



## **6E Thermal Energy System Research Laboratory**

Teacher in charge: Chuah, Yew Khoy Tel. 02-27712171 #3508; Email: yhtsai@ntut.edu.tw

## 1. Research field

- Development of high-efficiency refrigeration and air-conditioning equipment
- Building energy saving
- Environmental quality
- Fire and smoke exhaust
- Thermal current engineering
- Energy Technology

## 2. Recent research topics

- Development of high-efficiency airconditioning chiller
- Smart energy-saving remote air conditioning demand management
- UHV underground cable heat dissipation
  Integrated innovative temperature control
- network information cabinet
- Experiment and design of refrigeration system for outdoor Ice Sport Palace

• Energy-saving and control strategy implementation of electric air-conditioning for electric vehicles test

- The fountain used to change the semioutdoor micro-environment and thermal comfort
- Railway and tunnel ventilation and fire smoke exhaust

## Four, research room results

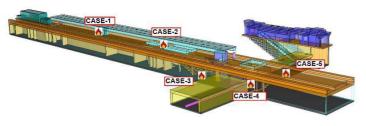


Figure 1.Designed for the fire and smoke safety design of foreign MRT stations and MRT vehicles



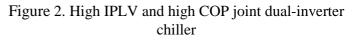




Figure 3.Air-conditioning energy management system adopting BACnet network standard