

The Department of Mechanical Engineering invites applications for a tenure track position at the Assistant Professor level in the area of Acoustics beginning Fall 2012. Specific areas of interest include:

**Biomedical Ultrasonics:**

- (a) Acoustic imaging and imaging systems
- (b) The physical acoustics of novel imaging techniques, such as contrast enhanced imaging, elastography, time reversal, and so on
- (c) High intensity focused ultrasound (HIFU) therapy and image guided HIFU
- (d) Ultrasound enhanced drug delivery
- (e) Shock wave lithotripsy and/or focused ultrasound histotripsy
- (f) Nonlinear acoustics

**Biomedical Photo-Acoustics and Acousto-Optics:**

- (a) Photo-acoustic and acousto-optic imaging and tomography
- (b) HIFU therapy guidance using photo-acoustics or acousto-optics
- (c) High-resolution photo-acoustic imaging of small structures

**Applications of acoustics to problems in materials science and environmental sciences:**

- (a) Ultrasound and Photo-acoustic NDE, sensing, & material characterization
- (b) Seismic & underwater sensing & imaging
- (c) Energy technologies
- (d) Novel acoustic materials, technologies, and phenomena

Successful candidates should have a Ph.D. degree in a relevant field of engineering or applied science, and should have demonstrated ability to sustain a funded research program. The applicant should be able to contribute to the graduate and undergraduate programs in Mechanical Engineering. Salary is competitive and commensurate with experience.

Boston University has made a long-term commitment to the development of the College of Engineering, and we are continuing an effort to increase both the breadth and depth of faculty expertise in the areas identified above. The Department of Mechanical Engineering has strong research programs in acoustics and vibrations; biomechanics; computational science and engineering; dynamics, robotics, systems and controls; thermofluid sciences, energy and sustainability; materials; and MEMS and nanotechnology. The Department is further strengthened by its affiliation with the Division of Materials Science and Engineering, the Division of Systems Engineering, the Fraunhofer USA Center for Manufacturing Innovation, the Center for Information and Systems Engineering, and the Photonics Center. Both the Department and College are working to implement ambitious ten-year plans that envision substantial growth in the coming years.

**For additional information and for instructions on how to apply, please go to:**

<http://www.bu.edu/me/facultysearch>

**Application Deadline: January 31, 2012**

Boston University and the Department of Mechanical Engineering are Equal Opportunity, Affirmative Action employers.

