

Editorial Team of International Journal of Agricultural and Biological Engineering

EDITOR-IN-CHIEF

Wang Yingkuan, PhD, Prof., Chinese Academy of Agricultural Engineering, Chinese Society of Agricultural Engineering, Beijing, China

SECTION EDITORS

Li Hongwen, Section Editor of PMS, China Agricultural University, Beijing, China

Debjyoti Banerjee, Section Editor of PMS, Texas A&M University, College Station, TX, USA

Sun-Ok Chung, Section Editor of PMS, Chungbuk National University, Korea

He Xiongkui, Section Editor of PMS, China Agricultural University, Beijing, China

Soni Peeyush, Section Editor of PMS, Indian Institute of Technology Kharagpur, Kharagpur, India

Jin Xin, Section Editor of PMS, Henan University of Science and Technology, Luoyang, China

Yang Qinghua, Section Editor of PMS & ITSCS, Zhejiang University of Technology, Hangzhou, China

Shufeng Han, Section Editor of PMS & ITSCS, John Deere, Urbandale, IA, USA

Zheng Yongjun, Section Editor of PMS & ITSCS, China Agricultural University, Beijing, China

Xie Qiuju, Section Editor of PMS & ITSCS, Northeast Agricultural University, Harbin, China

Guo Ya, Section Editor of PMS & SHE, Jiangnan University, Wuxi, China

Xue Xinyu, Section Editor of ASET & ITSCS, Nanjing Research Institute for Agricultural Mechanization, Nanjing, China

Chen Lei, Section Editor of NRES, Beijing Normal University, Beijing, China

Lei Tingwu, Section Editor of NRES, China Agricultural University, Beijing, China

Chang Tingting, Section Editor of NRES, Hohai University, Nanjing, China

Philip W. Gassman, Section Editor of NRES, Iowa State University, Ames, IA, USA

Victor B. Ella, Section Editor of NRES, University of the Philippines, Los Banos, Philippines

Vinay Nangia, Section Editor of NRES, International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

Zhou Beibei, Section Editor of NRES, Xi'an University of Technology, Xi'an, China

Li Baoming, Section Editor of APFS, China Agricultural University, Beijing, China

Liu Zhidan, Section Editor of APFS, China Agricultural University, Beijing, China

Wang Chaoyuan, Section Editor of APFS, China Agricultural University, Beijing, China

Lope G. Tabil, Section Editor of APFS & REMS, University of Saskatchewan, Saskatoon, SK, Canada

Ji Fang, Section Editor of APFS, China Agricultural University, Beijing, China

Huang Wenjiang, Section Editor of ITSCS, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing, China

Redmond R Shamshiri, Section Editor of ITSCS, Berlin Institute of Technology, Berlin, Germany

Xiang Haitao, Section Editor of ITSCS, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China

Li Minzan, Section Editor of ITSCS, China Agricultural University, Beijing, China

Liu Jizhan, Section Editor of ITSCS, Jiangsu University, Zhenjiang, China

Nilanchal Patel, Section Editor of ITSCS, Birla Institute of Technology Mesra, Ranchi, Jharkhand, India

Li Shihua, Section Editor of ITSCS, University of Electronic Science and Technology of China, Chengdu, China

Han Yuxing, Section Editor of ITSCS, South China Agricultural University, Guangzhou, China

Zhang Zhao, Section Editor of ITSCS, China Agricultural University, Beijing, China

Zhang Dongyan, Section Editor of ITSCS, Northwest A&F University, Yangling, China

Wei Guo, Editor of ITSCS, The University of Tokyo, Tokyo, Japan

Hu Menghan, Editor of ITSCS, East China Normal University, Shanghai, China

Li Chao, Section Editor of ITSCS, Hunan Agricultural University, Changsha, China

Fu Longsheng, Section Editor of ITSCS, Northwest A&F University, Yangling, China

Cui Yongjie, Section Editor of ITSCS, Northwest A&F University, Yangling, China

Liu Shouyang, Section Editor of ITSCS, Nanjing Agricultural University, Nanjing, China

Yu Zhang, Section Editor of ITSCS, National Agriculture and Food Research Organization, Tsukuba, Japan

Zhai Changyuan, Section Editor of ITSCS, Beijing Research Center for Information Technology in Agriculture, China

Álvaro Ramírez-Gómez, Section Editor of REMS, Technical University of Madrid, Madrid, Spain

Zhou Yuguang, Section Editor of REMS, China Agricultural University, Beijing, China

Xu Fuqing, Section Editor of REMS, Xi'an Jiaotong University, Xi'an, China

Su Rongxin, Section Editor of REMS, Tianjin University, Tianjin, China

Jun Soojin, Section Editor of AFPS, University of Hawaii at Manoa, Honolulu, HI, USA

Peng Yankun, Section Editor of AFPS, China Agricultural University, Beijing, China

Shaojin Wang, Section Editor of AFPS, Washington State University, Pullman, WA, USA

Wang Jun, Section Editor of AFPS, Zhejiang University, Hangzhou, China

Zheng Xianzhe, Section Editor of AFPS, Northeast Agricultural University, Harbin, China

Hongshun Yang, Section Editor of AFPS, National University of Singapore, Singapore, Singapore

Xiao Hongwei, Section Editor of AFPS, China Agricultural University, Beijing, China

EDITORIAL STAFF

Wang Yingkuan, Xin Shiqiang, Meng Dan, Guan Qi, Wang Yiping

English editors: Justin M. Thomas Part-time editors: Yang Yan, Wang Yuanjie, Paul Chen, Shi Xiuhuan

International Journal of Agricultural and Biological Engineering International Editorial Board

The Fourth Term

(To be updated)

<https://www.ijabe.org>

HONORARY CHAIRMEN

Jaw-Kai Wang, PhD, Prof., Member of National Academy of Engineering, University of Hawaii, Honolulu, HI, USA

Juming Tang, PhD, Prof., Former President of AOC, Washington State University, Pullman, WA, USA

Kang Shaozhong, PhD, Prof., Academician of the CAE, China Agricultural University, Beijing, China

Luo Xiwen, Prof., Vice-President of CSAE, Academician of the CAE, South China Agricultural University, Guangzhou, China

Zhao Chunjiang, PhD, Prof., Director, Academician of the Chinese Academy of Engineering (CAE), National Engineering Research Center for Information Technology in Agriculture, Beijing, China

CHAIRMEN

Zhu Ming, Prof., President of CSAE, Chief Scientist, Chinese Academy of Agricultural Engineering, Beijing, China

Roger Ruan, PhD, Prof., Director, University of Minnesota, Saint Paul, MN, USA

VICE-CHAIRMEN

Cao Weixing, PhD, Prof., Nanjing Agricultural University, Nanjing, China

Da-Wen Sun, PhD, Prof., CIGR Incoming President, Member of Royal Irish Academy, Member of Academia Europaea, National University of Ireland, Dublin, Ireland

Fu Zetian, PhD, Prof., China Agricultural University, Beijing, China

Naiqian Zhang, PhD, Prof., Former President of AOC, Kansas State University, Manhattan, KS, USA

Qiang Zhang, PhD, Former President of AOC, Prof. and Head of Biosystems Engineering Department, University of Manitoba, Winnipeg, MB, Canada

Ruihong Zhang, PhD, Prof., Former President of AOC, University of California, Davis, CA, USA

Ying Yibin, PhD, Prof., Zhejiang University, Hangzhou, China

Yuan Shouqi, PhD, Prof., Jiangsu University, Zhenjiang, China

Yubin Lan, PhD, Agricultural Engineer, Prof., South China Agricultural University, Guangzhou, China

MEMBERS OF THE EDITORIAL BOARD

Argentina

Jeszael Alexander Cristopher, National University of Rosario, Rosario, Santa Fe, Argentina

Australia

Allen (Jack) McHugh, National Centre for Engineering in Agriculture, University of Southern Queensland, Toowoomba, Australia

Deli Chen, The University of Melbourne, Melbourne, VIC, Australia

Guangan Chen, National Centre for Engineering in Agriculture, University of Southern Queensland, Toowoomba, Australia

Roderick A. Drew, Griffith University, Nathan, QLD, Australia

Sigfredo Fuentes, The University of Melbourne, Melbourne, VIC, Australia

Thomas Banhazi, National Centre for Engineering in Agriculture, University of Southern Queensland, Toowoomba, Australia

Belgium

Josse De Baerdemaeker, Katholieke Universiteit Leuven, Heverlee-Leuven, Belgium

Brazil

Antonio Saraiva, University of Sao Paulo-Polytechnic School, Sao Paulo, Brazil

Luiz Henrique A Rodrigues, University of Campinas, Campinas, Brazil

Rodrigo Manzione, Universidade Estadual Paulista/Ourinhos, São Paulo, Brazil

Bulgaria

Gabor Zsivanovits, Food Research and Development Institute (Former CANRI) of Plovdiv, Plovdiv, Bulgaria

Canada

Bingcheng Si, University of Saskatchewan, Saskatoon, SK, Canada

Heather McNarin, Agriculture and Agri-Food Canada, Ottawa, ON, Canada

Huiqing Guo, University of Saskatchewan, Saskatoon, SK, Canada

Iris Xiaohong Xu, University of Windsor, Windsor, ON, Canada

Jan C. Jofriet, University of Guelph, Guelph, ON, Canada

Lope G. Tabil, Jr., University of Saskatchewan, Saskatoon, SK, Canada

Neil B. McLaughlin, Agriculture and Agri-Food Canada, Ottawa, ON, Canada

Nicolas Tremblay, Agriculture and Agri-Food Canada, Quebec, QC, Canada

Prasad Daggupati, University of Guelph, Guelph, Ontario, Canada

Manickavasagan Annamalai, University of Guelph, Guelph, Ontario, Canada

Qiang Zhang, University of Manitoba, Winnipeg, MB, Canada

Xiaomei Li, XY Green Carbon, Edmonton, AB, Canada

Xiying Hao, Agriculture and Agri-Food Canada, Lethbridge, AB, Canada

Xueming Yang, Agriculture and Agri-Food Canada, Harrow, ON, Canada

Ying Chen, University of Manitoba, Winnipeg, MB, Canada
Zhiming Qi, McGill University, Macdonald Campus, Montréal, QC, Canada

China

Cao Chengmao, Anhui Agricultural University, Hefei, China
Cao Weibin, Shihezi University, Shihezi, China
Cao Weixing, Nanjing Agricultural University, Nanjing, China
Chang Tingting, Hohai University, Nanjing, China
Cen Haiyan, Zhejiang University, Hangzhou, China
Chen Haitao, Northeast Agricultural University, Harbin, China
Chen Jian, Southwest University, Chongqing, China
Chen Jianneng, Zhejiang Sci-tech University, Hangzhou, China
Chen Lei, Beijing Normal University, Beijing, China
Chen Liping, China National Research Center of Intelligent Equipment for Agriculture, Beijing, China
Cui Yongjie, Northwest A&F University, Yangling, China
Deng Lie, Citrus Research Institute, Chinese Academy of Agricultural Sciences, Chongqing, China
Ding Weimin, Nanjing Agricultural University, Nanjing, China
Dong Changsheng, Shanxi Agricultural University, Taigu, China
Dong Renjie, China Agricultural University, Beijing, China
Fu Longsheng, Northwest A&F University, Yangling, China
Fu Qiang, Northeast Agricultural University, Harbin, China
Fu Zetian, China Agricultural University, Beijing, China
Gao Haiyan, Zhejiang Academy of Agricultural Sciences, Hangzhou, China
Gao Wanlin, China Agricultural University, Beijing, China
Ge Zhenyang, Kunming University of Science and Technology, Kunming, China
Guo Ya, Jiangnan University, Wuxi, China
Guo Yuming, Shanxi Agricultural University, Taigu, China
Han Lujia, China Agricultural University, Beijing, China
Han Wenting, Northwest A&F University, Yangling, China
Han Yuxing, South China Agricultural University, Guangzhou, China
He Dongjian, Northwest A&F University, Yangling, China
He Jin, China Agricultural University, Beijing, China
He Xinlin, Shihezi University, Shihezi, China
He Xiongkui, China Agricultural University, Beijing, China
He Yong, Zhejiang University, Hangzhou, China
Hong Tiansheng, South China Agricultural University, Guangzhou, China
Hu Menghan, East China Normal University, Shanghai, China
Hu Yueming, South China Agricultural University, Guangzhou, China
Hu Yongguang, Jiangsu University, Zhenjiang, China
Huang Guanhua, China Agricultural University, Beijing, China
Huang Wenjiang, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing, China
Ji Changying, Nanjing Agricultural University, Nanjing, China
Ji Fang, China Agricultural University, Beijing, China
Ji Shiming, Zhejiang University of Technology, Hangzhou, China
Jin Xin, Henan University of Science and Technology, Luoyang, China
Kai Liu, City University of Hong Kong, Hong Kong, China
Li Baoming, China Agricultural University, Beijing, China
Li Chao, Hunan Agricultural University, Changsha, China
Li Chenghua, Shenyang Ligong University, Shenyang, China
Li Daoliang, China Agricultural University, Beijing, China
Li Dong, China Agricultural University, Beijing, China
Li Guanglin, Southwest University, Chongqing, China
Li Hong, Jiangsu University, Zhenjiang, China
Li Hongwen, China Agricultural University, Beijing, China
Li Ming, Yunnan Normal University, Kunming, China
Li Minzan, China Agricultural University, Beijing, China
Li Pingping, Nanjing Forestry University, Nanjing, China
Li Shaowen, Anhui Agricultural University, Hefei, China
Li Shihua, University of Electronic Science and Technology of China, Chengdu, China
Li Tianlai, Shenyang Agricultural University, Shenyang, China
Li Wenzhe, Northeast Agricultural University, Harbin, China
Li Zhanbin, Xi'an University of Technology, Xi'an, China
Lin Hetong, Fujian Agriculture and Forestry University, Fuzhou, China
Liu Donghong, Zhejiang University, Hangzhou, China
Liu Jizhan, Jiangsu University, Zhenjiang, China
Liu Ronghou, Shanghai Jiao Tong University, Shanghai, China
Liu Shouyang, Nanjing Agricultural University, Nanjing, China
Liu Yande, East China Jiaotong University, Nanchang, China
Liu Zhidan, China Agricultural University, Beijing, China
Lu Anxiang, Beijing Research Center for Agricultural Standards and Testing, Beijing, China
Lu Lixin, Jiangnan University, Wuxi, China

Luo Xiwen, South China Agricultural University, Guangzhou, China
Ma Haile, Jiangsu University, Zhenjiang, China
Ma Xiaoyi, Northwest A&F University, Yangling, China
Mao Hanping, Jiangsu University, Zhenjiang, China
Ou Yinggang, South China Agricultural University, Guangzhou, China
Peng Yankun, China Agricultural University, Beijing, China
Ren Tusheng, China Agricultural University, Beijing, China
Shang Shuqi, Qingdao Agricultural University, Qingdao, China
Shao Ming'an, Chinese Academy of Sciences, Beijing, China
Shu Lei, Nanjing Agricultural University, Nanjing, China
Song Wenlong, Northeast Forestry University, Harbin, China
Su Rongxin, Tianjin University, Tianjin, China
Sun Songlin, Hunan Agricultural University, Changsha, China
Wang Chaoyuan, China Agricultural University, Beijing, China
Wang Chun, Heilongjiang Bayi Agricultural University, Daqing, China
Wang Jihua, Beijing Research Center for Agricultural Standards and Testing, Beijing, China
Wang Jinwu, Northeast Agricultural University, Harbin, China
Wang Jun, Zhejiang University, Hangzhou, China
Wang Liang, Shanghai Academy of Environmental Sciences, Shanghai, China
Wang Maohua, China Agricultural University, Beijing, China
Wang Quanjiu, Xi'an University of Technology, Xi'an, China
Wang Xiangyou, Shandong University of Technology, Zibo, China
Wang Yingkuan, Chinese Academy of Agricultural Engineering, Beijing, China
Wei Xiuju, Chinese Academy of Agricultural Engineering, Beijing, China
Wu Di, Zhejiang University, Hangzhou, China
Wu Caicong, China Agricultural University, Beijing, China
Wu Chuanyu, Zhejiang Sci-Tech University, Hangzhou, China
Wu Huarui, National Engineering Research Center for Information Technology in Agriculture, Beijing, China
Xiang Haitao, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China
Xiao Hongwei, China Agricultural University, Beijing, China
Xie Qiuju, Northeast Agricultural University, Harbin, China
Xu Guangyin, Henan Agricultural University, Zhengzhou, China
Xu Fuqing, Xi'an Jiaotong University, Xi'an, China
Xue Xinyu, Nanjing Research Institute for Agricultural Mechanization Ministry of Agriculture and Rural Affairs, Nanjing, China
Yang Chuanhua, Jiamusi University, Jiamusi, China
Yang Li, China Agricultural University, Beijing, China
Yang Qinghua, Zhejiang University of Technology, Hangzhou, China
Yang Xinting, National Engineering Research Center for Information Technology in Agriculture, Beijing, China
Ye Xingqian, Zhejiang University, Hangzhou, China
Yi Shujuan, Heilongjiang Bayi Agricultural University, Daqing, China
Yi Weiming, Shandong University of Technology, Zibo, China
Ying Yibin, Zhejiang University, Hangzhou, China
Yuan Shouqi, Jiangsu University, Zhenjiang, China
Yubin Lan, South China Agricultural University, Guangzhou, China
Yue Tianli, Northwest A&F University, Yangling, China
Yun Wenju, Land Consolidation and Rehabilitation Center of Land and Resources Ministry, Beijing, China
Zhai Changyuan, Beijing Research Center for Information Technology in Agriculture, China
Zhang Dongxing, China Agricultural University, Beijing, China
Zhang Dongyan, Northwest A&F University, Yangling, China
Zhang Guochen, Dalian Ocean University, Dalian, China
Zhang Libin, Zhejiang University of Technology, Hangzhou, China
Zhang Naiming, Yunnan Agricultural University, Kunming, China
Zhang Quanguo, Henan Agricultural University, Zhengzhou, China
Zhang Wei, Heilongjiang Bayi Agricultural University, Daqing, China
Zhang Xianfeng, Peking University, Beijing, China
Zhang Yalei, Tongji University, Shanghai, China
Zhang Ying, Northeast Agricultural University, Harbin, China
Zhang Zhao, China Agricultural University, Beijing, China
Zhao Chunjiang, National Engineering Research Center for Information Technology in Agriculture, Beijing, China
Zhao Lixin, Chinese Academy of Agricultural Engineering, Beijing, China
Zheng Baodong, Fujian Agriculture and Forestry University, Fuzhou, China
Zheng Xianzhe, Northeast Agricultural University, Harbin, China
Zheng Yongjun, China Agricultural University, Beijing, China
Zhou Beibei, Xi'an University of Technology, Xi'an, China
Zhou Changji, Chinese Academy of Agricultural Engineering, Beijing, China
Zhou Fujun, Northeast Agricultural University, Harbin, China
Zhou Xinqun, Chinese Academy of Agricultural Engineering, Beijing, China
Zhou Yuguang, China Agricultural University, Beijing, China
Zhou Zhili, Henan University of Science and Technology, Luoyang, China
Zhu Hongguang, Tongji University, Shanghai, China

Zhu Ming, Chinese Academy of Agricultural Engineering, Beijing, China
Zhu Songming, Zhejiang University, Hangzhou, China
Zhu Wenxue, Henan University of Science and Technology, Luoyang, China
Zhu Yan, Nanjing Agricultural University, Nanjing, China
Zou Xiaobo, Jiangsu University, Zhenjiang, China

Czech Republic

Jiří Blahovec, Czech University of Life Sciences Prague, Prague, Czech Republic

Demark

Claus Grøn Sørensen, Aarhus University, Aarhus, Demark
Guoqiang Zhang, Aarhus University, Aarhus, Demark
Victoria Blanes-Vidal, University of Southern Denmark, Obsense, Denmark

Egypt

Mahmoud Hany Ramadan, Al-Mansoura University, Al-Mansoura, Egypt
Said Elshahat Abdallah, Kafrelsheikh University, Kafr Elsheikh, Egypt
Samy Badr Khadr, Zanzibar Joint Farm, Egypt

Finland

Hannu E. S. Haapala, Seinäjoki University of Applied Sciences, Seinäjoki, Finland
Jukka Rintala, MTT Agrifood Research, Jokioinen, Finland
Markku Järvenpää, MTT Agrifood Research, Jokioinen, Finland

France

Roger Martin-Clouaire, Institut National de la Recherche Agrono, France

Germany

Andreas Herbst, Federal Research Centre for Cultivated Plants, Braunschweig, Germany
Hans W. Griepentrog, University of Hohenheim, Stuttgart, Germany
Ing. Henning J. Meyer, Technische Universität Berlin, Berlin, Germany
Joachim Mueller, University of Hohenheim, Stuttgart, Germany
Peter Schulze-Lammers, University of Bonn, Bonn, Germany
Redmond R Shamshiri, Berlin Institute of Technology, Berlin, Germany
Thomas Jungbluth, University of Hohenheim, Stuttgart, Germany

Ghana

Nicholas kyei-baffour, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Greece

Nick Sigrimis, Agricultural University of Athens, Athens, Greece
Stavros G. Vougioukas, Aristotle University of Thessaloniki, Thessaloniki, Greece

Iceland

Sigurjon Arason, University of Iceland, Reykjavik, Iceland

India

B K Kumbhar, GB Pant University of Agriculture and Technology, Uttarakhand, India
Balram Panigrahi, Odisha University of Agriculture & Technology, Odisha, India
Gopal U. Shinde, Marathwada Agricultural University, Parbhani, Maharashtra, India
K N Tiwari, Indian Institute of Technology, Kharagpur, India
M N Dabhi, Junagadh Agricultural University, Junagadh, Gujarat, India
N. Kapilan, Nagarjuna College of Engineering and Technology, Devanahalli, Bangalore, India
Nilanchal Patel, Birla Institute of Technology Mesra, Ranchi, Jharkhand, India
R K Panda, Indian Institute of Technology, West Bengal, India
R S Prasad, Punjab Engineering College, Chandigarh, India
Rajvir Yadav, Junagadh Agricultural University, Junagadh (Gujarat) India
Ravindra Naik, Central Institute of Agricultural Engineering, Tamil Nadu, India
Tridib Kumar Goswami, Indian Institute of Technology, Kharagpur, West Bengal, India
Vilas M. Salokhe, Kaziranga University, Jorhat, Assam, India

Iran

Akbar Arabhosseini, University of Tehran, Pakdash, Tehran, Iran

Ireland

Da-wen Sun, National University of Ireland, Dublin, Ireland
Miao Song, Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland
Ultan Mc Carthy, University College Dublin, Belfield, Dublin, Ireland

Israel

Isaac Shainberg, Agricultural Research Organization, Israel
Ruth Ben-Arie, Israel Fruit Growers Association, Israel

Italy

Antonio Lo Porto, Water Research Institute, Italian National Research Council (IRSA-CNR), Bari, Italy
Daniele De Wrachien, The University of Milan, Via Celoria, Milan, Italy
Mambretti Stefano, Polytechnic University of Milan, Milan, Italy
Mauro Greppi, The University of Milan, Milan, Italy

Japan

Hiroaki Somura, Shimane University, Matsue, Japan
Jun Abe, Tokai University, Kumamoto Prefecture, Japan
Noboru Noguchi, Hokkaido University, Sapporo, Japan

Wang Xiulun, Mie University, Tsu, Japan
Wei Guo, The University of Tokyo, Tokyo, Japan
Yu Zhang, National Agriculture and Food Research Organization, Tsukuba, Japan

Jordan

Bassam Snobar, University of Jordan, Amman, Jordan
Taha M. Rababah, Jordan University of Science and Technology, Irbid, Jordan

Korea

In-Bok Lee, Seoul National University, Seoul, Korea
In-Hwan Oh, Konkuk University, Chungbuk-do, Korea
Myongsoo Chung, Ehwa Women's University, Korea
Seonggu Hong, Hankyong National University, Kyonggi-Do, South Korea
Seung-Jin Maeng, Chungbuk National University, Chungbuk, Korea
Sun-Ok Chung, Chungnam National University, Daejeon, Korea
YongJoo Kim, Chungnam National University, Daejeon, Korea
Youngjung Kim, National Academy of Agricultural Sciences, Suwon, Korea

Malaysia

Desa Ahmad, Universiti Putra Malaysia, Selangor Darul Ehsan, Malaysia
Ramin Shamshiri, Universiti Putra Malaysia, Serdang, Selangor, Malaysia
Olarewaju Akinola Johnson, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

Nepal

Shreemat Shrestha, Nepal Agricultural Research Council, Kathmandu, Nepal
Rabi Rasaily, REP of FAO Agricultural and Food Systems Group at Bangkok, Nepal Agricultural Research Council, Kathmandu, Nepal

New Zealand

E. John Stevens, The New Zealand & Australia Branch of IAMFE, Cass Bay Lyttelton, New Zealand
Hamish Gow, Massey University, Palmerston North, New Zealand
John Hampton, Lincoln University, Lincoln, Canterbury, New Zealand

Nigeria

Akindele Folarin ALONGE, University of Uyo, Uyo, Nigeria
Azikiwe Peter Onwualu, African University of Science and Technology, Abuja, Nigeria
Seth I. Manuwa, Federal University of Technology, Akure, Nigeria

Norway

Petter Hieronymus Heyerdahl, Norwegian University of Life Sciences, Oslo Area, Norway

Oman

Mushtaque Ahmed, Sultan Qaboos University, Al-Khoudh, Muscat, Oman

Pakistan

Ashfaq Ahmad Chattha, University of Agriculture Faisalabad, Faisalabad, Pakistan
Allah Bakhsh, University of Agriculture Faisalabad, Faisalabad, Pakistan
Muhammad Naveed Tahir, PMAS-Arid Agriculture University, Rawalpindi, Pakistan
Farman Ali Chandio, Sindh Agriculture University, Tandojam, Pakistan
Khalil Ahmed Ibupoto, Sindh Agriculture University, Tandojam, Pakistan

Philippines

Victor B. Ella, University of the Philippines Los Banos, Laguna, Philippines

Poland

Jacek Dach, Poznan University of Life Sciences, Poznan, Poland
Jacek Przybyl, Poznan University of Life Sciences, Poznan, Poland
Oryna Slobodzian-Ksenicz, University of Zielona Góra, Babimost, Poland
Tadeusz Kuczynski, University of Zielona Góra, Babimost, Zielona Góra, Poland
Tadeusz Pawlowski, Industrial Institute of Agricultural Engineering, Poznan, Poland

Portugal

Baptista Fatima Folgoa, University of Evora, Evora, Portugal

Romania

Gabriela Teodorescu, Valahia University of Targoviste, Targoviste, Dambovita, Romania

Russia

Aleksandr Perekopskii, Institute for Engineering and Environmental Problems in Agricultural Production, St. Petersburg, Russia
Oleg S. Marchenko, All Russian Research Institute for Mechanization in Agriculture (VIM), Moscow, Russia
Vladislav Minin, Russian Academy of Saint-Peterburg-Pushkin, Russia
Vladimir Dmitrievic Popov, Institute for Engineering and Environmental Problems in Agricultural Production, St. Petersburg, Russia

Serbia

Lazar Savin, University of Novi Sad, Novi Sad, Serbia
Milan Martinov, University of Novi Sad, Novi Sad, Serbia

Singapore

Hongshun Yang, National University of Singapore, Singapore, Singapore

Slovak Republic

Ladislav Nozdrovicky, Slovak University of Agriculture, Nitra, Slovak Republic

South Africa

Afam I O. Jideani, University of Venda, Thohoyandou, South Africa

Carlos Poblete Echeverria, Stellenbosch University, Stellenbosch, South Africa

Jeff Smithers, University of KwaZulu-Natal, Scottsville, South Africa

Spain

Álvaro Ramírez-Gómez, Technical University of Madrid, Madrid, Spain

Antonio Brasa Ramos, University of Castilla-La Mancha, Campus Universitario, Spain

Enrique Molto, Valencian Institute of Agricultural Research (IVIA), Valencia, Spain

Heiner Lehr, Syntesa Sp/F (Ltd.), Spain

Sweden

Bo Mattiasson, Lund University, Lund, Sweden

Jing Liu, Lund University, Lund, Sweden

Switzerland

Habil. Matthias Schick, Research Station ART, Ettenhausen, Switzerland

Syria

Vinay Nangia, International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

Thailand

Athapol Noomhorm, Asian Institute of Technology, Pathumthani, Thailand

Pecyush Soni, Asian Institute of Technology, Pathumthani, Thailand

The Netherlands

Eldert J. van Henten, Farm Technology Group, Wageningen UR, & Wageningen UR Greenhouse Horticulture, the Netherlands

Jeremy Harbinson, University of Wageningen, Wageningen, the Netherlands

Peter Groot Koerkamp, Wageningen University, Wageningen, the Netherlands

Turkey

Ahmet INCE, Cukurova University, Adana, Turkey

Hulya Atil, Ege University, İzmir, Turkey

Yunus Pinar, University of Ondokuz Mayıs, Samsun, Turkey

United Kingdom

David Tinker, European Society of Agricultural Engineers, Bedford, Bedfordshire, UK

Guoping Lian, Unilever Research Colworth, London, UK

Keith Weatherhead, Cranfield University, Cranfield, UK

Simon Blackmore, Harper Adams University College, Shropshire, UK

United States

Aaron Mittelstat, University of Nebraska-Lincoln, Lincoln, NE, USA

Athanasios (Alex) Alexandrou, California State University, Fresno, CA, USA

B. Brian He, University of Idaho, Moscow, ID, USA

Bang S. Sookie, South Dakota School of Mines and Technology, Rapid City, SD, USA

Bill Stout, Texas A&M University, TX, USA

Caixia (Ellen) Wan, University of Missouri, Columbia, MO, USA

Ce Yang, University of Minnesota, MN, USA

Chenxu Yu, Iowa State University, Ames, IA, USA

Cibin Raj, Pennsylvania State University, State College, PA, USA

Debjyoti Banerjee, Texas A&M University, College Station, TX, USA

Donghai Wang, Kansas State University, Manhattan, KS, USA

Edward T. Huang, California Institute of Environmental Design & Management, Los Angeles, CA, USA

Geng Bai, University of Nebraska-Lincoln, Lincoln, NE, USA

Glenn Warner, University of Connecticut, Storrs, CT, USA

Gonzalez L Jose, South Dakota State University, USA

H. Erdal Ozkan, Ohio State University, Columbus, OH, USA

Haibo Yao, Mississippi State University, Starkville, MS, USA

Haiqiang Chen, University of Delaware, Newark, DE, USA

Hanwu Lei, Washington State University, Richland, WA, USA

Hao Feng, University of Illinois, Urbana, IL, USA

Hongwei Xin, Iowa State University, Ames, IA, USA

Jaw-Kai Wang, University of Hawaii, Honolulu, HI, USA

Jian Yu, University of Hawaii at Manoa, Honolulu, HI, USA

Jianmei Yu, North Carolina A&T State University, Raleigh, NC, USA

Giannong Xin, University of Florida, Gainesville, FL, USA

Jian Shi, University of Kentucky, Lexington, KY, USA

Jiele Xu, North Carolina State University, Raleigh, NC, USA

Juming Tang, Washington State University, Pullman, WA, USA

Jun Soojin, University of Hawaii at Manoa, Honolulu, HI, USA

Jun Zhu, University of Arkansas, Fayetteville, AR, USA

Klein E. Ileleji, Purdue University, West Lafayette, IN, USA

Kyle R. Douglas-Mankin, U.S. Fish and Wildlife Service, Washington DC, USA

Lie Tang, Iowa State University, Ames, IA, USA

Lijun Wang, North Carolina A&T State University, Raleigh, NC, USA

Lingjuan Wang-Li, North Carolina State University, Raleigh, NC, USA

Lingying Zhao, The Ohio State University, Columbus, OH, USA

Manoj K. Jha, North Carolina A&T State University, Greensboro, NC, USA
Margaret Kalcic, The Ohio State University, Columbus, OH, USA
Naiqian Zhang, Kansas State University, Manhattan, KS, USA
Nalladurai Kaliyan, University of Minnesota, Paul, USA
Ning Wang, Oklahoma State University, Stillwater, OK, USA
Patricia Bresnahan, University of Connecticut, Storrs, CT, USA
Paul Chen, PhD, University of Minnesota, Saint Paul, MN, USA
Pei Huang, Wastewater Compliance Systems, Salt Lake City, UT, USA
Philip W. Gassman, Iowa State University, Ames, IA, USA
Phillip E. Savage, Pennsylvania State University, University Park, PA, USA
Qixin Zhong, University of Tennessee, Knoxville, TN, USA
Raj Khosla, Colorado State University, Fort Collins, CO, USA
Reginald S. Fletcher, USDA-ARS, Integrated Farming & Natural Resources Research Unit, Weslaco, TX, USA
Roger Ruan, University of Minnesota, Saint Paul, MN, USA
Ruihong Zhang, University of California, Davis, CA, USA
Ruplal Choudhary, Southern Illinois University, Carbondale IL, USA
Shaojin Wang, Washington State University, Pullman, WA, USA
Sheng Chu, Natural Systems Utilities, LLC, Hillsborough, NJ, USA
Shuangning Xiu, North Carolina A&T State University, Greensboro, NC, USA
Shufeng Han, John Deere - Intelligent Solutions Group, Urbandale, IA, USA
Shulin Chen, Washington State University, Pullman, WA, USA
Soojin Jun, University of Hawaii at Manoa, Honolulu, HI, USA
Steven J. Thomson, USDA-ARS, Washington D.C, USA
Wade Yang, Alabama A&M University, Normal, AL, USA
Wei Gao, Colorado State University, Fort Collins, CO, USA
Weilin Wang, Monsanto Company, St Louis, MO, USA
Wenqiao (Wayne) Yuan, North Carolina State University, Raleigh, NC, USA
William R Gibbons, South Dakota State University, Brookings, SD, USA
William S. Kisaalita, University of Georgia, Athens, GA, USA
Xiaofei Ye, University of Tennessee, Knoxville, TN, USA
Xinlei Wang, University of Illinois, Urbana-Champaign, IL, USA
Xiuying (Susan) Wang, Texas A&M University, Blackland Research Center, TX, USA
Xuejun (Jun) Pan, University of Wisconsin-Madison, Madison, WI, USA
Xuesong Zhang, Pacific Northwest National Laboratory, University of Maryland, College Park, MD, USA
Yang Tao, University of Maryland, MD, USA
Yao-wen Huang, University of Georgia, Athens, GA, USA
Yecong Li, Sapphire Energy, Inc., San Diego, CA, USA
Yeqiao Wang, CELS-NRS Coastal Institute, Kingston, RI, USA
Yi Liang, University of Arkansas, Fayetteville, AR, USA
Yifen Wang, Auburn University, AL, USA
Yi-Heng Percival Zhang, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, USA
Yi Zheng, Kansas State University, Manhattan, KS, USA
Yuanhui Zhang, University of Illinois at Urbana-Champaign, Urbana, IL, USA
Yufeng Ge, University of Nebraska-Lincoln, Lincoln, NE, USA
Yuzhou Luo, University of California, Davis, CA, USA
Zhen (Jason) He, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, USA
Zhuping Sheng, Texas A&M University, TX, USA
Ziyu Wang, North Carolina State University, Raleigh, NC, USA
Zongmei Gao, Columbia University, New York, NY, USA

Yemen

Mohammed El-Faki Mozib, University of Sana'a, Sana'a, Yemen