

# PROGRAM

THURSDAY, OCT 5

TIME CONTENT

- 8.30 **Welcome**  
Dr. Sebastian Fendt (Technical University of Munich, Germany / TUM REDEFINE H<sub>2</sub>E)
- 8.35 **Keynotes**  
Prof. Frank Sargent (Newcastle University, England)  
*Hydrogenases: enzymes of the past, enzymes of the future*  
Dr. Sebastian Fendt (Technical University of Munich, Germany / TUM REDEFINE H<sub>2</sub>E)  
*Electrification of biomass-to-X processes*
- 9.45 **BREAK // POSTER SESSION I**
- 10.15 **Session e-Gas I – Plasma applications in a hydrogen context**  
Prof. Sylvain Coulombe (McGill University, Canada)  
*Plasma for H<sub>2</sub>: Current state, opportunities and challenges*  
Prof. Dirk Uhrlandt (Leibniz Institute for Plasma Science and Technology, Germany)  
*Experimental studies of arcs in H<sub>2</sub> containing gases*  
Dr. Ante Hecimovic (Max Planck Institute for Plasma Physics, Germany)  
*Plasma technology for H<sub>2</sub> production and storage*  
Prof. Martin Gräbner (Technische Universität Bergakademie Freiberg, Germany)  
*Options of plasma-assisted gas production from secondary feedstock*  
Prof. Kevin J Whitty (University of Utah, USA)  
*Effective conversion of heterogenous materials into hydrogen using robust high temperature gasification*
- 12.30 **LUNCH BREAK**
- 13.30 **Session BioCat I – Biocatalysis in a hydrogen context**  
Prof. Helmut Schwab (Graz University of Technology, Austria)  
*Production of single cell protein from CO<sub>2</sub> and hydrogen by efficient gas fermentation - pilot scale studies*  
Dr. Ammar Al-Shameri (Technical University of Munich, Germany / TUM REDEFINE H<sub>2</sub>E)  
*Green hydrogen a by-product of sugar oxidation in cell-free systems*
- 14.20 **Keynote**  
Dr. Murphy Peksen (Technical University of Munich, Germany / TUM REDEFINE H<sub>2</sub>E)  
*Multiscale-multiphysics modelling of SOC - materials, components and systems*
- 14.50 **Session SLAM I – Systemic views on hydrogen**  
Andrew Steinhubl (Center for Houston's Future, USA)  
*The future of hydrogen in the Houston energy system*  
Joram Wasserfall (Society for the Advancement of Applied Computer Science, Germany)  
*Hydrogen in communal systems*  
Prof. Gilberto Jannuzzi (State University of Campinas, Brazil)  
*Advancement of renewables and hydrogen in the Brazilian energy matrix up to 2050*
- 16.00 **Closing remarks**
- 17.30 **Munich City Tour**
- 19.00 **Dinner – Augustiner Klosterwirt (City Center)**