

EFCD2015 - POSTER SESSIONS

Please find below the list of posters with authors classified alphabetically. Just go to the corresponding page to check the day of presentation, the poster title and the corresponding topic.

As a reminder:

- **Session 1:** Sunday 13th September from 19:00 to 21:00
- **Session 2:** Monday 14th September from 19:15 to 21:00

Poster Number	Last Name	First name	Page
47	Alkan Gürsel	Selmiye	7
73	Ampurdanes Vilanova	Jordi	9
57	Asset	Tristan	8
40	Atanassov	Plamen	6
35	Barman	Suman Kumar	5
6	Beauger	Christian	3
59	Beermann	Vera	8
46	Berber	Mohamed Reda	7
3	Brault	Pascal	3
63	Brouzgou	Angeliki	8
17	Brüller	Sebastian	4
20	Buan	Marthe Emelie Melandsø	4
23	Cai	Qiong	5
79	Casalegno	Andrea	10
86	Chen	Hanmei	11
14	Chisaka	Mitsuharu	4
31	Choi	Chang Hyuck	5
27	Chung	Min Wook	5
3	Colmenares	Luis Cesar	3
2	Colmenares	Luis	3
75	Davodi	Fatemeh	9
34	Domínguez Fernández	Carlota	6
11	Ercolano	Giorgio	3
33	Eriksson	Björn	5
12	Escribano	Sylvie	3
67	Fiala	Roman	8
26	Fukunaga	Hiroshi	5
69	Gago	Aldo	9
19	Gheorghiu	Cristina Constanta	4
29	Goellner	Vincent	5
39	Goenaga	Gabriel	6
7	Heikkilä	Pirjo	3
68	Ion-Ebrasu	Daniela	9
48	Işikel Şanlı	Lale	7
84	Jacques	Pierre-André	11
10	Jaouen	Frédéric	3
30	Jaouen	Frédéric	5
83	Kajama	Mohammed	11
36	Kim	Sang-Kyung	6
38	Kim	Sung-Min	6

66	Komárková	Zuzana	8
58	Kühl	Stefanie	8
21	Lázaro Elorri	M ^a JESÚS	4
61	Lázaro Elorri	María Jesús	8
62	Lee	SANG-YUL	8
76	Li	Dongmei	9
45	Longhi	Mariangela	6
25	Luo	Fang	5
28	Lyth	Stephen	5
51	Maillard	Frédéric	7
32	Malko	Daniel	5
60	Marconot	Olivier	8
18	Marzorati	Stefania	4
85	Marzun	Galina	11
49	Moreno	Berta	7
53	Nabil	Yannick	7
70	Nefedkin	Sergey	9
82	Orakwe	Ifeyinwa	11
44	Osmieri	Luigi	6
24	Pampel	Jonas	5
16	Park	Gu-gon	4
41	Perez-Alonso	Francisco J.	5
74	Peron	Jennifer	9
78	Reda	Mahmoud	10
81	Reda	Mahmoud	10
72	Rodríguez-García	Bárbara	9
8	Sabo	Lehel	3
52	Safo	Isaac Adjei	7
80	Salomov	Uktam	10
22	Sarapuu	Ave	4
5	Schneider	Oliver	3
9	Schuppert	Anna	3
50	Spataru	Tanta	7
43	Tammeveski	Kaido	6
71	Thazhe veettil	Vineesh	9
13	Thomassen	Magnus	3
56	Tong	YuYe	8
64	Tzorbatzoglou	Fotini	8
15	Uhlig	Lisa Maria	4
4	Ulrikkeholm	Elisabeth Therese	3
65	Uribe-Godínez	Jorge	8
37	Verde-Gomez	Ysmael	6
54	Westsson	Emma	7
42	Zhong	Lijie	6
77	Zhou	Weijiang	9
55	Zubiaur	Anthony	7

1. FCH-JU RELATED

POSTER NUMBER	LAST NAME	FIRST NAME	ORGANISATION	COUNTRY	POSTER TITLE	SESSION
1	COLMENARES	Luis Cesar	SINTEF	Norway	<i>European Energy Research Alliance Joint Programme on Fuel Cell and Hydrogen Technologies</i>	1
2	COLMENARES	Luis	SINTEF	Norway	<i>Antimony Tin Oxide: from computational research until MEA manufacturing: Challenges in the value chain</i>	2
3	BRAULT	Pascal	Université d'Orléans	France	<i>Molecular Dynamics simulations of plasma sputtered ultra-low platinum nanocatalyst growth</i>	1
4	ULRIKKEHOLM	Elisabeth Therese	DTU Physics	Denmark	<i>Single Crystals studies of Y/Pt(111) and Gd/Pt(111) for the Oxygen Reduction Reaction</i>	1
5	SCHNEIDER	Oliver	Technische Universität München	Germany	<i>Electrodeposition of Pt / rare earth metals as ORR catalysts</i>	2
6	BEAUGER	Christian	MINES ParisTech	France	<i>Metal Oxides Aerogels as promising catalyst supports for potential use in Fuel Cells and Electrolysers</i>	1
7	HEIKKILÄ	Pirjo	VTT Technical Research Centre of Finland Ltd.	Finland	<i>Fibrous and tubular support materials for low-Pt PEM fuel cells for automotive MEAs</i>	1
8	SABO	Lehel	Ulm University	Germany	<i>ReaxFF Simulations on the Dynamics of the Oxygen Reduction Reaction on Pt Electrodes</i>	1
9	SCHUPPERT	Anna	Institut Charles Gerhardt Montpellier	France	<i>Non-Precious Metal Catalysts with ultra-low Pt loading as Hybrid Materials for Oxygen Reduction</i>	2
10	JAOUEN	Frédéric	Institut Charles Gerhardt Montpellier	France	<i>Sacrificial Metal Organic Frameworks for Metal-Nitrogen-Carbon Catalysts</i>	1
11	ERCOLANO	Giorgio	Institut Charles Gerhardt Montpellier	France	<i>Alternative Pt deposition methods towards maximum efficiency</i>	2
12	ESCRIBANO	Sylvie	CEA/LITEN	France	<i>Ageing of platinum based catalysts: combined in-situ and ex-situ degradation analyses</i>	2
13	THOMASSEN	Magnus	SINTEF Materials and Chemistry	Norway	<i>Supported Ir and IrRu nanoparticles as highly active oxygen evolution catalysts for PEM water electrolyzers.</i>	1

2. OXYGEN REDUCTION CATALYSIS - NON PGM

POSTER NUMBER	LAST NAME	FIRST NAME	ORGANISATION	COUNTRY	POSTER TITLE	SESSION
2.1 OXIDE AND SULFIDE MATERIALS						
14	CHISAKA	Mitsuharu	Hirosaki University	Japan	<i>Active sites for oxygen reduction reaction in TaOx-MWCNT synthesized via a decomposition of oxy-tantalum phthalocyanine: Nano-TaOx versus CNx</i>	1
15	UHLIG	Lisa Maria	NEXT ENERGY - EWE Forschungszentrum fuer Energietechnologie	Germany	<i>Electrochemical characterisation of temperature dependence of plasma-treated cobalt-oxide catalyst for oxygen reduction reaction in alkaline media</i>	2
2.2 FE-CO-N-C SYNTHESIS AND CHARACTERISATION						
16	PARK	Gu-gon	Korea Institute of Energy Research	Republic of Korea	<i>Enhanced ORR Kinetics by Tuning the Active Site with Trace of Platinum on Ordered Mesoporous Porphyrinic Carbon (OMPC) as a Hybrid Support</i>	1
17	BRÜLLER	Sebastian	Max Planck Institute for Polymer Research	Mainz	<i>Bimetallic porous porphyrin polymer-derived non-precious metal electrocatalysts for oxygen reduction reactions</i>	2
18	MARZORATI	Stefania	Università degli Studi di Milano	Italy	<i>Template-free ultraspray pyrolysis synthesis of N- and Fe-doped carbon microspheres for oxygen reduction electrocatalysis</i>	1
19	GHEORGHIU	Cristina Constanta	CEA	France	<i>Doped Graphene as a Noble Metal-Free Catalyst for the ORR in acidic media</i>	2
20	BUAN	Marthe Emelie Melandsø	Norwegian University of Science and Technology (NTNU)	Norway	<i>Engineering of N-CNFs on Exfoliated Graphite for the Oxygen Reduction Reaction</i>	1
21	LÁZARO ELORRI	M ^a JESÚS	Instituto de Carboquímica	Spain	<i>N-doped Carbon Materials as Zero Platinum Catalyst for Oxygen Reduction in PEMFCs</i>	2
22	SARAPUU	Ave	University of Tartu	Estonia	<i>Cobalt- and iron-containing N-doped carbon aerogels as efficient catalysts for electroreduction of oxygen in alkaline media</i>	1

23	CAI	Qiong	University of Surrey	UK	<i>Biomass-based carbon aerogels for oxygen reduction reaction in polymer membrane fuel cells</i>	2
24	PAMPEL	Jonas	Max Planck Institute of Colloids and Interfaces	Germany	<i>Advanced Pore Tuning of Nitrogen Doped Carbons Leading to Highly Active Catalysts for the Oxygen Reduction Reaction</i>	1
25	LUO	Fang	TU Berlin	Germany	<i>Polyaniline-based non-noble Metal Catalysts for Oxygen Reduction Reaction – Investigation of Structure-Activity-Correlations</i>	2
26	FUKUNAGA	Hiroshi	Shinshu University	Japan	<i>Oxygen reduction reaction activity in relation with mesopore surface area of silk-derived carbon as non-Pt catalyst for PEFCs</i>	1
27	CHUNG	Min Wook	KAIST (Korea Advanced Institute of Science and Technology)	Republic of Korea	<i>Dimensionality-Dependent Oxygen Reduction Activity on Doped Graphene: Is Graphene a Promising Substrate for Electrocatalysis?</i>	2
28	LYTH	Stephen	I2CNER, Kyushu University	Japan	<i>Nitrogen-doped Graphene Foams as Template-Free, Metal-Free, Non-Precious Electrocatalysts for Oxygen Reduction in Acid and Alkaline Media</i>	1
29	GOELLNER	Vincent	Institut Charles Gerhardt Montpellier	France	<i>Synthesis of Highly-active Particle-Free Fe-N-C Catalyst for ORR Catalytic Site Identification</i>	1
30	JAOUEN	Frédéric	Institut Charles Gerhardt Montpellier	France	<i>Degradation by Hydrogen Peroxide of Metal-Nitrogen-Carbon Catalysts for Oxygen Reduction</i>	2
31	CHOI	Chang Hyuck	Max-Planck-Institut für Eisenforschung GmbH	Germany	<i>Operando stability windows of Fe-N-C catalysts in acid electrolyte</i>	1
32	MALKO	Daniel	Imperial College London	London	<i>The poison tolerance of non-precious metal catalysts and the challenges of thick catalyst layers.</i>	2
33	ERIKSSON	Björn	Applied Electrochemistry	Sweden	<i>Degradation and lifetime evaluation of Fe-N-C based catalyst in PEM fuel cell</i>	2
34	DOMÍNGUEZ FERNÁNDEZ	Carlota	Spanish National Research Council (CSIC)	Spain	<i>Influence of the iron precursors and the ammonia pyrolysis step in Fe/N/C electrocatalysts for oxygen reduction reaction</i>	1
35	BARMAN	Suman Kumar	CEA	France	<i>Oxygen reduction: a bio-inspired tri-iron catalyst on doped graphene</i>	2

36	KIM	Sang-Kyung	Korea Institute of Energy Research	South Korea	<i>Phthalocyanine-originated Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media</i>	2
37	VERDE-GOMEZ	Ysmael	Instituto Tecnológico de Canc�en	Mexico	<i>Comparison studies between fibers and carbon nanotubes doped with nitrogen.</i>	1
38	KIM	Sung-Min	Korea aerospace university	South Korea	<i>The nitrogen doped carbon nanotube as electrocatalysts for oxidation reduction reaction</i>	2
39	GOENAGA	Gabriel	The University of Tennessee	USA	<i>Synthesis and characterization of Cu, Fe, Co based non-noble metal catalysts for ORR in alkaline fuel cells</i>	1
40	ATANASSOV	Plamen	CNR-ITAE	Italy	<i>Performance analysis of non-platinum group metal catalysts for direct methanol fuel cell cathodes</i>	1
41	PEREZ-ALONSO	Francisco J.	Spanish National Research Council (CSIC)	Spain	<i>Preparation of iron-nitrogen-graphene based electrocatalysts. Study of oxygen reduction reaction activity in alkaline media</i>	2
42	ZHONG	Lijie	Technical University of Denmark	Denmark	<i>A highly efficient and stable non-precious metal ORR electrocatalyst by one-step pyrolysis under high pressures</i>	1
43	TAMMEVESKI	Kaido	University of Tartu	Estonia	<i>Oxygen electroreduction on Fe, Co-containing nitrogen-doped carbon nanomaterials</i>	2
44	OSMIERI	Luigi	Politecnico di Torino - DISAT	Italy	<i>A micro-Silica reactor (μSi-R) able to produce highly porous non-noble catalyst for oxygen reduction reaction under alkaline conditions.</i>	1
45	LONGHI	Mariangela	Università degli Studi di Milano	Italy	<i>Effects of catalyst aging on the growth morphology and oxygen reduction activity of nitrogen-doped carbon nanotubes</i>	2

3 OXYGEN REDUCTION CATALYSIS, PGM

Poster Number	Last Name	First name	ORGANISATION	COUNTRY	Poster Title	Session
3.1 NOVEL SUPPORTS, PT ON NOVEL SUPPORTS						
46	Berber	Mohamed Reda	Kyushu University	Japan	<i>Platinum Nanoparticles Immobilized on Polymer-wrapped Carbon Nanotube: Fuel Cell Performance and Durability Analysis</i>	1
47	Alkan Gürsel	Selmiye	Sabancı University Faculty of Engineering&Natural Sciences	Turkey	<i>Graphene Supported Pt Nanoparticles as the Electrocatalysts for PEM Fuel Cells</i>	2
48	Işikel Şanlı	Lale	Sabancı University	Turkey	<i>Graphene Hybrid Nanomaterials as the Catalyst Support for PEM Fuel Cell Electrodes</i>	1
49	Moreno	Berta	Instituto de Ceramica y Vidrio, CSIC	Spain	<i>Synthesis of Pt-TiO₂ and Pt-TiN catalysts with improved durability under cathode conditions</i>	2
50	Spataru	Tanta	Institute of Physical Chemistry of the Romanian Academy	Romania	<i>New liposomale template for the electrodeposition of low platinum content nanoparticles</i>	1
51	Maillard	Frédéric	CNRS-LEPMI	France	<i>Corrosion of high surface area carbon supports used in proton-exchange membrane fuel cell electrodes</i>	2
52	Safo	Isaac Adjei	Institute of Chemistry, Carl Von Ossietzky University of Oldenburg	Germany	<i>Understanding the Structural Loss of Shape-controlled Platinum Nanoparticles</i>	1
53	Nabil	Yannick	Institut Charles Gerhardt Montpellier	France	<i>Novel Structured Catalyst Supports for PEM Fuel Cells</i>	2
3.2 PT ALLOYS, CORE SHELL APPROACHES						
54	Westsson	Emma	Politecnico di Torino	Italy	<i>Core-shell noble catalyst with high electro activity thought oxygen reduction reaction (ORR) and increased methanol tolerance; a comparison between two methods</i>	1
55	Zubiaur	Anthony	Université de Liège	Belgium	<i>Synthesis and characterization of Pt-Co/carbon xerogel electrocatalysts for Proton Exchange Membrane Fuel Cells (PEMFC)</i>	2

56	Tong	YuYe	Georgetown University	USA	<i>Highly Stable and Active Carbon-Supported PtCo Nanoparticles for Oxygen Reduction Reaction</i>	1
57	Asset	Tristan	University of Grenoble	Belgium	<i>Pt-Ni Porous Hollow Nanoparticles for Oxygen Reduction Reaction: Controlling the Nanoparticles Size and Dispersion</i>	2
58	Kühl	Stefanie	TU Berlin	Germany	<i>Shaped Bi- and Trimetallic Nanoparticles Based on Platinum-Nickel Alloys as Active Electrocatalysts for Oxygen Reduction</i>	1
59	Beermann	Vera	TU Berlin	Germany	<i>Rh doped Pt-Ni octahedral nanoparticles: Correlation between elemental distribution and ORR stability</i>	2
60	Marconot	Olivier	CEA/DSM/INAC/SP2M/SiNaPS	France	<i>Platinum copper alloy nanotubes array as carbon-free PEMFC cathode</i>	2

3.3 OTHER PGM (NON PT) BASED CATALYSTS

61	Lázaro Elorri	María Jesús	Instituto de Carboquímica -CSIC	Spain	<i>Palladium-nickel catalysts as multi-functional electrodes for alkaline low temperature fuel cells</i>	2
62	Lee	SANG-YUL	Korea Aerospace University	Korea	<i>Synthesis and Characterization of the Size-controlled Pd and Pd-X nanoparticles for the Electrocatalytic Applications</i>	2
63	Brouzgou	Angeliki	University of Thessaly	Greece	<i>Carbon supported ultra-low Pt electrocatalyst for Oxygen Reduction Reaction</i>	1
64	Tzorbatzoglou	Fotini	University of Thessaly	Greece	<i>Investigation of Pd_xIr_y/Vulcan-XC-72 for Oxygen Reduction Reaction</i>	2
65	Uribe-Godínez	Jorge	National Autonomous University of Mexico	Mexico	<i>Study of the Oxygen Reduction and Hydrogen Oxidation Reactions by new tri-metallic catalysts</i>	2

3.4 ELECTRODE FABRICATION

66	Komárková	Zuzana	Charles University	Czech Republic	<i>PtM_x magnetron sputtered thin layer as Ultra Low loading catalyst for DMFC</i>	1
67	Fiala	Roman	Charles University	Prague	<i>Pt doped CeO₂ magnetron sputtered thin layer on CN_x at Ultra Low loadings for PEMFC catalyst</i>	2

4. OER AND HER CATALYSTS

Poster Number	Last Name	First name	ORGANISATION	COUNTRY	Poster Title	Session
4.1 OER CATALYSTS						
68	Ion-Ebrasu	Daniela	National Research & Development Institute for Cryogenics and Isotopic Technologies-ICSI-Rm	Romania	<i>Ru-based Oxide Catalysts for PEM Electrolyzers Obtained by DC Magnetron Sputtering</i>	1
69	Gago	Aldo	German Aerospace Center (DLR)	Germany	<i>Iridium nanoparticles supported on Ti4O7 as cost effective anode for proton exchange membrane (PEM) water electrolysis</i>	2
70	Nefedkin	Sergey	MEI National Research University	Russia	<i>Synthesized by magnetron sputtering Ir-Mo and Pt-C low-loading catalysts for PEM electrolyzers</i>	1
71	Thazhe veettil	Vineesh	CSIR-Central Electrochemical Research Institute	India	<i>Bi-functional electrocatalytic activities of boron doped graphene derived from boron carbide</i>	1
72	Rodríguez-García	Bárbara	Institute of Chemical Research of Catalonia (ICIQ)	Spain	<i>Oxygen evolution catalyst at neutral and acidic media by cyanide-based coordination polymers</i>	2
4.2 HER CATALYSTS						
73	Ampurdanes Vilanova	Jordi	ICIQ - Institute of Chemical Research of Catalonia	Spain	<i>MoS2 and Co3O4 as Non-PGM HER Materials in PEM Electrolysis</i>	1
74	Peron	Jennifer	Université Paris Diderot	France	<i>Iron Sulfide nanoparticles as cathode catalyst for PEM electrolyzers</i>	1
75	Davodi	Fatemeh	Aalto University	Finland	<i>Polymer functionalized carbon nanotube as an active electrocatalyst for hydrogen evolution reaction</i>	1
76	Li	Dongmei	University of Wyoming	USA	<i>Understanding Synergetic Effects Between PGM and Non-PGM Supports via Surface Characterization and Device Performance</i>	2
77	Zhou	Weijiang	Nanyang Technological University	Singapore	<i>Synthesis and activity of graphene-supported carbides for low-temperature fuel cells</i>	2

5. SYSTEM MODELLING AND ELECTRODE MODELLING

POSTER NUMBER	LAST NAME	FIRST NAME	ORGANISATION	COUNTRY	POSTER TITLE	SESSION
78	Reda	Mahmoud	CanadElectrochim	Canada	<i>Critical Comments on the Mathematical Modeling of Polymer Electrolyte Membrane Fuel Cell (PEMFC)</i>	1
79	Casalegno	Andrea	Politecnico di Milano	Italy	<i>Aged and low Pt loading catalyst layers: analogies in mass transport issue?</i>	1
80	Salomov	Uktam	Politecnico di Torino - Department of Energy	Italy	<i>Catalyst distribution effect on performance and durability of HTPEMFC</i>	2
81	Reda	Mahmoud	1-CanadElectrochim, 2- Kuwait University	1- Canada 2- Persian Gulf	<i>Toward the idea of replacing internal combustion engine by polymer electrolyte membrane (pem) fuel cell as power source for motor vehicles. The impact of platinum loading and relative humidity on oxygen transport resistance and identification of the unknown resistance</i>	2

6. miscellaneous

Poster Number	Last Name	First name	Organisation	Country	Poster Title	Session
82	Orakwe	Ifeyinwa	The Robert Gordon University Aberdeen	United Kingdom	<i>An Initial study of gas permeation of single gases on a Platinum impregnated Alumina Membrane</i>	1
83	Kajama	Mohammed	Robert Gordon University Aberdeen	Germany	<i>Hydrocarbon combustion on low Pt-alumina impregnated catalyst</i>	2
84	Jacques	Pierre-André	CEA	France	<i>HyCoRA – Hydrogen Contaminant Risk Assessment</i>	1
85	Marzun	Galina	University of Duisburg-Essen	Germany	<i>Laser-based synthesis of a heterogeneous nickel catalyst: Effect of electronic interaction on colloidal nanoparticle deposition</i>	1
86	Chen	Hanmei	Chinese Academy of Science	China	<i>Platinum Nano particles Loading on Super Hydrophobic Carbon Fiber Electrode Preparation of Hydrogen Peroxide Sensor and its Application Research</i>	2