

A summary of a confidential Thesis „Copper and nitrogen doped electrocatalysts derived from CO₂“

The aim of the bachelor thesis work was to synthesize copper and nitrogen doped carbon electrocatalysts from CO₂. Synthesis of the materials was done *via* molten salt CO₂ capture and electrochemical transformation method and subsequent pyrolysis of the obtained catalysts. Physical characterisation of CO₂-derived catalysts was done to study the morphology, structure, and elemental composition of materials. The electrocatalytic activity of CO₂-derived materials towards oxygen reduction reaction and CO₂ reduction reaction was tested. The results presented in this bachelor thesis show that CO₂ can be turned into active copper and nitrogen doped carbon electrocatalysts.