

Dept. of Energy and Refrigerating-Air conditioning
Liang-Han Chien, Distinguished Professor,
Dean, College of Mechanical and Electrical Engineering



OFFICE : 606-2

PHONE : +886.2.2771.2171 Ext. 3522

E-MAIL : lhchien@ntut.edu.tw

Education:

- 1. Master of Science and Ph.D in Mechanical Engineering, the Pennsylvania State University**
- 2. Bachelor's degree in Naval Architecture, National Taiwan University**

Expertise: Refrigeration and Air-conditioning, Heat exchanger design, Two-phase flow and convection, Heat and Mass Transfer Analysis, Electronic cooling, Thermal energy recovery

RCEC Principle Research item: Energy conservation technology of ice-

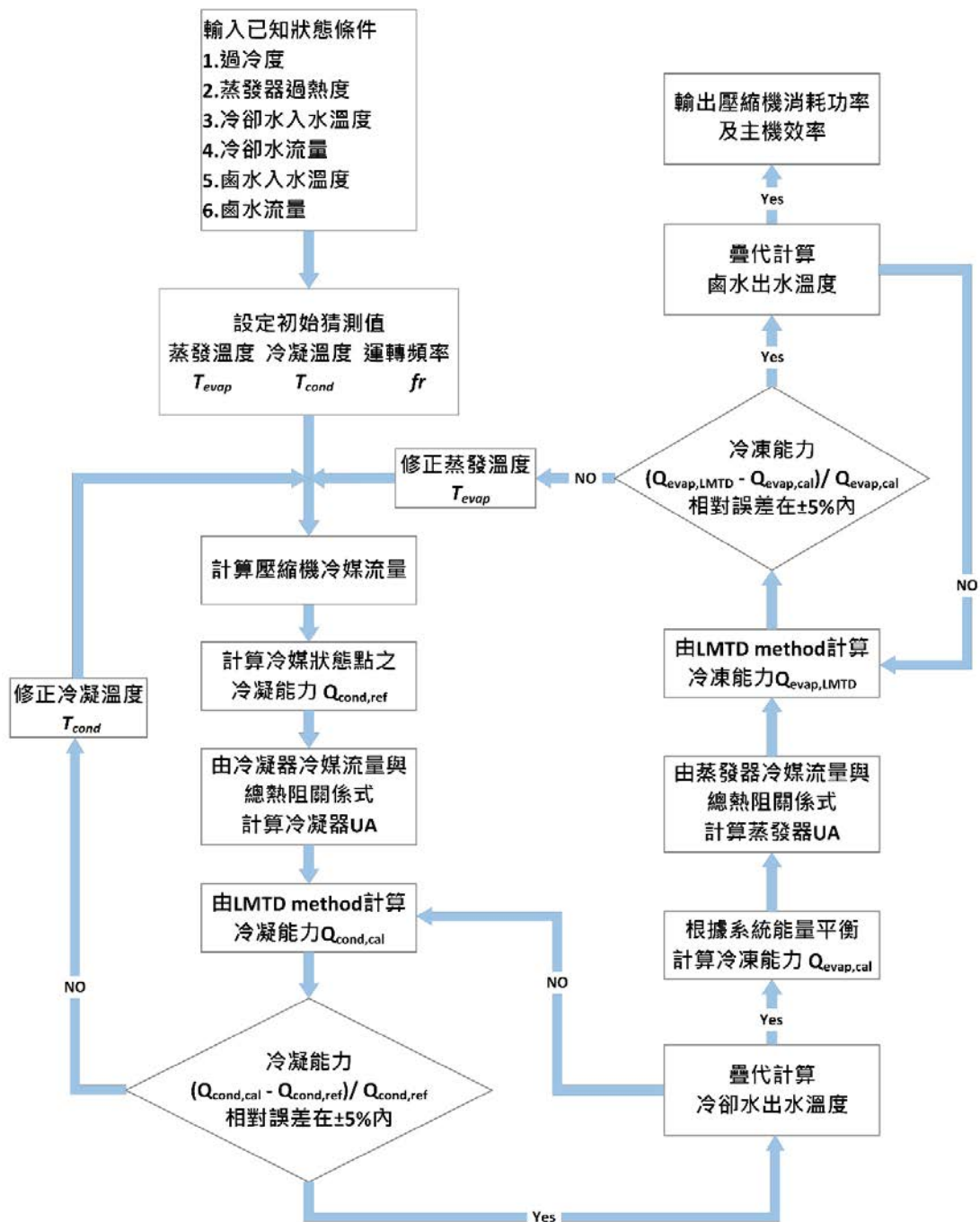
storage air condition system for fast demand response

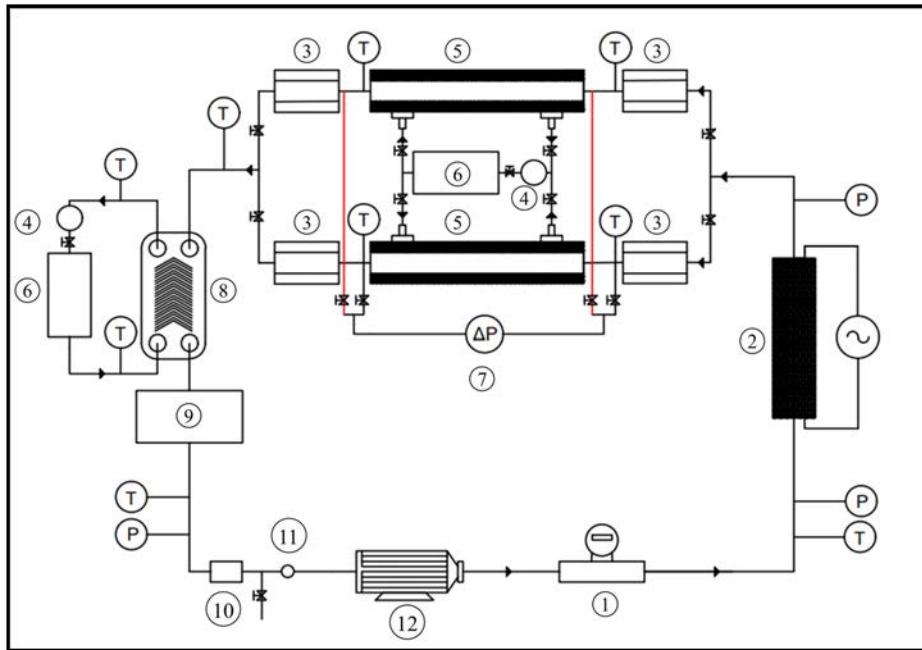
RCEC Research Goal:

1. Building an ice storage air conditioning demonstration system by using the air conditioning system of NTUT school library to develop demand control and flexible ice storage and melting technology.
2. Investigate a high-efficiency small ice storage tank and the ice melting and ice storage mechanism.

Core technology

1. Ice/brine chiller performance analysis and testing technology
2. Transient cold energy analysis technology for ice storage air conditioner
3. Heat transfer analysis technology for low global warming potential refrigerants

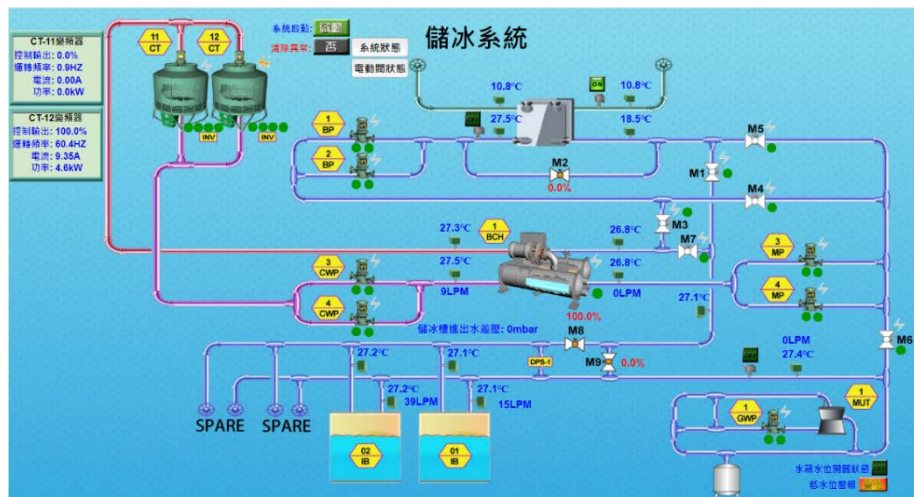




Condensation test facility of internal flow

Research Highlight:

Control system of ice storage air-conditioning for electricity demand response



1.

