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Department of Electrochemistry, Corrosion and Materials Engineering  
Faculty of Chemistry,  
c/o Prof. Dr. Kazimierz Darowicki  
Gdańsk University of Technology  
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**Dr. Ludwig Jörissen**  
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## Confirmation of cooperation

Dear Prof. Darowicki,

Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW) cooperates with the Department of Electrochemistry, Corrosion and Materials Engineering in the field of fuel cells research.

As part of the cooperation, a research and development project entitled *Control algorithm and controller for increasing the efficiency of hybrid PEMFC systems in different application* under the Polish-German sustainability research program was realized. As part of the project, the Department of Electrochemistry, Corrosion and Materials Science implemented Dynamic Electrochemical Impedance Spectroscopy as a monitoring and diagnostic tool of a fuel cell and supercapacitors hybrid system. The proposed methodology has a high application character and further cooperation of ZSW and Gdańsk University of Technology in this field is planned in the next research projects, which are currently undergoing evaluation by funding agencies. Joint research activities initiated the invention of a new methodology for local dynamic impedance measurements, which is in the phase of further development.

We assess very highly the importance of cooperation with the Department of Electrochemistry, Corrosion and Materials Engineering.

Mit freundlichen Grüßen



Prof. Dr. Markus Hölzle  
(Member of the Board)



Dr. Ludwig Jörissen  
(Head of Department ECG)