

Postdoctoral Fellow position available
Molecular-level simulations of shock physics and energy localization

Prof. Alejandro Strachan, Dr. John Brennan, Dr. James Larentzos
Purdue University and Army Research Laboratory

Purdue University is seeking applications from outstanding candidates to fill a Postdoctoral Scholar position to work on molecular-level simulations of shock loading of molecular materials with specific emphasis on energy localization and induced chemistry. The successful candidates will join a multidisciplinary team including modelers and experimentalists working at Purdue University and the Army Research Laboratory. The efforts will involve large-scale molecular dynamics and coarse-grained simulations designed to develop a predictive understanding of: shock interaction with microstructure, energy localization, and chemical response. The successful candidate will be part of the c-PRIMED center, headquartered at Discovery Park in Purdue University, and will have the opportunity to interact with a wide range of experimentalists and theoreticians in academia, industry and national labs and contribute to [nanoHUB](#).

Qualifications. Candidates should have earned a PhD in Physics, Chemistry, Materials, Chemical, or Mechanical engineering or a related field. The successful candidates will have experience in molecular modeling. A strong background in one or several of these fields is desirable: condensed matter or materials physics, physics of materials at extreme conditions or dynamical loading. This position requires US citizenship.

Application process. Applicants must provide a detailed resume including education, experience and qualifications; they should also include the names of three potential references. Applications from women and minorities are strongly encouraged. Applicants should submit the application materials electronically to:

- Prof. Alejandro Strachan. Email: strachan@purdue.edu
- Dr. John Brennan. Email: john.k.brennan.civ@mail.mil
- Dr. James Larentzos. Email: james.p.larentzos.civ@mail.mil

Evaluation of candidates will begin immediately, and will continue until the position is filled.

Greater Lafayette Indiana is home to Purdue University and is one of the fastest growing communities in the Midwest. Subaru of Indiana Automotive, Caterpillar, Corteva Agriscience, Rolls-Royce, GE Aviation, Schweitzer Engineering Laboratories, Wabash National, Saab Global Defense and Security Company, high tech firms and small businesses all call Greater Lafayette their home. Conveniently located between Chicago and Indianapolis, Greater Lafayette is also near several other major metropolitan cities. [Visit Lafayette-West Lafayette](#) and [Greater Lafayette Commerce](#) are resources that highlight our great community.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.