SCIENCESPRINGDAY

FCT FACULDADE DE CIÊNCIAS E TECNOLOGIA UNIVERSIDADE NOVA DE LISBOA

Materials Science Department – CENIMAT/I3N

Chemical Sensors and Biosensors

CENIMAT/I3N Microelectronics and Optoelectronics Group

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2008 Ph D. In Microelectronics and Optoelectronics, UNL

Objectives

Chemical Sensors

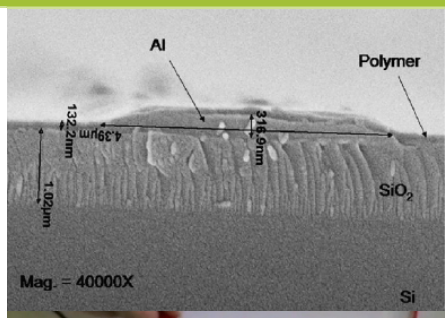
Biosensors

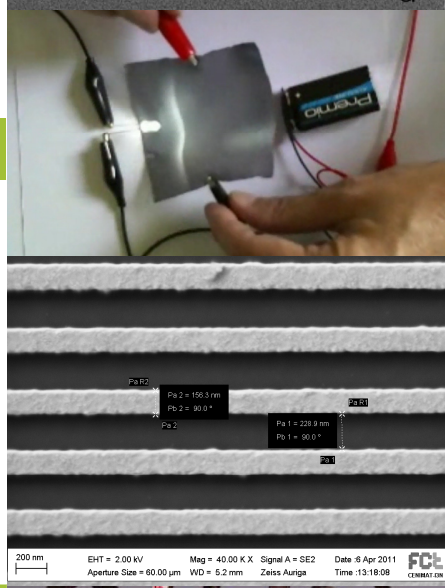
Dielectrophoresis

Dielectric Materials

Electronic Textiles

Microelectronics and Nanotecnologies





Methodology

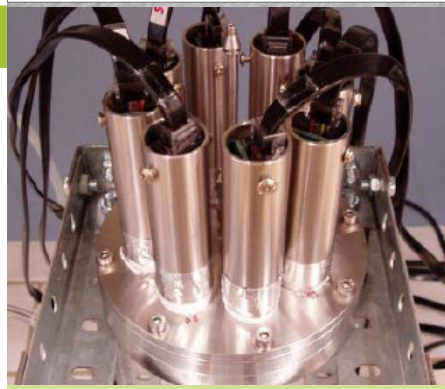
We intend to use micro and nanoscale materials which can offer new properties not find at macroscale. These new materials are expected to be used in new devices for chemical sensing and biosensing. Is our goal to promote the use of environmental friendly technologies and processes either for material syntesis and devices. One of the main goals is the development of new methodologies for disposable sensors for point of care diagnostics at low price.

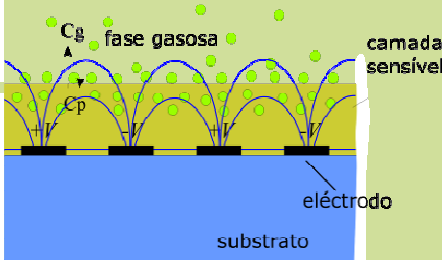
Expected Results

1 – Materials. Materials characterization by Impedance Spectroscopy.

2 – Technologies. Use of environmental friendly processes for thin film deposition (e.g. spin coating, spay coating) at low temperatures.

3 – Devices. Development of low cost devices based on organic materials for biosensores and point of care diagnostics.





Funding:

FCT Fundação para a Ciência e a Tecnologia

COMPETE

QREN Quadro de Referência Estratégico Nacional

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