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

COLLABORATION PROGRAMME



FUEL CELL RESEARCH 2017 RESULTS OF ANNEX 31 & 35 OF THE IEA AFC TECHNOLOGY

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





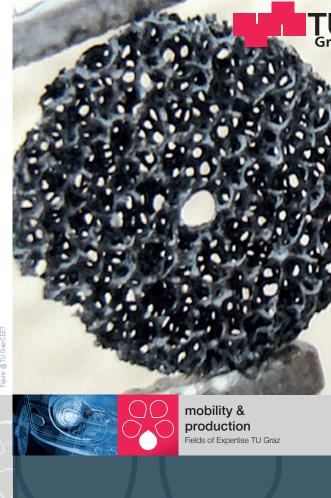












ORGANIZER

Prof. Viktor Hacker
DI Ilena Grimmer

Graz University of Technology.

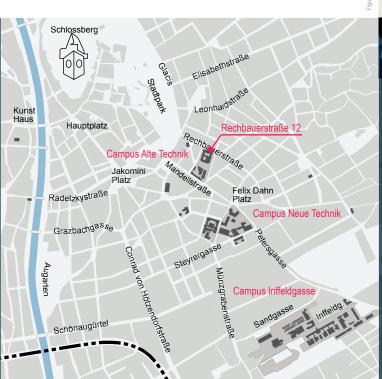
Institute of Chemical Engineering and Environmental Technology viktor.hacker@tugraz.at

Please register per e-email 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
Inffeldgasse 25 C, 8010 Graz, Austria
T: +43(0)316/873-8781, brigitte.hammer@tugraz.at

PARTICIPATION FREE OF CHARGE

www.ceet.tugraz.at/fuelcells



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

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 evervone involved.

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.

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.

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 SYS-

TEMS - 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**

COFFEE BREAK

15:50 - 16:10 JAPAN'S FUEL CELL DEVELOPMENT

Fabio Matera, CNR-ITAE, Italy

	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