



## 第七屆無線暨光通訊技術國際研討會

無線暨光通訊技術研討會(WOCC)歷年來為全球資通訊領域的專家學者提供新知交換、意見交流與學習互動的最佳溝通管道，在相關領域中建立起良好口碑與影響力。主要研討內容包括無線與光通訊相關技術及最新產業發展議題與趨勢，尤其強調北美與亞太之間的商機與技術探討。2008年第17屆無線與光通訊技術研討會主題將環繞「無所不在的網路社會 (Ubiquitous Networks Society)」。

「無所不在的網路社會」表示未來的資通訊技術在任何時間、任何地點、任何事情、任何人都可利用電腦或終端設備與網路進行連接，實現隨時隨地的資訊社會。本次會議面向分為無線網路 Wireless、光通訊 Optical、多媒體 Multimedia、無線數據通訊系統 Telematics 以及網路解決方案 Network Solutions。

本次研討會將於2008年4月23日及24日在臺灣台中 **金典酒店**舉辦。身為本次大會主席，我誠摯的邀請您參與。我相信每場學術發表演講會、專題討論會以及海報論文發表區，都將促成與會者對無線與光通訊相關技術議題有更深、廣的探討及共同研究的機會。期待您共同參與！

大會主席 **張進福**

### WOCC 組織

#### 主辦單位

電信國家型科技計畫、台灣經濟研究院、國立清華大學、國立暨南國際大學

#### 協辦單位

行政院國家科學委員會、經濟部工業局、經濟部技術處、台中市政府、經濟部技術處資通技術發展推動辦公室、經濟部產業價值創造辦公室、經濟部通訊產業發展推動小組、財團法人電信技術中心、國立交通大學、工研院資通所、工研院電光所、工研院晶片中心、資策會網多所

#### 贊助單位

中華電信、台灣新世代無線通訊產業研發聯盟(WIT CLUB)、仁寶電腦、Hong Kong Science & Technology Parks Corporation(HKSTP)、合勤科技、安立知、羅德史瓦茲、中國旅美科技協會、IEEE 北澤西分會、美東玉山科技協會、美東華人學術聯誼會、美洲中國工程師學會大紐約區分會、中華光電協會、美國空軍科學研究署、中天聯科

### WOCC 會議資訊

- 會議時間 2008年4月23、24日
- 會議地點 台中金典酒店
- 會議網址 [www.wocc.org](http://www.wocc.org)
- 秘書處

大會信箱：[wocc2008@knaintl.com.tw](mailto:wocc2008@knaintl.com.tw)

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### WOCC 報名注意事項

- 報名方法 請至大會網站報名  
<http://wocc2008.aonetek.com/regist/signin.php>
- 報名費用 一般 NT\$ 4,000  
學生 NT\$ 1,000(憑學生證)
- 繳費方式 可選擇電匯或傳真刷卡

#### 電匯：

1. Account Name : Taiwan Institute of Economic Research
2. Bank Code: 8220163
3. Account Number : 163540224458
4. Bank Name : CHINATRUST COMMERCIAL BANK
5. Bank Address : No.68, Sec2, Tun Hua South Road, Taipei, Taiwan, R.O.C
6. Swift Code: CTCBTWTP

傳真刷卡：請至大會網站下載信用卡持卡人授權書傳真至大會秘書處

# Tentative Program at a Glance

Time	April 23 (Wed)			
09:00~17:00	Exhibition			
08:00~09:00	Registration			
09:00~09:20	<b>Opening Remarks</b>			
	Jin-Fu Chang, President of National Chi Nan University & Chairman of NTP, 張進福 暨南大學校長暨 NTP 計畫總主持人 Tsung-Tsong Wu, Deputy Minister, National Science Council 吳政忠 國科會副主委			
09:20~10:00	Plenary Session 1			
	Ming-Kai Tsai, Chairman, MediaTek Inc., 蔡明介 聯發科董事長 <b>Opportunity and Challenge of communication IC Business in Taiwan</b>			
10:00~10:20	Break			
10:20~12:00	Plenary Session 2 (A)			
	<p><b>Topic: Strategic Research and Engineering Innovation</b>  <b>Chairs:</b> Jin-Fu Chang, President of National Chi Nan University &amp; Chairman of NTP, 張進福 校長暨計畫總主持人                      Ting-ye Li 厲鼎毅 博士  <b>Speakers:</b> Hwa-Nien Yu, Sr. Advisor &amp; TAC Chair, ITRI, 虞華年 博士 <b>Innovation in the World of Technology</b>                      Maw-Kuen Wu, Director, Institute of Physics, Academia Sinica, 吳茂昆 博士 <b>The Evolution of and Challenges to the Innovation System—Taiwan Model</b>                      Chintay Shih, Dean, National Tsing Hua University, 史欽泰 博士 <b>Technology Innovation and Entrepreneurship: Taiwan Experience and Outlook for China</b>                      Justin Chuang, Senior Director, Broadcom, 莊哲義 博士 <b>Quarter Century of Wireless Communications Research and Engineering: A Personal Perspective</b>                      Winston Way, Founder &amp; CTO, OpVista, 尉應時 博士 <b>Market versus Technology-Driven R&amp;D In Optical Fiber Communications Industry</b></p>			
12:00~13:30	Luncheon			
13:30~14:40	Plenary Session 2 (B) & Panel Discussion			
	<p><b>Chairs:</b> Jin-Fu Chang, President of National Chi Nan University &amp; Chairman of NTP, 張進福 校長暨計畫總主持人                      Ting-ye Li 厲鼎毅 博士  <b>Speakers:</b> Chih-Lin I, VP, ASTRI, 易芝玲 博士 <b>A Journey Through Strategic Research in Wireless: Bell Labs, ITRI and ASTRI</b>                      Hen-Tai Shang, Founder &amp; President, Prime Optical Fiber Corp, 向亭台 博士 <b>A Small Company's Mission-Oriented Research in the Changing World of Optical Fiber communication</b>  <b>Panelists:</b> Dr. Hwa-Nien Yu, Dr. Chintay Shih, Dr. Maw-Kuen Wu, Dr. Justin Chuang, Dr. Winston Way, Dr. Chih-Lin I, Dr. Hen-Tai Shang.</p>			
14:40~15:00	Break			
15:00~17:00 (Parallel)	<b>Wireless</b> Technical Session 1	<b>Optical</b> Technical Session 1	<b>Network Solutions</b> Technical Session 1	<b>Telematics</b> Technical Session 1
	<p>Chair: Li-Fung Chang, Director, Broadcom 張麗鳳 博士</p> <p>Speakers:                      1. Ming-Hsu Tu, Manager, Alcatel-Lucent 杜明旭 經理  <b>Data Traffic Patterns and Applications Impact to 3G/4G Wireless High Speed Data Network</b>                      2. Jean Au, Senior Manager, Qualcomm 區勃齡 資深經理  <b>3G History and Evolution</b>                      3. Gene Tkachenko, Senior Director of Engineering, Skyworks Solutions, 蘇翼凱 教授  <b>Power Amplifier and Front-End Module Technology for 3.9G LTE/EUTRAN Applications</b>                      4. Jerry Tsai, Manager, ROHDE&amp;SCHWARZ, 蔡文章 經理  <b>WiMAX Technology of Design Verification Test</b></p>	<p>Chair: Connie Chang-Hasnain, Professor, UC Berkeley University 常瑞華教授</p> <p>Speakers:                      1. Changyuan Yu, Assistant Professor, National University of Singapore, 余長源 教授  <b>Optical short pulse generation and measurement based on fiber polarization effects</b>                      2. Lih Y. Lin, Associate Professor, University of Washington 林麗媛 教授  <b>Colloidal nanocrystals: From nanophotonic integrated circuits to biophotonics</b>                      3. Yi-Kai Su, Professor, Shanghai Jiaotong University, 蘇翼凱 教授  <b>Slow light in silicon microrings</b>                      4. Yin-Chieh Lai, Professor, National Chiao Tung University, 賴映杰 教授  <b>Modelocked fiber lasers and quantum Solitons</b>                      5. Yi-Jen Chan, General Director, EOL-ITRI 詹益仁 所長  <b>Optical Interconnects: Trends and Applications</b></p>	<p>Chair: Chung-Ju Chang, Professor, National Chiao Tung University, 張仲儒 教授</p> <p>Speakers:                      1. Yu-Fei Wang, Senior Vice President, VPIsystems Inc., 王宇飛 資深副總  <b>Network Planning and Capacity Management for the 21st Century Networks</b>                      2. Yu-Chee Tseng, Professor, National Chiao Tung University, 曾煜祺 教授  <b>Localization, Tracking, Communications, and Applications</b>                      3. Benjamin Tang, Distinguished MTS, Alcatel-Lucent, 唐胤智 博士  <b>Next Generation Networks MultiService Network Design</b>                      4. L.S.Liang, General Director, Chunghwa Telecom Labs 梁隆星 所長  <b>NGOSS in the Converged World</b>                      5. Yih-Chen Wang, Distinguished MTS, Alcatel-lucent, 王義成 博士  <b>Femtocell Architecture, Deployment, And Seamless Secured Access</b></p>	<p>Chair: Chia-Hsiang Chang, Deputy General Director, Institute for Information Industry, 張嘉祥 副所長</p> <p>Speakers:                      1. Chia-Hsiang Chang, Deputy General Director, Institute for Information Industry 張嘉祥 副所長  <b>Telematics current status and Future Trend</b>                      2. Chung-Min Chen, Managing Director, Telcordia 陳仲民 總經理  <b>A Brief History of Telematics – Technologies, Services, and Standards</b>                      3. James Hwang, Professor, Lehigh University, 黃正民 教授  <b>MEMS-CMOS Wafer-Scale Integration for Millimeterwave Radar and Communication System</b>                      4. Cheng-Foo Chen, General Manager, HAITEC 陳正夫 經理,  <b>Telematics – From an Auto-OEM's Point of View</b>                      5. T. C. Chiang, Deputy Director, ICL-ITRI 蔣村杰 副組長  <b>Next Generation Vehicular Network Service Technology</b></p>
18:00~20:00	Gala Dinner			

Time		April 24 (Thu)			
09:00~17:00		Exhibition			
08:00~09:00		Registration			
09:00~09:10		<b>Opening Remarks</b> Wen-Tsuen Chen, President, National Tsing Hua University, 陳文村 清華大學校長			
09:10~10:30		<b>Plenary Session 3</b> <b>Chair:</b> Wen-Tsuen Chen, President, National Tsing Hua University, 陳文村 清華大學校長 <b>Speakers:</b> Connie Chang-Hasnain, Professor, UC Berkeley University 常瑞華 加州柏克萊大學教授 <b>Very high speed (&gt;100 GHz) diode lasers using optical injection locking</b> Shyue-Ching Lu, CEO, Chung Hwa Telecom, 呂學錦 中華電信總經理 <b>A Bright Future - CHT's View on UNS</b>			
10:30~10:50		Break			
10:50~12:10		<b>Plenary Session 4</b> <b>Chair:</b> Bao-Shuh Paul Lin, General Director, ICL-ITRI, 林寶樹 工研院資通所所長 <b>Speakers:</b> Qi Bi, Bell Labs Fellow, Alcatel-Lucent, 畢奇 博士 <b>The Trend of Next Generation Wireless Mobile Systems</b> Jan Nilsson, Deputy Chairman, Far Eastone, 楊麟昇 遠傳電信副董事長			
12:10~13:40		Luncheon			
13:40~15:10 (Parallel)	<b>Wireless</b> Technical Session 2 <b>Chair:</b> Chin-Liang Wang, professor, National Tsing Hua University, 王晉良 教授 <b>Speakers:</b> 1. Russell Sun, MTS, Alcatel-Lucent, 孫仲蔭 博士 <b>On the Baseband Algorithms for OFDM Systems</b> 2. Hong-Ya Ge, Professor, NJIT, 葛紅雅 教授 <b>Rapidly Converging Transceivers for Multiple Access Wireless Communication Systems</b> 3. Choi-Look Law, Professor, Nanyang Technological University, 魯彩祿 教授 <b>Ranging Detection Algorithm for Indoor UWB Channels and Research Activities Relating to a UWB-RFID Localization System</b> 4. Hwei Wang, Professor, National Taiwan University, 王暉 教授 <b>Research Efforts of Silicon-based Millimeter-wave MMICs</b>	<b>Optical</b> Technical Session 2 <b>Chair:</b> Angela Chiu, Principal MTS, AT&T Labs, 邱嵐 博士 <b>Speakers:</b> 1. Lian-Kuan Chen, Professor, Chinese University of Hong Kong, 陳亮光 教授 <b>Network Optimization for Optical Performance Monitoring</b> 2. Cedric F. Lam, Chief System Architect, OpVista Inc. 林峯 博士 <b>The outlook of broadband optical access networks</b> 3. San-Liang Lee, Professor, National Taiwan University of Technology 李三良 教授 <b>Performance enhancement of WDM-PON systems with DMLs and RSOAs</b> 4. Maria C. Yuang, Professor, National Chiao Tung University, 楊啓瑞 教授 <b>An Optical-Header Processing and Access Control System for a Packet-Switched WDM Metro Ring Network</b>	<b>Network Solutions</b> Technical Session 2 <b>Chair:</b> Benjamin Tang, Distinguished MTS, Alcatel-Lucent, 唐胤智 博士 <b>Speakers:</b> 1. Yu-Guang Fang, Professor, University of Florida, 方玉光 教授 <b>Securing Resource-Constrained Wireless Networks</b> 2. Herman Rao, Vice President, Far Eastone 饒仲華 副總 <b>Technology Enabling &amp; Network Infrastructure of Mobile Internet</b> 3. Chiao-Lieh Chen, Professor, Kun Shan University 陳朝烈 教授 <b>Cross-layer networking protocol design for ubiquitous home service</b>	<b>Multimedia</b> Technical Session 1 <b>Chair:</b> Yi-Bing Lin, Professor, National Chiao Tung University, 林一平 教授 <b>Speakers:</b> 1. Feng-Wen Sun, CEO, Availink 孫鳳文 總經理 <b>Digital video distribution in China</b> 2. Jing-Ming Chen, Managing Director, Chung Hwa Telecom 陳鏡明 處長 <b>Content Management for IPTV: Lessons Learnt from CHT MOD Services</b> 3. Pao-Chung Ho, General Director, Institute for Information Industry, 何寶中 所長, <b>Digital Convergence -- The way quad-play goes</b> 4. Fang-Chu Chen, Deputy Director, ICL-ITRI, 陳芳祝 副組長 <b>Trend in Multimedia Compression Technology</b>	
	15:10~15:30 Break				
15:30~17:00 (Parallel)	<b>Wireless</b> Technical Session 3 <b>Chair:</b> Qi Bi, Bell Labs Fellow, Alcatel-Lucent, 畢奇 博士 <b>Speakers:</b> 1. Peter Yeung, Senior Manager, HKSTP, 楊天寵 資深經理 <b>Technology Support Soft Infrastructure Supporting the Wireless Communications and Digital TV in Hong Kong Science Park</b> 2. Qin-Qing Zhang, Senior Research Scientist, Johns Hopkins University, 張沁馨 博士 <b>Exploiting Multi-Dimensional Diversity in Distributed Radio Resource Management for Mobile Ad-Hoc Networks</b> 3. Yih-Chen Wang, Distinguished MTS, Alcatel-Lucent 王義成 博士 <b>Survey on Wireless Security Architecture, Architecture, Vulnerabilities and Countermeasures</b> 4. Paul Hsu, Manager Moxa Inc. 許良維 經理 <b>Industrial Wireless</b>	<b>Optical</b> Technical Session 3 <b>Chair:</b> Maria C. Yuang, Professor, National Chiao Tung University, 楊啓瑞 教授 <b>Speakers:</b> 1. Ken-Ichi Sato, Professor, Nagoya University 佐藤健一 教授 <b>Key Enabling Photonic Network Technologies for Future Networks</b> 2. Jye-Hong Chen, Professor, National Chiao Tung University 陳智弘 教授 <b>Developments and enabling technologies of future hybrid access network</b> 3. Angela Chiu, Principal MTS, AT&T Labs, 邱嵐 博士 <b>Restoration Design in IP over Reconfigurable WDM Networks</b> 4. Shyr-Yuan Cheng, Managing Director, CHT-TL 鄭石源 主任 <b>The Development of FTTH in CHT</b>	<b>Network Solutions</b> Technical Session 3 <b>Chair:</b> Yi-Bing Lin, Professor, National Chiao Tung University, 林一平 教授 <b>Speakers:</b> 1. Bruce Chow, Project Manager, Corning Research Center, Taiwan 周欣愷 專案經理 <b>Radio over Fiber Distributed Antenna Systems for Wireless Communications</b> 2. TC Juan, Vice President, Taiwan Mobile Co., 阮得晉 副總 <b>Adapt SOA for mobile service development</b> 3. Cheng-Shang Chang, Professor, National Tsing Hua University, 張正尚 教授 <b>Optical "Queueing" Theory : a Mathematical Theory to Construct Optical Queues</b> 4. Sheng-Lin Chou, General Director, TECO 周勝鄰 所長, <b>IPTV-oriented Service Blending</b>	<b>Multimedia</b> Technical Session 2 <b>Chair:</b> Fang-Chu Chen, Deputy Director, ICL-ITRI, 陳芳祝 副組長 <b>Speakers:</b> 1. Nen-Fu Huang, Professor, National Tsing Hua University 黃能富 教授 <b>A P2P-based video streaming sharing platform for Ipv4/Ipv6 Networks</b> 2. Jan-Ming Ho, Research Fellow, Academia Sinica 何健明 博士 <b>P2P SEW: A Cooperative Shared Screen over Semi-Centralized Peer-to-Peer Architecture</b> 3. Chung-Ming Huang, Distinguished Professor, National Cheng Kung University, 黃崇明 特聘教授 <b>Ubiquitous Video Streaming for Heterogeneous Networks and Devices</b> 4. Hsiao-Kuang Wu, Professor, National Central University, 吳曉光 教授 <b>Bandwidth Management Strategies for Real Time VBR Video Streams in Wireless Home Networks</b>	
	17:00 END				

**WOCC 會後旅遊 (自費參加)**

**Group A : 4/25 單日行程**

**Group B : 4/25、4/26 兩日行程**

25 <sup>th</sup> April Friday	
09:30	自金典酒店出發至中台禪寺
12:00 ~ 13:30	中台禪寺享用午齋
13:30	出發至日月潭
14:30 ~ 16:00	日月潭遊湖
16:00 ~ 17:00	德化社 → 慈恩塔
17:00	慈恩塔 → 大湓閣大飯店
18:30 ~ 20:00	日月潭 明湖老餐廳
20:00	A 組：北返 台北 B 組：夜宿 大湓閣
26 <sup>th</sup> April Saturday	
06:00	觀日出
07:30 ~ 08:30	早餐
8:30 ~ 9:00	出發至九族文化村
09:00 ~ 12:00	九族文化村
12:30 ~ 14:00	埔里金都餐廳享用紹興宴
14:00 ~ 17:00	返回台北

費用		
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A	NT \$2,800	1. 中英語導遊及豪華冷氣遊覽車 2. 1 午餐、1 晚餐 3. 日月潭遊湖專用遊艇 4. 保險
B	NT \$9,000	1. 中英語導遊及豪華冷氣遊覽車 2. 2 午餐、1 晚餐 3. 一夜大湓閣大飯店二人一室住宿含早餐 4. 日月潭遊湖專用遊艇 5. 九族文化村門票 6. 保險 ※ 住宿單人房一人一室者，需加收 NT\$3,000