



## Tomasz Bednarek

**Task Force: Hydrogen production**

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Dr. Tomasz Bednarek is an esteemed specialist in the field of hydrogen technologies with a focus on Proton Exchange Membrane (PEM) fuel cells, electrolysis, and the incorporation of hydrogen in energy, and chemical processes. His proficiency in computational sciences, electrochemistry and mechanics allowed him to develop PEM fuel cell models and to perform simulations of fuel cell operation across diverse scales, from micro/meso scale up to stacks. He played a significant role in the creation of the JRC ZEROVCCELL, a novel single-cell testing hardware.

Dr. Bednarek's ambition transcends the confines of research. He is dedicated to the integration of hydrogen technologies into the energy market by acknowledging their transformative potential in our energy infrastructure. He exhibits a particular interest in the production of green hydrogen, considering it as a sustainable alternative for our energy demands.

As a member of the European Hydrogen Sustainability and Circularity Panel, Dr. Bednarek actively advocates for the production and utilisation of green hydrogen. He also participated in standardisation initiatives in international organisations such as ISO, CEN/CENELEC, and IEC TC105. His academic achievements include a PhD from the Institute of Fundamental Technological Research of the Polish Academy of Sciences. Dr. Bednarek's work signifies not merely expertise, but a commitment to instigating change in the energy sector.