



Programme

Cluster of Excellence Conference –
Sustainable and Energy-Efficient Aviation SE²A

Session:

„Liquid hydrogen and SAF in future aircraft”

Session Chair: Prof. Jörg Seume
Thursday, October 7th

09:00-09:30 Opening - Prof. Jens Friedrichs, Speaker SE²A
Welcome - Prof. Angela Ittel, President TU BS
International activities in SE²A - Prof. Rolf Radespiel, Co-Speaker of SE²A

09:30-10:10 The hydrogen ecosystem
KEYNOTE M.Sc. Stefan Sterlepper, Zukunftscluster Wasserstoff
RWTH Aachen

10:10-10:50 Hydrogen in Aero Engines: Opportunities and Challenges
Ass. Prof. Arvind Gangoli Rao, TU Delft, Netherlands

10:50-11:30 Hydrogen Powered High Altitude Platform Stations (HAPS)
- A Future Key Element of Broadband Infrastructure
Dr. Reiner Kickert, CEO Leichtwerk AG

11:40-12:20 Hydrogen as an energy carrier of the future:
Opportunities, challenges and limits
Dipl.-Ing. Sabrina Zellmer & M.Sc. Stefan Blume,
Wasserstoffcampus Salzgitter

12:20-13:00 Fuel Cells for Aviation - from general to specific
Dr. Xin Gao, SE²A

BREAK

Sessions:

„Liquid hydrogen and SAF in future aircraft” &
„Electric drive systems and power electronics”

Session Chair: Prof. Jens Friedrichs
Thursday, October 7th

13:40-14:20 H₂-powered aviation and its reliance on green hydrogen
infrastructure – Review and research gaps
Prof. Richard Hanke-Rauschenbach, SE²A

14:20-15:00 SAF for a climate neutral aviation
Siegfried Knecht, aireg - Aviation Initiative for Renewable
Energy in Germany e.V.

BREAK

SESSION 2

15:20-16:10 "CHESCO - Center for Hybrid Electric Systems Cottbus" -
KEYNOTE Planung & aktueller Stand eines neuen Forschungszentrums
Prof. Georg Möhlenkamp, Brandenburg University of
Technology (BTU)

16:10-16:50 Simulation and short circuit analysis of the propulsion
system of APUS i5 hybrid electrical airplane
M.Sc. Yinghui Yang, Brandenburg University of
Technology (BTU)

VIRTUAL NETWORKING OPPORTUNITY

Session:

“Electric drive systems and power electronics”

Session Chair: Prof. Regine Mallwitz
Friday, October 8th

09:00-09:50 Power Electronics and Machines for Aircraft
KEYNOTE Electrification
Prof. Pat Wheeler, University of Nottingham, GB

09:50-10:30 Impact of Electric Machine Design on the Weight
Balance of Electric Propulsion Drives
Prof. Markus Henke, SE²A

10:30-11:10 Green aviation in the Nordics
Prof. Stephen Wright, Tampere University, Finland

BREAK

11:30-12:10 Battery technologies for electric aviation
Prof. Arno Kwade, SE²A

12:10-12:20 Closing
Prof. Jens Friedrichs, Speaker SE²A

END OF CONFERENCE
VIRTUAL NETWORKING OPPORTUNITY