Postdoctoral Research Fellow

Massively Multiplexed Fluorescence Spectroscopy

Salary base

Can \$45,000 a year plus benefits

Department

Loock Laser Lab (<u>http://www.loocklaserlab.com/</u>) University of Victoria, Victoria, BC Dept of Chemistry

Posting End Date

March 31st, 2022 or until filled.

Research opportunity

Our research group builds spectrometers, fiber probes, refractometers, as well as micro-sensors for optical absorption, fluorescence, mechanical strain, vibration and sound. We take full advantage of the advances of the commercial developments in the telecom, imaging and sensing areas. When developing instruments we fabricate prototypes, write our own software and frequently design our own electronic circuitry.

We are looking for an ambitious research scientist to contribute to our development of new spectrometers and fiber probes for fluorescence and Raman measurements. The successful candidate will develop a new highly multiplexed fluorescence spectrometer using a fully programmable lightsource, which we previously invented and now patented. In particular we will develop systems for multiplexed and high-speed fluorescence imaging, Raman imaging and SERS detection using the programmable lightsource.

Most of our work is motivated by monitoring requirements from collaborators in industry and government labs, and the successful candidate will work closely with academic partners in Germany and industrial partners in Canada and Germany. Research experience in our group will provide the successful candidate with highly-sought qualifications for careers in academia and in the private sector.

The UVic campus is situated in one of the most scenic regions in Canada and Victoria has been ranked repeatedly among the most liveable cities worldwide. The University provides an intimate research environment and exciting opportunities for interdisciplinary research both on campus and within co-located research institutes.

Candidate qualifications

You are qualified to apply if you have completed a PhD degree in physics, chemistry, or related engineering disciplines within the last 5 years, and have hands-on expertise in building and characterizing optical devices, such as spectrometers and (micro-)analytical instrumentation. Knowledge of Matlab or Python programming is an asset. Your work will require occasional stays at collaborator labs in Canada and abroad, as well as reports and presentations at collaborator meetings, workshops, and conferences. Excellent written and oral communication skills are therefore required. The ability to work in a team, as well as independently lead a research project is expected.

How to Apply

Applicants should provide a letter of interest, curriculum vitae, including proof of doctoral degree (or anticipated graduation date), and contact information of three references to Peter Loock, <u>hploock@uvic.ca</u>.

The anticipated start date for this position is June 1, 2022, but earlier start-dates can be considered. The annual salary is Can\$45,000 plus benefits. This is one year term position, with the possibility of extension.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

We particularly encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.