



# IMPACT

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Association of Overseas  
Chinese  
Agricultural, Biological, and  
Food Engineers

海外华人农业，生物技术和食品工程师协会

## From AOC President's Desk



Naiqian Zhang

The Editors of *IMPACT* asked me to write a few words for the second issue of the AOC newsletter. I think it is appropriate to use this opportunity to give a brief summary on what we have done since the inauguration of AOC and what challenges we are facing at the present time.

Before giving the summary, perhaps we should once again review the objects of AOC, which were defined in our Constitution as “to promote information exchange and networking, to facilitate collaboration in research, to foster educational exchange, to enable technology transfer, and to enhance professional development.”

Since August, the AOC Executive Board has held four teleconferences. Eight task committees and four regional committees were formed after the first conference. All the Committees have become functional. After a meaningful discussion, AOC membership qualification has been redefined. Criteria and procedures for electing Honorary Members and Fellows have been discussed.

The first Honorary Membership has been conferred to Dr. Rameshwar Kanwar of Iowa State University. Through direct negotiation, a draft “Cooperative Agreement” between ASAE and AOC has been proposed to both Societies for consideration. Communications with leaders of CIGR and AAEE have led to co-sponsorship of AOC for the 2002 AAEE Conference in Shanghai, the 2004 CIGR Conference in Beijing, and a “China Exchange” session at the 2002 ASAE/CIGR International Conference in Chicago. AOC also is actively pursuing scholarly exchange programs with our counterparts in China.

In September, the first issue of *IMPACT*, the quarterly AOC newsletter, was published through diligent work of the Editors. The newsletter was very well received by members of AOC and other professional societies throughout the world. In October, a new AOC Web site was designed. In November, several AOC overseas representatives went to Beijing to attend an International Conference (ICAST-2001). They and AOC leaders residing in China met with CSAE

leaders to discuss plans for further strengthening the tie between AOC and CSAE. This meeting was an important event for AOC because it established a regional Headquarters for AOC in Beijing. The first action this regional Headquarters took was to print and distribute a brochure introducing AOC. The brochure also included the first issue of *IMPACT*. Over 300 copies of the brochures were distributed within a few days.

AOC has been actively recruiting members during the past five months. As a part of a membership drive, a document on membership benefits was developed. The regional committees have recruited members from Europe and Asia. The Student Activities Committee has published a letter to all Chinese graduate students in North America. Activities for promoting professional development of professionals and preprofessionals are being planned. AOC also has been planning fund-raising activities to provide travel funds and fellowships to its members.

Through these activities, AOC has rightfully gained more visibility among our peers. In the October issue of *Resource*, the ASAE magazine, an article on AOC was published. The latest issue of *Transactions of Chinese Society of Agricultural Engineering* included reports on AOC inauguration and AOC Executive Board. In addition, AAEE has requested information on AOC for their newsletter.

There is no doubt that AOC has accomplished many tasks since its inauguration. However, AOC is also facing many challenges. At the present time, the number of registered AOC members is low. More importantly, the number of members ACTIVELY involving in AOC activities is low. A professional association belongs to its members and the functions of such an association rely on the voluntary work of

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the members. Membership drive is probably the most urgent task for the next stage of AOC development.

A related issue is to design meaningful activities that benefit the association and its members. This includes organized efforts for academic exchange and research collaboration with China, meetings and Web site for

professional development for both professionals and preprofessionals, fund-raising for fellowship and awards, and development of an expertise database. I hope we can report progresses made in all these areas in the third issue of *IMPACT*.

## Asian Connection

By Jackie Elowsky, Resource Editor

*This article is reprinted, with permission, from Resource magazine, October 2001, published by the American Society of Agricultural Engineers.*

Texas A&M University Ph.D. student Lingjuan Wang smiles as she chats amid the throng of more than 100 people at the inaugural Association of Overseas Chinese Agricultural, Biological and Food Engineers (AOCABFE) meeting.

"I'm excited. I want to be a part of it," she says of the event where the Chinese language predominates among members and guests. The group's first business meeting made its debut in July during the ASAE Annual International Meeting in Sacramento, California.

Like most of the meeting attendees, Wang is originally from China and is an ASAE member. She has been studying in the United States for three years specializing in air quality. She hopes to do research in that field after graduation.

"I'd like to find some way to help with a project in the United States and China," she says.

Wang believes that although electronic communication via the Internet is a good long-distance option, personal contact is also important. The new AOCABFE could help people of both countries come together to "exchange some ideas," she says.

"In China, we have a big problem with air quality, and more technology is needed," Wang says. Chinese engineers can benefit by interacting with their U.S. counterparts to find new ways to improve research, education and management.

AOCABFE President and ASAE member Naiqian Zhang, professor in Kansas State University's department of biological and agricultural engineering, led the meeting and stresses a need to strengthen the academic exchange between the United States and China.

"... not only for the information exchange," he says, "but for our professional development."

In the past, Zhang says, Chinese ASAE members lacked a separate forum to express their views.

"This is historical to us," he says. "Our mission has no conflict with ASAE. We have a lot in common."

Zhang says the Chinese group's goals include helping ASAE expand its resources internationally.

"We believe we can publish our papers in Chinese mag-

azines. We are a hard working group of ASAE members."

Zhang backs up this statement with some statistics about Chinese ASAE members. He says that although ASAE members of Chinese origin make up only 2 percent of total membership, they produced 27 percent of the total authors contributing to *Transactions of the ASAE* in 2000. They contributed 18 percent of the total authors in *Applied Engineering in Agriculture* last year and nearly 17 percent of the papers presented at this year's annual meeting.

Besides the numerous Chinese members who live in the United States, about 20 visitors from mainland China attended the meeting.

"I came to meet people in this field," says Zhihuai Mao, professor and dean of China Agricultural University's colleges of mechanical and agricultural engineering in Beijing. "I need to know what's going on. To gain new knowledge about agricultural engineering."

Mao's reaction to his first ASAE meeting?

"It's great. I want to visit the United States frequently if possible."

Establishing relationships is one of Mao's aims. With a growing student population in his agricultural engineering department --he recruited 16 new students last year -- he seeks to improve programs. Agricultural engineering as a profession is still developing in China, he says, and more students will be needed to become future professionals to develop technology in this field.



Front row (r to l) Bill Stout, Texas A&M University, ASAE Executive Vice President Melissa Moore and 2000-2001 President Harmon Towne show their support at the AOCABFE meeting.

ASAE member El Houssine Bartali, professor of agricultural engineering at Rabat-Instituts in Morocco, North Africa, and president of the International Commission of Agricultural Engineering (CIGR), applauded the new Chinese group.

“As president of CIGR, I'm happy to be here to give support to such an organization,” he says. “Their objective is to support the profession.”

The AOCABFE members approved a draft constitution and plan to finalize details over the next year. They introduced their board members then viewed a video

presentation -- in Chinese with English translation -- that traced their country's agricultural engineering roots from the 1940s to today.

“I feel proud,” Zhang says of the group's accomplishments so far.

Although a vision statement and goals are still being developed, he believes the seeds have been sown to grow healthy international relationships.

## Membership Drive

### A Letter from Membership Development Committee Chair



Ruihong Zhang

Dear AOC Members and Friends:

The AOC was established this past July and is now a fully functional professional society. It was created to promote and serve the overseas Chinese scholars and engineers with a clearly defined mission, which is to promote information exchange and

networking, facilitate collaboration in research, foster educational exchange, enable technology transfer, and enhance professional development.

Any professional of Chinese origin who is residing anywhere in the world and has had overseas scholarly exchange experience is eligible for becoming a member of AOC. If you are eligible and have not yet joined AOC, I urge you to send your membership application in. The membership application form is attached to this newsletter or can be downloaded from the AOC website: <http://128.227.103.135/aocweb/aoc2>. By joining AOC, you will enjoy many benefits pertaining to both your personal growth and professional development. The following is a sample of benefits that AOC offers its members:

- **Networking – Build professional alliance.** AOC provides a platform for its members to exchange ideas and experiences and build professional alliance. AOC hosts members-only online community and sponsors regional, national, and international meetings to encourage networking and scholarly exchange among AOC members and between AOC members and related Chinese organizations.
- **Professional Development – Develop and enhance**

**professional career.** AOC sponsors training, mentoring, and professional promotion programs to help AOC members build and develop their professional careers. AOC provides scholarships and fellowships to support its members to participate in scholarly and educational exchange activities.

- **Conference and Meetings - Participate in professional meetings at discounted rates.** AOC sponsors and co-sponsors technical conferences and meetings and organizes both professional and social activities.
- **Career and Employment – Be informed of new career opportunities.** AOC posts announcement of job listings and "Positions Wanted" on the Internet, and organizes personnel services.

Please check out AOC website for more information about the AOC organization and AOC sponsored activities and programs. If you are already a member of AOC, I want to welcome you and thank you for your support. I would like to encourage you to become actively involved in various activities and programs organized and sponsored by AOC. Please feel free to contact me or other AOC Executive Board members if you have any questions about AOC and membership application process. Thank you for your attention and support.

Sincerely,

Ruihong Zhang, Ph.D.  
Chair of Membership Development Committee  
[rhzhang@ucdavis.edu](mailto:rhzhang@ucdavis.edu)



# Kanwar Awarded the First AOC Honorary Membership

By Hongwei Xin



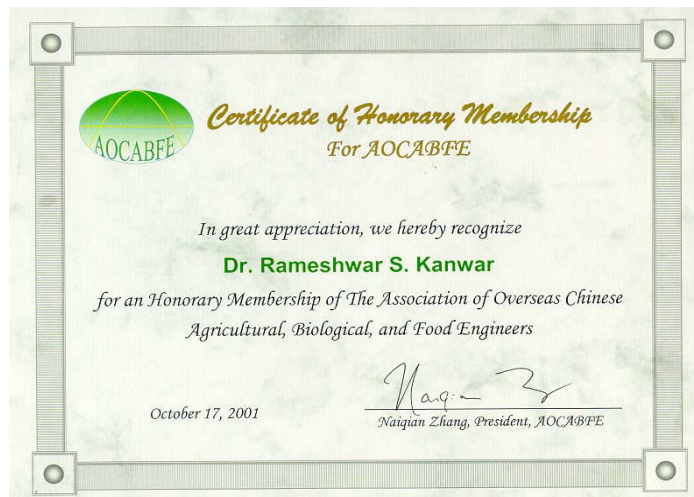
Ramesh Kanwar

The first Honorary Membership of AOCABFE has been awarded to Dr. Ramesh Kanwar, professor and chair of the Agricultural and Biosystems Engineering (ABE) Department, Iowa State University. This award honors the immense achievements and dedication demonstrated by Dr. Kanwar toward fostering the agricultural engineering profession and economic development as related to production agriculture around the world, particularly in developing countries. It further represents AOC's vision to enhance academic exchange among its members through absorbing and working closely with professionals of non-Chinese origin but with strong interests and commitments to perform such exchange.

A faculty member of ABE department since 1981, Dr. Kanwar has served the university and the department in the capacities of assistant, associate and full professor; Director of the ABE Graduate Education Program; International Agriculture Professor; Assistant Director of the Iowa Agriculture and Home Economics Experiment Station; Director of the Iowa State Water Resources Research Institute; and currently Chair of the ABE department. Also during this period, Dr. Kanwar has conducted collaborative research, demonstration projects, conference keynote addresses, and technical assistance programs in water quality issues relative to agriculture production in more than 30 countries, sponsored by World Bank, UNDP, FAO, USAID, NATO, and respective local or national governments. An internationally renowned expert in water quality, Dr. Kanwar has received numerous

prestigious national and international awards, such as Fellow of the Indian National Academy of Agricultural Sciences; Distinguished Service Award by the Asian Association for Agricultural Engineering (AAAE); Honorary Professor of the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan; and Honorary Professor of China Agricultural University, just to name a few. Dr. Kanwar is a prolific writer. He is an author/co-author of 126 refereed journal articles and more than 300 other technical publications. He is a PI/Co-PI of about \$10 million in funded competitive contracts and grants. He has advised 24 M.S. and 24 Ph.D. graduate students from 12 different countries, and served as a committee member for another 68 graduate students.

Welcome on board, Ramesh! We look forward to your visionary and exemplary contributions to the success of AOC's endeavors!



## A Letter to Prospective Members from the Student Activity Committee



Ning Wang

Dear Prospective Members:

On behalf of the Student Activity Committee of the Association of Overseas Chinese Agricultural, Biological and Food Engineers (AOC), we are writing to express our thanks to all of you for your time with us at the AOC Inaugural Ceremony in Sacramento, CA, on July 31, 2000. From that time on, AOC has been growing rapidly and various committees of AOC have accomplished many tasks, as you have read from the first issue of *IMPACT*, the quarterly

newsletter of AOC.

AOC is a professional organization of more than a hundred members from all over the world. Its major objective is "to promote information exchange and networking among agricultural, biological, and food engineers of Chinese origin worldwide." As you all know, overseas Chinese students have probably formed the largest group among the international students in almost every major university in the US and Canada. However, we are not well connected. Sometimes, our old friends, old classmates may have been studying and



Xinhua Jia

living in our area, but we just don't know it. AOC intends to establish links and foster communication among Chinese scholars and students in the fields of agricultural, biological, and food engineering. We, the student members of AOC, are the future of this Association. We should do something together for the Association, for ourselves, and for our country.

As recommended by the AOC Executive Board, the Student Activity Committee (SAC) was organized and held its first teleconference on Sept. 21, 2001. Six students from three universities attended the conference. Major issues discussed were objectives, activities, communication, and career development. Most of all, we hope to build a community for our student members to get acquainted, to communicate, and to share happiness and hardship with each other. We are also willing to help our student members walk through their university lives successfully.

SAC has been interconnected with other committees within AOC. One of the missions of the Professional Development and Awards Committee of AOC is to establish annual awards to honor student members. They are also planning to hold workshops periodically and to share their experiences in succeeding professional career through Internet. Information provided by these professionals, such as report and resume writing, interview preparation, and job searching, will be particularly helpful to those Chinese students, who will step into their career life in the near future.

Where do we start? During the first committee meeting, we ambitiously set our goals for the coming year. We will provide information that is of concerns to the student members via emails, newsletters, and Web pages, in order to promote and enhance their academic and research achievements, and to build a bridge between students, faculty, and potential employers. We also plan to organize a student-member gathering during the 2002 ASAE annual meeting with the sponsorship of interested companies.

Obviously, these tasks will not be easy to accomplish. They need a lot of efforts. They need the support of all of you. AOC is a community of all overseas Chinese bio- and ag-engineers. Students are the treasures and future of the

Association. From the students' point of view, AOC is our own community, and it definitely needs your valuable help and strong support. Now the Student Activity Committee has a limited number of volunteers. We sincerely invite those who are willing to voluntarily serve the committee at its developing stage to join the committee. We are especially welcoming students from the universities with large numbers of Chinese students to offer your help. As many activities and events will only take place at your local communities, your involvement will be of great importance to us.

If you have any questions or concerns about this request, please feel free to contact us. Here is the contact information of the current SAC committee members:

Ning Wang (Co-chair), Dept. of Bio. & Ag. Engr. Kansas State University, [wangn@ksu.edu](mailto:wangn@ksu.edu), Tel: 785-532-2914.

Xinhua Jia (Co-chair), Dept. of Agri. & Biosystems Engr., the University of Arizona, Tucson, AZ, 85721, Email: [jia@u.arizona.edu](mailto:jia@u.arizona.edu), Tel: 520-626-8119.

Linsong Guo, Dept. of Ag. Engr., UIUC, Email: [guo1@age.uiuc.edu](mailto:guo1@age.uiuc.edu), Tel: 217-265-5140.

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Jiantao Wei, Dept. of Bio. & Ag. Engr. Kansas State University, [wei@ksu.edu](mailto:wei@ksu.edu), Tel: 785-532-2914.

Best regards,

AOC Student Activity Committee

## A Report on AOC Activities During ICAST Meeting in Beijing

By Roger Ruan and Zhongli Pan



Roger Ruan

Four AOC members from the US attended the International Conference on Agricultural Science and Technology (ICAST), Nov. 7-9, 2001, in Beijing. They are Jiayang Cheng, Shufeng Han, Zhongli Pan, and Roger Ruan.

Prof. Senwen Zhang and Roger

Ruan met with Profs. Zhihuan Mao, Qingshui Liu (Library and Information Director, China Agricultural University (CAU), and China Society of Ag. Engr.), Minzan Li, Baoji Wang, Lujia Han, and Dong Li at a lunch meeting on Nov. 6th at CAU. We introduced briefly about the AOC and left the inauguration CDs with



Zhongli Pan  
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Prof. Liu. We decided to print the AOC newsletters for the ICAST meeting and have a meeting of the people from various related organizations in China during the ICAST meeting.

Profs. Senwen Zhang, Zhongli Pan, Shufeng Han, and Roger Ruan met with Profs. Xiwen Luo (VP of South China Ag. U.), Qingshui Liu, Qing Yang, and Yuansheng Zhang (Secretary General, China Society of Ag. Engr.), etc. and briefly with Profs. Maohua Wang and Minzan Li during the evening of Nov. 7th at the ICASE meeting hotel. Prof. Senwen Zhang again introduced the AOC. Prof. Luo led the discussion and we mainly focused on the potential joint meeting with the annual meeting of China Society of Ag. Engr. in Yangling, Shaanxi, sometime next summer. One of the main topics of the Yangling meeting was on the educational reform and trend of research and education in agricultural engineering. Professor Xiwen Luo would like to see some AOC members attend the meeting and present the US education, research, and extension system. In order to accommodate the schedules of AOC members, he is

considering having the meeting in early or mid-June, although final date of the meeting has not been set.

We also discussed the AOC China regional membership requirements. Zhongli Pan suggested that we extend the eligibility to all people who had formal overseas academic training and exchange experience, NOT necessarily limited to those having at least six months to a year.

A number of other people also discussed various potential joint exchange activities such as information and literature search service and China exchange summer camp.

Over 300 copies of the AOC bulletins including the *IMPACT* and information prepared by Baoji Wang and Ruihong Zhang were distributed at the ICAST meeting. The AOC CDs were distributed to several universities. The rest of the CDs were made available in the library of Chinese Agricultural University or for further distribution to interested parties.

The details and minutes of the two meetings are under preparation by Prof. Qingshui Liu, and will be made available later.

## 中国农业工程学会 (CSAE) 与海外农工学会 (AOCABFE) 第一次联席会议纪要

2001年北京国际农业科技大会期间，在汪懋华院士的亲自指导下，专程回国参加会议的三位美国AOC执委会代表阮榕生、韩树风、潘忠礼与中国农业工程学会副理事长罗锡文（华南农业大学副校长）、秘书长张元生、CSAE国际交流工作委员会副主任、AOC执委和中国大陆地区委员会主任张森文教授、AOC亚太地区委员会主任中国农大李民赞副教授、西北农林科技大学杨青教授、中国农大教授水利与水土保持研究所教授雷廷武；浙江大学农业工程与食品科学学院常务副院长、CSAE国际交流委员会副主任应义彬教授、中国农大东区图书馆馆长、CSAE情报信息专业委员会主任刘清水教授等出席了联席会议，会前汪懋华院士与大家见面并作了重要讲话。会议由华南农业大学副校长、中国农工学会副理事长罗锡文教授主持。

一、张森文教授介绍了AOC成立大会盛况和成立后的活动以及会前与阮榕生，潘忠礼等教授对AOC与祖国大陆相互联系开展活动的指导方针、活动内容、联络方法等方面的几次讨论，提出以下意见：

1. 正式成立AOC中国大陆委员会，与亚太地区委员会共同开展工作，委员会先由如下人员组成：张森文（大陆委员会主任），李民赞（亚太地区委员会主任），刘清水、李保明、应义彬、雷廷武、杨青（或由她指定西北农林科技大学的另一位代表），委员会秘书王宝济，委员会将根据地域和专业委员会的代表性，适当增加委员会人数并在北京和广州建立两个联络中心。

2. AOC与CSAE，祖国大陆农业工程院校研究所的合作联系将从以下几个方面进行：

- 人员互访交流：AOC将协助祖国大陆专业人员到北美和其它国家的专业访问、学习和进行研究，AOC在中国的二个委员会和中国农工学会将协助AOC海外学者回国访问、短期工作、讲学的安排。
- 信息交流：AOC的Newsletter将在北美和祖国大陆采用中英文混编的方式发布，着重介绍海外学者的工作成就和学会活动，同时也应介绍中国（包括台湾等地区）学者的成就和活动，充分利用Internet、网站和E-mail系统作好经常性交流，AOC海外会员和大陆会员将发挥各自的优势，促进共同发展。
- 科研合作：共同申报国家科技部、农业部的重大研究项目，加速国外先进技术在中国的引进、消化、吸收，并在国内取得国际领先成果，要实现产业化而努力。CSAE和中国有关单位要充分利用AOC海外学者的学术、信息优势，促进政府和企业部门进行项目咨询和评估。
- 发展AOC在祖国大陆的会员，这些会员须具有曾经在国外学习、工作、讲学的经历。这个工作现在已经开始。



- 扩大宣传：应使国内相关政府部门和农业、生物、食品工业等各方面的企业了解AOC，以便更好地开辟AOC海外成员以各种方式为祖国服务的渠道，促进海外智力技术的引进，为我国对外开放、科学和经济发展作更多的切实的工作。
- CSAE和AOC共同举办国际会议，通过多种方式加深了解与合作。
- 中国《农业工程学报》欢迎AOC海外学者投稿，介绍国外先进研究成果。

二、阮榕生、潘忠礼、韩树凤教授就AOC成立后的工作做了介绍，对合作方式和内容作了充分的补充，参会的全体人员合作前景的深度和广度充满信心。根据汪懋华院士、罗锡文教授和杨青教授的提议，会议认真讨论了关于AOC参与2002年6月中下旬中国农业工程学会关于农业工程发展战略高层研讨，和中国农工学会教育委员会、校长联谊会、院长联谊会关于农业工程学科建设和教育发展的研讨会的相关问题。

1. 罗锡文教授介绍了此次会议的意义、任务、方针和筹备过程，并由会议的东道主西北农林科技大学杨青教授介绍了总体安排设想，热烈欢迎AOC海外会员参加会议。阮教授等人作了热烈的响应，将尽量组织更多海外学者参与。他们将结合在国内外受教育的经历和在国外长期从事教学、科研工作的经历，提供他们的理念和经验，认为这次会议的交流 and 联谊活动，将对AOC和CSAE合作发生深刻的影响。

2. 为方便海外学者的参与，时间暂定于6月下旬，具体时间由东道主与AOC执委会讨论后再确定。

3. 委托杨青和刘清水教授对此次会议的主题、时间、地点、分组安排、游览和联谊活动起草第一号文件，供进一步的讨论，尽快形成正式文件。会议名称暂定为“农业工程发展战略和农业工程教育研讨会”。

4. 会议将进行经费的筹集，尽快开展准备工作。

5. AOC将作为此次会议的发起单位之一，协助好会议的组织工作。

三、中国农业工程学会秘书长张元生代表学会秘书处向AOC海外会员的到来表示热烈的欢迎，并借此机会向AOC全体会员表示问候和敬意。CSAE希望海内外学者积极参与支持农业工程学会的活动和工作，学会秘书处将提供全面的服务，将在人员信息交流，特别是农业部、科技部研究项目、技术引进等方面，利用学会的优势，为海外学者提供更多的服务。CSAE将与AOC紧密合作，配合方方面面作好工作。

2001年11月7日 北京五洲大酒店

## **Call for Presentations for the 2002 CSAE-AOC Meeting**

This is the first call for attendance and presentations for the 2002 CSAE-AOC Joint Meeting in Yangling, Shaanxi, China. We need to have the plan fixed by the end of January. The meeting will focus on agricultural engineering education reform and strategy for research in agricultural engineering in China. The meeting will be held in Northwest University of Agricultural and Forestry Sciences and Technology in Yangling, about a hundred kilometers west of Xi'an. The cost will include RMB 400 registration fee (meals included) and 3-4 days lodging (\$30-\$50 a day). The meeting may furnish post-meeting tours. What we need to know from you are:

1. What is the best time for you? early, middle, or late June?

2. Are you planning on attending?

3. What are the topics you are interested in giving a presentation on? (We will rearrange the topics after receiving all the responses so that all topics will be covered properly. Of course, we will rearrange the topics based on your inputs).

4. What are the places you would like to visit during the post-meeting tour?

5. Do you have any suggestions and requests?

Please send your responses to Naiqian Zhang, Hongwei Xin (the Meetings and Conferences Committee), or Jiannong Xin (the Secretary) ASAP.

# Juming Tang's Multi-million Dollar Research Project

By Lin Wang

*Dr. Juming Tang received his B.S. in Mechanical Engineering from Central-South University of Technology, Changsha, Hunan, China, his M.S. and Ph.D. in Food and Postharvest Engineering from University of Guelph, Guelph, Ontario, and University of Saskatchewan, Saskatoon, Saskatchewan, Canada, respectively. He has served as a chair and an associate editor of Transactions of ASAE for the Food & Process Engineering Institute of ASAE. An invited speaker of many conferences around the world, Dr. Tang has published 60 research papers in refereed journals and conference proceedings. He is a PI for a \$3.4 million project, and a second co-PI for a \$1 million project. He has received several awards. Currently, he is an associate professor at Washington State University and serves as the director of two research consortia.*

Dr. Juming Tang, an Associate Professor of Biological Systems Engineering, and his associates at Washington State University have developed a processing technology that uses radio frequency or microwave energy to shorten food processing time, allowing food to be heated evenly throughout without ruining its quality. By using this technology, army personnel can have a better taste, yet nutrient rich meal at the field.

The research team has conducted experiments in Dr. Tang's laboratory equipped with a range of pilot-scale

systems that have the capacity to monitor on-going processes, as well as computational tools. The process has been so developed that it can be easily automated and may improve energy efficiency.

Dr. Tang has received more than \$350,000 in grants from the U.S. Army to further his research in the past three years. Last fall, the Department of Defense and US Army approved a Dual Use Science and Technology proposal for \$460,000 for a two-year project. Several US food processing, packaging and equipment companies also have committed resources to support the research and development activities. A consortium with those companies hopes to translate the pilot-scale results into commercial processes within the next four to five years.

Two Ph.D. students have received national awards for their researches related to this project: Mr. Dongsheng Guan has received the Student Achievement Award from R&D Associates, INC., for his research on microwave sterilization technology; and Mr. Yifen Wang has received the 2001 Graduate Student Manuscript Award from the Institute of Thermal Processing Specialists, for his research paper on a new processing technology based on radio frequency energy.

*This article is adapted from News@WSU.*



*From left to right, Dongsheng Guan, Ph.D. student, Frank Liu, Project Engineer, Juming Tang, and Frank Younce, Pilot Plant Manager, discussing the design of next generation microwave sterilization system, in front of WSU pilot-scale unit.*



*Juming Tang and WSU Food Processing Pilot Plant Manager Frank Younce, inserting fiber-optic sensors in food trays in front of a novel pilot-scale Radio Frequency Sterilization System developed in his laboratory.*











用珍貴的地下水來換取今年的糧食和加劇來年的水荒。在如此的生態狀況下，西部開發比東部要復雜和困難的多，需要西部地區的領導具有對環境的深刻認知、對發展的長遠規劃和對事業的獻身精神，切忌急功近利的短期行爲和追求哄動效應的群眾運動。西部開發要量水而行。

十、本文旨在就中國的農業產業化和西部大開發提出一些老生常談但必須認真對待的問題，以期引起國內外專家和決策層的關注，而非提供一份詳細的分析或可行的方案。盡管如此，我還是願意再次提出以下建議，供大家參考：

- § 中國加入世界貿易組織對中國農業是一個沖擊，也是一個機遇。面對入世，中國必須加快農業產業化的步伐，盡快使農業生產規模化，推動農村勞動力轉移。
- § 從體制上提高農業部的職權範圍，統管有關中國農業與農村發展各個方面的事務，以適應中國發展現代大農業的需要。
- § 國家通過風險基金或配套資金引導社會資金、技術和人才流向涉農企業和西部地區。除了基礎設施投資和扶貧救濟款項，一般投入應加快從政府渠道轉向市場渠道。
- § 仿照目前退耕還林還草的措施，在全國所有干旱地區實行以糧代賑，逢旱休耕。政府應立即建立全面、準確、動態和公開的水資源資料庫，立法禁止超過最低保障水位和自然補給量的地下水開采。
- § 加大面向農業（尤其是產后科技）和西部發展的科技開發力度。中國目前的農業科技投入約為農業生產總值的百分之零點二。建議在二零零五年達到百分之二，並拿出其中的一半用于支持西部開發。
- § 採取各種有效措施扭轉中西部人才“東南飛”的流向。加大中西部地區引進和培養各種人才的力量。在西部地區率先改革農業科技推廣系統。在西部的開發資金中拿出穩定的份額用于面向管理人員的培訓和農民科技職業教育。
- § 國家國家在資金投入上可以區分西部和中部，但在政策方面則不應把中部拉下。有了適應市場經濟發展的政策，中部地區盡可在兩頭的帶動下得以發展，否則會造成新的失衡。
- § 成立包括海內外專家在內的西部開發和農業產業化促進委員會。定期出版有關的專家論壇。

## Executive Board Meetings Convened in September-November

By Jiannong Xin



Jiannong Xin

AOC Board members have been working diligently since the Association was established last July. The Board held monthly meetings in last three months and has formulated the following rationalizations and decisions:

- The Board approved the “Cooperative Agreement between American Society of Agricultural Engineers (ASAE) and AOCABFE.” The Agreement is appending for approval by ASAE Board, which has scheduled for a vote in December 2001. In addition, AOC has established excellent cooperation with Chinese Society of Agricultural Engineering (CSAE), International Commission of Agricultural Engineering (CIGR), and Asian Association for Agricultural Engineering (AAAE).
- The Board approved AOC membership qualifications. The Membership Development Committee has launched a membership drive. Membership is the crux of everything we do as an Association. The Board continues to search for ways to expand AOC membership. One of the Board’s primary focuses has been to introduce the Association and its services to current oversea students—our future—upon their entry into AOC instead of waiting until they graduate. The Student Activity Committee sent out an open letter to oversea students and encouraged them to join AOC.
- The Board has revised AOC Bylaws to create Honorary and Fellow membership. Honorary membership is designed for those distinguished individuals who want to join AOC, but they don’t meet the membership qualifications. AOC Fellow is an honor membership for those distinguished AOC members who have made great contributions to the Association and/or in his/her profession.
- The Board has approved special annual dues for AOC members residing in China. An accountant appointed by the China Regional Director will manage the membership dues. The dues will be used for domestic activities and travel in China.
- AOC Board and Meetings and Conferences



Committee are making a collective effort to prepare the 2002 ASAE/CIGR joint session on "China Exchange" in Chicago. AOC is the main organizer of this session.

- AOC has received an Employer's Identification Number (EIN). The Association has opened a bank account for financial transaction. AOC also applied for tax-exempt status in the US.

- The newly designed AOC website will be transferred to ASAE web server after the Agreement between AOC and ASAE is approved. AOC continues to reach out members and potential members through Internet and newsletter *IMPACT*. The Board appreciates the good work of *IMPACT* editors and encourages them to keep up the good work.

The Association has an exciting future. Through AOC we can work together to realize our common goals.

## Inter-Association Connection

*The following are two e-mail messages to AOC President Naiqian Zhang from CIGR President El Houssine Bartali and AAE President elect Vilas Salokhe.*

Dear Dr. Zhang

Thank you for your letter and for your efforts to promote the relations of AOC with CIGR. I am glad to learn that you have been appointed as the AOC Liaison with CIGR.

I am convinced that CIGR and AOC will make a good contribution to the Chicago congress through the co-organisation of the session on "China Exchange". It is good news that AOC will issue its first newsletter soon and I look forward to receiving a copy. Regarding your request related to the various CIGR meetings which will be held by CIGR during the next 3-4 years, the titles, dates, and places of these meetings. You are welcome to consult the CIGR Newsletter (quarterly) which is posted on the CIGR web site [www://cigr.org](http://www://cigr.org) and also available in printed form. The October issue is NL no. 56 can be found on the web. Additional information on this subject can be provided by CIGR General Secretariat in Bonn.

Yes, CIGR will hold a major conference on agricultural engineering in 2004 in Beijing and Dr. Maohua Wang is one of the organizers of this Conference. CIGR Incoming President Pr. Axel Munack will be visiting China in November to attend the ICAST 2001 Conference and he will have a meeting with the organizers of the 2004 Conference. I arranged with him that he will examine during his visit the proposal of AOC to cosponsor some sessions of the CIGR meeting in Beijing. I will contact you later on about this subject.

CIGR will be pleased to pursue its collaboration with AOC in the future. We will be happy if AOC can join CIGR as a corporate member. For the membership procedure, I invite

you to contact our General Secretary Pr. Peter Schulze Lammers in Bonn at: [cigr@uni-bonn.de](mailto:cigr@uni-bonn.de).

Looking forward to a fruitful collaboration with you.

Best regards

Pr. El Houssine Bartali  
President of CIGR 2001-2002

Copy to:  
Members of CIGR Presidium  
Pr. Kitani, Honoray President of CIGR

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Dear Prof. Zhang:

It was nice meeting you at the ASAE meeting. I was in China last week to attend the conference arranged by Prof. Wang. It was a well organized conference. There I saw a special publication about the formation of association of overseas Chinese. I will appreciate if you send a copy of that publication by e-mail attached file. I will publish a news item about it, in shorter version, in AAE newsletter.

By the way, during recent AAE board meeting in Shanghai, my nomination as the President of AAE for the years 2002-2003 was endorsed. I will take over the presidency from coming January. This will give us a chance to work more closely as our two associations can be complementary. Please let me know if you would like to me do anything for your association.

With best regard,

Vilas Salokhe  
President elect of AAE

## Upcoming Conferences

Agricultural Equipment Technology Conference, February 19-22, 2002, Kansas City, MO (ASAE).

World Congress of Computers in Agriculture and Natural Resources, March 13-15, 2002, Iguassu, Brazil.

Conference on “Energy Efficiency and Agricultural Engineering 2002”, April 4-6, 2002, University of Rousse, Bulgaria (CIGR).

Second International Conference on “New Trends in Water and Environmental Engineering for Safety and Life: Eco-compatible Solutions for Aquatic Environments”, June 24-28, 2002, Capri, Italy.

AgEng 2002 - Internations Conference on Agricultural Engineering, June 30-July 4, 2002, Budapest, Hungary (CIGR).

Sixth International Conference on Precision Agriculture and Other Precision Resources Management, July 14-17, 2002, Minneapolis, Minnesota (ASA/CSSA/SSSA).

The Second World Engineering Congress 2002 Engineering Innovation and Sustainability: Global Challenges and Issues, July 22-25, 2002, Kuching, Sarawak, Malaysia.

Automation Technology for Off-road Equipment, July 26-27, 2002, Chicago, Illinois (ASAE).

2002 ASAE/CIGR Annual International Meeting, July 28-31, 2002, Chicago, Illinois.

Eighth International Congress on “Mechanization and Energy in Agriculture”, October 15-17, 2002, Kusadasi, Turkey (CIGR).

Bi-Annual International Agricultural Engineering

Conference, December 5-7, 2002, Shanghai, China (AAAE/AOC).

Dairy Housing, January 29-31, 2003, Fort Worth, Texas (ASAE).

Agricultural Equipment Technology Conference, February 10-12, 2003, Louisville, Kentucky (ASAE).

International Conference on Crop Harvesting & Processing, February 10-12, 2003, Louisville, Kentucky (ASAE).

2003 ASAE Annual International Meeting, July 20-24, 2003, Las Vegas, Nevada.

Ninth (9th) International Symposium on Animal, Agricultural and Food, Processing Wastes (ISAAFPW), October 11-14, 2003, Raleigh, NC (ASAE).

Second International Swine housing Conference, October 11-13, 2003, Raleigh, NC (ASAE).

Third International Conference on Air Pollution from Agricultural Operations, October 11-13, 2003, Raleigh, NC (ASAE).

2004 ASAE/CASE Annual International Meeting, Date to be determined, Ottawa, Canada.

Tenth National Symposium on Individual and Small Community Sewage Systems, April 14-17, 2004, Sacramento, California (ASAE).

Drainage Symposium, April 14-17, 2004, Sacramento, California (ASAE).

*(Compiled by Lin Wang)*

“抚今追昔,值得欣慰的是我们这批**20世纪40**年代留学归国的学子,在不同的工作岗位上虽然境遇各异,但为改变中国传统农业的落后状况和中国农业工程科教的发展都做出了各自的贡献,尽了自己绵薄之力。”

曾德超

## An E-Mail Message From Professor Ding Lai Tao



Ding Lai Tao

*Professor Ding Lai Tao is former President of CSAE and CSAM. As you all know, Professor Tao is one of the pioneer agricultural engineers in China, the "first generation of AOC".*

At 06:05 AM 10/3/01 -0400,  
DLTAO@aol.com wrote:

Dear Dr. Chenghai Yang and Ms. Lin Wang, Editors of *IMPACT*:

Congratulations to your accomplishment in editing and issuing AOC newsletter *IMPACT*! It is really very well organized and beautifully edited to fulfill the needs of all AOC members, especially those who didn't get to attend the Association's meeting in Sacramento, last July.

Thank you for your effort and best wishes for its continuation.

Ding Lai Tao

## Editor's Note

*The second issue of IMPACT has come out with the arrival of year 2002. This issue continues the goal of the AOC quarterly newsletter, that is, to inform our members and perspective members the progresses and news about the association and its members. Since the first issue was put out, in addition to the e-mail distribution of the newsletter to each of you, over 350 hard copies of the first issue have been distributed to the invited guests attending the inaugural ceremony, colleagues in China, and other professional societies throughout the world. We are very glad that the newsletter was well received by our members and nonmembers alike. Now the second issue is out and we hope that it provides you with useful information. We wish to thank each of you who have contributed articles and provided materials for the second issue. Without your cooperation and contributions, it would have not been possible for us to accomplish this important task. The continuation and success of the newsletter depend on a concerted effort from every one of us. Your participation, cooperation, and contribution are extremely important. The third issue of the newsletter will be published before the end of March 2002. We look forward to receiving your suggestions and contributions for the third issue. Please send any comments and information to me at [cyang@weslaco.ars.usda.gov](mailto:cyang@weslaco.ars.usda.gov) or to Ms. Lin Wang at [lwang@ksu.edu](mailto:lwang@ksu.edu). Your suggestions and contributions are greatly appreciated.*

## Happy New Year!



AOCABFE  
Membership Application

- Regular Membership  
 Student Membership

Return your application to: Ms. Ning Wang  
Bio. & Ag. Engineering  
Kansas State University  
Seaton Hall, Room 147  
Manhattan, Kansas 66506

I submit the following for <input type="checkbox"/> Membership <input type="checkbox"/> Reinstatement	PREFIX <input type="checkbox"/> Mr. <input type="checkbox"/> Ms. <input type="checkbox"/> Mrs. <input type="checkbox"/> Miss <input type="checkbox"/> Dr. <input type="checkbox"/> Prof. <input type="checkbox"/> Other: _____																														
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