

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 3/4/16)

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. 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)

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)

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:

<u>Parallel Sessions:</u>

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系主任吳紀聖教授)

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

Chair: 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)

10/23 (Sun) 3:50 pm - 5:10 pm: Technical Session D2-S4-T3: Systems Informatics and Analytics-Climate Change, Sustainability, Productivity, Competitiveness, Intelligence, and Nexus of Food/Energy/Water Systems (FEWS)

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)