Carnegie Mellon University
School of Architecture, Department of Mechanical Engineering
Center for Building Performance and Diagnostics

A Presentation of Work in Progress
4 October 2006 in the Intelligent Workplace of CMU
Pittsburgh PA 15213

Carnegie Mellon's Intelligent Workplace Energy Supply System, IWESS: Power; Cooling, Heating, Ventilation from Solar Heat and Renewable Fuel

Agenda

9:00 - Introduction: the Concept and Contribution of IWESS — Prof Volker Hartkopf

9:30 - The Broad Two Stage, Steam Driven Absorption Chiller — Hongxi Yin

10:00 - The Broad Solar Receiver and Absorption Chiller System — Ming Qu, Sophie Masson

10:30 - A BioDiesel Fueled Engine Power Generation, Heat Recovery System — Fred Betz

11:00 - The LTG Fan Coil with Siemens Control System — Yun Gu, Viraj Srivastava

11:30 - Radiant Cooling/Heating Devices in the IW — Gary Gong

12:00 - Dedication of Solar Thermal Absorption Chiller — Zhang Yue, Broad CEO
In the presence of US Congressman Mike Doyle
Followed by a brief address by the Congressman — US Congressman Doyle

12:45 - Lunch

1:30 - The Semco Enthalpy Recovery, Solid Desiccant Dehumidification, Heat Pump Ventilation System — Chaoqin Zhai

2:00 - Overall System Performance Modeling:

- Solar Thermal Cooling/Heating of the IW — Sophie Masson, Ming Qu
- The Effect of Window Opening on Cooling in the IW — Elisabeth Aslanian, Sophie Masson

3:00 - Summary: IWESS from Here to Where, How? — Prof. David Archer

3:30 - IWESS as a Test-bed for the Building as Power Plant, BAPP — Prof. Volker Hartkopf