Project Type: PhD Thesis

Inkjet-printed Organic Thin Film Devices manufacturing

Short Description

The ICAS group of the IMB-CN is working in the emerging printed-electronics technologies and capabilities with a variety of projects with different goals and requirements: from simple conductive to single interdigitated capacitive/amperometric sensors, passive and active devices such as Organic Thin Film Transistors (OTFTs) or even interfacing hybrid circuits. Low-cost flexible substrates based printed technologies opened a new universe of applications not feasible neither viable with rigid high-cost silicon technologies by using printing and additive manufacturing technologies such as inkjet printing.

This position aims at the development of generic enabling printed electronic devices: novel functional devices like transistors and passive devices by using inkjet printing technology. Simple circuits will be manufactured to demonstrate the performance of the technology on disposable substrates such as paper.

Background & skills required

- Electronic, Telecommunications, Materials or Chemical Engineering, Physics /Nanoscience (or any similar curriculum) covering the following topic: Electronic devices manufacturing processes.
- Knowledge of electronic devices.
- Capability of working as a team.
- Good spoken and written English.

Tasks

The successful candidate will be part of the Printed Microelectronics Group. In the course of your work you will be involved in all aspects and stages of the project, from inception to delivery and gather valuable experience in applied research. The duration of the programme is 36 months.

Contact

Integrated Circuits and Systems (ICAS)
Dr. Eloi Ramon eloi.ramon@imb-cnmcsic.es
Dr. Lluís Terés lluis.teres@imb-cnmcsic.es