Applications are invited for a Research Associate in the area of computational modeling in the group of Professor Horacio D. Espinosa at Northwestern University. The candidate will participate in a vibrant interdisciplinary research group and will be involved in projects addressing modeling to understand mechanisms of deformation and failure in 2D and hierarchical composite materials. We pursue a combined experimental-computational approach; therefore, the candidate will be working in close collaboration with experimentalists to facilitate the understanding of experimental findings. Collaborations with groups at other university within a Multidisciplinary University Research Initiative (MURI) project are also anticipated.

Requirements:

1. A Ph.D. in Physics, Chemistry, Mechanical Engineering, Materials Science and Engineering, or a related area is required.
2. Working experience in:
   1. Atomistic modeling using various approximations, e.g., DFT, ReaxFF, REBO, CHARMM, OPLS.
   2. High performance computing - experienced with compiling and running scalable MD/QM codes on high end parallel machines
3. Strong verbal and written communication skills.
4. Current eligibility to work in the US (i.e., must have OPT or green card).

Why this is a great opportunity:

- Great experience in a top US university with world renowned mechanics group
- Interaction with leading Nanotechnology researchers at Northwestern and Argonne National Laboratory
- First class working environment and supporting facilities
- Many cultural and recreational activities in the university and Chicago area.

Interested candidates should email a CV (including list of publications and journal impact factors), cover letter describing research experience and interests, and the names and email addresses of three references to Professor Horacio D. Espinosa at espinosa@northwestern.edu.

http://clifton.mech.northwestern.edu/~espinosa/

Northwestern University is an equal opportunity, affirmative action educator and employer.