TARGET OF WORKSHOP

The workshop provides the elucidation of current fuel cell research targets and efforts. Presentations on the recent developments in the TCP on Advanced Fuel Cells build the framework of the workshop.

Please use your chance to discuss with internationally renowned experts the fascinating topics of hydrogen and fuel cells as key technology for a sustainable energy system.

TARGET GROUP

- Research institutions and universities
- Policy makers dealing with energy efficiency issues
- Industry (development, production, service companies & utility companies)

Financial support is provided by the Austrian Ministry for Transport, Innovation and Technology and the Austrian Research Promotion Agency (FFG) through the IEA Research Cooperation.

SCIENCE ▪ PASSION ▪ TECHNOLOGY

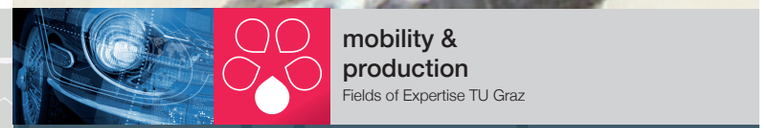
HIGHLIGHTS OF INTERNATIONAL FUEL CELL RESEARCH 2017

RESULTS OF ANNEX 31 & 35 OF THE IEA AFC TECHNOLOGY COLLABORATION PROGRAMME

WORKSHOP: May 15th, 2017, Graz University of Technology
Rechbauerstraße 12, 1st floor, Auditorium (AT01002), 8010 Graz, Austria

Supported by:

Figure: © TU Graz/CEET



mobility & production
Fields of Expertise TU Graz

ORGANIZER

Prof. Viktor Hacker
DI Ilena Grimmer
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Please register per e-mail with your full name, your organization and address before April 27th 2017 to:

Mrs. Brigitte Hammer
Graz University of Technology
Institute of Chemical Engineering and Environmental Technology
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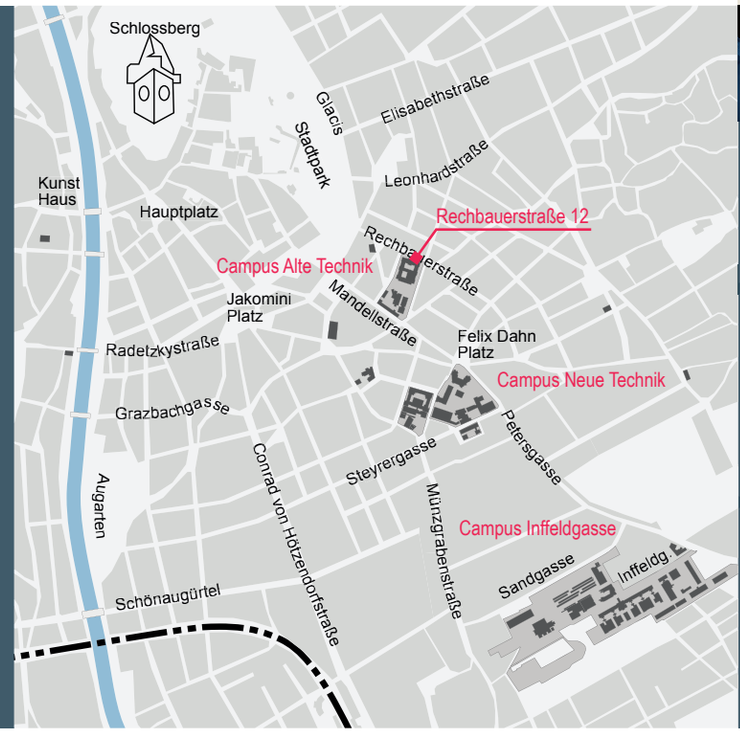
T: +43(0)316/873-8781, brigitte.hammer@tugraz.at
www.ceet.tugraz.at/fuelcells

PARTICIPATION FREE OF CHARGE



HIGHLIGHTS OF INTERNATIONAL FUEL CELL RESEARCH 2017

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COLLABORATION PROGRAMME

WORKSHOP
May 15th, 2017
Graz University of Technology

TECHNOLOGY COLLABORATION PROGRAMME ON ADVANCED FUEL CELLS

The aim of the International Energy Agency (IEA) Technology Collaboration Programme on Advanced Fuel Cells (AFC TCP) is to enhance the state of understanding of all contracting parties in the field of advanced fuel cells, through a coordinated programme of research, technology development and system analysis.

Currently 14 member countries, namely Austria, China, Denmark, Finland, France, Germany, Israel, Italy, Japan, Korea, Mexico, Sweden, Switzerland, and USA are participating in the AFC TCP.

AFC Technology Collaboration Programme emphasizes strongly the national and international information exchange between the partner institutions. Therefore, the members meet regularly in eight active Annexes (groups) to share technology and policy developments in their countries, companies and research institutions, for the benefit of everyone involved.

ANNEX 31 POLYMER ELECTROLYTE FUEL CELLS

Annex 31 is research and development oriented and targets the identification and development of techniques and materials to reduce the cost and improve the performance and durability of polymer electrolyte fuel cells and corresponding fuel cell systems.

ANNEX 35 FUEL CELLS FOR PORTABLE APPLICATIONS

Annex 35 focuses on polymer electrolyte fuel cells operated with methanol, hydrogen, ethanol or propane. The specific research demands and technical conditions needed to deliver viable fuel cells for portable applications.

PROGRAMME

09:15 - 10:05 WELCOME AND INTRODUCTION

Harald Kainz, Rector of TU Graz

Theodor Zillner, Austrian Ministry for Transport, Innovation and Technology, Austria

INTRODUCTION OF ANNEX 31 UNDER IEA ADVANCED FUEL CELLS TECHNOLOGY COLLABORATION PROGRAMME
D.J. Liu, ANL, USA

INTRODUCTION OF ANNEX 35 UNDER IEA ADVANCED FUEL CELLS TECHNOLOGY COLLABORATION PROGRAMME
Fabio Matera, CNR, Italy

OVERVIEW OF FUEL CELL R&D IN AUSTRIA
Viktor Hacker, TU Graz

10:05 - 10:25 INTRODUCTION OF THE RESEARCH WORK ON METALLIC BIPOLAR PLATE FOR FUEL CELL IN SJTU
Shuhuai Lan, Shanghai Jiao Tong University, China

10:25 - 10:45 LATEST RESULTS ON HIGH TEMPERATURE PEMFCS
Hans A. Hjuler, Danish Power Systems, Denmark

COFFEE BREAK

11:20 - 11:40 HYDROGEN CONTAMINANT RISK ASSESSMENT
Jaana Viitakangas, VTT Technical Research Centre, Finland

11:40 - 12:00 FUEL CELL ACTIVITIES IN FRANCE
Stève Baranton, Université de Poitiers, France

12:00 - 12:20 DEVELOPMENTS FOR FUEL CELLS OPERATING ON LIQUID FUELS AT THE FRAUNHOFER ICT
Carsten Cremers, Fraunhofer ICT, Germany

12:20 - 12:40 ANNEX 37, MODELLING OF FUEL CELLS SYSTEMS - HISTORY AND ACTIVITIES
Steven B. Beale, FZ Jülich, Germany

LUNCH BREAK

14:00 - 14:20 CURRENT WORK ON DMFCS IN JÜLICH
Andreas Glüsen, FZ Jülich, Germany

14:20 - 14:40 DEVELOPMENT OF ADVANCED CORROSION-RESISTANT CATALYST SUPPORTS FOR PEMFCS
Lior Elbaz, Bar-Ilan University, Israel

14:40 - 15:00 PEFC RESEARCH ACTIVITY AT CNR-ITAE
Alessandra Carbone, CNR-ITAE, Italy

15:00 - 15:20 PEFC ACTIVITIES AT ITAE ON PORTABLE FUEL CELLS
Fabio Matera, CNR-ITAE, Italy

COFFEE BREAK

15:50 - 16:10 JAPAN'S FUEL CELL DEVELOPMENT
Chiaki Ishii, Technova Tokyo, Japan

16:10 - 16:30 PERFORMANCE LIMITATIONS IN ANION-EXCHANGE MEMBRANE FUEL CELLS
Göran Lindbergh, KTH Royal Institute of Technology Stockholm, Sweden

16:30 - 16:50 RECENT DEVELOPMENT IN PGM-FREE AND ULTRALOW PT CATALYST DEVELOPMENT AT ARGONNE
D.J. Liu, Argonne National Laboratory, USA

16:50 - 17:10 EIS ASSISTED DEGRADATION INVESTIGATION IN PEFCS
M. Bodner, S. Weinberger, TU Graz, Austria

GET-TOGETHER AND POSTER PRESENTATION

17:15 - 19:00 POSTER SESSIONS
of the International Energy Agency (IEA) Technology Collaboration Programme on Advanced Fuel Cells (AFC TCP)
Annex 31 Polymer Electrolyte Fuel Cells
Annex 35 Fuel Cells for Portable Applications