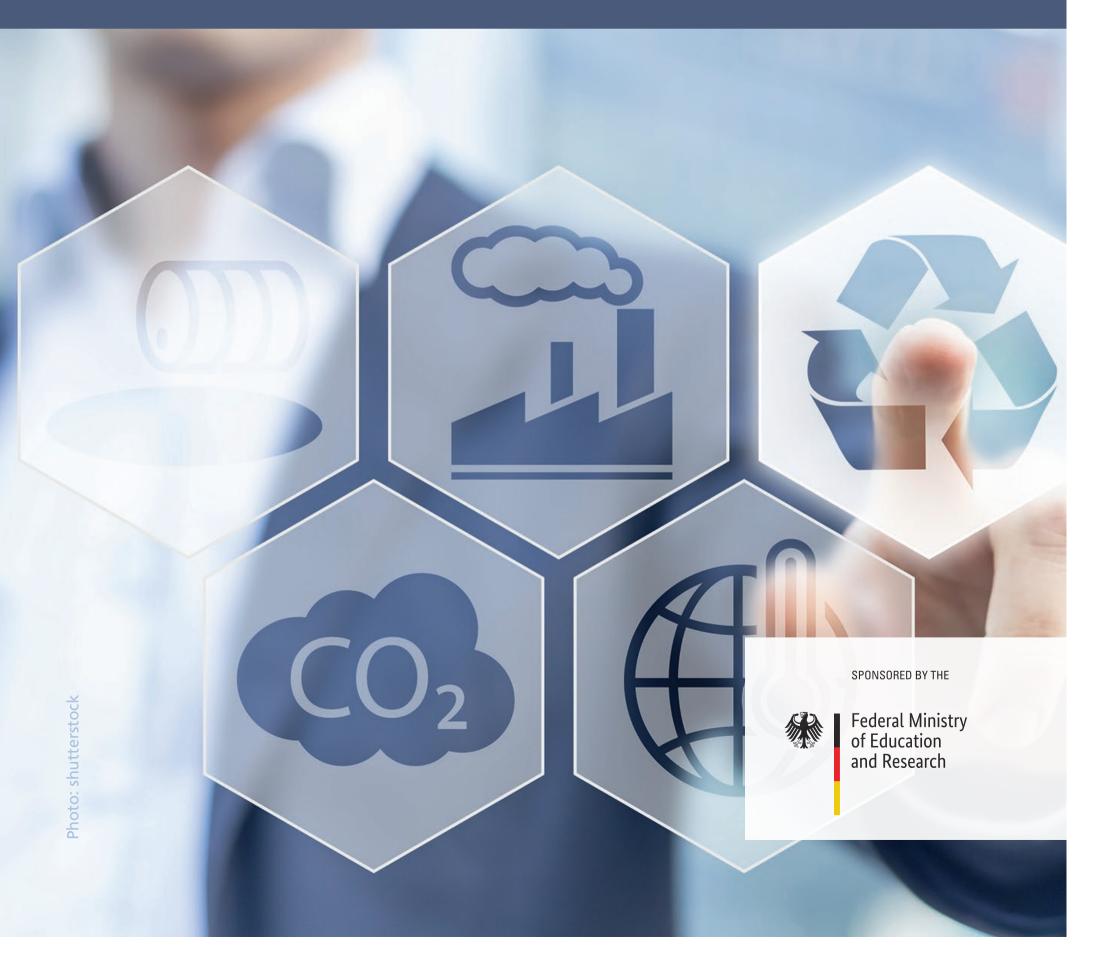


NOVEMBER 23, 2021 | HYBRID CONFERENCE - DÜSSELDORF (GERMANY)

CONFERENCE SUSTAINABLE CHEMICAL CONVERSION IN INDUSTRY



PROGRAM

AS OF NOVEMBER 22, 2021

TUESDAY, NOVEMBER 23, 2021

- 8:30 a.m. Registration Coffee
- 9:00 a.m. Opening Moderation: Dr. Torsten Müller Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Oberhausen
- 9:10 a.m. Video Message Federal Minister Anja Karliczek Federal Ministry of Education and Research, Berlin
- 9:25 a.m. Regional Transformation to Green Industry using the Example of North-Rhine Westphalia Undersecretary Michael Theben Ministry of Economic Affairs Innovation, Digitalization and Energy of the State of North-Rhine Westphalia
- 9:50 a.m. The Joint Project Carbon2Chem®

Dr. Markus Oles Project coordination Carbon2Chem® thyssenkrupp Steel Europe AG, Duisburg

10:20 a.m. The Rheticus Project Dr. Thomas Haas Evonik Operations GmbH, Head of New Growth Area Carbon Cycle, Marl

10:50 a.m. COFFEE BREAK

- 11:00 a.m. Transformation to a Sustainable and Climate-neutral Economy Intersectional Function of the Recycling Industry Dr. Ansgar Fendel REMONDIS Assets & Services GmbH & Co. KG, Lünen
- **11:30 a.m.** Accelerating Climate Technologies

 Dr. Ben A. Haag
 OGCI Climate Investments LLP, Zürich, Schweiz
- 12:00 a.m. Pitches
- 12:15 p.m. LUNCH BREAK

A KEY BUILDING BLOCK FOR THE CLIMATE PROTECTION



1:00 p.m. Inclusion of Society BMBF-Project WissKomm Energiewende Martin Schmidt Westphalian State Museum of Industrial Heritage, Hattingen

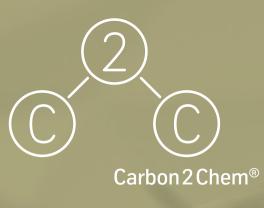
1:30 p.m. Advancing Solutions for a Lower Carbon Future Dr. Siva Ariyapadi ExxonMobil Chemical Company, Global Market Development Manager, Houston, USA

2:00 p.m. Project Status: eMethanol Vehicles and aFuel Technology Frank Obrist Obrist DE GmbH, Lindau

2:30 p.m. System-Integration

Dr. Torsten Müller

Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Oberhausen



During the conference it is forbidden to take pictures of the participants as well as of the presentation content.

3:00 p.m. Pitches

3:15 p.m. COFFEE BREAK

3:30 p.m. Circular Methanol – A Key Building Block towards Carbon **Neutral Chemistry and Mobility Development** Dr. Katharina Menzel Nobian GmbH, Frankfurt am Main Dr. Andreas Geisbauer Clariant Produkte (Deutschland) GmbH, Bruckmühl

4:15 p.m. Analytical Challenges within the Carbon2Chem® Approach Dr. Oliver-Niklas Hegen

Max Planck Institute for Chemical Energy Conversion, Mülheim an der Ruhr

4:45 p.m. Simulation – An Important Key for the Evaluation of Concepts Thorsten Wack Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Oberhausen

Dr. Stefan Schlüter Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Oberhausen

Project Carbon2Chem® 5:30 p.m.

A Key Building Block for the Climate Protection Prof. Dr. Görge Deerberg Project coordination Carbon2Chem® Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT, Oberhausen

6:00 p.m. END OF CONFERENCE **Evening Event**

INTERNAL PROJECT MEETING

WEDNESDAY, NOVEMBER 24, 2021

8:45 a.m. Registration

9:00 a.m. Start

1:30 p.m. END OF MEETING WITH LUNCHBUFFET

CIT ISSUES Chemie Ingenieur Technik





Volume 90, Issue 10

Special issue: Carbon2Chem® https://onlinelibrary.wiley.com/toc/15222640/90/10 Volume 92, Issue 10 Special issue: Carbon2Chem® https://onlinelibrary.wiley.com/toc/15222640/2020/92/10

Carbon 2 Chem®

www.umsicht.fraunhofer.de/carbon-cycle #Carbon2Chem

REGISTRATION

Please use our online form to register for the conference.

https://s.fhg.de/WK7

ORGANIZERS



As an institute whose motto is "production without raw materials", we fit perfectly into this project. For several years, the Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT has been conducting research in projects that have set themselves the goal of further reducing both CO₂ emissions and the extraction of fossil fuels, and instead work with "waste products" such as the top gases that inevitably arise in steel production, in order to use them for the production of chemicals such as methanol. That is why, with Carbon2Chem[®], we want to recycle carbon after it has formed during steel production, so that it is not released but instead is sustainably reused on site.



At the Max Planck Institute for Chemical Energy Conversion, we find ways to efficiently convert energy into storable and usable forms. In this instance we particularly look for suitable catalysts for the chemical reactions required. Industry generally tries to cut CO₂ through avoidance, and industry in Germany is already working with minimal use of carbon. However, complete avoidance is not possible. With Carbon2Chem[®], we are developing a modular system for these industries from which modules for implementing the energy transition can be created.



Together with the scientific community and other industrial partners, thyssenkrupp is the first industrial enterprise to conduct pioneering work in this field. We are not pursuing a single solution, but rather a set of solutions that can also be used by other smelting works and industries. All technology modules should ultimately be interlinkable. Our first application on an industrial scale is in the steel sector – a very CO_2 -intensive industry. This way we are undertaking preparatory work in the industrial environment, so that we can eventually extend the modules to other industry sectors. Which is something that benefits us as a diversified corporation.

YOUR CONTACT

FOR TECHNICAL QUESTIONS Dr.-Ing. Torsten Müller Fraunhofer UMSICHT Project office Carbon2Chem® Phone +49 208 8598-1284 torsten.mueller@umsicht.fraunhofer.de

FOR ORGANIZATIONAL QUESTIONS Christina Demmer Fraunhofer UMSICHT Project office Carbon2Chem® Assistence Phone +49 208 8598-1522 (8:30 a.m. – 12:30 p.m.) christina.demmer@umsicht.fraunhofer.de

LOCATION

LINDNER CONGRESS HOTEL Lütticher Strasse 130, 40547 Düsseldorf, Germany Phone +49 211 5997-0 www.lindner.de/en/duesseldorf-congress-hotel/welcome.html

Directions/Parking www.lindner.de/en/duesseldorf-congress-hotel/welcome/ directions-location.html





Directions/Parking

Conference venue in Düsseldorf, Germany

