



IMPACT

A Quarterly Newsletter of AOC
Volume 2, Issue 2, December 2002

<http://www.asae.org/aoc/>
<http://aoc.cau.edu.cn>, <http://www.aocscau.com/>

Editor: Chenghai Yang
Associate Editor: Lin Wang

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

Greetings from AOC President



Naiqian Zhang

On behalf of the Executive Board of AOC, I would like to congratulate you on the successes you have achieved in 2002 and wish you a more successful and prosperous year in 2003!

AOC has been continuously growing since its first anniversary. The current count of registered AOC members is 135, a 33% increase since the Chicago meeting.

This includes 44 non-student members outside China, 42 student members outside China, 47 members residing in China, and two honorary members. To honor the agreement between AOC and ASAE, which was signed into effect last July, we are making a great effort to introduce a large number of Chinese agricultural engineers into ASAE membership with a multiple-year commitment. We sincerely hope a successful outcome from this effort.

During the last quarter of 2002, AOC has focused its efforts on the following areas:

1. The newly established Publication Committee of AOC has communicated extensively with Chinese Society of Agricultural Engineering (CSAE) on launching a jointly sponsored international journal. A draft agreement has been approved in principle. Preparatory work is well under way.
2. A proposal on AOC student paper competition, which was jointly proposed by the Student Activity Committee and the Professional Development and Award Committee, has been approved by the Executive Board. The competition will start at the 2003 ASAE Annual Meeting in Las Vegas. A call for papers can be found in this issue of Impact.
3. AOC sent a delegation of seven to Wuxi, China, in November to

attend and address the International Agricultural Engineering Conference (IAEC-2002) sponsored by the Asian Association for Agricultural Engineering (AAAE). A special AOC meeting was held during the conference to discuss AOC's role in promoting international exchange in agricultural engineering research and education. This conference also provided an opportunity for direct communication between AOC and Chinese Society of Agricultural Machinery (CSAM).

4. AOC sent three delegates to Hangzhou, China, in November to attend the Workshop on Agricultural and Biosystems Engineering Development Strategy. Participants of this workshop were the leaders of major agricultural engineering institutions in China. This workshop was considered a continuation of the discussion on strategic issues that was started at the Yangling Meeting in June. A suggestion letter developed by 12 AOC delegates attending the Yangling Meeting was discussed at the workshop in details.
5. Preparations for the second "China Exchange" session at the 2003 ASAE Annual Meeting in Las Vegas are under way. Several "heavy-weight" speakers representing the education and government sectors in both China and the U.S. have accepted invitations. The themes and the format of the meeting have been developed.
6. AOC is acting as the major co-sponsoring organization for the second East Asia Bioproduction Forum, which will be held in July, 2003, in Las Vegas. Dr. Ruihong Zhang is severing as the chair of the organizing committee. AOC is working closely with CSAE,

Inside This Issue

<i>CAU president meets AOC president...</i>	<i>2</i>
<i>Student paper competition scheduled...</i>	<i>3</i>
<i>Honorary member-Dr. Norman Scott...</i>	<i>3</i>
<i>Hangzhou meeting summary.....</i>	<i>4</i>
<i>IAEC-2002 meeting summary.....</i>	<i>6</i>
<i>Membership development update</i>	<i>7</i>
<i>East Asia Forum planned.....</i>	<i>8</i>
<i>Joint journal update.....</i>	<i>8</i>
<i>Feature story about Dr. Roger Ruan...</i>	<i>9</i>
<i>APCAEM moved to Beijing.....</i>	<i>11</i>
<i>Board meeting summary.....</i>	<i>11</i>

CSAM, Chinese Institute of Agricultural Machinery (CIAM) in Taiwan, and other organizations in North America and Asia on detailed preparations for the Forum.

7. The AOC Membership Committee has developed a membership database and is ready to launch the database on-line. This database is supported by a search engine that allows convenient searching and referencing.
8. AOC has accepted an invitation to become a co-

sponsor of the 2004 CIGR World Congress, which will be held in Beijing.

AOC has been conducting multiple tasks with very limited resources. These tasks are conducted by many enthusiastic volunteers. As we devote our efforts to these meaningful tasks, we are training ourselves on leadership, teamwork, and professionalism. Obviously, AOC can continuously grow strong because AOC is a right thing to do.

Once again, I sincerely wish all of you a happy new year!

中国农业大学校长陈章良会见海外华人农工协会主席张乃迁

([中国农业大学新闻网](http://news.cau.edu.cn) 侯玉峰 2002年11月27日 报道)

This article, entitled "China Agriculture University President Zhangliang Chen Meets AOC President Naiqian Zhang" by Yufeng Hou, was originally published on the China Agriculture University web page at news.cau.edu.cn. We incorporated additional meeting information provided by Baoji Wang of China Agriculture University to the original article.

今天上午, 美国Kansas州立大学教授、海外华人农业、生物和食品工程师协会(简称AOC)主席张乃迁先生在汪懋华院士、韩鲁佳教授的陪同下, 拜访了陈章良校长。他是来中国参加亚洲农业工程学会主办的国际会议并进行学术访问的。

陈校长在自己的办公室热情的接待了张教授, 他首先向张会长介绍了学校目前的基本情况, 他说, 作为一所以农科为主的综合性大学, 中国农业大学在国内具有较强的学科实力, 但在国家目前面临的重大农业问题上, 还缺乏解决对策和办法, 能解决重大农业问题的科研成果不多。我校在水利、农业工程和机械方面具有很大的发展潜力, 但目前还面临着人才匮乏的问题。陈校长说, 我们不仅需要象汪院士这样德高望重的大科学家做统帅, 还要一批韩鲁佳教授这样的中青年科学家加入我们的科研队伍, 形成金字塔般的人才梯队, 从而能够产出一些能为国家解决重大农业问题的科研成果来。

他又说, 在党的十六大的报告中, 关于农业问题的文字虽然很少, 但却预示中国农业发展的新方向。土地承包经营权可依照依法、自愿、有偿的原则进行转让, 必然会形成大量的农场和农场化经营, 为农业机械、农业工程等相关领域的科研工作带来很大的机遇, 我们学校将大有作为。

张乃迁会长对陈校长能在百忙之中抽出时间接待自己表示感谢, 并诚恳地邀请陈校长参加将于2003年7月在拉斯维加斯举行的美国农业工程学会年会期间, 由AOC组织的第二届“中国交流”(China Exchange)和第二届东亚论坛(East Asia Forum), 陈校长愉快地接受了邀请, 并应允在东亚论坛上做关于生物安全的专题报告。

陈校长希望留学海外的农业工程学家们加强与中国农业大学的交流与合作。他还表示可以将中国农业大学和AOC的网站做链接, 进一步加强联系。陈校长也希望AOC能在中国的农业政策、农业机械



China Agriculture University President Zhangliang Chen (center) meets AOC President Naiqian Zhang (right) accompanied by Academician Maohua Wang at China Agriculture University in Beijing on 11/27/02.

化未来走势、农民收入、城镇发展模式、乡镇企业发展建设、农业教育、农业工程在中国农业发展中的作用进行深入的思考, 与中国农业大学一起向中国政府提交一些能影响中国农业发展研究报告。

早在1948年, 十九位留学美国的华人农工学者(包括我校的曾德超院士)曾协商成立一个海外华人农工学会, 他们后来成为我国农业机械化事业的栋梁。2001年7月, 一百多位华裔农业工程师于加利福尼亚重新成立了一个新的海外华人农业、生物和食品工程师协会, 简称AOC。AOC是一个以北美为主从事农业、生物系统与食品科研与高等教育的华人教授和知名专家为主要会员的学术组织, 现有会员135多位, 涵盖美国、加拿大四十多个州、省。成员大多是在八十年代初期我国实行改革开放以来出国学习农业工程的, 多数已成为同行业的佼佼者。学会宗旨是加强中国和世界华人农业、生物与食品工程领域的交流与合作, 促进中国有关领域的跨越式发展。

为加强AOC与中国大陆农业工程学者的交流与合作, 该协会在我校图书馆设立了中国交流中心, 并在图书馆建立了该协会的镜像站点(<http://aoc.cau.edu.cn>)。

Board Approves Student Paper Competition and Calls for Papers

By Huawei Sun and K. C. Ting



Huawei Sun

The AOCABFE Board of Directors has approved the establishment of a Student Paper Competition program. AOCABFE student members presenting papers at the upcoming ASAE annual international meeting are invited to submit their ASAE meeting papers for the competition. A submission will be completed in two stages: (1) complete an entry form (as attached) and send it to Dr. K. C. Ting at ting.14@osu.edu by January 31, 2003 and (2) submit the full length ASAE meeting paper via e-mail to Dr. K. C. Ting by April 30, 2003. An electronic entry form is available at the AOC

website <http://www.asae.org/aoc/>.

Up to three papers will be awarded each year. An individual will not receive more than one paper award in a given year. There may be no award if none of the submitted papers is of sufficient quality. A certificate and a monetary award will be given to each paper award recipient during the annual AOCABFE meeting. The monetary award for year 2003 will be \$100, \$60, and \$40 for the first, second, and third place, respectively.



K. C. Ting

Dr. Norman Scott Awarded the AOC Honorary Membership

By Hongwei Xin



Norman Scott

The AOC Executive Board has unanimously approved the nomination of Dr. Norman Scott for the AOC Honorary membership. Thus, he becomes the second Honorary Member of AOC. Congratulations and welcome on board, Norm! The following is the nomination letter authored by Dr. Hongwei Xin and signed by five AOC members.

During his 40-year career in the Department of Agricultural & Biological Engineering at Cornell University, Dr. Norman Scott has distinguished himself as an extraordinary scholar, an effective administrator, a caring mentor to graduate students, and a model citizen of the academic and professional communities he has tirelessly served. His impeccable record of accomplishments is highlighted in the attached brief vita.

Dr. Scott is an internationally renowned pioneer in the field of bioengineering for animal production. His cutting edge, visionary scholarly activities have often served as an immense inspiration to many who work in the same field. The fact that he has been inducted into the National Academy of Engineering (1990), served as the president of the ASAE (1993-1994), and served in various administrative capacities at Cornell speaks loud and clear about his academic reputation and leadership ability.

Of particular relevance to AOC's prosperity are not only

his remarkable technical know-how, visionary leadership and caring mentor personality, but most importantly, his demonstrated solid commitment to collaborating with China. As you may recall, during the China Exchange session in Chicago he outlined a series of Sino-US academic exchange activities since 1997. The most recent effort is the establishment and implementation of a Consortium of U.S. Universities and Institutes in Cooperation with China for Agriculture (UCCA), of which he serves as the project coordinator.

It is indeed a rare blessing to have someone with Dr. Scott's caliber and stature to be genuinely interested in and



committed to building mutually beneficial exchange programs between China and the United States. It would be AOC's privilege and in our best interests to attract Dr. Scott to the Association as an honorary member. Hence, we are delighted to nominate Dr. Scott for this honor, and asking you to join us in supporting this nomination.

Signed by
Hongwei Xin, Professor, Iowa State University
Yang Tao, Associate Professor, University of Maryland
K.C. Ting, Professor and Chair, The Ohio State University
Naiqian Zhang, Professor, Kansas State University
Qiang Zhang, Professor and Head, University of Manitoba

2002国际农业与生物系统工程科技与教育发展战略高层论坛纪要

2002.12.2-4, 浙江 杭州

This article is the memorandum for the 2002 International Forum on Agricultural and Biosystems Engineering Development Strategies held in Hangzhou, Zhejiang, China, December 2-4, 2002.

由全国高等院校农业工程及相关学科校长联谊会、海外华人农业、生物与食品工程师协会(AOCABFE)主办, 浙江大学生物系统工程与食品科学学院和浙江省农业工程学会承办的国际农业与生物系统工程科技与教育发展战略高层论坛于2002年12月2日至4日在杭州浙江大学召开。

会议由全国高等院校农业工程与相关学科校长联谊会主席、中国农业工程学会、中国农业机械学会副理事长、华南农业大学副校长罗锡文教授主持; 中国工程院院士、国务院学位委员会农业工程学科评议组召集人、中国农业工程学会和中国农业机械学会名誉理事长、中国农业大学汪懋华教授致开幕词; 浙江大学副校长程家安教授, 美国堪萨斯州立大学教授、海外华人农业、生物与食品工程师协会主席张乃迁教授等致欢迎词。浙江省科协等有关领导和浙江大学师生100余人出席和参加了论坛的开幕式。浙江大学党委书记张浚生教授在会议闭幕式后会见并宴请了与会代表。会议期间, 中国农业工程学会副理事长、浙江省农业工程学会理事长、浙江工程学院院长赵匀教授专门在杭州楼外楼饭店设宴宴请了与会代表。

来自海外华人农业、生物与食品工程师协会的3位旅美科学家和特邀的美国密歇根州立大学生物系统工程系主任Ajit Srivastava教授、美国普渡大学农业与生物工程系系主任Vincent F. Bralts教授、国务院学位委员会农业工程学科评议组包括两位召集人在内的共6位成员和国内10多个高校的27位代表参加了论坛研讨。这次会议是在陕西杨凌第五次全国高等学校农业与生物系统工程类专业教学改革学术研讨会的基础上, 进一步总结杨凌会议成果, 对“十五”期间我国农业与生物系统工程科技与教育的发展战略与对策进行深入探讨。论坛以大会报告和专题研讨相结合的形式, 就农业与生物系统科学技术发展的一系列重要问题进行了广泛而热烈的讨论和交流。Ajit Srivastava教授、Vincent F. Bralts教授、张乃迁教授、美国农业部农业研究中心卢仁富博士、华盛顿州立大学王绍金博士就目前农业与生物系统工程的热点问题, 作了精彩的学术报告。会议代表围绕农业与生物系统工程学科专业教育改革(培养方案、课程体系、教材组织)、农业机械化与农业装备发展战略、农业信息技术与精细农业、生物材料、收获后技术与农产品增值加工、食品安全、节水农业技术、机器视觉与计算机图像分析处理技术应用、设施农业与环境工程等进行了交流, 并着重就我国农业与生物系统工程学科发展与教育

改革面临的机遇、问题与对策, 农业与生物系统工程学科的专业名称、结构、内涵与发展, 农业工程专业本科与研究生教育中深化课程体系、教学内容与教学方法改革等问题进行了专题研讨, 内容涉及农业与生物系统工程科技与教育领域的各个方面, 这次论坛开拓了与会代表们的视野, 受到大家的好评。

自80年代以来, 随着生物技术、信息技术、新能源和新材料科学技术的迅猛发展, 国际农业工程学科研究领域正在进行或已经基本实现了向农业与生物系统工程方向发展的转变。它拓宽了工程技术对推动新的农业科技革命的服务空间和支持力度, 特别是这个学科培养的既具有生物系统科学知识背景, 又具有工程技术背景的生物系统工程师, 将在推进我国实现新型工业化, 包括农业工业化与利用现代工程科学技术与信息技术改造、提升农业和农村传统产业技术中做出更大的贡献。农业工程向农业与生物系统工程的转变, 将标志着我国农业工程学科进入了一个新的发展阶段, 对于我国农业工程界跟踪和赶上国际农业工程科学技术的主流方向和前沿领域具有重要的意义。

于今年6月在陕西杨凌西北农林科技大学举行“农业与生物系统工程发展战略论坛”(杨凌会议)是中国农业工程学术发展史上第一次由国内农工学科学术带头人与海外华人学者共同发起组织的盛会。这次论坛举办得非常成功, 其主要原因之一就是海外农工协会的积极参与。海外农工协会代表在他们的报告中, 介绍了世界农业, 生物及食品工程技术最前沿领域的研究成果及研究动态, 以及农业工程本科及研究生教育的体制, 特点与发展方向, 并提出很多对中国进一步发展农业工程科研和教育的具体建议。这些建议在这次高层论坛上得到了进一步讨论。

通过讨论, 与会代表们认为:

农业与生物系统工程学科必须与时俱进, 作为建立在许多传统工程学科基础上的农业与生物系统工程学科, 必须根据我国21世纪的三大支柱产业——信息技术、生物技术和新材料技术的发展, 在若干领域积极开拓新的学科生长点, 如农业信息技术, 精细农业技术, 农业生物材料工程技术, 机器视觉和计算机图像分析技术, 地理空间信息技术等, 服务并推进农业与生物系统工程学科及二级学科的发展, 应注意以高新技术改造、整合和提升传统学科的整体水平。

农业与生物系统工程学科必须为我国农业和农村的经济发展提供先进适用的技术, 为推动传统农业装备技术的改造与升级, 提高农民的收入做出切实的贡献。必须为中央和各级政府制定农业和农村经济与科技发展战略, 地域经济发展对策, 农业产业结构调

整、农业产业带规划等方面提供科学依据，同时应研制适应我国现阶段生产水平的多样化的农业装备，如适应各地域的农业机械化装备，收获后技术和农产品增值加工的技术和装备，食品安全监测技术系统，设施农业和环境工程技术，农村能源技术，节水灌溉和水土保持的全套技术和装备，草业机械配套技术装备，农业应用电子技术装备和农村信息化平台等。

与会代表一致认为党的十六大提出的全面建设小康社会的伟大战略目标给农业与生物系统工程的发展提供了非常好的机遇，我国农业工程科学工作者要认真研究思考为我国全面建设小康社会，能做什么？怎么做？这些都值得各学科群体、各个学校认真深思。会议代表们认为，为加强学科建设和深化教学改革：

- 必须加强与农学、生物学、物理、化工和信息等学科的沟通，加强学科的交叉和融合；
- 必须大力加强与政府和产业界的沟通与合作；
- 必须大力加强高层次人材的引进，避免学科群体内的自我繁殖；
- 必须大力加强对农业与生物系统工程学科发展和成就的宣传，引起各级领导和部门对农业工程学科的重视，并吸引更多的年轻一代对此事业的关注和兴趣；
- 必须大力加强国际交流，与海外华人农业、生物与食品工程师协会（AOC）建立更紧密的合作关系，引进国外先进教材，加强双向人材交流，加快国外先进教育思想、体系、技术的引进。尽快提高我国农业与生物系统工程界教学科研人员的水平。

会议期间，与会代表还认真学习了国务院学位委员会和教育部新近下达的“关于做好博士学位授权一级学科范围内自主设置学科、专业工作的几点意见”文件。对现有农业工程二级学科的名称

进行热烈的讨论。一些代表建议：根据国际农业工程学科发展的主流趋势和我国实际情况，在下一轮学科专业目录调整研究中，可以把“农业工程”一级学科更名为“农业与生物系统工程”学科。相应的下设二级学科和研究方向，应根据国际科技发展趋势和我国农业科技革命的发展需求做出新的调整。希望国务院学位委员会农业工程学科评议组提前组织论证研究。会议代表认为各院校应根据自身的基础、优势和区域经济发展的需要，认真办出有自己特色的专业。组织广大教师和科技工作者开展对学科建设方向和培养方式应进行认真的研究和讨论。

与会代表还认真讨论了一份由杨秀生博士主笔的建议书“重视和加快中国农业工程科学技术的发展和运用（草稿）”。这个建议书是由一个有国内农工行业的骨干和学科带头人及全体海外农工协会的代表组成的特别小组，在杨凌会议上用国外常用的“brain storm”方式，在极为民主的气氛中，通过深入讨论而共同起草的。与会代表认为这份建议书很有价值，并提出了若干修改意见。

本次论坛资料，将和杨凌会议资料一起经进一步整理编辑后，提供有关主管部门和全国高等院校相关学科专业参考。

会议取得了圆满的成功，组委会向各位代表和所在单位的支持表示感谢，并向会议承办单位浙江大学生物系统工程与食品科学学院和浙江省农业工程学会表示衷心感谢。

全国高等院校农业工程及相关学科校长联谊会
海外华人农业、生物与食品工程师协会
国务院学位委员会农业工程学科评议组
浙江大学生物系统工程与食品科学学院



Participants of the Hangzhou workshop.



Students crowding the opening ceremony of the workshop.

Happy New Year!

新年好!

AOC's Participation of the 7th International Agricultural Engineering Conference (2002) in Wuxi, China

By Juming Tang



Juming Tang

The 7th International Agricultural Engineering Conference (IAEC) was held between November 28-30, 2002 at Southern Yangtze University in Wuxi, China. IAEC started in 1990 as a biannual conference sponsored by the Asian Association for Agricultural Engineering (AAAE). This was the first time that China hosted an IAEC. The participants of this IAEC came from sixteen countries in five continents, and it was a great success. Faculty, staff, and graduate students of Southern Yangtze University, especially Professor Min Zhang (Secretary General of the conference and a new AOC member) and his team, had made tremendous efforts to ensure the success of the conference, after a major company dropped its sponsorship and the conference site moved from Shanghai to Wuxi. The presence of AOC was felt at the conference in many ways. AOC was one of the eleven co-sponsors, and AOC member Dr. Renfu Lu, a USDA scientist, served on the scientific committee. On Nov. 28th, AOC President Dr. Naiqian Zhang gave a keynote speech to an audience of over 400 on the role of AOC in international exchange in agricultural engineering.

The conference organizer also arranged AOC to have a special one-hour session in parallel with two other concurrent forum sessions. Over forty people attended the AOC session. Four invited speakers shared their opinions about possible roles of AOC in helping bridge China with the rest part of the world in the areas of agricultural, biosystems and food engineering. Naiqian introduced AOC's missions, organizational structure, past activities and action plans. Professor Jin Tong from Jilin University, an AOC member and a Yangtze Scholar in agricultural engineering, talked about his very first positive impression of AOC during the Yangling Conference in 2002, especially the depth and breath of research presented by AOC delegates and fresh and democratic styles brought by AOC members in managing meetings. He suggested that AOC could help China counterparts in four different ways: 1) sponsor and co-sponsor joint conferences, 2) help information exchange among public and private companies in and outside of China, 3) host visiting professors/engineers, and 4) help facilitate joint research projects among members of AOC overseas and in mainland China. Dr. Vincent Bralts, Head of Department of Agricultural and Biological Engineering at Purdue University, suggested that AOC members can help enhance scholarly exchange and participate in curriculum development/international accreditation of related

educational programs in China. Dr. Ajit Srivastava, Chair of Agricultural Engineering Department at Michigan State University, briefly introduced the discussion at a pre-conference meeting with the President of Southern Yangtze University, Professor Wenyi Tao, and his staff about student exchange programs. He suggested that AOC with its members outside and inside China can be an excellent resource for various educational exchange programs. For example, if a certain university in the USA wanted to start a summer student exchange program with China in a specific area (e.g., postharvest handling, processing, and marketing) but lacked proper faculty member(s) with right expertise and



Pre-conference visit of a food processing pilot-plant at Southern Yangtze University by (from left to right) Shaojin Wang and Juming Tang (Washington State University), Ajit Srivastava (Michigan State University), Vincent Bralts (Purdue University), and Renful Lu (USDA ARS, Michigan State University).



AOC members attending the AAAE Conference in Wuxi.

a good understanding of China, that university could approach AOC to identify faculty members in the USA and in China. US universities have the flexibility to hire external faculty members both in the USA and in China for summer exchange programs. As usual, Naiqian took the opportunity to advertise AOC and recruit new members. The response was overwhelming: twenty scholars joined AOC during and after the Wuxi meeting.

Professor Min Zhang of Southern Yangtze University

hosted a two-day pre-conference visit by a small contingent, consisting of two department heads of US universities, Ajit Srivastava and Vincent Bralts, and three AOC members, Renfu Lu (group coordinator), Shaojin Wang, and Juming Tang. The group visited several research centers, laboratories, and pilot plants at Southern Yangtze University, and met with faculty and administrators to exchange views on agricultural and food engineering education and international exchange.

A Message from Membership Development Committee

By Ruihong Zhang

Dear AOC members and friends,

As we are about to embrace the new year of 2003, I want to personally say "Thank You" for your support of AOC in the past year. Here let me give you a brief update on membership development and service.

First, I want to welcome the 22 new members who recently joined AOC. They are recognized in this newsletter. Secondly, I want to express my appreciation to those of you who have renewed your membership. If you have not renewed the membership yet, please do so as soon as possible. If you are a regular member (i.e. member of both AOC and ASAE), please renew your membership with ASAE by 12/31/02. If you are a corresponding member, please send your payment to AOC by 1/15/03. If you are not a member yet, please consider joining AOC now. Meanwhile, I strongly encourage you to join ASAE as well.

The member database has been uploaded and now is

temporarily running at this web address: <http://ruan.mafic.ac.cn>. Please take a look and let me (rhzhang@ucdavis.edu) or Roger Ruan (ruanx001@tc.umn.edu) know if you have any suggestions for improvement. The database will eventually be moved to the AOC website. The database is far from complete since many of our members are not on there yet, so if you don't see your name in the database, I need your portfolio information.

On behalf of the Membership Committee, I wish you and your family the very best and look forward to working with you in the New Year.



Ruihong Zhang
Chair of Membership Development
Committee



Ruihong Zhang

Welcome New AOC Members

Members joining AOC from October to December 2002:

Chen, L. Paul 陈灵, University of Minnesota, Senior Research Associate

Chi, Yujie 迟玉杰, 东北农业大学 Northeast Agricultural University, 教授/副系主任 Professor/Deputy Department Head

Cui, Shaorong 崔绍荣, 浙江大学 Zhejiang University, 教授 Professor

He, Yong 何勇, 浙江大学 Zhejiang University, 教授/副院长 Professor/Associate Dean

Hu, Yongguan 胡永光, 江苏大学 Jiangsu University,

讲师 Lecturer

Jia, Keli 贾克力, 内蒙古农业大学 Inner Mongolia Agricultural University, 教授/主任 Professor/Director

Kong, Baohua 孔保华, 东北农业大学 Northeast Agricultural University, 教授/系主任 Professor/Department Head

Li, Baofa 李宝筏, 沈阳农业大学 Shenyang Agricultural University, 教授 Professor

Li, Changyou 李畅游, 内蒙古农业大学 Inner Mongolia Agricultural University, 教授/校长 Professor/President

Li, Jianping 李建平, 浙江大学 Zhejiang University,

副教授 Associate Professor

Li, Jianqiao 李建桥, 吉林大学 Jilin University,
教授/副院长 Professor/Associate Dean

Li, Shujun 李树君, 中国农机院 Chinese Academy of
Agricultural Mechanization Sciences, 教授/副院长
Professor/Vice President; 中国农机学会 Chinese Society
of Agricultural Machinery, 副主席, 秘书长/Vice
President, Secretary General

Liu, Tingxi 刘廷喜, 内蒙古农业大学 Inner Mongolia
Agricultural University, 教授 Professor

Ma, Chenglin 马成林, 吉林大学 Jilin University, 教授
Professor; 中国农工学会 Chinese Society of Agricultural
Engineering, 副主席/Vice President

Miao, Xiangwen 苗香雯, 浙江大学 Zhejiang University,
教授 Professor

Piao, Zailin 朴在林, 沈阳农业大学 Shenyang
Agricultural University, 教授/院长 Professor/Dean

Sheng, Kuichuan 盛奎川, 浙江大学 Zhejiang University,
副教授 Associate Professor

Shi, Haibin 史海滨, 内蒙古农业大学 Inner Mongolia
Agricultural University, 教授 Professor

Wang, Chunguan 王春光, 内蒙古农业大学 Inner
Mongolia Agricultural University, 教授/院长
Professor/Dean

Wang, Xinlei 王新雷, University of Illinois, Assistant
Professor

Ying, Yibin 应义斌, 浙江大学 Zhejiang University,
教授/院长 Professor/Executive Dean

Zhang, Min 张敏, 江南大学 Jiang Nan University, 教授
Professor

The Second East Asia Bioproduction Engineering Forum

By Ruihong Zhang

AOC is co-sponsoring a forum focused on bioproduction technology development and globalization in East Asia. The forum is entitled "Bioproduction in East Asia: Technology Development and Globalization Impact" and will be held on July 20, 2003, in Las Vegas. The forum will have a one-day program that is organized into four sessions addressing four important areas encompassing the bioproduction systems: Food Production and Security, Biotechnology Development and Impact, Energy Supply and Sustainability, and Environmental Quality and Control Technologies. An

announcement flier for the forum is attached at the end of this newsletter. All the speakers will be invited from countries in Asia as well as in the United States. The organizing committee is working diligently to develop an informative program and hope to make the final program available in March. Please make plans to attend the forum.



Ruihong Zhang
Chair of East Asia Forum Organizing Committee

Updates on AOC-CSAE Joint International Journal

By Rongsheng Ruan



Rongsheng Ruan

We received twenty-five email suggestions regarding the title of the proposed joint journal. Based on the email discussion, we tentatively decided on the title as *Journal of Biosystems, Agricultural, and Food Engineering*.

Both AOC and CSAE's Boards of Directors and Publication Committees have reviewed, discussed, revised, and

exchanged the detailed plan for the first year's (2003) cooperation on the joint English version international journal. We are getting very close to agreeing on the final plan for the first year's operation before we can register the journal and start accepting the manuscripts.

Please plan in advance to send in your excellent work and volunteer to be an Associate Editor by contacting Dr. Roger Ruan, AOC Publication Committee Chair, at 612-625-1710 or ruanx001@umn.edu.

Your participation is essential to the success and well being of this international journal. Thank you very much for your continued support.

Roger Ruan
AOC Publication Committee

Dr. Roger Ruan-A Successful Professor and Active AOC Member

By *Lin Wang*



Lin Wang

I was assigned to prepare a feature story about Dr. Roger Ruan for this issue of the newsletter. Dr. Ruan is a member of AOC Executive Board, the Chair of AOC Publication Committee, the Director for the North/South America region, and one of the AOC founders. Currently, he is working with the Chinese Society of Agricultural Engineering (CSAE) to launch a new, English technical journal. Per my request, Dr. Ruan sent me his 80-page long vita. After reading through it, I could not stop wondering how a person can be so productive while keeping the balance between his career and family life. The following overview of his academic accomplishments and a question/answer session should provide you with some interesting information about Dr. Ruan.

Overview

Dr. Ruan is a Professor and Director of Undergraduate Studies with the Department of Biosystems and Agricultural Engineering and the Department of Food Science and Nutrition at the University of Minnesota. He is the author or co-author of one book, eight book chapters, 57 peer-reviewed articles, 38 conference proceedings publications, and 88 meeting papers. He has also been invited to give 62 seminars and symposium presentations by various professional societies, universities and companies. In addition, he holds six patents.

As a principal or co-principal investigator at the University of Minnesota, he has been awarded more than 65 research grants totaling over six million dollars. He has advised or co-advised 20 post-doctoral research associates and visiting scholars, 24 graduate students, and 25 other research fellows and teaching assistants. He has also served as an advisory/examination committee member for more than 38 graduate students in other departments. His achievements have been recognized both in the US and internationally.

As an active member of ASAE, Dr. Ruan currently serves as the Vice President of Minnesota Section, Chair of the ASAE Technical Paper Awards committee, Associate Editor for both *Transactions of the ASAE* and *Applied*



Roger Ruan with his wife Amy and two daughters Emily (4 1/2) and Megan (8).

Engineering in Agriculture, and a member of several other committees.

He is currently teaching three courses: Engineering Principles and Applications, Bioprocessing Engineering, and Managing Water in Food and Biological Systems.

His research work can be categorized into the following areas:

- Development of sensor and analysis technology for identifying, quantifying, understanding, and modeling important physical and chemical properties and structure-function relationships of biological, agricultural, and food materials and factors affecting these properties and relationships,
- Development of novel and environmental friendly value-added technology for making new foods and feeds, as well as materials, fuels, and chemicals from biological and agricultural materials, and
- Development of innovative electrotechnologies for non-thermal pasteurization/sterilization of foods and biological materials, and effective treatment of solid, liquid, and gaseous wastes generated from biological, agricultural, and food processing.

Questions & Answers

Where is your hometown in China? Is it somewhat related to your major selection when you went to college?

I was born and grown up in Fuzhou. Even though it is a major city in Fujian, it was not well developed especially in the late 70s. I lived in a wall-enclosed party school (党校). Although it is not far from the center of the city, it was still surrounded by many vegetable farms and there were signs everywhere about Agricultural Mechanization and Four Modernization slogans at the time. All I wanted was to go to Beijing, and Beijing Institute of Agricultural Mechanization was what my fellow friends recommended. That's where I went and studied mechanical engineering for four years.

Have you ever thought of changing to a field other than agricultural engineering? Is there anyone else in your family working in this field?

No matter how broad your definition of agricultural engineering is, I don't have anyone else in my family who was remotely connected with this field. My parents were economics and physics professors. My undergraduate study was mainly on machine design, manufacture, and repair. I was assigned to the Food Engineering Department at the Ministry of Agriculture's Nanjing Research Institute after graduation, and was sent to the University of California at Davis to study food engineering. I like the field and never thought of changing to another field in those days, even though I have expanded my interests to food and bioprocessing engineering now.

Comparing with other projects you have worked with, how would you like this on-going project on the joint publication with CASE? Is it easier or harder to handle a project when cooperation is involved with colleagues in China?

It's always harder to involve people with different norms of doing things or without a norm yet for doing something. However, I am Chinese myself and I understand the differences the way things are handled, and I think the project is going well so far. It's difficult to compare this with other projects since objectives are quite different. All we wanted here is to help Chinese and other researchers to publish high quality papers in a high quality international journal.

When you pick up collaborators, what is the most important quality you are looking for?

Integrity, capability, and chemistry.

How did you get involved in this joint journal project?

I consider this an important professional community service activity. I always believe in a strong community and its importance to the individual development. I tried my best to volunteer for this kind of services. I was the editor for the *Chinese* and the *Chinese Illini*, the magazines for the Chinese Student and Scholar Associations at Oklahoma State University and University of Illinois at Urbana-Champaign, respectively. I am also an Associate Editor for the ASAE journals.

How do you manage your family life with so many activities involved? Have you ever heard of complains that you are a workaholic from members of your family or from your students and associates?

Thanks to my understanding and capable wife, and my hard working team members. But it's difficult to stop once you get started.

Among all your achievements, which one are you proud of the most? What makes it different from the others?

My two smart and beautiful daughters. They make all my hard work worthwhile.

Is there anything you would have done differently if you were allowed to redo it?

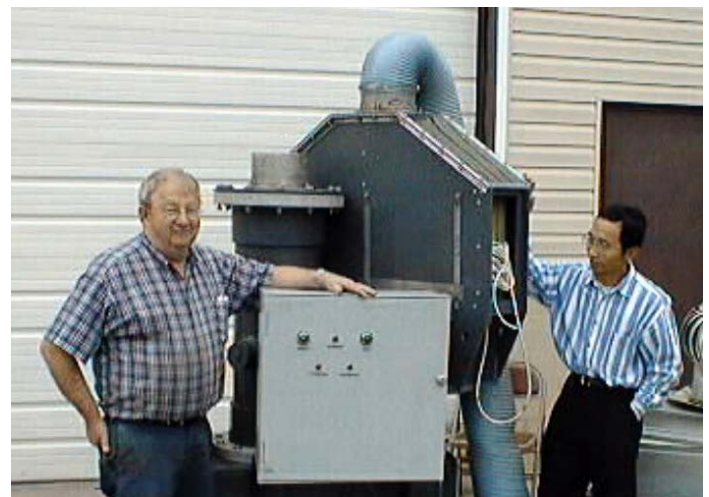
Yes, but I won't tell you.

You have been a full professor, at the top of the academic ladder, how do you keep yourself motivated?

Select things of your real interest, then you will really enjoy doing them.

How would you describe yourself?

Articulate, motivated, friendly, and lucky. Thank you all.



One of Roger Ruan's non-thermal plasma (NTP) patents has been transferred to a local company. He is standing by a NTP system manufactured by the company with its president Dr. Peterson.

United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (APCAEM) Moved to Beijing

Contributed by Prof. Maohua Wang

UNITED NATIONS  NATIONS UNIES

APCAEM IN BRIEF

STATUS Asian and Pacific Centre for Agricultural Engineering and Machinery (APCAEM) is one of the four subordinate institutions of the Bangkok-based United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). It was founded in 1977 as Regional Network for Agricultural Machinery (RNAM), and changed into the present name a few years back to uplift its status from a project to a regional institution, and to greatly widen its work scope.

OBJECTIVES The objectives of APCAEM are to enhance the technical cooperation among the countries of the members and associate members of ESCAP as well as other interested countries through extensive exchange of information, prototype exchange and technology sharing, and promote R&D and extension of agricultural engineering/machinery technologies in the region.

HEADQUARTERS According to the Resolution 58/8 of ESCAP, which was drawn in May, 2002, the headquarters of APCAEM is located in Beijing, China

MEMBERSHIP APCAEM has 12 member countries Bangladesh, China, India, Indonesia, Iran, Korea, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand and Vietnam.

WORK AREAS Apart from traditional machinery, the work areas of APCAEM now cover the related engineering and technology of a broadly-defined agriculture-as FAO does-that embraces also animal husbandry, fishery and forestry.

FUNDING APCAEM receives program support from different donors and institutions. It has also voluntary contributions from its member countries.

据新华社北京 11 月 26 日电 (记者钱彤) 国务院副总理温家宝 26 日下午出席了联合国亚太农业工程与机械中心在北京举行的迁址揭幕仪式。

温家宝在仪式上致辞。他说,联合国亚太农业工程与机械中心是第一个在中国设立总部的联合国官方机构。中心的设立,是联合国亚洲及太平洋经济社会委员会秘书处、中国政府、中心各成员和有关国家共同努力的结果,标志着中国与联合国的合作跨出了新的一步。

他说,我们相信,随着中国对外开放进一步扩大,将会有更多的联合国机构和其他国际组织来中国落户,中国政府愿为这些组织提供支持,为他们在自己的工作创造条件。

他说,联合国亚太农业工程与机械中心在北京设立,将对促进亚太地区农业工程与机械领域的国际合作、提高农业整体发展水平产生积极的作用。他表示衷心希望中心在农业工程与机械领域的科研开发、能力建设、资源共享等方面加强协调,密切合作,为亚太地区消除贫困、共同发展作出突出贡献。

温家宝和联合国副秘书长兼联合国亚洲及太平洋经济社会委员会执行秘书金学洙一同为中心揭幕。

全国政协副主席宋健向金学洙递交了象征中心所在的中国国际科技会展中心的钥匙模型。

联合国亚太农业工程与机械中心现有成员 12 个,工作领域涉及农林牧副渔及基因工程、农业信息工程等最新技术。中心在今年年初举行的理事会上决定将总部从泰国曼谷迁至北京。

联合国亚太农业工程与机械中心迁址北京

温家宝出席揭幕仪式

Executive Board Meetings Convened in October and December

By Yuanhui Zhang and Jiannong Xin



Yuanhui Zhang

The Executive Board held teleconferences on October 25 and December 13. Excerpts of the two meetings are as follows:

Student Paper Competition: AOC Executive Board has passed the Student Paper Competition proposal. The Professional Development and Awards Committee (PDAC) will organize this event during ASAE annual meeting in Las Vegas next year. PDAC is sending a call for papers for the competition on this issue of *IMPACT*.

AOC Membership: Discussion is in progress between CSAE and ASAE on a volume membership agreement. A four-year membership plan with an annual fee of \$30 was proposed. If this plan is approved by both ASAE and CSAE, 80 to 100 people in China will become joint members of ASAE and CASE in the first year. AOC added 22 new members from China and US. Since most of the new members are corresponding members, now it is important to increase the number of regular AOC members to honor the AOC-ASAE



Jiannong Xin

Agreement.

AAAE meeting: A delegation of AOC (Ramesh Kanwar, Renfu Lu, Juming Tang, Jin Tong, Shaojin Wang, Naiqian Zhang, and Heping Zhu) attended the AAAE Conference in Wuxi and three of the AOC members also attended the Hangzhou Meeting. AOC President, Dr. Naqian Zhang, was invited to meet President of China Agricultural University, Dr. Zhangliang Chen (陈章良). On behalf of AOC, Naiqian invited Dr. Chen to attend the upcoming “China Exchange” and “East Asia Forum” during the 2003 ASAE Meeting in July in Las Vegas. Dr. Chen gladly accepted the invitation.

China Exchange: Juming Tang has contacted the Chinese Consulate General in San Francisco. The Consulate is willing to support this event, but a session proposal is needed. Hongwei Xin is asked by the Board to develop the session proposal. The Meetings and Conference Committee should collaborate with Ruihong Zhang on the East Asia Forum. Hongwei reported that six potential speakers have been identified for the China Exchange session. It needs to find more speakers. The Board discussed the format of this session. Most members are in favor of a panel discussion instead of paper presentation. Hongwei will be the

moderator of this session.

East Asia Forum (Bioproduction in East Asia: Technology Development & Globalization Impact) in Las Vegas: Ruihong reported progress of the Forum. Four organizations (ASAE, AOC, CSAE, and CIAM) have decided to sponsor this one-day event. Twelve speakers from Asian countries and U.S. have been invited. The Forum is organized as a panel discussion with four sessions: 1) food production and security, 2) biotechnology development and impact, 3) energy supply and sustainability, and 4) environmental quality and control technology. Funding will be solicited from each sponsoring organization.

CSAE/AOC Joint Publication: Roger reported progresses on the CSAE/AOC joint publication to the Board. Tentative journal title is “Journal of Biosystems, Agricultural and Food Engineering.” Division editors have been selected. The Publication Committee will continue to work with CSAE on management details to ensure quality of the Journal. Roger discussed this joint effort with the Editorial Board of CSAE during his recent trip to China. In principle, CSAE has agreed with AOC’s position and AOC is now waiting for a formal reply from CSAE.

President of the Canadian Society of Agricultural Engineering (CSAE) Attended the First AOC Anniversary in Chicago

Dr. Abdel Ghaly, President of the Canadian Society of Agricultural Engineering (CSAE), and his wife attended the AOC celebration of its first anniversary during the 2002 ASAE/CIGR Annual International Meeting in Chicago. Recently, AOC President Naiqiang Zhang and the Newsletter Editorial Board apologized to Dr. Ghaly for not mentioning their presence at the AOC meeting in the first issue of Volume 2 of the newsletter.

CSAE has been a strong supporter from the very beginning of the establishment of AOC. Former CSAE President Victor Lo attended the AOC inaugural ceremony

held during the 2001 ASAE International Meeting in Sacramento, California and delivered a congratulatory speech. Dr. Ghaly and his wife had witnessed the progress that AOC had made in the first year. Dr. Ghaly expressed strong interest in becoming more involved in AOC as he has wide international experiences in many developed and developing countries.

Chenghai Yang
Newsletter Editor

Editor’s Note



Chenghai Yang

The newsletter editorial board and all the article contributors have worked hard to deliver the second issue of volume 2 of IMPACT to each of you before the new year arrives. On behalf of the newsletter editorial board, we thank you for your interest in the quarterly newsletter and wish you and your family a happy and successful new year.

As always, we encourage everyone to actively involve in AOC activities and submit any article or story to share with other members. Please send your comments, suggestions, and any materials for inclusion in the next issue to me at cyang@weslaco.ars.usda.gov or to Ms. Lin Wang at lwang@ksu.edu. If you need to contact us by regular mail, phone or fax, my contact information is Chenghai Yang, USDA-ARS, 2413 E. Highway 83, Weslaco, TX 78596, Tel: 956-969-4837, Fax: 956-969-4893.



**ASSOCIATION OF OVERSEA CHINESE
AGRICULTURAL, BIOLOGICAL & FOOD ENGINEERS**

STUDENT PAPER COMPETITION

ENTRY FORM

Year:

Name: (Last, First, Middle)

Organization

Street Address

City, State Zip

Telephone Number (including
area code)

E-Mail

Current Major

Advisor's Name

Advisor's Department

Paper Title: _____

ASAE Paper No: _____

Authors: _____

Abstract:

SUBJECT AREA (CHECK ONE):

POWER & MACHINERY

SOIL & WATER

FOOD & PROCESS ENGINEERING

BIOLOGICAL ENGINEERING

STRUCTURES & ENVIRONMENT

EMERGING AREAS

INFORMATION & ELECTRICAL TECHNOLOGIES

OTHER

(Please specify: _____)

Student Signature

Academic Advisor's Signature

*The advisor supports the submission of this
paper for competition.*

Coauthors' Signatures

*The coauthor(s) agree(s) to the submission of this
paper for competition.*

Bioproduction in East Asia: Technology Development & Globalization Impact

An ASAE pre-conference forum
7/20/2003, Las Vegas, U.S.A.

You are invited to the 2nd East Asia Bioproduction Engineering Forum for a day with a panel of experts on the following topics:

Food Production & Security

Supply, Safety, Global Trade, International Collaboration

Biotechnology Development & Impact

GMO Issues, Current Research, International Technology Transfer

Energy Supply & Sustainability

Resource Assessment, Demand, Marketing, Research & Production

Environmental Regulations & Technology Development

Policies, Production Impact on Environmental Quality, International Collaboration

For more information, please contact Dr. Ruihong Zhang
At University of California, Davis, USA. Email: rhzhang@ucdavis.edu

Organizing Committee:

R. Zhang & C. N. Thai (Co-Chairs)

S. Capareda, I. Lee, T. Lin, P. Ling, B. Park, S. Sase, T. Takakura, K.C. Ting, N. Zhang

Co-Sponsors:

American Society of Agricultural Engineers (ASAE)

Association of Overseas Chinese Agricultural, Biological, Food Engineers (AOCABFE)

Chinese Society of Agricultural Engineering (CSAE)

Chinese Institute of Agricultural Machinery (CIAM)