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William J. Coad, President of Coad Engineering Enterprises is a consulting principal and past Chairman and CEO of McClure Engineering Associates, and past President of ASHRAE. He received his degree in Mechanical Engineering from Washington University in 1957, and is a registered professional engineer in 37 states. He is a member of the Board of Directors of Mestek Corporation of Pittsburgh, Pennsylvania, Exergen Corporation of Watertown, Massachusetts and HBS Acquisition Corporation of Delaware.

In the field of Engineering Education, he served as a lecturer in Mechanical Engineering (undergraduate level) for 12 years at Washington University in St. Louis, and for 17 years as an Affiliate Professor teaching graduate courses in Mechanical Engineering and serving as a student thesis advisor in building environmental systems design.

Mr. Coad is a member of the Consulting Engineer's Council, the American Society of Mechanical Engineers (ASME) and a Fellow in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE). He is a recipient of ASHRAE's Distinguished and Outstanding Service Awards, the Crosby Field Award for the best paper published by ASHRAE in 1985, the Louise & Bill Holladay Distinguished Fellow Award, the award for Best Journal Article of 1991, the Andrew T. Boggs Service Award and ASHRAE's highest award for technical achievement, the F. Paul Anderson Award. He is a recipient of the Washington University Alumni Achievement Award, and the Donald Julius Groen Prize of the British Institute of Mechanical Engineers.

He has published 2 books and numerous articles and papers in United States and Foreign Journals on topics related to various aspects of Engineering Philosophy and Building Environmental Systems.

LECTURE TOPICS

<u>The Ethics and the Economics of Energy Conservation</u>

This talk explores the economics of energy conservation and the failure of economic alternatives in the search for more energy conservative buildings and machines. Then, based upon this observation an alternative perspective leads to the conclusion that energy conservation is an ethic, and if this ethic is embraced by those who practice in the energy sciences, the inevitable result will be improved system performance, energy conservation and improved economics.

<u>Air Conditioning Systems for Improved Comfort and Air Quality</u>

Indoor air quality is of increasing concern as society redefines the needs of the indoor environment. This

talk presents a new perspective on the topic, starting with the fundamental dynamics of psychrometric instability and its affect upon the controlled environment. System directed solutions are presented which reflect a significant departure from existing design practices.

A Fundamental Perspective on Chilled Water Systems

With chilled water systems, as with most other engineered energy systems, the parameters of performance and energy efficiency are totally synergistic. However, as these systems have grown in size they seemed to have grown in complexity and performance problems resulting therefrom have led to numerous publications and papers on how to fix the problems. This talk examines the fundamental objective and physics relating to chilled water system design and suggests design guidelines for all practitioners from entry level engineers to experienced professionals.

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