Sun•Lab staff continually operate, test, and monitor advanced concentrating solar power systems in an effort to make this technology a competitive form of electricity generation.

## Sun•Lab's Staff

Sun•Lab combines decades of experience in concentrating solar power systems. This experience has been building since the 1970s when DOE initiated the first renewable energy programs in response to the impending oil crisis. Work has continued uninterrupted since that time.

The expertise of the Sun•Lab technical staff Ñ numbering almost 50 Ñ covers every scientific and engineering field needed to develop, operate, test, and evaluate complex solar systems and facilitate their use. Key competencies include engineering systems design and analysis, system testing and evaluation, and optical and thermal materials research and development. These activities enable the technical staff to support industry in the commercialization of CSP technology.

The engineering staff at Sun•Lab is backed by experienced technicians and operators with a comparable experience base in solar and related engineering fields. Sun•Lab provides staff with professional opportunities, a broad scope of input, and the opportunity to work on cross-laboratory teams. The staff has received two recent R&D 100 Awards for their work in concentrating solar power research as well as numerous best-paper and other awards for technical accomplishments.

## How Does Sun•Lab Work?

The Sun•Lab staff has worked on virtually every major concentrating solar power project in the United States and has led or shared lead responsibility on many of them. In working with Sun•Lab, industrial and agency partners can expect the expertise that comes from decades of experience with every aspect of a major concentrating solar power system, from design to field testing to evaluation.

The Solar Two project is a prime example of the way Sun•Lab works. For this retrofit of the Solar One power tower pilot plant, Sun•Lab's engineers worked with private industry to develop the new system design that transformed the Solar One water/steam plant into a molten-salt system. Sun•Lab staff used data and their experience at the National Solar Thermal Test Facility in Albuquerque and the High-Flux Solar Furnace in Golden, to implement the retrofit. In addition to the design, procurement, construction, and start-up of this newest power tower, Sun•Lab participated actively with industry to test and evaluate Solar Two.

Sun•Lab staff also has experience with several major dish/engine projects and solar trough systems, including the commercial systems that continue to operate in the California desert. Sun•Lab Ñ its staff and their extensive testing facilities Ñ can provide partnership arrangements, project oversight, or project support for concentrating solar power projects. In addition, its test facilities are available to others for non-solar projects that require extremely high temperatures or radiant fluxes.

To find out more about how to work with Sun•Lab and use its capabilities, please contact Craig Tyner at Sandia, 505-844-3340 (cetyner@sandia.gov), or Tom Williams at NREL, 303-384-7402 (tom_williams@nrel.gov).

For on-line information about **Sun•Lab,** please visit **http://www.eren.doe.gov/sunlab.** Information about the U.S. Department of Energy's Concentrating Solar Power Program can be found at **http://www.eren.doe.gov/csp.**

For more information on renewable energy or for additional copies of this brochure, contact the Energy Efficiency and Renewable Energy Clearinghouse (EREC): **1-800-DOE-EREC (363-3732)**

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