

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 ultrafast characterisation of complex magnetic materials

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 research will be focused on studying the static and dynamic characteristics of ferromagnetic samples using the magneto-optic Kerr effect (MOKE). The experiments will involve the use of an extreme ultraviolet (XUV) light source, based on high harmonic generation (HHG) of an infrared laser in gas. The wavelength of the XUV radiation will be set at the M absorption boundary of various ferromagnetic elements, which will allow the performance of element-sensitive, time-resolved experiments on complex magnetic material. The candidate will gain experience in the areas of advanced characterisation methods and non-linear optics. The research topics will be focused on magnetism in hybrid semiconductors, ultrafast (de)magnetisation and temperature-induced phase transitions.

The research will be conducted as part of an international research network. Joint experiments are already planned with (e.g.) research teams on the FERMI free-electron laser at the Elettra Laboratory in Trieste, which is the co-owner of the HHG light source at the University of Nova Gorica, at the Paris Institute of Nanosciences and at the Institute of Nuclear and Radiation Physics at KU Leuven in Belgium.

Candidates should be students of physics, physical chemistry, materials science or related disciplines. We are looking for a creative and enthusiastic candidate with knowledge and experience in laboratory experiments. Candidates with experience with complex magnetic materials and setting up optical experimental schemes that include ultrafast lasers are preferred.

More information on the HHG light source that will be used in the MOKE experiments is available at: <a href="https://www.elettra.trieste.it/lightsources/labs-and-services/citius/citius.html">https://www.elettra.trieste.it/lightsources/labs-and-services/citius/citius.html</a>. Contact person for additional information in connection with the research area: <a href="mailto:giovanni.de.ninno@ung.si">giovanni.de.ninno@ung.si</a>.

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 of Research</u>:

• 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 brief motivational letter
- CV
- copy of diploma or other relevant documents
- letter of recommendation

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.