

Assignació TFG. Semestre de tardor. Curs 2023-24

	Tutor	Alumne
1. New materials		
1.1 Microfluidic synthesis of 3D covalent organic frameworks (COFs)	J Puigmartí / M Mattera	Adell Roca, Miquel
1.2 Development of microcapsules with thermal, mechanical and chemical resistance from plastic waste to contain PCM	Jessica Giró	Baltykova, Altana
1.3 Amphiphilic EDTA-derivatives for Langmuir monolayer studies	Joan Antoni Farrera	Calderon Miranda, Elena
1.4 Fabrication and characterization of clot-in-chip platforms	J Puigmartí / M Guix	Cornejo Paredes, Marco
1.5 Synthesis of expanded perovskites with controllable electrical doping	Roc Matheu	Espuch Escobar, Miquel
1.6 Synthesis of single-crystals of quasi-2D perovskites for light-absorbing applications	Roc Matheu	Mediavilla Pina, Miquel
1.7 AuCu alloy coatings from cyanide-free baths.	T Andreu / M Sarret	Sebastià Castarlenas, Eric
2. Food and health		
2.1 Characterization and authentication of meat and meat products using chromatographic metabolomic fingerprints	Óscar Núñez	Aijon Xalmet, Nil
2.2 Combination of optical and electrochemical methods for the resolution of pharmaceutical formulations	C Ràfols / C Pérez	Baun Carazo, Pol
2.3 Interactions between drugs and biliary salts micelles present in intestinal fluids	S Amézqueta / C Ràfols	Cabañas Castaño, Ruben
2.4 Designs of sensors and electroanalytical strategies for the preconcentration and determination of pharmaceuticals	JM Díaz / J Bastos	García Arnan, Xènia
2.5 HPLC/UV (gradient elution mode) determination of sweeteners and vitamins in soft drinks and energy drinks.	E Moyano / C Ràfols	Hueto Gual, Joel
2.6 Voltammetric analysis of bioactive compounds in food samples	N Serrano / C Pérez	Roca Aracil, Marc
2.7 Purification of plant extracts with high antioxidant activity with macroporous resins	M Granados / JL Beltrán	Walczkowski, Damian
3. Environment		
3.1 Photocatalytic Removal of Emerging Organic Pollutants in Water	Albert Serrà	Bautista Rosas, Queraltu Lu
3.2 Physicochemical characterization of wastes: providing proficiency testing according ISO 17043	Àngels Sahuquillo	Blasco Villegas, Carla
3.3 Simultaneous analysis of plutonium isotopes and ⁹⁰ Sr with fluorescent polymers in tandem	A Tarancón / H Bagán	Giner Mestre, Mònica
3.4 Lignin valorisation: electrochemical transformation combined with product adsorption	N Escaja / I Sirés	Lladós Clos, Jaume
3.5 Iridium-ruthenium electrocatalysts supported on TiO ₂ nanotubes for the oxygen evolution reaction	PL Cabot / T Andreu	Mena Andrade, Santiago Andrés
4. Computational Studies		
4.1 Stereochemical influence on tuning the transition temperature in Spin-Crossover molecules	Jordi Cirera	Alcocer Bernuz, Carlota
4.2 Atomic Doing in Nano-oxides for Photocatalysis	A Morales / F Viñes	Huang, Haoyu
4.3 Preliminary study of organic radicals generated from 1,3,2-dithiazolyl capable of forming magnetic crystals.	Fernando Mota	Montes Segarra, Ainhoa
5. Synthesis and Reactivity		
5.1 Synthesis of molecular boxes using heptazine ligands	Eliseo Ruiz	Blanco Geoa, José Antonio
5.2 Synthesis of cyclic peptide antibiotics and related compounds	Francesc Rabanell	Candelario Ribas, Hermes
5.3 Synthesis of N-acyl thioimides. Direct, catalytic and asymmetric reactions of construction of C-C bonds	Fèlix Urpí	Castella Rodríguez, Josep
5.4 Water-soluble organometallic complexes of lanthanides	Jordi García	Conesa Escoda, Marc
5.5 Synthesis of functional organic dyes and their characterization using NMR, MS, UV-vis and fluorimetry	Bart Limburg	Font Fraga, Oscar
5.6 Cyclopalladated compounds: synthesis and antioxidant activity	Joan Albert	Guadalupe Phang, Eva Sofia
5.7 C-F bond activation and cleavage as an innovative strategy in asymmetric catalysis	Xavier Companyó	Insausti Brull, Gerard
5.8 Syntheses of protein degraders (Protacs)	Antoni Riera	Lluch Díez, Xavier
5.9 Synthesis of luminescent phosphane gold(I) complexes	Inmaculada Angurell	Onetti Batlle, Oriol
5.10 Functionalized porphyrins for visible-light photoredox catalysis	Albert Moyano	Ponzano Sala, Enric
5.11 Synthesis of iron porphyrin with intermediate spin and study of their magnetic properties	Sílvia Gómez	Romo Carmona, Marc
5.12 Catalytic alkene and alkyne hydroacylation using Rh(I) complexes with diphosphanes	Arnald Grabulosa	Saumell Palacios, Nil
5.13 Synthesis, structural and magnetic studies of new coordination complexes 3d and 4f with schiff bases derived from oxalic dihydrazide.	M Salah El Fallah	Sitjar Botey, Pedro
5.14 Characterization of complexes derived from the Ag ^I cation as candidate to quantum computation QUBITS.	Albert Escuer	Xuriguera Bravo, Clàudia

6. Methods and Techniques		
6.1 Characterisation of modified industrial filtration membranes by chemical imaging and chemometrics	R Rocha / A de Juan	Friás Bermúdez, Adrià
6.2 Kinetic study of the electroreduction of CO ₂ to C ₂ H ₄ using a Cu ₂ O-CeO ₂ based-catalyst.	A Alarcón / T Andreu	Orcera Busquets, Júlia
6.3 Effect of modifications in the disorderd region of Src on its enzymatic activity	Miquel Pons	Urbano Romero, Laia
6.4 Copper hydrometallurgic processes	Oriol Rius	Vindel Deras, Katherine N
7. Bibliographic research		
7.1 Metabolomic approach to assess arsenic stress in plants and algae	J Fermín López	Bujons Lario, Jana
7.2 Enantioselective hydrogenations mediated by organometallic complexes derived from earth-abundant metals	José Luís Núñez	Carrascosa, Estaun, Angela
7.3 Superfluid helium nanodroplets and Chemistry. Fundamentals and applications	Miguel González	Costa Boatella, Maria
7.4 Analysis of the effect of viscosity in the design of fluorescent molecular rotors	J Garcia / D Velasco	Gambin Sáez, Albert
7.5 Sustainable drug production using ionic liquids as solvents	Jordi Robles	Mitjavila Viles, Alba
7.6 Creation of a database of polonium distribution coefficient in soils	Miquel Vidal	Planas Rafel, Aleix
7.7 Photoactive structures with multiple azobenzene units	J Garcia / D Velasco	Ruiz Tienda, Eva
7.8 Ion-molecule reactions of biological interest in planetary atmospheres	Josep M Lucas	Santillana López, Noemí
8. External organizations		
8.1 Human biomonitoring and wastewater-based epidemiology as complementary approaches for early identification of chemical exposure risks at the neighborhood level.	X Subirats	Ballester Miró, Olivia
8.2 Effect of TiO ₂ particle size: hemolytic activity and cell viability determination interference	Miquell Llunell	Bescós Tenas, Laura
8.3 Methodological development for analysing PFAS in drinking water	F Javier Santos	Gil Estela, Carlota
8.4 Suspect screening of organic contaminants in lettuce irrigated with reclaimed wastewater	X Saurina	Jiménez de Parga Gros, Ana
8.5 Implementation of the regulations of Annex 1 of GMP (Good Manufacturing Practice) in the production area of Laboratorios Grifols P9, Parets del Vallès.	Susana Amézqueta	Martínez Montes, Sonia
8.6 Occurrence of contaminants of emerging concern in urban groundwater samples from Barcelona city	Alberto Cruz	Mestanza Castelltort, Erik
8.7 Analysis of plasticizers in bird eggs from Doñana National Park	M Victoria Sanz	Ortiz Lisbona, Sandra
8.8 Comparative evaluation of different film-forming ingredients as water resistance agents in sun protection products	Ramon Reigada	Ruiz Veá, Emma
8.9 Atroposelective C–H amination. Synthesis of ligands and methodology.	Ernesto Nicolás	Sans Claro, Ariadna
8.10 Study of the shielding effect in a cable of different polymers in combination with different types of black pigments.	Mònica Martínez	Sufuentes Pérez, Abel Hermes
9. Erasmus/Sicue		
9.1 Deposition of Ba ₃ YGa ₂ O _{7.5} material through chemical solution spin-coating	Xavier Vendrell	Gutierrez Arce, Judith
9.2 (Universitat Oulu)		Serrahima Serra, Anna