

CENIMAT
CENTRO DE INVESTIGAÇÃO DE MATERIAIS

i3N

INSTITUTO DE
NANOESTRUTURAS,
NANOMODELAÇÃO E
NANOFABRICAÇÃO

INVITED SPEAKER

DR. JOÃO COELHO

Senior Researcher @ CENIMAT|i3N

WEBINAR

TWO-DIMENSIONAL NANOMATERIALS FOR FLEXIBLE ELECTRONICS APPLICATIONS

Since their discovery, graphene and other related two-dimensional (2D) nanomaterials have created a plethora of possibilities for new technological applications. Currently, these materials have been widely implemented in the fabrication of thin, ultra-light, flexible and wearable devices compatible with the emerging Internet of Things (IoT). However, this paradigm shift requires the development of new materials synthesis routes and fabrication procedures. Moreover, to be truly portable, the new devices must be autonomous and self-powered, i.e., harvest and storage energy from the environment.

This talk focuses on the more relevant 2D nanomaterials preparation techniques, with special attention on liquid phase-exfoliation (LPE), to produce flexible electronics components, such as energy storage devices. Besides being a low-cost technique with the potential of being upscaled to industrial levels. LPE is also compatible with emerging fabrication techniques, such as ink-jet printing.

The exhibited work was mostly carried out during my PhD and following Post-Doc at Trinity College Dublin. The status of the on-going research at CENIMAT|i3N is also presented and discussed.



19TH

**MARCH, 2021
01:30 P.M.**



[CLICK HERE TO ACCESS ZOOM](#)



NOVA
NOVA SCHOOL OF
SCIENCE & TECHNOLOGY