

# **Workshop on Laser Technologies for Organic Electronics**

The primary goal of the workshop «Laser Technologies for Organic Electronics» is to promote laser technology and applications within the organic electronics community, focusing on both fundamental and applied issues concerning laser materials processing, characterisation and assessment, devices functionality, and applications.

A wide range of laser sources (from cw to fs pulsed) are used for direct processes such as laser printing and etching allowing the deposition or etching of a wide variety of materials in solid or liquid phase, with high spatial resolution (µm) for the manufacturing of future organic electronic devices.

This session addresses issues such as laser printing, laser micromachining, selective layer patterning, laser synthesis of nanomaterials and sacrificial layers, modelling and diagnostics, OLED, OTFT, RFID and sensor applications. Compatibility with the current manufacturing organic electronics processes will be discussed.

# List of topics

- Laser processing in organic electronics (OLED, OPV, organic transistors, RFID, batteries, passive components, sensors, smart devices, healthcare devices, smart textiles, etc)
- Laser micromachining (cutting, drilling, etc)
- Laser printing of organic/inorganic materials (Laser Induced Forward Transfer LIFT)
- Laser micro-patterning (selective thin film ablation, large area processing, thin conductive film processing, touchscreen display structuring, transistors and RFID trimming, etc)
- Laser sintering (inks, pastes, etc)
- Laser nanoprocessing (metal nanoparticles, nanowires, CNT, graphene, quantum dots, etc)
- Laser surface functionalisation (tailored surface wetting, periodic features, etc)
- Lasers in smart OLAE packaging (advanced packaging, optical interconnects, waveguides in stretchable materials, light management layers)
- Laser systems integration (R2R integration, large area scanning, registration, diagnostics, hybrid laser and printing)Polymer Organic Semiconductors

### **Workshop International Organizing Committee**

## **Prof. Philippe Delaporte**

Laboratoire Lasers, Plasmas et Procédés Photoniques Marseille University, France

#### Dr. Dimitris Karnakis

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#### Dr. Georges Kotrotsios,

VP Marketing & Business Development, CSEM, Switzerland

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