so102 02/06/2025		
Room PR - Plenary		
08:50 - 09:10		Opening (Gabriele Centi, Siglinda Perathoner, Enrico Tronconi)
09:10 – 09:50	KP1	Pierdomenico Biasi CASALE S.A., Lugano, (Switzerland) *Environmental Catalysis in Industry: The Road Ahead* Pierdomenico BIASI, Raffaele OSTUNI, Alberto GARBUJO, Filippo BUTTIGNOL, Ludovica VILLANTIERI, Michal BIALKOWSKI CASALE SA, R&D Division, Via Giulio Pocobelli 6, 6900, Lugano, Switzerland.
10:00 – 10:20	OR1	Pascal Granger - University of Lille, UCCS CNRS, Lille (France) *Natural Gas Vehicle post-combustion catalysts: How to manage support effect to magnify the performances of noble metals in methane abatement* Amaury Decoster, Fabien Dhainaut, Pascal Granger Univ. Lille, CNRS, Centrale Lille, Univ. Artois, UMR 8181 - UCCS - Unité de Catalyse et Chimie du Solide, F-59000 Lille, France
10:20 – 11:00	KN1	Guido Busca (Università di Genova), Genova (Italy) *Zeolite catalysis for (bio)ethanol-to-hydrocarbons processes* Guido Busca, Elena Spennati, Paola Riani, Gabriella Garbarino - University of Genova, DICCA, via Opera Pia 15, Genova, Italy. - University of Genova, DCCI, via Dodecaneso 31, Genova, Italy.
11:00 – 11:20	Coffee-Break	
11:20 – 11:40	OR2	Henrik Gronbeck - Chalmers University of Technology, Gothenburg (Sweden) *NH3-SCR over Cu-CHA from first principles* Henrik Grönbeck Competence Centre for Catalysis and Department of Physics, Chalmers University of Technology, Göteborg, Sweden
11:40 – 12:00	OR3	Piotr Pietrzyk Jagiellonian University, Krakow (Poland) *Oxidative half-cycle of SCR NOx on single and dual copper sites of CuSSZ-13 catalyst via NO2, nitrates and nitrites formation – spectroscopic and thermodynamic DFT background for reaction networks* Bartosz Mozgawa, Filip Zasada, Monika Fedyna, Kinga Góra-Marek, Zbigniew Sojka, Piotr Pietrzyk Jagiellonian University, Faculty of Chemistry, Gronostajowa 2, Krakow, Poland.
12:00 – 12:20	OR4	Elisabetta Finocchio - (Università di Genova), Genova (Italy) *Ternary Me–P–Si oxides for catalytic conversion of biomass-derived chemicals: a closer look at the surface.* Elisabetta Finocchio*, Antonella Gervasini, Sebastiano Campisi, Aurelio Bifulco, Claudio Imparato, Antonio Aronne. 1 Università di Genova, Dip. Ingegneria Civile, Chimica e Ambientale, Via Opera Pia 15, Genova, Italy. 2 Università di Milano, Dip. Chimica, Via Camillo Golgi 19, Milano, Italy. 3 Università di Napoli Federico II, Dip. Ingegneria Chimica, dei Materiali e della Produzione Industriale, P.le Tecchio 80, Napoli, Italy.
		Short Orals
12:20 – 12:30	SO1	Gabriella Garbarino – University of Genova, DICCA Dept., Genova (Italy) *Transition metals over C-based materials: unraveling performances and challenges* Sina E. Atakoohi1, Elena Spennati1,2, Paola Riani2,3, Gabriella Garbarino1,2,* 1University of Genova, DICCA Dept., Genova, 16145 (Italy) 2INSTM, UDR Genova, 16146 (Italy) 3University of Genova, DCCI Dept., Genova, 16146 (Italy)
12:30 – 12:40	SO2	Michele Leone – Università La Sapienza, Roma (Italy) *Operando-FTIR investigation of bifunctional Pt or Pd,Fe-HMOR catalyst for simultaneous abatement of NOx and N2O by CH4* Michele Leone*,1, Chiara Caponera1, Daniela Pietrogiacomi1, Simone Morpurgo1, Maria Cristina Campa2

		1Chemistry Department, Sapienza University of Rome, 00185 Rome, Italy. 2 ISMN-CNR, c/o Chemistry Department, Sapienza University of Rome, 00185 Rome, Italy.
12:40 – 12:50	SO3	Florian Maurer - Karlsruhe Institute of Technology, Karlsruhe (Germany) *Descriptors for noble metal redispersion on CeO_2-based catalysts* Florian Maurer1*, Agustin Salcedo2, Maria Casapu1, David Loffreda2, Arik Beck1, Paolo Dolcet3, Mimoun Aouine4, Thierry Epicier4, Stéphane Loridant4, Philippe Vernoux4, Carine Michel2, Jan-Dierk Grunwaldt1 1 Institute of Chemical Technology and Polymer Chemistry, KIT, Karlsruhe, Germany 2 ENSL, CNRS, Laboratoire de Chimie, Lyon, France 3 Department of Chemical Sciences, University of Padova, Padova 35131, Italy
12:50 – 13:00	SO4	Valérie Meille - *University of Lyon*, IRCELYON, CNRS, Villeurbanne (France) *In-situ DRIFTS studies provide insight into competitive adsorption of VOCs and ozone on catalyst surfaces at low temperature* Amira Jabbari-Hichri1, Salma Majdoub1, Eddy J. Moreno1, Xiaolong Ji1, Valérie Meille1*, Sonia Gil1* *1IRCELYON, University of Lyon, CNRS, Lyon, 69626 Villeurbanne Cedex, France*
13:00 – 15:00	Lunch Break	
15:00 – 15:20	OR5	Filippo Buttignol - Casale SA, Dipartimento di Ricerca di Base, Lugano (Switzerland) *Iron-catalyzed cooperative red-ox mechanism for the simultaneous conversion of nitrous oxide and nitric oxide* Filippo Buttignol1,2, Jörg W. A. Fischer3, Alberto Garbujo4,*, Pierdomenico Biasi4, Gunnar Jeschke5, Oliver Kröcher1,2 and Davide Ferri1 1Paul Scherrer Institut (PSI), Center for Energy and Environmental Sciences, 5232 Villigen, Switzerland. 2École Polytechnique Fédérale de Lausanne (EPFL), 1015 Lausanne, Switzerland. 3ETH Zurich, Laboratory of Physical Chemistry, 8093 Zurich, Switzerland
15:20 – 15:40	OR6	Sang Woo Byun - Gwangju Institute of Science and Technology, Gwangju South Korea *Upcycling degraded Li(Ni-Co-Mn)O2 cathodes to highly active thermal catalyst via the lithium pre-extraction method for air pollutant abatement* Sang Woo Byun1, Hyeonwoo Shin1, Wonseok Choi1, Jinju Song2, Dokyeong Han2, Jiyoung Ma2, Jayoung Kim2, Seok Hyun Song2, Jung-Je Woo2 and Sung Bong Kang*, 1 1 Gwangju Institute of Science and Technology, 123 Cheomdan-Gwagiro, Gwangju 61005, South Korea 2 Gwangju Clean Energy Research Center, Korea Institute of Energy Research (KIER), Gwangju 61003, South Korea
15:40 – 16:00	OR7	Fabien Can - IC2MP, Université de Poitiers-CNRS, Poitiers (France) *H_2-SCR over 0.3%Pt/5%SiO_2-Al_2O_3 catalyst: investigations in the reaction pathways* Amira Ben Attia1, Fabien Can1, Xavier Courtois1* 1 IC2MP, Université de Poitiers-CNRS, 4 rue Michel Brunet TSA 51106 86073 Poitiers Cedex 9, France.
16:00 – 16:20	OR8	Daniel C. Cano-Blanco - Paul Scherrer Institute, Villigen (Switzerland) *Site-specific monomeric Fe sites catalyze the N2O decomposition reaction* Daniel C. Cano-Blanco1, Jörg W. A. Fischer3, Filippo Buttignol1, Gunnar Jeschke3, Oliver Kröcher1,2, Davide Ferri1 1 Paul Scherrer Institute, 5232 Villigen, Switzerland; 2 Institute for Chemical Science and Chemical Engineering, École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland; 3 Department of Chemistry and Applied Biosciences, ETH Zurich, 8093 Zurich, Switzerland
16:20 – 16:40	OR9	Maria Casapu - Institute for Chemical Technology and Polymer Chemistry (ITCP), Karlsruhe Institute of Technology, Karlsruhe (Germany) *Structural parameters for high activity and stability of Pd/CeO2 CH4 oxidation catalysts* D. Zengel1, V. Marchuk1, M. Kurt1, F. Maurer1, A. Salcedo2, C. Michel2, D. Loffreda2, M. Aouine3, T. Epicier3, S. Loridant3, P. Vernoux3, M. Casapu1*, J.-D. Grunwaldt1

		1Institute for Chemical Technology and Polymer Chemistry (ITCP), Karlsruhe Institute of Technology, 76131 Karlsruhe, Germany 2ENS de Lyon, CNRS UMR 5182, Laboratoire de Chimie, Lyon, France 3Institut de Recherches sur la Catalyse et l'Environnement de Lyon, CNRS UMR5256, Université de Lyon, Lyon, France
16:40 – 17:00	Coffee-Break	
		Short Orals
17:00 – 17:10	SO5	Roberta Castiglione – Laboratory of Catalysis and Catalytic Processes. Politecnico di Milano – Milano (Italy) *Anisotropic POCS: Unlocking Mass Transfer Potential* Roberta Castiglione1, Claudio Ferroni1, Federico Sascha Franchi1, Matteo Ambrosetti1, Mauro Bracconi1, Gianpiero Groppi1, Matteo Maestri1, Enrico Tronconi*,1 1Laboratory of Catalysis and Catalytic Processes, Politecnico di Milano, 20156 Milan, Italy
17:10 – 17:20	SO6	Matteo Maestri – Politecnico di Milano, Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Milano (Italy) *H_2O-assisted Oxidation Half-Cycle of Low Temperature NH3-SCR over Cu-CHA* Gabriele Contaldo1, Isabella Nova1, Matteo Maestri1,* and Enrico Tronconi1,* 1Politecnico di Milano, Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Via la Masa 34, Milano 20156, Italy.
17:20 – 17:30	SO7	Andrea De Giacinto - Karlsruher Institut für Technologie (KIT), Karlsruhe (Germany) *Influence of CeO_2 morphology and initial Pd-Pt interaction degree on catalyst activity and stability* Andrea DE GIACINTO1,2, Paolo DOLCET1,2, Di WANG3,4, Joachim CZECHOWSKY1, Carina MALIAKKAL3, Christian KÜBEL3,4, Silke BEHRENS5, Jan-Dierk GRUNWALDT1,5, Silvia GROSS1,2,*, Maria CASAPU1,* 1 Karlsruhe Institute of Technology, Institute for Chemical Technology and Polymer Chemistry, Engesserstraße 18-20, 76131 Karlsruhe, Germany 2 Università di Padova, Dip Scienze Chimiche, Via Marzolo 1, 35131 Padova, Italy 3 Karlsruhe Institute of Technology, Institute of Nanotechnology, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany 4 Karlsruhe Institute of Technology, Karlsruhe Nano Micro Facility, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany 5 Karlsruhe Institute of Technology, Institute of Catalysis Research and Technology, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany
17:30 – 17:40	SO8	Jean-Marc Giraudon - Univ. Lille, CNRS, Centrale Lille, Univ. Artois, Unité de Catalyse et Chimie du Solide, Lille (France) *Functionalization of hydroxyapatite with silver for application in total oxidation of formaldehyde* E. Prandini1,2, G. Abdallah1, S. Campisi2, A. Gervasini2, A. Addad3, O. Gardoll1, M. Trentesaux1, J.-M. Giraudon1*, J.-F. Lamonier1 1 Univ. Lille, CNRS, Centrale Lille, Univ. Artois, Unité de Catalyse et Chimie du Solide-Lille, 59000, France. 2 Dipartimento di Chimica, Università degli Studi di Milano, Via C. Golgi 19, Milano, 20133, Italy. 3 Univ. Lille, CNRS, INRAE, Centrale Lille, Unité de Matériaux et Transformations-Lille, 59000, France
17:40 – 17:50	SO9	Vincenzo Russo, University of Naples Federico II, Naple (Italy) *LOHC: kinetics of toluene hydrogenation over Pt/Al_2O_3 catalyst in a trickle bed reactor* Vincenzo RUSSO*,1, Muhammad Usama DAUD1, Alessandro ESPOSITO1, Federica COSENZA1, Riccardo TESSER1, Martino DI SERIO1 Università di Napoli 'Federico II', Department of Chemical Sciences, Napoli, Italy.
17:50 – 18:00	SO10	Withdrawn
18:00 – 19:00	CH	Poster session (Hallway)

	P1	P1
03/06/2025		
Room PR - Plenary		
08:50 – 09:50	PL1	Hiromi Yamashita - The University of Osaka (Japan) *Design of Metal-Organic Frameworks and Reaction Systems for Efficient Photocatalytic H_2O_2 Production* Graduate School of Engineering, The University of Osaka, Suita, Osaka 565-0871, Japan
10:00 – 10:20	OR28	Oleksandr Astakhov – Photovoltaics (IMD-3), Forschungszentrum Jülich GmbH, Jülich, Germany *Assessment of solar-to-chemical efficiency using only electrolyzer characteristics Shortcut bridging electrochemistry and photovoltaics* Oleksandr Astakhov*,1, Thérèse Cibaka1, Lars Wieprecht1, Uwe Rau1,2, Tsvetelina Merdzhanova1 1 Photovoltaics (IMD-3), Forschungszentrum Jülich GmbH, 52425 Jülich, Germany. 2 Faculty of Electrical Engineering and Information Technology, RWTH Aachen University, Mies-van-der-Rohe-Straße 15, 52074 Aachen, Germany.
10:20 – 10:40	OR29	Giuseppina Cerrato – Dipartimento di Chimica, Università degli Studi di Torino, Torino (Italy) *Crystalline face engineering in diverse Bismuth Oxyhalides for enhanced amoxicillin removal from water* Giuseppina Cerrato*1,2, Alessia Giordana1,2, Vincenzo Fabbrizio2,3, Melissa Greta Galloni2,3, Ermelinda Falletta2,3, Claudia Letizia Bianchi 2,3 1Dipartimento di Chimica, Università degli Studi di Torino, Via Pietro Giuria 7, 10125 Torino, Italy 2Dipartimento di Chimica, Università degli Studi di Milano, via C. Golgi 19, 20133, Milano, Italy 3Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM), via Giusti 9, 50121 Florence, Italy
10:40 – 11:00	OR30	Petar Djinovic – National Institute of Chemistry, Ljubljana (Slovenia) *Modification of the methane dry reforming reaction mechanism during visible light illumination of the Ni/CeO2-x catalyst* Kristijan Lorber1, Janez Zavašnik2, Jordi Sancho-Parramon3, Matej Bubaš1,3, Nataša Novak Tušar1,4 And Petar Djinović1,4* 1 National Institute of Chemistry, Hajdrihova 19, Ljubljana, Slovenia 2 Institute Jožef Stefan, Jamova 39, Ljubljana, Slovenia 3Ruđer Bošković institute, Bijenička 54, Zagreb, Croatia 4University of Nova Gorica, Vipavska 13, Nova Gorica, Slovenia
11:00 – 11:20	Coffee-Break	
11:20 – 11:40	OR31	Hyeonjeong Kim – Pohang University of Science and Technology, Division of Environmental Science and Engineering, Pohang (Republic of Korea) *Ti-Nb Oxide Nanotube Arrays with Cathodic Engineering for Photoelectrochemical Water Treatment and Molecular Hydrogen Production* Hyeonjeong Kim, Doyeon Kim, Eunju Hwang, Kangwoo Cho* Pohang University of Science and Technology, Division of Environmental Science and Engineering, 77 Chungamro, Namgu, Pohang, Republic of Korea
11:40 – 12:00	OR32	Makoto Ogawa – Kyoto University, Grad. Sch. of Eng., Kyoto (Japan) *Flux Synthesis of Layered Perovskite Oxyiodide Photocatalyst for Visible-Light-Driven Water Splitting* Makoto Ogawa1, Hajime Suzuki1, Kanta Ogawa1, Hiroki Ubukata1, Osamu Tomita1, Akinobu Nakada1, Shunsuke Nozawa2, Akinori Saeki3, Hiroshi Kageyama1, Ryu Abe*,1 1 Kyoto University, Grad. Sch. of Eng., Kyoto daigaku-katsura, Nishikyo-ku, Kyoto, Japan. 2 Photon Factory (PF), Institute of Materials Structure Science (IMSS), High Energy Accelerator Research Organization (KEK), Tsukuba, Ibaraki 305-0801, Japan.

		3 Department of Applied Chemistry, Graduate School of Engineering, Osaka University, 2-1 Yamadaoka, Suita, Osaka 565-0871, Japan.
12:00 – 12:20	OR33	Jiajia Zhang – Division of Chemistry and Biological Chemistry, School of Chemistry, Chemical Engineering and Biotechnology, Nanyang Technological University, Singapore (Singapore) *Squeezing Water Molecular Network with Kosmotropic Chemistry to Enhance Nitrogen-to-Ammonia Electrofixation* Jiajia Zhang1, Zhi Zhong Ang1, Hiang Kwee Lee*,1,2,3 1 Division of Chemistry and Biological Chemistry, School of Chemistry, Chemical Engineering and Biotechnology, Nanyang Technological University, 21 Nanyang Link, Singapore 637371, Singapore. 2 Institute of Materials Research and Engineering, The Agency for Science, Technology and Research (A∗STAR), 2 Fusionopolis Way, #08-03, Innovis, 138634, Singapore. 3 Centre for Hydrogen Innovations, National University of Singapore, E8, 1 Engineering drive 3, 117580, Singapore
		Short Orals
12:20 – 12:30	SO31	Alfredo Aloise – Department of Physical and Chemical Sciences, University of L'Aquila, L'Aquila (Italy) *Synthesis of Nano-Sil1/TiO2NTs Composite photocatalyst* Rosalba Passalacqua*1, Alfredo Aloise2, Alessia Marino2, Nicola Di Nicola2, Siglinda Perathoner1, Gabriele Centi1 1 University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences (ChiBioFarAm) & INSTM CASPE (Lab. of Catalysis for Sustainable Production & Energy), Viale F. Stagno d'Alcontres 31, 98166 Messina, Italy 2 Department of Physical and Chemical Sciences, University of L'Aquila, via Vetoio, Coppito 2 67100 L'Aquila, Italy
12:30 – 12:40	SO32	Giusy Dativo – University of Catania, Dep. of Chemical Sciences, Catania (Italy) *Modified Montmorillonite-based catalysts for the photothermo-catalytic reduction of CO2 into solar fuels* Giusy Dativo*,1, Salvatore Scirè1, Giuseppe Compagnini1, Roberto Fiorenza1 1University of Catania, Dep. of Chemical Sciences, Viale Andrea Doria 6, Catania, Italy.
12:40 – 12:50	SO33	Giuseppe Santoriello – Dept. Chemistry and Biology, University of Salerno, Fisciano (SA), Italy. *Theoretical insights on innovative solutions for CO2RR with Fe-based single atom catalysts* Giuseppe Santoriello1, Ida Ritacco1, Giulia Tuci2, Giuliano Giambastiani3, Claudio Ampelli4, Siglinda Perathoner4, Gabriele Centi4, Matteo Farnesi Camellone5, Lucia Caporaso1. 1 Dept. Chemistry and Biology, University of Salerno, via G. Paolo II 132, 84084, Fisciano (SA), Italy. 2 Institute of Chemistry of OrganoMetallic Compounds, ICCOM-CNR, Via Madonna del Piano, 10 - 50019, Sesto F.no, Florence, Italy. 3 Dept. of Chemistry "Ugo Schiff", Università di Firenze, via della Lastruccia 3-13, Sesto Fiorentino, Italy 4Dept. ChiBioFarm, University of Messina, 98166 Messina, Italy 5 Consiglio Nazionale delle Ricerche-Istituto Officina dei Materiali (CNR-IOM), 34136 Trieste, Italy
12:50 – 13:00	SO34	Serena Esposito – Department of Applied Science and Technology and INSTM Unit of Torino – Politecnico, POLITO, Torino (Italy) *Enhancing visible-light photocatalytic hydrogen evolution with sub-5 nm Fe-doped CeO_2 nanocrystals in confined spaces* Giuseppina Iervolino1, Olimpia Tammaro2, Marco Fontana2, Bruno Masenelli3, Anne D. Lamirand3, Vincenzo Vaiano1, Serena Esposito2* 1 Department of Industrial Engineering, University of Salerno, Via Giovanni Paolo II 132, 84084 Fisciano, SA, Italy.

		2 Department of Applied Science and Technology and INSTM Unit of Torino – Politecnico, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Torino, Italy. 3 INSA Lyon, Ecole Centrale de Lyon, CNRS, Universite Claude Bernard Lyon
13:00 – 15:00	Lunch Break	
15:00 – 15:20	OR34	Federica Menegazzo – Ca' Foscari University of Venice, Department of Molecular Sciences and Nanosystems, Venice (Italy) *Photocatalysts and essential oils: could they ever be friends?* Andrea Campostrini1,2, Teresa Botrè1,2, Sabrina Manente1, Pilar Bosch-Roig3, Elena Ghedini4, Michela Signoretto1,2, Federica Menegazzo*,1,2 1Ca' Foscari University of Venice, Department of Molecular Sciences and Nanosystems, Via Torino 155, 30172 Venice, Italy. 2INSTM RUVe, Via Torino 155, 30172 Venice, Italy. 3Universitat Politècnica de València, Instituto Universitario de Restauración del Patrimonio, Camí de Vera s/n, 46022 Valencia, Spain. 4 University of Bari, Chemistry Department, Via Orabona 4, 70126 Bari, Italy.
15:20 – 15:40	OR35	Eleonora Tosi Brandi – University of Bologna, Industrial Chemistry Department, Bologna (Italy) *Novel application of CuMg-based Layered Double Hydroxides as photocathodes for photoelectrocatalytic CO2 conversion* Eleonora Tosi Brandi*1, Andrea Fasolini1, Jacopo De Maron1, Nicola Sangiorgi2, Alex Sangiorgi2, Alessandra Sanson2, Francesco Basile1 1 University of Bologna, Industrial Chemistry Department, Viale del Risorgimento 4, 40136, Bologna, Italy. 2 National Research Council of Italy, Institute of Science, Technology and Sustainability for Ceramics (CNR-ISSMC), Via Granarolo 64, 48018, Faenza, Italy.
15:40 – 16:00	OR36	Tsvetelina Merdzhanova – IMD3-Photovoltaics, Forschungszentrum Jülich GmbH, Jülich (Germany) *Solar-driven CO_2 electroreduction with direct-coupled PV-EC in realistic operating cycles* Tsvetelina Merdzhanova*1, Thérèse Cibaka1, Oleksandr Astakhov1 1 IMD3-Photovoltaics, Forschungszentrum Jülich GmbH, 52425 Jülich, Germany
16:00 – 16:40	KN110	Tapio Salmi – Åbo Akademi, Laboratory of Industrial Chemistry and Reaction Engineering (TKR), Turku/Åbo (Finland) *Catalytic ozonation of pharmaceuticals – From experiments to modelling* Soudabeh Saied1,2, Pasi Tolvanen1, Vincenzo Russo1,3, Pasi Tolvanen1, Tapio Salmi*1,3 1Åbo Akademi, Laboratory of Industrial Chemistry and Reaction Engineering (TKR), FI-20500 Turku/Åbo, Finland 2Linde + Robinson Laboratories, California Institute of Technology, Pasadena 91125, United States 3Università di Napoli 'Federico II', Chemical Sciences, IT-80125 Napoli, Italy
16:40 – 17:00	Coffee-Break	
17:00 – 17:10	SO35	Elisabetta Fanizza – University of Bari A. Moro, Department of Chemistry, Bari (Italy) *Photocatalytically-regenerable hyper-crosslinked microporous adsorbent* Pierluigi Lasala,1 Khalid Tahla,1 Antonio Maglione,2 Antonia Cerbone,2,3 Serena Catullo, 1 Gaia Raffaele, 1Ombretta Giancaspro,1 Antonella Milella,1 Ilaria De Pasquale,4 Rachele Castaldo,2 Gennaro Gentile,2 Maria Lucia Curri, 1,.4,5 Elisabetta Fanizza*,1,.4,5 1University of Bari A. Moro, Department of Chemistry, Via Orabona 4, 70126 Bari, Italy 2 CNR- Institute of Polymers, Composites and Biomaterials (IPCB), Via Campi Flegrei 34, 80078 Pozzuoli (NA), Italy 3 University of Naples, Department of Chemical Science, Strada Comunale Cinthia, 26, 80126, Naples, Italy 4 CNR-Institute for chemical and physical processes (IPCF), Via Orabona 4, 70126 Bari, Italy 5 National Interuniversity Consortium of Materials Science and Technology, INSTM, Bari Research Unit, 70126, Bari, Italy

17:10 – 17:20	SO36	Dimitrios Giannakoudakis – Aristotle University of Thessaloniki, Department of Chemistry, Thessaloniki (Greece) Additive-free photochemical upcycling of bio-based (micro)plastics into value added chemicals Athanasia Kotsaridou1*, Dimitrios A. Giannakoudakis1, Konstantinos Triantafyllidis1 1Aristotle University of Thessaloniki, Department of Chemistry, Thessaloniki, Greece
17:20 – 17:30	SO37	Marianna Guagliano – Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta"- CMIC, POLIMI, Milano (Italy) *An iron-based biochar-supported catalyst for diclofenac degradation* Marianna Gualiano1, Christian de los Ríos2, Karla Jiménez-Bautista2, Virginia Muelas-Ramos2, Ana Bahamonde3, Cinzia Cristiani1, Simone Pedrazzi4, Marco Puglia4, Daphne Hermosilla2, Antonio Gascó2 1Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta"- CMIC, Politecnico di Milano, Piazza Leonardo Da Vinci 32, 20133, Milano, Italy 2G-Aqua Research Group, Universidad Politécnica de Madrid, Escuela Técnica Superior de Ingeniería de Montes, Forestal y del Medio Natural, Calle José Antonio Novais 10, 28040 Madrid, Spain 3Instituto de Catálisis y Petroleoquímica, Consejo Superior de Investigaciones Científicas, Calle de Marie Curie 2, 28049 Madrid, Spain 4Department of Engineering "Enzo Ferrari", Università degli Studi di Modena e Reggio Emilia | UNIMO, Via Università 4, 41121 Modena
17:30 – 17:40	SO38	Chiara Ingrosso – 1CNR-IPCF Sez. Bari, c/o Dept. of Chemistry, Università degli Studi di Bari, Bari (Italy) *Photocatalytic nanocomposites based on pyrene functionalized reduced graphene oxide in situ decorated with TiO2 nanorods* C. Ingrosso,1 A. Disha,2 M. Dell'Edera,1 I. De Pasquale,1 G. V. Bianco,3 A. Milella,2 A. Grandolfo1,4,5 E. Mesto,5 E. Schingaro,5 M. Striccoli,1 E. Fanizza,1,2 R. Comparelli,1 M. L. Curri1,2 1CNR-IPCF Sez. Bari, c/o Dept. of Chemistry, Università degli Studi di Bari, via Orabona 4, 70126 Bari, Italy 2Dept. of Chemistry, Università degli Studi di Bari, via Orabona 4, 70126 Bari, Italy 3CNR-NANOTEC, c/o Università degli Studi di Bari, Via Orabona 4, 70126 Bari, Italy 4Dept. of Electrical and Information Engineering, Polytechnic of Bari, Via Amendola 126/b, 70126 Bari, Italy 5Dept. of Earth and Geoenvironmental Sciences, Università degli Studi di Bari, via Orabona 4, 70126 Bari, Italy
17:40 – 17:50	SO39	Luca Maistrello – Department. Of Chemistry, University of Studies of Milan, Milan(Italy) *Innovative Photoelectrocatalytic filter for Recirculating Aquaculture Systems* Luca Maistrello, 1 Simone Livolsi1 Eleonora Buoio,2 Daniela Bertotto3, Giuseppe Radaelli3, Alessia di Giancamillo,2 Annamaria Costa,2 Gian Luca Chiarello*,1 1 Department. Of Chemistry, University of Studies of Milan, Via Golgi 19 20133, Milan (Italy) 2 Department of Veterinary Medicine and Animal Sciences, University of Milan, 26900 Lodi, Italy
17:50 – 18:00	SO40	Matteo Miceli – University of Messina (UNIME), CASPE/INSTM and ERIC aisbl, (ChiBioFarAm), Messina (Italy) *Sustainable ammonia synthesis using graphene/MnFe2O4-based gas-diffusion electrodes via photo-, electro-, and photo-electro-catalytic routes* Clécia Andrade Dos Santos1,2, Matteo Miceli*,3, Luciane Pimenta Cruz Romão2, Maria Valnice Boldrin Zanoni2, Siglinda Perathoner3, Gabrieli Centi3, Claudio Ampelli3 1 São Paulo State University (UNESP), Institute of Chemistry, Araraquara, Brazil. 2 National Institute of Alternative Technologies for Detection, Toxicological Evaluation and Removal of Micropollutants and Radioactive Substances (INCT-DATREM), São Paulo State University (UNESP), Institute of Chemistry, Araraquara, Brazil.

		3 University of Messina (UNIME), CASPE/INSTM and ERIC aisbl, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences (ChiBioFarAm), Messina, Italy.
18:00 – 19:00	CH P2	Poster session (Hallway) P2

04/06/2025		
Room PR - Plenary		
08:50 – 09:50	PL2	Olaf Deutschmann – KIT, Karlsruhe (Germany) *Dynamics in environmental catalysis: from surface coverages to reactor operation* Patrick Lott and Olaf Deutschmann Karlsruhe Institute of Technology (KIT), Karlsruhe (Germany)
10:00 – 10:20	OR55	Stefania Albonetti – University of Bologna, Department of Industrial Chemistry "Toso Montanari", C3 – Center for Chemical Catalysis, CIRI-FRAME, Bologna, (Italy) *Tuning the properties of Pt/Ni supported catalysts for the reductive amination of furfural* F. Liuzzi1, C. Cesari1, N. Dimitratos1,2, S. Zacchini1,2, S. Albonetti*1,2 1 University of Bologna, Department of Industrial Chemistry "Toso Montanari", C3 – Center for Chemical Catalysis, CIRI-FRAME, Via P. Gobetti 85, Bologna, Italy
10:20 -10:40	OR56	Irina Ivanova – Department of Chemistry, Lomonosov Moscow State University, Moscow (Russia) *Catalytic transformation of levulinic acid and C6-carbohydrates to γ-valerolactone over Zr- and Sn-containing BEA zeolites obtained by green ultra-fast synthesis* I.I. Ivanova, R.Yu. Barakov, E. Andriako, I.A. Ermakov, A. Dubtsova Department of Chemistry, Lomonosov Moscow State University, Leninskiye Gory 1, bld. 3, 119991 Moscow, Russia
10:40 – 11:00	OR57	Domenico Licursi – University of Pisa, Department of Chemistry & Industrial Chemistry, Pisa (Italy) *Use of ternary Cu/Zn/La mixed oxides for the hydrogenation/hydrogenolysis of hexyl hexanoate to 1-hexanol aimed at overcoming the issues of chromium-based systems* Domenico Licursi1,*, Leonardo Carmassi1, Nicola Di Fidio1, Sara Fulignati1, Claudia Antonetti1, Anna Maria Raspolli Galletti1 1University of Pisa, Department of Chemistry & Industrial Chemistry, Via Giuseppe Moruzzi, 13, Pisa, Italy.
11:00 – 11:20	Coffee-Break	
11:20 – 12:00	KN7	Stefan Vajda – Department of Nanocatalysis, J. Heyrovsky Institute of Physical Chemistry, Czech Academy of Sciences, Prague (Czech Republic) *CO2 conversion by subnanometer clusters: Control of selectivity by cluster size, composition and support* Stefan Vajda Department of Nanocatalysis, J. Heyrovsky Institute of Physical Chemistry., Czech Academy of Sciences, Dolejškova 2155/3, 18223 Prague, Czech Republic
12:00 – 12:20	OR58	Francesco Mauriello – Dipartimento DICEAM, Università degli Studi Mediterranea di Reggio Calabria, Reggio di Calabria (Italy) *Transfer Hydrogenation of Furfural Under Continuous Flow Conditions by Shvo Catalyst* Maitê Campos1, Luís Adriano Santos Do Nascimento1, Emilia Paone2, Giulia Brufani2,3, Chiara Lenzi4, Andrea Piazzi4, Rita Mazzoni4, Luigi Vaccaro3, Francesco Mauriello*,2 1Universidade Federal do Pará UFPA, Department of Biotechnology, Augusto Corrêa Street, Belém, Brazil. 2 Dipartimento DICEAM, Università degli Studi Mediterranea di Reggio Calabria, Via Zehender, Reggio di Calabria, Italy. 3 Dipartimento di Chimica Biologia e Biotecnologie, Università degli Studi di Perugia, Via Elce di Sotto 8, Perugia 4 Dipartimento di Chimica Industriale, Università degli Studi Alma Mater Studiorum di Bologna, Viale Risorgimento 4, Bologna, Italy.

12:20 – 12:40	OR59	Ricardo Soares – Faculty of Chemical Engineering, Federal University of Uberlândia, Uberlândia, Minas Gerais (Brazil) *Guaiacol hydrodeoxygenation over Ni-Fe supported on Nb2O5 and SiO2 catalysts* Karen Lucia P. Pantoja1, Naiara da Costa Telis1,2, Gisele Cristina R. Silva1, Klaus Raffelt2, Ricardo R. Soares1,* 1 Faculty of Chemical Engineering, Federal University of Uberlândia, Uberlândia, Minas Gerais, Brazil 2 Institute of Catalysis Research and Technology (IKFT), Karlsruhe Institute of Technology (KIT), Hermann-von-Helmholtz-Platz 1. Eggenstein-Leopoldshafen
12:40 – 13:00	OR60	Martino di Serio – Università di Napoli 'Federico II', Chemical Sciences, Napoli (Italy) *Vegetable oil-based 5-membered cyclic carbonates as bio-based building blocks for NIPU foams: catalysis, synthesis and kinetic aspects* Martino Di Serio*,1, Federica Orabona1,2, Tapio Salmi1,2, Vincenzo Russo1,2 1Università di Napoli 'Federico II', Chemical Sciences, IT-80125 Napoli, Italy 2Åbo Akademi, Laboratory of Industrial Chemistry and Reaction Engineering (TKR), FI-20500 Turku/Åbo, Finland
13:00 – 15:00	Lunch Break	
		Short Orals
15:00 – 15:10	SO61	Jennifer Cueto – Thermochemical Processes Unit, IMDEA Energy, Móstoles (Spain) *Catalytic co-pyrolysis of lignocellulose and non-edible vegetable oil using n-ZSM-5: synergistic effects for aromatic hydrocarbons production* Maurizio pagano1, 2, Jennifer Cueto1, Inés Moreno1, 2, David P. Serrano*, 1, 2 1 Thermochemical Processes Unit, IMDEA Energy, 28935 Móstoles, Spain. 2 Chemical and Environmental Engineering Group, Rey Juan Carlos University, 28933 Móstoles, Madrid
15:10 – 15:20	SO62	Camilla Galletti – POLITO, Department of Applied Science and Technology (DISAT), Torino (Italy) *Exploring the technical and environmental potentialities of rice husk-derived biochar for H_2S removal* Francesca Demichelis1*, Premchand Premchand1, Camilla Galletti1, Fabio Alessandro Deorsola1, Raffaele Pirone1, Debora Fino1, Guido Saracco1 1Politecnico di Torino, Department of Applied Science and Technology (DISAT), Corso Duca degli Abruzzi 24, 10129 Torino, Italy
15:20 – 15:30	SO63	Andrea Di Giuliano – University of L'Aquila, Department of Industrial and Information Engineering and Economics, L'Aquila (Italy) *Green syntheses of Ni-Mo-Al catalysts for deoxygenation of vegetable oil into green diesel: green metrics of syntheses and deoxygenation performances* Andrea Di Giuliano *,1, Paola Pietrangeli 1, Stefania Lucantonio 1, Giuseppe Di Vito Nolfi 2, Katia Gallucci 1, & Leucio Rossi 2 1 University of L'Aquila, Department of Industrial and Information Engineering and Economics, Piazzale E. Pontieri 1, L'Aquila, Italy. 2 University of L'Aquila, Department of Physical and Chemical Sciences., Via Vetoio, L'Aquila, Italy.
15:30 – 15:40	SO64	from SO120 Anna Rokicińska – Faculty of Chemistry, Jagiellonian University, Kraków (Poland) *Catalytic behaviour of CuO and Co3O4 phases deposited on hollow @SiO2 and @TiO2 structures in toluene combustion* Anna Rokicińska*,1, Magdalena Żurowska1,2, Radosław Sadowski1, Marek Dębosz1, Piotr Łątka1, Piotr Kuśtrowski1 1 Faculty of Chemistry, Jagiellonian University, Gronostajowa 2, Kraków, Poland 2 Doctoral School of Exact and Natural Sciences, Jagiellonian University, Łojasiewicza 11, Kraków, Poland
		Orals
15:40 – 16:00	OR61	Jacopo De Maron – University of Bologna, "Toso Montanari" Industrial Chemistry Dept., Bologna (Italy) *Promoting zirconia with carbon: enhanced hybrid ZrO2/C ketonization catalyst*

		for the valorization of e-acetic acid Jacopo De Maron*,1, Gaetano Maria D'onofrio1, Eleonora Tosib Randi1, Andrea Fasolini1, Gloria Gottardi2, Francesco Basile1, Fabrizio Cavani1, Tommaso Tabanelli1 1University of Bologna, "Toso Montanari" Industrial Chemistry Dept., Viale Risorgimento 4, Bologna, Italy. 2 Bruno Kessler Foundation, Center for Sustainable Energy., Via Sommarive 18, Trento, Italy.
16:00 – 16:20	OR62	J.A.Z. Pieterse – TNO Sustainable technology for industrial processes, Petten (The Netherlands) *Bifunctional catalysts for sorption-enhanced reaction processes* J.A.Z. Pieterse*, G.D. Elzinga, S. Booneveld, V. Dikic TNO Sustainable technology for industrial processes, 1755 LE Petten, Netherlands
16:20 – 16:40	OR63	Amy Radford – Wolfson Catalysis Centre, University of Oxford, Oxford, England *Mechanistic Link to Electrode Magnetism in Magneto-Electrocatalytic Oxygen Evolution* Amy Radford1, Dorottya Szalay1, Chen Wu2, Yiyang Li1*, Edman Tsang1 1Wolfson Catalysis Centre, University of Oxford, Oxford, England 2School of Materials Science and Engineering, Zhejiang University, Hangzhou, China
16:40 – 17:00	Coffee-Break	
17:00 - 17:20	OR64	Sara Fulignati – University of Pisa, Department of Chemistry and Industrial Chemistry, Pisa (Italy) *Development of an innovative biorefinery process by the one-pot fractionation of defatted cardoon* Sara FULIGNATI*,1, Francesca BARSOTTI1, Nicola DI FIDIO1, Domenico LICURSI1, Stefano FRIGO2, Claudia ANTONETTI1, Anna Maria RASPOLLI GALLETTI1 1University of Pisa, Department of Chemistry and Industrial Chemistry, via G. Moruzzi 13, Pisa, Italy. 2University of Pisa, Department of Energy, System, Territory and Construction Engineering (DESTEC), Largo L.Lazzarino 1, Pisa, Italy
17:20 – 17:40	OR65	Nolven Guilhaume – IRCELYON, UMR5256 CNRS and University Claude Bernard Lyon 1, Villeurbanne (France) *Temperature mapping of fixed-bed reactor in microwave-assisted catalytic dry-reforming of methane over SiC-based catalysts* Andrea Merlo, Léon Thomann, Nolven Guilhaume*, Yves Schuurman IRCELYON, UMR5256 CNRS and University Claude Bernard Lyon 1, Villeurbanne, France
17:40 – 18:00	OR66	Aqsa Noreen – Competence Center for Catalysis, Chemical Engineering, Chalmers University of Technology, Gothenburg (Sweden) *Zn-based catalyst route for Pentaerythritol synthesis: Process related CO2 reduction* Aqsa Noreen.1 Derek Creaser.1, Oleg Pajalic.2, Louise Olsson*1 1 Competence Center for Catalysis, Chemical Engineering, Chalmers University of Technology, SE-422096 Gothenburg, Sweden 2 Perstorp AB, Industriparken, 284 80 Perstorp, Sweden
		Short Orals
18:00 – 18:10	SO65	Giovanni Cardolini Rizzo – POLITO, Department of Applied Science and technology (DISAT), Torino (Italy) *Assessment of low PGM catalyst for Ammonia cracking* Giovanni Cardolini Rizzo *, Carlo Castelli, Alessandro Monteverde. Politecnico di Torino,Department of Applied Science and technology (DISAT), Torino, Italy.
18:10 – 18:20	SO66	Theodoros Lyras – Centre for Research and Technology Hellas, Thessaloniki (Greece) *Parametric investigation of an electrified steam methane reforming process using CFD modelling* Theodoros Lyras *,1, Panagiotis Drosatos 1, Nikos Nikolopoulos 1 1 Centre for Research and Technology Hellas, 6th km Charilaou-Thermi Rd., 57001, Thessaloniki, Greece.

18:20 – 18:30	SO67	Claudia Antonetti – University of Pisa, Department of Chemistry and Industrial Chemistry, Pisa (Italy) *Fully Renewable Diphenolic Acid Production in Batch and Continuous Reactors in the presence of new biomass-derived acid catalysts and LCA assessment of the entire process* Benedetta Bertini1, Domenico Licursi1, Francesco Taddeo2, Alessandra Sessa3, Nicola Scotti4, Raffaele Cucciniello3, Vincenzo Russo2, Anna Maria Raspolli Galletti1, Claudia Antonetti*,1 1University of Pisa, Department of Chemistry and Industrial Chemistry, Via G. Moruzzi 13, 56124 Pisa, Italy. 2University of Naples Federico II, Department of Chemical Sciences, Via Cintia, 80126 Naples, Italy. 3University of Salerno, Department of Chemistry and Biology, Via G. Paolo II 132, 84084 Fisciano, Italy. 4CNR, SCITEC "Giulio Natta", Via C. Golgi 19, 20133 Milano, Italy.
18:30 – 18:40	SO68	Carla Calabrese – CNR, Institute for the Study of Nanostructured Materials (ISMN), Palermo (Italy) *Heterogeneous catalysts based on hybrid POSS nanocages for sustainable applications* Michelangelo Gruttadauria*,1, Carmela Aprile*,2, Francesco Giacalone*,1, Carla Calabrese*,3,§ 1University of Palermo, Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, Viale Delle Scienze, Ed. 17 90128, Palermo Italy. 2 University of Namur, Department of Chemistry, Namur Institute of Structured Matter (NISM), 61 rue de Bruxelles, Namur 5000, Belgium. 3 National Research Council of Italy, Institute for the Study of Nanostructured Materials (ISMN), Via Ugo La Malfa 153, 90146, Palermo, Italy.
18:40 – 18:50	SO69	Enrico Catizzone – Chemical Engineering Catalysis and Sustainable Processes Laboratory, University of Calabria, Rende (Italy) *Gasification of residual biomass in a rotary kiln reactor integrated with radio frequency plasma torch* Enrico Catizzone1, Cesare Freda2, Antonio Villone2, Assunta Romanelli2, Giacinto Cornacchia2 1Chemical Engineering Catalysis and Sustainable Processes Laboratory, University of Calabria, Rende, Italy. 2Laboratory of Thermochemical processes for waste and biomass, Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Trisaia Research Center, Rotondella, Italy.
18:50 – 19:00	SO70	withdrawn

05/06/2025		
Room PR - Plenary		
08:50 – 09:30	KP2	Chemistry Europe Lecturer Annemie Bogaerts – Research group PLASMANT, Department of Chemistry - University of Antwerp, Campus Drie Eiken, Wilrijk-Antwerp, Belgium *Plasma catalysis: Complex chemical and physical mechanisms*
09:40 – 10:00	OR91	Patrick Da Costa – Sorbonne Université, Institut Jean Le Rond d'Alembert, CNRS UMR 7190, Saint-Cyr-L'Ecole (France) *On the structure reactivity and synthesis strategy of mixed-oxides prepared by microwave-assisted solution combustion synthesis – XAS and XRD operando study* Paulina Summa1,2, Katarzyna Świrk Da Costa 3, Li Li 4, Magnus Rønning 3, Monika Motak 2, Marta Gajewska 5, Changwei Hu 4, Patrick Da Costa 1, * 1 Sorbonne Université, Institute Jean Le Rond d'Alembert, CNRS UMR 7190, 2 pl. de la gare de ceinture, Saint-Cyr-L'Ecole, France 2 AGH University of Science and Technology, Faculty of Energy and Fuels, Al. A. Mickiewicza 30, Kraków, Poland 3 Norwegian University of Science and Technology, Department of Chemical Engineering, Sem Sælands vei 4,Trondheim, Norway 4 Sichuan University, Key Laboratory of Green Chemistry and Technology, Ministry of Education, College of Chemistry, Chengdu, PR China 5 AGH University of Science and Technology, Academic Centre for Materials and Nanotechnology, Al. A. Mickiewicza 30, Kraków, Poland
10:00 – 10:20	OR92	Oscar Furst – KIT, Institute for Chemical Technology and Polymer Chemistry, Karlsruhe (Germany) *Comparative assessment of power-to-methane technologies for sustainable synthetic natural gas production* Oscar Furst1, Daniel Schmider2, Julian Dailly2, Olaf Deutschmann*,1 1Karlsruhe Institute of Technology, Institute for Chemical Technology and Polymer Chemistry, Kaiserstraße 12, Karlsruhe, Germany. 2European Institute for Energy Research, Emmy-Noether-Straße 11, Karlsruhe, Germany.
10:20 – 10:40	OR93	Weijie Ji – Key Laboratory of Mesoscopic Chemistry, MOE, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing (China) *Very efficient yet durable urea electrosynthesis via carbon dioxide and nitrate over the defect-rich In2O3 nanotube* Hongjun Fang, Chen-Han Kuo, Hongsheng Yang, Ze Wang, Xinzhen Feng, Weijie Ji* Key Laboratory of Mesoscopic Chemistry, MOE, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210023, China
10:40 – 11:00	OR94	Yanggeun Ju - School of Environment and Energy Engineering, Gwangju Institute of Science and Technology, Gwangju (Republic of Korea) *Enhancing Low-Temperature CO2 Methanation: The Role of Praseodymium Oxide in Ni-Based Catalysts* Yanggeun1, Junseo Park1, Sung Bong Kang*,1 1School of Environment and Energy Engineering, Gwangju Institute of Science and Technology, Gwangju, 61005, Republic of Korea
11:00 – 11:20	Coffee-Break	
		Short Orals
11:20 – 11:30	SO91	Hilmar Guzman – IIT – Istituto Italiano di Tecnologia, Turin (Italy) *Scaling-up the electrocatalytic CO2 capture and conversion to Syngas* Hilmar Guzmána,b*, Federica Zammillo a, Roger Miró d, Alberto Lopera e, Adrianna Nogalska d, María J. López-Tendero e, Miriam Díaz de los Bernardos d, Simelys Hernández a,b,c. a CREST group, Department of Applied Science and Technology (DISAT), Politecnico di Torino, C.so Duca degli Abruzzi, 24, 10129, Turin, Italy. b IIT – Istituto Italiano di Tecnologia, Via Livorno, 60, 10144, Turin, Italy.

		c Clean water center (CWC),Politecnico di Torino, C.so Duca degli Abruzzi, 24, 10129, Turin, Italy. d Eurecat, Centre Tecnològic de Catalunya, Unitat de Tecnologia Química, C/Marcel·lí Domingo, 2, 43007 Tarragona, Spain. e Laurentia Technologies, Avda. Benjamin Franklin, 12 (CEEI), Parque Tecnológico/ 46980-Paterna, Valencia, Spain.
11:30 – 11:40	SO92	Renzo Leeflang – Wolfson Catalysis Centre, Department of Chemistry, University of Oxford, Oxford (UK) *Alkali Metal Promotion in Higher Alcohols and Olefin formation from CO2 Hydrogenation: Shifting the Reaction Mechanism* Renzo A. Leeflang*1, Sijie Huang1, Edman S.C. Tsang1, Guangchoa Li2 1Wolfson Catalysis Centre, Department of Chemistry, University of Oxford, Oxford OX1 3QR, United Kingdom 2 Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong
11:40 – 11:50	SO93	Li Li – Key Laboratory of Green Chemistry and Technology, Ministry of Education, College of Chemistry, Sichuan University (China) *Design of novel inverse ZrO2/Ni catalysts for CO2 utilization: from CO2 to syn-methane* Li Li 1,2, Patrick Da Costa*,2, Changwei Hu*,1 1 Key Laboratory of Green Chemistry and Technology, Ministry of Education, College of Chemistry, Sichuan University, Chengdu 610064, China. 2 Institut Jean Le Rond d'Alembert, Sorbonne Université, CNRS UMR 7190, 2 place de la gare de ceinture, Saint Cyr L'Ecole, France.
11:50 – 12:00	SO94	Luca Lietti – Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano, Milan (Italy) *Storage element – catalyst interaction on different supports for cyclic CO2 capture and methanation* Giuseppe Nava1, Alessandro Porta1, Roberto Matarrese1, Carlo Giorgio Visconti1, Luca Lietti1* 1Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano – Via La Masa 34, 20156 Milan, Italy
		Orals
12:00 – 12:20	OR123	Marco Etzi Coller Pascuzzi – Istituto Italiano di Tecnologia, Center for Sustainable Future Technologies, Torino (Italy) *Maximizing the efficiency of Ir-based oxygen evolution electrocatalysts through Ni doping* Anna Giulia Cardone1,2, Fabrizio Pirri1,2, Marco Etzi*,1 1 Istituto Italiano di Tecnologia, Center for Sustainable Future Technologies, Via Livorno 60, 10144, Torino, Italy. 2 Politecnico di Torino, Dept. of Applied Science and Technology, Corso Duca degli Abruzzi 24, 10129, Torino, Italy.
12:20 – 12:40	OR124	Daniela Cozza – Chemical Engineering Catalysis and Sustainable Processes Laboratory, University of Calabria, Rende (Italy) *Catalytic methane cracking over amorphous and regular structured carbons* Enrico Catizzone, Daniela Cozza, Girolamo Giordano*, Massimo Migliori, Chemical Engineering Catalysis and Sustainable Processes Laboratory, University of Calabria, Rende, Italy.
12:40 – 13:00	OR95	Matteo Guidotti – CNR-SCITEC, Milan (Italy) *Zirconia-based inorganic oxide catalysts for the abatement of highly toxic agrochemicals and chemical warfare agent simulants* Stefano Econdi1, Nicola Scotti1, Filippo Bossola1, Stefano Marchesi2, Chiara Bisio1,2, Fabio Carniato2, Matteo Guidotti*1 1CNR-SCITEC, via Golgi 19, Milan, Italy 2DISIT, University of Eastern Piedmont "Amedeo Avogadro", via Michel 11, Alessandria, Italy
13.00 – 15:00	Lunch Break	
		Short Orals

15:00 – 15:10	SO95	Kristijan Lorber – National Institute of Chemistry, Ljubljana (Slovenia) *CO2 activation dictates catalytic performance on different CeO2 morphologies in the low temperature DRM reaction* Petar Djinović1,2, Kristijan Lorber*,1 1National Institute of Chemistry, Ljubljana, Slovenia. 2 University of Nova Gorica, Nova Gorica, Slovenia.
15:10 – 15:20	SO96	Shokouhallsadat Masoumilari – Department of Civil and Environment Engineering, University of Ulsan, Ulsan (Republic of Korea) *Dual-Function Bi-Based Electrodes for Coupled CO_2 Reduction and Glycerol Oxidation* Shokouh Masoumi1, Zohreh Masoumi1, Daeseung Kyung*,1 1 Department of Civil and Environment Engineering, University of Ulsan, Daehakro 93, Namgu, Ulsan 44610, Republic of Korea
15:20 – 15:30	SO97	Federica Orabona – Åbo Akademi, Laboratory of Industrial Chemistry and Reaction Engineering (TKR), Turku/Åbo (Finland) *CO2 cycloaddition to limonene diepoxide: catalysis, kinetics and mass transfer* Federica Orabona*,1,2, Stefano Napolitano1,2, Veronika D. Badazhkova2, Wander Perez-Sena2, Kari Eränen2, Martino Di Serio1, Dmitry Murzin2, Vincenzo Russo1,2, Tapio Salmi1,2 1Università di Napoli 'Federico II', Chemical Sciences, IT-80125 Napoli, Italy 2Åbo Akademi, Laboratory of Industrial Chemistry and Reaction Engineering (TKR), FI-20500 Turku/Åbo, Finland
15:30 – 15:40	SO98	Andrea Rizzetto – POLITO, Department of Applied Science and Technology (DISAT), Turin (Italy) *Low-content Ru catalysts for efficient atmospheric CO_2 methanation* Andrea Rizzetto, Marco Pietro Mezzapesa, Enrico Sartoretti, Fabio Salomone, Marco Piumetti, Raffaele Pirone, Samir Bensaid* Politecnico di Torino, Department of Applied Science and Technology (DISAT), Corso Duca degli Abruzzi 24, 10129, Turin, Italy.
15:40 – 15:50	SO99	Matteo Maestri – Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano, Milano (Italy) *Deciphering Effects of Nanoparticles Shape and Size on the Structure Sensitivity of the CO2 Methanation Reaction on Ni* Gabriele Spano',1‡ Matteo Ferri,1‡ Raffaele Cheula,1 Matteo Monai,2 Bert M. Weckhuysen,2 Matteo Maestri1* 1Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano, Via La Masa, 34, 20156, Milano, Italy. 2Inorganic Chemistry and Catalysis Group, Institute for Circular and Sustainable Chemistry and Debye Institute for Nanomaterials Science, Utrecht University,
15:50 – 16:00	SO100	Paolo Squillaci – ChiBioFarAm – University of Messina, ERIC aisbl and CASPE/INSTM, Messina (Italy) *Enhancing CO2ER to ethylene over CuO electrodes by Ni and B modification* Paolo Squillaci*, G. Papanikolaou, P. Lanzafame, D. Chillè, S. Perathoner and G. Centi Department of Chemical, Biological, Pharmaceutical and Environmental Sciences (ChiBioFarAm) – University of Messina, ERIC aisbl and CASPE/INSTM, V.le F. Stagno d'Alcontres 31, 98166 Messina, Italy.
16:00 – 16:10	SO101	Alessio Tauro – POLITO, Dept. of Applied Science and Technology, Turin (Italy) *Effect of zeolite acidity on pre-treated Fe-based catalysts for e-fuel production via CO2-modified Fischer-Tropsch Synthesis* Alessio Tauro1, Fabio Salomone*,1, Fabrizio Celoria1, Luca Nodari2, Luca Romagnoletti3, Emanuele Felli4, Raffaele Pirone1, Samir Bensaid1 1 Polytechnic of Turin, Dept. of Applied Science and Technology, Corso Duca degli Abruzzi 24, 10129 Turin, Italy. 2 Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia (ICMATE), Consiglio Nazionale delle Ricerche (CNR), C.so Stati Uniti 4, 35127 Padova, Italy.

		3 API Raffineria di Ancona S.p.A., Via Flaminia 685, 60015 Falconara Marittima (AN), Italy. 4 Italiana Petroli S.p.A., Via Salaria 1322, 00138 Roma, Italy.
16:10 – 16:20	SO102	Luca Lietti – Laboratory of Catalysis and Catalytic Processes, Department of Energy Politecnico di Milano, Milano (Italy) *Promoted Fe catalyst for direct conversion of CO_2 into e-crude* Mattia Piacentini1, Beda Rolandi1, Alessandro Porta1, Luca Lietti1, Carlo Giorgio Visconti1* 1Laboratory of Catalysis and Catalytic Processes, Department of Energy Politecnico di Milano, via La Masa 34, 20156, Milano ITALY
16:20 – 16:30	SO103	withdrawn
16:30 – 16:40	SO104	Kinga Mlekodaj – J. Heyrovský Institute of Physical Chemistry of the CAS, Prague (Czech Republic) *Effective upgrade of CO2 and CH4 to high-value products over iron-containing Al-rich *BEA zeolite* Kinga Mlekodaj1, Kinga Gora-Marek*,2, Karolina Tarach2, Julia Sobalska 2,3, Agnieszka Kornas1, Radim Pilar1, Dalibor Kaucky1, Edyta Tabor*,1 1J. Heyrovský Institute of Physical Chemistry of the CAS, v. v. i., Dolejškova 2155/3, 182 23 Prague 8, Czech Republic. 2Faculty of Chemistry, Jagiellonian University, Gronostajowa 2, 30-387 Kraków, Poland. 3 Doctoral School of Exact and Natural Sciences, Jagiellonian University in Krakow, Łojasiewicza 11, 30-348 Krakow, Poland.
16:40 – 17:00	Coffee-Break	
17:00 – 17:20	OR96	Fabrizio Celoria – Dept. of Applied Science and Technology, Polytechnic of Turin, Turin (Italy) *Kinetic study and modeling for the methanation of CO2 and CO mixed syngas on a Ni/Al2O3 catalyst* Fabrizio Celoria1, Fabio Salomone1, Alessio Tauro1, Isabelle Champon2, Geneviève Geffraye2, Raffaele Pirone1, Samir Bensaid*,1 1Dept. of Applied Science and Technology, Polytechnic of Turin, Corso Duca degli Abruzzi 24, 10129 Turin, Italy. 2Université Grenoble Alpes, CEA, LITEN, DTBH, SCTR, LER, 17 Avenue des Martyrs, Grenoble, F-38054, France.
17:20 – 17:40	OR97	withdrawn
17:40 – 18:00	OR98	Hidenori Yahiro – Graduate School of Science and Engineering, Ehime University, (Japan) *Low Temperature-Water Gas Shift Reaction Using Perovskite-type Oxide Catalyst Containing Cerium Ion* Hidenori Yahiro1*, Noa Yamaguchi1, Satoshi Toshioka1, Hiroyuki Yamaura1, Syuhei Yamaguchi1, Anna Paola Panunzi2, Leonardo Duranti2, Elisabetta Di Bartolomeo2 1Graduate School of Science and Engineering, Ehime University, Matsuyama 790-8577, Japan 2Department of Chemical Sciences and Technologies, University of Rome Tor Vergata, via della Ricerca Scientifica, 00133 Rome, Italy
18:00 – 18:20	OR99	Bin Feng - State Key Laboratory of High-Temperature Gas Dynamics, Institute of Mechanics, Chinese Academy of Sciences, Beijing (China) *Oxygen migration and oxidation pathway for soot oxidation in presence of NO by two-step isotope experiment* Zirui Zhang1,2, Cen Sun1,2, Xiaolin Wei1,2, Shaohua Wu3, Gehan A J Amaratunga4, Feng Bin1,2,*, Wenjun Liang5 1State Key Laboratory of High-Temperature Gas Dynamics, Institute of Mechanics, Chinese Academy of Sciences, Beijing 100190, China; 2School of Engineering Science, University of Chinese Academy of Sciences, Beijing 100049, China; 3 Dalian University of Technology, Dalian 116000, PR China; 4 Department of Engineering, University of Cambridge, CB3 0FA, Cambridge, United Kingdom;

		5 Key Laboratory of Beijing on Regional Air Pollution Control, Beijing University of Technology, Beijing 100124, PR China.
18:20 – 18:40	OR100	Nicoletta Rusta – University of Cagliari, Department of Chemical and Geological Sciences, Cagliari (Italy) *Design of Ceria-based Catalysts via Self-Combustion Approaches for CO2 Conversion to Dimethyl Carbonate* Nicoletta RUSTA1,2*, Valentina Mameli1,2, Stefania Porcu2,3, Aryane A. Marciniak4, Evelyn C. S. Santos5, Odivaldo Cambraia Alves 6, Claudio J. A. Mota4,5,7, Elisabetta Rombi1,2, Carla Cannas1,2 1 University of Cagliari, Department of Chemical and Geological Sciences, Cagliari, Italy. 2 National Interuniversity Consortium of Materials Science and Technology (INSTM), Florence, Italy. 3 University of Cagliari, Department of Physics, , Cagliari, Italy. 4 Universidade Federal do Rio de Janeiro, Escola de Química, Rio de Janeiro, Brasil 5 Universidade Federal do Rio de Janeiro, Instituto de Química, Rio de Janeiro, Brasil 6 Universidade Federal Fluminense, Instituto de Química, Niterói, Brazil 7 INCT Energia & Ambiente, UFRJ, Brazil
		Short Orals
18:40 - 18:50	SO133	Fausto Secci – Department of Chemical and Geological Sciences, University of Cagliari, Monserrato (Italy) *Confined growth of ultrasmall NiO nanoparticles into mesostructured and mesoporous SiO2, γ-Al2O3 and CeO2 supports for CO2 methanation* Fausto Secci1,2*, Nicoletta Rusta1,2, Luciano Atzori1,2, Maria Giorgia Cutrufello1,2, Daniela Meloni1, Carla Cannas1,2, Elisabetta Rombi1,2 1Department of Chemical and Geological Sciences, University of Cagliari, Monserrato (CA), Italy 2National Interuniversity Consortium of Materials Science and Technology (INSTM), Florence, Italy
18:50 – 19:00	SO134	Laura Valentino – Institute for the Study of Nanostructured Materials (ISMN), CNR, Palermo (Italy) *Optimizing Ni-Based Catalysts for Dry Reforming of Methane: Impact of MgO Supports Doped with Fe, Cu, and Ce* L. VALENTINO*,1, G. PANTALEO1, V. LA PAROLA1, A. GIROIR-FENDLER2, L.F. LIOTTA1 1 Institute for the Study of Nanostructured Materials (ISMN), National Research Council (CNR), Via Ugo La Malfa 153, 90146 Palermo, Italy 2Universite Claude Bernard Lyon 1, IRCELYON, UMR 5256 CNRS, 43 Boulevard du 11 Novembre 1918, Villeurbanne 69622, France.
19:00 – 19:10	SO135	Chiara Negri – Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano, Milano (Italy) *A combined operando UV-vis and flow reactor study of the NH3-SCR redox kinetics over Cu-CHA* C. Negri1, N. Usberti1, G. Contaldo1, M. Bracconi1, I. Nova1, M. Maestri1*, E. Tronconi1* Laboratory of Catalysis and Catalytic Processes, Dipartimento di Energia, Politecnico di Milano, 20156 Milano (Italy)
19:10 – 19:20	SO136	withdrawn
19:20 – 19:30	Closing	