

## HASSAN MABRAK

## **PhD Researcher**

HASSAN MABRAK is a 26-year-old doctoral researcher. He began his doctoral preparation in electrochemistry and renewable energies at the Ben M'sik Faculty of Sciences in Casablanca, under the direction of Professor Mr Youssef Naimi, Director of the Laboratory of Physico-Chemistry of Materials (PCML), since 2020. He obtained his Master's

degree (renewable energies and materials) in the same establishment and his license at the Chouaib Doukkali University of El Jadida. His thesis subject is Hydrogen production by water electrolysis: Development of electrode materials and a prototype electrolyser. His master's end-of-study project was "preparing for the implementation of an iso 50001 energy management system at the ocp jorf-lasfar thermoelectric plant". This included the following steps: energy diagnosis of existing installations, optimization of utilities, namely steam and lighting, development of an action plan to improve the performance of the turbogenerator, energy feasibility studies of solutions, technical and economic study of the proposed solutions, preparation for certification, technical-economic study for the electrical and thermal power supply of the thermoelectric power plant and build by installing photovoltaic solar panels.