**Open Postdoctoral Position in Computational Science and Engineering**

The University of Notre Dame, Center for Shock Wave-processing of Advanced Reactive Materials (C-SWARM), is seeking a highly qualified candidate for a Postdoctoral Research Associate position in the area of computational mechanics/physics. C-SWARM is a newly established center of the emerging field of predictive science. The main mission of C-SWARM is to predict shock conditions under which new materials can be synthesized using predictive computational models that are verified and validated with quantified uncertainty on future high-performance Exascale computer platforms. For more information please visit [www.cswarm.nd.edu](http://www.cswarm.nd.edu).

The successful candidate will be key personnel in a team that is developing and implementing adaptive, multiscale, high-performance (parallel) computational algorithms for numerical solutions of chemo-thermo-mechanical PDE’s with emphasis on complex heterogeneous materials, such as heterogeneous reactive composites, etc. The candidate should have detailed knowledge of relevant technical areas of science, engineering, applications software for advanced scientific computing, broad knowledge of computer technology and hardware, and the ability to collaborate in a variety of relevant disciplines.

**Qualifications:**

* Ph.D. in Mechanical Engineering, Theoretical & Applied Mechanics, Applied Mathematics, Physics or related engineering/science discipline.
* Knowledgeable in computational nonlinear mechanics, numerical methods, fluid dynamics, and/or chemical kinetics and solid-solid phase transformations.
* Knowledge of C/C++, Fortran and UNIX operating system is required.
* Experience in parallel programming.

**Close Date:**

Review of applications will begin immediately and continue until the position is filled.

**Salary:**

Salary will be commensurate with qualifications and experience.

**Contact:**

Interested applicants should send a CV with a cover letter, names of at least three references, and a summary of recent work. All applications should be submitted electronically (paperless process) as a single PDF document to:

Melissa Kitkowski, Administrative Assistant

C-SWARM

Email: [cswarm@nd.edu](mailto:cswarm@nd.edu)

Tel: 574-631-6381

The University of Notre Dame is an Affirmative Action, Equal Opportunity Employer. Women and minorities are encouraged to apply.