

## Research project SONATA BIS

*"Relativistic and QED corrections in very accurate calculations of rovibrational states of small hydrogen-containing molecules."*

A graduate studentship is offered to an outstanding student who will be engaged in a full-time, thesis-based graduate level program of study at the Institute of Physics, Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University, Torun, Poland <<http://www.fizyka.umk.pl/fizyka/>>. The candidate should have MSc or equivalent degree in Physics (physics-oriented students of Chemistry, Informatics or Applied Mathematics can also apply). The candidates with outstanding academic records expecting MSc degree in this academic year may also apply. In the latter case, a letter of recommendation from the scientific supervisor must be presented. The scholarship is valued 3 000.- PLN per month and may be held for two years with a possibility of an extension.

**Description of the tasks:** The development of algorithms for the calculation of relativistic corrections to the energies of small diatomic and triatomic molecules within the Born-Oppenheimer framework. The algorithms have to be implemented, integrated with the existing software and tested in specific calculations.

The application should be submitted by e-mail to **Dr. Monika Stake** <[monika@fizyka.umk.pl](mailto:monika@fizyka.umk.pl)> not later than **15 April 2017** and should include a motivation letter, scientific curriculum vitae and a copy of the Diploma or a letter of recommendation.

Web: <https://www.ncn.gov.pl/baza-ofert/?akcja=wyswietl&id=175235>