



NORTH TEXAS
ASSOCIATION OF ENERGY ENGINEERS



**Improving Cooling and Power Efficiency
in Data Centers**
A DOE/ASHRAE Data Center Energy Efficiency Workshop
March 17, 2010
8 am to 5 pm
Texas Manufacturing Assistance Center (TMAC)
The University of Texas at Arlington (UTA)
7300 Jack Newell Blvd., South
Fort Worth, Texas 76118

Does your data center have too **much heat**, **too little space** and **too little power** for the expansion you have in mind? Can you tell where your data center **ranks on energy efficiency** compared to your competitors? Do you know where to start to **cut energy waste and reduce cost**?

This one day workshop on Data Center Energy Efficiency will give you the information and tools you need to begin to tackle these issues. One week after the workshop, there will be a one hour webinar on how to apply the DOE DC Pro Tool Suite at a data center. This will give attendees a chance to ask questions of the experts after they have applied the tool at their own site.

This workshop and webinar provides information, tools, and environmental best practices in the areas of data center/telecom power and cooling. The course will be taught by highly qualified instructors representing DOE and ASHRAE. See *Instructors* section below.

Attendees will:

- Learn how to improve the energy efficiency of data centers and other energy-intensive information technology (IT) facilities.
- Discover how to use DOE's free DC Pro Tool Suite to perform energy assessments on data center systems.
- Learn about IT systems efficiency opportunities identified by partnering organization The Green Grid.
- Receive a workbook and CD of the presentation slides, voucher for one ASHRAE datacom book, and 50% discount coupon off other ASHRAE datacom books.

Who Should Attend:

The workshop is geared toward datacom facility operators, IT professionals, and facility designers and operators.

Instructors:

Roger Schmidt, IBM Fellow, past chair of ASHRAE TC 9.9

Dr. Roger R. Schmidt, IBM Fellow, National Academy of Engineering Member, IBM Academy of Technology Member and ASME Fellow, has over 30 years experience in engineering and engineering management in the thermal design of IBM's large scale computers. He has led development teams in cooling mainframes, client/servers, parallel processors and test equipment utilizing such cooling mediums as air, water, and refrigerants. He has published more than 100 technical papers and holds over 100 patents/patents pending in the area of electronic cooling. He is a member of ASME's Heat Transfer Division and an active member of the K-16 Electronic Cooling Committee. He has been an Associate Editor of the Journal of Electronic Packaging and an Associate Editor of the ASHRAE Research Journal and is now an Associate Editor of the ASME Journal of Heat Transfer. He has taught extensively over the past 25 years Mechanical Engineering courses for prospective Professional Engineers and has given seminars on electronic cooling at a number of universities. He is a past Chair of the ASHRAE TC9.9 committee on Mission Critical Facilities, Technology Spaces, and Electronic Equipment.

Don Beaty, President of DLBassociates, past chair of ASHRAE TC9.9

Don Beaty has over 30 years experience in consulting engineering and founded DLB Associates Consulting Engineers in 1980. He is a licensed professional engineer in over 40 states (including NY) and has international licenses as well. He has served on ANSI / ASHRAE Standards Committee 90.1 (energy) including as vice chair, Standards Committee 127 (Method for Testing for Rating Computer and Data Processing Room Unitary Air-Conditioners) as secretary, and ASHRAE TC 7.6 (Systems Energy Utilization). Don Beaty has published over 50 papers, contributed to 5 published books (4 ASHRAE Books), contributed to the ASHRAE Handbook, and has spoken in over 50 conferences throughout the world.

Cost: \$ 99 to cover materials and food. Lunch and refreshments are provided.

Sponsors:

The workshop was developed by the US DOE and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE). The DFW workshop is co-sponsored by the Texas State Energy Conservation Office, Texas Industries of the Future, the Texas Manufacturing Assistance Center, North Texas Association of Energy Engineers, and the DFW AFCOM chapter.

How to Register:

Go to www.regonline.com/improving_cooling_and_power_efficiency_in_data_cen

Workshop Location: For location of the UTA/TMAC building, go to <http://arri.uta.edu/contact.html> If lost, call 817-272-5909.