

National Aeronautics and  
Space Administration

**Ames Research Center**  
Thermal Protection Materials Branch  
Moffett Field, CA 94035



***Postdoctoral Position in Computational Material Science  
at the NASA Ames Research Center***

A postdoctoral position in computational material science is available in the Thermal Protection Materials Branch at the NASA Ames Research Center. Current research is directed towards multiscale modeling (*ab initio*, atomistic, continuum) of next generation ablative materials for heat shields of space vehicles. These materials are typically carbon fiber, polymer matrix composites which must be optimized for high performance in extreme atmospheric entry environments. We have multidisciplinary teams (chemists, physicists, material scientists) on site working on both experimental and computational issues. We are especially interested in understanding the polymer phases of these materials (atomic, meso and macro scales), their impact on composite properties and their chemical processes under extreme conditions. Therefore candidates with experience in polymer modeling (atomistic and/or continuum) will receive special consideration. The appointment is jointly with John Lawson and Charles Bauschlicher.

The candidate should hold a doctoral degree in a relevant discipline, such as Materials Science, Mechanical Engineering, Chemistry, Physics, or Chemical Engineering before the commencement of the appointment. The ideal candidate will have a strong background in computational materials modeling using standard software packages and also be strong in scientific programming. US citizens or permanent residents will receive special consideration, but well-qualified foreign nationals are encouraged to apply.

The position is available immediately. However, the start date can be negotiated. The appointment is initially for one year with 1-2 year extensions possible. Interested applicants should submit by email a CV including a publication list and contact information for 2-3 references to John Lawson ([John.W.Lawson@nasa.gov](mailto:John.W.Lawson@nasa.gov)). Applicants should indicate in their CV their nationality and/or US immigration status as applicable. Applications will be reviewed until the position is filled.

The NASA Ames Research Center is located near Mountain View, California, in the heart of Silicon Valley, 10 miles from Stanford University and 40 miles from San Francisco.