

## M.S./Ph.D. Research and Teaching Assistantships at Tufts University

The Civil and Environmental Engineering Department at Tufts University has five teaching assistantships and several research assistantships available for students interested in pursuing an MS or PhD degree within a dynamic research environment. Both assistantships include summer support for thesis research. Located only six miles from historic downtown Boston in Medford, Massachusetts, the Department of Civil and Environmental Engineering at Tufts University thrives on interdisciplinary collaborations. Assistantships are currently available in the following areas:

1. Liquefaction hazard and earthquake site response. See <http://geohazards.cee.tufts.edu/> to learn more about the research. Contact Prof. Laurie Baise at [laurie.baise@tufts.edu](mailto:laurie.baise@tufts.edu).
2. Research in structural health monitoring (SHM) for bridges. Tufts University SHM website:<http://engineering.tufts.edu/cee/shm/Questions/> more information: Professor Brian Brenner, [brian.brenner@tufts.edu](mailto:brian.brenner@tufts.edu) Modeling of transport and fate of pathogens in surface waters. Contact Prof. Steve Chapra at [steven.chapra@tufts.edu](mailto:steven.chapra@tufts.edu) <<mailto:steven.chapra@tufts.edu>>.
3. Monitoring and modeling airborne ultrafine particles in urban areas. Funding is available for a PhD student. See [http://engineering.tufts.edu/cee/people/durant/durant2010PhD\\_RA.pdf](http://engineering.tufts.edu/cee/people/durant/durant2010PhD_RA.pdf) to learn more about the research. Contact Prof. John Durant at [john.durant@tufts.edu](mailto:john.durant@tufts.edu)
4. Seismic design and assessment of buildings and bridges. See <http://engineering.tufts.edu/cee/people/hines/publications.asp> to learn more about this research. Contact Prof. Eric Hines at [emhines@lemessurier.com](mailto:emhines@lemessurier.com).
5. Professor Islam's research group WE REASoN(<http://engineering.tufts.edu/cee/reason/>) emphasizes interdisciplinary collaborative partnership to address contemporary and emerging problems of water with a focus on scarcity and abundance within the context of change, variability and human health. Our research focuses on synthesizing scientific information and contextual understanding to create actionable knowledge in the interface of climate, cholera, and conflicts. For more specific information about research opportunities, please send an email to Dr. Islam ([Shafiqul.Islam@tufts.edu](mailto:Shafiqul.Islam@tufts.edu))
6. Is water the next oil? Is water war inevitable? Is water a property or a human right? If you are intrigued by these questions, we are looking for you to join us in our Interdisciplinary Program in Water Diplomacy. Several doctoral traineeship opportunities are available for highly motivated and creative individuals with a strong interest in pursuing interdisciplinary approaches to resolve complex water problems. For more information, please visit <http://waterdiplomacy.tufts.edu> and submit an online application.
7. Laboratory studies on the fate and transport in porous media and neurotoxicity of engineered nanomaterials. Contact Prof. Kurt Pennell at [kurt.pennell@tufts.edu](mailto:kurt.pennell@tufts.edu)
8. Experimental investigations of persistent organic pollutant bioremediation: microbial population dynamics and mediated processes; combined physical, chemical and biological *in-situ* remedies. Contact Prof. Natalie Cápiro at [natalie.capiro@tufts.edu](mailto:natalie.capiro@tufts.edu) and Prof. Kurt Pennell at [kurt.pennell@tufts.edu](mailto:kurt.pennell@tufts.edu)
9. Structural Health Monitoring of Bridges (contact [Prof. Masoud Sanayei](mailto:Prof.Masoud.Sanayei)) <http://engineering.tufts.edu/cee/shm/>
10. Mitigation of train-induced building floor vibrations for operation of sensitive equipment and human comfort (contact [Prof. Masoud Sanayei](mailto:Prof.Masoud.Sanayei)) <http://engineering.tufts.edu/cee/people/sanayei/>
11. Engineering education - Four (4), funded positions available that focus on the evaluation of service as appropriate pedagogy for engineering students. Successful applicant will be expected to also engage in a technical aspect related to sustainable engineering. See <http://ceeo.tufts.edu/Research-Projects/adamdisseration.html> for an example education effort. Contact Prof. Chris Swan at [chris.swan@tufts.edu](mailto:chris.swan@tufts.edu) for more information.

Please include a resume with your inquiry. The application deadline for enrollment in Fall 2011 is January 15, 2011. Research within the Department of Civil and Environmental Engineering at Tufts is sponsored by National Science Foundation (NSF), Defense Advanced Research Projects Agency (DARPA), Strategic Environmental Research and Development Program (SERDP), Department of Energy (DOE), the United States Geologic Survey (USGS), National Institutes of Health (NIH) and the National Institute for Occupational Safety and Health (NIOSH). For general information please contact Laura Sacco at [laura.sacco@tufts.edu](mailto:laura.sacco@tufts.edu)