

The University of Wrocław announces a competition for a scholarship under the project NCN OPUS

Project title

„Energy structure and spectroscopic properties of $3d^3$ ions (Cr^{3+} , Mn^{4+}) in crystalline matrices under extreme conditions”

Consortium leader: Uniwersytet Humanistyczno-Przyrodniczy im. Jana Długosza in Częstochowa,
UMO-2018/31/B/ST4/00924, prof. dr hab. Mikhail Brik

Head of the part implemented by the University of Wrocław: prof. dr. hab. Eugeniusz Zych

Department of Chemistry eugeniusz.zych@chem.uni.wroc.pl

Organizational unit: Faculty of Chemistry;

Position: student or doctoral student;

Research area/discipline: chemical sciences;

Number of students: 2;

Deadline for submitting documents: 26.07.2022;

Estimated date of the contested settlement: 29.07.2022;

Estimated date of starting the tests: immediately;

Research implementation period: till 15.06.2023;

Scholarship: 5 000 zł/month.

Description of tasks:

Synthesis of d-electron elements activated phosphor materials and/or chemical compounds of d-electron elements and their physicochemical studies, including X-ray structural studies, photoluminescence, and thermoluminescence studies in the range of 10-600 K and 30-500 ° C, respectively. Preparation of reports and presentations on the implementation of research.

Requirements:

1. Participant of MSc studies or doctoral school;
2. Experience in the so-called wet and dry inorganic synthesis, also in a controlled atmosphere (nitrogen, vacuum) and in high-temperature synthesis;
3. Practical experience in conducting physicochemical research, in particular photoluminescent research with the use of a cryostat and thermoluminescent research;
4. Ability to prepare and present research reports;
5. Ability to write a scientific paper;
6. Good command of spoken and written English;
7. Ability to work individually and in a team;
8. Ability to use Origin and MS Office software, in particular MS Word and MS Power Point.

Responsibilities:

Research work as part of the project "Energy structure and spectroscopic properties of $3d^3$ ions (Cr^{3+} , Mn^{4+}) in crystalline matrices under extreme conditions " implemented by the consortium Jan Długosz University in Częstochowa, the University of Gdańsk and the University of Wrocław. Collaboration with consortium units in planning and carrying out research. Preparation of research reports and draft versions of publications.

Additional information can be obtained from prof. dr. hab. Eugeniusz Zych,
eugeniusz.zych@uwr.edu.pl

The application must contain:

1. Curriculum vitae and cover letter;
2. A photocopy of the master's or bachelor's degree diploma;
3. A short self-report showing that the candidate meets the indicated requirements
4. List of publications, or information about the lack of such publications;
5. List of conference presentations at international conferences;

A clause must be included in the curriculum vitae: " I give my consent pursuant to Art. 4 and 7 of the GDPR, i.e. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (general regulation on data protection (Journal of Laws UE L of 04/05/2016, pp. 1-88), for the processing of my personal data by the University of Wrocław, 1 University Square, 50-137 Wrocław, for the purpose of recruitment for work at the University of Wrocław I am aware that the consent granted may be withdrawn at any time during the period adequate to its granting."

Documents should be sent only in electronic form to the following address:

eugeniusz.zych@uwr.edu.pl by entering the subject of the message: „Stypendium-WCH-EZych”.

Additional information:

The University of Wrocław reserves the right to contact only selected candidates;

Successful applicants may be asked for an interview;

The University of Wrocław reserves the right to close the competition without selecting a candidate;

The University of Wrocław reserves the right to cancel the competition;

The University of Wrocław does not provide housing.