

National Taipei University of Technology

CPET
er for Power Electronics Technology

國立台北科技大學電力電子產碩專班簡介

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Outline

- **People**
- **Mission**
- **≻**Core Technology
- **≻**Honors and Awards
- **>**Sponsors



Mission

- **Education**
- **≻**Hands-on Experience
- **►** Industry Collaboration
- **≻Enrich Life**

Core Technology-YS Lai

- ➤ Topology for high efficiency and high power density power converters: IT and EV etc.
- Control technology of power electronics applications: PFC, Inverter and UPS etc.
- ➤ Control of motor drives: Induction and PM drives
- ➤ Digital Power: FPGA and DSP-based realization

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Core Technology-SM Yang

- >SRM and PMSM motor design
- ➤ High speed SRM control
- Vector control of PMSM
- > Servo motor drives, auto-tune
- ➤ Magnetically levitated electric machines
- ➤ Electromagnetic actuators and sensors

Core Technology-MS Huang

- ➤ Electric Motor Control
- ➤ Electric Motor Design
- Digital Power Control for Inverter, Converter, and Motor Drives
- Power Electronics for EV and HEV Applications

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Core Technology-SY Ou

- ➤ Switching Power with Standby Solution
- ➤ High Performance PFC with Resonant Technology
- ➤ Single-Stage Power Supply Technology
- ➤ Voltage Regulator Module (VRM) with Variable-Frequency and Phase-Reduction Control
- ➤ Hybrid MPPT under Partially Shaded Conditions

Honor and Awards

- ➤ The Best paper award, John Hopkinson Premium, from Institute of Electrical Engineers (IEE), 1995/1996 Session
- ➤ Technical Committee Prize Paper Award from the IEEE IAS
 Industrial Drives Committee for 2002
- ➤ The Best Presentation Award for IEEE IECON, 2004
- ➤ Associate Editor, IEEE Trans. on Industrial Electronics, Industry Applications, Power Electronics, and Asia Journal of Control
- **≻ Vice Chair, IEEE IAS IDC**
- **➤ Chapter Chair**, IEEE IAS Taipei Chapter

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Honor and Awards

- **Excellent Award from Texas Instrument Inc., 2000**
- ➤ Invention Awards from NSC in 1998 & 2000
- Eminent Research Awards from NSC in 1996, 1997, 1999, 2000
- **Excellent Project Award from TECO-MOE, 2004**
- Best Paper Award, TPEC, 2009, 2010
- **▶Best Paper Award, PES, 2011**

