

POSTER CAT 2023

Jornada Científica de Jóvenes Investigador@s del ICP

Salón de Actos del ICP-CSIC. 22 de septiembre de 2023

PROGRAMA

09:00-09:30

REGISTRO

09:30.

BIENVENIDA Y PRESENTACIÓN DE LA JORNADA. Enrique Sastre, Director del ICP-CSIC

PRESENTACIONES ORALES

09:40-11:40.

PRIMERA SESIÓN.

Moderadores: Verónica Ganduglia-Pirovano y Antonio López de Lacey

09:40.

Paula Vidal Ramón

Discovery and engineering of enzymes for a healthy zero-plastic polluted environment

09:46.

Dianelis Toledo Monterrey

Thermostable chimeras engineered with SCHEMA-RASPP computational recombination: Advancing bio-based plastic degradation prospects

09:52.

Gonzalo Sánchez Domínguez

Development of photocatalytic surfaces based on ZnO nanocomposites with antiviral properties

09:58.

David Rodríguez López

PrNiO₃ and YbNiO₃ perovskites structure type as OER and ORR electrocatalyst. Comparative study

10:04.

David Ríos Ruiz

New development of N,P co-doped carbon and Cu nanocomposites for highly efficient electrochemical conversion of CO₂ into C₂₊ products

10:10.

Carlos Quilis Romero

Hydrogenation of CO₂ to methanol over PdZn-ZnO/TiO₂ intermetallic catalysts: influence of the Pd-TiO₂ interaction on structure and activity/selectivity towards methanol

10:16.

José Antonio Pulido Almagro

Gas phase dehydration of tetrahydrofurfuryl alcohol into dihydropyran over sol-gel Al₂O₃-TiO₂ catalysts: in situ drift reaction monitoring.

10:22.

Clara Ortega Nieto

Design and synthesis of new nanobiomaterials with antimicrobial properties

10:28.

Ana Orozco Saumell

A study of the effect of Ti loading on the reaction rate and post-treatment of ammoximation to cyclopentanone using TS-1 as catalyst

10:34.

Verónica Naharro Ovejero

Gas phase hydrogenation of crotonaldehyde using formic acid as hydrogen source over Cu and Re supported catalysts

10:40.

Julia Murciano Brea

Optimization of bioplastics degradation and thermostability improvements through chimera generation via SCHEMA-RASPP and ancestral enzyme reconstruction.

10:46.

Elvira Moreno Fortes

Impact of deposition procedure on thin-film solar cells

10:52.

Jorge Moral Pombo

Modified ferrites for the magnetically heated CO₂ reduction

10:58.

Laura Molina Nogal

Selección inteligente de materiales para la producción de hidrógeno solar

11:04.

Marina Minguet Lobato

Chitinous material bioconversion by novel chitinases from the yeast *Mestchnikowia pulcherrima*

11:10.

Andrea Menés Rubio

Exploring the fungal *Phylum Mucoromycota*: The heterologous expression of a new unspecific peroxygenase from *Absidia Repens* in *Escherichia coli*

11:16.

Laura Martínez Quintana

The effect of O-vacancies on intermediates stability and electron delocalization over MgO modified Ru/ZrO₂: Spectroscopic insights during CO₂ methanation

11:22.

Carlos Martínez Gómez

MOFs como precursores de catalizadores basados en óxido de cerio dopado con lantánidos para la reacción inversa de desplazamiento de gas de agua

11:28.

Paula Mármol Prieto

Catalizadores tándem para el hidrotreatmento de residuos de aceites vegetales para la obtención de biocombustibles avanzados en un paso

11:34.

Paula Llanos Fernández-Valmayor

Oxidative capacity and biocide potential correlation

11:40-12:00

CAFÉ

12:00-14:15.

SEGUNDA SESIÓN.

Moderadores: Juan Manuel Coronado y Marisol Faraldos

12:00.

Merve Keser

Engineering glucose-sensitive galactose oxidase for stability at high temperatures: A fusion of directed evolution and computational methods

12:06.

Jaime Jurado Sánchez

Estudio de diferentes agentes directores de estructura en síntesis de zeolitas quirales

12:12.

Cristina Jiménez Holgado

Sustainable and cost-efficient overall solution for high-quality biofuel production from waste biomass (SUGAI)

12:18.

Daniel Jiménez Gómez

Valorización no convencional de CO₂ a metanol

12:24.

Carla García Sanz

Estudio y preparación de metaloenzimas artificiales de oro mediante la combinación de ingeniería genética y química de proteínas

12:30.

Itziar Arnáiz Camón

Post-synthetic treatments and catalytic reactions of zeotypes of industrial interest

12:36.

Noel Fructuoso Bonet

Quartz crystal microbalance studies of encapsulins: experiments and theory

12:42.

Victoria de los Ángeles Francés Pérez

Technical feasibility and polymer properties of polybutylene maleate and succinate from furfural: opening a feasible route from biomass

12:48.

Estefanía Fernández Villanueva

Enhanced methanol production over a Cu/MgO catalyst: the key role of Cu⁺, monodentate formate species and water

12:54.

David Fernández Polo

Enzymatic hydrolysis of hyaluronic acid to obtain its oligosaccharides

13:00.

Laura Fernández López

Behind the pluriZyme designs: the degradation of plastic particles as study case

13:06.

Mihai-Cristian Fera

Synthesis and characterization of 1T/2H MoS₂ nanosheets for photoelectrocatalytic hydrogen production

13:12.

Santiago Estebaranz Pozo

Bagazo de cerveza como fuente de carbono para la obtención de electrocatalizadores

13:18.

Mikel Dolz Ruiz

Evolución dirigida de enzimas para la degradación de composites termoestables

13:24.

Ramón De la Serna Valdés

Estudio de la actividad catalítica de la zeolita quirál GTM-3: Ampliando el conocimiento del nuevo catalizador asimétrico

13:30.

Iris Cuesta Mayorga

Perovskites and NaYF_4 synthesis and characterization for solar cells

13:36.

Jesús Cebollada Borao

Materiales compuestos de Cu, Fe y Co en una matriz de carbono dopado con nitrógeno para la Reducción y evolución electroquímica de oxígeno

13:42.

Gabriel García Molina

Development of a potentiometric ATP biosensor based on E. coli F_1F_0 ATPase activity reconstituted on gold electrodes

13:48.

Carlos Esteban Aristizábal-Alzate

Coffee pulp gasification for syngas obtention and methane production simulation using Ni catalyst supported on Al_2O_3 in a packed bed reactor

14:52.

Leandro Alves

Production of glucose using enzyme heterogeneous catalysts in ionic liquids

14:00.

Mario Abellán Dumont

Dihydropyran conversion to 1,5-pentanediol: Effects of Ru-based catalyst supports

14:10.

**CLAUSURA DE LA JORNADA
VINO ESPAÑOL**
