

專業活動計畫書及行程表

一、活動主題：

中文: 2018 年第 27 屆無線暨光通訊研討會

英文: The 27th Annual Wireless and Optical Communications Conference (WOCC2018)

二、活動目標：

- 促進兩岸三地、美國及其他國家和地區在光纖、無線、網路通訊及資訊服務領域專業人士來台參與並交流經驗。
- 匯集在光纖、無線、網路通訊及資訊服務等領域的專家及業界領袖來交換最新的無線、光通訊網路、巨量資料、未來網路等技術成果及經驗，並共同開拓新的研究及商機
- 促成光纖、無線、網路通訊及資訊服務等領域之組織及單位的合作。
- 讓台灣資訊領域學者參與及觀摩國際會議，從中獲得最新的概念及研究方法，並能與國際一流專業人士面對面對談。
- 讓與會的外賓對台灣光纖、無線、網路通訊、光通訊網路方面有深入的認識。

三、活動項目：(研討會註明名稱、議程)

● 大會主題：

Communications and Networking to Realize a Smarter World

● 大會子題：

本會議將以下列四個子題(Symposia)平行進行

1. Wireless communications and Networking Symposium
2. Emerging networks and future internet symposium
3. Optical communications and photonics symposium
4. Big data analytics and machine learning for communications and networking Symposium

❖ **Wireless communications and Networking Symposium**

- Innovation and field trials of 5G
- PHY/MAC technologies for 5G
- mmWave technologies for 5G
- MIMO technologies (massive MIMO, full dimension MIMO , etc.)
- Cross-layer design and radio resource management
- Multi-cell cooperation and interference management
- Mobile ad-hoc and wireless sensor networks
- Small cell and heterogeneous networks
- Cognitive radios and networks
- Green communications and networking
- Vehicular communication networks
- Wireless body area networks
- Emerging mobile applications and services
- Cloud/Fog radio access networks
- Wireless network modeling and performance analysis
- Wireless technologies for IoT
- Wireless technologies for smart cities, smart communities and smart homes

❖ **Emerging networks and future internet symposium**

- Future internet and next-generation network architectures
- Networking technologies for IoT
- IoT applications
- Protocols and architectures for IoT
- Access systems and networks
- Hybrid wireless-optical networks
- Network security, privacy, survivability, and network resilience strategies
- Provisioning, monitoring, and management of IP services
- Overlay networks and P2P networking
- Social networking and computing
- Routing issues and technologies
- Network steganography and steganalysis
- Cloud computing
- Edge computing
- Tactile internet
- Network virtualization (NV) and services
- Software-defined networking (SDN)
- Network function virtualization (NFV) for next generation networks
- Data center networks
- Information-centric networks
- Network science

❖ **Optical communications and photonics symposium**

- Fibers and fiber devices/amplifiers/lasers
- Advanced optical components and modules
- Waveguide and optoelectronic devices
- Advanced optical modulation and detection schemes
- High-speed optical transmissions
- Optical network applications and services
- Optical access networks and fixed-mobile convergence
- Optical interconnection
- Nano-photonics and micro/nano optics
- microwave photonics
- Optical fiber sensors and networks
- Quantum and nonlinear optics
- Visible light communications

❖ **Big data analytics and machine learning for communications and networking Symposium**

- Machine learning models and algorithms for communications and networking
- Machine learning for intelligent IoT
- Big data models and algorithms
- Big data visualization and representation
- Semantic/context aware multimedia representation and processing
- Big data, IoT, and multimedia search and mining
- Big data, IoT, and multimedia service architectures
- Big data, IoT, and multimedia security and privacy
- Real-time coding, streaming of large volume interactive multimedia
- Cloud-based big data, IoT, and multimedia computing and communications
- Big data analytics in social media and IoT
- Big data applications in healthcare, finance, business, education, etc.
- Sensor and sensing technologies for IoT
- Scalable data management for big data and IoT
- Big data analytics and machine learning for network managements
- Big data analytics and machine learning for QoS improvements in communications and networking
- Big data analytics and machine learning for self-organized networks
- Big data analytics and machine learning for adaptive and accurate resource allocation

● 大會議程簡表

活動時間：(西元)2018年4月30日至(西元)2018年5月1日共2天

活動地點：花蓮福容大飯店

WOCC2018 Program at-a-Glance

April 30, 2018 Monday			
08:30 09:30	Registration		
09:30	Registration	Opening Remark: President Han-Chieh Chao, National Dong Hwa University	
09:45		Welcome Speech: President Yuan-Kuang Tu, Chunghwa Telecom	
09:45		Plenary Keynotes Chair: Prof. Yi-Bing Lin National Chiao Tung University	Dr. Tzi-Cker Chiueh Industrial Technology Research Institute
10:30			Prof. Ness B. Shroff Ohio State University
10:30			Dr. Yongxing Zhou Huawei
11:15			
11:15		Luncheon	
12:00		Panel Discussion Chair: Dr. Wen-Tsuen Chen Academia Sinica	
13:30		Coffee Break	
15:00		Parallel Technical Sessions	Poster Session
15:00 15:30	Break		
17:00	Banquet		

May 1, 2018
Tuesday

09:00	Registration	Plenary Keynotes Chair: Prof. Yinchieh Lai National Chiao Tung University	Prof. James Hwang Lehigh University	
09:45			Prof. Jia-Ming Liu University of California, Los Angeles	
09:45				
10:30				
10:30		Coffee Break		
10:50				
10:50		Plenary Keynotes Chair: Prof. Chin-Liang Wang National Tsing Hua University	Prof. Cheng-Shang Chang National Tsing Hua University	
11:35			Prof. Yu-Dong Yao Stevens Institute of Technology	
11:35				
12:20				
12:20	Luncheon			
13:30				
13:30	Parallel Technical Sessions		Poster Session	
15:00				
15:00	Coffee Break			
15:30				
15:30	Parallel Technical Sessions			
17:00				

四、協辦（參與）單位及與會來賓：

✓ 大會籌備委員：

● General Co-Chair:

Han-Chieh Chao

President of National Dong Hwa University

Yuan-Kuang Tu

President of Northern Taiwan Business Group Chunghwa Telecom

● Executive general chair:

Jen-Yeu Chen

National Dong Hwa University

● General vice chairs:

Tsung-Ying Sun

National Dong Hwa University

● Symposia co-chairs and TPC co-chairs:

Jen-Yeu Chen

National Dong Hwa University

■ **Wireless communications and Networking symposium:**

Shou-Chih Lo

National Dong Hwa University

Hsin-Piao Lin

National Taipei University of Technology

Tsang-Yi Wang

National Sun Yat-sen University

■ **Optical communications and photonics symposium:**

Yin-Chieh Lai

National Chiao Tung University

Xin Jiang

The City University of New York

Kai-Ming Feng

National Tsing Hua University

■ **Emerging networks and future Internet symposium:**

Min-Xiou Chen

National Dong Hwa University

Ray-Guang Cheng

National Taiwan University of Science and Technology

Whai-En Chen

National Ilan University

■ **Big Data and Machine Learning symposium:**

Shiow-Yang Wu

National Dong Hwa University

Chuan-Ming Liu

National Taipei University of Technology

● Conference organizer:

Shiann-Shiun Jeng

National Dong Hwa University

● Publicity co-chair:

Jen-Jee Chen

National University of Tainan

Chih-Yu Wen

National Chung Hsing University

● Local coordinating co-chairs:

Shou-Chih Lo

National Dong Hwa University

Min-Xiou Chen

National Dong Hwa University

Chien-Chih Lai

National Dong Hwa University

● Publication chair:

Chun-Chyuan Chen

National Dong Hwa University

● Adversary Committee Members:

James Hwang

Lehigh University

Kevin Lu

Stevens Institute of Technology

Hsuan-Jung Su

National Taiwan University

Yudong Yao

Stevens Institute of Technology

Sigen Ye

Nokia

Mengchu Zhou

New Jersey Institute of Technology

Hong Zhao

Fairleigh Dickinson University(FDU)

Xin Jiang

City University of New York

Meilong Jiang

Huawei USA

五、邀請來臺參與之理由：（應就其重要性、專業性及其他有關事由具體列述）

本次會議所邀請與會之專業人士皆為光纖、無線、網路通訊及資訊服務等領域相關技術研究及應用之專家學者，有鑑其專業技術、知識及背景，特邀來台進行專業講演及論文學術交流，以助提昇本會議之成效。

六、經費來源及概算：（含申請人支付及邀請單位之收支）

本次活動與會費用除受邀之 Plenary Keynote Speakers and Chairs、Adversary Committee Members、WOCC2019 organizer and organizing committee member 等成員外皆由大陸專業人士自行負擔，其餘會議籌辦費用則由大會自籌、相關單位補助，以及廣告徵展費用支出。

七、活動構想、源起：

WOCC 會議每年舉辦一次，其主要目的是促進兩岸三地、美國及其他國家和地區在光纖、無線、網路通訊及資訊服務等領域的技術、研究、商業、及政策交流。2018年由國立東華大學主辦，趙涵捷校長擔任大會主席，期許延續 WOCC 傳統，提供一個獨特的論壇匯集在光纖、無線、網路通訊及資訊服務等領域的專家及業界領袖來交換最新的無線、光通訊網路、巨量資料、未來網路等技術成果及經驗，並共同開拓新的研究及商機。

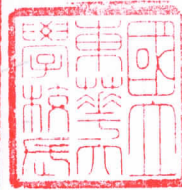
八、 詳細行程：(如停留期間較長，改以週、月為單位填寫)

自 2018 年 04 月 29 日 至 2015 年 05 月 02 日	行 程 內 容 (活動及住宿地點)		受訪單位 聯絡人	受訪單位 聯絡電話
第 1 天 4 月 29 日 星期日	下午	抵台 宿：福容大飯店	陳震宇	03-8634088
第 2 天 4 月 30 日 星期一	上午	參加 2018 年第 27 屆無線暨光通訊研討會 (WOCC 2018)	同上	同上
	下午	參加 2018 年第 27 屆無線暨光通訊研討會 (WOCC 2018) 宿：福容大飯店	同上	同上
第 3 天 5 月 1 日 星期二	上午	參加 2018 年第 27 屆無線暨光通訊研討會 (WOCC 2018)	同上	同上
	下午	參加 2018 年第 27 屆無線暨光通訊研討會 (WOCC 2018) 宿：福容大飯店	同上	同上
第 4 天 5 月 2 日 星期三	上午	離台	同上	同上

九、參加研討會，應檢附會議詳細計畫書，列明研討會主題、會議議程、會議地點、時間、主協辦單位、參加對象、參加人數等項。



(機關大小章)



邀請單位：國立東華大學 負責人：趙涵捷

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聯絡人姓名：陳震宇 電話：03-8634080

填表日期：107年3月27日