



THE Ames Laboratory  
Creating Materials & Energy Solutions

## Key Facts

Ames Laboratory creates innovative materials, technologies and energy solutions. We use our expertise, unique capabilities and interdisciplinary collaborations to solve global challenges.

**Basic Research:** Ames Lab is at the forefront of materials research, high-performance computing and analytical science. The Lab's research falls within five program areas: Materials Sciences and Engineering; Applied Mathematics and Computational Sciences; Chemical and Biological Sciences; Environmental and Protection Sciences; and Simulation, Modeling and Decision Science.

**Intellectual Property:** Ames Laboratory has a long-standing history of innovation, beginning with developing the process to purify uranium for the Manhattan project and continuing through the present with transformative technologies, such as lead-free solder and a boron-aluminum-magnesium material, which is among the hardest bulk materials after diamond. The Laboratory's portfolio of inventions may be licensed from the Lab's contractor, Iowa State University.



Ames Laboratory administrative offices

### Applied and Sponsored Research:

Working with industry and other federal agencies through its Work for Others program, the Laboratory utilizes its expertise, know-how and unique capabilities to find solutions to key issues. Sponsored research may take the form of Work for Others, Cooperative Research and Development Agreements, Technical Service Agreements or personnel exchanges, and may range from a few days to several years depending upon the scope of work.

### Energy Innovation Hub:

The Ames Laboratory leads the Critical Materials Institute, one of the Department of Energy's five Energy Innovation Hubs, which will develop solutions to shortages of rare-earth metals and other materials critical for U.S. energy security.

### Specialized Research Resources:

The Materials Preparation Center provides high-purity materials and unique characterization services to scientists at university, industry and government facilities. Other specialized research resources are focused on forensics, biorenewable resources, catalysis, scalable computing and physical and computational mathematics.

**Science Training:** We provide education outreach for K-12 students and real-world research opportunities for undergraduate, graduate and community college students, and faculty.

Adam Schwartz is the Director of the Ames Laboratory. He holds bachelor's and master's degrees in metallurgical engineering, and a Ph.D. in materials sci-



ence and engineering, all from the University of Pittsburgh. He joined Lawrence Livermore National Laboratory as a postdoctoral research

associate in 1991 and served as division leader of the Condensed Matter and Materials Division there before coming to Ames. He also coordinated LLNL's projects for the Critical Materials Institute, a DOE Energy Innovation Hub led by the Ames Laboratory. As a researcher, he has focused on plutonium aging and alloys, advanced characterization, and the dynamic properties of materials.

### BASIC AMES LABORATORY FACTS

**Work force:**

450+ full-and part-time employees

**Scientific staff:**

260 scientists and engineers

**Annual budget:** \$50 million

**Location:** Located on the Iowa State University campus in Ames, Iowa

**Web site:** [www.ameslab.gov](http://www.ameslab.gov)

### CONTACT INFORMATION:

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