

PhD Position

Optical sensors for the analysis of mineral building materials

You will work in the project "**LumAConM - High resolution imaging measurement analysis for mineral building materials**". The aim of this project is to research high-resolution, luminescence-based analytical methods for the measurement (imaging) of pH and chloride for mineral building materials. This will enable better concrete diagnostics to improve the understanding of various corrosion processes and enable a more accurate assessment of the condition of concrete structures. The project is funded within the framework of an FFG - Collective Research Program
More information: <https://tinyurl.com/yxnabegk>

As a PhD candidate, you will be a member of the Doctoral School of Chemistry and work together with an international team from several disciplines.

Responsibilities:

- Synthesis of new luminescent dyes
- Investigation of new sensor materials
- Set-up of measurement systems and application in field tests
- Presentation of results at international conferences and writing of publications

Required Skills and Qualifications:

- Master degree in Chemistry or Chemical Engineering
- Sound skills in synthetic chemistry
- Experience in fluorescence spectroscopy and imaging is favorable
- Good knowledge of the English language is favourable
- Knowledge in Matlab, Python or similar is an asset.

Employment: 30h/week, limited for 3 years, starting asap

Payment: Gross monthly salary and pay grade in terms of collective agreement for University staff (payable 14 times per year), comparable to FWF PhD, B1, EUR 2.205,60

Workplace: 8010 Graz, Austria

Deadline for applications: 30th October 2020

Please send your job application to:

Assoc. Prof. Torsten Mayr, torsten.mayr@tugraz.at

Graz University of Technology actively strives for diversity and equal opportunities. In particular, decisions in personnel selection procedures must not be based on criteria such as age, gender, ethnicity, religion or belief, sexual orientation or special needs due to a disability to the detriment of the applicants. Graz University of Technology strives to increase the proportion of women, especially in management positions and among scientific staff, and therefore explicitly invites qualified women to apply. Until a balanced number of women is reached, women with the same qualifications will be given priority in the application process.

General requirements:

Travel expenses incurred in connection with the selection procedure will not be reimbursed by Graz University of Technology.