



Vipavska cesta 13, 5000 Nova Gorica

**The University of Nova Gorica is offering the position of
ASSISTANT / JUNIOR RESEARCHER (m/f)
in the field of theoretical biophysics**

We invite candidates who are interested in working as an assistant/junior researcher (doctoral candidate) to apply for this position at the student-friendly and research-oriented [University of Nova Gorica](#). The work will be conducted at the [Materials Research Laboratory](#), in a dynamic and interdisciplinary research environment supported by state-of-the-art equipment, and will include direct involvement in the international research arena.

The research work will focus on the development of analytical spin models suitable for use in experimental data processing and computer simulation of conformational transitions in biopolymers. The use of 1D spin models is unique from the perspective of analytical solutions (statistical sums) and thus allows an implicit description of interactions with water. The development of this approach to the processing of circular dichroism and differential scanning calorimetry data allows insight into the constants of interactions between polypeptides and water, which is currently out of reach. The analytical solution also permits the use of an implicit water model in simulations and thus potentially allows for the simulation time to be cut nearly in half. For additional information in connection with the research work, contact Dr A. Badasyan: artem.badasyan@ung.si.

We expect candidates with a background in physics and a good familiarity with statistical mechanics. Creative and enthusiastic candidates with experience in polymer physics and biophysics are preferred. Part of the project will be dedicated to the development of a Gromacs force field, and therefore basic knowledge of C, C++ and Python is expected.

Candidates for this position **must** meet the conditions for junior researcher pursuant to Article 113 of the [Rules on \(Co\)Financing and Assessment Procedures and Monitoring the Conducting of Research](#).

The following must be attached to the application:

- motivational letter
- CV
- a copy of your degree certificate or other relevant documents
- letter of recommendation

Please send your application, along with proof that you meet the requirements, via e-mail to tea.stibilj.nemec@ung.si by 31 July 2020. The application should be sent as a single pdf e-mail attachment.

If you have any questions relating to the application procedure, please contact: Tea Stibilj Nemec, tel. +386 5 6205 822, e-mail tea.stibilj.nemec@ung.si.