

The Synergy of Photovoltaics: From Space to Terrestrial Applications

Dr. Sheila Bailey
NASA Glenn Research Center

Time: 4PM Thursday, April 29th

Location: EEP 252

ABSTRACT: Dr. Bailey will discuss DOE's photovoltaic goals and the overlap with Space Photovoltaic research. She will highlight the complementary research programs of DOE and NASA in high efficiency solar cells and new cell types. Dr. Bailey will also talk about career opportunities at NASA.

About the speaker: Biography: Sheila is a senior physicist in the Photovoltaic and Space Environments Branch at NASA Glenn Research Center. She is currently the lead scientist in "Quantum Dot Solar Cell Technology", which will hopefully yield a way to enhance the efficiency of solar cells in converting sunlight to electricity. She has authored or co-authored over 120 journal and conference publications, 6 book chapters and two patents. She is on the Editorial Board of "Progress in Photovoltaics", an active member of the American Physical Society, and a speaker for the American Institute of Physics Visiting Scientist Program. She is a member of AIAA Aerospace Power Systems technical committee and has served on the executive committee of the IEEE Photovoltaic Specialist Conference (PVSC) since 1987. She was the Technical Program chair for the 25th PVSC in Washington DC and the U.S. General Chair for the 2nd World Conference in Photovoltaic Energy Conversion in Vienna, Austria in 1998. Sheila is a member of the Lewis Business and Professional Women and vice president of the Lewis Engineers and Scientists Association. Currently, she is an adjunct professor at both the Ohio Aerospace Institute and Baldwin Wallace College and a faculty member of the International Space University. She was the co-chair of the Space Systems Analysis and Design Department at the International Space University in Thailand in '99 and Chile in '00. She has a B.S. from Duke University in physics, a M.S. in solid state physics from the University of North Carolina at Chapel Hill, and a Ph.D. in solid state physics from the University of Manchester in England. She spent a postdoctoral year at the Royal Military College (part of the Univ. of New South Wales) in Canberra, Australia. She joined Glenn Research Center in 1985. Sheila is the recipient of the faculty excellence award from Baldwin Wallace College, of the Federal Women's Program award, and is an Ohio Academy of Science "Exemplar". She was awarded the NASA Exceptional Service Medal for her work in space photovoltaics in 1999 and was inducted into the Ohio Women's Hall of Fame in 2003. She is married with three children and a resident of Lakewood. Sheila loves to travel starting with her early days, after earning her degree in England and spending a post-doctoral year in Australia, with a drive from Liverpool, England to Cape Town, South Africa. She is fond of saying she will go wherever the sun shines.

