

Seminar general

Micro nanoelectronic based devices and systems for environmental and biomedical applications



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Over the last two decades the unprecedented evolution of micronanotechnologies comprising new materials, new devices, new technologies, leads to extreme miniaturisation (3nm node), to extreme powerful computers, large spreading of internet, allowing industry production control (4.0), environment monitoring, telemedicine, space, security, food/agriculture control, etc.

The presentation will focus on new sensors/ sensors array for environment monitoring (gas, water, agriculture products) comprising simulation, design, technology, characterisation, communication, signal processing) that have been achieved within the Laboratory of Microsystems for Environmental and Biomedical applications.

The second topic of the presentation will be related to biosensors and implantable devices for wearable and implantable body parameters/signals, (e.g. glucose, peripheral nerves recording and stimulation) for non-invasive detection of glucose from saliva and for achieving neural interfaces to connect the nerves with a hand prosthesis for people with amputation.

Possible cooperation topics using complementary expertise and infrastructures between IMT and the host institution are envisaged.

Wednesday, 25 May 2022, 11:00

The Training and Research Centre of IFIN-HH

(the new building located between DFN and ELI-NP)