

Vipavska cesta 13, 5000 Nova Gorica

The University of Nova Gorica is offering the position of ASSISTANT / YOUNG RESEARCHER (m/f) in the area of experimental physics of two-dimensional heterostructures

We invite candidates who are interested in working as an assistant / young researcher to apply for this position at the student-friendly and research-oriented <u>University of Nova Gorica</u>. We offer work in a dynamic and interdisciplinary research environment, supported by the latest research equipment and including direct involvement in the international research arena.

The Laboratory of Organic Matter Physics, University of Nova Gorica, Slovenia has an opening for a doctoral student in experimental physics of two-dimensional heterostructures. The student will embark onto a research of the role of Moiré patterns on charge transport in two-dimensional heterostructures. A successful candidate will learn how to fabricate graphene/insulator/graphene tunneling junctions. To this end he/she will become familiar with graphene exfoliation and manipulation, optical lithography, scanning probe techniques and measurements of low electric currents. The enrollment into the doctoral study program Physics 3rd level of the Graduate School University of Nova Gorica is required. The successful candidate will also be expected to serve as a teaching assistant in undergraduate physics classes at the School of sciences of the University of Nova Gorica. The position is for four years and comes with complete salary with fringe benefits, therefore a permit to work in the European Union will be required prior to the start of the position.

Excellent communication skills; fluent written and verbal command of English are a must. We especially encourage candidates with affinity to the experimental solid state physics, with good knowledge of electronic properties of solids to apply.

Candidates for this position must meet the conditions for young researcher pursuant to Article 113 of the <u>Rules on (Co)Financing and Assessment Procedures and Monitoring the Conducting</u> of Research:

- hold at least a bachelor's degree in a related field conferred under a study programme adopted in Slovenia before 11 June 2004, and an average grade on all exams and tutorials (not including diploma thesis) of at least 8.00, and meet the conditions for enrolment in tertiary graduate studies; or
- hold a degree obtained through a second-cycle study programme in a relevant discipline adopted in Slovenia after 11 June 2004, and an average grade on all first-cycle and second-cycle exams and tutorials of at least 8.00 (including grade on diploma thesis and Master's thesis); or
- hold a Master's obtained through a Master's study programme adopted in Slovenia before 11 June 2004; or

- hold a degree obtained at a foreign university comparable to the descriptions set out in the first, second and third indents; and
- are 28 years old or younger (the birth year is applied); the age limit can be raised above 28 if the young researcher has already completed one or two years of tertiary graduate study without financial support, by one extra year for each year completed.

(2) If upon the concluding of the contract the young researcher is enrolled in the second or third year of a tertiary graduate study programme, their average grade from their undergraduate studies under a study programme adopted in Slovenia before 11 June 2004, or their average grade on all first-cycle and second-cycle exams and tutorials, shall not be taken into consideration. If the candidate holds a Master's degree obtained through a Master's study programme adopted in Slovenia before 11 June 2004, their average grade from their undergraduate studies shall not be taken into consideration.

(3) If a candidate for young researcher has taken parental leave lasting at least six months, whereby one year is taken into account for each child, the age limit shall be raised above 28. The same shall apply if the candidate has taken long-term (at least six months) documented sick leave.

(4) The agency does not finance candidates for young researcher who upon the signing of the contract are enrolled in an additional year of tertiary graduate studies or who have already held that status, candidates who have already been financed in the young researcher programme via the agency, and candidates who already hold a doctoral degree.

The following must be enclosed to the application:

- a statement of research interests
- curriculum vitae, with eventual publication list
- copy of diploma or other relevant documents

Applications with proof of satisfaction of the conditions will be accepted until 1 August 2019, in electronic <u>or</u> paper form. Applications in electronic form should be sent to <u>tea.stibilj.nemec@ung.si</u>. Applications should be sent as a single .pdf attachment in an e-mail message. Applications on paper should be sent to Univerza v Novi Gorici, Vipavska cesta 13, 5000 Nova Gorica, Slovenia, marked Tender for Young Researchers.

Contact person for questions relating to the application procedure: Tea Stibilj Nemec, tel. 05 6205 822, e-mail tea.stibilj.nemec@ung.si.

For more information regarding the research position please send enquiries to Prof. dr. Gvido Bratina, e-mail: gvido.bratina@ung.si.

About the Laboratory of Organic Matter Physics University of Nova Gorica Slovenia

The Laboratory of Organic Matter Physics University of Nova Gorica carries out a range of fundamental and applied research in organic electronics and two-dimensional materials, with the emphasis on charge transport in thin layers of organic semiconductors and blends of organic semiconductors and graphene. To this end we operate a unique experimental setup for measuring time-dependent photoconductivity, coupled to a complete sample fabrication facility including a clean-room with 1-micron-photolithography, a glove-box with integrated metallization chamber

and organic thin film fabrication facilities ranging from evaporation to liquid-based methods. Graphene-based heterostructures are fabricated by a dedicated flake manipulation apparatus. The group has also full access to an array of advanced characterization techniques including FEG SEM and TEM and time-resolved photoelectron spectroscopy. The group regularly collaborates with several important groups across Europe focusing on organic electronics and graphene and is a partner member of the Graphene Flagship. The position is funded by the Slovenian research agency, with a competitive salary, which complements nicely the renowned high-quality of living in Slovenia, known for its safety, unspoiled nature and friendly people.