



# EAGE/DGMK Joint Workshop on Underground Storage of Hydrogen

24 APRIL 2019 · CELLE, GERMANY

**Final Announcement & Programme** 

WWW.EAGE.ORG

# **TECHNICAL COMMITTEE**

Christian Bücker	DEA Deutsche Erdoel AG	
Birger Hagemann	Technical University of Clausthal	
Christoph Hilgers	Karlsruhe Institute for Technology	
Tobias Rudolph	Uniper Energy Storage	
Dominik Soyk	DGMK	

# **OVERVIEW**

With an increasing percentage of renewable energy from wind and solar, the proportion of hydrogen in the European gas supply network will rise. This one-day workshop has the primary goal to share knowledge, case studies, techniques and workflows on all aspects of Underground Storage of Hydrogen.

The programme includes contributions from academics, researchers, and industry experts to highlight advances and the state-of-the-art in the field of underground storage of hydrogen.

## VENUE

## **Congress Union Celle**

Room Celler Hall Thaerplatz 1 29221 Celle Germany

# **TECHNICAL PROGRAMME**

## Oral Presentations | Wednesday 24 April

CELLER HALL				
Keynote Presentations				
08:30	Registrations & Welcome Coffee			
09:00	Keynote Lecture 1 - Developments in Underground Hydrogen Storage: The Contribution of Research - L. Ganzer <sup>1*</sup> <sup>1</sup> Clausthal University of Technology			
09:30	Keynote Lecture 2 - Economics of Hydrogen Storage - T. van Wingerden <sup>1*</sup> , J. Douma <sup>1</sup> <sup>1</sup> DNV GL			
10:00	Keynote Lecture 3 - Storage of Renewable Energy in Existing Infrastructure with Power to Gas - R. Schoof <sup>1*</sup> <sup>1</sup> Uniper			
10:30	Coffee Break			
From	From Early Exploration to Pilot Project			
11:00	DGMK 01 - Underground Hydrogen Storage Using Saline Aquifers from Santa Lucía Basin Onshore Uruguay - J. Tomasini <sup>1*</sup> , H. de Santa Ana <sup>1</sup> <sup>1</sup> ANCAP			
11:30	DGMK 02 - Underground Hydrogen Storage – Current Developments and Opportunities - T. Rudolph <sup>1</sup> * <sup>1</sup> Uniper			
12:00	DGMK 03 - Underground Sun Storage Results and Outlook - M. Pichler <sup>1*</sup> <sup>1</sup> RAG Austria AG			
12:30	Lunch Break / Poster Session			

#### **Microbiology and Bio-reactive Transport** DGMK 04 - History Matching of Bio-reactive Transport in 13:30 an Underground Hydrogen Storage Field Case - G. Strobel1\*, B. Hagemann<sup>1</sup>, L. Ganzer<sup>1</sup> <sup>1</sup>Clausthal University of Technology 14:00 **DGMK 05 - Relevance of Microbial Redox Reactions of** Hydrogen During Underground Storage of Hydrogen -A. Dohrmann<sup>1\*</sup>, M. Krüger<sup>1</sup> <sup>1</sup>Federal Institute for Geosciences and Natural Resources (BGR) 14:30 DGMK 06 - Microbiological Aspects of Hydrogen Storage in Porous Underground Storages - M. Wagner<sup>11</sup> <sup>1</sup>MicroPro GmbH 15:00 **Coffee Break Underground Storage Integrity** 15:30 DGMK 07 - Simulation of the Aging of a Pore Space Underground Gas Storage by Compressibility Testing -C. Dietl<sup>1\*</sup>, T. Rudolph<sup>2</sup>, J. Szech<sup>1</sup>, H. Baumgartner<sup>1</sup>, E. Jahns<sup>1</sup> <sup>1</sup>Gesteinslabor Dr. Eberhard Jahns, <sup>2</sup>Uniper Energy Storage GmbH 16:00 DGMK 08 - Summary of an Experimental Investigation to Evaluate Potential Technical Integrity Issues in Porous UGS containing Hydrogen - E.C. Boersheim1\*, V. Reitenbach1, D. Albrecht <sup>1</sup>TU Clausthal 16:30 Wrap-up and Final Discussion

17:00 End of Workshop

## Poster Presentations | Wednesday 24 April

CELLER HALL			
Lunch Break / Poster Session			
12:30	DGMK P1 - Abiotic Redox Reactions of H2 with Iron- containing Minerals under Geologic Storage Conditions - T. Alpermann <sup>1*</sup> , C. Ostertag-Henning <sup>1</sup> <sup>1</sup> Federal Institute for Geosciences and Natural Resources (BGR)		
12:30	DGMK P2 - Physicochemical Investigations of Hydrogen Storage in Underground Porous Media – A Contribution to the Energy Transition - J. Hierold <sup>1*</sup> , P. Pilz <sup>1</sup> <sup>1</sup> Helmholtz Centre Potsdam German Research Centre For Geosciences - Gfz		



"The programme includes contributions from academics, researchers, and industry experts to highlight advances and the state-of-the-art in the field of underground storage of hydrogen "

## REGISTRATION

#### **Workshop Fees**

REGISTERED AND PAID	Until 1 March 2019	From 2 March 2019 - On-Site
EAGE/DGMK Member <sup>1</sup>	€215	€235
EAGE/DGMK Student Member <sup>1,2</sup>	€100	€ 120
Non-member <sup>3</sup>	€280	€ 305
Student Non-member <sup>2,3,4</sup>	€130	€ 150
EAGE Green Member <sup>1,5</sup>	€230	€255
EAGE Student Green Member <sup>1,2,5</sup>	€105	€ 125
EAGE Platinum Member <sup>1,5</sup>	€260	€260

<sup>1</sup> Members please note: To qualify for the member registration fee, your EAGE membership dues for 2019 must have been paid and confirmed. The processing time for membership applications or renewals is 10 working days.

<sup>2</sup> To qualify for the reduced student registration fee:

- Students must be enrolled in a full time study programme at a recognized university or institute
- The registration must be accompanied by a copy of a student ID card and/or official proof of enrolment.
- <sup>3</sup> The non-member fee includes EAGE membership for the remainder of 2019.

<sup>4</sup> Student non-members cannot be older than 34 years of age (when registering).

<sup>5</sup>Green membership status gives you a €50 discount (€25 for students) on each EAGE event registration; starting from the Bronze status, you can benefit from an even greater reduced EAGE member registration fee. Find here for more information on the recognition programme

All fees are in Euros (€). One Euro of your total registration fee is donated to the EAGE Green Fund.

Please note: The deadlines are following the Local Time in the Netherlands.

EAGE reserves the right to cancel the short course(s), workshop(s) or field trip(s) due to low participation.

All registration prices and deadlines are subject to change without notice. However, registration prices of paid registrations are guaranteed at the rate of the time of registration. Please visit the event website for the up-to-date registration information.

## **SPONSORING**

The EAGE/DGMK Joint Workshop on Underground Storage of Hydrogen offers excellent sponsoring opportunities to create high visibility for your brand. For more information about sponsoring this event, please refer to the 'Sponsor Guide' that is available on the workshop website or contact us at eage.events@eage.org.

# CONTACT

For further up-to-date information, please visit the event website via events.eage.org or contact the EAGE Europe Office at eage.events@eage.org or +31 88 9955055.



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