

## **OPENING DOORS 2015**

### **"Optical Technologies for Society"**

4-6 October, Instituto de Ciencias Agrarias del CSIC, Serrano, 115 dpto. Madrid

#### **SUNDAY 4<sup>th</sup> OCTOBER**

**20:00 Meeting point at "Residencia de Estudiantes" main lobby**

**20:30 Welcome dinner at a local restaurant**

#### **MONDAY 5<sup>th</sup> OCTOBER**

<b>9:00</b>	<b>Welcome by British Council and CSIC representatives</b>
<b>Session 1. Nanophotonics (Chair, Dr. Joaquin Campos)</b>	
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.
<b>11:10</b>	<b>Coffee break</b>
<b>Session 2. Optical Communications (Chair, Prof. Keith Blow)</b>	
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 Killey (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
<b>13:30</b>	<b>Lunch at Residencia de Estudiantes</b>

<b>Session 3: Bio-photonics (Chair, Dr. Joaquín Campos)</b>	
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
<b>16:30</b>	<b>Coffee break</b>
<b>16:45</b>	<b>Session: Posters display</b>
17:45	End of the day
<b>20:30</b>	<b>Dinner at the Residencia de Estudiantes</b>

## TUESDAY 6<sup>th</sup> OCTOBER

<b>Session 4: High Power Lasers (Chair, Prof. Keith Blow)</b>	
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
<b>11:00</b>	<b>Coffee break</b>
<b>Session 5: Quantum Optics (Chairs, Dr. Joaquín Campos and Prof. Keith Blow)</b>	
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
<b>13:30</b>	<b><i>Lunch at Residencia de Estudiantes</i></b>
<b>15:00</b>	<b>Session: Posters display</b>
<b>16:00</b>	<b>Closing remarks</b>