

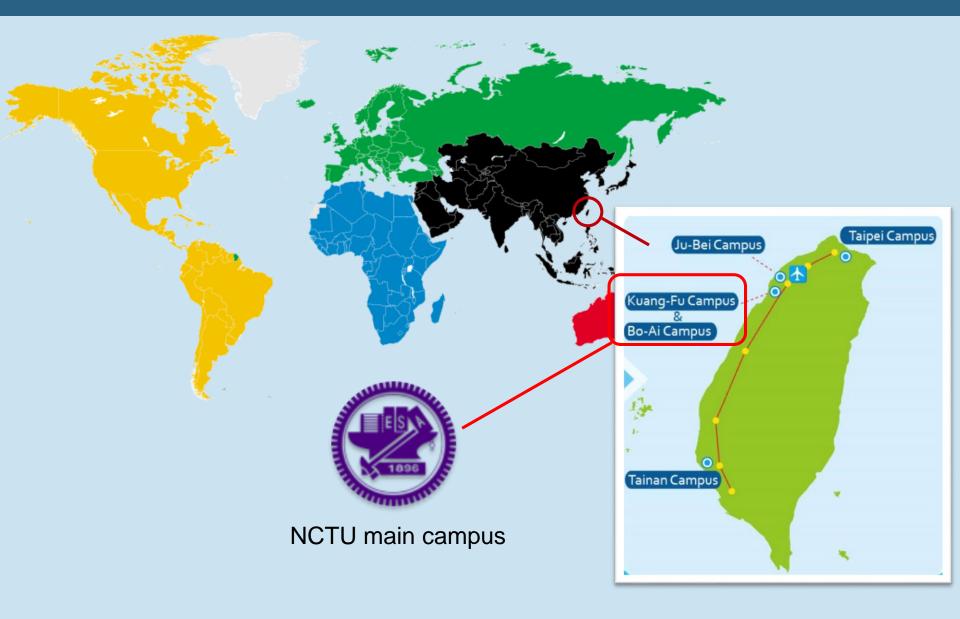
2nd Taiwan-Hungary Education Roundtable 2016

National Chiao Tung University

Dr. Han-Ping D. Shieh, IEEE/OSA/SID Fellow NCTU/UST Vice Chancellor Professor, Dept. of Photonics and Display Institute

Sep. 19, 2016, Budapest, Hungary



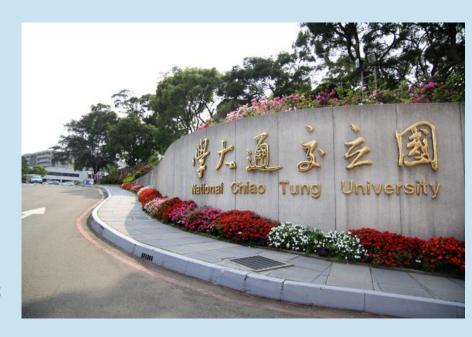




Facts about NCTU

天地"交"而萬物"通" - We connect!

- Originally founded in Shanghai in 1896, re-established in Taiwan in 1958
- Located in Hsinchu City, next to Hsinchu Science Park, the "Silicon Valley of Taiwan"
- One of the most prestigious universities in Taiwan





Silicon Valley of Taiwan

NCTU + Hsinchu Science Park + ITRI + NTHU + Oversea Link

"Silicon Valley of Taiwan" (\$36.7B/2015, 520 companies, 150K+ employees)





7 National Key Laboratories





Student & Faculty

| | Number | |
|------------------------|--------|---------------------|
| Undergraduate Students | 5,437 | Total 12,607 |
| Graduate Students | 7,170 | |
| Full-Time Faculty | 714 | |
| Researcher | 279 | |

- Academia Sinica (TW)- Academician: 7
- US National Academy of Engineering Foreign Associate: 1 / Member: 2
- The World Academy of Sciences for the Advancement of Science in Developing Countries Elected Member: 2



Dr. Simon M. Sze Semiconductor Physics and Devices IC Manufacture Technology



Semiconductor Technology



Biochemistry



Dr. Chun-Yen Chang Dr. Yan-Hwa Wu Lee Dr. Mau-Chung Chang Semiconductor



Dr. Yuan-Pern Lee Physical Chemistry



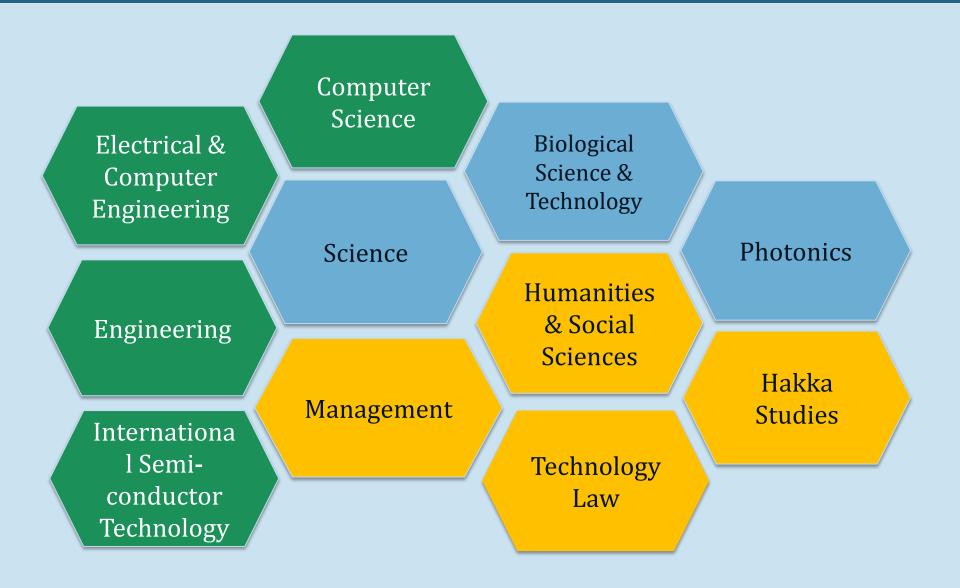
Dr. Ming-Chang Lin Physical Chemistry



Dr. Sheng-Hsien Lin Physical Chemistry



11 Colleges





Academic Performance

QS World University Rankings by Subject 2016

48 in Engineering – Electrical and Electronic

Academic Ranking of World Universities by Shanghai Jiao Tung University, 2015

51-75 in Computer Science & in Engineering

International accreditation: College of Management

 Accredited by AACSB (Association to Advance Collegiate Schools of Business) since 2007, renewed in 2012.





Top Research Centers

- Center for Interdisciplinary Science (CIS)
- Frontier Photonics Center
- Intelligent Information Communications Research Center (I²CRC)
- Bioinformatics Research Center (BRC)
- Emerging Nano-Electronics and Systems (ENES)
 Research Center
- Brain Research Center
- Biomedical Electronics Translational Research Center





Cutting-Edge Research

International Research

I-Rice Project
International Top 100 Cooperation Project
International Industry-academic Cooperation

Diamond Program

TSMC, CHT,
MediaTek, PROMISE Technology,
D-Link, ZyXEL, Hermes Epitek.
SPIL, KYEC, Lite-On IT

Cross-University Research

UST, China Medical University,
Chang Gong Medical University,
Taipei Medical University,
Tzu Chi, CSMU, NTU,
Show Chwan Health Care System,
NCKU

Inter-disciplinary and Emerging –Industry Research

BIO ICT Cultural Industry Green Energy

College Feature Research

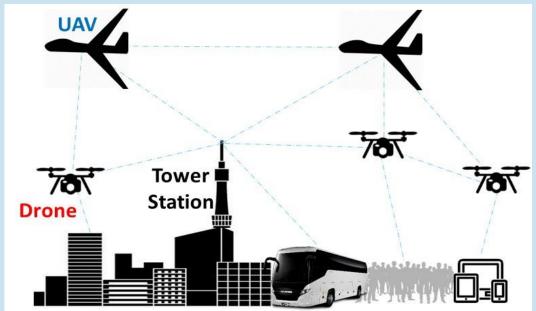
Intelligent Electronics,

Multi-media application, Bio-photonics
Disaster Prevention & Energy Conservation
Electronic Industry Supply Chain
Mathematical Modeling
Biomedical Engineering



Smart Campus by SkyNet (beyond 5G)







Global Mobility

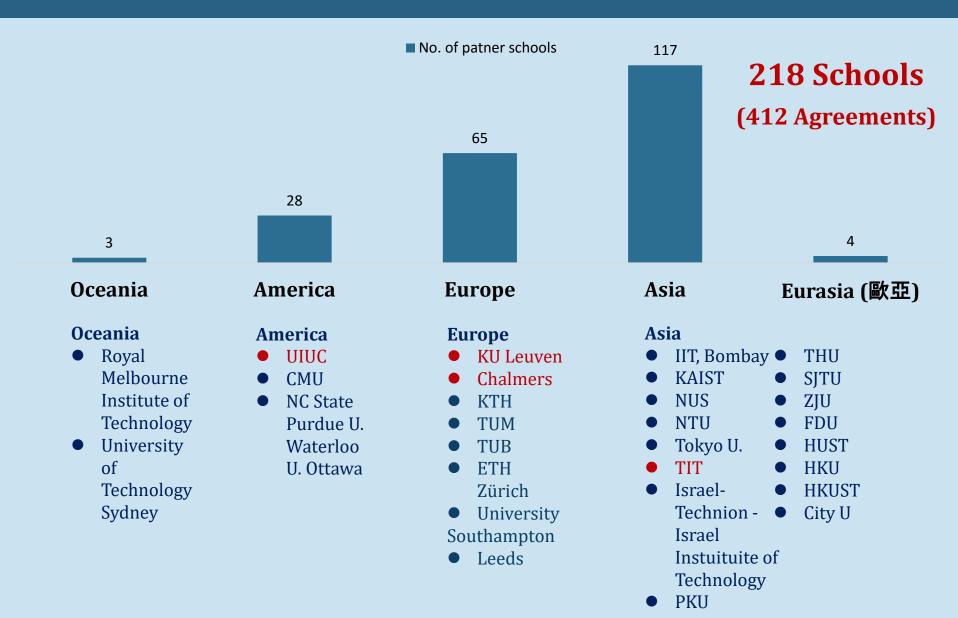
International Students Coming From more than 60 counties







International Academic Collaboration





7 All-English Grad Degree Programs

- Departments: 21 (include 3 degree programs)
- Master programs: 61 (5 taught in English)
- Ph.D. programs: 37

All-English Grad Degree Programs

- ◆Int'l Graduate Program in Electrical Engineering and Computer Science
- Global MBA Program
- ◆ Int'l Master of Science Program for Interdisciplinary
- ◆ Molecular Science of Materials and Chemical Biology
- Grad. Program, Int'l College of Semiconductor Technology
- ◆ Int'l PhD Program in Photonics
- ◆ Int'l PhD Program in Interdisciplinary Neuroscience
- ◆ Int'l PhD Program in Environment Science and Technology



Scholarship for International Students

NCTU Scholarship

- Up to NT\$10K (US\$30)/NT\$13K (US\$390) /NT\$20K (US\$600) for B/M/D Students
- Tuition waiver award available for application
- Up to 4/2/4 years for B/M/D student

Elite PhD Scholarship

- Up to 2 years, may apply for NCTU Scholarship afterwards)
- Up to NT\$30,000 (US\$900)/Month, with tuition and dorm fee waiver
- By recommendation of admission committee

Taiwan Scholarship

- Offered by Taiwan Government
- Up to NT\$30K (US\$900)/Month
- Up to 4/2/3 years for B/M/D Students
- Apply via Local Taiwan Embassy

NCTU Taiwan Elite Internship Program

- Current Master or PhD students from foreign universities to do short term research(at least 2 months) in NCTU.
- Financial Support: Free round trip flight ticket + NTD 5,000 scholarship



Notable NCTU CEO Alumni



Zai-Xing Qiu Electronics VC



Ding-Hua Hu VC Founder



Stan Shih Acer/PC



Robert Tsao UMC Foundry



Ho-Ming Huang Atelligent Global Consulting



Shu-Wu Du Synnex Sales Channel

In the past, NCTU has educated many industry leaders for Taiwan.

Ming-Zhi Xuan UMC **Foundry**

Shun-Yi Chu **ZyXEL** Communication

Feng-Tsu Tsai GeTac Communication





Ke-Chen Liu

Hyley H. Huang WinTek **TFT** Display













Entrepreneurship: From IP to IPO



Curriculurechnology Entrepreneurship

Entrepreneur Business Practice

Foresight of IOT Industries

Entrepreneurs and Entrepreneurship

Cultivation of Leadership in ICT

Financial Engineering for New Ventures

Foundations of Management and Entrepreneurship

◆ Venture Lab @ NCTU

3 steps: Courses, Incubation, and startup

1. Courses: ECE College

2. Incubation: co-work space, ...

3. Startup: VC

NCTU Venture Lab CEO Club 2015,6,30





Venture Lab Activities

- ➤ Venture Lab Forum 2014.11.14
- ◆ Keynotes:
 - Y. Zeevi, Technion --Israel Institute of Tech. (Israel)
 - Mung Chiang,
 Princeton U., (USA);
 - Kazuhiro Chiba,
 Tokyo U. Agriculture &
 Tech (Japan)

- ➤ Venture Lab Forum 2015.10.21
- Keynotes:
 - Tom Chiu, Angel investor and Venture Partner of Enspire (USA)
 - Maarten Hooft, Partner at Quest Venture Partners (USA)
 - Alireza Masrour, Managing Director of Plug & Play Ventures (US)
- Jimmy Kim, Co-founder & hmhan@@@@ NPartner at SparkLabs (Korea)



New NCTU Entrepreneurs



Chi-Huang Chiu Internet Social network

Chao-Jung ChenImaging Processing
Car Monitoring



Kun-Ho Liu Material Cosmetic

Chu-Ming Cheng Optical Medical Imaging

Ming-Hui Wen Internet Social Network

Now,

New NCTU entrepreneurs will continue this venture

journey...

Shih-Heng, Cheng Electronics Sensor

Hung-Chieh Kao Software APP







