Science, University of Tokyo
4-6-1 Komaba, Meguro-ku,
Tokyo 153-8505, Japan
<http://limmshp.iis.u-tokyo.ac.jp/mediawiki/index.php/Contact/Access>