

# National University Consortium Newsletter



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## Questions or comments?

Email: [Marsha.Bala@inl.gov](mailto:Marsha.Bala@inl.gov)  
or call 208-526-1336

## Meet INL's Chief Scientist, Materials and Fuels Complex



**John C. Wagner, Ph.D.**  
Chief Scientist

Dr. John C. Wagner is the Chief Scientist for the Materials and Fuels Complex at Idaho National Laboratory (INL). Wagner received a B.S. in nuclear engineering from the Missouri University of Science and Technology (formerly the University of Missouri-Rolla) in 1992 and M.S. and Ph.D. degrees from the Pennsylvania State University in 1994 and 1997, respectively. Wagner joined INL in 2016, after nearly seventeen years with the Oak Ridge National Laboratory. Wagner is a Fellow of the American Nuclear Society and recipient of the 2013 E. O. Lawrence Award. In 2014, Wagner received a DOE Special Recognition Award and was named the Nuclear Engineering Outstanding Engineering Alumnus, The Pennsylvania State University College of Engineering's Highest Honor.

Wagner's research interests span a wide range of issues associated with nuclear energy, spent fuel, and computational methods, with a current focus on advanced reactor technologies and systems. Wagner has authored or co-authored more than 170 referred journal and conference articles, technical reports, and conference summaries. He was the original developer of the A<sup>3</sup>MCNP and ADVANTG codes and led the development of the CADIS and Forward-Weighted CADIS hybrid transport methods.

# 7th Annual Modeling Experimentation & Validation Summer School



Oak Ridge National Laboratory is hosting the 7th annual 10-day school this summer to provide early-career nuclear engineers with advanced studies in integrated modeling, experimentation and validation to prepare them for some of the key challenges and demands facing the nuclear energy renaissance. The Modeling Experimentation and Validation (MEV) summer school is intended to fill a critical educational gap for engineers and applied scientists involved in the design, licensing and operation of a 21st century nuclear energy industry through a multifaceted learning approach of lectures, tours and hands-on activities.

This year, the school is scheduled to run from July 18 to 29 at ORNL near Knoxville, Tennessee. The event is sponsored by ORNL, INL, Idaho State University, Argonne National Laboratory, and the Center for Advanced Energy Studies and the Department of Energy. This year's school is focused on addressing nuclear fuel and structural materials challenges for current and future fuel cycle technologies.

The school is being organized through the cooperation of national laboratories, industry, government agencies and universities that share the goal of building a strong workforce to support global nuclear expansion. The faculty will be drawn from the top experts in academia, industry, government and laboratories. The general organization and conduct of the school will be overseen by an international board of senior experts. A local secretariat will provide technical, logistical and administrative support to students and faculty.

Cost of the school is \$3,000. Detailed program information and the school application are available at the [MEV website](#).

The application deadline is April 10, and acceptance notification will be given by April 30. For more information, contact

[Tandy Bales](#) (526-8770).

Sponsors:



# Russel L. Heath Distinguished Postdoctoral Research Associate

## IDAHO NATIONAL LABORATORY

Contact: Jessica Dixon, [Jessica.dixon@inl.gov](mailto:Jessica.dixon@inl.gov) (208) 526-9087

Work Location: Idaho Falls, ID (Town)

Position Description Number: 9786/17537

### Mission/Vision Statement

**Mission:** Discover, demonstrate and secure innovative nuclear energy solutions, other clean energy options and critical infrastructure.

**Vision:** INL will change the world's energy future and secure our critical infrastructure.

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### Responsibilities

Idaho National Laboratory (INL) is seeking candidates for the Russell L. Heath Distinguished Postdoctoral Research Associate Appointment. Russell Heath spent almost his entire career at INL (34 years) conducting nuclear research at INL. Heath's gamma ray-spectrometry catalog contributed to the nuclear communities understanding of radioactive materials and is still used extensively nearly six decades after it was first published. At INL gamma ray spectroscopy is utilized by all three mission directorates.

This appointment is awarded to early career scientists and engineers with interest in advancing the fields of nuclear energy, critical infrastructure protection, and clean energy deployment. Ideal candidates have exceptional talent, scientific track records, and potential for significant achievements. This appointment may support candidates represented broadly by the fields of nuclear engineering, material science, computational science, separations science, power engineering, wireless technology, or systems analysis.

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### Qualifications

At a minimum, candidates will possess:

- A PhD in a science or engineering discipline that is closely related to INL's mission
- PhD must be completed by commencement of appointment and within the previous three years
- Demonstrated leadership and independence potential

Preference will be given to candidates who:

- Possess a PhD degree from a prestigious university,
  - Are from a prestigious graduate program in their field of research, and/or
  - Have completed a research experience or Postdoc appointment at a premier institution
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# Recent Graduate – General Engineer/Nuclear Engineer

## DEPARTMENT OF ENERGY

### [Agency Contact Information](#)

Few vacancies in the following location:

Idaho Falls, ID

Work Schedule is Full Time - Permanent

Opened Monday 3/28/2016(0 day(s) ago)

Closes Monday 4/11/2016(14 day(s) away)

### Salary Range

\$32,318 to \$63,654 / Per Year

### Series & Grade

GS-0801/0840-05/09

### Promotion Potential

13

### Supervisory Status

No

### Who May Apply

To be considered for this **Recent Graduate ENGINEERING** position you must:

- Be a U.S. citizen;
- Have graduated with a degree from an accredited educational institution within the last two years or graduating within nine months of the closing date of this announcement
- Veterans who were unable to apply for Pathways Recent Graduate jobs due to active military service are eligible for 2 years after release or discharge from active duty, up to 6 years after completing degree requirements.

### Control Number

434077700

### Job Announcement Number

DOE-SE-16-0121-RCG

[Apply](#)



# University Partnerships

Idaho National Laboratory hosts students in an effort to help train the nation's next generation of scientists and engineers.

## INTERN PROGRAM

INL annually hosts students in an effort to help train the nation's next generation of scientists and engineers. The largest concentration of internships occurs during the summer months. Involvement in world-class research provides participants with a set of experiences that support their education and career goals. Internship participants make genuine contributions to program goals. They may publish or co-author papers as well as present their research at INL, at conferences or their institutions. Additional benefits include providing a pipeline to employment, strengthening collaborations with academia and other DOE laboratories and creating opportunities for collaborative research. Interns participate in a wide range of enrichment activities during their assignment.

To be considered for an INL internship, students must:

- Be enrolled in an U.S. accredited college or university and have completed a minimum of 12 credits; graduated from college within six months; or graduated and are applying to a graduate program
- Pass a background check
- Have at least a 3.0 cumulative GPA
- Complete an application

Foreign national students may be eligible for internships if they can obtain a U.S. work authorization.

## APPLICATION PROCESS

To apply, go to [www.inl.gov/careers](http://www.inl.gov/careers)

Click on the "INL current career openings" link, locate posting 9244 and upload a single PDF file containing:

1. Current resume or curriculum vitae
2. Unofficial transcripts for all current and past degrees
3. Current class schedule, including number of credits

## POSTDOC PROGRAM

Postdoctoral appointments are reserved for individuals that have recently received their qualifying doctorate degree and are provided a mentored research experience that enables these individuals the opportunity to gain hands-on laboratory research and development experience and the highest quality of training to prepare for transition to research independence.

Selected through a competitive bid process, INL postdoctoral research associates complete a one-to-three-year research experience that supports INL's science-based, applied engineering missions in nuclear and energy research. Science and national defense. As a result, INL postdoctoral research appointees contribute to national priorities for the U.S. Department of Energy's missions. These positions are full-time paid appointments and generally range from six to 37 months.

## REQUIRED QUALIFICATIONS

- Ph.D. requirements must be completed by commencement of appointment and within the previous 5 years
- Demonstrated oral and published written communication skills
- A developing publication record

To apply for open POSTDOC positions:

[Postdoctoral Research Associate](#)

## JOINT APPOINTMENTS

Joint appointees contribute to the mission of both their home and host institutions by developing or conducting research. Through the program, laboratory employees may teach courses and conduct research at partner universities or professors can work with INL on collaborative research projects.

The Joint Appointment Program strengthens INL's strategic objectives by increasing opportunities for research and development collaboration with universities.

## Joint Appointees:

- Actively engage and align universities with the INL Research and Development mission and strategic objectives
- Bring recognized, meaningful and productive engagement of university capabilities to bear on the broader spectrum of INL research and development activities
- Extend the external visibility and recognition of the INL Joint Appointment Program to the relevant research communities
- Provide for joint INL and university participation in proposals that might otherwise exclude the involvement of federally funded research and development centers as lead applicants
- Further strategic relationships between INL and another research institution designed to help attract and retain top notch scientists and engineers

## FACT SHEETS

[University Partnerships Fact Sheet](#)

[Internships Fact Sheet](#)

[Joint Appointment Fact Sheet](#)

[Russell L. Heath Distinguished Postdoctoral Appointment](#)

## Member Spotlight



**Dr. Ed Blandford**

### **Meet University of New Mexico Professor Department of Nuclear Engineering**

**Dr. Blandford joined the University of New Mexico as an assistant professor in the Fall of 2012. Prior to that, Dr. Blandford was a Stanton Nuclear Security Fellow at the Center for International Security and Cooperation at Stanford University, where he worked dominantly on reactor safety issues and safeguards technology development for pyro processing technology. He also worked for several years as a project manager at the Electric Power Research Institute focusing on steam generator thermal-hydraulics and material degradation management.**

**Dr. Blandford's research interests at UNM include reactor thermal-hydraulics in support of the safety of nuclear installations, fluoride salt-cooled high temperature reactor technology development, LWR severe accident experimentation, and process monitoring simulation for safeguards applications of pyro processing.**