

Institute of Physical and Theoretical Chemistry

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The ASEA-UNINET National Coordinator for Vietnam

## Call for Applications: 3-Year PhD Position in Austria via Ernst Mach Grant

Dear Sir or Madam,

The Chemical Modeling Group at the Graz University of Technology (TU Graz), Austria, invites top candidates from Vietnam to apply for a 3-year PhD position at our institute. I am seeking a candidate to supervise, and funding for this position can be secured by applying for the prestigious **Ernst Mach Grant - ASEA-UNINET** ("Full PhD" category).

This scholarship, awarded by the OeAD, offers comprehensive funding for a full 36-month doctoral program for postgraduate candidates (under 35). For full details on the scholarship benefits and financial support, please consult the official program page. The forthcoming application deadline to the OeAD is March 1, 2026.

The successful applicant will join a dynamic research group focusing on developing state-of-the-art methods. Potential research topics include:

- Iterative Synthesis and Characterization: A closed-loop approach combining the computational design of novel molecules/materials with their subsequent experimental synthesis and validation.
- Explainable AI in Chemistry: Developing novel machine learning models and knowledge engineering techniques for Explainable AI (XAI) to predict material properties and molecular reactivity.
- Materials Design: Computational materials design using quantum mechanical and other advanced computational chemistry techniques for sustainable technologies (e.g., catalysts for CO<sub>2</sub>, solar cells, batteries).

• **Digitalization for Smart Laboratories:** Design and development of robotic platforms for automated synthesis and analysis, and 'digital twins' for laboratory processes.

Promising candidates will benefit from a co-supervision arrangement involving myself and an additional senior professor from chemistry, physics, or computer science. This arrangement places the student to collaborate within TU Graz's Fields of Expertise, particularly *Advanced Materials Science* and *Information, Communication & Computing*, providing a broad network and excellent employability opportunities after graduation.

Given the interdisciplinary nature of our research, candidates with a background in chemistry, physics, computer science, or related disciplines are highly encouraged to apply.

The application is a two-step process. First, interested candidates need to contact me directly at kondinski@tugraz.at with their CV and motivation letter to be considered for supervision. With my support and a formal Letter of Acceptance, the selected candidate can then proceed with their official grant application to the OeAD.

More details on our research group and publications are available on our main webpage: https://chemin.at/.

Sincerely,

Aleksandar Kondinski