



Available Workshop and Presentation Topics

Heat Transfer and Vapor Compression Cycle Fundamentals

- HVAC and Heat Transfer Fundamentals
- HVAC Optimization
- Refrigeration Cycle Fundamentals
- Refrigerant and Oil Mixing and Impacts on Vapor Compression System Performance
- Air-to-Refrigerant Heat Exchangers (tube-fin and Micro-channel Coils)
- Fluid-to-Fluid Heat transfer (Plate Heat Exchangers)
- Compact Heat Exchangers
- Frost Accumulation and Defrost Strategies: Modeling Performance and Implementing Alternative Hardware Solutions

Future and Alternative Technologies

- Advanced Cooling Technologies
- Combined Heat and Power Systems
- Absorption Systems and Applications
- Application of Thermoelectric Cooling and Heat Pumping Technologies
- CO₂ and Other Transcritical Systems and Applications
- Thermal Storage Technologies and Integration
- Increasing System Performance and Effectiveness through Separate Sensible and Latent Cooling
- Thermal Storage Options and Implementation

Heat Exchanger Design and Technology

- Recent Trends in Compact Heat Exchanger Technology
- Impacts of Refrigerant and Air Maldistribution on Heat Exchanger Performance
- The Future of Heat Exchanger Design
- Design of Air-to-Refrigerant Heat Exchangers
- Effective Design and Integration of Suction Line Heat Exchangers
- Heat Exchanger Testing and Validation

Software Development and Training

- CoilDesigner Techniques, Tips, and Tools
- VapCyc Techniques, Tips, and Tools
- Transient Modeling Strategies and Methodologies
- Optimization
- Data Reduction

Product and Development Planning

- Innovation Engineering
- Research Roadmap Development
- Market Analysis and Technology Roadmapping
- Uncertainty Analysis and Impacts on Data Interpretation and Reliability

Environmental Considerations and Impacts

- Life Cycle Climate Performance
- Alternative Refrigerants
- Renewables and Integration with “Traditional” Technologies