International Journal of

Agricultural and Biological Engineering

International Editorial Board

2008-2010

http://www.ijabe.org

HONORARY CHAIRMEN

Bill Stout, Emeritus Prof. of Texas A&M University, Former and Honorary President of CIGR, College Station, TX, USA Jaw-Kai Wang, Member of National Academy of Engineering, USA, PhD, Prof., University of Hawaii, Honolulu, USA Tao Dinglai, Prof., Founder of the CAAE & CSAE, Chinese Academy of Agricultural Engineering, Beijing, China Zeng Dechao, Academician of Chinese Academy of Engineering, Prof., China Agricultural University, Beijing, China Jiang Yiyuan, Academician of the Chinese Academy of Engineering, Prof., Northeast Agricultural University, Harbin, China Li Peicheng, Academician of the Chinese Academy of Engineering, Prof., Chang'an University, Xi'an, China

CHAIRMEN

Wang Maohua, Academician of the Chinese Academy of Engineering, Member of International Eurasian Academy of Sciences, Prof., China Agricultural University, Beijing, China

Chenghai Yang, PhD, Agricultural Engineer, Former President of AOC, U.S. Department of Agriculture, Agricultural Research Service, Weslaco, TX, USA

VICE-CHAIRMEN

Zhu Ming (Standing), Prof., President of CSAE, President, Chinese Academy of Agricultural Engineering, Beijing, China

Cao Weixing, PhD, Prof., Vice-president, Nanjing Agricultural University, Nanjing, China

Fu Zetian, PhD, Prof., Vice-President of CSAE, Vice-President, China Agricultural University, Beijing, China

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

Li Pingping, PhD, Prof., Vice-President, Jiangsu University, Zhenjiang, China

Luo Xiwen, Prof., Vice-President of CSAE, Former Vice-President, South China Agricultural University, Guangzhou, 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

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

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

Wu Pute, PhD, Prof., Vice-President of CSAE, Vice-president, Northwest Agriculture and Forestry University, Yangling, China

Xiusheng Yang, PhD, Prof, Former President of AOC, President of ACAAS, University of Connecticut, Storrs, CT, USA

Ying Yibin, PhD, Prof., Executive Dean, College of Biosystems Engineering & Food Science, Zhejiang University, Hangzhou, China

Zhang Libin, PhD, Prof., President, Zhejiang University of Technology, Hangzhou, China

Zhao Chunjiang, PhD, Prof., Director, National Engineering Research Center for Information Technology in Agriculture, Beijing, China Zhongli Pan, PhD, Prof., President of AOC, University of California, Davis, CA, USA

EDITORS-IN-CHIEF

Wang Maohua, Academician of the Chinese Academy of Engineering, Member of International Eurasian Academy of Sciences, Prof.,

China Agricultural University, Beijing, China

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

DIVISION EDITORS

Naiqian Zhang, Division Editor of PMS, Kansas State University, Manhattan, KS, USA

Ou Yinggang, Division Editor of PMS, South China Agricultural University, Guangzhou, China

Tong Jin, Division Editor of PMS, Jilin University, Changchun, China

Xiusheng Yang, Division Editor of LWE, University of Connecticut, Storrs, CT, USA

Lei Tingwu, Division Editor of LWE, China Agricultural University, Beijing, China

Li Baoming, Division Editor of BEE, China Agricultural University, Beijing, China

Yuanhui Zhang, Division Editor of BEE, University of Illinois, Urbana, IL, USA

Chenghai Yang, Division Editor of IET, U.S. Department of Agriculture, Agricultural Research Service, Weslaco, TX, USA

Sun Yurui, Division Editor of IET, China Agricultural University, Beijing, China

Hanwu Lei, Division Editor of RES, South Dakota State University, Brookings, SD, USA

Liu Ronghou, Division Editor of RES, Shanghai Jiao Tong University, Shanghai, China

Juming Tang, Division Editor of AFPE, Washington State University, Pullman, WA, USA

Peng Yankun, Division Editor of AFPE, China Agricultural University, Beijing, China

Wang Jun, Division Editor of AFPE, College of Biosystems Engineering and Food Science, Zhejiang University, China

MANAGING EDITORS

Wang Yingkuan, PhD, Chinese Academy of Agricultural Engineering, Beijing, China

Paul Chen, PhD, University of Minnesota, Saint Paul, MN, USA.

NATIVE ENGLISH EDITORS

Stout A Bill, PhD, Prof Emeritus, Dept of Biological & Agricultural Engineering, Texas A & M University, United States Hal E. Lemmon, PhD, Computer Scientist, ARS, United States Department of Agriculture, United States

MEMBERS OF THE EDITORIAL BOARD

China

Bao Jun, Heilongjiang August First Land Reclamation University, Daqing, China

Cai Huanjie, Northwest Agriculture and Forestry University, Yangling, China

Cao Wei, China Agricultural University, Beijing, China

Cao Weibin, Shihezi University, Shihezi, China

Chen Jian, Southwest University, Chongqing, China

Ding Weimin, Nanjing Agricultural University, Nanjing, China

Dong Changsheng, Shanxi Agricultural University, Taigu, China

Fu Qiang, Northeast Agricultural University, Harbin, China

Gao Huanwen, China Agricultural University, Beijing, China

Guo Yuming, Shanxi Agricultural University, Taigu, China

Han Lujia, 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 Zhenqi, China University of Mining and Technology, Beijing, China

Huang Guanhua, China Agricultural University, Beijing, China

Huang Wenjiang, National Engineering Research Center for Information Technology in Agriculture, Beijing, China

Ji Changying, Nanjing Agricultural University, Nanjing, China

Jiao Qunying, China Agricultural University, Beijing, China

Jing Jianzhou, Zhengzhou University of Light Industry, Zhengzhou, China

Kang Shaozhong, China Agricultural University, Beijing, China

Li Changyou, Inner Mongolia Agricultural University, Huhhot, China

Li Chenghua, Shenyang Ligong University, Shenyang, China

Li Jiusheng, China Institute of Water Resources and Hydropower Research, Beijing, China

Li Lite, China Agricultural University, Beijing, China

Li Ming, Yunnan Nornal University, Kunming, China

Li Minzan, China Agricultural University, Beijing, China

Li Shaowen, Anhui Agricultural University, Hefei, China

Li Tianlai, Shenyang Agricultural University, Shenyang, China

Li Wenzhe, Northeast Agricultural University, Harbin, China

Li Yaling, Shanxi Agricultural University, Taigu, China

Liao Qingxi, Huazhong Agricultural University, Wuhan, China

Lin Hetong, Fujian Agricultural and Forestry University, Fuzhou, China

Liu Honglu, Beijing Hydraulic Research Institute, Beijing, China

Liu Tingxi, Inner Mongolia Agricultural University, Huhhot, China

Liu Zuming, Yunnan Normal University, Kunming, China

Luo Weihong, Nanjing Agricultural University, Nanjing, China

Luo Yunbo, China Agricultural University, Beijing, China

Ma Haile, Jiangsu University, Zhenjiang, China

Ma Xiaoyi, Northwest Agriculture and Forestry University, Yangling, China

Mao Duobin, Zhengzhou University of Light Industry, Zhengzhou, China

Mao Hanping, Jiangsu University, Zhenjiang, China

Pan Siyi, Huazhong Agricultural University, Wuhan, China

Ren Tusheng, China Agricultural University, Beijing, China

Ren Wentao, Shenyang Agricultural University, Shenyang, China

Shang Shuqi, Qingdao Agricultural University, Qingdao, China

Shao Ming'an, Institute of Soil and Water Conservation, Chinese Academy of Sciences, Yangling, China

Shen Bing, Xi'an University of Technology, Xi'an, China

Sun Songlin, Hunan Agricultural University, Changsha, China

Tu Kang, Nanjing Agricultural University, Nanjing, China

Wang Baowei, Qingdao Agricultural University, Qingdao, China

Wang Chun, Heilongjiang August First Land Reclamation University, Daqing, China

Wang Chunguang, Inner Mongolia Agricultural University, Huhhot, China

Wang Jihua, National Engineering Research Center for Information Technology in Agriculture, Beijing, China

Wang Jinwu, Northeast Agricultural University, Harbin, China

Wang Jixian, Anhui Agricultural University, Hefei, China

Wang Quanjiu, Xi'an University of Technology, Xi'an, China

Wang Xiangyou, Shandong University of Technology, Zibo, China

Wu Chuanyu, Zhejiang Sci-Tech University, Hangzhou, China

Wu Jian, Zhejiang University, Hangzhou, China

Xu Fang, Zhejiang University of Technology, Hangzhou, China

Yang Qinghua, Zhejiang University of Technology, Hangzhou, China

Yi Weiming, Shandong University of Technology, Zibo, China

Yue Tianli, Northwest Agriculture and Forestry University, Yangling, China

Yun Wenju, Land Consolidation and Rehabilitaion Center of Land and Resources Ministry, Beijing, China

Zhang Bailiang, Henan Agricultural University, Zhengzhou, China

Zhang Dongxing, China Agricultural University, Beijing, China

Zhang Guochen, Dalian Fisheries University, Dalian, China

Zhang Quanguo, Henan Agricultural University, Zhengzhou, China

Zhang Xianfeng, Peking University, Beijing, China

Zhang Yalei, Tongji University, Shanghai, China

Zhang Ying, Northeast Agricultural University, Harbin, China

Zhao Yun, Zhejiang Sci-Tech University, Hangzhou, China

Zhao Lixin, Chinese Academy of Agricultural Engineering, Beijing, China

Zheng Baodong, Fujian Agriculture and Forestry University, Fuzhou, China

Zheng Jiaqiang, Nanjing Forestry University, Nanjing, China

Zheng Xianzhe, Northeast Agricultural University, Harbin, China

Zhou Changji, Chinese Academy of Agricultural Engineering, Beijing, China

Zhou Hongping, Nanjing Forestry University, Nanjing, China

Zhou Zhili, Henan University of Science and Technology, Luoyang, China

Zhu Hongguang, Tongji University, Shanghai, China

Zhu Songming, Zhejiang University, Hangzhou, China

Zhu Wenxue, Henan University of Science and Technology, Luoyang, China

United States of America

Bingjun (Brian) He, University of Idaho, Moscow, ID, USA

Bresnahan Patricia, University of Connecticut, Storrs, CT, USA

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

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

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

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

Heping Zhu, U.S. Department of Agriculture, Agricultural Research Service, Wooster, OH, USA

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

Jian Chen, North Carolina State University, Raleigh, NC, USA

Jiansheng (Jason) Yang, Ball State University, Muncie, IN, USA

Jiannong Xin, Institute of Food and Agricultural Sciences, Gainesville, FL, USA

Jinwen Zhang, Washington State University, Pullman, WA, USA

Jiqin Ni, Purdue University, West Lafayette, IN, USA

José L. Gonzalez, South Dakota State University, Brookings, SD, USA

Jun Zhu, University of Minnesota, Saint Paul, MN, USA

Lei Tian, University of Illinois, Urbana, IL, USA

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

Lihan Huang, U.S. Department of Agriculture, Agricultural Research Service, Wyndmoor, PA, USA

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

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

Lingying Zhao, Ohio State University, Wooster, OH, USA

Ning Wang, Oklahoma State University, Stillwater, OK, USA

Qixin Zhong, University of Tennessee, Knoxville, TN, USA

Robert G. Evans, Irrigation Science, Sidney, MT, USA

Ronald E. Yoder, University of Nebraska, Lincoln, NE, USA

Ruixiu Sui, Texas A&M University, College Station, TX, USA

Shaojin Wang, Washington State University, Pullman, WA, USA

Shuangning Xiu, North Carolina A&T State University, Greensboro, NC, USA

Shufeng Han, John Deere, Urbandale, IA, USA

Shulin Chen, Washington State University, Pullman, WA, USA

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

Wade Yang, Alabama A&M University, Normal, AL, USA

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

Wei Gao, University of Colorado, Fort Collins, CO, USA

Wenqiao (Wayne) Yuan, Kansas State University, Manhattan, KS, USA

William R.Gibbons, South Dakota State University, Brookings, SD, USA

Xiaofei Ye, Tennessee University, Knoxville, TN, USA

Xinlei Wang, University of Illinois, Urbana, IL, USA

Xuejun Pan, University of Wisconsin, Madison, WI, USA

Yanbo Huang, U.S. Department of Agriculture, Agricultural Research Service, Stoneville, MS, USA

Yang Tao, University of Maryland, College Park, MD, USA

Yao-Wen Huang, University of Georgia, Athens, GA, USA

Yebo Li, Ohio State University, Wooster, OH, USA

Yeqiao Wang, CELS-NRS, Coastal Institute in Kingston, Kingston, RI, USA

Yi Liang, University of Arkansas, Fayetteville, AR, USA

Yifen Wang, Auburn University, Auburn, AL, USA

Yigang Sun, University of Illinois, Urbana, IL, USA

Yi-Heng Percival Zhang, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, USA

Yubin Lan, U.S. Department of Agriculture, Agricultural Research Service, College Station, TX, USA

Yuzhou Luo, University of California, Davis, CA, USA

Australia

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

Thomas Banhazi, University of Adelaide - Roseworthy Campus, Adelaide, South Australia, Australia

Belgium

Josse De Baerdemaeker, Katholieke Universiteit Leuven, Leuven, Belgium

Brazil

Antonio Saraiva, University of São Paulo, São Paulo, Brazil

Canada

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

Chao Tan, University of Calgary, Calgary, Alberta, Canada

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

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

Nicolas Tremblay, Environmental Health, Agriculture and Agri-Food Canada, Quebec, Canada

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

Xiaomei Li, Highmark Renewables Research L.P., Vegreville, Alberta, Canada

Xiying Hao, Agricultural and Agri-Food Canada, Lethbridge Research Centre, Alberta, Canada

Ying Chen, University of Manitoba, Winnipeg, MB, Canada

Denmark

Victoria Blanes-Vidal, University of Southern Denmark, Obsense, Denmark

Hans W. Griepentrog, University of Copenhagen, Copenhagen, Denmark

Egypt

Moustafa Tawfik Gaweesh, National Water Research Center, Ministry of Water Resources and Irrigation, Cairo, Egypt Mohamed F.M.Bakery, Drainage Research Institute, National Water Research Center, Cairo, Egypt

Finland

Jukka Rintala, Department of Biological and Environmental Science, University of Jyväskylä,

MTT Agrifood Research Finland, Jokioinen, Finland

France

Roger MARTIN-CLOUAIRE, Unité de Biometrie et Intelligence Artificielle, Institut National de la Recherche Agronomique(INRA), Auzevile, Toulouse, France

Germany

Andreas Herbst, Federal Research Centre for Cultivated Plants, Braunschweig, Germany

Joachim Mueller, University of Hohenheim, Stuttgart, Germany

Peter Schulze-Lammers, University of Bonn, Bonn, Germany

Thomas Jungbluth, University of Hohenheim, Stuttgart, Germany

Greece

Nick Sigrimis, Agricultural University of Athens, Athens, Greece

Stavros G. Vougioukas, Aristotle University of Thessaloniki, Thessaloniki, Greece

Iceland

Sigurjón Arason, University of Iceland, Reykjavík, Iceland

India

V.S. Hariharan, L.B.R. College of Engineering, Andhra Pradesh, India

Iran

Akbar Arabhosseini, University of Tehran, Tehran, Iran

Ireland

Da-Wen Sun, National University of Ireland, Dublin, Ireland

Israel

Isaac Shainberg, Institute of Soil, Water and Environmental Sciences, ARO, The Volcani Center, Bet Dagan, Israel Ruth Ben-Arie, Fruit Storage Research Laboratory, Kiryat Shmona, Israel

Italy

Daniele De Wrachien, State University of Milan, Milan, Italy Mauro Greppi, State University of Milan, Milan, Italy Stefano Mambretti, Politecnico di Milano, Milan, Italy

Japan

Hideo Ikeda, Osaka Prefecture University, Osaka, Japan Jun Abe, University of Tokyo, Tokyo, Japan Noboru Noguchi, Hokkaido University, Sapporo, Japan Ryoji Waka, Tottori University, Koyama, Tottori, Japan

Korea

In-Bok Lee, Seoul National University, Seoul, Korea Myongsoo Chung, Ehwa Women's University, Seoul, Korea Seonggu Hong, Hankyong National University, Kyonggi-Do, Korea

Netherlands

Eldert van Henten, Wageningen University, Wageningen, the Netherlands

Peter Groot Koerkamp, Wageningen University, Wageningen, the Netherlands

New Zealand

E. John Stevens, S&N International Ltd, The New Zealand & Australia Branch of IAMFE, Lyttelton, New Zealand

Norway

Petter Hieronymus Heyerdahl, Norwegian University of Life Sciences, Aas, Norway

Poland

Tadeusz Kuczynski, University of Zielona Gora, Zielona Gora, Poland

Tadeusz Pawlowski, Industrial Institute of Agricultural Engineering, Poznan, Poland

Russia

Vladislav Minin, North-West Research Institute of Agricultural Engineering and Electrification (SZNIIMESH), Russian Academy of Agricultural Science, Saint-Petersburg-Pushkin, Russia

Serbia

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

Spain

Antonio Brasa Ramos, University of Castilla-La Mancha, Albacete, Spain

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

Sweden

Bo Mattiasson, Department of Biotechnology, Lund University, Lund, Sweden

Jing Liu, Lund Institute of Technology, Lund University, Lund, Sweden

Thailand

Athapol Noomhorm, Asian Institute of Technology, Pathumthani, Thailand

Saichol Ketsa, Katsetsart University, Bangkok, Thailand

Vilas M. Salokhe, Asian Institute of Technology, Pathumthani, Thailand

United Kingdom

Guoping Lian, Unilever Research Colworth, Unilever U.K. Central Resources Limited, London, UK

Keith Weatherhead, Cranfield University, Cranfield, UK

EDITORIAL STAFF

 $Wang\ Yingkuan\ ,\ Paul\ Chen,\ Yang\ Song,\ Wang\ Liu,\ Zhao\ Tao,\ Li\ Yan,\ Zheng\ Jun,\ Du\ Hong\ (Web\ editor).$