



SPECIAL SESSION 10

Digital twin and resilience of Green Hydrogen System production

Session description :

Green Hydrogen is the most promising energy vector for the future. However, the technological, scientific and societal barriers to its production by complex and expensive multi-source platforms are at the heart of many questions for research and industry. This is why the green hydrogen sector is struggling to establish itself on the market. This special session will provide an in-depth exploration of design of digital twin to reduce costs, industrial scaling up, optimal feasibility test of Hybrid Renewable Energy Systems (HRES), specially green hydrogen production. This invited session deals with technologies and fundamental ICT techniques to design of a digital twin as virtual platform enabling intelligent decision making for online tracking of technical and economic performance and prognosis and health management and recovery decision robust to intermittent aspect of energy sources

Session chairs :

- **Belkacem OULD BOUAMAMA**, Polytech Lille Univ., FR

Topics of interest (not limited to) :

- Fault detection and diagnosis of RES in real operating conditions;
- Online optimal control and efficiency tracking of RES;
- Online Data driven and model-based PHM (Prognosis and Health Management) ;
- Industrial or laboratory applications of supervision (FDI, FTC) systems;
- Digital twin for optimal energy management and Resilient of Hybrid RES;
- Strategies for developing green hydrogen in North Africa

Important Dates



Sponsors



Contact : sime.conf@gmail.com

Submission Link
<https://sime-conf.org/submission/>

Website : www.sime-conf.org