





Clean Energy from Hydrogen-Metal Systems - CleanHME -

Kick-Off Meeting of the Project Consortium supported by the EU grant 951974:

FETPROACT-EIC-05-2019 Boosting emerging technologies Breakthrough zero-emissions energy generation for full decarbonization

23.09.-25.09.2020, University of Szczecin, Poland

The main aim of the project is to develop a new, clean, safe, compact and very efficient energy source based on Hydrogen-Metal systems, which could be a breakthrough for both private use as well as for industrial applications.

Organizers:

Institute of Physics Faculty of Physical, Mathematical and Natural Sciences University of Szczecin, Poland ul. Wielkopolska 15, 70-451 Szczecin

Organizing Committee:

K. Czerski, N. Targosz-Ślęczka, M. Kaczmarski, A. Kowalska, Edyta Kowalczyk-Łuc Combination of the face-to-face conference and on-line participation (MS Teams platform)

Conference Program:

Tuesday, September 22 - Willa West-Ende, al. Wojska Polskiego 65, 70-478 Szczecin 18:00- 19:00 Registration of the conference participants 19:00 Welcome Banquet

Wednesday, September 23 - "Rektorat" of the University of Szczecin, al. Papieza Jana Pawla II 22a, 70-453 Szczecin, room 111

8:00-10:00 Registration of the conference participants

9:00 **Press Conference**

10:00 Opening of the Conference

Rector of University of Szczecin

Rector of Maritime University of Szczecin

Representatives of the local Government and City







- 10:30 Opening Lecture: History of Low Energy Nuclear Reactions (P. Hagelstein, MIT, USA, 30' talk, recorded)
- 11:00 Plenary Lecture: Present Status and Perspectives of Low Energy Nuclear Reactions (J. Kasagi Tohoku University, Japan, 25' talk + 5' discussion)
- 11:30 Clean Energy from Hydrogen-Metal Systems: Problems to Solve (K. Czerski, University of Szczecin, Poland)
- 12:00 HERMES Project, (Pekka Peljo, University of Turku, Finnland)

12:30 - 13:30 Lunch (catering)

Chair: Natalia Targosz-Ślęczka

- 13:30 Electrolysis experiments, (J.P. Biberian, VEGATEC, France)
- 14:00 Gas loading experiments (F. Celani, INFN, Italy)
- 14:30 Accelerator experiments (M. Lipoglavsek, Josef Stefan Institute, Slovenia)
- 15:00 He-4 detection and correlation to the heat excess (D. Alexandrov, Lakehead University, Canada)

15:30 - 17:30 A short boat trip around the port of Szczecin

17:30 Catering

Chair: Konrad Czerski

- Evening Public Lecture: Hot Nuclear Fusion, (M. Jakubowski, Max Planck Institute for Plasma Physics, Greifswald, Germany)
- 18:40 Evening Public Lecture: Climate Change and Energy Production Policy (Jacques Ruer, SART von Rohr, France)

Thursday, September 24 - Institute of Physics, Faculty of Physical, Mathematical and Natural Sciences, University of Szczecin, ul. Wielkopolska 15, 70-451 Szczecin, room 305

Chair: Jacques Ruer

- 9:00 Structure and research program of the CleanHME, K.Czerski (USZ)
- 9:20 WP1 and WP7: Project Managing and Dissemination, N. Targosz-Sleczka (USZ), A. Kovacs (BET)
- WP2: Accelerator experiments, K. Czerski (USZ) + S. Bartalucci (INFN) + M. Lipoglavsek (JSI) 9:40
- 10:00 WP3: Gas Loading Experiments (Bulk Materials) and Detection Systems, Bo Hoistad (UU) + E. Mariotti (UniSi)
- 10:20 WP3: Gas Loading Experiments (Powder Materials), VEGA + FUT
- 10:40 WP3: Liquid/solid systems, A. Carpinteri (PoliTo)

11:00 -11:20 Coffee Break







Chair: Sergio Bartalucci

11:10 WP4: Preparation of active materials, Ch. Leroux (CNRS)

11:30 WP5: Theoretical Analysis, K. Czerski, V. Vysotskii

11:50 WP6: Application and Design of HME sources, SART

12:10 -13:10 Presentation of Commercial Companies and Research Associations (10' for each, not

presented before): Cyril Calatrava, SART Jozef Zlomanczuk, UU Guido Parchi, FUT

Arnaud Kodeck, LAKOCO

Andras Kovacs, BET

Robert Michel, VEGATEC

13:10 - 15:00 Lunch in chosen restaurants

15:00 -16:10 Discussion within WPs (separate conference rooms at the MS Teams platform)

WP1&WP7: N. Targosz-Ślęczka, A. Kovacs, room 305

WP2&WP5: F. Metzler, S. Bartalucci, M. Lipoglavsek, room 319 WP3: Bo Höistad, J.P. Biberian, G. Parchi, F. Michel, room 315 WP4&WP6: Ch. Leroux (CNRS), Jacques Ruer (SART), room 321

16:10 - 16:30 Coffee Break

16:30 - 17:30 Panel discussion and conclusions, Chair: Jean-Paul Biberian

19:00 23:00 Conference Dinner, Wyszak Browar Rodzinny, ul. Msciwoja II 8, 70-535 Szczecin

Friday, 25 September - Institute of Physics, Faculty of Physical, Mathematical and Natural Sciences, University of Szczecin, ul. Wielkopolska 15, 70-451 Szczecin, room 305

9:00- 10:00 Visiting of the eLBRUS Labs

Chair: Guido Parchi

10:00 Research Managing (Reporting) of the Project, A. Kovacs (BET)

10:30 Financial Managing (Reporting) of the Project, A. Bartoszewska (Regional Contact Point, H'2020), E. Kowalczyk-Łuc (USZ)

11:00 Time Schedule of the Project, A. Kowalska (AM)

11:30 11:50 Coffee Break

11:50 -13:30 General Assembly Meeting:







Changes to the Consortium Agreements Election of representatives to the Steering Board Organization of the Steering Board Meetings Organization of the next Consortium Meeting

13:30 - 14:30 Lunch (catering)

14:30 Meeting of the Steering Board 15:00 Meeting of individual WP participants 15:30 Final remarks and closing the conference, Bo Höistad