

TcSUH SPECIAL SEMINAR

Tuesday, October 25, 2011

12:00N - 1:00 PM

HSC 102

DR. BRUCE P. STRAUSS

UNITED STATES DEPARTMENT OF ENERGY

1000 Independence Ave SW SC-25, Washington, DC 20585-1290

T +1.301.903.3705 | F +1.301.903.2597

Bruce.strauss@science.doe.gov

<http://www.science.energy.gov>

Abstract:

“Superconducting Systems after Maxwell’s Equations”

Solving Maxwell’s Equations for a superconducting device is just the beginning. Engineering considerations of coil packages including insulation, stability, fields and forces will be discussed. Lessons learned in 50 years of superconducting coil design and construction will be covered.

Brief Bio:

Dr. Bruce Strauss is presently the Program Manager for the United States Department of Energy’s R&D on upgrades for the LHC Accelerator Project covering applications of advanced superconducting magnets. He serves on the DOE/NSF Joint Oversight Group (JOG) for U.S. LHC activities. As a member of the Office of High Energy Physics at DOE, he is responsible for all of their superconductivity wire and magnet activities. He received his undergraduate and doctoral education at the Massachusetts Institute of Technology and a Master of Business Administration degree at the University of Chicago.

Following early experience at the Avco Everett Research Laboratory and at Argonne National Laboratory, he joined the Fermi National Accelerator Laboratory in Batavia, Illinois. At Fermilab, he rose to the rank of Assistant Director of the Tevatron Project. He was responsible for the procurement scheme for the entire superconductor inventory for that project.

He left Fermilab to join the Magnetic Corporation of America where he served as production manager for superconducting wire and magnet fabrication. Subsequently he was the principal of two management-consulting organizations. Clients included government agencies, national laboratories and industrial concerns. A significant consulting contribution was to Management and Administration Branch of the DOE for the Independent Cost Estimation (ICE) process for all of the technical components, installation and commissioning for the Superconducting Super Collider.

Dr. Strauss was an incorporator of the Applied Superconductivity Conference, Inc. where he presently serves as the corporate treasurer as well as a member of several technical committees. He is also an officer of the IEEE Technical Council on Superconductivity. He is a fellow of the IEEE and was named a foreign member of the Russian Academy of Electrotechnical Sciences. He has been the chair of the MT-20 and 2010 Applied Superconductivity Conference and is currently the Chair of MT-23.

Persons with disabilities who require special accommodations in attending this lecture should call (713) 743-8210 as soon as possible.



TEXAS CENTER FOR
SUPERCONDUCTIVITY