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IEAGHG 11th High Temperature Solid Looping Cycles Network (HTSLCN) Meeting & Darmstadt Workshop Event

June 2027 – Georg-Christoph-Lichtenberg-Haus, Darmstadt, Germany

ORGANISING COMMITTEE

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BACKGROUND

Day 1 - 11th HTSLCN meeting – June 2027

The high temperature solid looping cycles network (HTSLCN) meeting covers technology developments in fields where a solid material is cycled between multiple reactors at elevated temperatures. The scope of the IEAGHG HTSLCN is to discuss recent progress in solid looping cycles such as calcium looping and sorption enhanced reforming for selective CO_2 transport and chemical looping combustion and reforming with selective oxygen transport by the solids. It brings together well-known technologies used in fluid catalytic cracking, circulating fluidised beds and combined cycles, in new ways, to increase efficiencies and provide opportunities to decrease the carbon footprint of energy intensive processes.

Day 2 – Darmstadt workshop event – June 2027

Bio-FlexCLC and Bio-MeGaFuel are European projects funded under the Horizon Europe framework programme, developing innovative Chemical Looping technologies for the sustainable utilization of biogenic residues and wastes. While Bio-FlexCLC focuses on flexible combined heat and power (CHP) production with cost-effective CO_2 capture and the potential for negative emissions, Bio-MeGaFuel aims to convert biogenic residues and organic waste into renewable methanol through chemical looping gasification and membrane reactors.

The workshop will bring together researchers, industry representatives and other stakeholders to discuss recent developments and opportunities in Chemical Looping technologies, sustainable biomass and waste conversion, carbon capture and sustainable fuel production. The event will also provide insights into the pilot-scale activities and technological developments of both projects.

ABSTRACT SUBMISSIONS

The Call for Abstracts for the 11th HTSLCN have not yet opened.

REGISTRATION

Registrations for the 11th HTSLCN have not yet opened.

AGENDA

To be confirmed.

VENUE

Name: Georg-Christoph-Lichtenberg-Haus

Address: Dieburger Straße 241, 64287 Darmstadt

Georg-Christoph-Lichtenberg-Haus is located in the Komponistenviertel of Darmstadt, directly at the edge of the forest and within easy reach of the city centre. Built in 1898 and restored in Art Nouveau style in 1910, the historic guest house of TU Darmstadt offers a unique and peaceful setting for the event.

Darmstadt is known as a vibrant city of science, research and culture. One of its main attractions is **Mathildenhöhe Darmstadt**, a UNESCO World Heritage Site and a unique ensemble of Art Nouveau architecture, artists' houses, exhibition buildings, the Artists' Colony Museum and the famous Wedding Tower. The nearby **Rosenhöhe** with its historic landscape garden and rose garden provides an ideal setting for a walk and relaxation.

Beyond Mathildenhöhe, visitors can discover a diverse cultural scene including museums, theatres, galleries, music and other cultural institutions. Participants are encouraged to explore Darmstadt and enjoy the city's combination of scientific tradition, cultural heritage and green surroundings. Further information about Darmstadt and local attractions is available through the Darmstadt Tourism website.

DIRECTIONS TO THE MEETING/VENUE

Upon arrival at Frankfurt Airport, participants can take a taxi or the direct **AirLiner bus service** to Darmstadt. The journey takes approximately 40–45 minutes. From Darmstadt city centre, the **F bus (direction Oberwaldhaus)** takes you to the **Fasanerie** stop, located directly in front of the Georg-Christoph-Lichtenberg-Haus. The journey from **Schloss** takes approximately 10 minutes.

For further information on public transport connections and current timetables, please visit the Frankfurt Airport or local public transport websites.

CONFERENCE DINNER

More information to follow.

SITE VISIT

On June 16th, following the Bio-FlexCLC project 2nd Dissemination Event, we will organize a site visit to the **EST pilot plant (TRL 6)** at TU Darmstadt, located at Ottilie-Bock-Straße 6, Darmstadt. The pilot plant can be easily reached from Darmstadt city centre by tram line L, with **TU Lichtwiese/Campus** as the final stop.

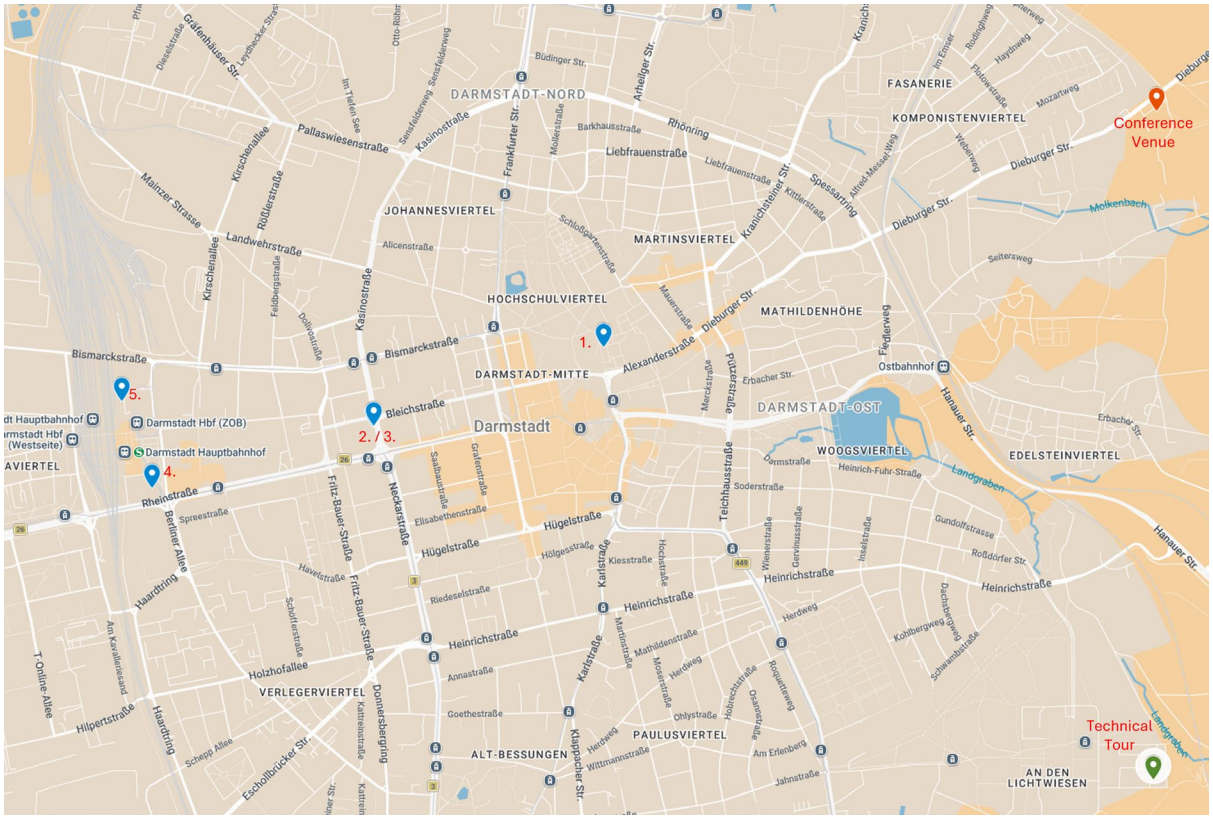
Please wear appropriate clothing for the site visit, in particular **sturdy, closed-toe footwear**.

HOTEL ACCOMMODATION

We recommend booking your accommodation as soon as possible. The discount information is valid for 2026 and will be updated at the beginning of 2027:

Below is a map showing the location of the venue and hotels with TUDA special price agreement:

1. Welcome Hotel Darmstadt https://www.welcome-hotels.com/en
2. THE Darmstadt Hotel https://www.the-darmstadt.de/en
3. Felix Hotel Darmstadt https://www.felix-darmstadt.de/en
4. Maritim Hotel Darmstadt https://www.maritim.com/en
5. InterCity Hotel Darmstadt https://hrewards.com/en



SCIENTIFIC COMMITTEE

The Scientific Committee of the HTSLCN organises and manages the technical sessions of the meeting:

- Anders Lyngfelt, Chalmers University, Sweden
- Ben Anthony, Cranfield University, UK
- Bernd Epple, TU Darmstadt, Germany
- Carlos Abanades, CSIC-INCAR, Spain
- Dennis Lu, Natural Resources Canada, Canada
- Jasmin Kemper, IEAGHG, UK
- Matteo Romano, Politecnico Di Milano, Italy
- Paul Cobden, Swerim, Sweden
- Peter Clough, ERM, UK
- Stuart Scott, University of Cambridge, UK
- Tobias Pröll, University of Natural Resources Vienna, Austria
- Vincenzo Spallina, University of Manchester, UK
- Zhenshan Li, Tsinghua University, China

ABOUT IEAGHG

The IEA Greenhouse Gas R&D Programme (IEAGHG) is an international collaborative research programme established in 1991 as an Implementing Agreement under the International Energy Agency (IEA).

IEAGHG studies and evaluates technologies that can reduce greenhouse gas emissions derived from the use of fossil fuels. The Programme aims to provide its members with definitive information on the role that technology can take in reducing greenhouse gas emissions.

IEAGHG takes pride in being an informed but unbiased source of technical information on greenhouse gas mitigation.

The programme's main activities are:

- To evaluate technologies aimed at reducing greenhouse gas emissions.
- To help facilitate the implementation of potential mitigation options.
- To disseminate the data and results from evaluation studies.
- To help facilitate international collaborative research, development and demonstration activities (R, D&D).

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