

Cooperation Project
 Duration: Dec 2010 - Dec 2013
 Partners: 5
 Budget: 700000 Euros

Info

Organic Electronics (OEs) is one of the most rapidly emerging fields that will revolutionize our everyday life. Its main advantage include the use of organic materials in the manufacturing of flexible organic electronic devices (e.g. Organic Photovoltaics-OPVs, Organic Thin-Film Transistors-OTFT etc.) by large-scale and low-cost processes.

The main idea of NanOrganic is the development of a complete technology of Organic Electronics and its direct application in industrial scale for the production of organic electronic devices.

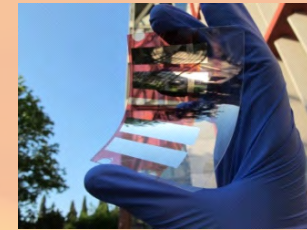
The NanOrganic combines all the Greek excellence in the fields of OE nanomaterials, processes and electronic devices (2 Universities, 1 Institute, 2 high-tech companies).

Objectives

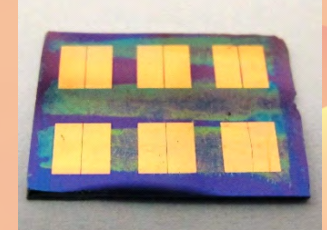
- Development of advanced organic semiconductors (polymers and small molecules), transparent electrodes and nano-structural barrier materials with improved properties and morphology.
- Combination of printing and vacuum technologies for the fabrication of OE devices (OPVs, OTFTs) onto rigid and flexible substrates.
- Upscaling of the synthesis of organic semiconductors in large quantities to enable the industrial manufacturing of OE devices by large-scale & low-cost processes.
- Manufacturing of OE devices (OPVs, OTFTs) and their integration to an Autonomous Organic Light Sensor.

Project Results

Printed OPV Cell



Flexible OTFT



Demonstrator: Autonomous Organic Light Sensor

