



**THOMAS E. WERKEMA, JR.  
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Thomas Werkema graduated from the University of Michigan in 1971 with a B.S. in Chemical Engineering and in 1975 from Seidman Graduate School, a division of Grand Valley State Colleges, with an MBA. Mr. Werkema has worked in the chemical industry for a variety of companies, building chemical plants, running them as plant manager, and in 1987, became Business Manager for the Industrial Chemical Division of Pennwalt, a \$200 million business. In 1993, he became Vice President of Regulatory Activities for ATOFINA, the successor to Pennwalt.

For the past 11 years, Mr. Werkema has been involved in and attended United Nations meetings of the Montreal Protocol on Substances that Deplete the Ozone Layer, Persistent Organic Pollutants and the Kyoto Protocol on Climate Change.

Mr. Werkema has been a member of the ASHRAE TEGA Committee since 2001. He also serves on the Board of Directors of the Alliance for Responsible Atmospheric Policy, a leading fluorocarbon advocacy group, the Board of Directors for the International Climate Change Partnership, the Strategic Implementation Leadership Council related to chlorine issues, various committees for the Air Conditioning and Refrigeration Institute, and leadership roles in several other trade associations.

**LECTURE TOPICS:**

Climate Change

The presentation on climate change will vary since the science understanding and politics change continuously. The current understanding of the science of climate change will be reviewed. The science assessment will be presented. The current international Kyoto Protocol negotiations and the industry relevant issues as well as positions by the significant parties are presented. In addition, current U.S. voluntary programs (including President Bush's new program), EU Commission derived programs, member state programs, Canadian programs, and possible impacts on U.S. industry are reviewed.

Ozone Depletion

This discussion will include an update on current ozone depletion science, recent Antarctic hole activity and Arctic depletion, projections for future recovery, and the various CFCs/HCFCs and other chemical species and their impact. Also, the current political issues will be updated; international, national and Canadian.

International Fora, Domestic Implementation, Politics and Science

Discussion topics include a broad range of international initiatives that may affect ASHRAE, national and regional developments and their potential impact on business, and the current state of science for ozone depletion and climate change. Mr. Werkema has made presentations worldwide from Africa to Asia, and he is a well-known and respected authority on these topics. Please contact Thomas (Tom) Werkema for additional details.

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