

Semi-annual Meeting of PRETZEL Project at Universitatea Politehnica Timisoara

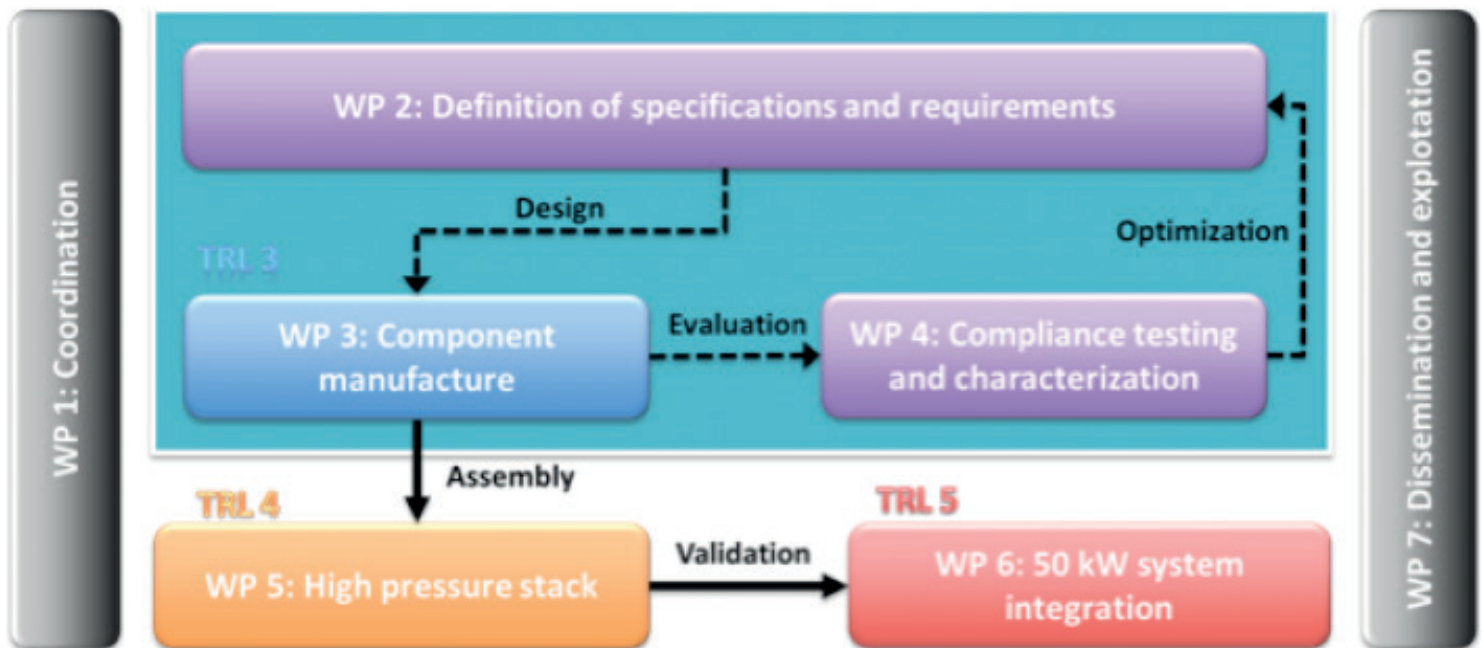
On September 25th 2018, the Universitatea Politehnica Timisoara (UPT) hosted the official Semi-annual meeting of PRETZEL project at the Faculty of Industrial Chemistry and Environmental Engineering.

<http://pretzel-electrolyzer.eu/>

The overall goal of this EU-Project Pretzel is the development of an innovative polymer electrolyte membrane electrolyzer (PEMEL) that provides

significant improvements in efficiency and operability to satisfy emerging market requirements. Such electrolyzers are urgently needed for the increased demand of the grid balancing services. In this context, PRETZEL is offering breakthrough technologies for becoming game changer in the field of water electrolyzers.

The project structure is illustrated in the scheme below:



The current status and progress on each work package of the project have been presented and discussed by its lead beneficiary and partners involved during the semi-annual meeting at UPT.





Project partners at dinner the night before the semi-annual meeting in Timisoara.

Characterization results already obtained were presented and discussed in **WP4**. According to the time plan of PRETZEL project the work package – Compliance testing and characterization - officially starts in October 2018, however preliminary results on the physical and electrochemical characterization of protective coatings and developed catalysts have been already presented and discussed.

Progresses made on components and electrocatalysts for the design of the PEMEL stack were discussed (**WP2, WP3**). The main objectives of PRETZEL project are the design and manufacture of a novel PEMEL stack and associated systems for a 25 kW consumption to produce 4.5 m³ H₂ per hour, working for more than 2000 hours at a rate power of 4 A · cm⁻², 100 bar and a temperature of 90 °C.

First tasks on cell development and pressure housing have been accomplished within **WP5** as well as components specifications and optimization were discussed as a critical point of the project.

The main objective of PRETZEL project is to test and integrate the hydraulic compression technology, already tested at the laboratory scale, under real working conditions (**TLR5**) which is necessary for commercialization. Within **WP6**, the system integration already started. First activities concentrate on the optimization of the cooling system due to the different requirements for the new developed stack. First results were furthermore discussed in terms of power input and hydrogen output.

Concerning **WP7**, status of dissemination and publication of PRETZEL project scope were analyzed and participation to congresses and workshops was reported as well as the achieved training activities. Dissemination and exploitation plans were discussed and near future actions decided.

PRETZEL partners are very grateful to the 18 teachers, researchers, PhD students and administrative staff from the 9 project partners who participated at the meeting:

http://www.upt.ro/Informatii-utile_upt-partner-in-horizon-2020-project_254_en.html

PRETZEL project progresses, publications and events can be followed on our social media profiles:

Twitter

twitter.com/PElectrolyzer

LinkedIn

linkedin.com/in/pretzel-electrolyzer-pemel-747522167/

Participating partners:



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