



**Second International
Symposium
“Catalytic Chemistry
of C1 Molecules”**

July 7-10, 2026

Le Touquet-Paris-Plage, France

DRAFT PROGRAM

Invitation and scope

The Scientific and Organizing committees welcome you at the **C1Chem** International Symposium “**Catalytic Chemistry of C1 Molecules**”, which take place 7-10 July 2026, Palais des congrès, Le Touquet- Paris Plage, France.

The ongoing societal transition from fossil fuels to renewable energy sources requires the development of energy-efficient, selective and waste-free catalytic processes for C1 molecules, which occur under mild conditions. The symposium is intended to offer an update of recent innovations in both fundamental and applied aspects of catalytic utilization of **CO₂, CO, methane, methanol, formaldehyde and formic acid**. The particular focus will be on **hydrogen production and storage** using C1 molecules. The symposium will emphasize catalyst design, thermocatalysis, homogeneous catalysis, heterogeneous catalysis, photocatalysis, electrocatalysis, catalyst characterization, modelling, kinetics, process design and intensification. Our goal is to enable researchers from different fields to exchange views and to create a synergy of knowledge.

Symposium topics:

- ✓ **CO₂ upgrading** (hydrogenation, reduction, CO₂ for oxidation/dehydrogenation, carbonates);
- ✓ **Catalytic valorization of methane** (methane coupling, partial oxidation, reforming);
- ✓ **Methanol-mediated hydrocarbon synthesis from CO and CO₂**;
- ✓ **Fischer-Tropsch synthesis**;
- ✓ **Synthesis of methanol and dimethyl ether**;
- ✓ **Synthesis of substituted natural gas (SNG)**;
- ✓ **Conversion of methanol to hydrocarbons**;
- ✓ **Hydrogen production and storage using C1 molecules**.

Program

The symposium program includes 6 Invited Plenary Lectures (**45 min without Q&A**), 11 Keynote Lectures (**30 min presentation + 10 min Q&A**), 93 Oral Presentations (**15 min presentation + 5 min Q&A**), 37 Short Oral Presentations (**5 min presentation + 5 min Q&A for session**) and about 40 Posters. The presentations have been selected by peer-reviewing on the basis of the submitted abstract. The accepted abstracts are published in the symposium proceedings.

Publication

After the symposium, the authors of oral presentations and selected posters will be invited to submit full manuscripts to a special issue of **Catalysis Today**.

Sponsors

The C1Chem Symposium organizers are grateful to the sponsors **Malvern Panalytical, Micromeritics, REALCAT, Université de Lille and Elsevier**, who have kindly agreed to provide financial support for the organization of this meeting.

Poster Session

The poster session will be held on July 7 after 18:30. The posters will be available through the whole symposium for presentation and discussion. The Scientific Committee will attribute the Best Poster Award during the Closing Ceremony.

Awards

Awards will be given by Scientific and Organizing Committees for the best oral presentations and best poster.

ORAL SESSIONS

PL Plenary Lecture, KL Keynote Lecture, O Oral presentation, SO Short Oral presentation, P Poster

Tuesday July 7, 2026 - Morning

8:00-9:00	Registration		
9:00-9:20	Opening ceremony Auditorium Victor Boucher		
9:20-10:05	Plenary 1 Tao Zhang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China Single-Atom Catalysts: Concept and Applications in C1 Chemistry		
10:05-10:25	Coffee break		
	Session Victor Boucher CO₂ Hydrogenation to Methanol	Session Schuman Photocatalysis & Solar Fuels	Session Adenauer Zeolites & Aromatics
10:25-10:45	Keynote 1 D. Levin, ExxonMobil Technology and Engineering A Mechanistic Investigation into Basic Metal Oxide Co-Catalyst Functionality in Methanol Conversion Reactions	O4 S. Ali, Prince Sultan University, Saudi Arabia Advanced Metal chalcogenides-Based Photocatalysts for Efficient CO ₂ Reduction and Solar Energy Conversion	O7 X. Shang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China Formation of valuable aromatics through alkylation reactions on zeolite catalysts
10:45-11:05		O5 F. Zhang, Dalian Institute of Chemical Physics (DICP), China Redox-mediated Z-scheme overall water splitting over photocatalysts with wide visible light utilization	O8 Y. Yuan, Xiamen University, China CO ₂ Hydrogenation Intermediates for Selective Aromatic Methylation
11:05-11:25	O1 X. Fan, The University of Manchester, UK Cooperative Role of Nonthermal Plasma and Copper-Zinc Catalysts in the Hydrogenation of CO ₂ to Methanol	Keynote 2 J. Lu, University of Science and Technology of China, China Precise Design of Metal-Oxide Interfaces for Efficient CO ₂ and Syngas Conversions	O9 X. Ou, University of Nottingham Ningbo China, China Decoupling Zeolites Properties: Unravelling the Hierarchical Impacts on CO ₂ Hydrogenation to Aromatics
11:25-11:45	O2 J.M. Gallo, King Abdullah University of Science and Technology, Saudi Arabia Indium-based catalysts for CO ₂ hydrogenation: opportunities and challenges		O10 S. Damasceno, University of São Paulo, Brazil Catalyst Design and Process Optimization for the Methanol-to-Aromatics Reaction: Impact of Particle Size and Hierarchical Structure
11:45-12:05	O3 J.M. Christensen, Technical University of Denmark, Denmark Elucidation of the mechanism of CO ₂ conversion to methanol through isotope labelling experiments	O6 G.S. García, Universitat de Valencia, Spain Tailoring WO ₃ Photoanodes for Solar-Driven CO ₂ Reduction to C1-C2 products	Keynote 3 N. Nesterenko, Sulzer Chemtech, Switzerland Upgrading One-Carbon Molecules: A New Toolbox for Strategic Impact
12:05-12:25	SO: CO₂ Hydrogenation to SAF SO1 C. Wang CO/CO ₂ hydrogenation to jet fuel components SO2 D. Alsaadi Enhancing Iron-Copper Catalysts for Direct CO ₂ Hydrogenation toward Sustainable Aviation Fuel SO3 B. Rolandi Product distribution control in CO ₂ Fischer-Tropsch synthesis toward sustainable aviation fuel via Fe-Zeolite tandem catalysis	SO: Methane activation SO4 J. Ma Catalytic Dilute Methane Abatement via O ₂ Activation into Reactive Surface Oxygen on Copper Zeolites SO5 Z. Wei Revisiting the Catalytic Role of supported Na ₂ WO ₄ for Oxidative Coupling of Methane Reaction SO6 M. Fu Mechanisms of Copper-Based Catalysts in methane partial oxidation and VOCs Catalytic Oxidation	
12:25-14:00	Lunch		

Tuesday July 7, 2026 - Afternoon

Auditorium Victor Boucher			
Plenary 2 Bert Weckhuysen, Utrecht University, The Netherlands Understanding Reaction and Deactivation Mechanisms in the Catalytic Activation of CO, CO ₂ and CH ₄ as Revealed by Spatiotemporal Operando Spectroscopy			
	Session Victor Boucher CO₂ electroreduction	Session Schuman Methane oxidation/activation	Session Adenauer CO₂ conversion
14:00-14:45			
14:50-15:10	O11 H. Wang, Utrecht University, the Netherlands Visualizing the Restructuring and Self-healing Ability of Copper Electrodes during Electrochemical CO ₂ Reduction	Keynote 4 P. Xie, Zhejiang University, China Rational Design of Dual-atom Catalysts for Methane Valorization	O19 H. Chen, Xiamen University, China Sustainable pathway for the synthesis of methylamine from CO ₂ , H ₂ and NH ₃
15:10-15:30	O12 X. Cai, Shenzhen University, Shenzhen, China Development of catalysts for multi-electrons involved electrocatalytic reactions		O20 K. Natte, Indian Institute of Technology Hyderabad, India CO ₂ Valorization toward Selective N-Formylation of Nitroarenes and Aminoarenes under Homogeneous Titanium Catalysis
15:30-15:50	O13 A. Muthuperiyanayagam, Queen Mary University of London, UK Amorphous Catalysts for CO ₂ Electroreduction	O15 H. Jeong, Korea Institute of Materials Science (KIMS), Republic of Korea Palladium oxide nano-cluster catalysts with tailored surface structures for high-performance methane oxidation	O21 T. Karnaukhov, National Institute of Chemistry, Slovenia Efficient CO ₂ hydrogenation into light olefins over synergistic Fe-based catalysts
15:50-16:10	SO: CO₂ Reduction & C-C Coupling SO7 Z. Teimouri Integrating Atomic Scale Catalyst Design with Transport Engineering for Stable and Efficient CO ₂ Electrolysis to CO in a Membrane Electrode Assembly SO8 J.C. Cruz Methane Suppression and Selective Oxygenate Production in CO ₂ Hydrogenation over Ni-Ga Intermetallic Catalysts SO9 A. Pérez-Calvo Catalytic Valorization of CO ₂ via Oxidative Dehydrogenation of Ethylbenzene: Linking Catalyst Performance, Electrochemical Properties and Techno-Economic/Sustainability Assessment	O16 P. Granger, University of Lille, France Importance of the protocol used to incorporate Pd to Co-spinel structure in methane oxidation: Optimal interaction and kinetic consequences	SO: Zeolites & Aromatics SO13 S. Huang Optimizing gallium hydrides of GaZrO _x -ZSM-5 for aromatic synthesis and toluene methylation using CO ₂ hydrogenation intermediates SO14 O. Toyin Site dynamics reduces the induction period of methanol conversion SO15 M. Ozden Optimization of Catalyst-Adsorbent Bed Configurations for Sorption-Enhanced CO ₂ Hydrogenation to DME
16:10-16:30	Coffee break		
16:30-16:50	Keynote 5 K. Cheng, Xiamen University, China Methane Upgrading to C ₂ + Hydrocarbon Chemicals via Relay Catalysis at Mild Conditions	O17 Y. Cao, Southwest Petroleum University, China Highly Selective Methane Photooxidation to Formaldehyde by Constructing Symmetry-Breaking Sites	O22 F. Zhang, Sichuan University, China Polyethylene upgrading to aromatics by coupling with CO ₂
16:50-17:10		O18 S. Kim, King Abdullah University of Science and Technology	O23 J. Vachaud, Univ. Grenoble Alpes, France

		<i>(KAUST), Saudi Arabia</i> Syngas economy for rapid decarbonization of fuels and chemicals	Kinetic modelling and catalyst development for direct CO ₂ valorisation to light olefins
17:10-17:30	O14 Z.-J. Zhao Theoretical guided design of Zn modified Cu catalyst for CO ₂ electrochemical reduction	SO: CO₂ Capture, Hydrogen Carriers & Process Intensification SO10 C. Zhou Revisit Amine Regeneration in Post-Combustion CO ₂ Capture Process From a Catalytic Point of View SO11 S. Gigot Transition-metal based catalysts for the dehydrogenation of Formic Acid SO12 Y. Guo Hydrogen Production via Catalytic Reforming over NiAl ₂ O ₄ Spinel Catalysts	SO: Advanced CO₂ Hydrogenation Catalysts & Functional Oxides SO16 D. Mateo Oxygen Vacancy-Engineered In ₂ O ₃ @Carbon Catalysts from Steam-Pyrolyzed MOFs for Photo-thermal CO ₂ Hydrogenation SO17 C. Spyros Designing High-Surface Area Ordered Mesoporous In ₂ O ₃ for efficient CO ₂ hydrogenation SO18 W. Liu Unveiling Nb ₂ O ₅ as a Catalytically Functional Oxide for Thermocatalytic CO ₂ Hydrogenation
17:30-18:30	Round Table		
18:30-21:00	Poster session and cocktail reception		
21:00-22:00	A guided pedestrian tour (optional)		

Wednesday 8, 2026 - Morning

9:00-9:45	Auditorium Victor Boucher Plenary 3 Ye Wang, Xiamen University, China Relay Catalysis for Precise Conversions of Syngas and CO ₂ Involving C-C Coupling		
	Session Victor Boucher RWGS	Session Schuman CO₂ hydrogenation	Session Adenauer Fischer-Tropsch, syngas-to-olefins & SAF
9:50-10:10	Keynote 6 B. Guichard, IFPEN, France Syngas Transformation into Chemicals and Biofuels: From Fundamental Approaches to Industrial Applications, Bridging the Past and the Future	O26 P. Da Costa, Sorbonne Université, France Yttrium-promoted Ni/CeO ₂ catalyst for plasma-assisted CO ₂ valorization reaction	O32 L. K/Bidi, Yale University, United States Probing adsorption sites diversity and reactivity in colloidal Iron Carbide nanoparticles for Fischer-Tropsch Synthesis
10:10-10:30		O27 J. Hong, South-Central Minzu University, China Impact of Oxide Promoters on Active Phase Dispersion and Cu-ZnO Interfacial Sites in CO ₂ Hydrogenation to Methanol	O33 C. Jimenez, Helmholtz-Zentrum Berlin für Materialien und Energie (HZB), Germany Mn Promotion and Surface Dynamics of Co(0001) Model Catalysts in Fischer-Tropsch Synthesis
10:30-10:50	Coffee break		
10:50-11:10	Keynote 7 L.M. Rossi, University of São Paulo, Brazil The critical role of metal-carbides for CO ₂ hydrogenation to hydrocarbons and oxygenates over metal-oxide catalysts	O28 L. Gavrilovic, Institute for Energy Technology, Norway Effect of ZrO ₂ and In ₂ O ₃ on Cu-based catalyst in Sorption-enhanced CO ₂ hydrogenation to methanol	O34 Y. Han, Dalian Institute of Chemical Physics, China Hydroxy-induced cobalt oxides for syngas to light olefins
11:10-11:30		O29 F. Bihl, Université de Strasbourg, Strasbourg, France Experimental Investigation of Sorption-Enhanced Methanol Synthesis: Impact of Sorbent Properties on Conversion and Selectivity	O35 Y. Wisse, Lille University, France Achieving High Activity and Stability in In ₂ O ₃ -ZrO ₂ /SAPO-34 Catalysts for Syngas-to-Olefins Conversion: The Role of Indium Mobility

11:30-11:50	O24 J. Hu , <i>Max Planck Institute for Chemical Energy Conversion, Germany</i> Low Temperature Reverse Water-Gas Shift Enabled by Magnetically Induced Catalysis	O30 C. Liu , <i>Shaanxi Normal University, China</i> Gallium nitride catalyzed CO ₂ hydrogenation to dimethyl ether as a primary product	O36 B. Rolandi , <i>Politecnico di Milano, Italy</i> Spatial-temporal characterization of activation effects on phase evolution and performance of a FeZnCuK catalyst in CO ₂ hydrogenation to hydrocarbons
11:50-12:10	O25 F. Nicolini , <i>Politecnico di Milano, Italy</i> Green syngas production via Reverse Water Gas Shift	O31 S. Singh , <i>Indian Institute of Technology Indore, India</i> Aqueous-phase hydrogenation of CO ₂ to formate over diruthenium catalysts	O37 X. Zhang , <i>Utrecht University, The Netherlands</i> Pathway-dependent carburization under competing carbon and hydrogen fluxes: Insights from cobalt catalysts for CO ₂ hydrogenation
12:10-12:30	SO: CO₂ Methanation SO19 A. Szymaszek-Wawryca Ni-Ce mixed oxides promoted with Mg or Ca and supported on natural aluminosilicates as novel CO ₂ methanation catalysts SO20 K. Ray Low temperature CO ₂ methanation over Mn-promoted Ni and Ru catalysts for energy efficient C1 conversion SO21 O. Laurent High performance Ni/CeO ₂ catalysts for CO ₂ methanation synthesized via aerosol-assisted sol-gel method	SO: Fischer-Tropsch SO22 C. Chatelier Copper doping in FeK catalysts for direct CO ₂ hydrogenation SO23 Y. Fan Al Promotion Regimes in Iron Carbides for CO ₂ Hydrogenation SO24 Z. Yang CO ₂ Hydrogenation to Linear Alpha Olefins over Fe-based Composite Catalysts	SO: Methane Pyrolysis, Reforming & Hydrogen Production SO25 L. Rishi Catalyst Design and Optimization for Methane-to-Hydrogen Conversion Using FeCo/Al ₂ O ₃ SO26 A. Horváth Methane pyrolysis on NiMo/MgO catalysts: how the preparation method governs bimetallic interactions that lead to high activity
12:30-14:00	Lunch		
14:00-17:30	Social program: guided visit of Nausicaá, the largest aquarium in Europe		
17:30-21:00	Young scientist party in the restaurant "La Plage des Pirates" (optional)		

Thursday July 9, 2026 - Morning

9:00-9:45	Auditorium Victor Boucher Plenary 4 Beatriz Roldán Cuenya , <i>Fritz Haber Institute of the Max Planck Society (FHI), Germany</i> CO ₂ Conversion Catalysts: More Alive than Previously Thought		
	Session Victor Boucher Single-Atom & Advanced Catalyst Design	Session Schuman Methane Reforming & Coupling	Session Adenauer Electrochemical fuels, hydrogen and value-added products
9:50-10:30	O38 A. Mironenko , <i>University of Illinois Urbana-Champaign, United States</i> Methanol Carbonylation to Acetic Acid on Ultradispersed ReOx Sites: Insights into the Reaction Mechanism from First-Principles Calculations and Microkinetic Modeling	O44 F. Tao , <i>University of California, USA</i> Transformations of Methane and Ethane to Methanol and Acetic Acid under Mild Conditions	O49 J. Albero , <i>Institute of Chemical Research (ITQ), Spain</i> Ni and Mo atom pairs as active sites for urea production from simultaneous CO ₂ and NO ₃ ⁻ reduction by pulsed electrocatalysis
	O39 G. Fang , <i>Lille University, France</i> In-situ Decorating Titania with Ultrasmall Zr-MOF for	O45 J. Mielby , <i>Technical University of Denmark, Denmark</i> Preventing Coke-Formation During Dry Reforming of Methane	O50 X.Z. Fu , <i>Shenzhen University, China</i> Electrocatalytic co-generation of electrical energy/hydrogen and value-added chemicals

	Quantitative Methane Photocatalytic Oxidation		
10:30-10:50	O40 C. Duan, Nanjing University, China Metal-organic architectures for catalytic CO ₂ reduction	SO: Advanced Reactor SO30 R. Ishibashi Rational support design for high energy conversion efficiency in microwave-driven dry reforming of methane SO31 N.S. Altinsoy Ferromagnetic catalyst development for inductively heated syngas production by reverse-water gas shift reaction SO32 F. Varsano Structured Co–Ni Catalysts Prepared by Additive Manufacturing for Induction-Heated Methane Bi-reforming	SO: Operando, Dynamic Catalysts & Reaction Control SO35 G. Groppi Thermal control in conductive structured Fischer–Tropsch reactors: expanding the high-conversion operating window SO36 A. Rabee Oxide Support Control of Sodium-Induced Promotion and Deactivation during the Reverse Water-Gas Shift over Cu-Based Catalysts SO37 F. Rocha-Antezana Monitoring Structural Reconstruction of Perovskites during Chemical Looping Dry Reforming by Operando Synchrotron XRD and XAS
10:50-11:10	Coffee break		
11:10-11:30	O41 B. Gu, Yunnan University, China Lattice-Shrunk TiO ₂ with an Au Cocatalyst Enables Highly Efficient and Selective Photocatalytic Coupling of Methane to C ₂ + Hydrocarbons	O46 I. Melnikov, Ghent University, Belgium Unravelling the Transients in Hydrogen Production during Methane Pyrolysis over BP2000	Keynote 8 M. Saeys, Ghent University, Belgium First-principles microkinetic study of the effect of the CO/CO ₂ ratio on the selectivity of Fischer-Tropsch synthesis
11:30-11:50	O42 A. Wang, Dalian Institute of Chemical Physics, China Development of Heterogeneous Single-Atom Catalysts for Ethylene Methoxycarbonylation	O47 Y. Chen, Zhejiang University, China Ca Atomic Monolayer on CeO ₂ : An Electron Reservoir Steering Oxygen Activation for Selective Methane Coupling	
11:50-12:10	O43 A. Fedorov, ETH Zürich, Switzerland The Role of Point Defects on the Fischer-Tropsch Catalysis with Mo-based MXenes	O48 Y. Luo, Université de Strasbourg, France Ni-based catalysts for dry reforming of methane: Multi-fuel electrode SOFC	O51 J.L. Luo, Shenzhen University, China Perovskite Electrocatalysts for Synthesis of High-value Fuels in Solid Oxide Cells
12:10-12:30	SO: Plasma Catalysis & Non-Thermal Activation SO27 A.R. Garcia Kinetic modelling of methane conversion in DBD plasma-catalysis under isothermal conditions SO28 Z. Ye From Powder Interfaces to Structured Electrodes Product Partitioning in Plasma-Catalytic CH ₄ /CO ₂ Conversion SO29 M. Wisniewski Non-thermal plasma application in selective CO ₂ reduction	SO: C–C Coupling SO33 W. Lin Heterogeneously Coordinated Dual-Co Single Atom Sites on Carbon Nanotubes Drive C–C Coupling toward Ethanol Formation SO34 R. Güttel Hydrogenation of CO in Presence of CO ₂ using Ru-based Fischer-Tropsch Synthesis	
12:30-14:00	Lunch		

Thursday July 9, 2026 - Afternoon

Auditorium Victor Boucher			
Plenary 5 Ding Ma , <i>Peking University, China</i>			
Low-Carbon Emission Iron-Based Fischer–Tropsch Synthesis Process			
	Session Victor Boucher Photo/electrochemical and hybrid photo-catalytic systems	Session Schuman Zeolites, MTH/MTO and hydrocarbon upgrading	Session Adenauer CO₂ hydrogenation, methanation and sustainable fuels
14:00-14:45			
14:50-15:10	O52 P. Boruah , <i>CNRS, France</i> MOP-POM Assemblies Post-functionalized with Re(I) for Highly Selective Photocatalytic CO ₂ Reduction to CO	Keynote 9 P. Fongarland , <i>Université Claude-Bernard Lyon 1, France</i> From experiment to optimization by simulation of the SERP methanol synthesis from CO ₂ /H ₂	O66 X. Wang , <i>King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i> Highly Selective Photothermal CO ₂ Hydrogenation to C ₂ + Hydrocarbons over bimetallic Fe-based Catalysts
15:10-15:30	O53 W. Li , <i>South China University of Technology, China</i> Rich Electron Site CO ₂ Reduction Photocathode Coupled with Ethylene Glycol Reforming Photoanode for Integrated Formate Production		O67 J. L. Santos , <i>King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i> Powering Sustainable Aviation: Machine Learning–Guided Catalysts for CO ₂ -to-SAF
15:30-15:50	O54 Y. Hu , <i>South China University of Technology, China</i> Design and Mechanistic Investigation of Photo/electrochemical CO ₂ Reduction-Oxidation Coupled System	O59 Z. Qin , <i>China University of Petroleum (East China), China</i> Tailored design of ZSM-5 zeolites for catalysis	O68 N. Iwanjko , <i>ETH Zürich, Zürich, Switzerland</i> Efficient Chemical Space Exploration in Fischer-Tropsch Synthesis from CO ₂ via Mathematically Optimized High Throughput Experimentation
15:50-16:10	Coffee break		
16:10-16:30	Keynote 10 M. Zabilskiy , <i>Clariant, Germany</i> Green Methanol Synthesis: From Academic Discovery to Industrial Reality	O60 A. Kordek , <i>Jagiellonian University, Poland</i> Unraveling Reaction Intermediates in the MTH Process Using MCR-ALS Analysis of FT-IR Spectroscopy Data	O69 Y. He , <i>University of Toyama, Japan</i> Synergistic Fe-Co Catalysts for Efficient CO ₂ Hydrogenation
16:30-16:50		O61 M. Vanni , <i>Paul Scherrer Institute, Switzerland</i> Enhanced alkene productivity in methanol-to-hydrocarbons conversion using a secondary catalyst component and hydrogen co-feeds	O70 S. Paul , <i>Centrale Lille, France</i> Development of Ru-based supported catalysts for the hydrogenation of biogas CO ₂ into methane using high-throughput experiments
16:50-17:10	O55 M. Nguyen , <i>CNRS, France</i> Heterojunction Engineering Powered by CIGS Solar Cells for Boosted Photocatalytic Methane Coupling	O62 M. Mielniczuk , <i>Paul Scherrer Institut, Switzerland</i> Mechanistic understanding of regeneration by steam of methanol-to-olefins catalysts	O71 C. Molinet-Chinaglia , <i>Université de Toulouse, France</i> Selectivity Shifts in CO ₂ Methanation over Subnanometer Ru/TiO ₂ Catalysts
17:10-17:30	O56 N. Alhajjar , <i>Lille University, France</i> Femtosecond Study of the Methane Photoconversion in Me/NPW/TiO ₂ Photocatalysts	O63 X. Gong , <i>King Abdullah University of Science and Technology, Saudi Arabia</i> Spatiotemporal Activation of Ni/Zeolite Catalysts Enables Isoparaffin-Rich Gasoline	O72 B. Bai , <i>Utrecht University, The Netherlands</i> Enhancing Low-Temperature CO ₂ Methanation via Nickel Electronic Structure Engineering

17:30-17:50	O57 Y.F. Zhu, University of New South Wales, Australia Examining the effect of a plasmonic metal promoter for visible light-assisted thermal CO ₂ -Fischer Tropsch Synthesis over Fe supported on HZSM-5	O64 D.H. Kim, Seoul National University, Republic of Korea Systematic Optimization of NiO Promoters for Mo/HZSM-5 Catalysts in Methane Dehydroaromatization: From Particle Size Control to Interfacial Engineering	O73 S. Xing, Guangzhou Institute of Energy Conversion, CAS, China Surface engineering of nickel oxide cluster on indium oxide for driving methanol synthesis from CO ₂ hydrogenation
17:50-18:10	O58 R. Tokarz-Sobieraj, Jerzy Haber Institute of Catalysis and Surface Chemistry, Poland Model DFT model studies of CH ₄ reforming on metal heteropolyacid titania photocatalysts	O65 V. De Waele, CNRS, France Methanol photoconversion in zeolite activated by femtosecond pumping of hot-vibrational states	O74 F. Braun, Ulm University, Germany Investigating the Influence of Metal-Support Interactions on CO ₂ hydrogenation with periodic-transient Experimentation
19:30-23:00	Symposium dinner at Le Touquet Golf Resort (optional)		

Friday July 10, 2026 - Morning

9:00-9:45	Auditorium Victor Boucher Plenary 6 Matthias Beller, Leibniz-Institut für Katalyse (LIKAT), Germany Green Carbonylation Reactions: Challenges and Opportunities to Impact the Chemical Industry		
	Session Victor Boucher Sustainable CCU and unconventional activation	Session Schuman Mechanistic, operando & modelling	Session Adenauer Emerging catalyst and process concepts
9:50-10:10	Keynote 11 G. Skorikova, Netherlands Organization for Applied Scientific Research (TNO), the Netherlands Driving CO ₂ conversion with sorption enhancement	O80 P. Vanaraja Ambeth, University of Queensland, Australia Role of B-Site Substitution on Lattice Oxygen Activation of Ba–Sr–Co Perovskites for Hydrogen Production in a Chemical Looping System	O87 O.M. Gazit, Israel Institute of Technology -Technion, Israel CO ₂ hydrogenation over mixed MnCo catalyst – effect of metal valence on performance
10:10-10:30		O81 S. Loridant, Université Claude Bernard Lyon 1, France Oxide-zeotype bifunctional catalysts efficient for the conversion of CO to light olefins	O88 D. Wu, Zhengzhou University, China Spatial Confined Single-atom Ru catalyst for Efficient CO ₂ Hydrogenation to Formate
10:30-10:50	O75 P. Schuehle, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany Sustainable methanol production from wet biomass waste in a novel mild and competitive process	O82 Z. Zuo, Shanghai Institute of Organic Chemistry, Shanghai LMCT Catalysis for selective functionalizations of strong bonds	O89 L. Zubeir, Netherlands Organization for Applied Scientific Research (TNO), the Netherlands Integrating CO ₂ conversion and ammonia reforming
10:50-11:10	Coffee break		
11:10-11:30	O76 F. Morfin, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON), France Low-Temperature Ni and Re-based Dual-Function Material for Sustainable Integrated CCU-Methanation	O83 S. Yasuda, University Toyama, Japan NiFe ₂ O ₄ –Fe ₂ O ₃ Interfacial Engineering Breaking the Activity–Selectivity Trade–Off CO ₂ hydrogenation to ethanol	O90 J. Wang, Technical University of Denmark, Denmark Mechanistic Insight into High-Temperature Reverse Water-Gas Shift over Mn-Based Spinel Catalysts
11:30-11:50	O77 F. Kishimoto, University of Tokyo, Japan	O84 F. Ivars-Barceló,	O91 J. Han, Dalian Institute of Chemical Physics,

	Microwave-induced atomic scale hot spots for enhanced catalytic reactions	<i>UNED University, Spain</i> Deciphering the atomic-scale evolution of Pd(Ag)-Fe ₃₋₆ O ₄ nanocomposites during low-temperature methane partial oxidation	<i>China</i> Dynamic Ga(III)/GaH _x Interconversion in Ga-MFI Zeolites Enables High-Efficiency CO ₂ -Cyclohexane Coupling to Aromatics
11:50-12:10	078 S. Raseale, University of Cape Town, South Africa When the support talks back – rWGS control via Fe _x Ni supported on overlayers γ-Al ₂ O ₃	085 D. Tuncer, Ghent University, Belgium Role of Chabazite Support and Single Atom Vanadium Site Interactions in CO ₂ -Assisted Propane Dehydrogenation	092 K. Qi, Dalian Institute of Chemical Physics, China Unlocking CO ₂ electrolysis to C ₃ products via electrolyte supersaturation
12:10-12:30	079 C. Wang, Max-Planck-Institut für Kohlenforschung, Germany Mechanical Force Unlocks CO ₂ Reactivity on Hexagonal Boron Nitride	086 Q. Gu, Eindhoven University of Technology, The Netherlands Regulating Dynamic Coordination Environments in Pt/CeO ₂ Single-Atom Catalysts	093 E. de la Torre Miranda, Lille University Liquid metals for CO ₂ reduction to CO and formic acid
12:30-12:50	Closing ceremony, announcements and presentation of awards		
12:50-14:15	Lunch		

Poster Session

P1	I. Abdellah, Université de Lorraine, France	A Sustainable, Metal-Free Route to Amides via Visible-Light ConPET Carbonylation of Alkyl Iodides
P2	G. Assaad, Lille University, France	Hydrogen spillover for highly efficient hydrogenation of anthraquinone over Pd/TiO ₂ for H ₂ O ₂ synthesis
P3	A. Braga, Instituto de Química-Universidade de São Paulo, Brazil	Optimizing selectivity and lifetime in Methanol-to Aromatics by creating defects in H-ZSM-5 catalysts
P4	B. Chatelier, University Grenoble Alpes, France	Thermodynamic Enhancement CO ₂ -FTS
P5	Y. Chen, Zhejiang University, China	Surface-Confined Radical Mediation for Ultra-High-Yield Oxidative Dehydrogenation of Ethane to Ethylene
P6	N. Featherstone, Ghent University, Belgium	e-SAF: Innovative Process Integration for CO ₂ conversion to Sustainable Aviation Fuels
P7	R. Fernandez-Domene, Universitat de Valencia, Spain	Tailoring WO ₃ Photoanodes for Solar-Driven CO ₂ Reduction to C ₁ -C ₂ products
P8	E. Hoffmann, Institute of Chemical Reaction Engineering FAU-Erlangen, Germany	Syngas Production from Biogenic Aqueous Formic Acid via Coupled Reaction Pathways
P9	A. Hosoi Kimura, University of São Paulo, Brazil	Tailoring Cobalt Active Sites on Graphitic Carbon Nitride for Selective CO ₂ Hydrogenation to Alcohols
P10	Q. Jiang, GuangZhou Institute of Energy Conversion	Direct Synthesis of Aromatics for Jet Fuel by Integrating CO ₂ -FTS and Toluene Alkylation Reaction
P11	K. Kalita, Indian Institute of Technology Indore, India	Ru catalysts for reversible formic acid dehydrogenation and CO ₂ hydrogenation: Ligand tuned catalytic activity
P12	M. Koothupalakkal Manojkumar, University of Strasbourg, France	Development of catalytic materials for methanol synthesis from renewable carbon
P13	A. Kordek, Jagiellonian University in Kraków, Poland	Catalytic Upgrading of CO ₂ and CH ₄ to Oxygenates over Fe-FER zeolite
P14	M. Mendes, University of São Paulo, Brazil	Synthesis of CZA catalysts by a one-pot mechanical route: a novel methodology for a classic methanol synthesis application
P15	E. Montejano Nares, UNED, Spain	Methane and CO ₂ Transformation into Ethanol under Mild Conditions over Pd(Ag)-Fe ₃₋₆ O ₄ Catalysts: Structural and Electronic Dynamics

P16	J. Moszczynska , <i>Nicolaus Copernicus University, Poland</i>	From Capture to Conversion: C@C Nanocomposites for CO ₂ Valorisation
P17	C. Pietrogiacomini , <i>Sapienza University of Rome, Italy</i>	Ni supported on Ca-modified ZrO ₂ catalysts: influence of ZrO ₂ crystalline phases on Oxidative Dry Reforming of CH ₄
P18	R. Sanchez-Tovar , <i>Universitat de Valencia, Spain</i>	Co/Co ₃ O ₄ Heterojunction Catalysts for Selective Photoelectrochemical CO ₂ -to-Formate Conversion
P19	L. Sommaruga , <i>Università degli Studi di Milano, Italy</i>	ZrO ₂ -based tandem catalysts for CO ₂ to DME conversion
P20	M. Szymaszek , <i>AGH University of Krakow, Poland</i>	Rice-Husk Silica-Supported CO ₂ Methanation Catalysts: Solution combustion synthesis vs hydrotalcite co-precipitation
P21	X. Yao , <i>Institute of Science Tokyo, Japan</i>	Acidity Tuning of AEI-Type Zeolite Catalysts for Methanol-to-Olefins Performance
P22	X. Yu , <i>Utrecht University, Netherlands</i>	Quantifying Structural and Dipole–Dipole Coupling Effects in Coverage-Dependent CO Infrared Spectra on Pt
P23	D. Bi , <i>Nanyang Normal University, China</i>	Engineering S-scheme ZnIn ₂ S ₄ /CuInS ₂ on Flexible Substrate for Selective Photothermal CO ₂ Reduction to CO
P24	F.J. Platero Moreno , <i>King Abdullah Science and Technology University, Saudi Arabia</i>	Comparative Hydrogenation Strategies for Converting CO ₂ -Derived Oil into Sustainable Aviation Fuel
P25	M. Ali , <i>Université du Littoral Côte d'Opale, France</i>	Shaping of Ni-Co catalyst for up-scale biogas dry reforming
P26	M. Tayyab , <i>King Fahd University of Petroleum and Minerals, Saudi Arabia</i>	Regulating redox sites for photocatalytic phenylcarbinol conversion and H ₂ production on lattice-matched Schottky junction
P27	M. Ali , <i>Université de Strasbourg, France</i>	Iron-Based Catalysts for Sustainable CO ₂ Conversion via the Reverse Water Gas Shift Reaction (RWGS)
P28	H. Wang , <i>Guangzhou Institute of Energy Conversion, China</i>	Direct Catalytic Hydrogenolysis of Cellulose to Methane over Ru/C under Mild Conditions
P29	T. Wu , <i>Nanyang Technological University, Singapore</i>	Studies on Metal Oxide-Based Heterogeneous Catalysts for Aqueous Phase CO ₂ Hydrogenation to Alcohols
P30	B. Berger , <i>ETH Zürich, Switzerland</i>	Fe ₂ O ₃ - A Novel SOMC Platform to Study Bimetallic Fe Carbide FTS Catalysts
P31	S. Fujii , <i>University of Toyama, Japan</i>	The particle effect of ZrO ₂ -SiO ₂ supported Co-Mn catalysts for ethylene co-feeding Fischer-Tropsch Synthesis toward Sustainable Aviation Fuel
P32	B. Solsona , <i>Universitat de Valencia, Spain</i>	CO ₂ assisted oxidative dehydrogenation of ethylbenzene over MoVTaNbO mixed oxides with the M1-orthorhombic phase
P33	Y. Stiefel , <i>ETH Zürich, Switzerland</i>	Alkali Metal Doping of Cobalt-Based Catalysts for CO ₂ Hydrogenation
P34	M. Claeys , <i>UCLouvain, Belgium</i>	Effect of preparation method and copper promotion on the acidity and activity of Fe-ZSM-5 catalysts in mild conditions for methane oxidation
P35	Y. M. Lucas , <i>Federal University of Ceara, Brazil</i>	Effect of Niobium Oxide Support on the Performance of Cu–ZnO Catalysts for CO ₂ Hydrogenation to Methanol
P36	Z. Zhang , <i>CNRS, France</i>	CO ₂ Hydrogenation to Methanol within the OBIWAN Project