



## Scholarships for PhD students in the theoretical nuclear physics

**Job title :** PhD student

**Number of positions:** 3 (three scholarships)

**Unit name:** Institute of Physics, Maria Curie-Skłodowska University

**City:** Lublin, Poland

**Link to the website of the unit:** <https://www.umcs.pl/en/>

### Requirements

- Master diploma (or equivalent) in physics or related area (diploma has to be obtained till 15 August 2019),
- Basic knowledge of theoretical physics including nuclear physics,
- Communicative knowledge of English.

### Task description

The successful candidate will be working on the theoretical description of low energy nuclear fission. He/she will have to prepare the PhD thesis in the nuclear theory group in the Maria Curie Skłodowska University in Lublin.

Specific scopes of the work may include:

- Performing computer calculations of potential energy surfaces and transport parameters of fissioning nuclei within the macroscopic-microscopic model. Investigations of influence of various collective degrees of freedom on the fission fragments mass and kinetic energy yields.
- Carrying out multidimensional self-consistent Hartree-Fock-Bogolubov calculations for selected spontaneously fissioning isotopes. Evaluation of the fragment mass and kinetic energy yields within the time dependent collective model.
- Preparing a numerical program and performing calculations within the coupled multidimensional Langevin and Master equations for dissipative nuclear fission of hot and rotating nuclei with light-particle evaporation .

### Type of the project

The project is realized in collaboration with the Tsinghua University and the China Institute of Atomic Energy in Beijing, China in the frame of the Polish-Chinese program SHENG-1 .

**Group of Sciences:** ST (Science and Technology)

**The deadline for the submission of the applications:** 2019-06-30 23:59 CET

**Form of sending of the offers:** E-mail to: [michal.warda@umcs.pl](mailto:michal.warda@umcs.pl)

### Conditions of employment:

- The Candidate has to undertake education on 1st October 2019 at the Doctoral School of Natural Sciences of the Maria Curie-Skłodowska University in Lublin
- Scholarship 3000 PLN / monthly (no tax) for 33 months
- No tuition fees is foreseen

## **Additional information**

### **Required documents:**

- Copy of master diploma (if available, or information on current status of MSc thesis),
- Scientific CV (including photo and list of publications)
- Contact details
- Please include in your application one page with the following phrase: "In accordance with Article 6(1)(a) of the General Data Protection Regulation of 27 April 2016 (Journal of Laws of the EU L 119/1 of 4 May 2016) I agree to the processing of personal data other than those indicated in Article 221 of the Labour Code (name(s) and surname; parents' names; date of birth; place of residence; address for correspondence; education; previous employment), included in my job offer for the purpose of current recruitment."

### **Candidate may attach the following documents:**

- Academic records transcript
- Recommendation letter from a researcher
- Confirmation of conference activities
- Confirmation of taking part in research projects, academic trainings
- Certificate of language skills
- Published and/or accepted for publication scientific papers
- Description of scientific interests
- Any documents confirming his/her scientific, didactic or organizing activities

Selected candidates will be invited for an interview (personally or by an internet communicator, e.g. Skype or WeChat). The date of the interview will be communicated to the candidates individually.

For more information please contact:

<http://studyinpoland.pl/en/index.php/news/36-study-in-lublin>

or

[artur.dobrowolski@umcs.pl](mailto:artur.dobrowolski@umcs.pl)

[krzysztof.pomorski@umcs.pl](mailto:krzysztof.pomorski@umcs.pl)

[michal.warda@umcs.pl](mailto:michal.warda@umcs.pl)

### **Information on maintenance costs in Lublin (aprox.):**

Room in the student dormitory (monthly): 400-600 PLN

Lunch in cafeteria: 10-20 PLN

Monthly living costs: 1000 PLN

Lublin, 30<sup>th</sup> May 2019