

Science and Technology for a Safer World

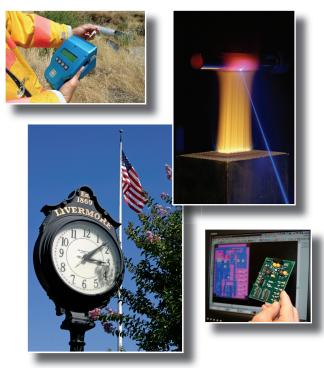
Sandia National Laboratories, one of the largest Department of Energy research facilities, unites the commitment of some 8,300 employees toward the common goal of applying science and technology to create a more secure world.

Initially established in New Mexico in the late 1940s, Sandia opened a second site in California's Livermore Valley in 1956. From a small group of employees, Sandia California has grown to include some 900 staff and 250 contractors, post-doctoral fellows, and students and broadened its scope to play a vital role in Sandia's overall missions.

Making a Difference

Working closely with colleagues in New Mexico, the employees at Sandia California apply world-class science, engineering, and systems analysis to solve problems of national importance:

- Nuclear stewardship: Charged with stewardship of several weapons in the U.S. nuclear stockpile, Sandia performs annual assessments of each through integrated analysis of test and simulation data. We also take responsibility for specific subsystems.
- Bioterror protection: Sandia's work to illuminate how communication occurs across cell membranes could advance numerous pursuits, including enhanced countermeasures against bioterrorism.
- Energy security: For more than 20 years, Sandia's
 Combustion Research Facility has conducted basic
 and applied research to improve the energy efficiency
 and environmental profile of combustion, the source of
 85% of the nation's energy; and combustion processes,
 the backbone of numerous critical industries.



- Power networking: Our quest to push boundaries includes opening the Distributed Information Systems Laboratory (DISL) in 2004. Integrating high fidelity modeling, simulation, and data access, DISL promises to transform our engineering environment and enable pioneering cyber security measures.
- Practical tools for emergency responders: Drawing on expertise in the complex field of microfluidics,
 Sandia researchers are developing palm-sized sensors to help police and fire personnel rapidly detect chemical and biological agents.
- Next-generation semiconductors: A unique partnership with Silicon Valley companies generated a breakthrough prototype machine that harnesses extreme ultraviolet (EUV) light to make microprocessors that could work tens of times faster than today's most powerful chips.





Building the Future

Seeking the best and the brightest to meet the challenges of the 21st century, Sandia California actively recruits and trains its future workforce. In addition, we attract talented science and engineering interns to work on highly relevant projects with Sandia mentors. We also cultivate younger students' natural fascination with science by organizing events at local schools, providing science kits to schools, judging science fairs, and running an annual math challenge for middle and high school students.

Strong in the Community

Deeply attached to their communities, employees reach out in many ways. Through such initiatives as the Livermore Employee Assistance Program and holiday food and gift drives, Sandia employees contribute about \$230,000 annually to charitable causes. Further, the Sandia/Lockheed Martin Foundation donates more than \$50,000 annually to local cultural, educational, and human services groups. We also strengthen the community by showing environmental leadership, creating business partnerships, volunteering, and providing scholarships to high school seniors who've overcome exceptional challenges.

