



PhD Scholarship in Homogeneous Catalysis with CO₂

A PhD scholarship in catalytic valorization of CO₂ to commodity fuels and chemicals by homogeneous metal catalysis is available at the Technical University of Denmark (DTU) in the Centre for Catalysis and Sustainable Chemistry, Department of Chemistry with Prof. Anders Riisager. You will join an international environment applying an application-oriented research strategy to develop novel chemistry and processes with the potential to secure the future for the next generations in terms of energy, resources, and the environment.

Responsibilities and qualifications

We are looking for a very motivated and ambitious candidate for a project within the field of selective cascade catalysis with CO₂ using ionic liquid-enabled complex catalyst systems. The work will include both syntheses of catalyst components, characterization, and optimization of the catalyst systems for batch and continuous-flow reactions using heterogenized catalyst forms.

Candidates should have a two-year master's degree (120 ECTS points) or a similar degree with an academic level equivalent to a two-year master's degree. A master's degree with a strong background in experimental inorganic coordination chemistry is preferred.

Experience with homogeneous catalysis, ionic liquid chemistry, materials characterization, pressurized reactors, and instrumental analytical methods is an advantage, but not a requirement.

The candidate must be able to work independently but also participate in collaborations. Good communication skills in both written and spoken English are required.

Approval and enrolment

The scholarship for the PhD degree is subject to academic approval, and the candidate will be enrolled in one of the general degree programmes at DTU. For information about our enrolment requirements and the general planning of the PhD study programme, please see the [DTU PhD Guide](#).

Salary and appointment terms

The appointment will be based on the collective agreement with the Danish Confederation of Professional Associations. The allowance will be agreed upon with the relevant union. The period of employment is 3 years. The position is available with start as soon as possible.

You can read more about [career paths at DTU here](#).

Further information

Further information may be obtained from Prof. Anders Riisager, e-mail: ar@kemi.dtu.dk.

You can read more about DTU Chemistry at www.kemi.dtu.dk and the research group at www.kemi.dtu.dk/anders-riisager

If you are applying from abroad, you may find useful information on working in Denmark and at DTU at DTU – [Moving](#) to Denmark.

DTU is a leading technical university globally recognized for the excellence of its research, education, innovation, and scientific advice. We offer a rewarding and challenging job in an international environment. We strive for academic excellence in an environment characterized by collegial respect and academic freedom tempered by responsibility. DTU has 12,000 students and 6,000 employees. We work in an international atmosphere and have an inclusive, evolving, and informal working environment. Our main campus is in Kgs. Lyngby north of Copenhagen and we have campuses in Roskilde and Ballerup and in Sisimiut in Greenland.