

Final TFG. Semestre de tardor. Curs 2022-23

		Alumne
1. New materials		
1.1	Synthesis of lead-free iodide perovskites (resum) (dipòsit)	Casas Comas, Carlota
1.2	Electrochemical etching of ferromagnetic Ni tips for molecular spintronics for Scanning Tunneling Microscopy (resum)	Fornells Gómez, Carlota
1.3	Development of a porphyrin-based porous Supramolecular Polymer Network for dissipative self-assembly. (resum)	González García, Guillem
1.4	Controlled clot formation in microfluidic co-flowing devices (resum) (dipòsit)	Luque Artero, Marina
1.5	Biomolecular guest induced supramolecular assembly under microfluidics control. (resum)	Martínez Verdi, Clàudia
1.6	Synthesis of bismuth (III) sulfide nanoparticles and its ternary derivatives with copper and silver. Colloidal thermal decomposition reaction path and posterior characterization.. (resum)	Menes Rouco, Nicolás
1.7	Synthesis of halide-thiocyanate perovskites via ball-milling (resum)	Orfila Sintés, Ivan
1.8	Mechanosynthesis and nanostructuring of luminescent Lanthanide 2D MOFs (resum)	Parada Rolan, Kevin

2. Food and health		
2.1	Identification of wine in roman pottery. (resum)	Cabeza Navarro, Raul
2.2	Analysis of a protein biomarker of COVID-19 by capillary electrophoresis-mass spectrometry (resum)	Fernández i Lugo, Xènia
2.3	Voltammetric determination of pharmaceutical contaminants in water. (resum)	Gómez Berlanga, Marta
3. Environment		
3.1	Isolation and clean-up techniques for arsenosugars extracted from edible algae. (resum)	Amador García-Villaraco, Jaime
3.2	Building a database to identify polyfluorinated pollutants in environmental samples by Mass Spectrometry . (resum)	López Varela, Víctor
3.3	Environmental applications of nanostructured materials. (resum)	Marsinyach Malé, Marta
3.4	Assessment of the suitability of biochar as a sustainable alternative to remove lanthanides from contaminated waters. (resum)	Romera Miró, Marc
4. Computational Studies		
4.1	Triggering the Sign of Magnetic Exchange Coupling in BTBN-based compounds by means of the spin polarisation mechanism. (resum) (dipòsit)	Franquesa Viñas, Pau

5. Synthesis and Reactivity		
5.1	Phosphane oxides as luminescent components for modulated emission. (resum) (dipòsit)	Carrasco Prieto, Jeanette
5.2	Luminescent and magnetic properties of lanthanide (III) coordination compounds. (resum)	Castro Iñiguez, Eva
5.3	Synthesis and characterization of new coumarin-based chromophores. (resum)	Céspedes Acosta, Àlex
5.4	Ligands for supramolecularly regulated Rh-catalyzed hydroformylations. (resum)	Conde Hesse, Daniel
5.5	Synthesis of fluorescent p-38 inhibitors for high-resolution microscopy studies. (resum)	Cubiña Esquerdo, Héctor
5.6	Optimisation of the synthesis of ruthenium complexes used as photosensitisers in dye-sensitized solar cells (DSSC). (resum) (dipòsit)	Donlo Benito, Artur
5.7	Study of the organophotocatalytic alkylation of aldehydes with diazoacetates.. (resum)	Font Muñoz, David
5.8	Synthesis and characterization of luminescent Au(I) complexes with different nuclearity (resum) (dipòsit)	Franco Murillo, Raul
5.9	Synthesis of a Ru(II) complex containing a phenanthroline derivative as a precursor of novel photosensitizers for photodynamic therapy under hypoxia. (resum)	Gao, Jiawei

5.10	New organic ligands applicable to the design of nanotechnological devices. (resum) (dipòsit)	Gómez Tost, Lidia
5.11	Antioxidant activity of palladium(II) molecular compounds. (resum)	Iturria Serna, Ainhoa
5.12	Synthesis of azo compounds with unusually-accelerated thermal isomerization kinetics. (resum)	Ladron Galceran, Sílvia
5.13	Intermediate spin systems: metal complexes of porphyrins and phthalocyanines. (resum)	Llanés Lorent, Patrícia
5.14	Syntheses and reactivity of tridentate N-donor Schiff bases. (resum)	Oubihi, Rachida
5.15	Use of click-chemistry for the synthesis of new gold(I) complexes. (resum)	Rodríguez Gallego, Andrés
5.16	Synthesis of N-acyl thiomides. New direct, catalytic and asymmetric reactions of construction of C-C bonds. (resum) (dipòsit)	Sánchez Castillo, Laura
5.17	Synthesis and study of the luminescent properties of gold(I) organometallic complexes (resum) (dipòsit)	Sevillano Santamaria, Alba
5.18	Design and synthesis of lanthanide Schiff base complexes with slow relaxation of the magnetization. (resum)	Torrent Llovera, Joan
5.19	Synthesis of oligonucleotide-based RNase H1-sensitive structures: a strategy with potential in breast cancer therapy and nanotechnology. (resum) (dipòsit)	Torrents Lara, Maria

6. Methods and Techniques		
6.1	Development and application of a fast method for the characterization of liquid chromatography systems. (resum)	Abelló Villar, Marc
6.2	log Po/w determination of substances of cosmetic interest by chromatographic methods. (resum)	Barrera Duque, Anna
6.3	Experimental measurement of ion-molecule reaction cross-sections. (resum)	Chacón Sabaté, Pol
6.4	Effect of pH on the stretching of a weak polyelectrolyte at the single-molecule level (resum)	El Jellouli Bota, Safae
6.5	Evaluation of the interaction between anti-inflammatory drugs and β -cyclodextrin by calorimetric measurements (resum) (dipòsit)	Facerías Rodríguez, Laura
6.6	Comparison of the potentiometric and the capillary electrophoresis methods for acidity constants determination. (resum)	Pallisé Huerta, Ferran
6.7	Characterization of solution equilibria of i-motif-like DNA structures. (resum)	Rodríguez Gómez, Judit
7. Bibliographic research		
7.1	Sensor arrays for seawater monitoring. (resum)	Benomar El Mouali, Ibrahim
7.2	Synthesis and decoration of anisotropic magnetic nanoparticles. (resum)	Bueno Megías, Sílvia

7.3	Drug synthesis based on Green Chemistry principles. (resum)	Castillo García, David
7.4	Use of metal-organic frameworks in electrochemical water treatment (resum)	Fernández Monolio, Carla
7.5	Computer simulation models in the study of macromolecular crowding effect on diffusion/reaction processes. (resum)	Martín Buil, Pol
7.6	Bibliographic study of analytical methodologies for the isolation and quantification of liposomes in serum or plasma samples. (resum)	Recouso Vega, Adrian
7.7	Materials used as artificial skin (resum)	Sáez Soriano, Marta
8. External Organizations		
8.1	Study of DNA-protein coacervates (resum) (dipòsit)	Barro Fernández, Eduard
8.2	Electrochemical reduction of CO ₂ using N doped graphene oxide. (resum)	Bosch Roig, Xavier
8.3	Purification of SABRE-polarized biomolecules. (resum)	Carretero Aguilá Maria
8.4	Effect of the water treatment on the thermo-oxidative degradation of the PP-R pipes (resum)	Domínguez López, Jaume
8.5	Development and characterization of Super Duplex Steel obtained by Laser Powder Bed Fusion. (resum)	El Idrissi El Alouan Sospedra, Amina

8.6	Stabilizing effect of polyglycerides as emulsifiers in cosmetic emulsions. (resum) (dipòsit)	Lozano Gorgoso, Sergio
8.7	Use of Comet-assay to identify phototoxic chemicals. (resum)	Marín Fàbregas, Ricard
8.8	Photogenotoxicity induced by compounds with different phototoxic properties. (resum)	Palou Biosca, Judith G.
8.9	Green synthesis of (Z)-3-hexen-1-ol via enzymatic catalysis. (resum)	Rincón Rico, Alba
8.10	Development of a cosmetic line based on cornflower properties (resum)	Tenllado Martínez, Laura
9. Erasmus/Sicue		
9.1	Study of Fluorescent Probes for Exosomes (resum)	Agudo i Trill, Montserrat
9.2	Synthesis of Tröger's Base Analogues (resum)	Arbós Labal, Neus
9.3	Manufacturing of paper-based electrochemical sensor. (resum) (dipòsit)	Gassol Moreno, Guillem
9.4	Effect of nanostructured clays in the oscillatory dynamics of the Belousov-Zhabotinsky reaction (resum)	Miró Escuder, Oriol

Final TFG. Semestre de primavera. Curs 2022-23

		Alumne
1. New materials		
1.1	Clot-in-chip fabrication by continuous flow approaches (resum) (dipòsit)	Boix Comella, Judit
1.2	Development of magnesium silicate hydrate cement (MSH) using magnesia and silica based industrial byproducts. (resum)	Fernández Mendes, Luana
1.3	Preparation of catalysts for the Reverse Gas Water Shift reaction with transition metals supported on a carbon fiber felt. (resum)	Moncada Martínez, Roger Stalin
1.4	Tip coating design for scanning Tunneling microscopy (resum)	Pou Saliotti, Marçal
1.5	Synthesis of a new photoinitiator for Two-Photon Polymerization (resum)	Quesada Saiz, Andrea
1.6	Doped TiO ₂ as support of iridium electrocatalysts for the oxygen evolution reaction. (resum) (dipòsit)	Riba Ferrerons, Joan

1.7	Biomolecular guest induced helical supramolecular polymers under microfluidic control (resum) (dipòsit)	Serra Roger, Maurici
1.8	Catalytic behavior of MAX phases on carbon felt support for Reverse Water Gas Shift reaction (resum)	Ventura Crespín, Adrian
1.9	Development of mortars using Magnesium Phosphate Cements (resum)	Vera Rivera, David
1.10	Boundary and size effects in chromonic liquid crystal emulsions. (resum) (dipòsit)	Vergés Villarubia, Marc
2. Food and health		
2.1	Analysis of bioactive peptides in bovine milks by capillary electrophoresis-mass spectrometry (resum)	Fericle Berzosa, Joan
2.2	Purification of plant extracts with high antioxidant activity by ion exchange (resum)	Fisher Candeloro, M Malena
2.3	Characterization and authentication of paprika with protected designation of origin (PDO) based on the determination of antioxidant capacity. (resum)	García del Amo, Mar Inés

2.4	Characterization of teas from different varieties based on the determination of their antioxidant capacity. (resum)	Giralt Len, Núria
2.5	Establishment of a liquid chromatography-mass spectrometry method for the analysis of glycan biomarkers of pancreatic cancer. (resum) (dipòsit)	Mancisidor Ortiz, Maialen
2.6	Identification of bioactive compounds in quinoa grains following a metabolomics approach (resum) (dipòsit)	Lobato Reyes, Judit
2.7	Determination of biogenic amines in chocolate by liquid chromatography (resum)	Sicre Conesa, Albert
3. Environment		
3.1	Study of the material and formal characteristics of illuminated manuscripts from the XII-XVI centuries. (resum) (dipòsit)	Arres Chillon, Víctor
3.2	Developing photo-thermo-catalysts to synthesize gamma-valerolactona (resum)	Brunat Huertas, Alba
3.3	Development of analytical methods to characterize NORM leachates (resum)	Casas Vázquez, Judith Saskia

3.4	Electrosynthesis of biomimetic photocatalysts for water decontamination (resum)	Ortiz Rodríguez, Miquel
3.5	Magnetic oxides for pollutants removal (resum) (dipòsit)	Ruiz Francisco, Paula
4. Computational Studies		
4.1	Nanostructured surface wettability and their interaction with lipid vesicles. A computational analysis of the involved intermolecular forces. (resum) (dipòsit)	Carrera Acosta, Marcos
4.2	On the Stability of Supported Metal Islands (resum)	Núñez Manrique, Eva
5. Syntesis and Reactivity		
5.1	Ru(II) complexes of new tridentate ligands. (resum)	Aakki Akhnikkh, Fatima Zouhra
5.2	Synthesis of cyclic peptide antibiotics and related compounds (resum) (dipòsit)	Asensio Borràs, Eudald
5.3	Preparation of Co(III) complexes with tri and tetradentate ligands and funtionalised azobenzene derivatives. (resum)	Aymerich Cugat, Núria

5.4	Dissipative self-assembly of redox-responsive porous supramolecular networks (resum) (dipòsit)	Camacho Molina, Maria
5.5	Development of a new asymmetric allylic alkylation between allyl fluorides and silylated C-pronucleophiles (resum)	García Cid, Alvaro
5.6	Synthesis of 2-phenylethylamines and their transformation to tetrahydroisoquinolines via C–H activation and vinyl sulfones (resum)	Jofre Soriano, Mireia
5.7	Enantioselective carbon-carbon bond forming reactions catalyzed by chiral nickel(II) complexes (resum) (dipòsit)	Lamrhadi Elabiad, Otman
5.8	Preparation of Co(III) complexes with pentadentate encapsulating ligands. Coordination to azo photoactive molecules. (resum)	Martínez Morató, Jordi
5.9	Development of new hydroformylation methods based on syngas surrogates (resum)	Mir Molina, David
5.10	Coordination compounds with formula $[Ln(diketonate)_3(NN)Ln'(diketonate)_3]$. NN = 4,4'-bipyridine or pyrazine. Magnetic and luminescent properties. (resum)	Monell de Miguel, Zeleste
5.11	Synthesis of functional organic dyes and their characterization using NMR, MS, UV-vis and fluorimetry (resum)	Oliveras Tramunt, Arnau

5.12	Synthesis of coordination complexes 3d and 4f with Schiff bases. Structural and magnetic studies. (resum)	Ortiz Membrado, Marina
5.13	Supramolecular host- guest assemblies encapsulating qubit prototypes (resum)	Poyato Santiago, Carlos
5.14	Synthesis of magnetic-based hybrid core@shell nanomaterials: Fe ₃ O ₄ nanoparticles surrounded by spin crossover polymer (Fe ₃ O ₄ @SCO) (resum)	Sancho Caldentey, Alba
5.15	Activation of CH bonds of chiral imines by ruthenium compounds (resum)	Torres Gea, Rubén
5.16	Studies on chelidamic acid derivatives for their use in the preparation of water-soluble lanthanide complexes. (resum)	Vera Valverde, José Manuel
5.17	Design, synthesis and study of supramolecular switchable materials. (resum)	Vilariño Casaus, Pol
6. Methods and Techniques		
6.1	Characterization of hydrophilic interaction liquid chromatography. (resum)	Borrell Figuera, Laura

6.2	Lignin valorisation: electrochemical transformation and product analysis (resum)	García González, Dany Xavier
6.3	Development of digital learning tools on the chemistry of plastics and their recycling. (resum)	García Hernández, Guillermo
6.4	Development of a new PSresin for ⁹⁰ Sr measurement based on a crown-ether and an ionic liquid (resum)	Herranz i Díez, Aindara
6.5	Hexacyanoferrate(II)-hydrogen peroxide reaction: Catalysis by molybdate ion (resum) (dipòsit)	Marqués Fumado, Kílian
6.6	Physicochemical characterization of polymers in solution (resum)	Merino Trenchs, Noemí
6.7	Characterization and re-valorization of Aluminum by-products (red mud) (resum)	Pérez Santas, Alejandro
6.8	Dynamization of a chemistry workshop in a science outreach event. (resum)	Porras Infantes, Nerea
6.9	Gold and silver extraction from minerals in thiosulfate media replacing cyanide solutions (resum)	Sánchez Urbaneja, Alba

7. Bibliographic research

7.1	Voltammetric determination of bioactive compounds in herbs and spices. (resum)	Carmona Ferrer, Martí
7.2	Synthesis of antivirals applying Green Chemistry principles. (resum) (dipòsit)	Flix Rubio, Laia
7.3	Review of acidity constants of compounds of environmental and pharmacological interest. (resum)	González Martínez, Sergi
7.4	Chemical characterization of antibodies used in cancer immunotherapy (resum)	Lamas Arias, Laura
7.5	Bibliographic study on the electroreduction of CO ₂ using Cu-Metal cathodes. (resum) (dipòsit)	Llopis Carreras, Maria
7.6	Supramolecular motifs based on self-assembling heterocycle-appended metalloporphyrins. (resum)	Martínez Lassalle, Enrique
7.7	Electric Field Effects on Chemical Reactions. (resum)	Ollé Rodríguez, Gerard

7.8	Literature review about the analysis of radionuclides through inductively coupled plasma mass spectroscopy (resum)	Ouchen Lamaiz, Manal
7.9	Development of sensors by 3D printing technology (resum)	Reyes Raya, Carmen
7.10	Bibliographic search of transition metal based catalysts for carbon-carbon coupling reactions (resum) (dipòsit)	Rodríguez Pueyo, Víctor
7.11	Indicators of the quality and the health, social, economic and political uses of water. (resum)	Salas Campuzano, Enric
7.12	Recent developments on Hydrogen as an energy vector. (resum)	Villanueva Garro, Eudald
8. External Organizations		
8.1	Analysis reduction project in the Quality Control department (QC) of a pharmaceutical company (resum)	Alves de Araujo Ríos, Murillo
8.2	Unrevealing the key parameters for the design of highly crystalline NiO Nanoparticles (resum)	Ara Escario, Jorge

8.3	Design of a colorimetric method for the determination of α -PbO / β -PbO ratios in lead monoxide samples. (resum)	Barnés Fernández, Georgina
8.4	Metabolism and drug resistance in colon cancer (resum) (dipòsit)	Bori Bru, Berta
8.5	Shaping of Zeolite Pellets: Formulation and Procedures to Improve Material Properties as Catalytic Support (resum) (dipòsit)	Gabal Campodarve, Paula
8.6	Multivariate accelerated shelf-life testing: a novel approach for understanding the shelf-life of edible mushrooms (resum) (dipòsit)	García García, Raul
8.7	Optimization of the cleaning solvent in a paint plant (resum)	León Aznar, Paula
8.8	Characterization and properties of surfactants and surfactant mixtures (resum)	Montero García, Maria
8.9	Chemometric strategies assessment for the quantitation of dyes using fluorescence spectroscopy (resum) (dipòsit)	Orcino Móstoles, Danica May

9. Erasmus/Sicue

9.1	Additions of 2-alkyl azines to imines (resum)	Fernández Yuste, Maria
9.2	Chiral plasmonics in Covalent Organic Frameworks (COFs) for the selective dehydrogenation of formic acid (resum)	Martín García, Elena
9.3	Non-Covalent Functionalization of Graphene Oxide with Porphyrazine Macrocycles (resum) (dipòsit)	Pérez Quer, Pol
9.4	Streamlined aqueous synthesis of modified hyaluronic acid to form tunable hydrogels for use in endothelialized in vitro models (resum)	Solsona Pujol, Aina
9.5	Advanced Formulation of Layered Hydroxide-based electrodes : investigation of charge storage mechanism and electrochemical performance (resum)	Tirado Gascó, Xènia Mei