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	moved 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

04/06/2025		
Room Massimo - RM		
10:00 – 10:20	OR67	Joanna Gryboś – *Redox Behavior of Manganese Oxide Catalysts in Thermochemical Redox Cycles: Mechanistic Insights from In Situ TEM and DFT Investigations* Joanna Gryboś1, Karol Górecki, Monika Fedyna, Michał Pacia, Zbigniew Sojka 1Faculty of Chemistry, Jagiellonian University, Gronostajowa 2, 30-387 Kraków, Polska.
10:20 – 11:00	KN8	Roberta Villamaina – Johnson Matthey Technology Centre, Blounts Court Road, RG4 9NH, UK *Challenges and performance of Cu-SCR catalysts under H2-ICE conditions* Roberta Villamaina1*, Maria Pia Ruggeri2, Paul Millington1, Husn Islam1, Lisa Allen1, David Bergeal2, Jill Collier1 1Johnson Matthey Technology Centre, Blounts Court Road, RG4 9NH, UK 2Johnson Matthey, Orchard Road, Royston, SG8 5H2, UK
11:00 – 11:20	Coffee-Break	
11:20 – 11:40	OR68	Simone Perego – Istituto Italiano di Tecnologia, Atomistic Simulations, Genoa (Italy) Unraveling the catalytic activity of FeCo alloys for ammonia decomposition via molecular dynamic simulations Simone Perego1*, Luigi Bonati1, Michele Parrinello1 1 Istituto Italiano di Tecnologia, Atomistic Simulations, 16165 Genoa, Italy.

11:40 – 12:00	OR69	Silmina Silmina – Tokyo University of Agriculture and Technology, Graduate School of Bio-Applications and Systems Engineering, Nakacho, Tokyo (Japan) *Bio Oil Steam Reforming over Mesoporous Hexagonal and Noncapsular Ni Nanoparticle Catalyst Prepared Using Post Loading and Co-Assembly Strategy* Silmina1, Naoko Suyama, Kenji Kamiya and Eika W. Qian* 1Tokyo University of Agriculture and Technology, Graduate School of Bio-Applications and Systems Engineering, Nakacho, 2-24-16, Koganei, Tokyo 184-8588, Japan
12:00 – 12:20	OR70	Zbigniew Sojka – Faculty of Chemistry Jagiellonian University, Krakow (Poland) *Decomposition of N_2O on Redox-Tuned Cobalt Spinel Catalysts – Molecular Orbital Resolution of Reaction Mechanism* Leszek Nowakowski, Camillo Hudy, Filip Zasada, Zbigniew Sojka* Faculty of Chemistry Jagiellonian University, ul. Gronostajowa 2, 30-387 Krakow, Poland
12:20 – 12:40	OR71	Felix Ott, RWTH Aachen University, Aachen (Germany) *Monitoring the active site of CeO_2 supported Pd by H_2-D_2 exchange and EXAFS* Felix Ott1, Chalachew Mebrahtu1,2, Regina Palkovits*1,2 1 Institute of Technical and Macromolecular Chemistry, RWTH Aachen University, Aachen, Germany 2 Institute for Sustainable Hydrogen Economy, Forschungszentrum Jülich GmbH, Jülich, Germany
12:40 – 13:00	OR72	Choji Fukuhara - Department of Applied Chemistry and Biochemical Engineering, Graduate School of Engineering, Shizuoka University, Shizuoka (Japan) *Innovative CO_2 recycling system with powerful performance for converting GHG: Multi-stage structured catalyst system for methanation, dry reforming and carbon-capture* Choji Fukuhara*, Yuki Yamada, Yu Nakazawa, Hiroshi Akama, Ryo Watanabe Department of Applied Chemistry and Biochemical Engineering, Graduate School of Engineering, Shizuoka University, 3-5-1 Johoku, Chuo-ku, Hamamatsu, Shizuoka, Japan
13:00 – 15:00	Lunch Break	
		Short Orals
15:00 – 15:10	SO71	Riccardo Colombo – POLIMI, Department of Energy, LCCP group, Milan (Italy) *Surface Carbon Formation and its Impact on Methane Dry Reforming Kinetics on Rhodium-Based Catalysts by Operando Raman Spectroscopy* Riccardo Colombo1, Gianluca Moroni1, Chiara Negri1, Matteo Monai2, Bert M. Weckhuysen2, Matteo Maestri1* 1Politecnico di Milano, Department of Energy, LCCP group, via La Masa 34, 20156 Milan, Italy 2Utrecht University, Inorganic Chemistry and Catalysis Group, Universiteitsweg 99, Utrecht, The Netherlands
15:10 – 15:20	SO72	Elisabetta Petri – Dept. of Chemistry “Giacomo Ciamician”, University of Bologna, Bologna (Italy) *Valorization of different organic waste sources for electrochemical applications: Process and life cycle assessment* E. Petri1, S. El Yamani2,3, F. Capodarca1, A. Primante2,3, A. Contin2.3, F. Soavi1,3* 1Dept. of Chemistry “Giacomo Ciamician”, University of Bologna, Via Selmi 2, 40126, Bologna, Italy 2 Dept. of Physics and Astronomy "Augusto Righi", University of Bologna, Viale Berti Pichat 6/2, 40127, Bologna 3Centre for the Environment, Energy, and Sea - Interdepartmental Centre for Industrial Research in Renewable Resources, Environment, Sea and Energy (CIRI-FRAME), University of Bologna, Viale Ciro Menotti 48, 48122, Marina di Ravenna, Italy
15:20 – 15:30	SO73	Elisabeth Herzinger – KIT, Institute of Catalysis Research and Technology (IKFT), Eggenstein-Leopoldshafen (Germany) *Bimetallic Platinum-Rhenium Catalysts: Enhancing Hydrogen Storage Efficiency through Material Optimization and Synthesis Modification* Elisabeth Herzinger1, Hannah Park1, Jennifer Weimann1, Moritz Wolf*,1,2 1 Karlsruhe Institute of Technology (KIT), Institute of Catalysis Research and Technology (IKFT), Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany.

		2 Karlsruhe Institute of Technology (KIT), Engler-Bunte-Institut (EBI), Engler-Bunte-Ring 1, 76131 Karlsruhe, Germany.
15:30 – 15:40	SO74	Plaifa Hongmanorom – Institute of Condensed Matter and Nanoscience, UCLouvain, Louvain-La-Neuve (Belgium) *Spark-ablated metal nanoparticle catalysts supported on TiO2 for CO2 methanation* Plaifa Hongmanorom1, Damien P. Debecker*,1 1Institute of Condensed Matter and Nanoscience, UCLouvain, Place Louis Pasteur 1, Louvain-La-Neuve, Belgium.
		Orals
15:40 – 16:00	OR73	Ryo Watanabe – Department of Applied Chemistry and Biochemical Engineering, Graduate School of Engineering, Shizuoka University, Hamamatsu, Shizuoka (Japan) *Powerful CO2 methanation system by electrically heating spiral-type structured catalyst* Ryo Watanabe, Kohki Nishide, Hiroshi Akama, Choji Fukuhara* Department of Applied Chemistry and Biochemical Engineering, Graduate School of Engineering, Shizuoka University, 3-5-1 Johoku, Chuo-ku, Hamamatsu, Shizuoka, Japan
16:00 – 16:20	OR74	Angelina Barthelmeß – KIT, Eggenstein-Leopoldshafen (Germany) *Enhancing CO_2 Hydrogenation Efficiency through in situ Formation of Active Species in Carbon Nitride Modified Catalysts* Angelina Barthelmeß,1 Dan Zhao,1 Maik Kahnt,2 Michael Zimmermann,1 Enrico Tusini,1 Timo Van Roje,1 Cherie Hsu,1 Thomas Sheppard,1 Anna Zimina,1 JAN-Dierk Grunwaldt,1 Moritz Wolf1* 1Karlsruhe Institute of Technology, Eggenstein-Leopoldshafen/Germany, 2MAX IV Laboratory, Lund/Sweden
16:20 – 16:40	OR75	Nassima Berroug – Chemical Technologies for Environmental Sustainability Group, Department of Chemical Engineering, Faculty of Science and Technology, University of the Basque Country, Bilbao (Spain) *Nickel acetylacetonate grafted on CaO-modified hydroxyapatite catalysts for enhanced performance in decarbonization processes : Effect of Ni loading* Nassima Berroug*, Miguel A. Gutiérrez-Ortiz, Juan R. González-Velasco, Zouhair Boukha Chemical Technologies for Environmental Sustainability Group, Department of Chemical Engineering, Faculty of Science and Technology, University of the Basque Country UPV/EHU, P.O. Box 644, E-48080, Bilbao, Spain
16:40 – 17:00	Coffee-Break	
17:00 – 17:20	OR76	Catia Cannilla – Institute of Advanced Technology for Energy CNR-ITAE, Messina (Italy) *Effect of the pre-activation conditions on the nature of the active sites generated during CO2 hydrogenation to MeOH over Cu-based catalysts* Catia Cannilla*1, Mariarita Santoro1, Serena Todaro 1, Hanna Solt 2, Ferenc Lonyi 2, Francesco Arena 1, Giuseppe Bonura 1 1Institute of Advanced Technology for Energy CNR-ITAE, S. Lucia sopra Contesse, 5, 98126 Messina, Italy. 2Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Magyar tudósok körútja 2, H-1117, Budapest, Hungary.
17:20 – 17:40	OR77	Giuliano Giambastiani – University of Florence, Dept. of Chemistry "U. Schiff" DICUS, Sesto Fiorentino (Italy) *A Phoenix-like Covalent Triazine Framework as a Selective CO2-to-Formate Electrocatalyst* Giuliano Giambastiani*,1,2 Giulia Tuci,2 Andrea Rossin,2 Claudio Evangelisti,3 Giovanni Valenti,4 Francesco Paolucci,4 Yuefeng Liu5 1 University of Florence, Dept. of Chemistry "U. Schiff" DICUS, Via della Lastruccia 13, Sesto Fiorentino, Italy. 2 Institute of Chemistry of OrganoMetallic Compounds, ICCOM-CNR and Consorzio INSTM, Via Madonna del Piano, 10 - 50019, Sesto Fiorentino, Florence, Italy. 3 Institute of Chemistry of OrganoMetallic Compounds, ICCOM-CNR, Via G. Moruzzi 1 – 56124, Pisa, Italy.

		4 Department of Chemistry "Giacomo Ciamician", University of Bologna, 40126 Bologna, Italy. 5 Dalian National Laboratory for Clean Energy (DNL), Dalian Institute of Chemical
17:40 – 18:00	OR78	Hsin Yu Chen – National Tsing Hua University, Department of Materials Science and Engineering, Hsinchu (Taiwan) *Atomic-scale insights into nanostructured MgO for thermocatalytic CO_2-to-CO conversion* Hsin-Yu Chen1,2, Shih-Yuan Chen*3, Cheng-Hsi Yeh2, Chien-Neng Liao1,4, and Hsin-Yi Tiffany Chen*1,2,4 1National Tsing Hua University, Department of Materials Science and Engineering, Hsinchu 300044, Taiwan. 2National Tsing Hua University, Department of Engineering and Systems Science, Hsinchu 300044, Taiwan. 3National Institute of Advanced Industrial Science and Technology (AIST), Energy Catalyst Technology Group, Energy Process Research Institute (EPRI), 16-1 Onogawa, Tsukuba, Ibaraki 305-8569, Japan. 4College of Semiconductor Research, National Tsing Hua University, Hsinchu 300044, Taiwan.
		Short Orals
18:00 – 18:10	SO75	Luciano Atzori – University of Cagliari, Department of Chemical and Geological Sciences, Monserrato (Italy) *Mesoporous Ni/ZrO2-SiO2 catalysts for the Dry Reforming of Methane* Luciano Atzori*,1,2, Daniela Meloni1, Elisabetta Rombi1,2, M. Giorgia Cutrufello1,2 1University of Cagliari,Department of Chemical and Geological Sciences, Monserrato (CA), Italy. 2National Interuniversity Consortium of Materials Science and Technology (INSTM), Florence, Italy.
18:10 – 18:20	SO76	Jung-Sik Kim – University of Seoul, Department of Materials Science and Engineering, Seoul (Republic of Korea) *Enhanced Photocatalytic Performance of (TiO2-WO3) Supported on Sr4Al14O25:Eu, Dy under Visible Light* Hyun-sung KANG, Jung-Sik KIM* The University of Seoul, Department of Materials Science and Engineering, Seoul 02504, Republic of Korea
18:20 – 18:30	SO77	Neha Choudhary – Institut Jean Le Rond D'Alembert, Sorbonne Université, CNRS UMR 7190, Saint-Cyr-L'Ecole (France) *Ni nanoparticles decorated over Y3+ promoted CeO2 single-atom catalysts for enhanced low-temperature CO2 methanation* Neha Choudhary1, Navdeep Srivastava2, Biplab Ghosh3, Patrick Da Costa*1 1Institut Jean Le Rond D'Alembert, Sorbonne Université, CNRS UMR 7190, 2 Place de la Gare de Ceinture, 78210 Saint-Cyr-L'Ecole, France 2Department of Chemistry, Indian Institute of Technology-Indore, Simrol, Khandwa
18:30 – 18:40	SO78	Maria Córdoba Rodríguez – Technologies for Environmental Sustainability Group, Department of Chemical Engineering, Faculty of Science and Technology, University of The Basque Country UPV/EHU, Bizkaia (Spain) *Novel bimetallic La-Ni and Ba-Ni ceramic foams for dry reforming of methane* María Córdoba*1, Andoni Choya1, Beatriz De Rivas1, Jose Ignacio Gutiérrez-Ortiz1, Rubén López-Fonseca1 1Technologies for Environmental Sustainability Group, Department of Chemical Engineering, Faculty of Science and Technology, University of The Basque Country UPV/EHU, Barrio Sarriena s/n, Leioa, Bizkaia E-48940, Spain.
18:40 – 18:50	SO79	Shafiq Falak – University of Milano-Bicocca, Dept. of Materials Science, Milano (Italy) *Design of nanostructured Cu oxides for the electrocatalytic CO2 reduction* Falak Shafiq*,1 Davide Melotto1, Tatiana Rodriguez-Flores1, Laura Vigni2, Mariangela Longhi2, Marco Montalbano2, Maria Vittoria Dozzi2, Lorenzo Mino3, Roberto Nistico'1 1 University of Milano-Bicocca, Dept. of Materials Science, Via R. Cozzi 55, Milano, Italy.

		2 University of Milano, Dept. of Chemistry, Via C. Golgi 19, Milano, Italy. 3 University of Torino, Dept. of Chemistry and NIS Centre, Via P. Giuria 7, Torino, Italy.
18:50 – 19:00	SO80	Carlo Giorgio Visconti – Dipartimento di Energia, POLIMI, Milano, (Italy) *Unravelling S Poisoning Effects on Ru/Al2O3 CO2 Methanation Catalysts Through in-situ and ex-situ Approaches* Clara Larghi1, Alessandro Porta1, Carlo Giorgio Visconti1, János Szanyi2*, Luca Lietti1* 1 Dipartimento di Energia, Politecnico Di Milano, Milano, 20156, Italy 2 Institute for Integrated Catalysis, Pacific Northwest National Laboratory, Richland, 99352, WA, USA

04/06/2025		
Room ISOLA - RI		
10:00 – 10:20	OR79	Guillaume Aubert – CP2M, University of Lyon1, CPE - CNRS, Villeurbanne (France) *Experimental and modeling of Sorption-Enhancement Reaction Process with in-situ water removal for a methanol production from CO_2* Enrico Antonuccio, David Edouard, Frédéric Bornette, Guillaume Aubert, Pascal Fongarland* 1CP2M, University of Lyon1, CPE - CNRS, 3 Rue Victor Grignard 69100 Villeurbanne, France
10:20 – 10:40	OR80	Juan Jose Villora Pico – School of Chemistry and Chemical Engineering, Queen's University Belfast, Belfast (UK) Enhanced CO_2 Hydrogenation to Hydrocarbons via SIL-Modified Fe-Ru/Al_2O_3 Catalysts: Tailoring Activity and Selectivity Through Support Engineering Juan José Villora-Picó1, Marina Maddaloni2, Ander Centeno-Pedrazo1, Jillian Thompson1, Chunfei Wu1, Nancy Artioli2,*, and Haresh Manyar1,* 1 School of Chemistry and Chemical Engineering, Queen's University Belfast, David-Keir Building, Stranmillis Road, Belfast, BT9 5AG, UK; 2 CEEP Laboratory, Department of Civil Engineering, Architecture, Territory, Environment and Mathematics, University of Brescia, via Branze 38, 25123 Brescia, Italy
10:40 – 11:00	OR81	Samir Bensaid – POLITO, Dept. of Applied Science and Technology, Turin (Italy) *Effect of pre-treatment conditions on Fe-based catalyst for e-fuel production via modified Fischer-Tropsch synthesis* Alessio Tauro1, Fabio Salomone1, Fabrizio Celoria1, Marco Armandi1, 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.
11:00 – 11:20	Coffee-Break	
11:20 – 11:40	OR82	Claudio Contreras Diaz – Pontificia Universidad Católica de Chile, Departamento de Ingeniería Química y Bioprocesos, Escuela de Ingeniería, Santiago (Chile) *Improving Nickel Catalyst Dispersion on Phenol Hydrodeoxygenation by Amine-Assisted Impregnation* Claudio Contreras-Díaz1,2*, Cesar Pazo-Carballo3, Claudio Araya-Lopez1,2, C. Sepulveda4 and Néstor Escalona1,2,3** 1Pontificia Universidad Católica de Chile, Departamento de Ingeniería Química y Bioprocesos, Escuela de Ingeniería, Santiago, Chile. 2Núcleo Milenio en Procesos Catalíticos hacia la Química Sustentable, Santiago, Chile. 3Pontificia Universidad Católica de Chile, Departamento de Química Física, Facultad de Química y Farmacia, Santiago, Chile. 4Universidad de Concepción, Facultad de Ciencias Químicas, Edmundo Larenas 129, Concepción, Chile.

11:40 – 12:00	OR83	Bezawit Zerihun Desalegn – Hanyang University, Department of Chemical Engineering, Seoul (South Korea) *Tuning Multifunctionality for the Co-production of H2, Carboxylic Acids and Electricity in a Multi-purpose Biomass-Fuel Cell* Bezawit Z. Desalegn, and Jeong Gil Seo* Hanyang University, Department of Chemical Engineering, 04763, Seoul, South Korea. Hanyang University, Clean-Energy Research Institute, 04763, Seoul, South Korea.
12:00 – 12:20	OR84	Valérie Meille – IRCELYON, CNRS, UCBL, Villeurbanne (France) *Hydrogen release from perhydrobenzyltoluene: role of the catalyst support* Nataliia Marchenko, Mohamad Kharma, Franck Morfin, Laurent Piccolo, Nuno Rocha Batalha, Valérie Meille * IRCELYON, CNRS, UCBL, 69100 Villeurbanne, France.
12:20 – 13:00	KN9	Andrzej Adamski – Jagiellonian University, Faculty of Chemistry, Kraków (Poland) *Cenosphere-based catalysts active in selected heterogeneous pro-environmental redox reactions* Paweł Rybowicz1, Yana Vitushynska1, Allison Proszowska1,2, Tomasz Polczyk1, Bogdan Samojeden3, Agata Łamacz4, Monika Motak3, Marek Michalik4, Andrzej Adamski*,1 1 Jagiellonian University, Faculty of Chemistry, Gronostajowa 2, 30-387 Kraków, Poland. 2 Jagiellonian University, Faculty of Biology, Gronostajowa 7, 30-387 Kraków, Poland. 3 AGH University of Krakow, Faculty of Energy and Fuels, Mickiewicza Ave. 30, 30-059 Kraków, Poland. 4 Wroclaw University of Technology, Faculty of Chemistry, Gdanska 7/9, 50-344 Wroclaw, Poland.
13:00 – 15:00	Lunch break	
		Short Orals
15:00 – 15:10	SO81	Chiara Aliotta – CNR, ISMN, Palermo (Italy) *Low-critical elements perovskite oxides for clean energy production and CO2 conversion* Chiara Aliotta*1, Francesca Deganello1, Valeria La Parola1, Laura Valentino1, Eleonora La Greca1 and Leonarda Francesca Liotta1 1 CNR, ISMN, Via Ugo La Malfa 153, 90146-Palermo, Italy
15:10 – 15:20	SO82	Luca Cosentino – ISMN-CNR, Palermo (Italy) *Ni-La Perovskite Catalysts for CO_2 Methanation: Uncovering the Structure-Function Correlation* Luca Consentino*,1,2, Miriam González-Castaño3, Luis F. Bobadilla3, Michelangelo Gruttadauria2, Leonarda Francesca Liotta1, José Antonio Odriozola3 1 ISMN-CNR, Via U. La Malfa 153, 900146 Palermo, Italy 2 STEBICEF Department Ed. 17, University of Palermo, Viale delle Scienze, 90128 Palermo, Italy 3 Department of Inorganic Chemistry, University of Seville (ICMS-CSIC), C/Americo Vespucio 49, 41092 Seville, Spain
15:20 – 15:30	SO83	Sven Kureti – Institute of Energy Process Engineering and Chemical Engineering, Chair of Reaction Engineering, TU Freiberg, Freiberg (Germany) *Transient isotopic study of low-temperature NOx reduction by H2 on Pt/Mo/ZrO2 catalyst* Daniel Schröder1, Sven Kureti1,* 1Institute of Energy Process Engineering and Chemical Engineering, Chair of Reaction Engineering, TU Freiberg, Fuchsmuehlenweg 9D, 09599 Freiberg, Germany
15:30 – 15:40	SO84	Andrea Felli – Politechnical Department, University of Udine, Udine (Italy) *A Parametric Study on Ru-CeO2 Catalysts for H2 Production from NH3 Decomposition* Andrea FELLI1, Maila DANIELIS1, Alessandro TROVARELLI1, Sara COLUSSI1 1Politechnical Department, University of Udine, Via del Cotonificio 108, 33100, Udine, IT
		Orals
15:40 – 16:00	OR85	Izabela Kurzydym – Faculty of Chemistry, Biological and Chemical Research Centre, University of Warsaw, Warszaw (Poland) *Overview of ZSM-5, CLI, and FAU catalysts with metallic dimers (Cu, Fe, Zn) and their sensitivity to poisoning by sulfur dioxide (SO2) in the DeNOx process.*

		Izabela Kurzydym*1, Izabela Czekaj2 1Faculty of Chemistry, Biological and Chemical Research Centre, University of Warsaw, ul. Żwirki i Wigury 101, 02-089 Warszaw, Poland 2Department of Organic Chemistry and Technology, Faculty of Chemical Engineering and Technology, Cracow University of Technology, Warszawska 24, 31-155 Cracow, Poland
16:00 – 16:20	OR86	Jean-François Lamonier – Unité de Catalyse et Chimie du Solide (UCCS), Univ. Lille, CNRS, Centrale Lille, Univ. Artois, Lille (France) *Promoting the efficient oxidation of toluene via non-thermal plasma-assisted synthesis of supported cobalt oxide catalysts* Victor Deboos1,2, Savita Kaliya Perumal Veerapandian2, Eliane Ghossein1,2, Jean-Marc Giraudon1, Rino Morent2, Nathalie De Geyter2, Jean-François Lamonier*,1 1Unité de Catalyse et Chimie du Solide (UCCS), Univ. Lille, CNRS, Centrale Lille, Univ. Artois, 59000 Lille, France 2 Unit Plasma Technology (RUPT), Department of Applied Physics Faculty of Engineering and Architecture, Ghent University, 9000 Ghent, Belgium
16:20 – 16:40	OR87	Luciana Lisi – Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili (STEMS) – CNR, Napoli (Italy) *NOx emission control by H2-SCR over Pt-ZSM5 catalyst in mobile applications* Elisabetta M. Cepollaro1, Stefano Cimino1, Michele E. Fortunato1, Luciana Lisi*,1 1Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili (STEMS) – CNR, P.le Tecchio 80 – 80125 Napoli, Italy
16:40 – 17:00	Coffee-Break	
17:00 - 17:20	OR88	Francesco Montanari – University of Florence, Department of Chemistry "Ugo Schiff", Sesto Fiorentino (Italy) *Effective upcycling of Pd(II) waste into an atomically precise Pd(II)-based catalyst for alkaline fuel cells applications* Francesco Montanari*1, Marco Bonechi1,2, Carlotta Cappanni1, Pietro Gentilesca1, Matteo Savastano2,3, Mirko Severi1, Antonio Bianchi1,2, Massimo Innocenti1,2 1University of Florence, Department of Chemistry "Ugo Schiff", Via della Lastruccia 3-13, 50019 Sesto Fiorentino, Italy. 2 National Interuniversity Consortium of Material Science and Technology (INSTM), via G.Giusti 9, 50121, Italy. 3University San Raffaele Roma, Department of Human Sciences for the Promotion of Quality of Life, Via di Val Cannuta 247, 00166 Rome, Italy.
17:20 – 17:40	OR89	Tofik Nagiev – Nagiev Institute of Catalysis and Inorganic Chemistry of Ministry of Science and Education, Baku (Azerbaijan) *Gas-phase selective dehydrodimerization of 3-picoline In the coherent synchronization mode* Nagieva I.T.2, Malikova N.N.1, Ali-zadeh N.I.1, Nagiev T.M.1 1Nagiev Institute of Catalysis and Inorganic Chemistry of Ministry of Science and Education, Baku, Azerbaijan; 2Baku State University, Baku, Azerbaijan
17:40 – 18:00	OR90	Ying Zheng – Western University, Dept. of Chemical and Biochemical Engineering London, Ontario (Canada) *Plasma-Driven Modulation of Metal-Organic Frameworks for CO2 hydrogenation* Nan Zou, Ying Zheng* Western University, Dept. of Chemical and Biochemical Engineering London, Ontario, Canada
		Short Orals
18:00 – 18:10	SO85	Bernardo Patella – University of Palermo, Department of Engineering, Palermo, (Italy) *Fabrication of thermally annealed NiFeS ternary alloy for green hydrogen production* Bernardo Patella1, Salvatore Geraci1, Roberto Luigi Oliveri1, Nadia Moukri1, Giuseppe Aiello1, Filippo Pellitteri1, Cinzia Muriana1, Rosario Miceli1, Rosalinda Inguanta1 1University of Palermo, Department of Engineering, Viale delle Scienze, Palermo, Italy
18:10 – 18:20	SO86	Marta Stucchi – University of Milano, Chemistry Department, Milano (Italy) *Innovative materials for CO2 capture and conversion to e-fuels*

		Marta Stucchi*,1, Valentina Colombo1, Alessia Colombo1, Alberto Vertova1, Claudio Ampelli2, Siglinda Perathoner1. 1University of Milano, Chemistry Department, Via Golgi 19, 20133 Milano, Italy. 2 University of Messina, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, Viale Ferdinando Stagno d'Alcontres 31, 98166 Messina, Italy.
18:20 – 18:30	SO87	Fabio Salomone – University of Calabria, Dept. of Environmental Engineering, Rende (Italy) *Hierarchical zeolites for methanol and dimethyl ether dehydration into light olefins* Emanuele Giglio*,1, Giorgia Ferrarelli1, Fabio Salomone2, Elena Corrao3, Raffaele Pirone2, Samir Bensaid2, Massimo Migliori1, Girolamo Giordano1 1 University of Calabria, Dept. of Environmental Engineering, Via Pietro Bucci 45A, 87036 Rende (CS), Italy. 2 Polytechnic of Turin, Dept. of Applied Science and Technology, Corso Duca degli Abruzzi 24, 10129 Turin, Italy. 3 University of Turin, Dept. of Chemistry, Via Pietro Giuria 7, 10125 Turin, Italy.
18:30 – 18:40	SO88	Shigeo Satokawa – Seikei University, Faculty of Science and Technology, Tokyo (Japan) *CO2 hydrogenation activity over iron carbide catalysts having different crystal structures derived from iron oxalate* Akihide Yanagita, Daisuke Komizu, Haruki Horikoshi, Keigo Tashiro, Shigeo Satokawa* Seikei University, Faculty of Science and Technology, 3-3-1 Kichijoji-kitamachi, Musashino-shi, Tokyo 180-8633, Japan.
18:40 – 18:50	SO89	Shaohua She – Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, Tokyo (Japan) *Effect of Sulfonation Conditions on Performance of Sulfonated Lignin-Based Porous Carbon Catalyst* Shaohua She1, Shunpei Takada1, Kenji Kamiya1, Eika W. Qian*,1 1Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, 2-24-16 Nakacho, Koganei, Tokyo 184-8588, Japan
18:50 – 19:00	SO90	Michela Signoretto – Ca' Foscari University, Department of Molecular Sciences and Nanosystems, Venice (Italy) *Hydrodeoxygenation of isoeugenol catalyzed by Co/biochar catalyst* Lilia Longo*1, Davide Baldassin1, Päivi Mäki-Arvela2, Joan Wärnå2, Mark E. Martinez Klimov2, Olha Yevdokimova2, Kari Eränen2, Dmitry Y. Murzin2, Michela Signoretto1. 1 Ca' Foscari University, Department of Molecular Sciences and Nanosystems, Venice, Italy. 2Åbo Akademi University, Johan Gadolin Process Chemistry Centre, Henriksgatan 2, 20500 Turku/Åbo, Finland