SUSTAINABLE MATERIALS, PROCESSES AND SYSTEMS FOR ENERGY TRANSITION

MUR DM 118 - Electrochemical conversion of CO2 into added-value chemicals

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] UNIVERSITA' DEGLI STUDI DI PALERMO [P.iva/CF:00605880822]
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Context of the research activity	Research activities will be focused on the CO2 electrochemical conversion in aqueous electrolytes into formic acid and syngas. For the process' industrial feasibility, its performance should reach simultaneously high CO2reduction rates, selectivity, concetration, and stability with time. The aim of this research will be to optimise process performance by studying the effect of several operating parameters, including cell potential, pH, pressure, temperature, and purity of the gaseous CO2 stream Progetto finanziato nell'ambito del PNRR – DM 118/2023 - CUP E14D23001860006
Objectives	Progetto finanziato nell'ambito del PNRR – DM 118/2023 Scientific Responsible: Onofrio Scialdone, University of Palermo, Onofrio.scialdone@unipa.it Main seat to carry out research: Department of Engineering, University of Palermo, Palermo
Skills and competencies for the development of the activity	The candidate should: - be able to work in a team as well as adapt to multicultural environments; - have the willingness to learn new technologies and knowledge;- have excellent communication and interpersonal skills, i.e. be able to clearly get the message across, in verbal or written speech, and be able to grasp other people's, as well as fluent English communication; - be highly self-motivated, eager to face new challenges and solve problems; - know the basic knowledge of electrochemistry.