

TENTATIVE PROGRAM (as of 18/09/2015) Keynote lecture / I: Invited Lecture / O: Oral contribution

TUESDAY (22/09/2015)

08:00 – 09:00: Registration

09:00 – 10:00: Opening Ceremony

Excmo. y Mgfc. Sr. D. Carlos Conde Lázaro
Rector
Universidad Politécnica Madrid (UPM) (Spain)

Excmo. Sr. D. Guillermo Velarde Pinacho
Presidente
Instituto Fusión Nuclear (Spain)

Sr. D. Jose Luis Cortina
Presidente
Grupo Atenea (Spain)

Sr. D. Isaac Martín Barbero
Dir. General de Internacionalización
Empresa ICEX, España Exportación e Inversiones(Spain)

Vicealmirante Jesus Manrique Braojos
Subdirector General de Planificación, Tecnología e Innovación
Ministerio de Defensa (Spain)

Sr. D. Antonio Correia
Presidente
Fundación Phantoms (Spain)

Sr. D. Emilio Mínguez Torres
Director
Escuela Técnica Superior de Ingenieros Industriales UPM (Spain)

Sr. D. Jose Manuel Perlado
Director
Institute of Nuclear Fusion UPM (Spain)

Excmo. Sr. D. Rafael Sánchez Ortega
General de División / jefe del ESFAS
CESEDEN (Spain)

Sr. D. Jose Manuel Perez Perez
Subdirector General del Gabinete Técnico de la Dirección General de la Policía
Policía Nacional (Spain)

10:00 – 10:40: **Patricia Lopez Vicente** (European Defense Agency, Belgium)
Impact of Nanotechnology on European Defence Capabilities and EDA's work

K

10:40 – 11:40: Coffee Break & Posters session

11:40 – 12:20: **Glenn A. Fox** (Lawrence Livermore National Laboratory, USA)
Advanced foams and nanomaterial synthesis for science and security applications

K

12:20 – 13:00: **Raquel Gonzalez-Arrabal** (IFN-ETSII / UPM, Spain)
Coatings production for civil and military market

K

13:00 – 14:30: Cocktail lunch offered by the organization – Posters session

14:30 – 15:10: **George Palikaras** (Metamaterial Technologies, Canada)

K

15:10 – 15:30: **Rafael Abargues** (INTENANOMAT S.L., Spain)
Plasmonic optical sensors printed from Ag-PVA nanoinks as intelligent labels for food control

O

15:30 – 15:50: **Juan Pablo Martínez Pastor** (University of Valencia, Spain)
Efficient photodetectors at telecom wavelengths based on thin films of lead sulfide quantum dots

O

15:50 – 16:10: **Carlos Rivera** (Ingeniería de Sistemas para la Defensa de España, Spain)
Modulating retro-reflectors operating in the range of 1-1.1 μm for asymmetric communications

O

16:10 – 17:00: Coffee Break & Posters session

17:00 – 17:40: **Aleksandr Noy** (Lawrence Livermore National Laboratory, USA)
Bionanoelectronics with natural and artificial membrane transporters

K

17:40 – 18:20: **Giorgio Sberveglieri** (C.N.R. - National Institute of Optics, Italy)
Metal oxide nanostructured gas sensors for security applications

K



WEDNESDAY (23/09/2015)

09:00 – 09:30: **Luis Sanz Tejedor** (Oficina Española de Patentes y Marcas (OEPM), Spain) |

Industrial Property and Nanotechnology

09:30 – 10:00: **Socorro Vazquez-Campos** (Leitat, Spain) |

Nanosafety issues along their life cycle of nanoadditives incorporated in NM-enabled products

10:00 – 10:30: **Maida Domat** (ITENE, Spain) |

Lessons learned in the exposure assessment and risk management of nanomaterials

10:30 – 11:00: **Pedro Heredia** (GAIKER-IK4, Spain) |

Nanotoxicology: In vitro tests for safety assessment of nanomaterials

11:00 – 11:30: Coffee Break & Posters session

11:30 – 12:00: **Juan José Fernandez** (Industria Química del Nalón, Spain) |

Nalon: an industrial partner in the spanish security and defense field

12:00 – 12:30: **Adam Prats** (NANOTECNOLOGÍA SPAIN S.L., Spain) |

Smartnanocoatings the key to advance efficiency in surface solutions, easy to clean super hidrophobic & super hidrophilic coatings

12:30 – 13:00: **Ana Ledo Suárez** (NANOGAP, Spain) |

13:00 – 15:00. Lunch

15:00 – 15:30: **Adolfo Benedito Borrás** (AIMPLAS, Spain) |

Electromagnetic effects of carbon based nanocomposites. Potential applications.

15:30 – 15:50: **Ramon Torrecillas** (Nanomaterials and Nanotechnology Research Center (CINN), Spain) O

Hybrid SPS-Hot Press: A suitable technology for the fabrication of ceramic nanocomposite components for security and defense applications

15:50 – 16:20: **Victor Valcárcel** (NEOKER, Spain) |

Ballistic ceramic with single cristal alumina fibers

16:20 – 17:00: Coffee Break & Posters session

17:00 – 17:30: **Jaime Lopez de la Osa** (nanoimmunotech, Spain) |

Improving biosensors with nanotechnology

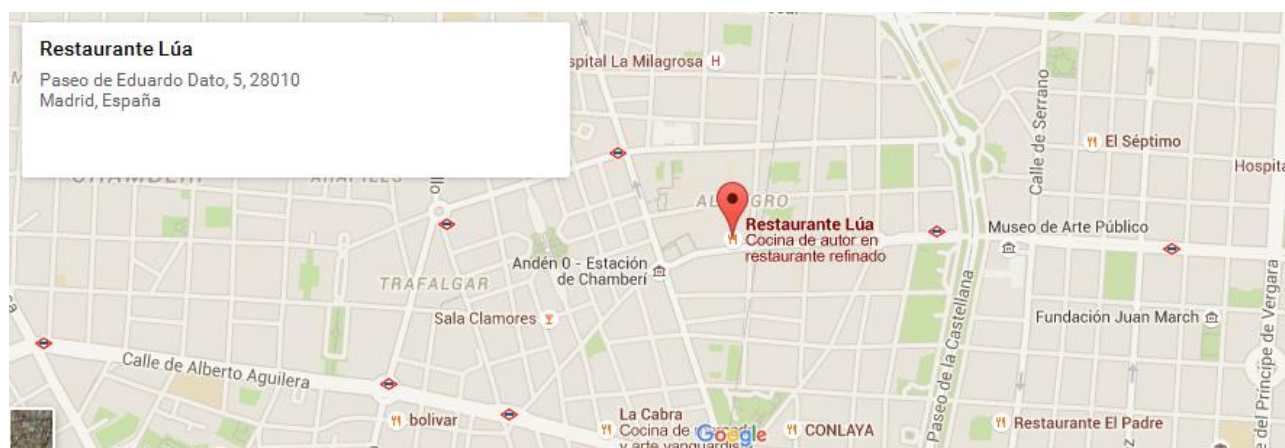
17:30 – 17:50: **Eva Mateo-Marti** (Centro de Astrobiología (INTA/ CSIC), Spain) O

Biomolecules sensors and detection by surface science techniques

17:50 – 18:10: **Pedro Javier Rodríguez Cantó** (INTENANOMAT S.L., Spain) O

UV-patternable nanocomposite containing CdSe and PbS quantum dots as miniaturized luminescent chemo-sensors

21:00 – Conference Gala Dinner – Restaurante Lúa





THURSDAY (24/09/2015)

- 09:30 – 10:10: **Frank Koppens** (ICFO, Spain) K
Graphene photodetection and imaging for safety and security applications: technological progress, prospects and prototypes
- 10:10 – 10:40: **Amaia Zurutuza** (Graphenea, Spain) K
Graphene in security and defence applications
- 10:40 – 11:00: **Flavio Pendolino** (University of Padova, Italy) O
Temperature Effect on the Production of Graphene Oxide and Graphite Oxide.
- 11:00 – 11:30: Coffee Break & Posters session
- 11:30 – 11:50: **Alberto Boscá Mojena** (Universidad Politécnica de Madrid/ ISOM, Spain) O
CVD-graphene growth and automated transfer for large-area, high performance applications
- 11:50 – 12:10: **Christopher Lillotte** (Advanced Carbon Materials Dept. at Grupo Antolin Ingenieria, Spain) I
Large scale production of graphenic materials by Grupo Antolin and their applications development
- 12:10 – 12:40: **Jorge Pedrós** (ISOM/UPM, Spain) I
Graphene-based supercapacitors
- 12:40 – 13:10: **Rafael Ferrito** (Nanoinnova Technologies SL, Spain) I
graphenit®: industrial applications.
- 13:10 – 15:00. Lunch
- 15:00 – 15:40: **Francoise Roure** (Ministry of Economy, Industry and Digital, France) K
Expanding nanotechnology opportunities for Defence and Security - Some pre-requisites
- 15:40 – 16:10: **José Manuel Ramos** (AITEX, Spain) I
Development of fiber reinforcing thermoplastic composites based on hybrid yarns
- 16:10 – 16:30: **Mariana Castrillón** (Instituto Tecnológico de Aragón, Spain) O
Inorganic nanofillers, the new way of designing thermoplastic materials with enhanced properties
- 16:30 – 17:10: **John W. Sibert** (The University of Texas at Dallas, USA) K
New Redox-Responsive Molecular Tools and Larger Scale Systems for the Detection and Removal of Strategic Environmental Hazards
- 17:10 – 17:30. Coffee Break & Posters session



FRIDAY (25/09/2015)

- 09:30 – 10:10: **Ovidio Peña Rodríguez** (IFN-ETSII-UPM, Spain) K
Designing "superabsorber" nanoparticles
- 10:10 – 10:30: **Freddys Beltrán** (ETSII - Universidad Politécnica de Madrid, Spain) O
PLA-clay nanocomposites for food packaging: Water absorption and its effects in the structure
- 10:30 – 10:50: **Johann G. Meier** (Instituto Tecnológico de Aragón, Spain) O
Surface silanised nanoclays – Filler modifier for rubber compounds
- 10:50 – 11:30: Coffee Break & Posters session
- 11:30 – 11:50: **Bartolomé Mas** (IMDEA Materials, Spain) O
Continuous Macroscopic Fibres of Carbon Nanotubes for Smart Textiles and Ballistic Protection
- 11:50 – 12:20: **Nieves Murillo** (Tecnalia, Spain) I
Smart Sensors and Active Solutions for Chemical and Biological threat Detection and Protection
- 12:20 – 13:00: **Santiago Cuesta** (University of Burgos, Spain) K
Nanosafety and Critical Raw Materials Strategic Dependence for the Development of Nanotechnology
- 13:00 – Concluding remarks and nanoSD2016 announcement