

# 13<sup>th</sup> International Conference “Fuel Science - From Production to Propulsion”

# Program

Eurogress / Monheimsallee 48, 52062 Aachen  
June 3 to 5, 2025



# TUESDAY, 03.06.2025

	08:00	Registration	
	08:30	Brüsselsaal: Keynote Session I	
	08:55	Welcome and Introduction	
	09:40	Keynote I eFuels – on the Road to R100 Matthias Moras   Porsche AG	
	10:25	Coffee Break	
	11:00	Brüsselsaal: Catalysis	K2: Exhaust Aftertreatment
	11:25	Fuels and Chemicals from Renewable H <sub>2</sub> and CO <sub>2</sub> Ralf Peters   Forschungszentrum Jülich GmbH	HCN Formation Pathways from Formaldehyde During the Selective Catalytic Reduction of NOx with NH <sub>3</sub> over Cu-SSZ-13 Shengming Tang   RWTH Aachen University
	11:50	Solid Molecular Catalysts for Multi-Energy Piezo-Photocatalysis Sarah Brettschneider   RWTH Aachen University	Microwave Assisted Heterogeneous Catalysis - From Exhaust After-Treatment to CO <sub>2</sub> Utilization Daniel Röhrens   RWTH Aachen University
	12:15	Synthesis of Gasoline and Kerosene by Co-Oligomerization of Light Olefins Ulrich Arnold   Karlsruhe Institute of Technology	Exploring the Challenges of Exhaust Gas Aftertreatment for Dimethyl Ether as a Carbon Neutral Fuel in Internal Combustion Engines Tom Padeken   RWTH Aachen University
	12:40	Simple but Effective Adaptive Catalysis Triggered by CO <sub>2</sub> Bhaskar Paul   MPI for Chemical Energy Conversion	Enhancing N <sub>2</sub> O Decomposition via Impregnation of Co <sub>3</sub> O <sub>4</sub> Catalysts with High-Surface-Area Supports Ahed Abouserie   RWTH Aachen University
	Lunch Break		
	14:00	Brüsselsaal: Fuel Design	K2: Electro- & Biochemistry
	14:25	Energy and Process Network Flux Analysis: Screening and Synthesis of Sustainable Chemical Production Processes Marian Panofen   RWTH Aachen University	Status and Potential of Electrochemical Nitrogen Reduction to Ammonia for On- and Off-Grid Operation Michael Rix   RWTH Aachen University
	14:50	The Power of Waste - Integrated Recycling of PLA to Fuel Additives Moreno Ascani, Lisa Burkart   RWTH Aachen University	Accelerated Optimization of Solid-Liquid Interfaces for Sustainable Organic Electrosynthesis Pavlo Nikolaienko   Helmholtz Institute Erlangen-Nürnberg for Renewable Energy
	15:15	When Innovation Meets Biology: Zebrafish Reveal the Neurodevelopmental Impact of Novel Fuels Angelina Miller   RWTH Aachen University	Tailoring Gas Diffusion Electrodes through Additive Manufacturing Lukas Portheine   RWTH Aachen University
	15:40	A Breath of Change: Human Lung Cell Exposure to a Bio-Hybrid Fuel Vapor Jonas Daniel   RWTH Aachen University	Integrated Electro-Biocatalysis for Chemical Production in Flow-System Guiyeoul Lim   RWTH Aachen University
	16:05	Coffee Break	Electrochemical Reduction of Nitriles – Efficient and Resilient Siegfried R. Waldvogel   MPI for Chemical Energy Conversion
	16:20	Brüsselsaal: From Inspiration to Innovation With Impact – Startup Session Powered by koala	
	18:00	MechSyn HaberSolutions Simplyfined ETB FXC Engineering GmbH Power2Polymers koala	
	Foyer: Poster Party		

Registration

08:00



Brüsselsaal: Keynote Session II

Keynote III Defossilizing Industrial Clusters: The Role of Alternative Carbon Sources Andrea Ramirez Ramirez | TU Delft

08:30

Keynote IV Power-to-X from a System Perspective – Current Trends and Future Prospects Falko Ueckerdt | PIK Potsdam

09:15

Coffee Break

10:00



Brüsselsaal: Synthesis

Sustainable E-Methanol Production Using Corn and Its Waste in Renewable Energy Systems Renston Jake Fernandes | King Abdullah University of Science and Technology

10:30

Formic Acid: Integrating Yeasts, Enzymes & Ruthenium Catalysts for Products From Renewables Nina Klos | Forschungszentrum Jülich GmbH

Biogenic Propane as Hydrogen Source for Jet fuel Production from Used Cooking Oil Testafdet Gebregziabher | IMDEA Energy

Proof-of-Concept in Lab-Scale Miniplant: Integrated Reaction and Separation System for Cyclic Acetal Synthesis Moritz Haas, Niklas Gaelings | RWTH Aachen University

Synthesis of Regenerative Methanol Based on Bio- and Sewer Gas Benedikt Bender | OWI Science for Fuels gGmbH

Lunch Break

12:35



Brüsselsaal: System Perspective

The Importance of Liquid Fuels for Reducing the GreenHouse gas Emissions of the European Vehicle Fleet Hendrik Poetting | RWTH Aachen University

14:00

Cross-Sectoral Life-Cycle Assessment of Hydrogen and Ammonia Usage Karan Anand | RWTH Aachen University

K2: Ammonia

Assessing Policy Impacts on Renewable Fuel Supply Chain Design in the European Transport Sector Mohammad Zardoshti | RWTH Aachen University

Designing Nickel-Based Catalysts for Low-Temperature Direct Ammonia Fuel Cells Jakub Zabrzyczyk | Warsaw University of Technology

10:30

The Challenge of Energy Transition in the Transport Sector Kati Görsch | Deutsches Biomasseforschungszentrum gemeinnützige GmbH

Fuel Flexible and Reversible Solid Oxide Cells: A Path to Scalable Maritime Energy Solutions, from Cell to System Level Sreejoe Kaniyamparambil | RWTH Aachen University

10:55

Fuel Standardization: Overcoming Challenges for the Introduction of New Fuels – The Case of Methanol and DME Werner Willems | Tec4Fuels

Optimization of Ammonia Combustion Chemistry using Extensive Existing and Newly Acquired Kinetic Data Sanket Girhe | RWTH Aachen University

11:20

Coffee Break

16:05



Brüsselsaal: Keynote Session III

Keynote V Past and Present Transitions in Transportation Fuels André L. Boehman | University of Michigan

16:30

Keynote VI HVO100 and E20 – Pathways for a CO<sub>2</sub>-Neutral Future for Combustion Engines Drives Thomas Garbe | Volkswagen AG

17:15

Conference Dinner La Fabrik

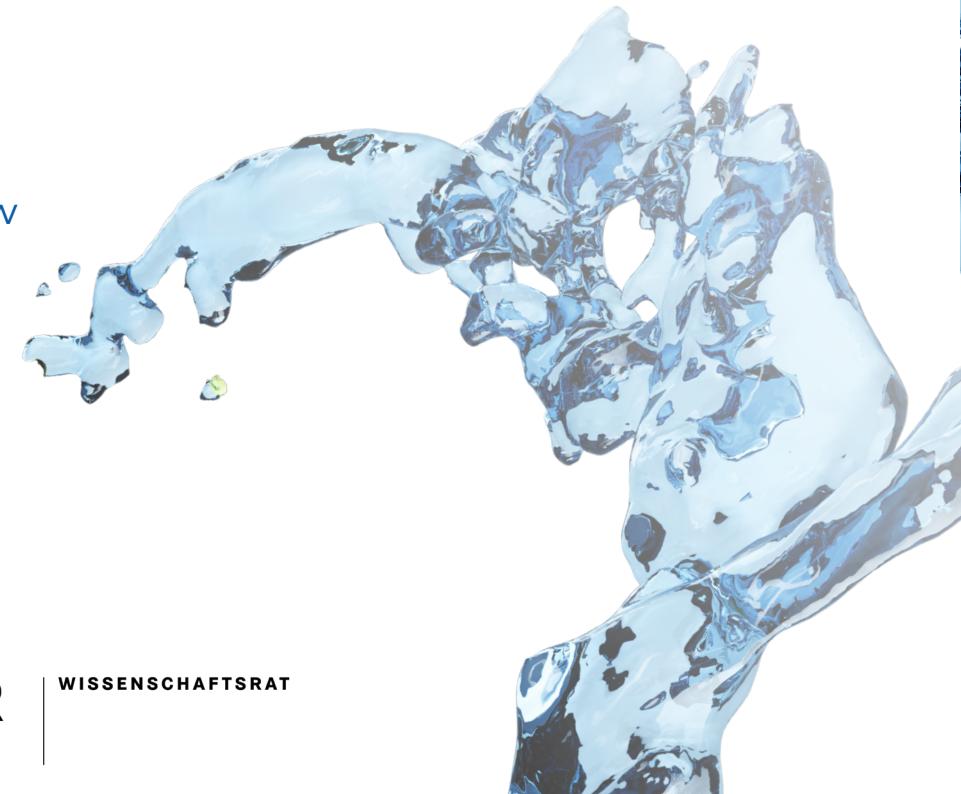
19:00



# THURSDAY, 05.06.2025

	08:00	Registration
		Brüsselsaal: Keynote Session IV
	08:30	Keynote VII Better than Photosynthesis? Engineering New Ways to Convert Carbon with Synthetic Biology Tobias Erb   MPI for Terrestrial Microbiology
	09:15	Keynote VIII Combustion Specificities of Ammonia SI Engine Christine Rouselle   Université d'Orléans
	10:00	Coffee Break
		Brüsselsaal: FSC Report
	10:30	FSC Introduction & Report
	11:30	Closing Remarks / Poster Prize & Presentation Prize
	12:00	Lunch Break
		Tagungstreff
	12:45	International Advisory Board Meeting Members Only

Find the Conference App below



# Save the Date

23. - 25.06.2026

To stay up to date, feel free to visit our website for the latest news and announcements or leave a like on our social media pages.



## Contact

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