

Bu proje Avrupa Birliği ve Türkiye Cumhuriyeti tarafından finanse edilmektedir This project is co-funded by the European Union and the Republic of Türkiye





International Brokerage Event on Clean Hydrogen Partnership 2024 Call



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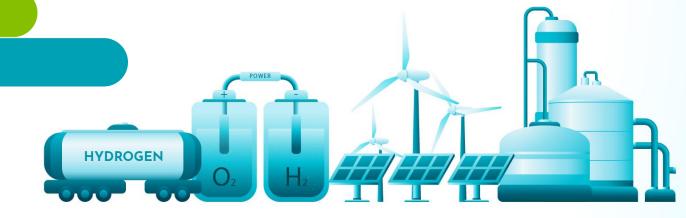












Description of the Organization



Istanbul Technical University (ITU), Energy Institute (https://enerji.itu.edu.tr/en/home) is working on every aspect of energy research including material development, energy efficiency, renewable and nuclear integration, energy planning & management.

Research activities on various aspect of electrochemical energy conversion & storage, specifically on Hydrogen & Fuel Cell research aspects are covered by several faculty @ITU.

Electrochemical aspect of hydrogen research is supported by projects including:

- H2S containing seawater electrolysis;
- Photoelectrochemical hydrogen production;
- Electrochemical CO₂ reduction;
- PEM electrolysis component development;
- Electrochemical NH₃ production;
- PEM fuel cell catalyst and cell/stack development;





The research interest can be defined as following:

- Electrochemical Energy Conversion & Storage
 - Monopolar & Bipolar Plate
 - Porous Transport Layers
 - Electrocatalysts
 - CNT & Graphene production
 - 3-electrode, Cell & Stack electrochemistry
- PEM, AEM & Alkali Electrolysis Technologies
- PEM & DMFC Fuel Cells
- Electrochemical CO₂ Conversion
- Electrochemical NH₃ production

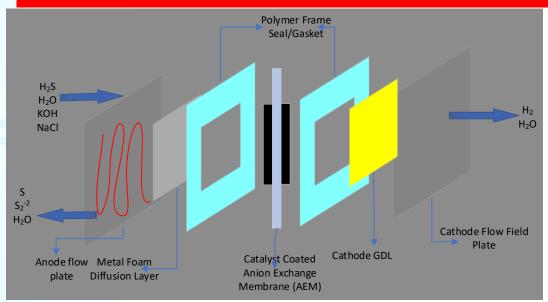




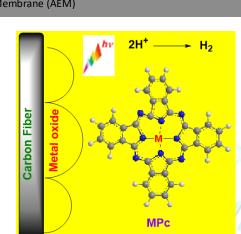


HORIZON-JTI-CLEANH2-2024-01-03: Development of innovative technologies for direct seawater electrolysis

H2SEA: Flow Through Seawater electrolysis together with H2S for Hydrogen Production



REPUBLIC OF TURKEY MINISTRY OF INDUSTRY AND TECHNOLOGY

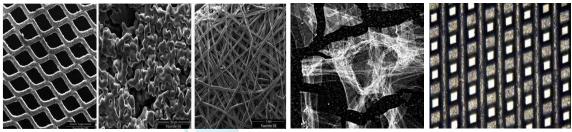


Anode/Cathode Nano Synthesis

Sea Water Catalyst 1 Catalyst 2

Ni, Co, Fe NiPc-FePc-CoPc-CVD Grafen

Sinter & Porous Transport Layer Development



Flow-Through, Zero-Gap Cell & Stack Development







Consortium - profile of known partners (if any)

No	Partner Name	Type	Country	Role in the Project
01	ITU		Turkiye	
02	BAS		Bulgaria	
03	ICSI		Romania	
04				
05	KIST		Korea	
06				

Consortium – required partners

No	Expertise	Type	Country	Role in the project	
01	Membrane				
02	Modelling				
03					
04					
05					
06					HYDROGE



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