

Post-Doctoral Fellow
Worcester Polytechnic Institute

Direct Link: <https://www.AcademicKeys.com/r?job=239667>

Downloaded On: Jul. 22, 2024 7:29pm

Posted Jul. 17, 2024, set to expire Nov. 9, 2024

Job Title	Post-Doctoral Fellow
Department	
Institution	Worcester Polytechnic Institute Worcester, Massachusetts
Date Posted	Jul. 17, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Mechanical Engineering Material/Metallurgy Manufacturing & Quality Engineering
Apply Online Here	https://apptrkr.com/5426418

Apply By Email

Job Description

Image not found or type unknown



JOB TITLE

Post-Doctoral Fellow

LOCATION

Worcester

DEPARTMENT NAME

Mechanical Engineering - NFR JM

DIVISION NAME

Post-Doctoral Fellow Worcester Polytechnic Institute

Direct Link: <https://www.AcademicKeys.com/r?job=239667>

Downloaded On: Jul. 22, 2024 7:29pm

Posted Jul. 17, 2024, set to expire Nov. 9, 2024

Worcester Polytechnic Institute - WPI

JOB DESCRIPTION SUMMARY

The iMdc program is searching for post-doctoral fellows to increase the number and diversity of projects in our research portfolio, with emphasis on advanced manufacturing technologies for high-integrity applications.

JOB DESCRIPTION

The successful candidate will be engaged in conventional and advanced materials manufacturing technologies, including additive manufacturing, cold spray fabrication, friction stir welding, and cast and wrought alloy processing, including high-entropy alloys. The candidate will perform advanced experimental investigations and computational modeling to simulate these processes (thermal histories, microstructure evolution, etc.), evaluate fatigue and high temperature performance and damage/failure mechanisms occurring in these materials, and optimize the materials and manufacturing processes for high-integrity applications. The candidate should have extensive knowledge of materials science (fatigue, thermo-mechanical fatigue, and creep, fracture mechanics and life predictions, materials processing and microstructures, dislocation mechanisms, stress analysis), experimental engineering experience (CNC machining, mechanical testing, metallography and fractography - scanning and transmission electron microscopy, including EBSD, X-ray diffraction, and digital image correlation are required), and analytical and computational modeling skills (knowledge of MATLAB, ANSYS, phase field and crystal plasticity modeling is highly desirable). Responsibilities will include design of experiments for fatigue, thermo-mechanical fatigue, and creep investigations, implementation of novel testing, characterization, and analysis schemes, and development of computational modeling tools for material, process, and performance prediction and optimization. In addition to the use of the mechanical testing and material characterization equipment, the candidate will coordinate training sessions for current and new students and researchers. The candidate will conduct research on multi-disciplinary projects, and will work in a fast-paced environment, which requires regular reports and presentations to research groups and funding agencies and sponsors. Excellent written and oral communication skills are essential requirements.

To apply please submit the following documents: Cover letter with areas of research interest that align with this position; CV with list of publications; names and contact information for three references (letters of recommendation encouraged)

FLSA STATUS

United States of America (Exempt)

Post-Doctoral Fellow Worcester Polytechnic Institute

Direct Link: <https://www.AcademicKeys.com/r?job=239667>

Downloaded On: Jul. 22, 2024 7:29pm

Posted Jul. 17, 2024, set to expire Nov. 9, 2024

WPI is an Equal Opportunity Employer. All qualified candidates will receive consideration for employment without regard to race, color, age, religion, sex, sexual orientation, gender identity, national origin, veteran status, or disability. We are seeking individuals with diverse backgrounds and experiences who will contribute to a culture of creativity and collaboration, inclusion, problem solving and change making.

To apply, visit: https://wpi.wd5.myworkdayjobs.com/en-US/WPI_External_Career_Site/job/Worcester/Post-Doctoral-Fellow_R0001221

About WPI

WPI is a vibrant, active, and diverse community of extraordinary students, world-renowned faculty, and state of the art research facilities. At WPI, we have competitive and comprehensive benefits, including health insurance, long-term care, retirement, tuition assistance, flexible spending accounts, work-life balance and much more.

Diversity & Inclusion at WPI

WPI is committed to creating an inclusive workplace where everyone feels valued and respected; a place where every student, faculty and staff member can be themselves, so that they can study, live, and work comfortably, to reach their full potential, and make meaningful contributions in order to meet departmental and institutional goals. WPI thrives on innovative practice and welcomes diverse perspectives, insight, and people from diverse lived experiences, to enhance the community environment and propel the institution to the next level in a competitive, global marketplace.

jeid-535069f1ae93bb4a8ec39660b23cc0b7

Contact Information

Post-Doctoral Fellow
Worcester Polytechnic Institute

Direct Link: <https://www.AcademicKeys.com/r?job=239667>

Downloaded On: Jul. 22, 2024 7:29pm

Posted Jul. 17, 2024, set to expire Nov. 9, 2024

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

N/A

Worcester Polytechnic Institute

,