NOTICE OF APPLICATION FOR ALIEN
EMPLOYMENT CERTIFICATION

This notice is provided because of the filing of an application for permanent alien labor
certification for the following position: RESEARCH SCIENTIST

Concerned applicants for this position should report to the following University of Wyoming
department responsible for placing this position: MECHANICAL ENGINEERING

Any person may provide documentary evidence bearing on the application to the attention of the
Certifying Officer of the U.S. Department of Labor, Employment & Training Administration,
Office of Foreign Labor Certification, Atlanta National Processing Center, Harris Tower, 233
Peachtree Street, Suite 410, Atlanta, GA 30303. Telephone: (404) 893-0101; FAX: (404) 893-4642.

The following is a statement of the job duties and requirements:

DUTIES: Conduct innovative research in the field of High Performance Computing (HPC) for
extremely large-scale CFD and other physic-based multidisciplinary applications. As HPC
continues to play an ever-larger role in today's science and engineering disciplines, a broad
range of research avenues is available. The selected candidate will perform leading-edge
research that will advance the state of the art in fluid dynamics computations on emerging
heterogeneous HPC systems. A major responsibility of this position is to investigate, develop
and demonstrate advanced multilevel solution strategies for leading-edge high fidelity simulation
methods in CFD applications. Historically, multilevel methods have played a dominant role in
CFD and their unique characteristics make them ideally suited for emerging HPC architectures.
Novel scalable scientific algorithms are needed to enable CFD tools previously developed within
this laboratory to exploit the massive computational power that is becoming available by
emerging HPC systems. In particular, advanced algorithms that drastically increase the ratio of
computation to communication are needed. The successful candidate will develop and
implement automated scalable solvers that can be utilized in multi-solver frameworks.

REQUIREMENTS: PhD in mechanical engineering, computational engineering, applied
mathematics or related engineering or science discipline. Proven experience in development
and implementation of computational fluid dynamics (CFD) solvers. Practical knowledge of
FORTRAN, C and/or C++ programming languages and UNIX operating system is required.
Proven experience in parallel programming and utilizing cutting-edge high-performance
computing, storage, and networking systems. Experience using modern mesh generation and
visualization tools (such as Pointwise, FieldView, Tecplot). Strong communication skills are a
must; be able to collaborate in a team but also think and work independently.

WAGE OFFERED: $66,000

This notice has been posted in compliance with 20 CFR 656.10(d)(1)(ii). It has been posted in
two conspicuous, unobstructed locations at the employer's place of business for at least 10
consecutive business days and on the University of Wyoming Human Resources website.