# Abstract Info Sheet

For the Munich Hydrogen Symposium 2024 we would like to welcome the listed main research topics in the field of hydrogen. The contents can be of an analytical, simulation-based, or experimental nature. Moreover, we welcome suggestions for additional topics that align with hydrogen research, provided they contribute to the overall research focus of the conference. We look forward to a broad exchange in the field of hydrogen research!

Please choose the topic your research belongs to from the following list:

| Topic | Sub-topics | Examples |
|---|---|---|
| **1. Hydrogen System Studies** | 1.a System modelling | Circular economy, transport and storage, implementation in existing infrastructure (steel industry, chemical industry, glass industry) |
| | 1.b Policy and regulations | European and worldwide challenges and goals |
| | 1.c Economic aspects | Life Cycle Analysis (LCA), value chain analysis, transport and storage costs |
| **2. Hydrogen Production** | 2.a Electrochemical | Electrolysis (PEM, alkaline, high and low temperature electrolysis, SOEC), reversible SOC |
| | 2.b Thermochemical | Pyrolysis and gasification of biomass and waste for hydrogen and syngas production |
| | 2.c Biochemical | Hydrogenases and whole cell biocatalysts, utilization of algae and cyanobacteria, metabolic engineering, photo-fermentation, microbial electrolysis cells (MECs) |
| **3. Power-to-X and Circular Economy** | 3.a Power-to-X (Synthesis Pathways) | Methanol synthesis, sustainable aviation fuels (SAF), carbon capture utilization (CCU), $CO_2$ direct-electrolysis to ethylene, hydrogenolysis, ammonia synthesis, hydro-processing |
| | 3.b Biomass- and Waste-to-X Technologies | Pyrolysis, gasification and plasma technologies for biomass, waste and syngas treatment, syngas cleaning |
| **4. Hydrogen Utilization** | 4.a Applications | Fuel cells (conventional and SOC), production of bio-based polymers, electro-synthesis of polymers |
| | 4.b Synthetic Energy Carriers and Chemicals | Methanol, ethylene, ammonia, SAF |

## Abstract Submission Guidelines

Please adhere to the following guidelines. Only this approach can guarantee that your contribution will appear correctly in the published conference proceedings. Therefore, please adhere strictly to the specifications and formatting specified therein.

| | |
|---|---|
| Template | Click here for the template |
| Length | max. 2 pages, but at least more than 250 words |
| Format | doc, docx |
| Size | max. 5 MB |

Please use the abstract submission tool provided on the conference website. Click here to get to the submission.

## Timeline

| | |
|---|---|
| 11.12.2023 | Start of abstract submission |
| 11.02.2024 | Deadline for the submission of abstracts |
| 01.04.2024 | Feedback to submitters |
| 21.10.2024 | Start of the MH2S 2024 |

## Conference Proceedings and Conference Presentations

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|---|---|
| Book of abstracts | The abstracts will be published in a book of abstract with a DOI in the MH2S 2024 conference proceedings. |
| Collection of presentations | The collection of presentations will be made available via a download link after the MH2S 2024. All presenters will be asked in advance for permission to make their presentations available. |

## Contact

Dr. Sebastian Fendt

Technical University of Munich
School of Engineering and Design
Chair of Energy Systems

Boltzmannstraße 15
85748 Garching near Munich

Email: h2symposium.les@ed.tum.de