



**The Second EITA Conference on Agricultural  
Science and Technology, Biosystems Engineering**  
(EITA-New Agriculture 2016) or (EITA-EITC 2016 at NTU)

**"Precision Agriculture: Challenges, Opportunities  
and Future Directions"**

**National Taiwan University**  
Taipei, Republic of China (Taiwan)

**Saturday-Sunday, October 22-23, 2016**

**Program**

(Draft as of 3/5/16)

***Day 1 (Saturday, October 22, 2016)***

**10/22 (Sat) 9:00 am - 4:00 pm: Registration**

Room:

**10/22 (Sat) 9:30 am - 10:00 am: Opening Session**

Co-Chair: **Dr. Kuan Chong Ting**, Professor and Head, Department of Agricultural and Biological Engineering, University of Illinois at Urbana-Champaign (伊利諾大學香檳校區農業生物工程系系主任丁冠中教授)

Co-Chair: **Dr. Ta-Te Lin**, Distinguished Professor, Department of Bio-Industrial Mechatronics, Engineering, National Taiwan University, and Secretary-General, the Office of the Secretariat, National Taiwan University (臺灣大學生物產業機電工程系兼臺灣大學主任秘書林達德特聘教授)

Room:

**Plenary Sessions:**

**10/22 (Sat) 10:00 am - 11:20 am: Plenary Session (I):**

Chair:

Room:

(1 speaker)

**10/22 (Sat) 11:20 am - 11:35 am: Coffee Break**

Room:

**10/22 (Sat) 11:35 am – 12:55 pm: Plenary Session (II)**

Chair:

Room:

(1 speaker)

**10/22 (Sat) 12:55 pm - 2:15 pm: Lunch Break**

**Parallel Sessions:**

**10/22 (Sat) 2:15 pm – 3:35 pm: Technical Session D1-S1-T1: Food Security and Safety-Plant/Animal Production, Protection, Processing, Distribution, Utilization, and Resource Recovery**

Chair: **Dr. Yung-Fu Chang**, Director, Infectious Disease Research Laboratory, Animal Health Diagnostic Center and Professor, Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University (康乃爾大學獸醫學院張永富教授)

Room:

(4 speakers)

**Dr. Jin-Chywan Gwo**

Professor, Department of Aquaculture

National Taiwan Ocean University

(台灣海洋大學水產養殖學系郭金泉教授)

**10/22 (Sat) 2:15 pm – 3:35 pm: Technical Session D1-S2-T1: Energy Security-Supply, Demand, Conservation, and Renewable Sources**

Chair: **Dr. Jeffrey Chi-Sheng Wu**, Associate Chair and Professor, Department of Chemical Engineering, National Taiwan University (臺灣大學化學工程學系副系主任吳紀聖教授)

Room:

(4 speakers)

**Dr. Faa-Jeng Lin**

Chair Professor, Department of Electrical Engineering, National Central University

Committee Chair, National Energy Plan (NEP-II) Smart Grid Focus Center

Ministry of Science and Technology, R.O.C. (Taiwan)

(中央大學電機工程學系兼科技部第二期能源國家型科技計畫智慧電網主軸計畫召集人林法正講座教授)

**Dr. Jyh-Yih Hsu**

Professor, Department of Applied Economics and

Department of Management Information Systems

(中興大學資訊管理學系暨應用經濟學系許志義教授)

**10/22 (Sat) 2:15 pm – 3:35 pm: Technical Session D1-S3-T1: Water Security-Supply, Demand, Conservation, and Quality Improvement/Assurance**

Chair: **Dr. Fi-John Chang**, Professor, Department of Bioenvironmental Systems Engineering, National Taiwan University (臺灣大學生物環境系統工程學系張斐章教授)

Room:

(4 speakers)

**Dr. Chia-Ren Chu**

Professor, Department of Civil Engineering  
National Central University  
(中央大學土木工程學系朱佳仁教授)

**Dr. Chia-Jeng Chen**

Assistant Professor, Department of Civil Engineering  
National Chung Hsing University  
(中興大學土木工程學系陳佳正教授)

**10/22 (Sat) 2:15 pm – 3:35 pm: Technical Session D1-S4-T1: Systems Informatics and Analytics-Climate Change, Sustainability, Productivity, Competitiveness, Intelligence, and Nexus of Food/Energy/Water Systems (FEWS)**

Chair: **Dr. Suming Chen**, Associate Dean, College of BioResources and Agriculture, and Professor, Department of Bio-Industrial Mechatronics Engineering, National Taiwan University  
(臺灣大學生物產業機電工程系兼生物資源暨農學院副院長陳世銘教授)

Room:

(4 speakers)

**Dr. Kuan Chong Ting**

Professor and Head, Department of Agricultural and Biological Engineering  
University of Illinois at Urbana-Champaign  
(伊利諾大學香檳校區農業生物工程系主任丁冠中教授)

**Dr. Li-Cheng Hsieh**

Associate Professor, Department of Bio-industrial Mechatronics Engineering  
Associate Dean of Student Affairs  
National Chung-Hsing University  
(中興大學生物產業機電工程學系兼副學務長謝禮丞教授)

**Dr. Ping-Lang Yen**

Associate Professor, Department of Bio-Industrial Mechatronics Engineering  
National Taiwan University  
(臺灣大學生物產業機電工程系顏炳郎教授)

**10/22 (Sat) 3:35 pm – 3:50 pm: Coffee Break**

Room:

**Parallel Sessions:**

**10/22 (Sat) 3:50 pm – 5:10 pm: Technical Session D1-S1-T2: Food Security and Safety-Plant/Animal Production, Protection, Processing, Distribution, Utilization, and Resource Recovery**

Chair:

Room:

(4 speakers)

**Dr. Bang-Yuan Chen**

Assistant Professor, Department of Food Science  
Fu Jen Catholic University

(輔仁大學食品科學系陳邦元教授)

**10/22 (Sat) 3:50 pm – 5:10 pm: Technical Session D1-S2-T2: Energy Security-Supply, Demand, Conservation, and Renewable Sources**

Chair:

Room:

(4 speakers)

**Dr. Fang-Chung Chen**

Professor, Department of Photonics  
National Chiao-Tung University

(交通大學光電系陳方中教授)

**Dr. Yu-Bin Chen**

Professor, Department of Mechanical Engineering  
National Cheng Kung University

(成功大學機械工程學系陳玉彬教授)

**Dr. I-Chun Cheng**

Associate Professor, Graduate Institute of Photonics and Optoelectronics  
Department of Electrical Engineering  
National Taiwan University

(台灣大學電機工程學系陳奕君教授)

**10/22 (Sat) 3:50 pm – 5:10 pm : Technical Session D1-S3-T2: Water Security-Supply, Demand, Conservation, and Quality Improvement/Assurance**

Chair:

Room:

(4 speakers)

**Dr. Yi-Pin Lin**

Associate Professor, Department of Civil Engineering  
National Taiwan University

(臺灣大學土木工程學系林逸彬教授)

**Dr. Wei-Hsiang Chen**

Assistant Professor, Institute of Environmental Engineering  
National Sun Yat-Sen University

(中山大學環境工程研究所陳威翔教授)

**10/22 (Sat) 3:50 pm – 5:10 pm: Technical Session D1-S4-T2: Systems Informatics and Analytics-Climate Change, Sustainability, Productivity, Competitiveness, Intelligence, and Nexus of Food/Energy/Water Systems (FEWS)**

Chair:

Room:

(4 speakers)

**Dr. Yuan Shen**

Professor, Department of Department of Soil and Environmental Sciences

Associate Dean, College of Agriculture and Natural Resources

National Chung Hsing University

(中興大學土壤環境科學系兼農業暨自然資源學院副院長申雍教授)

**Dr. Wei Fang**

Professor, Department of Bio-Industrial Mechatronics Engineering

National Taiwan University

(台灣大學生物產業機電工程系方煒教授)

**Dr. Hsiu-An Chu**

Associate Research Fellow, Institute of Plant and Microbial Biology

Academia Sinica

(中央研究院植物暨微生物學研究所朱修安博士)

**Day 2 (Sunday, October 23, 2016):**

**10/23 (Sun) 9:30 am - 4:00 pm: Registration**

Room:

**10/23 (Sun) 10:00 am - 11:20 am: Panel Discussions**

Moderator:

Room:

(4 panelists)

**10/23 (Sun) 11:20 am - 11:35 am: Coffee Break**

Room:

**Parallel Sessions:**

**10/23 (Sun) 11:35 am – 12:55 pm: Technical Session D2-S1-T1: Food Security and Safety-Plant/Animal Production, Protection, Processing, Distribution, Utilization, and Resource Recovery**

Chair:

Room:

(4 speakers)

**Dr. Kai-Yi Chen**

Associate Professor, Department of Agronomy  
National Taiwan University

(臺灣大學農藝學系陳凱儀教授)

**Dr. Pao-Yang Chen**

Assistant Research Fellow, Institute of Plant and Microbial Biology  
Academia Sinica

(中央研究院植物暨微生物學研究所陳柏仰陳柏仰博士)

Dr. Wen-Po Chuang

Assistant Professor, Department of Agronomy  
National Taiwan University

(臺灣大學農藝學系莊汶博教授)

**10/23 (Sun) 11:35 am – 12:55 pm: Technical Session D2-S2-T1: Energy Security-Supply, Demand, Conservation, and Renewable Sources**

Chair:

Room:

(4 speakers)

**Dr. Hsuan-Cheng Huang**

Director and Professor, Institute of BioMedical Informatics  
National Yang Ming University

(陽明大學生物醫學資訊研究所長黃宣誠教授)

**10/23 (Sun) 11:35 am – 12:55 pm: Technical Session D2-S3-T1: Water Security-Supply, Demand, Conservation, and Quality Improvement/Assurance**

Chair:

Room:

(4 speakers)

**Dr. Chihhao Fan**

Associate Professor, Department of Bioenvironmental Systems Engineering

National Taiwan University

(臺灣大學生物環境系統工程學系范致豪教授)

**10/23 (Sun) 11:35 am – 12:55 pm: Technical Session D2-S4-T1: Systems Informatics and Analytics-Climate Change, Sustainability, Productivity, Competitiveness, Intelligence, and Nexus of Food/Energy/Water Systems (FEWS)**

Chair:

Room:

(4 speakers)

**Dr. Fi-John Chang**

Professor, Department of Bioenvironmental Systems Engineering

National Taiwan University

(臺灣大學生物環境系統工程學系張斐章教授)

**Dr. Min-Hui Lo**

Assistant Professor, Department of Atmospheric Sciences

National Taiwan University

(台灣大學大氣科學系羅敏輝教授)

**10/23 (Sun) 12:55 pm – 2:15 pm: Lunch Break**

Room:

**Parallel Sessions:**

**10/23 (Sun) 2:15 pm – 3:35 pm: Technical Session D2-S1-T2: Food Security and Safety-Plant/Animal Production, Protection, Processing, Distribution, Utilization, and Resource Recovery**

Chair:

Room:

(4 speakers)

**Dr. Ya-Ching Shen**

Professor, School of Pharmacy, College of Medicine

National Taiwan University

(台灣大學藥學系沈雅敬教授)

**Dr. Tzu-Shing Deng**

Assistant Professor, Department of Agronomy  
National Chung-Hsing University  
(中興大學農藝學系鄧資新教授)

**10/23 (Sun) 2:15 pm – 3:35 pm: Technical Session D2-S2-T2: Energy Security-Supply, Demand, Conservation, and Renewable Sources**

Chair:

Room:

(4 speakers)

**Dr. Jung-Jeng Su**

Associate Professor, Department of Animal Science and Technology  
National Taiwan University  
(臺灣大學動物科學技術學系蘇忠楨教授)

**Dr. Si-Yu Li**

Associate Professor, Department of Chemical Engineering  
National Chung Hsing University  
(中興大學化學工程學系李思禹教授)

**10/23 (Sun) 2:15 pm – 3:35 pm: Technical Session D2-S3-T2: Water Security-Supply, Demand, Conservation, and Quality Improvement/Assurance**

Chair:

Room:

(4 speakers)

**Dr. Yung-Chieh Wang**

Assistant Professor, Department of Soil and Water Conservation  
National Chung Hsing University  
(中興大學水土保持學系王咏潔教授)

**10/23 (Sun) 2:15 pm – 3:35 pm: Technical Session D2-S4-T2: Systems Informatics and Analytics-Climate Change, Sustainability, Productivity, Competitiveness, Intelligence, and Nexus of Food/Energy/Water Systems (FEWS)**

Chair:

Room:

(4 speakers)

**Dr. Ta-Te Lin**

Distinguished Professor, Department of Bio-Industrial Mechatronics Engineering and Secretary-General, the Office of the Secretariat  
National Taiwan University  
(臺灣大學生物產業機電工程系兼臺灣大學主任秘書林達德特聘教授)



**Dr. Ye-Nu Wan**

Professor, Department of Bio-industrial Mechatronics Engineering  
National Chung-Hsing University

(中興大學生物產業機電工程學系萬一怒教授)

**10/23 (Sun) 3:35 pm - 3:50 pm: Coffee Break**

Room:

**Parallel Sessions:**

**10/23 (Sun) 3:50 pm – 5:10 pm: Technical Session D2-S1-T3: Food Security and Safety-Plant/Animal Production, Protection, Processing, Distribution, Utilization, and Resource Recovery**

Chair:

Room:

(4 speakers)

**Dr. Hsueh-Fen Juan**

Professor, Institute of Biomedical Electronics and Bioinformatics,  
Institute of Molecular and Cellular Biology, Department of Life  
Science, Center for Systems Biology and Bioinformatics  
National Taiwan University

(台灣大學生醫電子與資訊學研究所與分子細胞生物學研究所阮雪芬教授)

**10/23 (Sun) 3:50 pm – 5:10 pm: Technical Session D2-S2-T3: Energy Security-Supply, Demand, Conservation, and Renewable Sources**

Chair:

Room:

(4 speakers)

**Dr. Jeffrey Chi-Sheng Wu**

Associate Chair and Professor, Department of Chemical Engineering  
National Taiwan University

(臺灣大學化學工程學系副主任吳紀聖教授)

**10/23 (Sun) 3:50 pm – 5:10 pm: Technical Session D2-S3-T3: Water Security-Supply, Demand, Conservation, and Quality Improvement/Assurance**

Chair:

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**Dr. Fi-John Chang**

Professor, Department of Bioenvironmental Systems Engineering  
National Taiwan University

(臺灣大學生物環境系統工程學系張斐章教授)

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Chair:

Room:

(4 speakers)

**Dr. Suming Chen**

Associate Dean, College of BioResources and Agriculture

Professor, Department of Bio-Industrial Mechatronics Engineering

National Taiwan University

(臺灣大學生物產業機電工程系兼生物資源暨農學院副院長陳世銘教授)