



I YOUNG INVESTIGATORS MEETING CMAM

Thursday, June 20th

Center for Micro-Analysis of Materials (CMAM)

9:00	9:15	Welcome
		Session 1. Chair: Andrés Redondo Cubero
9:15		"In Situ Analysis of Inflammation Detection with Gold Nanoshells by Rutherford Back Scattering and Particle Induced X-Ray Emission" . Diego Lecumberri. UAM
9:30		"Boosted visible-light photocatalysis on Au clustered porous Se: Ta2O5 thin films" . Francisco José Fernández Alonso. CMAM-UAM , ICMM . (Online)
9:45		"Towards fabrication of lateral Josephson junctions: through growth and characterization of quasi-epitaxial Fe/MgO/V and V/MgO/Fe trilayers" . Cayetano Hernández Gómez. UAM
10:00		"Thermoelectric efficiency of sputtered epitaxial Fe₂VAl and Fe₂V_{0.8}W_{0.2}Al (100) and (110) thin films" . José María Domínguez-Vázquez. IMN-CNM CSIC , CMAM
10:15		"Femtosecond laser processing of deep-embedded Au nanoparticles in dielectrics towards optoplasmonic tuneability " . Irene Solana. IO-CSIC
10:30		"First ERDA-TOF results of H desorption in Mg-Pd films" . David Abejón. CMAM-UAM
10:45		"Study of the oxidation processes of Zn₃N₂ layers sensitive to the temperature and humidity conditions" . David García-García. CMAM-UAM
11:00		"Study of a possible vertical beam line at CMAM for irradiation biological samples" . Javier Luis Correa Laorden. UCM
11:15	11:45	Coffee break
		Session 2. Chair: Noelia Maldonado Gavilan
11:45		"Irradiation and dosimetry protocol for biological samples at the CMAM implantation beamline" . Inés del Monte García. UCM
12:00		"Beyond Cancer: The Potential of Proton Therapy for Neurodegenerative Disorders" . Carina Marques Coelho. FCUL , LIP , CMAM . (Online)
12:15		"Exploring the theoretical and experimental frontiers of proton therapy" . Guillermo Pérez Liñero. CMAM-UAM



- 12:30 "Exploring the limits between proton therapy and biological systems". Unai Cuevas Gómez. [CMAM-UAM](#)
- 12:45 "Exploring the synergy between phototherapy and proton therapy with gold nanorods for colorectal cancer treatment". Sara C. Freitas. [IFIMUP-UP](#). (Online)
- 13:00 "Desarrollo de un Sistema de Modulación de Haz para Irradiación de muestras biológicas en el Centro de Microanálisis de Materiales (CMAM) usando Simulación Monte Carlo". Adrián Zazpe Apezteguía. [UCM](#)
- 13:15 "First results and future prospects of (α , xn) reaction studies with MONSTER". Alberto Pérez de Rada Fiol. [CIEMAT](#)
- 13:30 "Measurement of ^{27}Al (α , n) ^{30}P thick target yields and angular correlations at CMAM". Odette Alonso Sañudo Álvarez. [UCM](#)

13:45 **15:00** **Lunch**

Session 3. Chair: Esther Enriquez Pérez

- 15:00 "Ion beam nanostructuring of materials". Sunil Kumar. [CMAM-UAM](#)
- 15:15 "Study of modifications induced in optical materials with high energy ions". Félix Graziani. [UB](#), [CMAM](#)
- 15:30 "Simultaneous characterization of ^6Li and impurities content in PbLi by ion beam analysis". Guillermo de la Cuerda Velázquez. [IFN](#), [UPN](#)
- 15:45 "Synthesis and characterization of Mg nanoribbons with tunable plasmonic resonances". Álvaro Bueno García. [CMAM-UAM](#)
- 16:00 "Coatings for space and photonic instrumentation in the UV and far UV: nanostructure and optimization including high energy ions". Francesc Valls Vicent. [IO-CSIC](#), [CMAM](#)
- 16:15 "Research on Defects in Diamond Induced by High-Energy Particle Irradiation". Gangyuan Jia. [TUST](#), [CMAM](#)
- 16:30 "Quest for subsurface amorphization in topological Bi-Sb materials by MeV ion irradiation". Alberto Andrino-Gómez. [UAM](#), [INC](#), [CMAM](#)
- 16:45 "Novel Modification and Analysis of Materials using High - Energy Heavy Ions". Carmen Olivares Alonso. [CMAM-UAM](#)

17:00 **17:15** **Coffee break**

17:15 **17:30** **Awards and closing remarks**
