10th Finnish Young Scientist Forum on Catalysis (FYSFC 2026)
16 April 2026

Day program Rooms 207 and 204 (Kokoussiipi/Conference Centre), Messukeskus Helsinki		
9:30–9:55	Coffee	Room 207
9:55–10:00	Day program opening	Room 207
	Oral presentations by young catalysis scientists I: *Environmental catalysis — CO_2 conversion and emissions control*	Room 207
10:00–10:15	**Laura Annunen** (University of Oulu) — Fabrication of Freeze-Casted NiCu-Based Cryogel Catalysts for the RWGS Reaction	
10:15–10:30	**Florian Rathmann** (VTT) — Plasmon-Enhanced CO_2 Methanation over Au@Ru/TiO_2 via Nanoscale Control of Ru Shell Thickness	
10:30–10:45	**Tytti Ristikaarto** (University of Oulu) — Deactivation of Fe-based NH_3-SCR Catalysts	
10:45–11:00	**Abhinash Kumar Singh** (VTT) — Integration of Pd based catalyst inside MW plasma for oxidation of methane	
11:00–12:15	Lunch break (self-paid)	
12:15–13:00	Invited speaker: **Dr. Pascal Raybaud** (IFP Energies Nouvelles) — Valuable atomic scale learnings from the computational approach on heterogeneous catalysts	Room 207
	Oral presentations by young catalysis scientists II: *Atomic scale insights to environmental catalysis*	Room 207
13:00–13:15	**Bhumi Arunkumar Baraiya** (University of Jyväskylä) — Identification of Active Sites for CO_2 Conversion on ZnO/Cu(111) Catalysts	
13:15–13:30	**Haixian Yan** (University of Helsinki) — Electronic Structure Engineering of δ-MnO_2 via Multi-Cation Co-Doping for Efficient PMS Activation	
13:30–14:30	Poster presentations by young catalysis scientists and coffee	**Room 204 (note the room change)**
	Oral presentations by young catalysis scientists III: *Cutting-edge catalyst synthesis and characterization*	Room 207
14:30–14:45	**Eelis Ketola** (Åbo Akademi) — Intricate Catalyst Design by Additive Manufacturing	
14:45–15:00	**Manoj Kumar Ghosalya** (University of Oulu) — Advanced Ambient Pressure X-ray Photoelectron Spectroscopy (APXPS) at the University of Oulu: A Powerful Platform for Operando Surface and Electrochemical Interface Studies	
15:00–15:30	Invited speaker: Oral presentation by **the Finnish Catalysis Society Best Doctoral Thesis Award recipient**	Room 207
15:30	Day program closing	Room 207
16:00	Finnish Catalysis Society annual meeting	Room 207

Poster presentations	
P1	**Uswa Shahid** (Åbo Akademi) — Ru/C Catalysts on 3D-Printed α-Al_2O_3 Gyroid Supports for Lignin Reductive Depolymerization
P2	**Olha Yevdokimova** (Åbo Akademi) — Production of Sustainable Aviation Fuel Precursors by Aldol Condensation of Cyclopentanone and Furfural on Ce-Based Catalysts
P3	**Abdul Rehman Khan** (University of Oulu) — Waste derived MOFs based photocatalyst for Solar Fuel Production
P4	**Mehdi Hassan Milu** (Åbo Akademi) — Mesoporous Materials for Direct Oxidation from Methane to Methanol
P5	**Luis A. Gallego-Villada** (Åbo Akademi) — Synthesis of methanol from direct methane oxidation over Cu-ZSM-5 catalysts

P6	**Pablo Lujan** (National University of Engineering) — Hydrogen production by biogas tri-reforming over $NiTiO_3$ catalysts with La/Ce doping
P7	**Marcelo Díaz** (National University of Engineering) — Structural and catalytic effects of La and Ce doping on $NiTiO_3$ for CO_2 methanation
P8	**Enrico Marchi** (Åbo Akademi) — Sorption enhanced CO_2 methanation
P9	**Salvatore Capasso** (Åbo Akademi) — Modelling of carbon dioxide methanation in radial flow reactor
P10	**Nelly Mollehuara** (University of Oulu) — Life cycle assessment of Methane Production through CO_2 Hydrogenation: A comparative analysis
P11	**Andres Barreiro** (Åbo Akademi) — Sustainable Production of Cyclic Carbonates from CO_2 and Renewable Biosources: Process Development from Laboratory Scale toward Industrial Feasibility
P12	**Jessica Ekholm** (VTT) — Studying the effects of different CeO_2-based catalysts and additives in the synthesis of dimethyl carbonate from methanol and CO_2
P13	**Wayne Kipngeno Korir** (Åbo Akademi) — Human-Guided LLM Approach for Literature-Grounded Bifunctional CO_2-to-DME Catalyst Design
P14	**Rasmus Ikonen** (University of Jyväskylä) — Application of machine learning potentials to diffusion of light hydrocarbons in SAPO-34
P15	**Sanni Tuunainen** (University of Eastern Finland) — Impact of Gas Deactivation on 13X zeolite CO_2 adsorption capacity
P16	**Niko Virkki** (VTT) — Direct heated E-reactor for ammonia reforming
P17	**Kristian Chen** (VTT) — Kinetics of catalytic ammonia cracking over Ru catalysts
P18	**Abdul Shahid** (Åbo Akademi) — Ozonation of urea