

AGENDA

DGIST – University of Tours (GREMAN, PCM2E) – INSA Centre Val de Loire

Monday, Nov 21st

10.00 am – noon: Visit of CERTeM (<http://certem.univ-tours.fr/>)

(contact: Jérôme Billoué, director of CERTeM)

noon: Lunch in ST Microelectronics

(<http://www.s2e2.fr/en/orgs/stmicroelectronics-tours>)

2.00 pm – 5.00 pm: Short presentations and informal discussions

GREMAN: <http://greman.univ-tours.fr/>

PCM2E: <http://pcm2e.univ-tours.fr/>

(See the detailed program below)

8.00 pm: dinner with colleagues from GREMAN (Gisèle Gruener, Marc Lethiecq - director of GREMAN, François Gervais – former director of GREMAN, Joe Sakai, Yves Lansac) and PCM2E (Bruno Schmaltz, Daniel Lemordant)

Tuesday, Nov 22nd

8.30 am: Meeting in Tours train station with Marc Lethiecq to go to INSA in Blois.
Arrival in Blois at 9.24 am

9.30 am – noon:

- Greeting by the director of INSA-Centre Val de Loire, Prof. Jean-Marie Castelain (<http://www.insa-centrevaldeloire.fr/en>)

- Presentation of DGIST and its departments, Prof. Hasuck Kim
- Presentation of INSA group, INSA-Centre Val de Loire, its current departments and its project for a new department on durable energy systems, Prof. Marc Lethiecq.
- Discussions on possibilities of partnerships, exchanges, double degrees, etc.
- Visit of laboratory facilities

noon: Lunch in Blois

2.00 pm: Presentations of research topics (10-15 min to allow informal discussions)

- **Guylaine Poulin-Vittrant**

Design, modeling and characterisation of micro and nano objects based on MEMS capacitive or piezoelectric technologies.

- **Séverine Gauchet**

Durability of the polymer materials: application to hydrogen storage

- **Gaël Gautier**

Fuel cells and lithium batteries – can porous silicon be a part of future portable energy systems? (Porous silicon, electrochemistry, proton exchange membrane fuel cells, lithium battery anodes)

3.30 pm: Transfer to Blois train station

DGIST – University of Tours (GREMAN, PCM2E) WORKSHOP

Monday, Nov 21st 2016, 14h–17h

Building E2, Room 2290 (Seminar room of the mathematical dept.)

13h50 – Welcome (coffee)

14h00 - Yves Lansac

Introduction and overview of University of Tours and GREMAN

14h10 - Hasuck Kim

Overview of Energy Systems Engineering Department and other departments in DGIST, Korea + research overview in Energy Systems Engineering dept.

14h20 - Bruno Schmaltz

Organic semiconductors and nanostructured materials for energy applications
+ overview of PCM2E.

14h30 - Aurélien Montagu

Le Studium opportunities in Région Centre: fellowships, professorships and consortium

14h40 – Pause (coffee)

14h50 - Jérôme Wolfman

Enhanced dielectric and piezoelectric properties close to morphotropic phase boundaries
(thin film deposition by combinatorial pulsed laser approach)

15h00 - Jong-Sung Yu

Materials for energy conversion and storage

(mostly carbon materials such as modified graphene, graphene oxides etc used as oxygen reduction/evolution catalysts i.e electrodes for fuel cells and various batteries)

15h10 - Sonia Didry

Oxide ceramics for dielectric properties

15h20 - Sangaraju Shanmugam

Development of Efficient Materials for Energy Conversion and Storage Applications

(mostly composite materials of Nafion (or other polymer fuel cells membranes) and graphene or metal oxide for improved fuel cell performance)

15h30 – Pause (coffee)

15h40 - Daniel Lemordant

Electrolyte and interphases in Li-ion Batteries

15h50 - Hochun Lee

Key factors to govern the kinetics of Li-ion batteries: importance of concentration overpotential

16h00 - Joe Sakai

Development of nanostructured electrodes of lithium-ion batteries

(preparation of columnar-structured Si anodes by plasma etching of Si wafers, and trial of dual-PLD for cathode / electrolyte oxide layers expecting self-assembled nanocomposite)

16h10 - Seung-Tae Hong

Intercalation chemistry of Zn, Ca and Mg ions for post Li-ion batteries

16h20 – Pause (coffee)

16h30 - Gisèle Gruener

Structural and magnetic properties of oxydes

(GaFeO₃ is substituted on Ga and Fe site, a structural analysis is done and related to magnetic properties with local and macroscopic approach)

16h40 - Vinh Ta Phuoc

Optical properties of strongly correlated electronic materials

(micro spectroscopy and micro Raman in extreme conditions)

16h50 - Yunhee Jang

Molecular modeling of energy-harvesting and energy-saving device materials

(organic solar cells and some organic (piezoelectric /ferroelectric polymers) or inorganic (perovskite) materials for energy saving electronic devices)

17h00 - Informal discussion / visit of the laboratories (GREMAN, PCM2E) etc