Scholarship Offer for PhD Student at Faculty of Chemistry, A. Mickiewicz University, in Project Opus 11

Institution: Faculty of Chemistry, Adam Mickiewicz University in Poznań **Position Name:** PhD student (*Doktorant - stypendysta*) in the project OPUS 11: "Rational design of molecular nanomagnets: synthesis, characterization, theoretical description and computational modeling of their properties".

Duration: up 36 months, initially for 6 months with possible extension after probation period. **Salary:** negotiable but not more than 2300 PLN/month (gross).

Principal Investigator (and Supervisor): Prof. Czesław Rudowicz. **Requirements:**

- 1. Substantial knowledge of physical foundations of EMR spectroscopy and magnetism of transition ions and molecular nanomagnets, especially the effective spin Hamiltonians.
- 2. Familiarity with tensor operators, group theory, and symmetry.
- 3. Other qualifications required:
- good programming skills in computational and/or algebraic languages;
- high level of analytical skills and inquiring mind;
- publications in internationally refereed scientific journals would be an advantage;
- proficiency in English is a must, whereas in Polish would be an advantage.

Scope of work within project tasks:

Development of forms of the generalized spin Hamiltonians [GSH], including: higher-order zero-field splitting terms [HOZFS] and higher-order magnetic field-dependent terms [HOFD], using the methods of group theory for various symmetry cases. Systematic categorization of the experimental and theoretical data related to these terms. Individual literature searches. Active participation in complementary project's studies and preparation of publications.

Additional information:

- Application containing: motivation letter, CV (including photo), publication list (if any), copy of diploma (if available, or information on current status of MSc thesis), contact details of 2-4 potential referees, should be sent as a single pdf-file or zip-file. Please include in your application one page with the following phrase: "In accordance with the Personal Data Protection Act from 29 August 1997, I hereby agree to process and to store my personal data by the Adam Mickiewicz University in Poznań for recruitment purposes".
- Selected candidates will be invited for the interview the date will be communicated to the candidates individually.

Send applications by email to: <ala_zal@wp.pl> *with a copy to* <czerud@amu.edu.pl> The e-mail heading should be: "PhD student #1– OPUS grant".

Application deadline: 31.03.2017 or until the position is filled.

For more information contact: Prof. Czesław Rudowicz by email: <czerud@amu.edu.pl>.