

Postdoc position at MIT: Thermal and mechanical properties of nanocomposites

A postdoctoral associate position at MIT is available immediately, focused on the analysis and development of multifunctional thermal management structures, by using theoretical and atomistic multiscale modeling and simulation. This project specifically involves calculations of thermal and mechanical properties of graphene based metal- and polymer nanocomposites, with a focus on various aspects such as interfacial transport properties, tunability, mutability and phonon engineering. Additional aspects of the project relate to the general area of mechanical energy transport in biological materials.

A Ph.D. in materials science, chemistry, physics or a related field is required, and in particular experience with molecular dynamics simulations. The candidate should have very well-developed computational skills, a strong background and interest in atomistic, molecular and multiscale modeling and simulation, preferably experience in the calculation of transport properties and some expertise in first principles calculations (Density Functional Theory). Good written and verbal communication skills and organizational talents are expected.

Please send a CV, a brief summary of research interests and skills, three representative publications, and the names, affiliations, phone numbers, and email addresses of three references to lamm-search@MIT.EDU. The research will be carried out at MIT's Laboratory for Atomistic and Molecular Mechanics.

Evaluation of candidates will begin immediately and will continue until the opening is filled. This position is available immediately.

For any questions, please contact Markus Buehler (contact information below).

Contact information:

Prof. Markus J. Buehler, Ph.D.
Esther and Harold E. Edgerton Associate Professor
Principal Investigator, Laboratory for Atomistic and Molecular Mechanics
Department of Civil and Environmental Engineering
Massachusetts Institute of Technology
77 Massachusetts Ave. Room 1-235 A&B
Cambridge MA 02139
Phone: 617-452-2750
Fax: 617-324-4014
E-mail: mbuehler@MIT.EDU
Lab website: <http://web.mit.edu/mbuehler/www/>