

Fuel Science - From Production to Propulsion

7th International Conference

Call for Papers and Posters



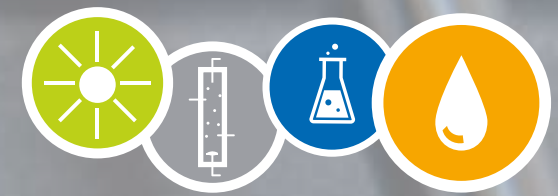
Be part of the conference “Fuel Science – From Production to Propulsion” – the well-known conference on fuel science which is now held for the first time by the new Cluster of Excellence “The Fuel Science Center – Adaptive Conversion Systems for Renewable Energy and Carbon Sources”! This conference is open to participants from science and industry

interested in challenges and solutions regarding novel biofuels and synthetic fuels from regenerative energy and alternative carbon sources. The conference focuses on chemical transformation of regenerative electricity and various carbon sources, molecular interactions and clean combustion systems. It will take place from **May 13th to 15th, 2019 in Aachen, Germany.**



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We would like to invite you to contribute to this conference with either an oral presentation or a poster of your work in the below mentioned fields. Please use our template (download-link) to send in a short abstract of your topic and preferred presentation type (oral or poster) to the Cluster Office (info@fuelcenter.rwth-aachen.de) by latest February 17th, 2019. You can also find the template by scanning the QR-Code below. There is no need to hand in an extended abstract this year! You will be informed by March 1st, 2019 if your abstract has been accepted. In case of any questions regarding the submission or the conference in general, please do not hesitate to contact the Cluster Office. More information on the FSC and the Cluster Office can be found on www.fuelcenter.rwth-aachen.de

Information on the Cluster of Excellence “The Fuel Science Center”

The Cluster of Excellence “The Fuel Science Center – Adaptive Conversion Systems for Renewable Energy and Carbon Sources” (FSC) has just recently been established at RWTH Aachen University. The Cluster generates fundamental knowledge as well as novel scientific methodologies to replace today’s fossil fuel-based static scenario by adaptive production and propulsion systems that are based on renewable energy and carbon resources under dynamic system boundaries. The fundamental research in FSC aims to integrate renewable electricity with the joint utilization of bio-based carbon feedstocks and CO₂ to provide high-density liquid energy carriers (“bio-hybrid fuels”), which enable innovative engine concepts for highly efficient and clean combustion.

FSC capitalizes on achievements of the Cluster of Excellence “Tailor-Made Fuels from Biomass” to act as a structuring element at RWTH Aachen University and its partner institutions. Together with the Forschungszentrum Jülich and the Max-Planck-Institute for Chemical Energy Conversion as well as the MPI für Kohlenforschung at the Campus Mülheim a.R., a world-class research environment will be established. FSC strengthens disciplinary competences in natural sciences, engineering sciences and social sciences and converges them in a dynamic team science approach.



The following topics will be addressed in separate sessions during the conference:

- Synthetic, alternative fuels by utilization of regenerative electricity and carbon dioxide
- System perspective & sustainable value chains
- Impact of renewable fuels on environment, economics, and society
- Catalytic synthesis and conversion of biomass-based streams in combination with other renewable resources to platform molecules and fuels
- Combustion process and exhaust gas aftertreatment optimization of renewable fuels
- Mixture formation and ignition processes of renewable fuels

For the first time, there will be a dedicated session for **Co-Optimization of Fuels & Engines (Co-Optima)** - an initiative of the U.S. Department of Energy (DOE), nine national laboratories and industry that aims to simultaneously transform both transportation fuels and vehicles in order to maximize performance and energy efficiency, minimize environmental impact, and accelerate widespread adoption of innovative combustion strategies.

Save the Date

“Fuel Science - From Production to Propulsion”
7th International Conference
of the Cluster of Excellence
“The Fuel Science Center”

**May 13th to 15th, 2019, Eurogress
Aachen, Germany**

Confirmed Invited Speakers

The conference sessions will be completed by keynote lectures from experts of all addressed disciplines:

- **Ulrich Kramer**, Technical Specialist „Advanced & Alternative Fuels“, Research and Advanced Powertrain Engineering, Ford-Werke GmbH, Germany
- **Robert Wagner**, Director of National Transportation Research Center, Oak Ridge National Laboratory, US
- **Gonzalo Guillén Gosálbez**, Reader in Process Systems Engineering, Imperial College of Science, Technology and Medicine, United Kingdom
- **Benjamin K. Sovacool**, Professor of Energy Policy, University of Sussex, United Kingdom, Professor of Business and Social Sciences, Aarhus University, Denmark
- **Mark Koper**, Professor of Catalysis and Surface Chemistry, Leiden University, The Netherlands

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