



**Title:** Converging Technologies Session II: Alternative Energies

**Date/Time:** Wednesday, July 30, 10:30 AM – 12:00 PM

**Location:** Renaissance Austin Hotel

**Description:** The field of alternative energies is expanding rapidly. The presentations in this session give unique perspectives on the challenges and opportunities that face educators and trainers in alternative energies today.

**A Model for Collaboration: CERET's Renewable Energy Technology Certificate**

**Presenter: Barbara Anderegg, Consortium for Education in Renewable Energy Technologies (CERET)**

This presentation will describe Madison Area Technical College's Renewable Energy Certificate, funded through a National Science Foundation grant. The certificate includes online and face-to-face courses that feature seasoned renewable energy experts from Solar Energy International, the Midwest Renewable Energy Association, and others who give students a sense of the current workforce. The design of the certificate attracts a wide range of students, from those who are already entrepreneurs to those who want to pair it with an existing program. Two-year colleges can use the certificate as they develop their own courses and programs, as well as for faculty professional development.

**Alternative and Renewable Energy Educational Programs and Work Opportunities**

**Presenter: Tom Diskin, College of San Mateo**

The field of alternative and renewable energy has literally exploded in the past four to five years. The interest in this field has been accelerated by a large increase in public consumption. This presentation will cover what is currently being done in college and university educational programs to educate the public about this emerging field and providing job preparation skills to enter the field. This presentation will also feature an overview of a publication recently released by the American Solar Energy Society titled "Renewable Energy and Energy Efficiency: Economic Drivers for the 21<sup>st</sup> Century."

**Presenter Bios:**



**Barb Anderegg, Ph.D.**, is the Principal Investigator of a National Science Foundation grant, Partnerships in Educational Resources for Renewable Energy Technologies, that delivers a certificate in renewable energy technologies. She is also a faculty member and grants specialist at Madison Area Technical College. In August 2007, Dr. Anderegg finished a two-year rotation with the National Science Foundation where she worked in the Division of Undergraduate Education as a Co-Lead on the Advanced Technological Education Program.



**Tom Diskin** is a Professor of Electronics Technology at College of San Mateo in San Mateo, California. He has taught courses in general electronics, electronics circuits, RF and high frequency, electronics music and most recently, alternative and renewable energy over his tenure at the college. Prior to that, Tom worked three years in the electronics industry as a field support engineer, sales engineer and industrial trainer. He also has taught electronics and electricity at the high school level.

Tom's current interest is in alternative and renewable energy, and five years ago started a program in Solar Fundamentals, focused on photovoltaic system design and installation. During the next year, he will be expanding the program into a broader spectrum of courses which will include wind technology, geothermal, hydroelectric and biomass technologies. Tom is most interested in helping to inform youth of the importance of practicing sustainability and both active and passive approaches to the use of renewable resources both now and in the future.