

Postdoctoral Associate Position Opportunity

Department: Mechanical & Materials Engineering

Supervisor: Aaron Price

Description of Research and Position:

Conjugated polymers (CPs) are typically prepared as simple thin-films or powders which has hindered their wide-spread adoption. Therefore, new functional materials and manufacturing processes are essential to exploit these materials. Our solution is a patent-pending innovation combining a novel Material and its concomitant Manufacturing Process that yields 3D CP structures via the digital light processing (DLP) additive manufacturing process. The objective of Phase I of this I2I project is to develop and optimize our prototype CP materials and DLP fabrication technology to further advance this innovation towards commercialization.

Accountabilities of the Role:

The Incumbent will lead research efforts related to material development, topological structuring and surface morphologies, and DLP process improvements. Finally, having completed these work packages, the Incumbent's effort will focus on harnessing these developments to fabricate the first prototype microfluidic devices exhibiting improved sensing and actuation performance. A key outcome for this project is to successfully transition to Phase II of NSERC's Idea to Innovation model.

Educational Requirements necessary for the Role:

Candidates must have completed a Ph.D. degree in Chemistry or Materials Science (or closely related field) with demonstrable expertise in organic chemistry, polymer synthesis, and experimentation. Experience with polymer processing, characterization, and fabrication technologies including additive manufacturing and/or radiation curing would be an asset. Excellent written and oral communication skills are essential for this role.

Number of Opportunities: 1

Proposed Start Date: 09/01/2020

Length of Appointment: 12 months

Please note that the length of appointment may change.

How to Apply:

Interested applicants are requested to forward their CV to Dr. Aaron Price (aaron.price@uwo.ca).

Posting Expires: _____

Note: Postings must be publicly available for a minimum of 10 days.