



ČESKÉ VYSOKÉ UČENÍ TECHNICKÉ V PRAZE

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Fakulta Elektrotechnická

Katedra Řídicí Techniky

### OPENING PHD POSITIONS

Applications are invited for two PhD positions in the Applied Physics program at the [Advanced Materials Group](#) ([Department of Control Engineering](#), [Faculty of Electrical Engineering](#), [Czech Technical University in Prague](#)) under the supervision of Dr. Antonio Cammarata.

#### OBJECTIVES:

The projects focus on the application of quantum mechanical simulation techniques to design nanoscale materials. Examples of PhD projects include: 1) Structural dynamics role in heat diffusion, energy dissipation and layer exfoliation of Transition Metal Dichalcogenides; 2) Computational design of low-dimensional structures for energy harvesting; 3) Nanoelectric generators as local power suppliers.

#### JOB REQUIREMENTS:

Successful candidates must have an MSc in Physics, Chemistry, Materials Science or related disciplines. We are seeking highly motivated individuals with a solid background in physics/physical chemistry. Knowledge of atomistic simulation codes is a plus. Programming experience in widely-used scientific languages (Fortran, C, C++) together with knowledge of shell scripting in UNIX environment is also desirable. Good knowledge of English, both written and oral, is compulsory.

#### CONTRACT DETAILS:

The salary will be competitive (about 1200 EUR net). The standard period for a PhD course is 4 years.

#### HOW TO APPLY:

The call is directed at EU applicants (although applications from outstanding candidates outside of the EU will also be considered). Review of the applications will start immediately and the positions will be filled as soon as proper candidates are found – the starting date is September the 1<sup>st</sup> 2022. Applications should consist of a brief description of research interests and relevant experience (e.g. the transcript of studies, thesis etc.), a CV and, optionally, contact of recommendation from academic referees. Inquiries and applications must be sent to [cammaant@fel.cvut.cz](mailto:cammaant@fel.cvut.cz).