Postdoctoral Position in Organic Electronic Devices, with emphasis on vacuum systems

We are seeking a highly motivated postdoctoral researcher to join a multidisciplinary team led by Profs. Giovanni Fanchini (Western Physics & Astronomy) and Joe Gilroy (Western Chemistry). The project will focus on the synthesis and characterization of organic semiconducting polymers via solvent-free vacuum techniques, their characterization with scanning probe techniques, and their incorporation into a variety of organic electronic devices.

The successful candidate for this position will be responsible for the management and operation of an ultra-high vacuum (UHV) chamber with radio-frequency sputtering and thermal evaporation capabilities, integrated with an inert-atmosphere glove box for organic electronic device fabrication and testing. One of such systems is currently operational in Fanchini's lab, while a second system with advanced capabilities is under commission. It is essential that the candidate will have demonstrated expertise in operating and maintaining ultra-high vacuum systems (which may include, for instance: thermal and/or e-beam evaporation, chemical vapor deposition, vacuum polymer deposition, radio-frequency sputtering, plasma enhanced CVD, pulsed laser ablation, etc.). It is also critical that the candidate will have at least some experience in device fabrication and testing in an inert-atmosphere glove box. Fanchini's lab is also home of a unique infrastructure for advanced device characterization and testing using scanning probe techniques, specifically: atomic force microscopy (AFM), conducting AFM, Kelvin-probe force microscopy (KPFM), near-field scanning optical microscopy (NSOM), near-field scanning thermoreflectance imaging (NeSTRI), in addition of routine materials science characterization techniques. Physics and Astronomy also hosts Western's Nanofabrication Facility (http://nanofab.uwo.ca/) and Interface Science Western (http://www.isw.physics.uwo.ca/) where additional infrastructure for device assembly, characterization, and testing is available. Previous experience with similar facilities, and potential to take advantage of them, will be an asset for the ideal candidate. Experience in organic materials will be a plus, but is not necessary.

Strong written and oral communication skills are essential, as the candidate will be expected to frequently interact with other team members and prepare and submit paper manuscripts and research reports in a timely fashion.

Application Details

The minimum requirements for this position are a PhD in physics, engineering physics, physical chemistry, materials science and engineering, electrical engineering, or related disciplines, and a strong publication record. The appointment will begin at the candidate's earliest convenience, and will be made for one year. The appointment is renewable for a second year upon agreement of all parties involved in the project. Compensation levels will be comparable to current NSERC PDF standards and include benefits.

Interested candidates should send a cover letter, curriculum vitae, and contact information for two referees to Prof. Giovanni Fanchini at gfanchin@uwo.ca. Please include "PDF in Organic Electronic Devices" in the subject line of your e-mail. Additional material and/or availability for an interview may be requested at a later stage. Applications will be considered until the position is filled, and only shortlisted candidates will be contacted.

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