



School of
Engineering
BROWN UNIVERSITY

FACULTY POSITIONS AVAILABLE

The School of Engineering at Brown University invites applications for **several full-time faculty positions** at the Assistant or Associate Professor level (pre-tenure), with an expected start date of July 1, 2027. We seek visionary researchers and educators in the fields of **Chemical Engineering, Environmental Engineering,** and **Materials Science and Engineering**, broadly defined.

AREAS OF INTEREST

Chemical and Environmental Engineering

We welcome applicants working across a wide range of forward-looking areas, with specific interests including, but not limited to:

- **Industrial Decarbonization:** Novel pathways for difficult-to-abate sectors such as green cement, low-carbon steel, sustainable hydrocarbon management, metabolic engineering, and synthetic fuel development.
- **Modeling & Systems Integration:** Optimization theory, physical modeling, large-scale energy systems integration, computational discovery, atmospheric dynamics, and life-cycle analysis.
- **Separations and Transport Phenomena:** Advanced membranes, electrochemical separations, voltage-responsive materials, fate and transport of environmental pollutants.
- **Critical Minerals Recovery:** Sustainable extraction, recycling and processing of elements essential to the global energy transition.
- **Coastal & Climate Resilience:** Engineering solutions addressing sea-level rise, infrastructure protection, natural hazards, water sustainability, and ecosystem vulnerability.
- **Environmental Microbiology:** microbial fuel cells, biotransformation of emerging contaminants, methanotrophs for climate change mitigation, metagenomics of microbial communities, plant-microbe interactions.
- **Water Treatment Technologies:** bioreactors, forward osmosis, nanofiltration, nanosorbents, advanced oxidation processes.

Materials Science and Engineering

We seek candidates pushing the boundaries of structure, properties, and processing of materials, with specific interests including, but not limited to:

- **Quantum Materials & Devices:** Design, synthesis, and multiscale modeling of materials for quantum computing, light-driven phenomena, advanced sensing, and solid-state devices,
- **AI-Enabled Materials Discovery & Characterization:** Application of machine learning, autonomous workflows, and AI tools for accelerated materials design and automated characterization.
- **Materials for Low-Power Computing:** Novel materials systems designed to address the energy demands of next-generation microelectronics and neuromorphic architectures.
- **Mechano-Coupled Phenomena:** Interfacial mechanics, chemo-mechanics, and stress-driven behavior in structural or functional materials, especially under extreme environments.

APPLICATION INSTRUCTIONS

Applicants are encouraged to submit their materials online through <https://apply.interfolio.com/190435>. Review of applications will begin on October 15, 2026 and will continue until the positions are filled.

