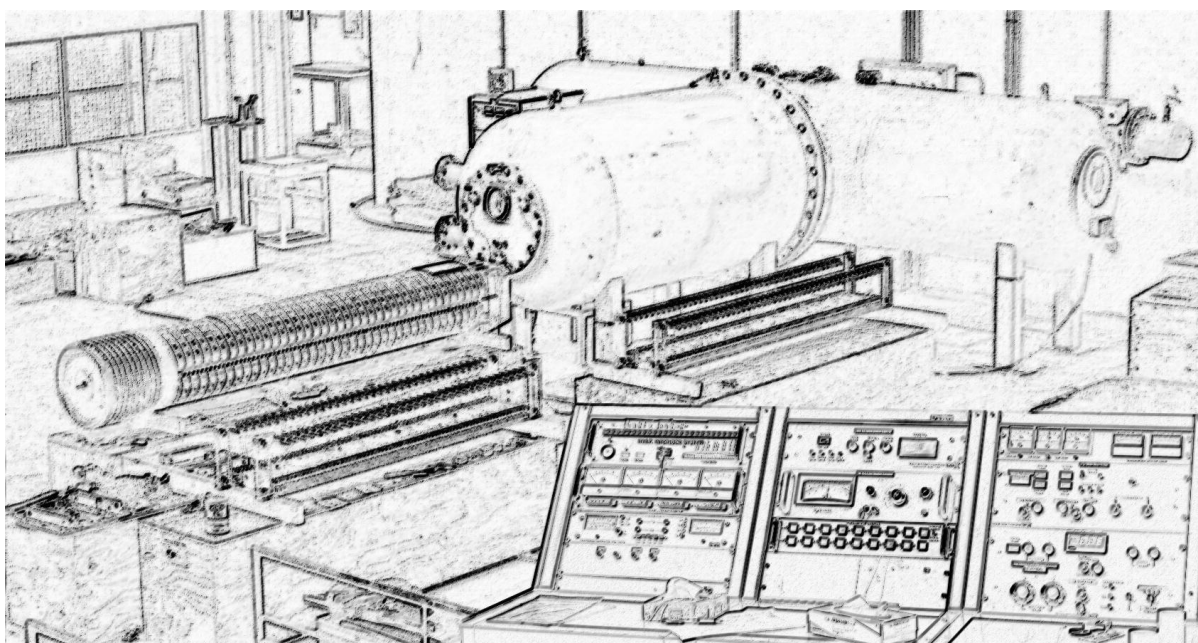


Semiconductors Meet Ion Beams

Workshop in the frame of the
projects GreenLight and Nanowires*

SMIB-2015



25 - 26 June 2015
Instituto Superior Técnico
Campus Tecnológico e Nuclear
Portugal

Organizers:

Katharina Lorenz
Teresa Monteiro
Eduardo Alves
Flávia Rocha
Marco Peres
Miguel Sequeira
Alexandre Freitas
Djibril Faye

* Funding by FCT Portugal under contracts PTDC/CTM-NAN/2156/2012 and PTDC/FIS-NAN/0973/2012 is gratefully acknowledged.

Program

Thursday 25th of June 2015

Katharina Lorenz /
Teresa Monteiro 13:45 - 14:00 Welcome/Introduction

Chair: Katharina Lorenz

Mike Leszczynski invited	Unipress/ TopGaN, Warsaw	14:00 - 14:45	Nitride-semiconductor technologies in Poland
Bruno Daudin invited	CEA Grenoble	14:45 - 15:30	InGaN/GaN and AlGaN/GaN nanowire quantum structures: growth and optical properties
Joana Rodrigues	U. Aveiro	15:30 - 15:50	The pursuit of solid state lighting: rare earth doped GaN nanostructures

Break 15:50 - 16:15

Chair: Eduardo Alves

Elke Wendler invited	U. Jena	16:15 - 17:00	Primary processes of damage formation in semiconductors
Susana Freitas invited	INESC-MN/ IST, Lisbon	17:00 - 17:45	Magnetoresistive materials for spintronics: challenges and applications
Djibril Faye	IST, Lisbon	17:45 - 18:05	Implantation damage in AlGaN alloys
Sérgio Magalhães	IST, Lisbon	18:05 - 18:35	Evidence of bimodal defect distribution by X-ray diffraction in Tm implanted AlGaN

Friday 26th of June 2015**Chair:** Teresa Monteiro

Bianchi Méndez invited	Universidad Complutense de Madrid	9:30 - 10:15	Synthesis and structural characterization of oxide complex nanostructures
Emilio Nogales invited	Universidad Complutense de Madrid	10:15 - 11:00	Gallium oxide based nanowires for optoelectronics

Break 11:00 - 11:30

Ana Silva invited	U. Nova, Lisbon	11:30 - 12:15	Electric field changes in ultrathin oxides by contact-less method
Marco Peres/ Flávia Rocha	IST, Lisbon/ U. Nova, Lisbon	12:15 - 12:45	A new measurement chamber for in-situ characterisation at the nuclear microprobe: First measurements

Lunch 12:45 - 14:30**Chair:** Katharina Lorenz

Eduardo Castro Invited	IST, Lisbon	14.30 - 15.15	Graphene and beyond: electronic properties of novel 2D materials
Andrés Redondo-Cubero	IST, Lisbon/ Universidad Autonoma de Madrid	15:15 - 15:35	Ion beam mixing of III-nitride heterostructures
Nabiha Ben Sedrine	U. Aveiro	15:35 - 15:55	Annealing and implantation effects on InGaN/GaN-based heterostructures: Optical Studies.
Miguel Sequeira/ Alexandre Freitas	IST, Lisbon	15:55 - 16:15	Swift heavy ion irradiation of InGaN/GaN quantum well structures

DISCUSSION