

The **Research Center for Pharmaceutical Engineering (RCPE)** is a global leader in pharmaceutical engineering sciences. We help our partners to create and manufacture advanced medicines for patients around the world, through optimizing products and processes.



FOR OUR AREA CCFLOW  
WE ARE OFFERING A

# PAID DIPLOMA/ MASTER'S THESIS

## ELECTROORGANIC SYNTHESIS

To dedicated students of **chemistry, chemical engineering, pharmaceutical engineering** or related disciplines, we offer an opportunity to write a paid Diploma/Master's thesis. The project is conducted in close cooperation with the **Institute of Chemistry at the University of Graz**.

### OBJECTIVE:

Electrochemical organic synthesis has emerged as one of the most sustainable and cost efficient techniques for the preparation of active pharmaceutical ingredients. The goal of this work is to develop **novel electrochemical transformations**, particularly involving redox mediators, and the development of new **reactor technologies for the scale up of electrochemical synthesis**.

In particular, the objectives of this work are:

- Investigation of **new electrocatalytic methods** for the synthesis of organic compounds
- Design and development of **electrochemical devices for kilogram-scale** electroorganic synthesis
- Implementation of **real-time process monitoring** techniques and **artificial intelligence**-based development methods into electrochemical devices

WITHIN THE FRAMEWORK OF THIS DIPLOMA/ MASTER'S THESIS WE OFFER THE FOLLOWING:

- Extensive participation in a top-level and industrially relevant research project in an international environment
- Supervised training in the task
- Assistance of experienced staff with the implementation of innovative ideas
- Access to highly modern infrastructure on campus of University of Graz
- Assistance with the publication of results
- Adequate compensation and opportunities for personal and professional development

### FINANCING:

- Compensation on the basis of a service contract

IF YOU ARE INTERESTED IN WRITING YOUR THESIS AT THE INTERFACE BETWEEN UNIVERSITY RESEARCH AND INDUSTRY/ BUSINESS AND TO CONTRIBUTE TO THE OPTIMIZATION OF PRODUCT AND PROCESS DEVELOPMENT IN THE PHARMACEUTICAL INDUSTRY, PLEASE CONTACT US INDICATING THE REFERENCE NUMBER.

### Contact:

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