

VNIVERSITAT
ID VALÈNCIA

[ò *] Facultat de
Química

1st WORKSHOP YRChem

YOUNG RESEARCHERS IN CHEMISTRY



Burjassot, June 6th-7th, 2019

6th June 2019, *Saló de Graus de la Facultat de Química*

14:30 h **Registration**

15:00 h **Opening of the 1st Workshop YRChem**

- Carlos Hermenegildo Caudevilla
Vice-Rector of Research, University of Valencia
- Jose Vicente Bagan Sebastian
Director of Doctoral School, University of Valencia
- Adela de los Reyes Mauri Aucejo
*Dean of the Faculty of Chemistry,
University of Valencia*
- Begoña Milián Medina
*Vice-Dean of Degree Enrolment, Innovation and
Teaching Quality of the Faculty of Chemistry,
University of Valencia*

Session 1

Chair: Isaac Brotons Alcázar

15:30 h **Oral communication 1:** *Heterostructures of gold and Prussian blue: combining magnetic and plasmonic properties*, **Roger Sanchis-Gual, Institute of Molecular Science**

15:45 h **Oral communication 2:** *Highly conductive electrical device based on gold@spin-crossover nanoparticles*, **Ramón Torres-Cavanillas, Institute of Molecular Science**

16:00 h **Oral communication 3:** *Encapsulation of spin-crossover complexes in metal-organic frameworks*, **Katia Caamaño, Institute of Molecular Science**

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Session 2

Chair: Jaume Rostoll Berenguer, Estefanía Almenar Sánchez

16:15 h **Oral communication 4:** *Síntesis organocatalítica enantioselectiva de una familia de piperidinas 2,5,5-trisustituidas con un centro cuaternario*, **Marcos Escolano, Department of Organic Chemistry**

16:30 h **Oral communication 5:** *Catalytic diastereo- and enantioselective synthesis of 2-imidazolinones*, **Pablo Martínez-Pardo, Department of Organic Chemistry**

16:45 h **Plenary conference 1:** *Un mundo más allá de la Academia*, **Tania Godoy, Instituto Interuniversitario de Reconocimiento Molecular y Desarrollo Tecnológico**

17:15 h **Coffee break + Poster session**

Session 3

Chair: Jesús Cerdá Calatayud

18:00 h **Oral communication 6:** *Modulation of the ordering temperature in anilato-based magnets*, **Cristian Martínez Hernández, Department of Inorganic Chemistry**

18:15 h **Oral communication 7:** *Heterotetranuclear oxalate-bridged $\text{Re}^{\text{IV}}_3\text{M}^{\text{II}}$ complexes ($\text{M} = \text{Mn}, \text{Ni}, \text{Cu}, \text{Zn}$): Synthesis, crystal structure and magnetic properties*, **Adrián Sanchis-Perucho, Department of Inorganic Chemistry**

18:30 h **Oral communication 8:** *Liquid phase exfoliation of carbonate-intercalated layered double hydroxides*, **Jose Alberto Carrasco, Institute of Molecular Science**

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Session 4

Chair: Carolina Belenguer Sapiña

18:45 h **Oral communication 9:** *Application of mesoporous silica materials in food and environmental analysis*, **Enric Pellicer-Castell**, Department of Analytical Chemistry

19:00 h **Oral communication 10:** *Exposure and risk assessment of environmental pollutants using biomonitoring*, **Sandra Fernández**, FISABIO and Public Health Laboratory of Valencia

19:45 h **Oral communication 11:** *Nanoestructuration of hybrid multifunctional molecular materials*, **Alejandro Núñez-López**, Institute of Molecular Science

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Session 5

Chair: Jose Antonio Navarro Huerta

09:30 h **Oral communication 12:** *Defect engineering of zirconium and titanium organic frameworks*, **Isabel Abánades Lázaro, Institute of Molecular Science**

09:45 h **Oral communication 13:** *Chemical engineering of photoactivity in heterometallic Ti(IV) metal-organic frameworks*, **Javier Castells-Gil, Institute of Molecular Science**

10:00 h **Oral communication 14:** *A direct ab initio Frenkel-Davydov exciton model in molecular pairs*, **Jesús Cerdá, Institute of Molecular Science**

10:15 h **Plenary conference 2:** *Beyond the PhD: Opportunities in Academia. On the search of a postdoctoral fellowship*, **Lara Martínez, Universidad Autónoma de Madrid**

10:45 h **Coffee break + Poster session**

Session 6

Chair: Pablo Martínez Pardo

11:30 h **Oral communication 15:** *One-pot catalytic enantioselective functionalization of dihydroquinoxalinones with ketones through visible-light photoredox catalysis and organocatalysis*, **Jaume Rostoll-Berenguer, Department of Organic Chemistry**

11:45 h **Oral communication 16:** *Síntesis total de anaferina y dihidrocoscohigrina*, **Javier Torres Fernández, Department of Organic Chemistry**

12:00 h **Oral communication 17:** *Cyclodextrins as a versatile tool through their application in Analytical Chemistry*, **Carolina Belenguer-Sapiña, Department of Analytical Chemistry**

12:15 h **Break**

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Session 7

Chair: Ester Peris García

12:30 h **Oral communication 18:** *Slow relaxation in anilato-based coordination polymers*, **Antonio Hernández-Paredes**, **Institute of Molecular Science**

12:45 h **Oral communication 19:** *MnPS₃ exfoliation in solution: Mechanical vs Chemical approach*, **Isaac Brotons**, **Institute of Molecular Science**

13:00 h **Oral communication 20:** *Extraction of chitosan from Ceratitis capitata flies and preparation of magnetic nanohybrid for arsenic adsorption*, **Daniela Cuadra**, **Institute of Molecular Science**

13:15 h **Oral communication 21:** *Spin-crossover complexes based on bis(pyrazol-1-yl) pyridine- (1-bpp) and triazole-based ligands*, **Víctor García-López**, **Institute of Molecular Science**

13:30 h **Oral communication 22:** *Narrow bandgap solar cells synthesized through sublimation methods*, **Ana María Igual-Muñoz**, **Institute of Molecular Science**

13:45 h **Closing of the 1st Workshop YRChem**

POSTER SESSIONS

- Modulation of retention and selectivity in oil-in-water microemulsion liquid chromatography, **Ester Peris García, Department of Analytical Chemistry**
- Analysis of β -blockers in microemulsion liquid chromatography, **Nikita Pankajkumar Patel, Department of Analytical Chemistry**
- Estimation of Peak Capacity for Isocratic and Gradient Elution based on Peak Simulation, **José Antonio Navarro Huerta, Department of Analytical Chemistry**
- Comparison of down and up-conversion emission in Photoactive Nanoparticles, **Irene Pérez Herráez, Institute of Molecular Science**
- Enantioselective synthesis of biotoxins produced by cyanobacteria, **Luis Guillermo Addante Moya, Department of Organic Chemistry**
- Crystallographic study on oxo-bridged diruthenium complexes as possible candidates to the mitochondrial calcium uniporter inhibition, **Marta Orts Arroyo, Institute of Molecular Science**.
- Novel high-affinity monoclonal antibodies for Ochratoxin A immunodetection by direct ELISA, **Daniel López Puertollano, Department of Organic Chemistry**
- Combining optical and fluorescent properties in hybrid nanoparticles of Prussian Blue and Quantum Dots, **Alejandro Lumbreras, Institute of Molecular Science**
- Molecular modification of layered double hydroxides for energy applications, **Alvaro Seijas Da Silva, Institute of Molecular Science**
- Completely organic thermoelectric nanocoatings for flexible films, **José Francisco Serrano Claumarchirant, Institute of Materials Science**
- Influence of the synthetic approach and exfoliation in the electrochemical behaviour of NiFe Layered double hydroxides (NiFe-LDHs), **Antonella Gayoso Padula, Institute of Molecular Science**
- Nanostructured flexible MOFs and related composite materials, **Iván Gómez, Institute of Molecular Science**
- Detection of gaseous formaldehyde with a BODIPY derivative, **Carlos Martínez Aquino, Instituto Interuniversitario de Reconocimiento Molecular y Desarrollo Tecnológico**
- Inorganic Bismuth Halides for Optoelectronics Applications, **Paz Sebastiá-Luna, Institute of Molecular Science**
- Colorimetric detection of the neurotransmitter serotonin based on the aggregation of gold nanoparticles functionalized with α -cyclodextrin, **Estefanía Almenar Sánchez, Instituto Interuniversitario de Reconocimiento Molecular y Desarrollo Tecnológico**
- Organocatalytic Enantioselective Alkylation of Pyrazol-3-ones with Aldimines Generated in Situ from α -Amido Sulfones, **Laura Cacceller Ferrer, Department of Organic Chemistry**.
- Catalytic asymmetric aza-Michael addition of isoxazol-5-ones to para-quinone methides, **Ricardo Torán Muñoz, Department of Organic Chemistry**
- Synthesis of spirocyclic isoxazol-5-ones via asymmetric [3+2]-cycloaddition of 4-alkylideneisoxazol-5-ones and isocynoacetate esters, **Adrián Laviós Gomis, Department of Organic Chemistry**
- Enantioselective Hydrophosphonylation of Benzoxatiazines, **Carles Lluna Galán, Department of Organic Chemistry**
- Preconcentration of polychlorinated biphenyls in water samples by using new types of materials containing cyclodextrin, **Carolina Belenguer Sapiña, Department of Analytical Chemistry**
- Chromofluorogenic detection of GHB through bidentate ligands, **Silvia Rodríguez Nuévalos, Instituto Interuniversitario de Reconocimiento Molecular y Desarrollo Tecnológico**
- Use of silica porous materials as solid phase for aflatoxin extraction and determination in tea samples, **Enric Pellicer Castell, Department of Analytical Chemistry**.

The aim of this workshop is to share the research done by the PhD students in the different chemistry departments. This workshop is thought as an excellent opportunity for every PhD student in chemistry to practice and give an oral communication in a friendly environment and, even, open new multidisciplinary collaboration lines between the different departments of chemistry.

Sponsors:



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