

June 5, 2019

Vacancy Announcement

Carnegie Institution for Science—Postdoctoral Fellow Theory and Modeling of Iron Transport Properties and Dynamics of Earth's Core

A postdoctoral position is available to apply density functional theory (DFT) and dynamical mean-field theory (DMFT) methods to study the thermal and electrical conductivity in iron under extreme pressure and temperature conditions, and to apply these properties to magnetohydrodynamic models of Earth and planetary cores. The position will be jointly supervised by Ronald Cohen and Peter Driscoll at the Carnegie Institution for Science in Washington, D.C. This position is part of a collaboration with experimentalists and theorists under an NSF CSEDI grant. The postdoc is expected to conduct both quantum mechanical and fluid dynamical simulations and geophysical modeling.

Experience with first-principles DFT methods is essential, and a background with DMFT and transport properties is highly desirable. A background in geophysics is recommended but not required. The postdoc will gain valuable experience by developing expertise in first-principles molecular dynamics, transport theory, and geophysical applications.

This full-time position will be based at Carnegie Institution for Science's Broad Branch Road campus in Washington, DC. Interested applicants should submit a CV (including a list of publications), three letters of reference, and a cover letter stating your interest in the position. Consideration of candidates will begin immediately and continue until the position is filled.

To submit an application, [click here](#). Only complete applications submitted via the Carnegie website will be considered.

The Carnegie Institution of Washington is an equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of gender, race/ethnicity, protected veteran status, disability, or other protected group status.