



The Department of Materials Science and Engineering at the University of Michigan invites applications for multiple postdoctoral research fellow positions in the areas of polymer synthesis, surface science, robotics, machine learning, and instrumentation. The research fellows will join an interdisciplinary research team supervised by Profs. Anish Tuteja, Abdon Pena-Francesch, Geeta Mehta, and Pramod Reddy, and will directly contribute to an active DOD-sponsored project. The project, led by the University of Michigan, involves multiple other university and industrial partners. The research will involve the design and synthesis of zwitterionic polymers and glycolipids, as well as the design and fabrication of robotic instrumentation for automated high-throughput characterization of ice formation and adhesion.

The research fellows will have direct access to state-of-the-art research facilities in the PIs' laboratories and through UM's advanced instrumentation facilities (Michigan Center for Materials Characterization, BioInterfaces Institute, etc.). As part of a team, the postdoctoral research fellow will be involved in a fast-paced research environment, all aspects of high impact applied research including design and execution of experiments, data analysis, manuscript preparation, presentation of results, and mentoring.

The positions are available immediately with a target start date in August 2023, and will remain open until they are filled. The position will last at least one year, with the possibility of extension for subsequent years depending on performance. The salary will be commensurate with experience, prior publication record, and according to university regulations.

Please include a cover letter, CV, and names of potential references in your application. Please, send your applications and queries to atuteja@umich.edu or abdon@umich.edu.

Required Qualifications (for multiple positions)

- A Ph.D. in polymer chemistry, robotics, surface engineering, materials science, mechanical engineering, biomedical engineering, chemical engineering, data science, electrical engineering, or a related field.
- Experience with conducting research on tight timelines.
- Strong publication record, good communication and interpersonal skills

Desired qualifications (for multiple positions)

- Prior experience in glycolipid / zwitterionic polymer synthesis, characterization
- Prior experience in automated chemistry, high-throughput measurements, and machine learning data analysis.
- Experience with in-vitro and in-vivo (mouse) models.

The University of Michigan provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.