

Understanding Materials Structure and Performance by Raman Confocal Microscopy – PROGRAM

Miércoles, 26 de abril

9:30 Presentación

10:00 *Sociedad Española de Cerámica y Vidrio, SECV, Dra. Begoña Ferrari, ICV-CSIC.*

10:20 *Introduction to Witec. Dra. Elena Bailo, Witec GmbH, Ulm, Germany.*

10:40 *Fundamentals of Raman Spectroscopy, Dra. Elena Bailo, Witec GmbH, Ulm, Germany.*

11:00 Conferencia invitada: *3D Raman Imaging Meets SEM, AFM, SNOM and Profilometry, Dra. Elena Bailo, Witec GmbH, Ulm, Germany.*

12:00 Café y sesión de posters

12:30 *Thermal route for the synthesis of maghemite/hematite core/shell nanowires, Belén Cortés Llanos, UCM.*

12:50 *Epsilon iron oxide: Sol-gel synthesis, structural properties and micro-Raman characterization, Jesús López, UCM.*

13:10 *Descifrando los caminos reaccionales triboquímicos en hidruros iónicos y moleculares, Dr. Román Nevshupa, IETcc-CSIC.*

13:30 *Active corrosion inhibition of mild steel by environmentally-friendly Ce-doped organic-inorganic sol-gel coatings, Dra. Jadra Mosa, ICV-CSIC.*

13:50 *Importance of the confocal micro-Raman spectroscopy in the characterization of thick films electrolytes, Dr. Ricardo Jiménez Rioboo, ICMM-CSIC.*

14:10 *Optical quantification of strain and doping in graphene, Alberto Boscá, UPM.*

15:30 Demostración del equipo Witec Alpha 300RA.

Jueves, 27 de abril

9:30 Conferencia invitada: *New perspectives in correlated Microscopy: Example of fast confocal Raman SEM Integration-Challenges and applications, Dr. Philippe Ayasse, Witec; and Dr. Herbert Pavlicek, Carl Zeiss GmbH.*

10:30 *Chemical precipitation of nickel nanoparticles on Ti(C,N) suspensions focused on cermet processing, Miguel de Dios, ICV-CSIC-UC3M.*

10:50 *Features and benefits of exotic ZnO structures: A Raman study, Eva de Lucas, ICV-CSIC.*

11:10 *Study of CoAl₂O₃ nanostructured surfaces by Raman Confocal Spectroscopy, Carmen Álvarez Docio, ICV-CSIC.*

11:30 Café y sesión de posters

12:00 *Thermoelectric Skutterudite/oxide nanocomposites: effective decoupling of electrical and thermal conductivity by functional interfaces, Dr. Alberto Moure, ICV-CSIC.*

12:20 *Structural characterization of nanostructure glass ceramic materials, Víctor Fuertes, ICV-CSIC.*

12:40 *Correlación de Microscopía de Fluorescencia y Microscopía Raman para el estudio in situ de la geomicrobiología del subsuelo de la FPI, Dra. Cristina Escudero, CBM-UAM-CSIC.*

13:00 *Raman and Rayleigh Scattering Microscopy: Applications in Alkali Feldspars for the Characterization of Pegmatites, Dr. Luis Sánchez Muñoz, ICV-CSIC.*

13:20 *Caracterización paleohistológica y fisicoquímica de un diente de cocodrilomorfo del Cretácico Superior del yacimiento de "Lo Hueco" (Cuenca), Dra. María Canillas, ICV-CSIC.*

13:40 *Identificación del Óxido de Hierro epsilon (ϵ -Fe₂O₃) en estructuras arqueológicas de combustión, Dra. Marisa Osete López, Instituto de Geociencias-UCM-CSIC.*

15:30 Demostración del equipo Witec Alpha 300RA.

Viernes, 28 de abril

9:30 Conferencia invitada: *Aplicación de la espectroscopia Raman al estudio de las fases anhidras e hidratadas de sistemas cementantes, Dra. Sagrario Martínez, IEM-CSIC.*

10:00 *New perspectives in the analysis of weathered cements by Confocal Raman Microscopy, Dr. Manuel Torres-Carrasco, ICV-CSIC.*

10:20 *Study of the dispersion grade of TiO₂ nanoparticles into sunscreens by Raman Confocal Spectroscopy, Dr. Julián Jiménez Reinoso, ICV-CSIC.*

10:40 *Local tuning of graphene properties upon ultrahigh pressures, Pablo Ares, UAM.*

11:00 *Squeezing AFM and Raman combination for graphene characterization, Dra. Carmen Munuera, ICMM-CSIC.*

11:20 *Local transport in doped silicon carbide composites containing in-situ synthesized three-dimensional graphene networks, Dra. Pilar Miranzo, ICV-CSIC.*

11:40 *Early stages of growth of ZnO on graphene/Cu: graphene decoupled from Cu, Carlos Morales, UAM.*

12:00 Café y sesión de posters

12:30 *New trends of Raman Spectroscopy in Polymers Science, Isabel Muñoz Ochando, ICTP-CSIC.*

12:50 *Chemical and topographical modification of polycarbonate surfaces through diffusion and photocuring, processes of hydrogel precursors based on vinylpyrrolidone, Dr. Juan Rodríguez Hernández, ICTP-CSIC.*

13:10 *Modification of poly(dimethylsiloxane) as a basis for surface wrinkle formation: Chemical and mechanical characterization, Dra. Aurora Nogales, IEM-CSIC.*

13:30 Entrega de premios y clausura