CV – Motalleb Miri

Motalleb Miri is the team leader for hydrogen technologies at KONČAR – Electrical Engineering Institute, where he has been employed since May 2022. His current work focuses on the development of a prototype autonomous solar-hydrogen power system that uses renewable energy sources to produce hydrogen, which is subsequently stored and converted back into electrical energy through fuel cell technology. His responsibilities include the entire project cycle, covering research and analysis, energy balance calculations, equipment sizing, and implementation. He obtained his Master's degree in Mechanical Engineering from University of Zagreb Faculty of Mechanical Engineering and Naval Architecture in 2012, with a thesis entitled Hybrid Photovoltaic and Fuel Cell Energy System for Electricity Production on a Remote Island. He earned his Bachelor's degree in Process Engineering from University of Tehran in 1997, specialising in thermodynamics and thermal processes. In 2003, he completed a diploma programme in Energy Planning and Sustainable Development at University of Oslo. Since November 2023, he has been pursuing a PhD at Faculty of Electrical Engineering Mechanical Engineering and Naval Architecture University of Split, where his research focuses on hydrogen technologies for stationary applications. His research has been published in peer-reviewed journals and presented at international conferences. His most recent paper, Performance Evaluation of Solar-Hydrogen Microgrid Energy Storage System: Comparing Low-pressure with Simulated High-Pressure Hydrogen Storage, co-authored with Ivan Radaš, Ivan Tolj, and Frano Barbir, was published in the International Journal of Hydrogen Energy in July 2025. In 2024, he co-authored the paper Review of Proton Exchange Membrane Fuel Cell-Powered Systems for Stationary Applications Using Renewable Energy Sources in the journal Energies. In 2023, he co-authored A Sizing and Techno-Economic Analysis for Local Hybrid Microgrid, presented at the SpliTech International Conference. His earlier work, Solar Hydrogen Power System for Isolated Passive House, was published in the International Journal of Hydrogen Energy in December 2015.