



# Teacher Research Academy (TRA)

## Climate Change & Possible Solutions - 2012

The Energy and Environmental Technology Research Academy prepares teachers to conduct research and guide student research projects in the fields of climate, carbon, and energy. The TRA program offers four levels of instruction. Each level builds on the knowledge and experience of the preceding level progressing the teacher from novice to mastery. Materials are aligned with the California and National Science Standards. Instruction provides teachers with a context to explain to students how science is applied, and includes hands-on activities using the science and technology of the discipline, lectures by practicing scientists, tours of research facilities, and opportunities to network with researchers and peers.

### WHEN:

**June 18 - June 20 - Level - 1:** Three days of instruction. Participants gain skills and knowledge generally consistent with the requirements to teach advanced middle and high school science.

**June 25- June 29 - Level - 2:** Five days of instruction. Participants gain skills and knowledge generally consistent with the requirements to teach advanced placement and college preparatory courses.

**July 9 - July 13 - Level - 3:** Five days of instruction preparing teachers to work in a mentored research experience.

**June 13 - Aug 3 - Level - 4:** Eight-week mentored research experience. Applicants must have completed Levels 1, 2 and 3 prior to submitting an application for a Level 4 internship. Acceptance into Level 4 is competitive. Teachers receive \$4,000 stipend for completion of Level 4.

**WHERE:** Lawrence Livermore National Laboratory, Livermore, CA

**REGISTRATION:** Register on-line at <http://education.llnl.gov/academies>

**REGISTRATION FEE:** \$20.00 for each registration.

### WHAT TEACHERS GET:

- Increased understanding of science and technology.
- Experience using scientific equipment to perform standards aligned experiments.
- Preparation to guide student research projects.
- Instruction binder with classroom activities.

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### MASTER OF SCIENCE IN EDUCATION:

Participants in the Teacher Research Academy can earn graduate course credit through the California State University (CSU) East Bay toward a Master of Science in Education degree, Curriculum Option, or extension credit.

**PLEASE FORWARD TO INTERESTED TEACHERS**