



Open PhD position - »Biomimetic nanostructures for medical applications«

Topic description: Despite great advances in nanomedicine, most synthetic nanoparticles are recognized by the immune system and rapidly removed from the bloodstream, which consequently leads to a significant reduction in the effectiveness of treatment and unwanted side effects. New approaches in the development of drug delivery systems are needed to improve treatment efficacy and ensure safety. A new trend in this area is the preparation of so-called biomimetic nanoparticles prepared from the body's own cells. The work for the doctoral thesis will include the preparation of biomimetic nanoparticles, encapsulation of active ingredients and also the extensive characterization of as-prepared nanostructures. The candidate will have the opportunity to get acquainted with the challenges in the treatment and diagnosis of cancer, new techniques of synthesis and characterization and will also participate in the process of pre-clinical testing of prepared nanostructures. The work will take place at the [Department of Nanostructured Materials](#) at the Jožef Stefan Institute. A 4 year PhD position is a fully-funded by the Slovenian Research Agency, starting in October 2020.

Minimum requirements for application:

- master degree from chemistry, pharmacy or biology,
- grade point average (exams and lab classes excluding the undergraduate thesis) above 8,
- age up to 28 years (the year of birth is taken into account),
- knowledge of English.

Criteria for assessment of candidates:

- grade point average in all courses,
- awards or prizes received,
- participation in research work,
- scientific articles published,
- assessment of an interview with the candidate.

Interested candidates should send their CV to nina.kostevsek@ijs.si by **10th of July 2020**. Interviews with the candidates will take place in July 2020.

[Public call](#)

Ljubljana, 9th of June 2020