Investigation into $ALD-CuS_x$ as a precatalyst for electrochemical CO_2 reduction



Figure 1: a) Effect of KHCO₃ concentration on the Faradaic efficiency (FE) of different reduction products. b) Product distribution after 4, 7 and 14 hours of CO₂ electrolysis in 0.5 M KHCO₃ solution at 40 °C. Gray columns and symbols for H₂, orange for formate, blue for CO. c) XPS analysis of the electrode before and after electrolysis, showing that most of the S disappeared during electrolysis. Figures reproduced from ref. 1: M. Suominen et. al. Materials Today Sustainability 24 (2023) 100575.