

**Postdoctoral Position with Dane Morgan and Ryan Jacobs at
University of Wisconsin – Madison (Complex Oxide Transport Phenomena)**

We invite applications for the following postdoctoral position at the University of Wisconsin – Madison with Prof. Dane Morgan and Dr. Ryan Jacobs in the Department of Materials Science and Engineering:

Understanding of Structure and Transport Phenomena in Oxides

This work is focused on materials discovery and design in atomic layer deposition and ion transporting oxides. The work will combine tools from molecular simulation and data science (machine learning, optimization) to determine oxide structures and understand structure-property relationships of ionic transport phenomena. The work is part of active collaborations with top experimental groups, including Prof. Xudong Wang (University of Wisconsin-Madison) and Jinwoo Hwang (Ohio State), and will enable career-expanding interaction and collaboration with many researchers in the field.

A PhD in materials science, mechanical engineering, physics, chemistry, chemical engineering, or a related field is required. Familiarity with one or more of molecular simulation (density functional theory, molecular dynamics), machine learning and data science tools (e.g. scikit-learn or Keras) and a programming background is preferred, but capable and enthusiastic applicants with varied background will be considered.

Additional information

The appointment is initially for one year with the expectation of this being extended if the work is going well. Interested applicants should send (1) CV in PDF format, (2) a brief cover letter describing suitability for the position, and (3) contact information for three references to Ryan Jacobs at uwcmghire19@gmail.com. Review of applicants will begin immediately and will continue until the position is filled.

Professor Dane Morgan and the Computational Materials Group (CMG) (<http://matmodel.engr.wisc.edu/>): CMG is a joint effort of Izabela Szlufarska and Dane Morgan in the Department of Materials Science and Engineering at UW Madison. We are a highly active group leveraging simulation, machine learning and experiment and work in areas including nuclear materials, amorphous alloys, nanomechanics, nano-bio interfaces, fuel cells, batteries, semiconductors, and geophysics.