

**Monday, October 21**

**Plenary Lecture (9:00-10:00)**

S. Shiraishi    A Challenge Using Classic Carbon Materials to Progress of Electrochemical Capacitors

**Oral Session 1 (10:00-11:30)**

M. Sevilla	A green strategy towards high-surface area carbons by chemical activation of biomass-based products with sodium thiosulfate	S1-1
F. Fontana-Roman	Low-cost biochar produced by hydrothermal carbonization of compost derived from municipal solid waste	S1-2
M. Martínez	Recovery of graphitizable structure in activated carbons after the KOH activation process	S1-3
M. Cocina Fernández de Córdoba	Synthesis of ordered mesoporous carbons by a photoinduced strategy	S1-4
M. Yoshikawa	Development of novel PAN-based activated carbon fibers	S1-5
S. Bonnamy	Biomimetic calcium-deficient hydroxyapatite deposited on carbon fiber cloth for bone regeneration	S1-6

**Keynote 1 (12:00-12:30)**

H. Nishihara    Force-driven reversible liquid–gas phase transition mediated by elastic nanoporous carbon materials

**Hot Topics Energy (12:30-13:30)**

F. Beguin	How next generations of electrochemical capacitors can be developed with help of carbon porosity?	HT1
E. Frackowiak	Ageing of carbon based electrochemical capacitors in neutral aqueous electrolyte	HT2
N. Chanut	Electron conducting cement/carbon nano-composites: expanding concrete structural elements functionalities	HT3
N. Fulik	An asymmetric supercapacitor-diode (CAPode) for unidirectional energy storage	HT4

**Keynote 2 (15:30-16:00)**

E. Raymundo Optimizing porous carbons for supercapacitors operating in high concentrated aqueous electrolytes

**Oral session 2 (16:00-17:00)**

J.M. Rojo	Capacitance vs. current density in microporous carbon monoliths	S2-1
A. Castro-Muñiz	Carbon monoliths with an ordered mesoporous structure from coal tar-derived products for electrochemical energy storage	S2-2
L.A. Ramírez-Montoya	Utilization of whey for the synthesis of nitrogen doped carbon xerogel supercapacitors	S2-3
S. Breitenbach	Cellulose-based activated carbon fibers for use as supercapacitor electrodes	S2-4

**Tuesday, October 22**

**Keynote 3 (9:00-9:30)**

S. Dali Efficient cathodic exfoliation of graphite in aqueous electrolytes towards high quality graphene for energy and environmental applications

**Oral session 3 (9:30-11:00)**

N. Rey	Fe-N-doped hydrothermal carbons for the oxygen reduction reaction	S3-1
G. Alvarez-Ferrero	Porous activated binderless pellets for electrochemical oxygen reduction and evolution reaction	S3-2
S. Fontana	Synthesis of N-doped graphenic foam for the oxygen reduction reaction in PEMFC	S3-3
M. Martínez	Recycling the spent bleaching earth waste material into electrocatalytic component	S3-4
F. Deschamps	How to make a proper 3D characterization of PEMFC catalyst layer?	S3-5
A. F. Pérez-Cadenas	Graphitic and magnetic carbon spheres-nanocomposites obtained under pressure for oxygen reduction reaction	S3-6

**Keynote 4 (11:30-12:00)**

P. Przygocki Self-consistent methodology to quantitatively analyze the phenomena taking place during operation of both EDL and sodium-ion capacitors

**Oral session 4 (12:00-13:15)**

D. Kilymis	Topological effects on NMR spectra of disordered carbons explored through DFT calculations	S4-1
C. Santos	In situ SAXS/WAXS characterisation of macroscopic yarns of carbon nanotubes (CNTf) during electrochemical processes	S4-2
E. Yambou	Low temperature performance of carbon/carbon EDLCs down to -50°C in ionic liquid binary mixture	S4-3
A. Okotrub	Electrochemical applications of UV irradiated fluorinated graphene films	S4-4
D. Carriazo	Graphene composites as binder-free electrodes for high volumetric energy density devices	S4-5

**Keynote 5 (15:30-16:00)**

N. Alonso      Application of carbon microcapsules in CO<sub>2</sub> capture with encapsulated ionic liquids

**Oral session 5 (16:00-17:00)**

J. Jagiello	A new approach to characterization of carbon pore structure	S5-1
Z. El-Oufir	On molecular simulation of phenol adsorption in slit-shaped carbons: role of carbon surface conductivity	S5-2
Y. Magnin	Kerogen texture modeling, adsorption and transport properties	S5-3
O. Guerrero	Enhanced cyclic CO <sub>2</sub> /N <sub>2</sub> separation performances stability on chemically modified nitrogen-doped Ordered mesoporous carbon	S5-4

**Wednesday, October 23**

**Plenary Lecture (9:00-10:00)**

T. Bandoz      Metal-free porous carbon catalysts for ORR: Addressing the complexity of activity governing factors

**Keynote 6 (10:00-10:30)**

A. Leonard      How do the micropores of carbon xerogels influence their electrochemical behavior as anodes for lithium-ion batteries?

**Oral Session 6 (10:30-11:30)**

M. Rana	MoS <sub>2</sub> @CNT hybrid for free-standing charge storage: mechanistic investigations on growth and charge storage mechanism	S6-1
I. Cameán	Silicon/biogas-derived carbon nanofibers composites: a promising anode material for lithium-ion batteries	S6-2
C. Ghimbeu	Design of Hard Carbons anodes for high performance Na-ion batteries (NIBs)	S6-3
N. Villanueva	Mesoporous Fe-C-S composites as electroactive materials for the negative electrode of an Iron-Air battery	S6-4

**Keynote 7 (12:00-12:30)**

H. Fujimoto    Operando analysis for charge/discharge reaction mechanism of graphite anode of Li ion battery using synchrotron radiation

**Oral Session 7 (12:30-13:30)**

L. Bulusheva	In situ X-ray photoelectron and X-ray absorption spectroscopy study of lithium interaction with fluorinated graphites	S7-1
A. Casanova	Synthetic approaches for improving the electrical conductivity of mesoporous carbon gels	S7-2
F. Cazaña	Synthesis and characterization of graphene-related nanomaterials by catalytic chemical vapor deposition using a Co-Cu/Cellulose-Derived Carbon catalyst	S7-3
V. Luchnikov	Carbon microtubes derived from self-rolled chitosan acetate films and graphitized by joule heating	S7-4



**Keynote 8 (15:30-16:00)**

J.M. Rosas      Activated carbon monoliths from lignocellulosic biomass waste for methanol dehydration

**Oral Session 8 (16:00-17:45)**

M.A. Centeno	Biomass upgrading via H <sub>2</sub> -free HDO using highly effective carbon-based catalysts	S8-1
M. Martín-Martínez	Production of hydrocarbons by hydrodechlorination using functionalized carbon nanofibers	S8-2
J.L. Pinilla	Ru, Pd, Pt as dopants of carbon nanofibers-supported Ni catalysts for one-pot cellobiose conversion	S8-3
M.A. Centeno	Noble metals supported on mesoporous biochar as a suitable catalyst for upgrading bio oils	S8-4
F. Heras	Templated carbons for the study of the influence of morphology, porous texture and N-doping of catalytic supports in aqueous-phase hydrodechlorination	S8-5
J. Matos	H <sub>2</sub> production on 1D and 2D Carbon-containing Fe-, Co-, and Ni-based foamy catalysts	S8-6
D. Bulushev	N-doping of carbon support for creation of efficient catalysts for hydrogen production from formic acid decomposition	S8-7

**Thursday, October 24**

**Keynote 9 (9:00-9:30)**

C. Ania          Performance of Bi<sub>2</sub>WO<sub>6</sub>/carbon catalysts under real solar conditions in a CPC photoreactor

**Oral session 9 (9:30-11:00)**

J. Fernández-Català	Synthesis of hierarchical TiO <sub>2</sub> /MWCNT photocatalysts for VOCs abatement	S9-1
J. Matos	Photocatalytic activity of semiconductor-free, tannin-derived mesostructured carbons	S9-2
K. Kordek	Application of pulsed laser deposition for fabrication of carbon cloth-based free-standing bifunctional electrodes for water splitting	S9-3
R. Ruiz-Rosas	Electrospinning of Alcell lignin for the preparation of electrodes and electrocatalysts	S9-4
S. Heumann	In-situ formation of active C-O-Fe species during the water splitting process	S9-5
L. Cano-Casanova	TiO <sub>2</sub> -C materials prepared by hydrothermal synthesis for their application in photocatalysis	S9-6

**Hot Topics Environment (11:30-12:30)**

A. Arenillas, T. Cordero	Perspectives for carbons in environmental applications	HT5 (30 min)
D. Lozano-Castelló	Carbon monoliths with designed morphology and tailored textural properties for environmental catalytic applications	HT6
S. Bonnamy	Adsorption kinetics of nitrate ions on activated carbons	HT7

**Oral Session 10 (12:30-14:00)**

A. Mestre	Superactivated carbons synthesized by steam activation of acid-chars for pharmaceuticals removal	S10-1
A. Monzon	Development of Ni catalysts supported on Cellulose Derived Carbon for CO <sub>2</sub> Methanation	S10-2
L. Duclaux	Effect of multi-scale texture of activated carbons and ultrasound treatment on the adsorption of carbamazepine and ibuprofen in water	S10-3
S. Benjedim	Removal of emerging pollutants present in water using an E-coli biofilm supported onto activated carbons prepared from argan wastes	S10-4
F.J. García-Mateos	Simultaneous adsorption of bisphenol-a and phenol on lignin-derived activated carbons	S10-5
S. Soares	Tuning the surface chemistry of carbon materials to achieve efficient Ni-based catalysts for CO <sub>2</sub> methanation	S10-6