

MONDAY, JULY 14TH, 2014**(Aula Magna)**

9:00-9:30	Opening Session
9:30-10:30	<u>PL1</u> : Prof. Juan M. Feliú "Surface electrochemistry and catalysis"
10:30-11:00	CIDETEC Awards/Lecture: Nuria García-Araez "Soluble redox catalysts to enhance and relocate oxygen reduction and evolution in the lithium-air battery"
11:00-11:30	Coffee Break/Poster Session
11:30-12:45	Electrochemistry Group of RSEQ Meeting
12:45-13:30	Prof. José M. Pingarrón "Management of R&D projects in the National Plan"
13:00-15:00	Lunch Break
15:00-16:30	Regional Student Meeting (RSM-ISE) / Poster Session
16:30-17:00	Coffee Break/Poster Session
17:00-19:00	Regional Student Meeting (RSM-ISE) / Poster Session

TUESDAY, JULY 15TH, 2014

9:00-10:00 **PL2: Prof. Patrick R. Unwin** "Challenging the consensus: New models for electrochemistry at carbon electrodes"

SYMPOSIUM A (Aula Magna)

10:00-10:20	<u>KNA1</u> Agustín Costa "Nanomaterials as electrochemical labels for monitoring biological reactions"
10:20-10:30	<u>QCA1</u> Paloma Yañez-Sedeño "Multiplexed determination of human growth hormone and prolactin in human serum and saliva at a label free electrochemical immunosensor using dual carbon nanotubes-screen printed electrodes modified with gold and pedot nanoparticles"
10:30-10:40	<u>QCA2</u> Ariadna Brotons "Toward dna methylation determination - effective screen printed electrochemical devices use"
10:40-10:50	<u>QCA3</u> Tania Campos "Electrochemical behaviour of electrodes made with graphene exfoliated in nmp"
10:50-11:00	Discussion
11:00-11:30	Coffee Break/Poster Session
11:30-11:50	<u>KNA2</u> Juan R. Castillo "Nanoparticles chemical and functional speciation by using electrochemical techniques"
11:50-12:00	<u>QCA4</u> Pablo Giménez "Evaluation of different strategies for the development of an amperometric bienzymatic lactate biosensor"
12:00-12:10	<u>QCA5</u> Julien Biscay "Flow injection electrochemical systems using a flow magnetic cell with an integrated magnet"
12:10-12:20	<u>QCA6</u> Alejandra Abellán "Electrochemical oxidation of ascorbate using different electrodes"
12:20-12:30	Discussion
12:30-12:50	<u>KNA3</u> Encarnación Lorenzo "Electrochemical biosensors for screening of specific gene mutations associated with human diseases"
12:50-13:00	<u>QCA7</u> Mario Castaño "Innovative electrochemical platforms for using a new generation of low-cost thin-film (micro)electrodes"
13:00-13:10	<u>QCA8</u> Gemma Cepriá "Looking for engineered nanoparticles in the environment. The electrochemical approach"
13:10-13:20	<u>QCA9</u> José Luis Olloqui-Sariego "Direct observation of a temperature-driven changeover in the et mechanism of a thermophilic plastocyanin"
13:20-13:30	Discussion
13:00-15:00	Lunch Break
15:00-15:20	<u>KNA4</u> F. Javier del Campo "Miniaturization of electrochemical devices: microfabrication and rapid prototyping"
15:20-15:30	<u>QCA10</u> Alvaro Colina "Development of a new full-integrated uv/vis spectroelectrochemistry instrument"
15:30-15:40	<u>QCA11</u> Ottavio Lugaressi "Electrocatalytic activity of silver nanoparticles for environmental applications: from classical to fixed energy x-ray absorption voltammetry (fexrav) approaches"
15:40-16:00	<u>KNA5</u> Alberto Escarpa "Electrochemical microfluidic sensing of target analytes in agro-food and clinical fields"
16:00-16:10	<u>QCA12</u> Jerónimo Agrisuelas "AC-electrogravimetry to study the free water transfer in thin poly(o-toluidine) films"
16:10-16:20	<u>QCA13</u> Laura Valero "Sensing actuators exchanging cations"
16:20-16:30	Discussion
16:30-16:45	Coffee Break
16:45-17:45	Poster Session

SYMPOSIUM B (Aula Romeros)

10:00-10:20	KNB1. Michele Mascia "Design of electrochemical reactors for disinfection and water treatment"
10:20-10:30	OCB1 Salvador Cotillas "Use of bipolar electrodes for the reclamation of urban treated wastewater"
10:30-10:40	OCB2 Abdoulaye Thiam "Degradation of allura red ac in aqueous solutions by photoelectro-fenton: influence of operating parameters"
10:40-10:50	OCB3 Leticia García-Cruz "A peme architecture for electro-oxidation of alcohols in alkaline conditions"
10:50-11:00	Discussion
11:00-11:30	Coffee Break/Poster Session
11:30-11:50	KNB2. Enric Brillas "Progress in the electrochemical advanced oxidation processes based on the fenton's chemistry for water decontamination"
11:50-12:00	OCB4 Manuel Rodrigo "Electrochemical disinfection of reclaimed wastewater"
12:00-12:10	OCB5 M^a José Piernas-Muñoz "Prussian blue, a new anode material exhibiting displacement or conversion reaction in li-ion batteries"
12:10-12:20	OCB6 Eider Artutxa "comparative study of amorphous alloys catalysts composition $Ni_{51}Nb_{40}Pt_1$, $Ni_{59}Nb_{39}Pt_2$ and $Ni_{59}Nb_{40}Pt_{0.6}Ru_{0.4}$ for ethanol and bioethanol electrooxidation"
12:20-12:30	Discussion
12:30-12:50	KNB3. Vito di Noto "Advanced nanostructured ORR electrocatalysts: plurimetal alloy nanoparticles embedded in carbon nitride "shells" wrapping conducting "cores"
12:50-13:00	OCB7 Catia Arbizzani "High-energy lithium batteries for electric transportation and stationary application"
13:00-13:10	OCB8 Rubén Rizo "Pt:Sn catalysts for ethanol oxidation reaction supported on different carbon materials"
13:10-13:20	OCB9 Andrea Massa "MJ solar cell and PEM electrolyzer coupled system"
13:20-13:30	Discussion
13:00-15:00	Lunch Break
15:00-15:20	KNB4. Justo Lobato "PBI based membranes for high temperature PEMFCs"
15:20-15:30	OCB10 Onofrio Scialdone "Electrochemical treatment of wastewaters driven by reverse electrodialysis processes"
15:30-15:40	OCB11 Mikel Pino "Characterization of commercial aluminium alloys for application as anodes in Al/air batteries"
15:40-16:00	KNB5. Carlos Sánchez-Sánchez "Electrocatalytic reactions at surface structured electrodes in different room temperature ionic liquids"
16:00-16:10	OCB12 Beatriz Guitian "Strategies to increasing the conductivity of nanostructured layers of FeF ₃ for used as electrodes in Li-ion batteries"
16:10-16:20	OCB13 Alessandro Iannaci "Zirconia based cathodes for MFC applications"
16:20-16:30	Discussion
16:30-16:45	Coffee Break
16:45-17:45	Poster Session

SYMPOSIUM C (Aula Ruta Jacobea)

10:00-10:20	KNC1. José Juan García Jareño "Electrochemical systems characterization by means of in situ electrochemical impedance, mass impedance and color impedance spectroscopy. The usefulness of crossing impedance functions"
10:20-10:30	QCC1 Verónica Celorrio "Oxygen reduction kinetics at lanthanum based perovskites"
10:30-10:40	QCC2 Ana M^a Gómez-Marín "Role of surface Pt(111) oxides during the oxygen reduction reaction"
10:40-10:50	QCC3 Manuel Montiel "Nanostructured supported palladium catalysts for alcohols oxidation"
10:50-11:00	Discussion
11:00-11:30	Coffee Break/Poster Session
11:30-11:50	KNC2. David Fermín "Dynamic photoelectrochemical responses in oriented high aspect ratio semiconductor assemblies"
11:50-12:00	QCC4 Enrique Ortí "Light-emitting electrochemical cells: emission colour and efficiency"
12:00-12:10	QCC5 Sofiane Hassab "Development of unbalanced electrochromic devices"
12:10-12:20	QCC6 Alessandro Minguzzi "Fixed energy X-ray absorption voltammetry (FEXRAV): proof of concept and application to a water oxidation catalyst"
12:20-12:30	Discussion
12:30-12:50	KNC3. Angel Cuesta "Atomic-ensemble effects and non-covalent interactions at the electrode-electrolyte interface"
12:50-13:00	QCC7 Francisco José Vidal-Iglesias "Electrochemical properties of Pt nanoparticles prepared in water-in-oil microemulsion in the presence of different adsorbates"
13:00-13:10	QCC8 Daniela Plana "Photoinduced electron transfer at liquid/liquid interfaces promoted by semiconductor nanostructures"
13:10-13:20	QCC9 Eduardo Laborda "Simple theoretical approach to ion transfer processes at asymmetric nanoscopic liquid/liquid interfaces"
13:20-13:30	Discussion
13:00-15:00	Lunch Break
15:00-15:20	KNC4. Francisco Prieto "Adsorption of adenine and thymine on gold electrodes. Study by FT-IR reflection-absorption spectroscopy"
15:20-15:30	QCC10 Alain Rafael Puente "Electrochemical and RAIRS study of 11-mercaptoundecanoic acid mixed sams on Au(111)"
15:30-15:40	QCC11 Sandrine Delpeux-Ouldriane "Carbon adsorbents regeneration using electrochemical techniques"
15:40-16:00	KNC5. Elisa Vallés "New strategies for electrochemical preparation of micro/nanostructures of alloys"
16:00-16:10	QCC12 Sarai Leyva "Analyzing electrochemical oxidation of activated carbons by electrochemical quartz microbalance"
16:10-16:20	QCC13 Joaquín González "A common approach to the study of the electrochemical response of charge transfer processes coupled with homogeneous chemical reactions"
16:20-16:30	Discussion
16:30-16:45	Coffee Break
16:45-17:45	Poster Session

WEDNESDAY, JULY 16TH, 20149:30-10:30 PL3: **Prof. Jean-Michael Kauffmann** "Trends in electrochemical analysis"**SYMPOSIUM A (Aula Magna)**

- 10:30-10:50 **KNA6. Susana Campuzano** "Advanced electrochemical bioplatfoms as promising tools in electrochemical sensing"
- 10:50-11:00 **OCA14 M. Chatenet** "Understanding the heterogeneous degradations of Pt₃Co/C electrocatalysts by identical-location transmission electron microscopy in polymer electrolyte environment"
- 11:00-11:10 **OCA15 María Porcel** "Electroassisted deposition of molecularly imprinted silicas for the voltammetric detection of neurotransmitters"
- 11:10-11:20 Discussion
- 11:20-11:50 Coffee Break/Poster Session
- 11:50-12:10 **KNA7. Agustina Guiberteau** "Electrochemical studies of phenolic compounds of interests"
- 12:10-12:20 **OCA16 Laura Asturias** "Cytochrome P450 2D6 based electrochemical sensor for the determination of codeine"
- 12:20-12:30 **OCA17 Elisabetta Petrucci** "Application of a novel definitive-screening design in the decolorization of an azo dye on boron doped diamond electrodes"
- 12:30-12:40 Discusión
- 12:40-13:00 **KNA8. Francisco Javier Andrade** "New electroanalytical platforms for decentralized systems"
- 13:00-13:10 **OCA18 Jesus Garoz-Ruiz** "Development of a new bidimensional spectroelectrochemistry cell based on optical fibers"
- 13:10-13:20 **OCA19 Laura Mais** "On the electroreduction of tantalum from 1-butyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl) imide"
- 13:20-13:30 Discusión
- 13:30-14:00 Posters Awards. Closing Session.
- 14:00-16:00 Lunch Break

SYMPOSIUM B (Aula Romeros)

- 10:30-10:50 **KNB6. José Solla** "Recent advances in nanostructured metal materials for electrochemical applications"
- 10:50-11:00 **OCB14 M^a Victoria Martínez-Huerta** "Titanium carbonitride supported catalysts for unitized regenerative fuel cells"
- 11:00-11:10 **OCB15 Víctor Climent** "CO₂ reduction on adatom modified platinum single crystal electrodes"
- 11:10-11:20 Discussion
- 11:20-11:50 Coffee Break/Poster Session
- 11:50-12:10 **KNB7. Gonzalo García** "Metallic carbides and nitrides as catalysts and co-catalysts for CO and alcohol electrooxidation reactions"
- 12:10-12:20 **OCB16 Pilar Ocón** "Alkaline solid polymer electrolyte membranes based on modified polyvinyl alcohol (PVA)"
- 12:20-12:30 **OCB17 Cinthia Alegre** "Pd-based catalysts for the air electrode of iron-air batteries"
- 12:30-12:40 Discusión
- 12:40-13:00 **KNB8. Gonzalo Guirado** "Electrochemical processes: from green chemistry to "green" molecular devices"
- 13:00-13:10 **OCB18 Beatriz Ruiz** "Zinc bromide redox flow battery life assessment"
- 13:10-13:20 **OCB19 Rafael Trocoli** "Aqueous Zn-CuHCF based batteries for energy storage"
- 13:20-13:30 Discusión
- 13:30-14:00 Posters Awards. Closing Session.
- 14:00-16:00 Lunch Break

SYMPOSIUM C (Aula Ruta Jacobea)

- 10:30-10:50 **KNC6. Ángela Molina** "Electrochemical characterization of charge transfer processes at micrometric and nanometric interfaces"
- 10:50-11:00 **OCC14 Francisco Vicente** "The poly-(neutral red) as electrochemical coating"
- 11:00-11:10 **OCC15 José G. Martínez** "Structural electrochemistry. Detection and quantification of structural processes in conducting polymers"
- 11:10-11:20 Discussion
- 11:20-11:50 Coffee Break/Poster Session
- 11:50-12:10 **KNC7. Guadalupe Sánchez** "Molecular assembly on gold alloys"
- 12:10-12:20 **OCC16 Rosa M. Arán-Ais** "IL-TEM images on shaped Pt nanoparticles: electrochemical activation and surface disordering"
- 12:20-12:30 **OCC17** Carlos Busó "Ethanol oxidation on Pt electrodes: influence of pH exchange"
- 12:30-12:40 Discusión
- 12:40-13:00 **KNC8. M^a Carmen Pérez** "Design of alternative treatments to improve the corrosion resistance of metallic substrates"
- 13:00-13:10 **OCC18** Alba Dalmau "Study of the corrosion behavior of new martensitic stainless steels using electrochemical techniques"
- 13:10-13:20 **OCC19 M^a Cruz Alonso** "Testing methodologies to determine the critical chloride concentration for duplex stainless steel rebars in concrete"
- 13:20-13:30 Discusión
- 13:30-14:00 Posters Awards. Closing Session.
- 14:00-16:00 Lunch Break