# **European Materials Research Society**

# Spring Meeting 2015

From May 11<sup>th</sup> to 15<sup>th</sup> Lille Grand Palais – France

**Call For papers** deadline for abstract submission: 15 January 2015

www.european-mrs.com

# CEOPS SUMMER SCHOOL: Carbon dioxide recovery

## SUNDAY, MAY 10th, 2015

The world is facing currently two major problems:

- Climate change due to the excess CO2 generation unable to be absorbed naturally:
- Storage of electricity generated by renewable energies, essentially wind and photovoltaics. .

The industrial proposal is to capture and storage CO2, but the main question is how to manage energy and economy; it seems that Carbon dioxide is at the same time the problem and the solution if we accept a circular economy of the carbon resources.

This workshop will discuss how research and innovation in material sciences can generate fully new solutions to contribute to solve the above stated problem.

A series of lectures given by internationally recognized teachers, will address the current stages of development of this new field in different major areas.

### These topics includes:

- Carbon recovery and economic strategy
- Organic synthesis for biodegradable polymer and solvent •
- Industrial strategy for a direct carbon recovery
- Innovative catalysts to open new routes for the valorization of CO2 molecule
- Electro catalysis process for CO2 recovery
- Challenges for an industrial scale of new processes
- End of the day: discussions with the audience and conclusions

Supported by: FP7-NMP CEOPS project: www.ceoops-project.eu





**Jacques Amouroux** Ecole Nationale Supérieure de Chimie (ENSCP) Université Pierre et Marie Curie Paris France jacquesamouroux@gmail.com

Joan Ramon Morante IREC, Catalonia Institute for Energy Research Sant Adrià del Besòs 08930 Spain irmorante@irec.cat

**Xianhong Wang** Key lab of Polymer Ecomaterials Chinese Academy of Sciences Changchun Institute of Applied Chemistry, CAS China xhwang@ciac.jl.cn



### **Zinfer Ismagilov**

Institute of Coal Chemistry and Material Science Siberian Branch of RAS Kemerovo 650000 Russia IsmagilovZR@iccms.sbras.ru

# **i-FLEXIS SUMMER SCHOOL** Flexible electronic sensors

### FRIDAY, MAY 15th, 2015

This school aims at providing an introduction on the fundamental aspects and a broad overview on the major issues related to the state-of-the-art materials, fabrication methods and device architectures employed to realize advanced electronic sensing systems on flexible, large area substrates. The school welcomes attendees who are new to the topic as well as researchers who may not be fully aware of some of the new materials, techniques and devices available

Speakers and topics covered

### Materials

- Rodrigo Martins "High mobility thin film oxides for novel flexible devices and sensing"
- Beatrice Fraboni "Organic crystals and polymers for radiation sensing applications"

### Devices

- Annalisa Bonfiglio "New transistor structures for low-voltage operation and sensing applications"
- George Malliaras "Bioelectronic sensing with conductive polymer devices"
- Luisa Torsi "High sensitivity Organic sensors for bioanalytical applications"

### Fabrication

- Vincent Fischer CEA "Device fabrication and patterning for large area flexible electronics"
- Speaker TBD- Roll-to-roll fabrication of sensor systems

# Applications (shorter presentation of state of the art devices)

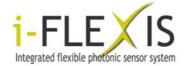
- Paul Siffert EURORAD "Large-area organic X-ray detectors"
- Christophe Loussert -TAGSYS "RFID sensors"
- Josè Saenz Cogollo TOY s.r.l. "Large-area pressure and strain sensors on textile materials" •

## Organizer:

Supported by: FP7-ICT iFLEXIS project: www.iflexis.eu

# **Beatrice Fraboni**

Dipartimento di Fisica e Astronomia Università di Bologna Viale Berti Pichat 6/2 40127 Bologna - Italy beatrice.fraboni@unibo.it





# Deadline for abstract submission: January 15, 2015

