







UNIVERZA V NOVI GORICI Vipavska cesta 13, 5000 Nova Gorica

The University of Nova Gorica announces the opening of the following position:

Expert working at the development and characterization of a light source based on laser high-order harmonic generation (HHG) in gas.

The hired researcher will join the project CITIUS - Medregijski center za ultrahitre fotonske tehnologije v spektroskopiji / Centro interregionale di Tecnologie Fotonice Ultraveloci per la Specttroscopia, co-financed in the framework of the Program for cross-border cooperation Italia-Slovenia 2007-2013 (for more information, see: http://www.ita-slo.eu). The contract will have an initial duration of one year, with the possibility of a further extension.

The University of Nova Gorica is engaged in the development of a state-of-the art light source, based on the generation of coherent light through the interaction of a high-power laser with a gas jet of molecules. The spectral domain of the generated light will initially range between 20 and 40 eV. The generated harmonic pulses will have a duration of the order of few tens of femtoseconds, an energy of the order of one microjoule, and variable repetition rate (from 1 to 10 kHz).

Presently, the source is being assembled at Sincrotrone Trieste (Italy), where it will remain until completion of the commissioning phase. Then, the source will be transferred to the new laboratory, which is under construction at Nova Gorica University.

Job tasks:

- Commissioning of the new laboratory at Nova Gorica University.
- Transfer and commission of the light source in the new laboratory
- Participation to experiments aimed at characterizing the light generated by the source.

For more information about CITIUS activities, contact: Giovanni De Ninno (giovanni.de.ninno@ung.si).

Candidates must:

- University degree in an appropriate field
- Have some experience with the commissioning, characterization and use of HHG sources
- Show very good (oral and written) communication skills in English.

The application must include:

- A cover letter.
- The CV.
- The list of most relevant publications.
- Two recommendation letters.

Candidates must send their applications by normal post to the following address: *Tea Stibilj Nemec*, *Univerza v Novi Gorici*, *Vipavska cesta 13*, *5000 Nova Gorica* and by email to <u>giovanni.de.ninno@ung.si</u> and <u>tea.stibilj.nemec@ung.si</u>. Application deadline is 17. 5. 2013.

The contract will last until 31.5.2014.