



European Hydrogen Energy Conference 2018

CONTENTS AGENDA

14th-16th March 2018, Malaga - Spain



Topic Schedule

	Wednesday 14 th		Thursday 15 th			Friday 16 th
	14:00 - 16:00	16:30 - 18:30	10:30 - 12:30	14:00 - 16:00	16:30 - 17:30	10:30 - 12:30
	Parallel 1	Parallel 2	Parallel 3	Parallel 4	Parallel 5	Parallel 6
Auditorium	HYSAFE Session: Hydrogen safety	Renewable H2: Bio- Hydrogen & Gasification	Renewable H2: Electrolysis 1	Renewable H2: Electrolysis 2	Renewable Hydrogen 1	Renewable Hydrogen 2
Room 1	Hydrogen and FC applications	Hydrogen Production: Catalysts 1	Hydrogen Production: Catalysts 2	Hydrogen Production: Catalysts 3	Hydrogen Production: Purification & Membranes	Hydrogen Production: Fossil Sources
Room 2	Hydrogen Storage 1	Hydrogen Storage 2	Fuel cell systems: Stacks & Modelling	Fuel cell systems: Modelling	FC applications: Stationary & Transport	FC applications: Transport
Room 3	Fuel Cell Components: HighT & PEM	Fuel Cell Components: PEM	Fuel Cell Components: PEM & Catalysts	European Projects FCH JU	European Projects & Other applications	Fuel Cell Components: Catalysts
Room 4			Hydrogen Economy	Public Strategies & Environment	Hydrogen Economy & Research	

Oral Communications

Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
125	Challenges facing thermal and electrical conductivity measurements in catalyst layer of PEM fuel cells	AHADI, MOHAMMAD	SIMON FRASER UNIVERSITY	Canada	6	March 16th	11:10	Fuel Cell Components: Catalysts
79	Insights on the degradation of HT-PEMFC with Ni-P-Al bipolar plates	ALEGRE, CINTHIA	LABORATORIO DE INVESTIGACIÓN EN FLUIDODINAMICA Y TECNOLOGÍAS DE LA COMBUSTIÓN (LIFTEC-CSIC-UNIZAR)	Spain	2	March 14th	17:30	Fuel Cell Components: PEM
149	Could hydrogen co-feeding save the diesel engines?	ALEMANY, LUIS J.	UNIVERSITY OF MALAGA	Spain	1	March 14th	14:20	Hydrogen and FC applications
203	Theoretical Study of the Magnesium Hydride Decomposition	ALMATROUK, HASAN	KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH	Kuwait	2	March 14th	16:30	Hydrogen Storage 2
112	Selective hydrogen production from formate at room temperature using nanoparticle with homogeneously dispersed platinum nanoparticle	AMAO, YUTAKA	OSAKA CITY UNIVERSITY	Japan	6	March 16th	12:10	Renewable Hydrogen 2
111	Hydrogen Role in Decarbonizing the European Energy System	TBC	I-TÉSÉ, CEA, UNIVERSITÉ PARIS SACLAY, AND LABORATOIRE GÉNIE INDUSTRIEL, CENTRALESUPÉLEC, UNIVERSITÉ PARIS SACLAY	France	3	March 15th	12:10	Hydrogen Economy
172	Impact and mitigation of the reversible losses in a PEMFC stack	ANTONI, LAURENT	CEA/LITEN	France	3	March 15th	10:50	Fuel cell systems: Stacks & Modelling

Oral Communications

Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
213	Fuel Cells & Hydrogen Research in Europe	ANTONI, LAURENT	HYDROGEN EUROPE RESEARCH	France	5	March 15th	16:30	European Projects & Other applications
127	Hydrogen Energy in German mobility	ARLT, WOLFGANG	UNIV. OF ERLANGEN	Germany	6	March 16th	11:10	FC applications: Transport
100	Attrition-resistant membranes for fluidized-bed membrane reactors: double-skin membranes	ARRATIBEL, ALBA	EINDHOVEN UNIVERSITY OF TECHNOLOGY	Netherlands	5	March 15th	17:10	Hydrogen Production: Purification & Membranes
89	Activation effect on a Co-Ru-C thin film catalyst for the hydrolysis of sodium borohydride	ARZAC DI TOMASO, GISELA MARIANA	MATERIALS SCIENCE INSTITUTE OF SEVILLE, CSIC-UNIV. SEVILLE	Spain	1	March 14th	15:00	Hydrogen Storage 1
175	Technological aspects of an auxiliary power unit with internal reforming methanol fuel cell	AVGOUROPOULOS, GEORGE	DEPARTMENT OF MATERIALS SCIENCE, UNIVERSITY OF PATRAS, GR-26504 PATRAS, GREECE	Greece	3	March 15th	10:30	Fuel cell systems: Stacks & Modelling
95	First in Africa pilot scale LOHC hydrogenation plant: A field study	BESSARABOV, DMITRI	HySA Infrastructure Center, North-West University	South Africa	1	March 14th	14:20	Hydrogen Storage 1
47	Operando monitoring of local current density distributions in PEMWE, AWE, and AEMWE	BISWAS, INDRO	GERMAN AEROSPACE CENTRE (DLR)	Germany	4	March 15th	14:20	Renewable H2: Electrolysis 2
77	Enabling Industrial Production of Electrodes by use of Slot Die Coating for HT-PEM fuel cells	Bodner, Merit	RESEARCH AND DEVELOPMENT ENGINEER	Denmark	6	March 16th	12:10	Fuel Cell Components: Catalysts

Oral Communications

Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
223	Electrochemical Hydrogen Compression as New Disruptive Technology in Hydrogen Purification and Storage	BOS, ALBERT	HYET HYDROGEN	Netherlands	2	March 14th	17:10	Hydrogen Storage 2
130	Cu-ZnO/HAP catalysts: characterization and activity in WGS reaction in realistic reformat mixture	BOUKHA, ZOUHAIR	CHEMICAL TECHNOLOGIES FOR ENVIRONMENTAL SUSTAINABILITY GROUP, UNIVERSITY OF THE BASQUE COUNTRY	Spain	3	March 15th	11:30	Hydrogen Production: Catalysts 2
194	Evaluation of strategies for the promotion of zero emission vehicles in Spain	BREY SANCHEZ, JAVIER	UNIVERSIDAD LOYOLA ANDALUCIA	Spain	4	March 15th	15:40	Public Strategies & Environment
195	P2G from renewable hydrogen	BREY SANCHEZ, JAVIER	UNIVERSIDAD LOYOLA ANDALUCIA	Spain	6	March 16th	11:30	Renewable Hydrogen 2
181	Modelling, Simulation and Optimization of a Wind-to-Hydrogen and Hydrogen-to-Power Micro-Grid for Isolated Applications	CANALEJAS, RUBÉN	FUNDACIÓN HIDRÓGENO ARAGÓN	Spain	4	March 15th	15:40	European Projects FCH JU
145	Catalyst structure influence on PEM fuel cell performance	CARCADEA, ELENA	NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR CRYOGENICS AND ISOTOPIC TECHNOLOGIES - ICSI RM. VALCEA	Romania	3	March 15th	11:30	Fuel cell systems: Stacks & Modelling
174	Advancing the H2 Economy in Europe via Expansion of Fuel Cell and Hydrogen Applications	CHATZIKYRIAKOU, DESPOINA	TOYOTA MOTOR EUROPE	Belgium	3	March 15th	11:50	Hydrogen Economy

Oral Communications

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58	Enhancement of oxygen reduction reaction activity on carbon-support-free titanium oxynitride catalyst by pyrolysis under reductive atmosphere	CHISAKA, MITSUHARU	HIROSAKI UNIVERSITY	Japan	3	March 15th	11:50	Fuel Cell Components: PEM & Catalysts
153	New single cell hardware for the study of metallic grids for PEMFC electrodes	TBC	CIEMAT	Spain	2	March 14th	18:10	Fuel Cell Components: PEM
66	Safety design of a system hydrogen storage tank-TPRD	DADASHZADEH, MOHAMMAD	HYDROGEN SAFETY ENGINEERING AND RESEARCH CENTRE (HYSAFER), ULSTER UNIVERSITY	United Kingdom	1	March 14th	15:20	HYSAFE Session: Hydrogen safety
72	European Member States' strategies for the deployment of a hydrogen refuelling infrastructure	DE MIGUEL, NEREA	DIRECTORATE ENERGY, TRANSPORT AND CLIMATE, JOINT RESEARCH CENTRE, EUROPEAN COMMISSION	Netherlands	4	March 15th	15:00	Public Strategies & Environment
31	Design and demonstration of a lab-scale fluidized-bed membrane reactor for biogas steam reforming	DE NOOIJER, NIEK	TU/E	Netherlands	2	March 14th	16:30	Renewable H2: Bio-Hydrogen & Gasification
5	Process intensification of alkaline water electrolysis using forced electrolyte flow through 3D electrodes	DE RADIGUÈS, QUENTIN	UNIVERSITÉ CATHOLIQUE DE LOUVAIN (UCL)	Belgium	3	March 15th	11:50	Renewable H2: Electrolysis 1
191	The value of hydrogen to future low-carbon energy systems	DODDS, PAUL	UNIVERSITY COLLEGE LONDON	United Kingdom	3	March 15th	11:30	Hydrogen Economy
51	Influence of the production route on the hydrogen environment embrittlement of austenitic stainless steels	EGELS, GERO	RUHR-UNIVERSITÄT BOCHUM	Germany	1	March 14th	14:40	HYSAFE Session: Hydrogen safety

Oral Communications

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216	Influence of operating conditions on permeance of CO ₂ through the membrane in a PEMFC system with subsequent CO catalyst blockage on anode	ERBACH, SIMON	DAIMLER AG	Germany	6	March 16th	11:50	FC applications: Transport
157	The influence of the surface carbon on the H ₂ formation in the ethanol reforming on Co/Al ₂ O ₃	ERDOHELYI, ANDRAS SANDOR	DEPARTMENT OF PHYSICAL CHEMISTRY AND MATERIALS SCIENCE, UNIVERSITY OF SZEGED	Hungary	4	March 15th	14:20	Hydrogen Production: Catalysts 3
114	Semi-pilot microbial electrolysis cell (MEC) for hydrogen production and pig-slurry valorization	TBC	NATURAL RESOURCES INSTITUTE (IRENA), UNIVERSIDAD DE LEÓN	Spain	2	March 14th	17:30	Renewable H ₂ : Bio-Hydrogen & Gasification
1	Effect of various biogas contaminants on the performance of solid oxide fuel cells	TBC	CIEMAT	Spain	1	March 14th	14:20	Fuel Cell Components: HighT & PEM
218	High pressure alkaline electrolyzers - the first choice for renewable energy applications	FELL, HANS JÖRG	HYDROGENPRO	Norway	3	March 15th	11:30	Renewable H ₂ : Electrolysis 1
115	End-of-life of FCH products: a review of the current situation	FERRIZ QUILEZ, ANA MARIA	FOUNDATION FOR THE DEVELOPMENT OF NEW HYDROGEN TECHNOLOGIES IN ARAGON	Spain	4	March 15th	14:00	Public Strategies & Environment

Oral Communications

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83	Hydrogen underground storage - potential reservoir effects investigated with high-resolution computer tomography	FLESCH, STEVEN	FRIEDRICH SCHILLER UNIVERSITY JENA, INSTITUTE OF GEOSCIENCES	Germany	2	March 14th	17:50	Hydrogen Storage 2
45	TECHNICAL-ECONOMICAL ANALYSIS FOR GREEN AMMONIA PRODUCTION PLANT IN CHILE AND SUBSEQUENTLY TRANSPORT TO JAPAN	FUNEZ GUERRA, CARLOS	NATIONAL HYDROGEN CENTER	Spain	6	March 16th	11:10	Renewable Hydrogen 2
90	Interleaved, switched-inductor, multi-phase, multi-device DC/DC boost converter for non-isolated and high conversion ratio fuel cell applications	GARRIGOS, AUSIAS	MIGUEL HERNANDEZ UNIVERSITY OF ELCHE	Spain	2	March 14th	16:50	Fuel Cell Components: PEM
171	Test protocols for accelerated in situ degradation of alkaline water electrolysis under dynamic operating conditions	GIL, VANESA	HYDROGEN FOUNDATION OF ARAGÓN / ARAID FOUNDATION (HR EXCELLENCE IN RESEARCH)	Spain	3	March 15th	11:10	Renewable H2: Electrolysis 1
50	Laser structured nickel-iron electrodes for oxygen evolution in alkaline water electrolysis	GIMPEL, THOMAS	INSTITUTE OF CHEMICAL AND ELECTROCHEMICAL PROCESS ENGINEERING, CLAUSTHAL UNIVERSITY OF TECHNOLOGY	Germany	6	March 16th	10:50	Fuel Cell Components: Catalysts
151	Hydrogen Production Process from 2G biofuel: DME as an alternative to fossil-fuel	GONZÁLEZ-GIL, RAFAEL	UNIVERSITY OF MALAGA	Spain	2	March 14th	17:30	Hydrogen Production: Catalysts 1
176	Hydrogen production via the glycerol steam reforming using nickel catalysts based on zirconia and zirconia modified with CeO ₂ or La ₂ O ₃	TBC	WESTERN MACEDONIA UNIVERSITY OF APPLIED SCIENCES	Greece	3	March 15th	11:50	Hydrogen Production: Catalysts 2

Oral Communications

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177	Nickel on alumina, zirconia and silica catalysts for the production of hydrogen via the biogas dry reforming reaction: Insights into carbon formation	TBC	WESTERN MACEDONIA UNIVERSITY OF APPLIED SCIENCES	Greece	4	March 15th	15:40	Hydrogen Production: Catalysts 3
155	Use of hydrogen in off-grid installations. A techno-economic assessment	GRACIA, LORIEN	FOUNDATION FOR THE DEVELOPMENT OF NEW HYDROGEN TECHNOLOGIES IN ARAGON	Spain	3	March 15th	11:10	Hydrogen Economy
80	Deactivation dynamics of a Ni supported catalyst during the steam reforming of volatiles from in-line biomass pyrolysis	TBC	UNIVERSITY OF THE BASQUE COUNTRY (UPV/EHU), DEPARTMENT OF CHEMICAL ENGINEERING	Spain	4	March 15th	15:20	Hydrogen Production: Catalysts 3
20	Power-to-SNG technologies by hydrogenation of CO ₂ and biogas: a comparative chemical process engineering analysis	GUTIÉRREZ-MARTÍN, FERNANDO	UNIVERSIDAD POLITÉCNICA DE MADRID, ETSIDI	Spain	4	March 15th	15:20	Fuel cell systems: Modelling
107	Temperature and Stress Distributions in micro-Tubular SOFC	HAN, YU	UNIVERSITY OF MICHIGAN	United States	3	March 15th	11:50	Fuel cell systems: Stacks & Modelling
122	Reliability and characterization of NiO-GDC/GDC/LSCF-GDC manufactured by tape casting and reactive magnetron sputtering processes for their application in solid oxide fuel cells	TBC	ENERGY DEPARTMENT, UNIV. BOURGOGNE FRANCHE-COMTÉ, UTBM	France	1	March 14th	15:00	Fuel Cell Components: HighT & PEM

Oral Communications

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6	Techno-Economic Analysis of a Potential Energy Trading Link between Patagonia and Japan based on CO ₂ free Hydrogen	HEUSER, PHILIPP-MATTHIAS	FORSCHUNGSZENTRUM JUELICH, INSTITUTE OF ENERGY AND CLIMATE RESEARCH - IEK-3	Germany	4	March 15th	14:00	Fuel cell systems: Modelling
201	Study of Ni/CeO ₂ -ZnO catalysts in the production of H ₂ from acetone steam reforming	HOMS, NARCIS	UNIVERSITAT DE BARCELONA	Spain	4	March 15th	14:00	Hydrogen Production: Catalysts 3
102	Design of an Ejector for a Hydrogen Recirculation System for a PEM Fuel Cell	HUSAR, ATTILA	INSTITUT DE ROBÒTICA I INFORMÀTICA INDUSTRIAL, CSIC-UPC	Spain	4	March 15th	14:20	Fuel cell systems: Modelling
96	Green hydrogen production methods. A review of solar-driven water splitting techniques	TBC	INTA	Spain	5	March 15th	16:50	Renewable Hydrogen 1
11	Regional Networking as a Success Factor for the Implementation of Hydrogen and Fuel Cells	TBC	EnergieAgentur.NRW, Fuel Cell and Hydrogen, Electric Mobility Network NRW	Germany	4	March 15th	15:20	Public Strategies & Environment
42	Anodic aluminum oxide supported Cu catalyst for oxidative steam reforming of methanol	KIM, DONG HYUN	DEPARTMENT OF CHEMICAL ENGINEERING, KYUNGPOOK NATIONAL UNIVERSITY	Korea, Rep.	2	March 14th	17:10	Hydrogen Production: Catalysts 1
71	Life Cycle Assessment studies on Power-to-X: A review of recent findings	KOJ, JAN CHRISTIAN	FORSCHUNGSZENTRUM JÜLICH, INSTITUTE OF ENERGY AND CLIMATE RESEARCH - SYSTEMS ANALYSIS AND TECHNOLOGY EVALUATION (IEK-STE)	Germany	4	March 15th	14:20	Public Strategies & Environment

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65	Grid balancing with PtG-plants - Validating a modelling approach within the project "Energiepark Mainz"	KOPP, MARTIN	RHEINMAIN UNIVERSITY OF APPLIED SCIENCES	Germany	5	March 15th	16:50	Hydrogen Economy & Research
103	Vehicle integration and testing of a cryo-compressed hydrogen storage system in an upper segment automotive fuel cell application and conclusions from two years of driving experience	KUNZE, KLAAS	BMW AG	Germany	2	March 14th	17:30	Hydrogen Storage 2
60	Investigating a single European hydrogen market by looking at the minimum cost of transporting hydrogen via trucks between France and Germany	LAHNAOUI, AMIN	FORSCHUNGSZENTRUM JÜLICH, SYSTEMS ANALYSIS AND TECHNOLOGY EVAL-UATION (IEK-STE)	Germany	3	March 15th	12:10	Fuel cell systems: Stacks & Modelling
74	Fuel cell buses; a solution to meet zero emission regulations for transit agencies	LAPERCHE-RITEAU, YANE	BALLARD POWER SYSTEMS INC.	Canada	6	March 16th	11:30	FC applications: Transport
224	Study of nanocomposites based on N-doped graphene modified with Co and Ti nanoparticles as electrocatalysts towards oxygen reduction and oxygen evolution reactions	TBC	INSTITUTO DE CARBOQUÍMICA - CSIC	Spain	6	March 16th	11:50	Fuel Cell Components: Catalysts
106	Evaluation of fuel cell/battery passive hybrid power systems for unmanned vehicles	LÓPEZ GONZÁLEZ, EDUARDO	INSTITUTO NACIONAL DE TÉCNICA AEROESPACIAL (INTA)	Spain	5	March 15th	16:30	FC applications: Stationary & Transport

Oral Communications

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108	Catalytic ammonia decomposition for hydrogen production using 3D printed structures	LUCENTINI, ILARIA	UNIVERSITAT POLITÈCNICA DE CATALUNYA	Spain	2	March 14th	16:50	Hydrogen Production: Catalysts 1
38	Hydrogen energy storage for the Chinese power grid	LUDWIG, MARIO	STATE GRID CORPORATION OF CHINA, GLOBAL ENERGY INTERCONNECTION RESEARCH INSTITUTE EUROPE GMBH	Germany	5	March 15th	16:50	FC applications: Stationary & Transport
56	Hydrogen storage potential of MIL-101 at 200K	LUPU, DAN	NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT OF ISOTOPIC AND MOLECULAR TECHNOLOGIES	Romania	2	March 14th	18:10	Hydrogen Storage 2
110	Tuning of supports surface porosity for Pd-based membranes fabrication applicable to sustainable and renewable H ₂ production processes	TBC	SENIOR RESEARCHER	Spain	5	March 15th	16:30	Renewable Hydrogen 1
163	On-board generation of hydrogen to improve in-cylinder combustion and after-treatment efficiency and emissions performance of a hybrid hydrogen/gasoline engine	MARTIN, JUAN CARLOS	JOHNSON MATTHEY TECHNOLOGY CENTRE	United Kingdom	1	March 14th	15:20	Hydrogen and FC applications
202	Performance assessment of alternative membranes for Electrochemical Hydrogen Compressor (EHC) in portable PEM fuel cell applications	TBC	CNR-ITAE	Italy	3	March 15th	11:30	Fuel Cell Components: PEM & Catalysts

Oral Communications

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73	Influence of promoters addition to Co-based catalysts on acetic acid steam reforming	MEGÍA HERVÁS, PEDRO J	REY JUAN CARLOS UNIVERSITY	Spain	4	March 15th	14:40	Hydrogen Production: Catalysts 3
167	HIAD - Hydrogen Incident and Accident Database	MELIDEO, DANIELE	EUROPEAN COMMISSION - JOINT RESERCH CENTRE	Netherlands	1	March 14th	15:00	HYSAFE Session: Hydrogen safety
28	Fuel Cell Electric Vehicle simulation with smartphone App Hy2Travel	MERINO, CARLOS	CENTRO NACIONAL DEL HIDRÓGENO (CNH2)	Spain	6	March 16th	10:50	FC applications: Transport
197	Performance of a combined sorbent-catalyst material for Sorption-Enhanced Reforming (SER) in fluidized bed reactor	MEYER, JULIEN	INSTITUTE FOR ENERGY TECHNOLOGY (IFE)	Norway	6	March 16th	10:30	Hydrogen Production: Fossil Sources
193	The impact of e-mobility in a future energy system dominated by renewable electricity	MICHALSKI, JAN	LUDWIG-BÖLKOW-SYSTEMTECHNIK GMBH	Germany	3	March 15th	10:30	Hydrogen Economy
7	Phyllosilicate minerals as sealants for Molten Carbonate Fuel Cell stacks	TBC	WARSAW UNIVERSITY OF TECHNOLOGY	Poland	1	March 14th	14:40	Fuel Cell Components: HighT & PEM
49	Control Strategies and Test Protocols for Reliable and Comparable PEMFC Stack Benchmarking	MITZEL, JENS	GERMAN AEROSPACE CENTER (DLR)	Germany	4	March 15th	14:40	European Projects FCH JU
98	Analysis of reaction mixtures of liquid organic hydrogen carriers using 2D-GC-TOF-MS and GC-SQ-MS	MODISHA, PHILLIMON	UTAD INESC TEC	Portugal	2	March 14th	16:50	Hydrogen Storage 2
10	Hydrogen production by coupling concentrated solar energy with a high temperature steam electrolyser	MONNERIE, NATHALIE	DLR, GERMAN AEROSPACE CENTER	Germany	6	March 16th	11:50	Renewable Hydrogen 2

Oral Communications

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160	H ₂ production by sorption enhanced steam methane reforming. Effect of RedOx cycles on the performance of the catalyst	NAVARRO, MARIA VICTORIA	INSTITUTO DE CARBOQUÍMICA ICB-CSIC	Spain	2	March 14th	16:30	Hydrogen Production: Catalysts 1
178	Modular PEM FC power system for UAVs	NEFEDKIN, SERGEY	BP POWER	Russian Federation	5	March 15th	17:10	FC applications: Stationary & Transport
54	HYACINTH: Recommendations for deployment the fuel cell and hydrogen market	NIETO, EMILIO	NATIONAL HYDROGEN CENTER (CNH ₂)	Spain	4	March 15th	14:00	European Projects FCH JU
147	R&D Status on the Thermochemical Hydrogen Production IS Process in Japan Atomic Energy Agency	NOGUCHI, HIROKI	JAPAN ATOMIC ENERGY AGENCY	Japan	5	March 15th	17:10	Renewable Hydrogen 1
113	Experimental and modeling study of an electrochemical hydrogen compressor	NORDIO, MARIA	EINDHOVEN UNIVERSITY OF TECHNOLOGY	Netherlands	3	March 15th	12:10	Fuel Cell Components: PEM & Catalysts
209	Start-up and validation of a test station for 1 - 10 kW PEM stacks	OLAVARRIETA, JOSE	CENTRO NACIONAL DEL HIDRÓGENO (CNH ₂)	Spain	3	March 15th	11:10	Fuel cell systems: Stacks & Modelling
231	Renewables + Hydrogen = Industry reimagined	O'NEIL, PHIL	ADVISIAN	Australia	5	March 15th	16:30	Hydrogen Economy & Research
15	HYDROGEN SAFETY SENSOR STABILITY TESTING - IMPACT OF THE CHEMICAL ENVIRONMENT	ORTIZ CEBOLLA, RAFAEL	JOINT RESEARCH CENTRE	Netherlands	1	March 14th	14:20	HYSAFE Session: Hydrogen safety
188	Innovative ionic liquids co-polymers as membrane electrolytes for fuel cell applications	ORTIZ, ALFREDO	UNIVERSITY OF CANTABRIA	Spain	3	March 15th	11:10	Fuel Cell Components: PEM & Catalysts

Oral Communications

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86	Palladium membrane reactors for hydrogen production	PACHECO TANAKA, DAVID ALFREDO	TECNALIA RESEARCH & INNOVATION	Spain	6	March 16th	11:10	Hydrogen Production: Fossil Sources
196	Novel nanomaterials for the hydrogen evolution reaction	PASTOR, ELENA	UNIVERSITY OF LA LAGUNA	Spain	2	March 14th	18:10	Hydrogen Production: Catalysts 1
144	CO ₂ methanation using Ru based catalysts for storage and distribution of energy: activation of catalyst strategies	PEÑA, JOSÉ ÁNGEL	ARAGO INSTITUTE OF ENGINEERING RESEARCH (I3A) ; UNIVERSIDAD ZARAGOZA	Spain	1	March 14th	15:00	Hydrogen and FC applications
220	BaNiO ₂ : An oxide with elevate electrocatalytic activity to oxygen evolution reaction in alkaline media	PEÑA, MIGUEL ANTONIO	INSTITUTO DE CATÁLISIS Y PETROLEOQUÍMICA, CSIC	Spain	6	March 16th	11:30	Fuel Cell Components: Catalysts
78	Separation enhanced water-gas shift processes and materials	PIETERSE, JAZ	ECN	Netherlands	5	March 15th	16:50	Hydrogen Production: Purification & Membranes
128	The need for a statutory basis to establish modern safety directives	PILZ, WOLF-DIETER	KARLSRUHE INSTITUTE OF TECHNOLOGY - INSTITUTE FOR APPLIED COMPUTER SCIENCE	Germany	1	March 14th	15:40	HYSAFE Session: Hydrogen safety
180	Hydrogen production from the hydrolysis of sodium borohydride (NaBH ₄): Study of the CMC influence in the recyclability of the by-product	TBC	FACULTY OF ENGINEERING UNIVERSITY OF PORTO	Portugal	1	March 14th	15:40	Hydrogen Storage 1

Oral Communications

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183	Optimization of a passive Direct Methanol Fuel Cell with different current collector materials	TBC	FACULTY OF ENGINEERING UNIVERSITY OF PORTO	Portugal	2	March 14th	17:50	Fuel Cell Components: PEM
204	AURORA Project: hydrogen systems and safety concerns in a transportable system for power supply	POZO BAQUERO, RUBÉN	ARIEMA ENERXÍA SL	Spain	1	March 14th	14:00	Hydrogen and FC applications
219	Synthetic fuels production by graphite-assisted electrolysis	TBC	LNEG	Portugal	4	March 15th	15:20	Renewable H2: Electrolysis 2
135	Innovative ZoneFlow© Technology offers Breakthrough Solutions for Steam Reforming based Hydrogen-Syngas Generation	RATAN, SANJIV	DIRECTOR OF PRODUCT DEV AND MARKETING, ZONEFLOW REACTOR TECHNOLOGIES LLC	United States	3	March 15th	11:10	Hydrogen Production: Catalysts 2
9	Effect of humidification by cathodic recirculation on a 6 kW PEMFC system: an experimental study	RODOSIK, SANDRINE	CEA-LITEN	France	6	March 16th	12:10	FC applications: Transport
137	Local degradations induced in a PEMFC stack by start-up/shut-down cycles: investigations coupling in-situ and ex-situ analyses	RODOSIK, SANDRINE	CEA/LITEN	France	2	March 14th	16:30	Fuel Cell Components: PEM
120	Experiences in teaching Hydrogen Technologies in the framework of the International Campus of Excellence Andalucía TECH	RODRÍGUEZ, EDUARDO A.	ENERGÉTICA GROUP. MECHANICAL, THERMAL AND FLUIDICS ENGINEERING DEPARTMENT. UNIVERSITY OF MÁLAGA	Spain	4	March 15th	14:40	Public Strategies & Environment
23	Development of innovative photoreactors and photocatalytic processes for hydrogen production	ROSSETTI, ILENIA	UNIVERSITÀ DEGLI STUDI DI MILANO - DEPT. OF CHEMISTRY	Italy	6	March 16th	10:30	Renewable Hydrogen 2

Oral Communications

Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
24	Sizing of a cogeneration unit based on fuel cells and on steam reforming of diluted bioethanol	ROSSETTI, ILENIA	UNIVERSITÀ DEGLI STUDI DI MILANO - DEPT. OF CHEMISTRY	Italy	4	March 15th	14:40	Fuel cell systems: Modelling
62	RENOVAGAS: process for the production of renewable natural gas	RUBIO, JACOBO	ENAGAS	Spain	6	March 16th	10:50	Renewable Hydrogen 2
142	Hydrogen production by oxidative reforming of ethanol in a fluidized bed reactor using a Pt-Ni/CeO ₂ -SiO ₂ catalyst	RUOCCO, CONCETTA	UNIVERSITY OF SALERNO-DEPARTMENT OF INDUSTRIAL ENGINEERING	Italy	3	March 15th	10:50	Hydrogen Production: Catalysts 2
33	Structural characterization of PEM fuel cell catalyst layer using N ₂ adsorption porosimetry: effects of ink composition and ink processing	SALARI, SINA	SIMON FRASER UNIVERSITY / AUTOMOTIVE FUEL CELL COOPERATION	Canada	2	March 14th	17:10	Fuel Cell Components: PEM
70	Measuring relative diffusivity of PEM fuel cell catalyst layer using modified Loschmidt cell: effects of ink composition, ink processing, and operating temperature and humidity	SALARI, SINA	SIMON FRASER UNIVERSITY / AUTOMOTIVE FUEL CELL COOPERATION	Canada	3	March 15th	10:30	Fuel Cell Components: PEM & Catalysts
52	Development of Highly Efficient Raney Nickel Electrodes for Alkaline Water Electrolysis	SCHILLER, GUENTER	GERMAN AEROSPACE CENTER (DLR), INSTITUTE OF ENGINEERING THERMODYNAMICS	Germany	3	March 15th	10:30	Renewable H ₂ : Electrolysis 1
0	HYSAFE Session	SCHMIDTCHEN, ULRICH	FEDERAL INSTITUTE FOR MATERIALS RESEARCH AND TESTING (BAM)	Germany	1	March 14th	14:00	HYSAFE Session: Hydrogen safety

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Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
64	Enabling a safe, efficient and scalable hydrogen infrastructure via Liquid Organic Hydrogen Carriers (LOHC)	SCHNEIDER, MARTIN	HYDROGENIOUS TECHNOLOGIES GMBH	Germany	1	March 14th	14:40	Hydrogen Storage 1
40	Membrane based purification of hydrogen system	SCHORER, LINDA	DHBW MANNHEIM	Germany	4	March 15th	14:20	European Projects FCH JU
35	BioHyMethcontrol: Combined, flexible, biological hydrogen and methane production	SCHOTH, JENS	UNIVERSITÄT DUISBURG-ESSEN	Germany	2	March 14th	16:50	Renewable H2: Bio-Hydrogen & Gasification
217	Megawatt scale PEM electrolysis for energystorage and decarbonisation of industrial hydrogen use	Schutysers, Wouter	HYDROGENICS EUROPE	Belgium	3	March 15th	10:50	Renewable H2: Electrolysis 1
30	Development of a novel power-to-methanol technology based on a tubular proton conducting SOEC	SCHWABE, FELIX	DRESDEN UNIVERSITY OF TECHNOLOGY	Germany	4	March 15th	14:40	Renewable H2: Electrolysis 2
138	Efficient H2 production by photocatalytic water splitting under visible light over modified TiO2-based catalysts	SCIRE, SALVATORE	DIPARTIMENTO SCIENZE CHIMICHE - UNIVERSITY OF CATANIA	Italy	4	March 15th	15:00	Hydrogen Production: Catalysts 3
166	Direct conversion of methane to aromatics in a catalytic co-ionic membrane reactor	SERRA, JOSE M.	ITQ (UPV-CSIC)	Spain	5	March 15th	16:30	Hydrogen Production: Purification & Membranes
168	Intensified conversion of natural gas using proton-conducting ceramics to produce pressurized hydrogen	SERRA, JOSE M.	ITQ (UPV-CSIC)	Spain	6	March 16th	10:50	Hydrogen Production: Fossil Sources

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Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
132	Structure and photoactivity of Ag-CdS photocatalysts prepared by solvothermal method at different temperature	SOTO, ERIKA	INSTITUTE OF CATALYSIS AND PETROCHEMISTRY (ICP-CSIC)	Spain	3	March 15th	10:30	Hydrogen Production: Catalysts 2
136	Water electrolysis in conjunction with fish hatcheries-a viable business concept	SUNDSETH, KYRRE	SINTEF MATERIALS AND CHEMISTRY	Norway	3	March 15th	10:50	Hydrogen Economy
173	Transition metal and nitrogen co-doped carbide-derived carbon electrocatalysts for oxygen reduction reaction in AEM fuel cell	TAMMEVESKI, KAIDO	INSTITUTE OF CHEMISTRY, UNIVERSITY OF TARTU	Estonia	6	March 16th	10:30	Fuel Cell Components: Catalysts
104	Anion exchange membrane electrolyzer- Status of technology and first research steps within the project "AEL-MALFE "	TANNERT, DANIEL	BRANDENBURG TECHNICAL UNIVERSITY COTTBUS-SENFTENBERG (BTU), CHAIR OF POWER PLANT TECHNOLOGY	Germany	4	March 15th	15:00	Renewable H2: Electrolysis 2
43	Hydrogen Storage in Li-Decorated Metal-Graphyne Framework	THOGLUVA JANARDHANAN, DHILIP KUMAR	DEPARTMENT OF CHEMISTRY, INDIAN INSTITUTE OF TECHNOLOGY ROPAR	India	1	March 14th	14:00	Hydrogen Storage 1
93	Reversible Hydrogen Storage in Ti and Li-Functionalized Calix[4]arene	THOGLUVA JANARDHANAN, DHILIP KUMAR	INDIAN INSTITUTE OF TECHNOLOGY ROPAR	India	1	March 14th	15:20	Hydrogen Storage 1
97	Optical characterization of hydrogen-air laminar combustion under cellularity conditions	TINAUT, FRANCISCO	UNIVERSITY OF VALLADOLID	Spain	1	March 14th	15:40	Hydrogen and FC applications

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Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
210	Single cell PEM electrolyzers for H2 production: key design parameters for small-scale application	TOMAS-GARCIA, ANTONIO LUIS	UNIVERSITY OF THE WEST OF SCOTLAND	United Kingdom	4	March 15th	14:00	Renewable H2: Electrolysis 2
139	Innovative catalysts for H2 conversion to SNG via CO2 methanation	TRUDA, LIVIA	UNIVERSITY OF SALERNO	Italy	2	March 14th	17:50	Hydrogen Production: Catalysts 1
109	Synthesis of Copolymers based on Sulfonated Polysulfone: A Thermo-Mechanical Study	UREÑA TORRES, M NIEVES	UNIVERSIDAD CARLOS III DE MADRID	Spain	3	March 15th	10:50	Fuel Cell Components: PEM & Catalysts
99	Effect of bio-oil conditioning by phenols extraction on the activity of Ni-based catalyst for the steam reforming process	TBC	UNIVERSITY OF THE BASQUE COUNTRY	Spain	2	March 14th	17:10	Renewable H2: Bio-Hydrogen & Gasification
101	Thermochemical water splitting hydrogen production projects at CIEMAT-Plataforma Solar	VIDAL, ALFONSO	CIEMAT	Spain	4	March 15th	15:00	European Projects FCH JU
13	Cell Voltage Monitoring All in One. A new low cost solution for degradation analysis on Polymer Electrolyte Fuel Cells	VIVAS FERNÁNDEZ, FRANCISCO JOSÉ	UNIVERSITY OF HUELVA	Spain	1	March 14th	14:00	Fuel Cell Components: HighT & PEM
116	Advanced m-CHP fuel cell system based on a novel bioethanol fluidized bed membrane reformer	VIVIENTE, JOSE LUIS	TECNALIA	Spain	4	March 15th	15:20	European Projects FCH JU
105	ANALYSIS OF A SCENARIO TO SUPPLY AN INDUSTRIAL AREA WITH RENEWABLE HYDROGEN USING MATLAB	VOIGT, ANDRE	BRANDENBURG UNIVERSITY OF TECHNOLOGY COTTBUS-SENFTENBERG, CHAIR OF POWER PLANT TECHNOLOGY	Germany	4	March 15th	15:00	Fuel cell systems: Modelling

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Comm. Code	Title	Communication Presenter	Affiliation	Country	Session	Date	Time	Room name
53	An innovative hydrogen based air-conditioning system for fuel cell vehicles	WECKERLE, CHRISTOPH	INSTITUTE OF ENGINEERING THERMODYNAMICS, GERMAN AEROSPACE CENTER (DLR)	Germany	6	March 16th	10:30	FC applications: Transport
129	Innovative (Ca-Cu) Combined Materials for Calcium-Copper Chemical Looping Technology	WESTBYE, ALEXANDER	INSTITUTT FOR ENERGITEKNIKK (IFE)	Norway	6	March 16th	11:30	Hydrogen Production: Fossil Sources
185	Surplus hydrogen reuse using decision-making techniques in northern Spain	YÁÑEZ DÍAZ, MARÍA	UNIVERSITY OF CANTABRIA	Spain	4	March 15th	15:40	Fuel cell systems: Modelling
91	Experimental Hydrogen reactor for Rydberg and Ultra Dense Hydrogen states for energy applications	ZEINER-GUNDERSEN, SINDRE	UNIVERSITY OF ICELAND	Norway	1	March 14th	14:40	Hydrogen and FC applications

Poster Communications

Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
124	Electrical conductivity of PEM fuel cell catalyst layers: Through-plane vs. in-plane	AHADI, MOHAMMAD	SIMON FRASER UNIVERSITY	Canada	P-41
150	Ni/Ce _{1-x} Zr _x O _{2-δ} catalysts for methane steam reforming at mild conditions	ALEMANY, LUIS J.	UNIVERSITY OF MALAGA	Spain	P-16
226	Hydrogen production via Sorption enhanced ethanol steam reforming process	ALEMANY, LUIS J.	UNIVERSITY OF MALAGA	Spain	P-17
81	On the effect of Ni-P deposits from Al-based bipolar plates on the performance of Pt catalysts for HT-PEMFCs	ALVAREZ-MANUEL, LAURA	LABORATORIO DE INVESTIGACIÓN EN FLUIDODINÁMICA Y TECNOLOGÍAS DE LA COMBUSTIÓN (LIFTEC-UNIZAR-CSIC)	Spain	P-51
208	Overview of the ENHIGMA project: optimization and improvement of PEM electrolysis cells for hydrogen production	AMORES VERA, ERNESTO	CENTRO NACIONAL DEL HIDRÓGENO (CNH2)	Spain	P-05
211	Flow field optimization for PEM water electrolysis cell using computational fluid dynamic simulations	AMORES VERA, ERNESTO	CENTRO NACIONAL DEL HIDRÓGENO (CNH2)	Spain	P-06
192	Virtual Reality Training and Certification for Firefighters for Hydrogen Applications	AMORIM, E. VASCO	UTAD INESC TEC	Portugal	P-70
190	Manufacturing of textured electrodes and evaluation in PEMFC stacks for stationary applications- MATISSE project	ANTONI, LAURENT	CEA/LITEN	France	P-52

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
141	Effect of the steam to carbon molar ratio (S/C) in the oxidative steam reforming of raw bio-oil over a Ni-Al spinel catalyst	TBC	UNIVERSITY OF THE BASQUE COUNTRY (UPV/EHU)	Spain	P-19
8	The role of surface coarsening and sintering during thermal decomposition of titanium hydride	BEN DAVID, ROEY	TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY	Israel	P-38
29	Valorization of alcoholic wastes to produce H ₂ to be used in the sustainable generation of electricity - LIFE ECOELECTRICITY Project	BENEITO, RUBÉN	AIJU	Spain	P-01
236	The pre-coated strip steel solution for mass production of interconnects and bipolar plates	TBC	SANDVIK	Sweden	P-77
131	Catalytic performance of Cu/hydroxyapatite catalysts in CO Preferential Oxidation in H ₂ -rich Stream	BOUKHA, ZOUHAIR	CHEMICAL TECHNOLOGIES FOR ENVIRONMENTAL SUSTAINABILITY GROUP, UNIVERSITY OF THE BASQUE COUNTRY	Spain	P-20
156	Hydrogen Separation Characteristics of Zeolite and Activated Carbon from Ammonia Reforming Gas	CHAE, HO JIN	KYUNGPOOK NATIONAL UNIVERSITY	Korea, Rep.	P-33
123	Co and La supported on Zn-Hydrotalcite derived material as efficient catalyst for bioethanol steam reforming	DA COSTA-SERRA, JAVIER FRANCISCO	INSTITUTO DE TECNOLOGÍA QUÍMICA UPV-CSIC	Spain	P-21

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
61	Preparation of supported and unsupported graphene layers for PEMFC electrodes	TBC	CIEMAT	Spain	P-53
152	Chlorine effect in ceria-based SOFCs operating with biogas	TBC	CIEMAT	Spain	P-58
2	Copper-zinc ferrite supported on mesoporous $Ti_xSn_{1-x}O_4$ mixed oxides as catalysts for sustainable hydrogen production via methanol decomposition	GENOVA, IZABELA	INSTITUTE OF ORGANIC CHEMISTRY WITH CENTRE OF PHYTOCHEMISTRY	Bulgaria	P-22
3	Effect of preparation procedure on the formation of copper- titanium-cerium mixed oxide catalysts	GENOVA, IZABELA	INSTITUTE OF ORGANIC CHEMISTRY WITH CENTRE OF PHYTOCHEMISTRY	Bulgaria	P-23
67	H ₂ production by sorption enhanced catalytic steam gasification of solid biomass	GIL MATELLANES, MARÍA VICTORIA	POSTDOCTORAL RESEARCHER	Spain	P-02
228	Optimization of Nafion/C composition in PEMFC electrodes with low platinum loading	GONZÁLEZ, LEANDRO	CENTRO NACIONAL DEL HIDRÓGENO (CNH2)	Spain	P-43
229	Preliminary electrochemical study of membrane electrode assemblies operated at low temperatures in self-humidification conditions	GONZÁLEZ, LEANDRO	CENTRO NACIONAL DEL HIDRÓGENO (CNH2)	Spain	P-44
225	CuNi catalysts over Pr promoted Ceria for Water Gas Shift catalysts	GONZÁLEZ-GIL, RAFAEL	UNIVERSITY OF MALAGA	Spain	P-30

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
27	Upgrading of Light Cycle Oil to high quality fuels minimizing hydrogen consumption in hydroprocessing	TBC	UNIVERSITY OF THE BASQUE COUNTRY UPV/EHU	Spain	P-74
46	Natural gas reforming system for hydrogen production using high frequency induction heating	HEO, SUNGGUE	KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY(KITECH)/INHA UNIVERSITY	Korea, Rep.	P-59
212	Photo-production of H ₂ from aqueous solutions of ethanol using new Pt/Co-TiO ₂ catalysts	HOMS, NARCIS	UNIVERSITAT DE BARCELONA	Spain	P-24
162	e-Infrastructure to compile and provide e- Learning Content and Engineering Tools	TBC	INSTITUTE FOR NUCLEAR- AND ENERGIETECHNOLOGIES	Germany	P-60
134	Developing a Plug Fuel Cell vehicle model for energising FCEVs	TBC	COVENTRY UNIVERSITY	United Kingdom	P-67
21	Catalytic performance of steam and auto-thermal reforming for VOCs to syngas over Ni-Rh based catalysts	KANG, SUK-HWAN	INSTITUTE FOR ADVANCED ENGINEERING (IAE)	Korea, Rep.	P-25
69	Kinetic Modeling and Reactor Design of HT-WGS Reaction under high pressure for Hydrogen Production in LDG	KANG, SUK-HWAN	INSTITUTE FOR ADVANCED ENGINEERING (IAE)	Korea, Rep.	P-26
126	Experimental study of CO ₂ absorption and H ₂ recovery in a polypropylene hollow fiber membrane contactor	TBC	RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE AND TECHNOLOGY	Korea, Rep.	P-35

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
16	MEMS based hydrogen sensor with (Pd,Ag)-decorated graphene	KIM, JUNG-SIK	UNIVERSITY OF SEOUL	Korea, Rep.	P-71
235	3-D porous Co-Fe-P catalyst for oxygen and hydrogen evolution reactions of alkaline water electrolysis	KWON, YONGKEUN	Korea Advanced Institute of Science and Technology (KAIST)	Korea, Rep.	P-27
233	Ni-Mo nanoparticle catalyst for hydrogen oxidation reaction in alkaline media	KWON, YONGKEUN	Korea Advanced Institute of Science and Technology (KAIST)	Korea, Rep.	P-45
234	Atomically Ordered Pt ₃ Mn Intermetallic Electrocatalysts for oxygen reduction reaction with Enhanced Activity and Durability in PEM fuel cells	KWON, YONGKEUN	Korea Advanced Institute of Science and Technology (KAIST)	Korea, Rep.	P-46
94	Ni-based catalysts for auto-thermal reforming reaction of dodecane	LEE, SOO CHOO	KYUNGPOOK NATIONAL UNIVERSITY	Korea, Rep.	P-28
148	Nonlinear Control Strategy Design for Air Supply System of PEM Fuel Cells	TBC	INSTITUTE OF CYBER-SYSTEMS AND CONTROL, ZHEJIANG UNIVERSITY	China	P-55
84	Proposal of a equation to measure the degradation of a PEM fuel cell, using EIS results	TBC	INSTITUTO NACIONAL DE TÉCNICA AEROSPAIAL (INTA)	Spain	P-42
22	Solenco Powerbox: Revolutionizing the world of Energy today	TBC	SOLENCO POWER NV	Belgium	P-64
232	Implementation of a Sievert's instrument to carbonaceous materials evaluation for hydrogen storage	TBC	CIEMAT	Spain	P-39

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19	Electrochemical process for hydrogen production from several organic compounds in an alkaline solution	MARTÍN DE LOS SANTOS, ESTHER M ^a	CENTRO DE AUTOMÁTICA Y ROBÓTICA (CAR) CSIC_UPM	Spain	P-07
227	Present and future markets for hydrogen technology in SUDOE Region	MARTÍNEZ GONZÁLEZ, ANA ISABEL	ARIEMA ENERGÍA Y MEDIOAMBIENTE S.L.	Spain	P-73
92	Improvement of biofilm formation for application in bioelectrochemical system for hydrogen production	MEJÍA LÓPEZ, MÓNICA PATRICIA	INSTITUTO DE ENERGÍAS RENOVABLES (UNAM)	Mexico	P-03
68	Hydrogen Absorption and Desorption in LabTech Metal Hydride Bottles for Integration in Renewable Systems	TBC	FUEL CELLS AND SYSTEMS INTEGRATION UNIT, ENERGY DEPARTMENT, CIEMAT	Spain	P-40
48	In-situ measurement of current density distribution in polymer electrolyte membrane water electrolysis cells	MITZEL, JENS	GERMAN AEROSPACE CENTER (DLR)	Germany	P-08
187	POWER TO GAS: Integration of wind renewable energy for Hydrogen generation as a future energetic vector in the Atlantic area	ORTIZ, ALFREDO	UNIVERSITY OF CANTABRIA	Spain	P-09
154	Activity tests of Rh-Ni-Ce-Zr/Al-based catalysts for reforming of toluene	PARK, NO-KUK	YEUNGNAM UNIVERSITY	Korea, Rep.	P-29
198	Oxygen reduction on S- and N-doped graphene nanomaterials	PASTOR, ELENA	UNIVERSITY OF LA LAGUNA	Spain	P-48
143	Synthetic natural gas production in fluidized bed reactor using Ni based catalysts	PEÑA, JOSÉ ÁNGEL	ARAGO INSTITUTE OF ENGINEERING RESEARCH (I3A) ; UNIVERSIDAD ZARAGOZA	Spain	P-63

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
221	IRRAS study of ethanol electrooxidation in alkaline media	PEÑA, MIGUEL ANTONIO	INSTITUTO DE CATÁLISIS Y PETROLEOQUÍMICA, CSIC	Spain	P-49
17	Modelling of a milli-structured reactor for PtG application	PEREZ, SUSANA	TECNALIA R&I	Spain	P-61
146	Hydrogen and Fuel Cells- Technical Safety for general use	PILZ, WOLF-DIETER	ASSOCIATION OF GERMAN ENGINEERS (VEREIN DEUTSCHER INGENIEURE - VDI)	Germany	P-72
215	Photocatalytic Hydrogen Production using TiO ₂ -rGO-Pt Nanocomposites and Glycerol as a Sacrificial Agent	TBC	LNEG	Portugal	P-15
87	Deactivation causes of a Rh based catalyst in the bio-oil steam reforming	TBC	UNIVERSITY OF THE BASQUE COUNTRY	Spain	P-31
205	Life+ aquasef: eco-efficient technologies development for environmental improvement of aquaculture	RODRIGUEZ OLMO, MARÍA ISABEL	ARIEMA ENERGÍA Y MEDIOAMBIENTE S.L.	Spain	P-65
118	Innovative concepts of Integrated Solar Combined Cycles (ISCC) using a Solid Oxide Fuel Cell (SOFC)	RODRÍGUEZ, EDUARDO A.	ENERGÉTICA GROUP. MECHANICAL, THERMAL AND FLUIDICS ENGINEERING DEPARTMENT. UNIVERSITY OF MÁLAGA	Spain	P-66
133	Materials selection for bipolar plates in PEMWE	ROJAS GARCÍA-PARDO, NURIA	CENTRO NACIONAL DEL HIDROGENO	Spain	P-10
18	Hydrogen production from two-stage biomass gasification process	TBC	INSTITUTE FOR ADVANCED ENGINEERING (IAE)	Korea, Rep.	P-04
140	Functionalized mesoporous silica materials for PEMFC application	SÁNCHEZ, MAIALEN	UNIVERSITY OF THE BASQUE COUNTRY UPV/EHU	Spain	P-50

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Comm. code	Title	Communication Presenter	Affiliation	Country	Poster location
169	High efficient H ₂ production in a multitubular electrolyser using protonic ceramic conductors	SERRA, JOSE M.	ITQ (UPV-CSIC)	Spain	P-11
75	SMR integration and increase of CO ₂ production - Stage 3 -	TBC	AIR LIQUIDE ARGENTINA	Argentina	P-36
34	Development of Gas Analysis and Gas Cross-leak Rate Estimation Methods for High-temperature co-electrolysis of H ₂ O and CO ₂	TANAKA, YOHEI	NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY (AIST)	Japan	P-12
179	Dimensioning of the propulsion system of a passenger car based on a fuel cell and on-board hydrogen storage	TINAUT, FRANCISCO	UNIVERSITY OF VALLADOLID	Spain	P-68
85	Composites of metal encapsulated silicon super-atoms M@Si ₁₆ for hydrogen storage	TORRES, MARÍA BEGOÑA	UNIVERSIDAD DE BURGOS	Spain	P-62
82	Detection of abnormal combustion events in an automotive-size commercial spark-ignition engine fueled with hydrogen	URROZ, JOSÉ CARLOS	UNIVERSIDAD PÚBLICA DE NAVARRA	Spain	P-69
59	In the path of H ₂ 020 targets. A new proposal and experimental case to reduce the cost of fuel cells	VIVAS FERNÁNDEZ, FRANCISCO JOSÉ	UNIVERSITY OF HUELVA	Spain	P-56
39	Preheating fuel cells via unused pressure difference with metal hydrides for sub-zero start-up	WECKERLE, CHRISTOPH	GERMAN AEROSPACE CENTER (DLR)	Germany	P-57



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76	Performance and Processing Evaluation of Solid Oxide Cells by Co-sintering of GDC Buffer Layer and LSCF Air Electrode	WOO, SANGKUK	KOREA INSTITUTE OF ENERGY RESEARCH	Korea, Rep.	P-14