Ph. D. student positions in Laboratory of Bioorganic Chemistry

The Laboratory of Bioorganic Chemistry lead by Jacek Jemielity at the Centre of New Technologies, University of Warsaw seeks to fill a Ph. D. student position to investigate new therapeutic applications of modified mRNAs or inhibition of nucleotide-processing enzymes of therapeutic relevance by small molecules as a part of ongoing interdisciplinary research project.

Ph. D. student: A two-year Ph. D. position with full-stipend **(3 000 PLN /mo.)** funded by a grant from the National Centre of Science (Poland; OPUS program) coordinated by Prof. Jacek Jemielity, is available from **October 2018** at the Centre of New Technologies, University of Warsaw.

Organic/bioorganic chemist

Ideal candidate profile: We seek motivated candidates with a MSc degree in chemistry or related field, fluent English and a strong interest in chemistry of nucleotides and nucleic acids components. The position will involve interdisciplinary research directed at the design, synthesis and studying properties of novel nucleotide analogs and development of new synthetic methods for the preparation of nucleotide analogs. The project will also involve studies on mRNA degradation and interactions with proteins by means of microscale thermophoresis. The successful candidate will have experience in organic synthesis and bioorganic/medicinal chemistry, knowledge of methods for compound purification and spectroscopic characterization. Skills in enzymatic assays, studying protein-ligand interaction by biophysical methods, and experience in biochemistry will also be appreciated.

How to apply: Applications should be submitted by e-mail to Prof. Jacek Jemielity (j.jemielity@cent.uw.edu.pl) no later than **13th of July 2018 at 12:00 (GMT+1)** with the term “Ph. D. student position” as email’s topic. Application should include:

- a cover letter
- curriculum vitae including a description of prior research experience
- a list of publications and conference presentations
- reference contact list (with phone numbers and e-mails; at least two reference contacts are expected from post-doc candidates and one contact from Ph.D. candidates)
- and a transcript of record from undergraduate studies

Following an initial screening of the applications, selected candidates will be contacted by e-mail for further recruitment steps.

The selected candidate will have to obtain PhD student status from the University of Warsaw.

About Laboratory of Bioorganic Chemistry:

We are an interdisciplinary group of chemists, biologists, and biophysical researches. We are focused on the synthesis, properties and applications of modified nucleotides (including analogs of mRNA 5' cap, nucleoside triphosphates, nucleotide sugars, nucleoside phosphosulfates and many others). The main goal of our research is to create tools useful for elucidating biological processes involving nucleotides and to find new potential nucleotide-derived therapeutics.

To do so, we develop new synthetic methods for the chemical and enzymatic synthesis of nucleotides and their analogs. We are particularly interested in the synthesis and properties of nucleotides modified within the phosphate moieties, and fluorescently labeled nucleotides. We design nucleotide analogs that increase cellular stability of mRNA and nucleotide-derived inhibitors of protein biosynthesis with increased stability under cellular conditions. We synthesize fluorescently labeled nucleotides, nucleotides with affinity tags as well as nucleotide-probes for NMR and EPR experiments. We also prepare and evaluate conjugates of nucleotides with nano(bio)materials. Finally, we are interested in the development of inhibitors of nucleotide-processing enzymes. More information is available at www.jemielitygroup.pl

Please include in your offer:

"I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended."