

# **MASTER OF APPLIED MATERIALS CHEMISTRY**

*Master's Thesis: July 2019*

- Carrasco Córdoba, Javier (*Supervisor: A. Grabulosa, QI*)  
"Coordination and Catalysis with Non-symmetric *P*-stereogenic Methylene-bridged Diphosphines"
- Fabregas Bellavista, Paula (*Supervisor: X. Vendrell, UPC*)  
"Vacancies Creation Effect on the Electric Properties of Neodymium Zirconium Oxide"
- Fort Grandas, Ignasi (*Supervisor: A. Figuerola, QI*)  
"Synthesis and Study of Metal Chalcogenide Nanoparticles: Towards Tailoring Hybrid Structures"
- Gallego Del Río, Aitor (*Supervisor: T. Puig, ICMAB*)  
"Low Temperature Ozone-assisted Pyrolysis of Metalorganic Acrylate Fluorine-free Solutions for Superconducting YBCO Films"
- Gimeno Fonquernie, Pol (*Supervisor: J. Giner, ICMAB*)  
"Carborane-based Linkers for the Synthesis of Dynamic Metal Organic Frameworks"
- Gimeno Muñoz, Raquel (*Supervisor: N. Aliaga, ICMAB*)  
"Estudio de la Reactividad de Curcuminoides con Grupos Carboxílicos y su Inmovilización en Superficie"
- Hernández López, Laura (*Supervisor: D. MasPOCH, ICMAB*)  
"Phase Transfer of Rhodium(II)-Based Metal Organic Polyhedra bearing Coordinatively bounded Cargoes"
- Jurado Mañas, Anabel (*Supervisor: F. Viñes, QF*)  
"First-Principles Evaluation of the Initial Oxidation of Transition Metal Surfaces"
- Molina Fabra, Maria (*Supervisor: P. Martínez, QI*)  
"Synthesis of Molybdenum Carbides and their Application as  $\text{Mo}_x\text{C}/\text{ZnO}$  Systems as Photocatalysts for  $\text{H}_2$  Production"
- Moré Flores, Ferran (*Supervisor: M. Torrent, IREC*)  
"Study of Ni Exsolution in Fluorite Structure for Anode Site Operation on SOFC"
- Moreno Kübel, Sofia Patricia (*Supervisor: A.B. Caballero, QI*)  
"Functionalization of Metal Nanoparticles to Develop Diagnostic Tools"
- Moreno Sanabria, Luis (*Supervisor: M. Torrent, IREC*)  
"New Infiltration Technique based on Inkjet Printing for Oxygen Electrodes Functionalization of Solid Oxide Cells"
- Pinacho Olaciregui, Jokin (*Supervisor: P. Gámez, QI*)  
"Synthesis of Nanocarrier Ligands for Drug Administration by Thermal Release"

- Pinar Serrano, Aranzazu (*Supervisor*: D. Morillo, Leitat)  
“Modificación Superficial de Nanomateriales para su Aplicación Industrial”
- Ràfols Parellada, Laia (*Supervisor*: A. Grabulosa, QI)  
“New Ruthenium Chemotherapeutics: *en route* towards Nanomolar Cytotoxicities”
- Rico Camacho, Aracelis (*Supervisor*: J.M. Chimenos, CEM)  
“Preliminary Study of Alkali-activated Cements Formulated with Rice Husk Ashes and Aluminum Sources as Precursors for Constructive Solutions”
- Romano De Gea, Jan (*Supervisor*: A.B. Caballero, QI)  
“A Nano Approach to Lessen Amyloid- $\beta$  Toxicity and Copper-promoted Reactive Oxygen Species in Alzheimer’s Disease”
- Segura Lecina, Ona (*Supervisor*: A.M. Lopez, ICMAB)  
“Synthesis and Characterization of Biocompatible Metalorganic Materials and their Immobilization on Surfaces using Conventional Methods and scCO<sub>2</sub> Technologies”
- Tamayo Buisán, Rubén (*Supervisor*: E. Ramirez, IQ)  
“Esterification of Levulinic Acid with 1-butene over Ion-exchange Resins”
- Vélez Cerón, Ignasi (*Supervisor*: F. Sagués, QF)  
“Assembly of Active Gels on Supported Lipid Bilayers”
- Videa Dubon, Hellen Skarleth (*Supervisor*: D. Sainz, QI)  
“Trinuclear Palladium Picolyl-NHC Complexes as Catalysts in Suzuki-Miyaura Reaction NADES Solvents”