

POSTDOCTORAL RESEARCHER IN BIOINSPIRED MATERIAL DESIGN LAB (BMDL) IN THE DEPARTMENT OF CIVIL, ENVIRONMENTAL AND ARCHITECTURAL ENGINEERING AT WORCESTER POLYTECHNIC INSTITUTE (WPI)

The Opportunity:

The BMDL lab in the Department of Civil, Environmental & Architectural Engineering at WPI is seeking a highly motivated and qualified postdoctoral researcher to support, conduct, and publish research to find, make, and promote new construction materials that act as carbon sinks. The successful candidate will also help with educational activities in the Environmental Engineering Laboratory. This position is ideal for a recent PhD graduate with a strong background in engineering, chemistry, and analytical chemistry, with a specific interest in applying their expertise to the frontiers of engineering materials. The applicant would be expected to play a key “hands-on” role in various research efforts in the department and would be given the opportunity to develop their own research direction.

Responsibilities:

- Manage operations of the BMDL Laboratories, ensuring efficient use of equipment and maintaining a safe and productive work environment.
- Working and supervising undergraduate and graduate research assistants in the laboratory and providing guidance in conducting research projects.
- Help the teaching efforts in the environmental engineering laboratory (undergraduate lab courses).
- Maintain and operate all laboratory instrumentation, including ICP-MS, ICS, GC-MS, TOC, etc., and train users in proper operation.
- Be aware of all lab safety requirements and protocols, and lead safety training sessions for lab users.
- Collaborate with the supervising faculty member on grant proposals and research publications.
- Conduct independent research in areas of expertise, leading to peer-reviewed publications.
- Maintain laboratory records and prepare reports as required.

Qualifications:

- Recent PhD in Material Science, Environmental Eng., Civil Eng., Chemistry, Biochemistry, Chemical Eng. or a closely related field.
- Strong foundation in chemical, physical, and biochemical principles in the environmental area.
- Excellent laboratory skills and experience with various analytical techniques used in environmental engineering.

- Effective communication, interpersonal, and leadership skills with the ability to mentor and motivate research assistants and work with students in a classroom setting.
- Strong work ethic, ability to manage multiple tasks, and a commitment to high-quality research.
- Experience with grant writing and scientific publication is a plus.

To Apply:

Please email jbleyhl@wpi.edu a cover letter outlining your research interests and qualifications for this position, a curriculum vitae, and contact information for three references.

Review of applications will begin on August 1, 2024, and continue until the position is filled.

Worcester Polytechnic Institute is an equal opportunity employer and values diversity at our institution. We do not discriminate on the basis of race, religion, color, national origin, gender, sexual orientation, age, marital status, veteran status, or disability status.