

PROGRAM MFS2013

Tuesday 17th September 2013

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| 15:00 – 16:00 | REGISTRATION | |
| 16:00 – 16:30 | OPENING CEREMONY (Eutyches Auditorium) Session Chairs: Jordi Fraxedas / Jordi Arbiol | |
| 16:30 – 17:30 | Dan Shechtman (Nobel Laureate Chemistry 2011) (#169) Technion – Israel Institute of Technology & ISU, Ames (USA) <i>Quasi-Periodic Materials - Crystal Redefined</i> | Plenary |
| 17:30 – 18:00 | Georg Schitter (#145) Automation and Control Institute, TU Wien <i>Mechatronics and Instrumentation for High-Speed High-Resolution Imaging Systems</i> | Invited |
| 18:00 – 18:30 | Marisa Martín-Fernández (#84) Central Laser Facility Rutherford Appleton Laboratory <i>Multicolour Single Molecule Imaging of the ErbB Family of Receptor Tyrosine Kinases in Cells</i> | Invited |
| 18:30 – 20:00 | COCKTAIL (SPONSORED by MONOCOMP) & EXHIBITION | |

Wednesday 18th September 2013

Session MS1 (Eutyches Auditorium)

Materials Science: Semiconductor Materials and Alloys

Session Chair: Paula Vilarinho

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| 09:00 – 09:15 | LI. López-Conesa (#52) LENS – MIND/IN2UB, Universitat de Barcelona <i>Si-Based Photonic and Photovoltaic Devices: a Low-Loss EELS Analysis</i> |
| 09:15 – 09:30 | R. Zamani (#90) Institut de Ciència de Materials de Barcelona, ICMAB-CSIC <i>Structure Study of Complex Ternary and Quaternary Copper-Selenide Based Nanocrystals for Thermoelectrics</i> |
| 09:30 – 09:45 | M. de la Mata (#79) Institut de Ciència de Materials de Barcelona, ICMAB-CSIC <i>STEM Tools for Atomic Polarity Assignment in Semiconductor Nanostructures</i> |

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| 09:45 – 10:00 | R. Félix (#37) Universidad de Cádiz <i>Complete Characterization by Imaging and Measuring TDs in Hexagonal Semiconductors</i> |
| 10:00 – 10:15 | A. Eljarrat (#28) LENS – MIND/IN2UB, Universitat de Barcelona <i>Plasmon Mapping for the Analysis of III-V Nitride Distributed Bragg Reflectors</i> |
| 10:15 – 10:30 | R. Santamarta (#75) Universitat de les Illes Balears <i>Study of the Crystal Structure of Precipitates in Ni-Rich Ni-Ti-X (X=Hf,Zr) Shape Memory Alloys</i> |
| 10:30 – 10:45 | J. Pons (#76) Universitat de les Illes Balears <i>Characterization of Precipitates in Ni-Rich Ni-Ti-X (X=Hf, Zr) Shape Memory Alloys</i> |

Session LS1 (Medusa Lounge)

Life Sciences: Macromolecular structure

Session Chair: Leah Gheber

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| 09:00 – 09:30 | Jose María Valpuesta (#168) Centro Nacional de Biotecnología, CSIC <i>Structural characterisation of the chaperone Hsp70 folding network</i> | Invited |
| 09:30 – 09:50 | M. Serna (#49) Centro Nacional de Biotecnología, CSIC <i>Structural analysis of tubulin binding cofactor complex between TBCE, TBCB and α-tubulin by electron microscopy and image processing</i> | |
| 09:50 – 10:10 | S. Alvira (#40) Centro Nacional de Biotecnología, CSIC <i>Structural characterization of the folding complex formed by chaperones Hsp90 and Hsp70 and their cochaperone Hop</i> | |
| 10:10 – 10:30 | J. Cuéllar (#41) Centro Nacional de Biotecnología, CSIC <i>Structures of the Gβ-CCT and PhLP1-Gβ-CCT complexes reveal a molecular mechanism for G protein β subunit and $\beta\gamma$ dimer assembly</i> | |
| 10:30 – 10:50 | M. Valle (#11) CICbioGUNE <i>Capturing working conformations for Pyruvate Carboxylase by cryoEM and sorting</i> | |

Joint Activity

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| 10:45 – 11:15 | COFFEE BREAK & EXHIBITION (HALL) |
| 11:15 – 13:15 | VISIT TOUR TO THE ROMAN CITY (TARRACO) |
| 13:15 – 15:00 | LUNCH (not included) |

Session MS2 (Eutyches Auditorium)

Materials Science: Magnetic Materials

Session Chair: Paulo Ferreira

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| 15:00 – 15:30 | César Magén (#62) INA-LMA, Universidad de Zaragoza <i>Imaging Nanoscale Magnetization States by in-Situ Lorentz Microscopy and Electron Holography</i> | Invited |
| 15:30 – 15:45 | A. Elkayam (#29) Ben-Gurion University of the Negev <i>Structure of Epitaxial $L1_0$-FePt/MgO Perpendicular Magnetic Tunnel Junctions</i> | |
| 15:45 – 16:00 | L. A. Rodríguez (#50) INA-LMA, Universidad de Zaragoza <i>Observation of the Suppression of Ferromagnetism in Strained Manganite Thin Films by Cryo-Electron Holography</i> | |
| 16:00 – 16:15 | J. M. Rebled (#53) ICMAB-CSIC and LENS – MIND/IN2UB, Universitat de Barcelona <i>Transmission Electron Microscopy Characterization on (001) Textured CoFe_2O_4 Thin Films Grown on Buffered MgAl_2O_4 and SrTiO_3 Substrates</i> | |
| 16:15 – 16:30 | B. Galiana (#69) Universidad Carlos III de Madrid <i>TEM Characterization of Fe-B Nanoparticles Formed by Gas Aggregation</i> | |

Session LS2 (Medusa Lounge)

Life Sciences: Cellular imaging

Session Chair: Mikel Valle

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| 15:00 – 15:30 | Leah Gheber (#146) Ben-Gurion University of the Negev <i>Regulation of Directionality and Function of Mitotic Kinesin-5 Motors</i> | Invited |
| 15:30 – 15:50 | S.I. Vieira (#129) University of Aveiro <i>APP and G(alpha)O in neuronal-like migration</i> | |
| 15:50 – 16:10 | O.A.B. da Cruz e Silva (#132) Universidade de Aveiro <i>The molecular basis underlying actin network remodelling</i> | |
| 16:10 – 16:30 | J. de D. Alché (#162) EEZ-CSIC <i>Imaging of living pollen tubes across in vitro germination as a tool to analyze pollen physiology and performance</i> | |

Joint Session J1 (Eutyches Auditorium) Technical

Session Chair: Judith Oró

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| 16:30 – 16:45 | D. Delille (#XXX) FEI <i>Last Developments in UHR S/TEM</i> | |
| 16:45 – 17:00 | L.-O. Kautschor (#83) Carl Zeiss Microscopy <i>Helium Ion Microscopy – Advancements from 0.35 nm Imaging to sub 10 nm Nanopatterning</i> | |
| 17:00 – 17:30 | COFFEE BREAK & EXHIBITION (HALL) | |

Session MS3 (Eutyches Auditorium)

Materials Science: Nanoparticles & Nanotubes

Session Chair: Belén Ballesteros

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| 17:30 – 17:45 | E. Ariza (#88) SEMAT/UM, Universidade do Minho <i>Electron Microscopy Study of Perovskite Nanoparticles</i> | |
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| 17:45 – 18:00 | R. Fernández-Pacheco (#21) INA-LMA, Universidad de Zaragoza <i>Electron Microscopy Characterisation of Bio-Magnetic Nanospheres</i> |
| 18:00 – 18:15 | E. Pach (#110) CIN2 (ICN-CSIC), Catalan Institute of Nanotechnology <i>Electron Microscopy Investigation of Filled and Functionalized Carbon Nanotubes</i> |
| 18:15 – 18:30 | R. Arenal (#60) INA-LMA, Universidad de Zaragoza <i>Atomic Spectroscopic and Structural Studies on Nitrogen Doped Single-Walled Carbon Nanotubes</i> |
| 18:30 – 18:45 | Paula M. Vilarinho (#108) CICECO, University of Aveiro <i>A microscopy study of BaTiO₃ / MultiWall Carbon Nanotubes</i> |
| 18:45 – 19:00 | A. Dias (#155) Universidade Federal de Ouro Preto, Campus Morro do Cruzeiro <i>Incipient Crystallization of Electroceramics Under Microwaves Probed by Transmission Electron Microscopy</i> |

Session LS3 (Medusa Lounge)

Life Sciences: Ultrastructure

Session Chair: José M. Valpuesta

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| 17:30 – 18:00 | Ilan Hammel (#167) Tel Aviv University <i>The Quantal basis for secretory granule formation and secretion</i> | Invited |
| 18:00 – 18:20 | J. Seras-Franzoso (#120) Universitat Autònoma de Barcelona <i>Structural and ultrastructural approaches to elucidate the interaction between bacterial inclusion bodies and mammalian cells</i> | |
| 18:20 – 18:40 | N. Rodrigues (#99) University of Aveiro <i>Potential anti-inflammatory effects of Artemisia gorgonum on rat liver injury induced by CCl₄</i> | |
| 18:40 – 19:00 | Liliana T. Canguero (#92) University of Lisbon <i>Femtosecond laser ablation of bovine cortical bone</i> | |

Session J2 (Medusa Lounge)

Materials Science: Nanoparticles & Nanotubes

Session Chair: Jordi Fraxedas

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| 19:00 – 19:30 | A. Casares Carl Zeiss Microscopy <i>New applications in X-Ray Microscopy</i> |
| 19:30 – 20:30 | COCKTAIL (SPONSORED by ZEISS) & EXHIBITION (HALL) |
| 19:30 – 20:30 | POSTER SESSION A (see page 12) |

Thursday 19th September 2013

Session MS4 (Eutyches Auditorium)

Materials Science: Ceramic Materials

Session Chair: Jaume Pons

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| 09:00 – 09:30 | Gil Markovich (#115) Tel-Aviv University <i>Electron Microscopy Studies of Nanoscale Ferroelectricity: Does a Single Domain Ferroelectric Particle Exist?</i> | Invited |
| 09:30 – 09:45 | M. L. Ruiz-González (#38) Universidad Complutense CEI Moncloa <i>Isolated Extended Defects Studied with Atomic Resolution</i> | |
| 09:45 – 10:00 | A. M. R. Senos (#121) CICECO, University of Aveiro <i>Microstructure Evaluation of the Constrained Sintering Effects in BaLa₄Ti₄O₁₅</i> | |
| 10:00 – 10:15 | J. Resende (#42) CICECO, University of Aveiro <i>On the Properties of Layered Strontium Titanate Ceramics: Microstructural Dependence</i> | |
| 10:15 – 10:30 | A. R. Landa-Cánovas (#71) Instituto de Ciencia de Materiales de Madrid, ICM-CONIC <i>Order-Disorder in the Sb_xV_{1-x}O₂ (0<x<0.5) Solid Solution</i> | |

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| 10:30 – 10:45 | J. Gàzquez (#152) Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) <i>Origins and Control of a Complex Point Defect in $YBa_2Cu_3O_{7-x}$</i> |
| 10:45 – 11:30 | COFFEE BREAK & EXHIBITION (HALL) |

Session LS4 (Medusa Lounge)

Life Sciences: Cellular organization

Session Chair: Eyal Shimoni

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| 09:00 – 09:30 | Carmen López-Iglesias (#156) CCiT, Universitat de Barcelona <i>The Last Advances in Electron Microscopy for Structural Biology and In Situ Molecular Recognition</i> | Invited |
| 09:30 – 09:50 | F. Marques (#73) Instituto Superior Técnico, Campus Tecnológico e Nuclear <i>Novel Pathways for Anticancer Therapy: the Role of Golgi network in the mechanism of cell death of organometallic complexes</i> | |
| 09:50 – 10:10 | A. Fernández (#98) Instituto de Ciencia de Materiales de Sevilla, CSIC <i>Location study of gold NPs in bivalve tissues by STEM mode in a SEM-FEG microscope</i> | |
| 10:10 – 10:30 | F. F. Vale (#97) Universidade de Lisboa <i>Induction study for the isolation of Helicobacter pylori phages</i> | |
| 10:30 – 10:50 | A. Sánchez-Chardi (Poster #122) Universitat Autònoma de Barcelona <i>Interaction between bladder tumor cells and Mycobacterium brumae or BCG by using electron microscopy</i> | |
| 10:50 – 11:30 | COFFEE BREAK & EXHIBITION (HALL) | |

Session MS5 (Eutyches Auditorium)

Materials Science: Surfaces and Thin films

Session Chair: Ana M.R. Senos

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| 11:30 – 11:45 | A. Verdaguer (#65) Centre d' Investigació en Nanociència i Nanotecnologia, CIN2 <i>Amplitude-Modulation AFM-Derived Heights in Air: How High is High?</i> |
| 11:45 – 12:00 | J. J. Segura (#126) Ecole Polytechnique Fédérale de Lausanne, EPFL <i>Molecular Ordering of Ionic Liquids at Solid Interfaces</i> |
| 12:00 – 12:15 | S. Skiadopoulou (#61) CICECO, Department of Materials and Ceramic Engineering, University of Aveiro <i>Microscopic Study of Multiferroic Bismuth Ferrite Porous Thin Films</i> |
| 12:15 – 12:30 | P. A. Carvalho (#107) ICEMS, Instituto Superior Técnico <i>Self-Lubricant Behavior of Copper-Carbon Nanocomposites: an Electron Microscopy and Atomic Force Microscopy Study</i> |
| 12:30 – 12:45 | J. B. Rodríguez-González (#127) CACTI, Vigo University <i>Characterization of Textured FeCoCu Nanowires</i> |
| 12:45 – 13:00 | O. Tunçkan (#94) Faculty of Aeronautics and Space Sciences, Anadolu University, İki Eylül Campus <i>SEM and TEM Characterization of Si₃N₄-Superalloy Joints</i> |
| 13:00 – 14:45 | LUNCH (not included) |

Session LS5 (Medusa Lounge)

Life Sciences: New and improved methods

Session Chair: Ishi Talmon

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| 11:30 – 11:45 | J. Vargas (#74) Centro Nacional de Biotecnología, CSIC <i>The use of the spiral phase transform in 3DEM</i> |
| 11:45 – 12:00 | J. Nebesarova (#89) Biology Center of ASCR <i>New options of multiple immunolabeling in high resolution SEM</i> |

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| 12:00 – 12:15 | S. G. Wolf (#170) Weizmann Institute of Science <i>Tomography of frozen hydrated cells by cryo-scanning transmission electron microscopy</i> |
| 12:15 – 12:30 | J. Llinares (#12) Polytechnic University of Valencia <i>Influence of axial asymmetry in measurement of tip radius from AFM images</i> |
| 12:30 – 12:45 | P. Nolasco (#135) University of Lisbon <i>Mean X-ray attenuation of salivary calculi computed from microtomography data</i> |
| 12:45 – 14:45 | LUNCH (not included) |

Session MS6 (Eutyches Auditorium)

Materials Science: Catalytic Materials

Session Chair: Jose J. Calvino

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| 14:45 – 15:15 | Paulo Ferreira (#158) The University of Texas at Austin <i>Behavior of Pt and Pt₃Co Nanoparticles in PEM Fuel Cells Observed by High-Resolution TEM, Aberration-Corrected STEM and In-situ TEM</i> | Invited |
| 15:15 – 15:30 | F.J. García-García (#178) ICTS-Centro Nacional de Microscopía Electrónica, UCM <i>On the Complex Crystal Chemistry and Catalytic Properties in the System BaFeO_{3-δ}, 0 ≤ δ ≤ 0.5</i> | |
| 15:30 – 15:45 | J.C. Hernández-Garrido (#25) Universidad de Cádiz <i>Unveiling the Final Surface Structure of a Co₃O₄/La-Modified-CeO₂ Washcoated Monolithic Catalyst by Combining Electrons and Ions: a (S)TEM-FIB Microscopy Application</i> | |
| 15:45 – 16:00 | M. Tinoco (#9) Universidad de Cádiz <i>STEM Characterisation of CeO₂-MgO Catalysts</i> | |
| 16:00 – 16:15 | A. Mayoral (#22) INA-LMA, Universidad de Zaragoza <i>Aberration Corrected Scanning Transmission Electron Microscopy Applied to Ordered Porous Structures</i> | |

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| 16:15 – 16:30 | D.C. Arias-Duque (#36) Universidad de Cádiz <i>(S)TEM Investigation of Novel, Low Lanthanide Content and Noble Metal Free, CeO₂/Yttria-Stabilized-Zirconia Nanostructured Catalysts with Outstanding Oxygen Storage Capacity</i> |
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Session LS6 (Medusa Lounge)

Life Sciences: Cellular imaging by soft X-rays

Session Chair: José L. Carrascosa

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| 15:00 – 15:30 | Andrea Sorrentino (#163) ALBA Synchrotron Light Facility Transmission soft X-ray cryo microscopy: how and what we can do in cellular imaging | Invited |
| 15:30 – 15:50 | F.J. Chichón (#19) Centro Nacional de Biotecnología, CSIC <i>Vaccinia virus (VACV) development inside cells by soft X-ray tomographic reconstruction</i> | |
| 15:50 – 16:10 | M. Serna (#46) Centro Nacional de Biotecnología, CSIC <i>Ciliogenesis in ependymal cells</i> | |
| 16:10 – 16:30 | M. Chiappi (#18) Centro Nacional de Biotecnología, CSIC <i>Qualitative and quantitative analysis of Fe magnetic nanoparticles designed for antitumoral therapy</i> | |

Joint Session J3 (Eutyches Auditorium)

Advancements in Microscopy Techniques

Session Chair: Francesca Peiró

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| 16:30 – 16:45 | L. Yedra (#31) CCiT and LENS – MIND/IN2UB, Universitat de Barcelona <i>EELS Tomography: Characterization of Self-Assembled Nanostructures in Four Dimensions</i> |
| 16:45 – 17:00 | S. Estradé (#10) CCiT and LENS – MIND/IN2UB, Universitat de Barcelona <i>Electron Energy Loss Spectroscopy Combined with Beam Precession in the TEM</i> |

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| 17:00 – 17:15 | E. Bailo (#16) WITec GmbH <i>Characterization of Multi-Component Materials on the Sub-Micrometer Scale</i> |
| 17:15 – 17:30 | A. C. Robins Fischione <i>Using ions to prepare samples for electron microscopy</i> |
| 17:30 – 18:00 | COFFEE BREAK & EXHIBITION (HALL) |
| 18:00 – 18:15 | Presentation ICTS Electron Microscopy (R. Ibarra/J.M. González-Calbet) |
| 18:15 – 19:00 | SME GENERAL ASSEMBLY (Sala Eutyches) |
| 19:00 – 20:00 | POSTER SESSION B (see page 16) & EXHIBITION (HALL) |
| 21:00 – 24:00 | CONFERENCE DINNER |

Friday 20th September 2013

SME Best PhD Thesis Awards 2011-2012: (Eutyches Auditorium)

Session Chairs: Juan José Calvino / Jose L. Carrascosa

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| 09:00 – 09:15 | Patricia Abellán (MS) (#XXX) Institut de Ciència de Materials de Barcelona, ICMA-B-CSIC <i>Interfacial Structure and Microstructural Evolution of Solution-Derived Dissimilar Oxide Nanostructures. Implications on Their Functional Properties</i> | PhD Award |
| 09:15 – 09:30 | Juan David Rejón (LS) (#180) Estación Experimental del Zaidín (EEZ-CSIC) <i>Characterization of Esterase Enzymes Involved in Pollen-Pistil Interaction in the Olive Tree (Olea Europaea L.)</i> | PhD Award |

Joint Session J4: (Eutyches Auditorium)

Advancements in Microscopy Techniques

Session Chair: Albert Verdaguer

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| 09:30 – 10:00 | Lucía Aballe (#159) ALBA Synchrotron Light Facility <i>X-Ray Microscopes At ALBA: TXM and XPEEM</i> | Invited |
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| 10:00 – 10:30 | Ishi Talmon (#114) Technion – Israel Institute of Technology <i>The Latest in Cryo-EM</i> | Invited |
| 10:30 – 10:45 | V. Simic-Milosevic (#5) SPECS Surface Nano Analysis GmbH <i>Ultimate Stability and Productivity at Variable Temperatures and Near Ambient Conditions - The SPM Aarhus Family</i> | |
| 10:45 – 11:00 | S. Nikolopoulos (#161) NanoMEGAS SPRL <i>TopSPIN : a new Digital STEM , beam precession & analytical framework (orientation imaging - strain mapping- EELS/EDS signal improvement)</i> | |
| 11:00 – 11:15 | Nicolas F. Martinez (#160) ScienTec Ibérica <i>Resiscope II, a Module for Advanced Electrical Characterization in Atomic Force Microscopy</i> | |
| 11:15 – 11:45 | COFFEE BREAK & EXHIBITION (HALL) | |
| 11:45 – 12:15 | Pedro M. F. J. Costa (#171) Aveiro University <i>Using an electron microscope to manipulate filled carbon nanotubes</i> | Invited |
| 12:15 – 12:45 | Josep M. Trigo-Rodríguez (#67) Institute of Space Sciences (CSIC-IEEC) <i>Electron microscopy to better understand meteorites older than Earth from the NASA Antarctic collection: How were the building blocks of planets?</i> | Invited |
| 12:45 – 13:00 | C. E. Moyano-Camero (#149) Institute of Space Sciences (CSIC-IEEC) <i>The Use of Optical and Electron Microscopy to Study the Martian Meteorite Allan Hills 84001 and the Shock Effects in Several Shergottites</i> | |
| 13:00 – 13:15 | V. Antunes (#55) Instituto História da Arte da Faculdade de Letras da Universidade de Lisboa <i>15th and 16th Centuries Portuguese Painting Ground Layers from Coimbra's Workshop: Classification of Calcium Sulphate Fillers and Binders</i> | |
| 13:15 – 13:30 | CLOSURE | |

POSTER SESSIONS

Wednesday 18th September 2013

Poster Session A (HALL)

Materials Science

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| 18:30 – 20:00 | POSTER SESSION A MS |
| MA1 | <u>R. Rosentsveig</u>, L. Yadgarov, D. G. Stroppa, L. Houben, R. Tenne (#8) Weizmann Institute of Science <i>Investigation of Rhenium-doped MoS₂ Nanoparticles with Fullerene-like Structure</i> |
| MA2 | <u>R. Sánchez-Tovar</u>, R. Leiva-García, <u>J. García-Antón</u> (#14) Universitat Politècnica de València (UPV) <i>Influence of Temperature on a Duplex Stainless Steel by Means of Confocal and Raman Microscopy</i> |
| MA3 | <u>J. A. R. Pacheco de Carvalho</u>, C. F. R. Pacheco, A. D. Reis (#20) Universidade da Beira Interior <i>Applications of MeV Ion Beams and Microscopy to Surface Analysis of Materials</i> |
| MA4 | <u>J. Ramírez-Castellanos</u>, A. Peche, I. López, E. Nogales, B. Méndez, J. Piqueras, J. González-Calbet (#23) Universidad Complutense de Madrid <i>Microstructure and Luminescence of Sn-Cr Doped β-Ga₂O₃ Nanowires</i> |
| MA5 | <u>L. Yadgarov</u>, R. Rosentsveig, R. Tenne (#27) Weizmann Institute of Science <i>Synthesis and Characterization of Re/Nb Doped Inorganic Nanotubes and Fullerene-Like Nanoparticles</i> |
| MA6 | <u>M. Stankova</u>, R. Calavia, L. Vojkuvka, E. Llobet (#30) Universitat Rovira i Virgili <i>Dynamic Voltage Contrast for Study of Metal Oxide Gas Sensor Structures</i> |
| MA7 | <u>L.E. Chinchilla</u>, C. Olmos, A. Villa, L. Prati, X. Chen, J.J. Calvino, A.B. Hungria (#33) Universidad de Cádiz <i>Ru Modified Au Catalysts Supported on Ceria Zirconia for the Selective Oxidation of Glycerol</i> |
| MA8 | <u>A. Ibarra</u>, J. Crespo, J. M. López-de-Luzuriaga, M. Monge, M. E. Olmos (#34) Laboratorio de Microscopías Avanzadas (LMA)-Instituto de Nanociencia de Aragon (INA), Universidad de Zaragoza <i>Synthesis and Plasmonic Properties of Core-Shell Bimetallic Silver-Gold Nanoprisms Obtained Through an Organometallic Route</i> |

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| MA9 | <p><u>R. Cortés-Gil</u>, A. Torres-Pardo, A. El Hadri, M. L. Ruiz-González, J. M. González-Calbet (#39) Universidad Complutense CEI Moncloa <i>LaNiO_{3-δ}: Defects and Oxidation States Under Atomic Resolution</i></p> |
| MA10 | <p><u>LI. López-Conesa</u>, G. Martín, M. Vila, C. Díaz-Guerra, J. Piqueras, S. Estradé, F. Peiró (#51) Universitat de Barcelona <i>Structural, Chemical and In Situ Electrical Characterization of Bi₂O₃ Nanowires</i></p> |
| MA11 | <p><u>T. Ferreira</u>, H. Moreiras, A. Manhita, C. Frade, E. Lopes, P. Tomás, P.S. Rodrigues, J. Mirão, A. Candeias, C. Dias, A.T. Caldeira (#56) Universidade de Évora <i>Material Characterization of a Liturgical Cope Belonging to D.Teotónio of Braganza (16th Century)</i></p> |
| MA12 | <p><u>S. Valadas</u>, A. Cardoso, J. Mirão, C. Dias, R. Freire, A. Candeias (#58) Universidade de Évora <i>Unravelling 16th Century Portuguese-Flemish Paintings Using Microanalytical Techniques</i></p> |
| MA13 | <p><u>P. Valles</u>, A. Pastor, O. Vilanova, S.F. Medina, M. Gómez (#59) Instituto Nacional de Técnica Aeroespacial (INTA) <i>Microstructural Studies for Optimization o Heat Treatment in Components of Steel X₃₈CrMoV₅₋₁ Subjected to High Stresses</i></p> |
| MA14 | <p><u>A.Genc</u>, A. de la Escosura-Muñiz, A. Merkoçi, J. Arbiol (#63) Institut de Ciencia de Materials de Barcelona, ICMAB-CSIC <i>HRTEM Characterization and Modeling of Spheroidal Decahedron Shaped Au Nanoparticles</i></p> |
| MA15 | <p><u>P.G. González</u>, E. Urones-Garrote, D. Ávila-Brandé, L.C. Otero-Díaz (#154) Centro de Investigación en Micro y Nanotecnología, Universidad Veracruzana <i>Study of the Structure and Textural Properties of Microporous Carbon Nanospheres</i></p> |
| MA16 | <p>El Hadri Achraf, M. Hernando, A. Varela, J.M. González-Calbet, M. Parras, <u>F. J. García-García</u> (#179) ICTS-Centro Nacional de Microscopía Electrónica, UCM <i>The Crystal Structure of BaFe_{1-x}Co_xO_{3-δ}, 0.1 ≤ δ ≤ 0.3, 0.3 ≤ x ≤ 0.5: Co Comes in, Messing Up the Structure.</i></p> |
| MA17 | <p>J. Hernández-Moro, A.R. Landa-Cánovas, F. Agulló-Rueda, P. Díaz-Carrasco, J.R. Ramos-Barrado, M. Gabás, <u>P. Herrero-Fernández</u> (#81) Instituto de Ciencia de Materiales de Madrid, ICMM-CSIC <i>Microstructural Characteristics of Transparent Conducting ZnO Doped with Ga and Al Cations</i></p> |

Life Sciences

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| 18:30 – 20:00 | POSTER SESSION A LS |
| LA1 | <p>T. M. Fortuna, J. C. Franco, <u>M. T. Rebelo</u> (#6) CESAM, Universidade de Lisboa <i>Morphology and Distribution of Antennal Sensilla in a Mealybug Parasitoid, Anagyrus Sp. Near Pseudococci (Hymenoptera, Encyrtidae)</i></p> |
| LA2 | <p>N. Centeio, A. Farinha, C. G. Dourado, A. R. Oliveira, D. Dias, <u>M. T. Rebelo</u> (#7) CESAM, Universidade de Lisboa <i>Fine Structure Comparison Of Eggshell From Lucilia Sericata And Calliphora Vicina, Calliphoridae With Forensic Importance</i></p> |
| LA3 | <p><u>A. García-Herraiz</u>, R. Leiva-García, F. J. Silvestre, J. García-Antón (#13) Universidad de Valencia <i>Dimensional Accuracy of Silicone Impressions and Plaster Casts Using CLSM</i></p> |
| LA4 | <p><u>E. Bailo</u>, A. Jauss, J. Toporski, U. Schmidt (#15) WITec GmbH <i>Confocal Raman Imaging Applied in Bio-Medical Sciences</i></p> |
| LA5 | <p><u>F.J. Chichón</u>, A. Cuervo, J.J. Conesa, A. Camacho, J.L. Carrascosa (#17) Centro Nacional de Biotecnología (CNB-CSIC) <i>Structural Characterization of the Phi29 Tail Complex During DNA Injection</i></p> |
| LA6 | <p><u>A. Chicano</u>, J. R. Daban (#35) Universitat Autònoma de Barcelona <i>Structure of Bulk Chromatin in Interphase Nuclei of Human Cells</i></p> |
| LA7 | <p><u>T. Rosado</u>, J. Mirão, A. Candeias, A.T. Caldeira (#43) Évora University <i>Microbial Diversity in Mural Paintings: How to Know Better</i></p> |
| LA8 | <p><u>C. Salvador</u>, M.R. Martins, J.M. Arteiro, A.T. Caldeira (#44) University of Évora <i>Bioactive Protein-Bound Polysaccharides from Amanita Ponderosa Cultures</i></p> |
| LA9 | <p><u>A. C. C. Marcato</u>, N. Righetto Neto, J. E. Correia, J. F. U. Marinho, C. S. Fontanetti (#82) UNESP, São Paulo State University <i>Investigation of the Toxicity of the Commercial Herbicide 2,4-D Using Gills of Tilapia as a Model</i></p> |
| LA10 | <p><u>P. Nolasco</u>, F. Cabrita, P. V. Coelho, A.P. Alves de Matos, A. Maurício, M.F.C. Pereira, J.M.R. Sanches, P.A. Carvalho (#85) Universidade de Lisboa <i>Mean X-Ray Attenuation by Salivary Calculi Computed from Microtomography Data</i></p> |

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| LA11 | <u>A.J. Anjos</u>, P. Nolasco, J.M. Aquino Marques, A.P. Alves de Matos, P.A. Carvalho (#87) Universidade de Lisboa <i>On Oral Calcifications: Tartar and Pulp Stones</i> |
| LA12 | <u>F. Amaro</u>, L. Chainho, L. Zé-Zé, H. Osório, M. J. Alves, A. P. Alves de Matos (#100) Centro de Estudos de Vectores e Doenças Infecciosas/Instituto Nacional de Saúde Dr. Ricardo Jorge <i>Electron- Microscopy Characterization of a Phlebovirus Isolated in Sandflies from South Portugal</i> |
| LA13 | <u>R. Lacerda</u>, L. Ascensão (#102) Universidade de Lisboa <i>Glandular Trichomes on the Leaves and Flowers of Bellardia Trixago and Parentucellia Viscosa (Orobanchaceae)</i> |
| LA14 | <u>F. F. Vale</u>, A. P. Alves de Matos, M.F. Caeiro, J. M. B. Vitor (#103) Universidade Católica Portuguesa / Universidade de Lisboa <i>Survival of Helicobacter Pylori within Amoeba</i> |
| LA15 | M. Gomes, A. P. Alves Matos, M. Gaspar, M. Colla Carneiro, <u>F. F. Vale</u> (#104) Universidade Católica Portuguesa / Universidade de Lisboa <i>Drug Delivery Systems for Helicobacter Pylori</i> |
| LA16 | <u>L. Millach</u>, A. Burgos, A. De los Rios, J. Maldonado, A. Solé, I. Esteve (#112) Universitat Autònoma de Barcelona <i>Effect of Copper and Lead on Two Consortia of Phototrophic Microorganisms and Their Capacity to Sequester them Determined by High Resolution Microscopy Techniques</i> |
| LA17 | <u>I. Vieira da Silva</u>, T. Nogueira, L. Ascensão (#113) Universidade de Lisboa <i>Secretory Structures on the Flowers of Hypericum Pubescens and H. Tomentosum</i> |
| LA18 | G. Orpella-Aceret, <u>A. Sánchez-Chardi</u>, S. Secanella-Fandos, M. Luquin, E. Julián (#122) Universitat Autònoma de Barcelona <i>Interaction Between Bladder Tumor Cells and Mycobacterium Brumae or BCG by Using Electron Microscopy</i> |
| LA19 | <u>A. Sánchez-Chardi</u>, A. Dols-Pérez, J. Repullés, C. Rodríguez-Cariño, M.A. Sans-Fuentes (#123) Universitat Autònoma de Barcelona <i>Different Approaches to Quantitative Histopathological Evaluation as a Management Tool on Natural Populations of Protected Sites</i> |

Thursday 19th September 2013

Poster Session B (HALL)

Materials Science

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| 18:30 – 20:00 | POSTER SESSION B MS |
| MB1 | <p><u>Myriam H. Aguirre</u>, Eugenio H. Otal, Laura Bocher, Luiz Tizei, Mathieu Kociak (#66) Laboratorio de Microscopías Avanzadas (LMA), Instituto de Nanociencia de Aragón (INA), Universidad de Zaragoza <i>Spectrally and Spatially Resolved Cathodoluminescence Study on Pr:CaTiO₃ by Electron Microscopy</i></p> |
| MB2 | <p><u>P. Vilanova-Martínez</u>, J. Hernández-Velasco, F. Agulló-Rueda, A.R. Landa-Cánovas (#70) Instituto de Ciencia de Materiales de Madrid, ICM-CONIC <i>Short Range Order and Phase Transition in Sb-Doped VO₂</i></p> |
| MB3 | <p><u>J. Hernández-Velasco</u>, P. Vilanova-Martínez, F. Agulló-Rueda, A. Landa-Cánovas (#72) Instituto de Ciencia de Materiales de Madrid, ICM-CONIC <i>Short Range Order and Magnetic Ordering in SbVO₄</i></p> |
| MB4 | <p><u>M. Brânzei</u>, I. Pencea, M. Feder, D. Gheorghe (#77) University POLITEHNICA of Bucharest <i>Quantitative Light Microscopy Applied on MnZn Ferrite With Bi₂O₃ Increasing Addition</i></p> |
| MB5 | <p><u>A. Torres-Pardo</u>, I. N. González-Jiménez, A. Varela, M. Parras, J. M. González-Calbet (#78) Universidad Complutense CEI Moncloa <i>Atomically-Resolved Analysis of the Topotactic Reduction in SrMnO_{3-δ} Nanoparticles</i></p> |
| MB6 | <p><u>M. de la Mata</u>, X. Zhou, F. Furtmayr, J. Teubert, S. Gradečak, M. Eickhoff, A. Fontcuberta i Morral, J. Arbiol (#80) Institut de Ciència de Materials de Barcelona, ICMA-CONIC <i>Bandgap Engineering in a Nanowire: Embedding 0D, 1D, and 2D Quantum Structures</i></p> |
| MB7 | <p><u>C.M. Fernandes</u>, A. Cavaleiro, C. Van Gestel, J. Jhabvala, E. Boillat, M.T. Vieira, A.M.R. Senos (#86) University of Aveiro <i>Microstructural Characterization of WC-AISI 304 Composites Obtained by Selective Laser Sintering</i></p> |
| MB8 | <p><u>R. Zamani</u>, M. Ibáñez, J.R. Morante, A. Cabot, J. Arbiol (#91) Institut de Ciència de Materials de Barcelona, ICMA-CONIC & IREC <i>Functional Nanocomposites Made of PbTe-PbS Core-Shell Nanocrystals for Thermoelectrics: Structure Study</i></p> |

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| MB9 | <u>M. Rosado, E. Pach, B. Ballesteros (#109)</u> Catalan Institute of Nanotechnology, CIN2 (ICN-CSIC), <i>Extreme High Resolution Scanning Electron Microscopy</i> |
| MB10 | <u>M. Martínez-Jiménez, J.M. Trigo-Rodríguez (#150)</u> Institute of Space Science (CSIC-IEEC) <i>Solar System Formation, and Parent Body Processing Clues from the Microscopic Study of Pristine Carbonaceous Chondrites</i> |
| MB11 | <u>J. Jeremias, I. Nogueira, P. Nolasco, P.A. Carvalho, C. Ferreira, C.Costa (#157)</u> ICEMS, University of Lisbon <i>Pozzolanic Activity of Oil-Refining Catalyst: Evaluation by Electron and Atomic Force Microscopy</i> |
| MB12 | <u>J. Portillo, D. Viladot, M. Véron, M. Gemmi, F. Peiró, S. Estradé, J. Mendoza, N. Llorca, S. Nicolopoulos (#164)</u> NanoMEGAS SPRL / CCiT, Universitat de Barcelona <i>Orientation and Phase Mapping in TEM Microscopy with the ASTAR Technique: Application Examples for Materials Characterization</i> |
| MB13 | <u>A. Rodríguez-Contreras, J.M. Manero, M.S. Marqués-Calvo (#173)</u> Universitat Politècnica de Catalunya <i>Study for Poly[(R)-3-Hydroxybutyrate] Production by a Novel Bacterium and its Modification for the Preparation of Drug-Loaded Micro- and Nano-Spheres</i> |
| MB14 | <u>M.T. Foixench, C. Caparrós, A. Rodríguez-Contreras, E. Ruperez, J.M. Manero, F. Xavier Gil (#174)</u> Universitat Politècnica de Catalunya <i>Bonlike Apatite Formation on the Surface of Chemically Treated Tantalum Substrates</i> |
| MB15 | <u>C. Herranz, J. Schaffer, T. Trifonov, J. Portillo, S. Estrade, L.I. Yedra, J. Mendoza, F.X. Gil, J.M. Manero (#175)</u> Universitat Politècnica de Catalunya <i>Microstructural Characterization of a Potential Superelastic Nickel-Free Titanium Alloy</i> |
| MB17 | <u>P. Abellan, T.J. Woehl, L.R. Parent, M. Gu, B.L. Mehdi, P. Xu, P.V. Deshmukh, I. Arslan, W.D. Ristenpart, C.-M. Wang, J.E. Evans, N.D. Browning (#181)</u> Pacific Northwest National Laboratory <i>Controlling a Gas/Liquid Environment in the (S)TEM/DTEM for the Study of Nanomaterials Dynamics</i> |

Life Sciences

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| 18:30 – 20:00 | POSTER SESSION B LS |
| LB1 | <p>C. Rodriguez-Cariño, T. Mussá, M. Pujol, <u>A. Sánchez-Chardi</u>, L. Córdoba, N. Busquets, E. Crisci, M. Baratelli, P. Martínez, J. Dominguez, L. Fraile, M. Montoya (#124) Universitat Autònoma de Barcelona <i>An Ultrastructural Study of in Vitro Conventional Swine Influenza Virus Infection</i></p> |
| LB2 | <p>J. Repullés, M.A. Sans-Fuentes, J. Ventura, <u>A. Sánchez-Chardi</u> (#125) Universitat Autònoma de Barcelona <i>Quantifying the Effects of Robertsonian Fusions on Male Reproduction with Light and Electron Microscopy</i></p> |
| LB3 | <p><u>F. Resende</u>, N. Barbosa, M. Barra, A. P. Alves de Matos, P. L. Falé, L. Ascensão, M. L. M. Serralheiro, M. F. Caeiro (#128) CESAM, Universidade de Lisboa <i>Activities of Plant Aqueous Extracts Against Herpes Simplex and Encephalomyocarditis Murine Viruses</i></p> |
| LB4 | <p>J. F. Rocha, O.A.B. da Cruz e Silva, <u>S.I. Vieira</u> (#131) Universidade de Aveiro <i>Characterization of SH-SY5Y Neuronal-Like Differentiation Models</i></p> |
| LB5 | <p><u>A. P. Tenreiro</u>, S. Rebelo, F. Martins, E. D. Coelho, A. P. Alves de Matos, O. A. B. da Cruz e Silva (#133) Universidade de Aveiro <i>Comparison of Sucrose and Percoll Based Methodologies for Isolation of Synaptosomal-enriched Fractions</i></p> |
| LB6 | <p>F.M.S. Morsoleto, T. Milano, <u>F. Morgado</u>, M.J.M.S. Morsoleto (#137) CESAM & Universidade de Aveiro <i>Electrotherapy with Microcurrents in Skeletal Muscle Regeneration</i></p> |
| LB7 | <p>M.J.M.S. Morsoleto, V. Sella, P. Machado, F. do Bomfim, M.H. Fernandes, H. Plapler, <u>F. Morgado</u> (#138) CESAM & Universidade de Aveiro <i>Low-Level Laser Applications on the Cytochemistry of Osteoblastic Cell Biomodulation</i></p> |
| LB8 | <p>M.J.M.S. Morsoleto, F.M.S. Morsoleto, <u>F. Morgado</u>, C.A. Anaruma (#139) CESAM & Universidade de Aveiro <i>Use of Ultrasonic Energy for the Enhancement of Drug Transport in the Regeneration of Skeletal Muscle Injuries</i></p> |
| LB9 | <p>J.R. Gadelha, <u>F. Morgado</u>, A.M.V.M. Soares (#140) CESAM & Universidade de Aveiro <i>Histological Analysis of Reproductive Anatomy of Actinia Equina and Anemonia Sulcata (Cnidaria: Anthozoa)</i></p> |

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| LB10 | <p>J.R. Gadelha, <u>F. Morgado</u>, A.M.V.M. Soares (#141) CESAM & Universidade de Aveiro <i>Reproductive Histopathologies of the Sea Anemones Actinia Equina and Anemonia Sulcata of the Iberian Coast</i></p> |
| LB11 | <p>J.V. Betioli, C.A. Christofolletti, M.A. Marin-Morales, <u>F. Morgado</u> (#142) CESAM & Universidade de Aveiro <i>Chromosomal Anomalies Analysis for Preliminary Tests Application of Cytotoxic, Genotoxic and Mutagenic Environmental Contamination</i></p> |
| LB12 | <p>M.J.M.S. Morsoleto, A.A. Aro, L. Gomes, M.A.M. Esquisatto, <u>F. Morgado</u> (#143) CESAM & Universidade de Aveiro <i>Therapeutic Applications of Ultrasound, Glycosaminoglycan and Chondroitin Sulfate on the Articular Cartilage Arthritis</i></p> |
| LB13 | <p><u>I. Joao</u>, L. Reis, P. Carvalho, A. Duarte, L. Jordao (#144) INSA <i>Exploiting a Link Between Resistance to Antimicrobial Agents and Pathogens Structure</i></p> |
| LB14 | <p>M.J. Jiménez-Quesada, <u>A. Zafra</u>, E. García-Quirós, J.A. Traverso, J.D. Alché (#165) Estación Experimental del Zaidín, CSIC <i>Localization of NADPH Oxidase and Superoxide Dismutase Transcripts in Olive Reproductive Tissues by Using Double-Labelled Oligonucleotide Probes</i></p> |
| LB15 | <p><u>C. Salvador</u>, M.R. Martins, J.M. Arteiro, A.T. Caldeira (#166) University of Évora <i>Bioactive Protein-Bound Polysaccharides from Amanita Ponderosa Cultures</i></p> |
| LB16 | <p><u>D. Rodler</u>, F. Sinowatz (#172) Ludwig-Maximilians-University, Munich <i>Ultrastructure and Cytochemistry of the Blood Cells of the Ostrich (Struthio Camelus)</i></p> |
| LB17 | <p><u>E. García-Quirós</u>, S. Ch. Brandt, M.I. Rodríguez-García, A.J. Castro, J.D. Alché (#177) Estación Experimental del Zaidín, CSIC <i>LM/TEM Immunolocalization of Low Molecular Weight Antioxidants in Olive Pollen During Pollen Development and Germination</i></p> |