

OPENING DOORS 2015

“Optical Technologies for Society”

5-6 October, Instituto de Ciencias Agrarias del CSIC, C/ Serrano, 115 BIS 28006 Madrid

MONDAY 5th OCTOBER

9:00	Welcome by British Council and CSIC representatives
Session 1. Nanophotonics (Chair, Dr. Joaquin Campos)	
9:20	Keynote, Prof. Jeremy Baumberg, (University of Cambridge)) “Seeing individual molecules by confining light to the nanoscale”
9:50	Dr Giuliana Di Martino (University of Cambridge) “Growing nanowires by light”
10:00	Keynote, Dr. Javier García de Abajo (ICFO) “Pushing nanophotonics down to the atomic scale”.
10:35	Dr. José Ramón Martínez Saavedra (ICFO), “Electron beams for nanophotonics in the atomic scale”.
10:40	Discussion on the session presentations.
11:10	Coffee break
Session 2. Optical Communications (Chair, Prof. K. Blow)	
11:35	Keynote, Dr. Juan D. Ania (IO-CSIC), “Distributed Raman amplification and the capacity crunch in optical fiber transmission”
12:10	Dr. Pawel Rosa, (IO-CSIC), “Raman amplification for nonlinear impairment compensation using optical phase conjugation”.
12:15	Keynote, Dr Robert Killely (UCL) “Spectrally efficient optical transmission systems”
12:50	Dr. Gabriel Saavedra Moncada (UCL) “Wide-band amplification for increased capacity for optical transmission”
12:55	Discussion on the session presentations
13:30	End of session
Session 3: Bio-photonics (Chair, Dr. Joaquín Campos)	
14:45	Keynote, Prof. Sergei Sokolovsky (Aston University) “Cancer Photo- diagnostics and treatment”

15:20	Mr. Ilya Rafailov (Aston University) "Cross-sectional model to simulate and visualise the optical properties in urinary bladder"
15:25	Keynote, Prof. Susana Marcos (IO-CSIC), "Light for vision"
16:00	Dr. Eduardo Martínez-Enríquez (IO-CSIC), "Quantitative anterior segment optical coherence tomography"
16:05	General discussion on the session presentations
16:30	Coffee break
16:45	Session: Posters display
17:45	End of the day

TUESDAY 6th OCTOBER

Session 4: High Power Lasers (Chair, Prof. K. Blow)	
9:00	Welcome of the day
9:10	Keynote, Prof. Luis Roso (Pulsed Lasers Centre, CLPU), "Extreme Lasers"
9:45	Mr. Francisco Valle (Pulsed Lasers Centre, CLPU), "Laser Generated X-rays"
9:50	Keynote, Dr Shaiful Alam (University of Southampton) "High power fiber lasers – harnessing the power of light"
10:25	Dr. Lin Xu (University of Southampton) "Compact High-Pulse-Energy Mid-IR Picosecond Optical Parametric Sources"
10:30	Discussion on the session presentations
11:00	Coffee break
Session 5: Quantum Optics (Chair, ...)	
11:30	Keynote, Prof. Stephen Barnett (University of Glasgow) "The strongly damped quantum harmonic oscillator"
12:05	Dr Rob Cameron (Glasgow) "Chiral optical force"
12:10	Keynote, Prof. Humberto Michinel (University of Vigo), "Dark-Matter Optics"
12:45	Dr. Ángel Paredes Galán (University of Vigo), "On quantum corrections to ultra-intense laser propagation in vacuum".
12:50	General Discussion on session presentations

13:30	<i>End of session</i>
15:00	Session: Posters display
16:00	Closing remarks