

Department of Chemistry

立足分子 · 縱情大學



Founded 1928

Standing on molecules, hovering the universe



Institute of Atomic & Molecular Sciences, Academia Sinica
 Room 308 & 322
 Tel: (02) 2366-8238
 Fax: (02) 2363-6359
 ytchem@ntu.edu.tw
 ytchen@pub.iam.s.sinica.edu.tw

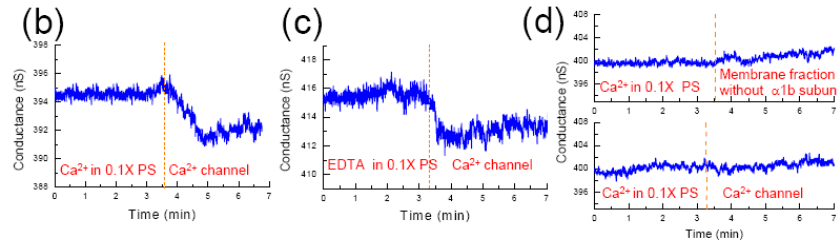
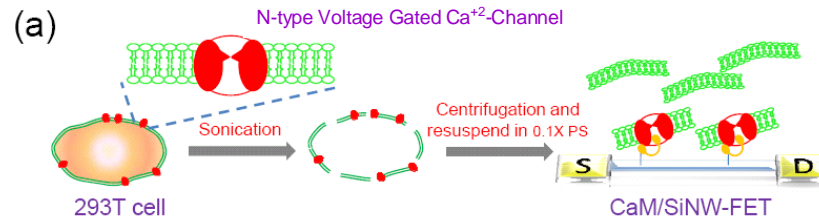
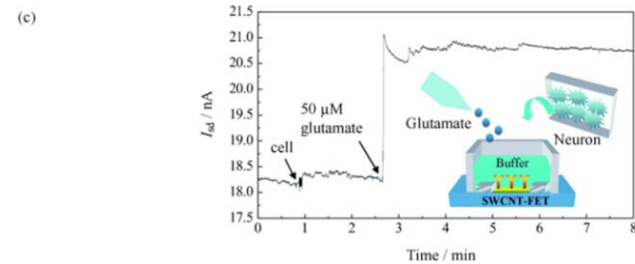
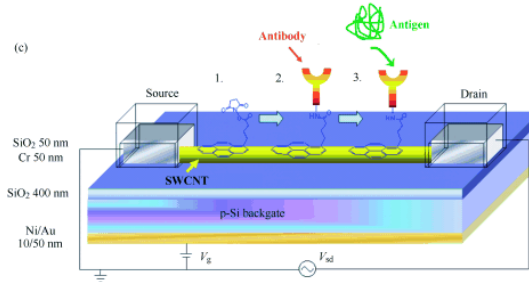
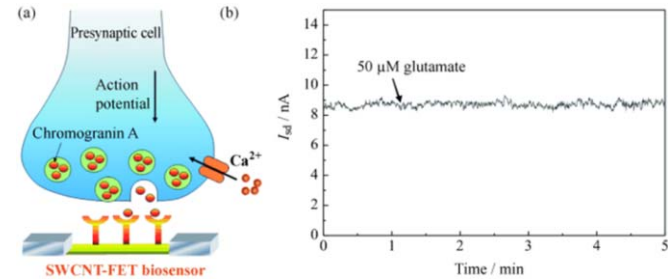
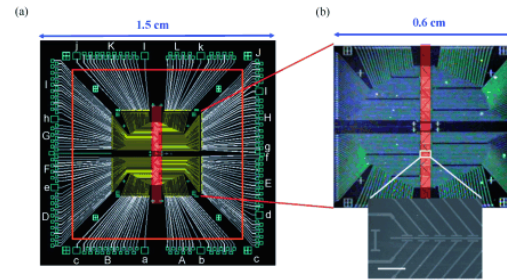
Research Interests

1. Nanowire / nanotube based field effect transistors (NW/NT FET) as highly sensitive biological and chemical sensors.
2. Photon-to-current conversion efficiency and electron transfer rate in dye-sensitized solar cells studied by molecules adsorbed on single NW/NT FET.
3. Spectroscopic characterization, electric transport, and optoelectronic applications of one-dimensional nanomaterials.
4. Biomolecular force spectroscopy integrated with photonic probe microscopy to study the dynamic process of protein-ligand recognition.

Career

B.S., National Taiwan University 1980; Ph.D., University of Chicago 1988; Postdoctoral Res. Assoc., MIT 1989-91; Professor, National Taiwan University 1997-; Adjunct Research Fellow, Institute of Atomic and Molecular Sciences, Academia Sinica 2001-.

Nanomaterials & Bio-analytical Chemistry



○ Ca⁺²

× Ca⁺²

Control experiments

Small (2007), 3, 1350-1355.
JPC B (2008), 112, 9165-9173.
Nano Today (2009), 4, 235-243.
PNAS (2010), 107, 1047-1052.
Adv. Func. Mat. (2011), 21, 474-479.
Nanotechnology (2011), 22, 135503.
ACS Nano (2011), 5, 2051-2059.
Nano Today (2011), 6, 131-154.

A Bird's Eye View



New IC Building

總樓地板面積（A棟+B棟）：
6041.78坪（20139.26m²）



Chem. 2011

Faculty 55

Professor: 24

Associated Prof. 4

Assistant Prof. 2

Instructor 1

Adjunct Prof. : 11

Distinguished Chair
Prof. 1

Distinguished
Chair Prof. 5

Part time Prof. 7

Staff

Teaching Assist. 19

Administration and
Technical Service 26+7

Research Assist 30

Postdoc. 50

Research Fellow: 1

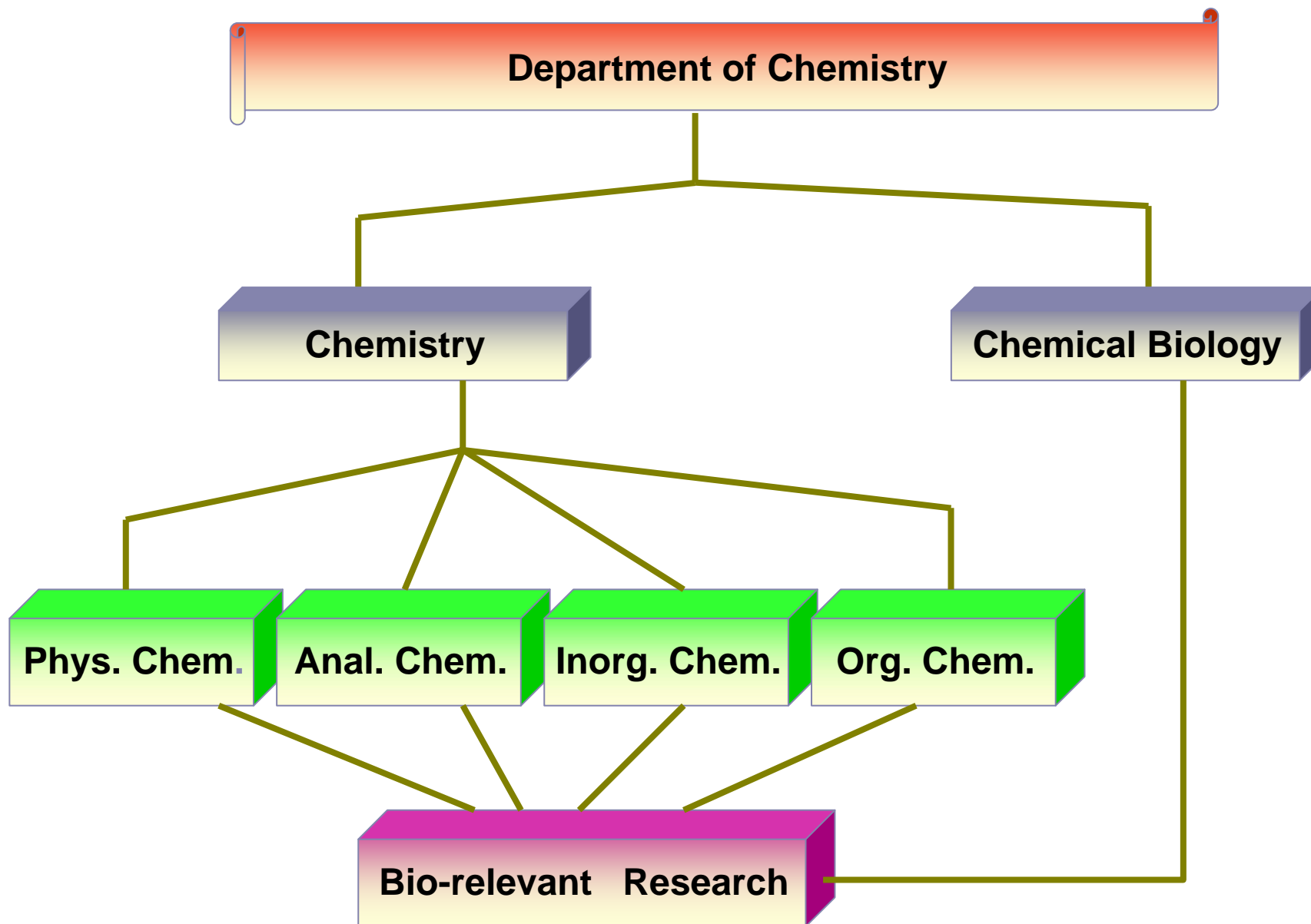
Students

725

Ph.D.
214

MS.
214

BS.
297



Organic Chemistry

(10 Professors, 4 Distinguish Chair & Adjunct Professors)



Luh, Tien-Yau



Fang, Jim-Min



Yang, Jye-Shane



Liu, Shih-Tzung



Chen, Chao-Tsen



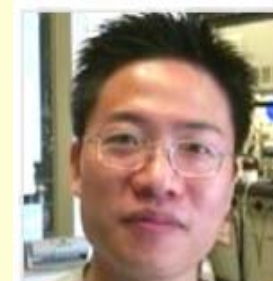
Leung, Man-Kit



Lo, Lee-Chiang



Wong, Ken-Tsung



Chiu, Sheng-Hsien



Cheng, Ping



Wong, Chi-Huey



Chow, Tahsin J.



Lin, Chun-Hung



Wu, Shih-Hsiung

Inorganic Chemistry

(7 Professors, 4 Distinguish Chair & Adjunct Professors)



Mou, Chung-Yuan



Peng, Shie-Ming



Cheng, Soofin



Lin, Ying-Chih



Chen, Jwu-Ting



Liu, Ru-Shi



Chiu, Ching-Wen



Wang, Yu



Liu, Ling-Kang



Chien, Shu-Hua



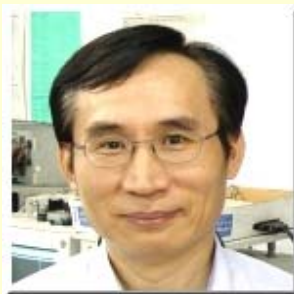
Chang, Chi-Kwong

Analytical Chemistry

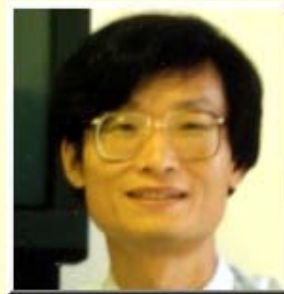
(5 Professors , 3 Adjunct Professors)



Chang, Huan-Tsung



Her, Guor-Rong



Chang, Che-Chen



Lin, King-Chuen



Chen, Chun-Hsien



Yeung, Edward S.



Chen, Chung-Hsuan



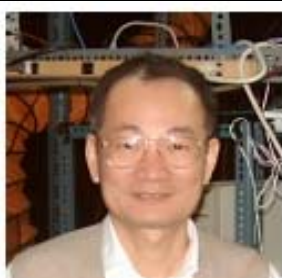
Chen, Yu-Ju

Physical Chemistry

(10 Professors, 8 Distinguish Chair & Adjunct Professors)



Mou, Chung-Yuan



Su, Tzu-Min



Lin, King-Chuen



Chou, Pi-Tai



Chen, Yit-Tsong



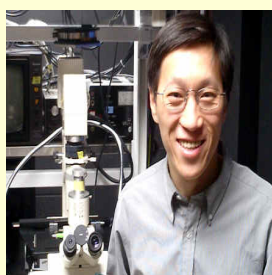
Jin, Bih-Yaw



Chan, Chun-Chung



Lu, Chun-Yi



Li, Hung-Wen



Cheng, Yuan-Chung



Lee, Yuan-Tseh



Chan, Sunney I.



Chien, Shu-Hua



Chen, Chung-Hsuan



Chang, Ta-Chau



Chang, Huan-Cheng



Lin, Jim Jr-Min



Hsieh, Tao-Shih

Chemical Biology

(12 Professors, 9 Distinguish Chair & Adjunct Professors)



Mou, Chung-Yuan



Fang, Jim-Min



Lo, Lee-hiang



Chen, Chao-Tsen



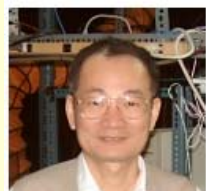
Cheng, Ping



Chang, Huan-Tsung



Chou, Pi-Tai



Su, Tzu-Min



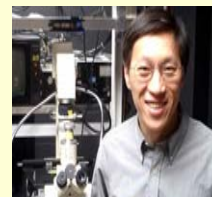
Chen, Yit-Tsong



Lu, Chun-Yi



Chan, Chun-Chung



Li, Hung-Wen



Wong, Chi-Huey



Chen, Sunney I



Lin, Chun-Hung



Lin, Chun-Hung



Hsieh, Tao-Shih



Wu, Shih-Hsiung



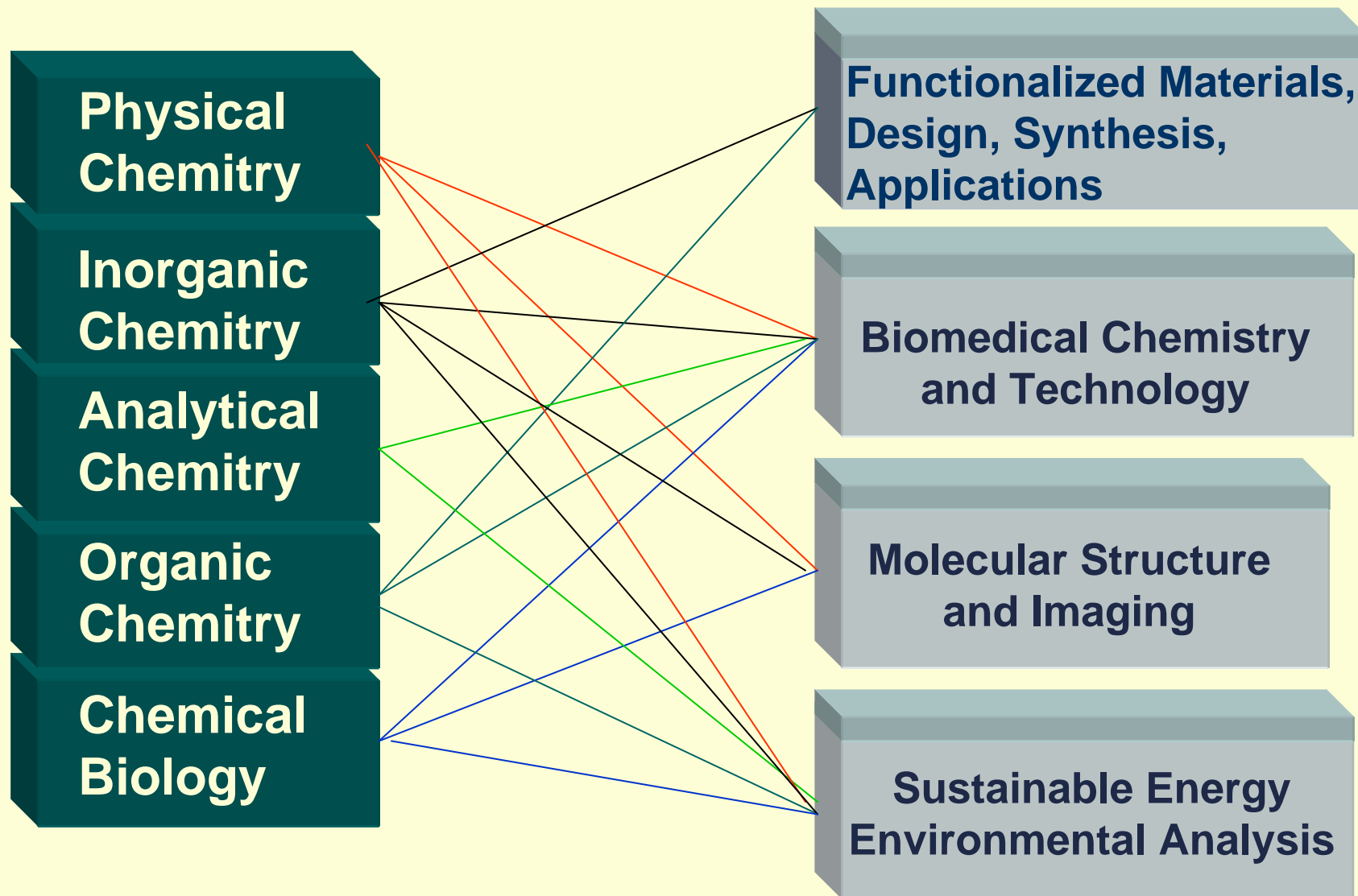
Chen, Yu-Ju



Chang, Huan-Cheng



Chang, Ta-Chau



**Interdisciplinary Research Orientation
Funded by NSC, MOE, National Nano Projects, etc.**

NTU Department of Chemistry

Current Research Activity

1. Advanced Functional Materials
2. Nanoscience, Nanotechnology
3. Chemical Biology

<http://www.ch.ntu.edu.tw>