



UNIVERZA V NOVI GORICI  
Vipavska cesta 13, 5000 Nova Gorica

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

**Associate Researcher working at the development of a numerical code for the modelling of the process of high-harmonic generation (HHG) in gas.**

The hired researcher will join the project CENILS, co-financed in the framework of the Central Europe (for more information, see: <http://www.central2013.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 have a duration of few tens of femtoseconds, an energy of the order of one microjoule, and variable repetition rate (from 1 to 10 kHz).

**Job tasks:**

- Development of a numerical code including all relevant effects involved in the generation of HHG.
- Design, organization and execution of experiments aimed at benchmarking the numerical code with experiments.
- Establishment of intense collaborations with local, national and international research groups.
- Preparation and submission of research projects aimed at enriching and sustaining the above-mentioned activities.

For more information about CENILS activities, contact prof. Giovanni De Ninno ([giovanni.deninno@elettra.trieste.it](mailto:giovanni.deninno@elettra.trieste.it)).

**Candidates must:**

- Hold a PhD in physics, and have some experience with HHG sources.
- Demonstrate a strong attitude in developing numerical codes and carrying out numerical analysis.
- Demonstrate a well-developed capability to promote and carry out independent activities within a research group.
- Be author of high-quality scientific papers.

- 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 are strongly encouraged to provide a general plan of the research activity they intend to carry out (max 2 pages).

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 in po elektronski pošti na naslov, and* by email to Giovanni De Ninno ([giovanni.deninno@ung.si](mailto:giovanni.deninno@ung.si)).

Recruitment will continue until the position is filled. Next consideration of applications will **commence on 20 March 2013.**

**Contacts:**

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