



# IMPACT

A Quarterly Newsletter of AOC  
Volume 5, Issue 4, June 2006

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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

## Look Forward to Seeing You in Portland

Dear AOC Members and Friends,



Ruihong Zhang Chenghai Yang

The 2006 AOC Annual Meeting is coming up very soon. This year's meeting will be held in conjunction with the ASABE Annual International Meeting on July 9-12 in Portland, Oregon. The City of Portland has been proclaimed to be North America's "Best Big City" according to *Money* magazine (see website <http://www.pova.com/visitors/>). It should be a beautiful place for us to conduct business, chat, and have fun. We suggest that you also make plans to check out the northwest coast while you are there. Through several months of careful planning and organizing efforts involving many individuals, especially the members of the AOC Executive Board, we should look forward to another productive and enjoyable meeting.

In this newsletter, you can find detailed information on many activities planned for our AOC Annual Meeting. The Students Activity Committee has organized a dinner gathering for students on the evening of July 10 (see [http://aoc-web.org/student/doc/dinner\\_flyer.pdf](http://aoc-web.org/student/doc/dinner_flyer.pdf)). Three professionals have been invited to share their thoughts and words of wisdom on job search and career development. Please be there to support our students. July 11 will be a big day. The China Exchange Session will be held in the afternoon and the Annual Business Meeting will be in the evening, followed by a Dinner Banquet. The theme of this year's China Exchange Session is "Vision, Philosophy, and Roadmaps". Nine invited speakers

will share their information about new programs and policies in China, changes that have taken place in the field of agricultural engineering, and research collaboration and student exchange activities between American and Chinese universities. At the Business Meeting, we will review this past year's accomplishments, develop an action plan for next year, and hold our annual election. Please bring your thoughts and vote to the meeting. The Dinner Banquet will be held at Bridgeport Brewpub & Bakery ([www.bridgeportbrew.com](http://www.bridgeportbrew.com)). More than 70 seats have been reserved in the restaurant and we hope that you will join us there. You are very welcome to bring families and friends to dine and entertain together. Please mark your calendar for all these AOC activities. We look forward to seeing you soon in Portland.

With best regards,

Ruihong Zhang, President  
Chenghai Yang, Vice President

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## News in Brief

**Dr. Juming Tang** was elected to be a member of the Board of Governors for the International Microwave Power Institute. He also visited Southern Yangtze University in Wuxi and Zhejiang University in Hangzhou in early June to interact with professors Min Zhang and Yibin Ying's groups and gave talks about his research, among other activities.

**Dr. Xiuzhi Susan Sun** has accepted to be an Editorial Board Member and Associate Editor of Journal of Biobased Materials and Bioenergy published by American Scientific Publisher (ASP).

**Dr. Xiusheng Yang** is the founding President of CAU American Alumni Association, CAUAAA (中国农大美国校友会), established in late 2004. Drs. Naiqian Zhang and Ning Wang, members of AOC, also serve as a Vice President and a Vice Secretary General of CAUAAA, respectively. In 2005, CAUAAA established a foundation to support CAU

students with financial difficulties. Representing CAUAAA, Xiusheng Yang visited CAU and presented the first year donations from CAUAAA members to ten students, each receiving 2000 RMB, in January, 2006.

**Dr. Xiusheng Yang** was interviewed by Science Press (科学时报) twice this year. The first one was on agricultural extension systems in China and the second one was about the newly launched rural development program. The articles have been well received in China.

**Dr. Xiusheng Yang** was invited as a special overseas member to participate in the Seventh Congress of the China Association of Science and Technology (科协七大) held in Beijing, May 22-26. Sixteen overseas members were invited from all over the world.

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## Dr. Xiusheng Yang: the Upcoming President of AOC

*Interviewed By Xianglian Li*



*Xianglian Li*

Dr. Xiusheng Yang is a professor in the Department of Natural Resources Management and Engineering, University of Connecticut. He got his B.S. degree from China Agricultural University in 1982, majoring in Agricultural mechanization. Dr.

Yang obtained his Master's degree at Cornell University in 1985 and Ph.D degree at the Ohio State University in 1988, both majoring in Agricultural Engineering. After that, he worked as a postdoctoral researcher at Purdue and the Ohio State University for three years. In 1991, Dr. Yang joined the faculty of the Department of Natural Resources Management and Engineering, University of Connecticut. In 2002, Dr. Yang also received a certification of Leadership Development Program from the USDA ESCOP/ACOP.

As a distinguished scholar, Dr. Yang is renowned for his work on natural resources engineering and modeling, multimedia transport processes, integrative modeling of hydrology, ecology and economy, biometeorology/

microclimatology, and greenhouse engineering/greenhouse environment control. He developed the



*Dr. Xiusheng Yang*

first 3-dimensional model of greenhouse microclimatology for environment control in his very early stage of research. Recently, his works on regional scale multimedia transport modeling and atmospheric gene flow modeling have been highly recognized and applied in multi-state research projects. Dr. Yang also cooperates with Chinese

professionals on long-term projects regarding the development and the environment in rural China, in which the study on multi-scale ecosystem dynamics modeling, and sustainable water management and agricultural production in Northwestern China has achieved significant progress. In his career, Dr. Yang has written more than 10 books, published more than 60 journal articles and over 80 conference proceeding papers, several of which have been recognized as outstanding technical papers by professional organization/associations including American Society of Agricultural and Biological Engineers (ASABE). He has also given about 50 keynote or invited speeches at international conferences. In recognition of his distinguished research, Dr. Yang has been honored and awarded many times. In 1998, Dr. Yang was honored William E. Krauss Director's Award for Excellence in Research at College of Agriculture and OARDC, OSU, and UPS Visiting Professorship by Stanford University and UPS Foundation. For four times, in 1995, 1997, 1999 and 2000, Dr Yang won Special Achievement Award from University of Connecticut and the American Association of University Professors UCONN Chapter. He has been also honored CAS Overseas Outstanding Scholars Award and MOE Award for Significant Contributions to the Advancement of Science and Technology in 2001 and 2003 respectively. Dr. Yang's profile has been included in the millennium edition of *Who's Who in World Science and Engineering*.

In addition to his passion in scientific research, Dr Yang is also actively involved in teaching, outreach and social activities. He has developed and taught nine courses at UCONN including Meteorology, Natural Resources Measurements, Environmental Biophysics, and Research Methods in Natural Resources. He has been the Editor-in-Chief of World Scientific Publishers Book Series *Advances in Agricultural Science and Technology* since 1999. He has been the member of the Editorial Board of *Transactions of the CSAE* since 1998, the member and lead author of UN Millennium Ecosystem Assessment (MA) Program since 2003, and the member of advisory council of Consortium for Atlantic Regional Assessment (CARA) since 2003. He has organized and/or invited to participate about 20 international meetings in recent years. In Connecticut, he leads the Connecticut State Climate Center (CSCC) which provides climatic consultation and data service for different institutes and agencies in the state.

Dr. Yang is devoted to promoting international collaborations between US and China. He has served as the President of the Association of Chinese American Agricultural Scientists (ACAAS), with numerous honorary titles from Chinese universities and research institutions. In particular, he has served for years on the Academic Advisory Board for Chinese Academy of Sciences (CAS) and China National Science Foundation (CNSF). He also serves as Senior Overseas Advisor for China Council for the Promotion of Applied Technology Exchanges with Foreign Countries (CCPAT) since 2003. Recently, he was elected the member of the National Academic Council by the State Administration of Overseas Chinese Affairs, together with other two dozens of world-class scientists including Yang, Zhengning, Zhu, Jingwu, Qiu, Chengtong, Zuo, Tianjue, and Wu, Rui. Many of his suggestions and comments regarding agricultural and rural development have been adopted by the central government in national policy-making. His story has been reported by several national media including CCTV, *China press*, and *Science TIMES*. His efforts in promoting international cooperation between US and China have been recognized and honored by national leaders in both countries. Dr. Yang holds many honorary or guest professorships at top universities and institutions in China, including China Agricultural University, Beijing Normal University, Zhejiang University, and Tongji University. Dr. Yang has served as advisor of Yangling State Demonstration Zone of Agricultural Hi-tech Industries since 1999 and advisor of China Ministry of Education International Exchange Programs since 2003.

Dr. Yang has a wonderful family, his wife Lan and four children, Samuel, Lisa, Ellen and William. Lan is talented in many ways: teaching, singing, playing volleyball, fashion, cooking, and housekeeping. For many years, she gave off her career to support Dr. Yang's endeavor. Now, with four kids growing up, she is striving to gain her tenure at East Hartford International Baccalaureate Academy where she teaches Chinese. Samuel is in his senior year of high school and Lisa is a junior. They are both preparing to go to college. Samuel has shown great interest in Asian language and culture and wishes to make a contribution to bridging US and China relations like his father does. Lisa studies diligently and is involved in many extracurricular activities. Ellen, a first year middle school student, is very active in theatre performance and symphony

orchestra. She is an animal lover and volunteers at a local shelter helping with the adoption of lost and unwanted animals. She is also a poet who had a poem published in 'Poetry Selection of the American Young Poets 2005'. Little William, very perceptive, is an energetic student leader in elementary school. At home, each child fulfills his/her responsibility in

helping with housework. The family is well known for its hospitality. Their home is almost the default gathering place for Chinese young people at UCONN. They host parties for most traditional Chinese holidays and many professors and students are invited. The family is always full of love and fun.

## Interview

**Xianglian:** *You have done a lot to promote cooperation between the US and China. What's your primary motivation in doing this?*

**Xiusheng:** As one of the first group of students to study overseas, I did not mean to stay in the United States. During my graduate studies, I chose the field of agricultural engineering which was and still is mostly needed in China, and planned to go back to develop my career. Although for various reasons I took the faculty position at UConn, my life is still rooted in China. For one, I have gained almost 20 years of education in China, both culturally and professionally. For another, my parents and many of my relatives and friends are in China. I deeply concern myself with the development of China, especially the agricultural and rural developments. I wish I can make a little contribution to where I was born and raised.

**Xianglian:** *(Continue last question) What are some of the biggest challenges you have faced when you are doing this?*

**Xiusheng:** There are many, and they are different at different times. For now, I wish my Chinese friends are not too much driven by top-down pressures to shift their focuses too often. Administrators need to devote efforts to long-term agenda and scientists need to focus themselves on progressive research. With respect to international collaboration, mutual understanding and win-win considerations are important.

**Xianglian:** *Could you tell us something about your plans after becoming president?*

**Xiusheng:** I think so far AOC has been on a right track and has done successfully in all aspects. I will largely continue the effort that the current leadership is making, with more attention on 1) promoting AOC in both China and overseas, and 2) helping our

members to be more successful in their career and social development.

**Xianglian:** *Each time I'd like ask professors sharing some of their experiences with us students. People cooperated with you all have high praise for your gracious writing in both English and Chinese. Are there any skills (of writing academic paper) that you would like to share with us students?*

**Xiusheng:** Thanks. In fact, when I first came to the United States, I was not able to say a word. Probably because my speaking has never been great, I spent a bit more on writing. This is not a great thing to brag about. In any case, I would like to say that writing is important in any career. That is why I pay more attention to writing than math or any other subjects in the learning of my children. Writing forces you to think, to organize materials in mind, and to express and deliver your ideas. I would suggest that AOC organize a short workshop on writing technical papers for our students.

**Xianglian:** *I noticed you like calligraphy -- the art of Chinese writing. It's not so easy especially nowadays. People tend to be busy. How long have you been on this? What's the biggest benefit?*

**Xiusheng:** You will never have any time to do anything considered leisure. Neither will I. We all know that this is not right; we all persuade friends to balance working and fitness; but we all do not do that well. I certainly wish all you can do better in the future. I picked up practicing calligraphy several years ago simply because several of my friends in Chinese art circle thought I should do something different than just academic research and bought me a whole set of tools as a gift. I have not been very consistent for the past several years. However, I start to love it. The greatest benefit is that doing so helps me to wonder myself in a world of sporadic





Oregon Convention Center.  
 Moderator: Xiusheng Yang, University of Connecticut, Storrs, CT

2:25 pm Introduction  
 2:30 pm Evolution, Development and Future of Agricultural Engineers, **Jaw-Kai Wang**, Univ. of Hawaii, Honolulu, HI  
 2:45 pm Biomass Energy in China, a Challenge and a Chance, **Xu Cheng**, China Agricultural University, Beijing, China  
 3:00 pm The Role of Overseas Chinese Professionals in Promoting Applied Technology Exchanges Between China and the World, **Jiansheng Zhang**, China Council for Applied Technology Exchanges  
 3:15 pm Critical Issues in Research for Agriculture, Farmers, and Rural Development in China, **Maoliang Lei**, Chinese Academy of Agricultural Engineering, Beijing, China  
 3:30 pm Student Exchange - First KSU

Study-Abroad Group in China, **Naiqian Zhang**, Kansas State University, Manhattan, KS (D. Wang, T. Culbertson, A. Good)  
 3:45 pm Research, Education, and Commercialization of Agricultural Technologies in China, **Yuejin Wang**, Northwest University of A & F Science and Technology, Yangling, China  
 4:00 pm Developments and Challenges in Agricultural Mechanization in Northeast China, **Hong Xiao**, Heilongjiang Association of Agricultural Mechanization and Engineering  
 4:15 pm Research in Agricultural Resources in China and Collaborative Opportunities for Overseas Chinese Scientists and Engineers, **Yonghui Yang**, CAS Center for Agricultural Resources Research  
 4:30 pm AOC-China Collaborations, **Zhongli Pan**, USDA-ARS WRRC, Albany, CA

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## Connection, Communication and Contribution -The SAC Yearly Summary By *Changying Li*



*Changying Li*

From 2005-2006, the SAC has experienced a special and productive year. As a unique and important committee in AOC, the SAC plays an important role in building a community of our young Chinese engineers working in ABE field, promoting

networking and communication, and better serving for our professional and career development.

According to our survey last year, there are more than one hundred Chinese students studying in Agricultural and Biological Engineering in the US and Canada. We strongly believe that there is a need to connect all these colleagues together and build up a community of our own.

During the past year, our SAC Board members (Xianglian Li, Chunxia Wu, Min Min, Jian Shi, Haitao Xiang) made extraordinary efforts towards this goal and this SAC is also one of the most industrious committees in history: we had Board meeting every month in the past year. We are happy to see that things are little different from what we saw last year. In summary, we have accomplished

the following goals in the past year.

1. AOC student annual membership fee was waived. Thanks to AOC Executive Board's support, our suggestion was adopted and the AOC student member only needs to pay membership fee once when he/she joins the AOC. By taking this measure, we believe, AOC will attract more young colleagues to come and join, and each member will benefit more from this community.
2. A new SAC website was developed. I think overhauling the SAC website is not only a face lift job; it promotes our communication as well. According to our statistics, more than 1000 colleagues have visited our website since it was rebuilt last Fall. We posted our SAC open letter, Board members' contact information, student activities, and job information on our website, by which an interested student can get access around the globe.
3. An information exchange platform-Email-list was developed. In order to accomplish our goal of promoting communication and

connection, we have developed an email-list which is used as a platform for news distribution and information exchange. By registering as a student member, AOC members can post message on it. You can ask professional questions, post your resume for job searching, and share information such as hotel room sharing during conference...

4. Bimonthly student newsletter—E-news was formed and published. E-news has been published for 4 series, thanks to efforts from Jian, Changying, Haitao and Min. E-news keeps us informed with things happening in our community. By doing this, a sense of belonging is formed.
5. Opened AOC door to youth in China. One of the boldest reforms in this SAC might be the act to open AOC door to students in Chinese Universities, which has never been done or

even thought about. Our reform was backed by AOC Board Members and currently more than 30 students from China have joined us. This move is a concrete example of promoting exchange between China and the US.

6. Planning for an annual student gathering at Portland is underway. In this meeting, we are going to provide a venue for student members networking, and invite accomplished professors as well as new faculty members talking their stories and sharing their experiences.

Yes, by working together, we did make a difference. I believe the SAC will continuously develop connections between members, build communication platform and make contribution to our community in the years to come.

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## SAC E-news Digest

### 1. AOC STUDENTS GATHERING THIS SUMMER AT PORTLAND

The AOC students gathering dinner will be held on July 10, Monday evening at 6 pm. Thanks for Dr. Qingyue Lin's help that the restaurant has been reserved at Narderin House at downtown Portland. Several speakers from academic and industry areas will give wonderful speeches about the questions which are mostly concerned by students and young faculty members. The topics will include:

- How to get a job in industry
- How to apply assistant professor position
- How to apply funding
- How to get tenure.

Expect for the delicious food, the dinner gathering will provide an excellent environment for exchanging experiences in studying and living in North America. Students, faculties and friends are all welcome to join this dinner. For more information, please find the invitation poster at [http://aoc-web.org/student/doc/dinner\\_flyer.pdf](http://aoc-web.org/student/doc/dinner_flyer.pdf).

### 2. WELCOME NEW MEMBERS!

The SAC had very good progress on member recruitment in China. Especially Li, Xianglian and Shi, Jian took a lot of effort on organizing new student memberships. So far we have more than thirty new members from different universities at China. For recognizing their participations, the student member roster was listed below.

**Name**                      **Affiliation/Address**

- Bian, Liming: Nanjing Forestry University
- Cao, Dong: Northwest A & F University (Yangling)
- Chai, Lilong: China Agricultural University
- Chen, Jing: Northwest A & F University (Yangling)
- Derek, Shute: South China University of Technology
- Dong, Xunjiang: China Agricultural University
- Du, Shuwen: Henan University of Technology
- Guo, Rui: Northwest A & F University (Yangling)
- Huang, Chao: China Agricultural University
- Huang, Xingpeng: Northwest A & F University (Yangling)
- Kang, Lijun: Northwest A & F University (Yangling)
- Li, Wei: Northwest A & F University (Yangling)
- Lin, Tonghui: China Agricultural University
- Luo, Cilan: China Agricultural University
- Luo, Xiaolei: China Agricultural University
- Lü, Gang: China Agricultural University
- Ma, Yuhong: Northwest A & F University (Yangling)
- Mo, Junyi: China Agricultural University
- Pan, Kaixun: Northwest A & F University (Yangling)
- Song, Lijuan: Northwest A & F University (Yangling)
- Song, Zhenyong: Northwest A & F University (Yangling)
- Sun, Qiaonan: Northwest A & F University (Yangling)
- Wang, Lan: China Agricultural University

Wei, Xiaoming: China Agricultural University  
 Yang, Jiajia: China Agricultural University  
 Yi, Na: China Agricultural University  
 Yin, Guoqing: Northwest A & F University  
 (Yangling)  
 Zhang, Dong: Northwest A & F University  
 (Yangling)  
 Zhang, Huichun: NanJing Forestry University  
 Zhang, Li: Northwest A & F University (Yangling)  
 Liu, Dilin: Justus-Liebig-University Giessen,  
 Germany

**3. SAC IS SEEKING FOR DELEGATES IN NORTH AMERICAN UNIVERSITIES**

In order to recruit more student members, the SAC has proposed to find one student delegate/representative in the related agricultural/biological engineering department in most universities over the north of America since this February. SAC president Mr. Changying Li had sent out some invitations to several universities. Due to receiving few responses, AOC president Dr. Ruihong Zhang would like to help SAC to send email to faculty members in representative universities and let them recommend delegates for SAC. Any student in relevant majors, who is willing

to be a SAC representative at your department, is encouraged to contact SAC president Mr. Changying Li directly at [cul140@psu.edu](mailto:cul140@psu.edu)

**4. CALL FOR E-NEWS CONTRIBUTIONS FROM ALL AOC MEMBERS**

Three issues of E-news have been released up to now, and they had only been sent to AOC student members. AOC president Dr. Ruihong Zhang suggested to also send the E-news to AOC board members and to see the possibility of sending to all regular AOC members. Due to the limited source of the E-news, the editors of E-news will send a remind email to all the AOC members asking for contributions about two-week before the publication.

**5. SAC BOARD MEETING MINUTES AVAILABLE ONLINE**

SAC had four Board meetings on Feb. 23, 2006, March 30, 2006, April 27, 2006 and June 1, 2006. The meeting minutes are now available online: <http://www.aoc-web.org/student/board.htm>

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## Minutes of AOC Board Teleconference

*By Shaojin Wang*



*Shaojin Wang*

**Friday, March 3, 2006**

The AOC Board teleconference was held on Friday, March 3, 2006. AOC President Ruihong Zhang called the meeting to order at 1:00 PM PST (3:00 PM CST).

There were seven members in attendance and they were (alphabetically): Changying Li, Zhongli Pan, Shaojin Wang, Jiannong Xin, Xiusheng Yang, Qiang Zhang and Ruihong Zhang.

President Ruihong Zhang inquired about suggestions and comments on the minutes of January 13, 2006 Board Meeting. There were no additional comments and the minutes were approved and posted on the AOC website.

**-China Exchange Session**

- Xiusheng acknowledged the financial support on the China Exchange Session. He updated the information about the invited speakers: 4–5 speakers from China and 2–3 from the US. Those potential

speakers have been contacted for a few times and will be confirmed. Xiusheng will prepare the invitation letter for the speaker’s visa application from AOC with the help of Ruihong and in the mean time to ask Sharon McKnight (ASABE) to send the invitation letter to those speakers from China.

- Xiusheng will contact the director of meeting from ASABE to clearly determine the deadline for submission of program of China Exchange Session, and the total meeting time allocated for the session, which is on Tuesday afternoon.

- With the suggestion of Zhongli and Ruihong, Xiusheng will ask those Chinese speakers to make donations to AOC, which could be listed as sponsors for the AOC annual meeting, published in the AOC website, and presented with an appreciation plaque. If everything goes well with positive response on fund raising, the detailed work can be transferred to Yanbin for following-up.

**- Annual Meeting and Dinner Planning**

- The Annual AOC meeting announcement has been submitted to ASABE in January and has been



included in the preliminary program of ASABE meeting. After much discussion on the dinner plan based on the information that Joan provided, the board members agreed to use the restaurant, Bridgeport Brewpub. Considering the relatively high cost of meal, we decided to choose Chicken (main course) for all and include dessert, which gives the cost of each meal at \$36.58 (taxes and 18% gratuity included). Because of higher meal cost than originally planned, we decided to charge \$10 per person for students and attendees from China with free meals only provided to invited guests. The Board acknowledged the effort of Joan and others for planning out the dinner event.

- This year, we are planning to give out up to 6 student paper awards. Naiqian, Chair of the Award Committee is planning to send the Call for Papers at the end of March and he is looking for volunteers (5–6) to serve on the judge panel. Please contact Naiqian for details.

**- IMPACT Newsletter**

- Shaojin reported the preparation situation about the next issue of IMPACT newsletter. The articles in most columns are nearly ready to be published on March 25, 2006. He still welcomes the AOC members' contributions to News in brief and other columns.

**- Student Activities**

- Changying opened a discussion about the Student Activity Committee (SAC). The SAC holds a meeting once a month and publishes E-news every two months. In order to recruit more student members, the SAC is trying to find one student delegate/representative in the related agricultural/biological engineering department in most universities of North America. Ruihong suggested to identify an AOC faculty member first and then a recommended candidate for this delegate, which would be desirable.

- There are not many responses from the students in China after sending the information about AOC via email and BBS in the related universities. Next time the SAC will try to send hard copy pamphlets about AOC and membership application form. Zhongli suggested to select 5–10

representative universities for mailing purposes. AOC would cover the mailing cost.

- E-news has published two issues up to now and has been sent only to AOC student members. Ruihong asked to send the E-news also to AOC Board members and to see if we need to send it to regular members. Due to the limited source of the E-news, it is suggested to remind all the AOC members for contribution roughly two weeks before the publication.

- The SAC is planning to have a similar student gathering dinner during the annual ASABE meeting, probably on Monday evening. Two faculty members will be invited to make a presentation and one of them could be from the industry. Most Board members at the meeting agree to support this activity (about \$10 per person and within \$300 in total) but ask to gather more detailed information about the dinner.

**- Fund Raising Activities**

- Since Shufeng and Yanbin were absent, Ruihong will contact them regarding further possible donations before the annual AOC meeting.

**-AOC Technology Database**

- Zhongli solicited the response on announcement of the establishment of AOC member expertise and technology cooperation database and expertise form sent in last December. Since this happened rather long ago, he will send the announcement again to AOC board members and hope to discuss about it and make a decision at the next Board meeting.

The next meeting was consolidated to 1–2 PM PST (3–4 PM CST) Friday, April 28, 2006.

With no other new business, the AOC Board teleconference was adjourned at 2:18 PM PST by President Ruihong Zhang.

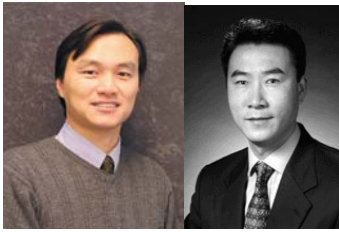
Respectfully Submitted,

Shaojin Wang  
March 6, 2006

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# University Spotlight: Iowa State University

By *Lie Tang and Hongwei Xin*



*Lie Tang      Hongwei Xin*

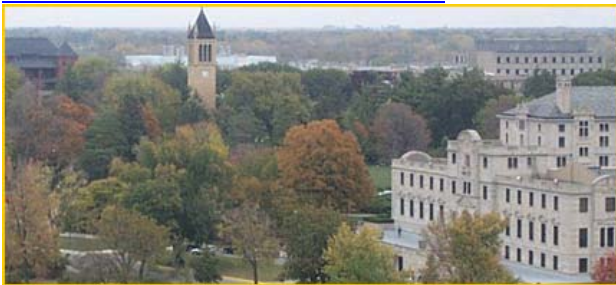
## ISU at a Glance

Iowa State University (ISU) is a public [land-grant](#) and [space-grant](#) university located in [Ames, Iowa](#). Official name:

Iowa State University of Science and Technology (<http://www.iastate.edu/>). It was previously Iowa State College of Agriculture and Mechanic Arts, a school created through the [Morrill Land-Grant Colleges Act](#).

President Abraham Lincoln signed the law that gave birth to the land-grant universities. Iowa State was one of the first of these special colleges founded on three guiding ideas: Open higher education to all, teach practical classes, and share knowledge far beyond the campus borders.

The [Iowa General Assembly](#) in 1858, prior to the passage of the [Morrill Act of 1862](#), enacted legislation to establish an agriculture college and model farm. This college was named the State Agricultural College & Model Farm. The University is one of the 60 elected members of the prestigious [Association of American Universities](#).



The institution was coeducational from its earliest year (1858). The [Iowa Experiment Station](#) was one of its prominent features. Practical courses were taught, including one designed to provide a general training for the career of a farmer. Courses in mechanical, civil, electrical, and mining engineering were delivered.

The domain occupied about 1175 acres, of which 120 acres formed the campus. Today Iowa State's central campus is among three central campuses on a national landscape architects' centennial list of great sites (American Assn. of Landscape Architects, 1999).



*Iowa State's student-built solar car finished third in the stock class of the 2005 North American Solar Challenge, the world's longest solar car race*

ISU is a large, prestigious university with a friendly hometown personality. Its nearly 27,000 students choose from 100+ majors, study with world class scholars and keep more than 500 student organizations going strong. ISU boasts the inventor of the electronic digital computer, top-ranked career services, one of the nation's best tech transfer programs and a gorgeous central campus. U.S. News & World Report ranks ISU among the top 50 public national universities. Half of the ISU freshmen receive an early boost in academic success by participating in its [highly touted learning communities](#). So many students study or work abroad that ISU ranks 18th in the nation in that category.



*Iowa State Cyclones*



*The Alumni Hall*





*The Fountain of Four Seasons*



*The Beardshear Hall*

### **Iowa and Ames**

Great schools, safe communities, plenty of entertainment and friendly people are part of what makes Iowa the sixth most-liveable state in the United States. Iowa also ranks 8th in the safest neighborhoods and enjoys the third highest high school graduation rate in the country (Morgan Quitno, 2005). Iowans pay the nation's 6th lowest housing costs (U.S. Census Bureau, 2002).

Ames (<http://www.visitames.com/>), home of Iowa State University, ranks among the top small American cities, both to live and work. Ames

(population: 50,000) regularly draws performers like Kenny Chesney, Widespread Panic and Incubus, Elton John, along with Broadway musicals and international symphonies. It's approximately 30 minutes from Des Moines and half day's drive or less from Kansas City, Omaha and Chicago. Beneath the small town charm of Ames, Iowa, beats the heart of a much larger city: a city that has become a player in developing the world's bio-economic future; a city with top-quality education, from kindergarten to grad school. Ames Community Schools typically produce the state's most National Merit Scholars; a city with hundreds of acres of parks, numerous bike paths, and cultural festivals and celebrations; and a city that's been ranked the second most liveable small city in the nation.

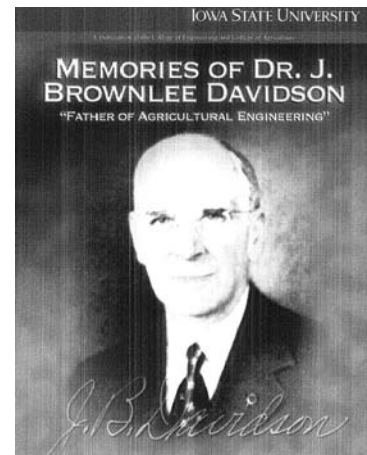


*Small town warmth and big city amenities*

### **Department of Agricultural and Biosystems Engineering (<http://www.abe.iastate.edu/>)**

The first agricultural engineering program in the United States was established at Iowa State College in 1906. In 1936 the agricultural engineering curriculum became one of the first three professional accredited programs in the United States. The M.S. degree in agricultural engineering was first offered in 1918. The Ph.D. degree was established as co-major between agricultural engineering and other departments in 1938. The first Ph.D. in agricultural engineering in the United States was given on this campus in 1938. In 1962, the Ph.D. in agricultural engineering was offered as a single major. During 1973, the agricultural mechanization degree was developed and offered through the college of agriculture.

J. B. Davidson, head of the department from 1905-1946, was also a founding member and the first president of the American Society of Agricultural Engineers (ASAE), now American Society of Agricultural and Biological



Engineers (ASABE). The agricultural engineering building was named Davidson Hall in 1975 and has been designated as a historic landmark by the ASABE.

The department name was changed to Agricultural and Biosystems Engineering (ABE) in February 1991, and the undergraduate major in the College of Agriculture was changed to agricultural systems technology effective with the 1991 fall semester.

The department has been a leader in training agricultural engineers to meet the growing need of industry and academic institutions in the United States and the world. Some of the pioneering members of the Agricultural Engineering discipline in China (e.g., Professors Zhang, Jigao and Cui, Yinan) received their graduate education from this very department in the late 1940s. The department has been a national leader in providing engineering solutions to problems related to the management of natural resources and to the agriculture and food industry. The department's original mission was to mechanize agriculture. Over the years that mission has evolved to encompass a global view of the entire food production system – the wise management of natural resources in the production; management of environmental systems of crop and animal production; processing, storage, handling, and use of food, fiber and other biological materials and products.

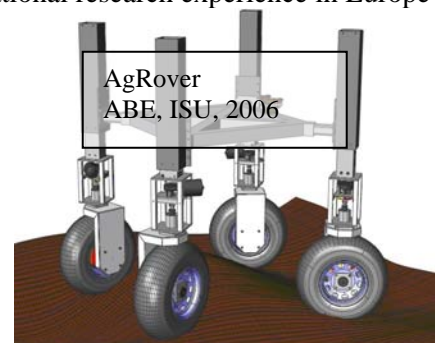
July 1, 2004 marked the beginning of a new era in the history of the department when the Department of Industrial Education and Technology merged with ABE. The department's undergraduate and graduate programs were continually growing over the past several years, with the merger the number of undergraduate and graduate students increased to more than 500 and 80, respectively. Student retention rate in ABE has gone up to 92% from about 67% in 1998. Nearly 100% of the students are able to find high-paying jobs, out of which 67% are currently employed in Iowa alone. The department's current research and extension efforts are moving more toward solving some of state's major problems related to agriculture and developing engineering solutions to manage crop and animal production systems, such as water quality and air quality management, animal environment control, manure storage and handling systems, composting of manure and animal carcasses, bioconversion of agricultural and industrial waste materials, grain quality and food processing, advanced agricultural machine systems and automated controls, smarter machines for precision, agricultural and food safety, and modeling of hydrologic systems. New research efforts are

being directed increasingly toward biosystems engineering through the use of biosensors, image processing techniques for precision chemical application, biological systems modeling, and the design and control of biological systems and processes. With the merger of Industrial Technology program, the department will implement much stronger undergraduate and graduate programs in "agricultural and industrial technology" with options in manufacturing, industrial and occupational safety, and bio-environmental systems. In the fall of 2004, the US News and the World Report ranked the AE undergraduate program third in the nation.



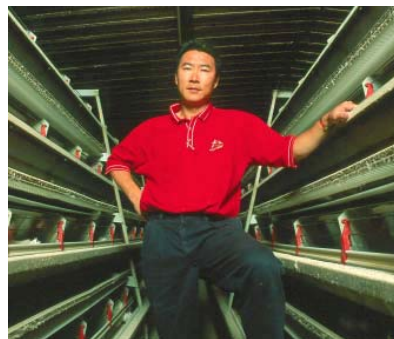
As of this writing, ABE has 30 regular/voting faculty with a nice breadth of diversity. Two of the ABE faculty have the origin of mainland China. Dr. Lie Tan, assistant professor, has been with the department since October 2004; and Dr. Hongwei Xin, professor, has been with the department since December 1993.

Dr. Tang teaches undergraduate courses in power and machinery, computer systems and modeling. He is also teaching automation systems for industrial technology students. He has developed a graduate course in applied computational intelligence for agricultural and biological systems. He is actively engaged in developing an agricultural robotics and automation laboratory to offer students learning and research opportunities in advanced agricultural machinery engineering. Dr. Tang's research has been concerned with agricultural automation, optimization, machine vision, machine intelligence and robotics. He has years of international research experience in Europe and US.






Dr. Xin's research and extension thrusts aim to quantify the impact of biophysical factors on production performance, bioenergetics, behavior, physiology and well-being of livestock and poultry; enhance animal well-being and production efficiency via application of biosensors for improved housing environment control; and improve air quality in livestock and poultry production facilities. His research and extension programs strive to advance the science and technology in the preceding areas through conduct of original and innovative research; and to serve the animal industry and the affected citizens of the state and beyond by timely dissemination of research-based information to the stakeholders.



We welcome and encourage you to visit ISU/Ames and keep it on your top list of places in the United State where you can pursue academic excellence, quality of life or both. You will be delighted and impressed!

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**AOC Student Activities, 2006 ASABE annual meeting in Portland, OR**

## AOC Students Dinner Party

*Free Dinner for all AOC students !*

**When:** 6:00 – 9:00 P.M. July 10<sup>th</sup>, 2006

**Where:** Narderin House  
120 SW 2nd Ave, Portland  
OR 97204, (See backside for direction)

**Events:**

- **Invited Speaking & Discussion**
  - How to apply for industrial and academic positions?
  - How to succeed in academics as a female?
  - And any topics you concerned.
- **AOC Student Activities Committee (SAC) meeting**
- **Onsite new student member recruiting**

*Come and join us !*

**SAC**

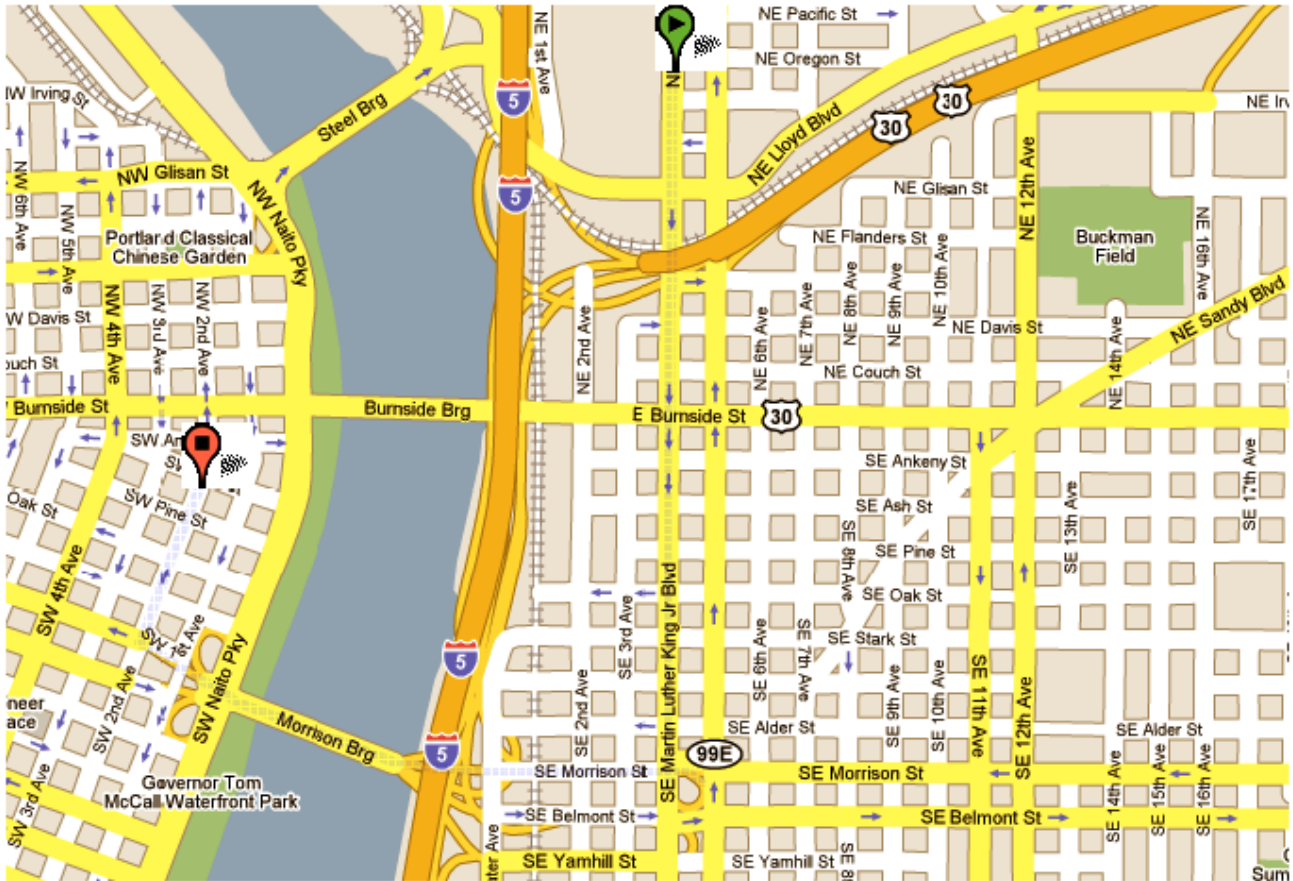
Organized by AOC Student Activity Committee

Not an AOC member? Join AOC at the party! Or contact: Dr. Wang, [dwang@ksu.edu](mailto:dwang@ksu.edu) Web: <http://www.aoc-web.org>



Start address: **777 NE Martin Luther King Jr Blvd**  
 Portland, OR 97232  
 End address: **120 SW 2nd Ave, Portland, OR 97204**

Distance: **1.7 mi (about 4 mins)**



- |  |
|--|
| 1. Head south from NE Martin Luther King Jr Blvd - go 0.4 mi               |
| 2. Continue on SE Martin Luther King Jr Blvd - go 0.4 mi                   |
| 3. Bear left onto the Morrison Br. ramp to Salem/Seattle (I-5) - go 0.4 mi |
| 4. Bear right at Morrison Brg - go 0.2 mi                                  |
| 5. Take the SW 2nd Ave ramp - go 0.1 mi                                    |
| 6. Turn right at SW 2nd Ave - go 0.2 mi                                    |

These directions are for planning purposes only. You may find that construction projects, traffic, or other events may cause road conditions to differ from the map results.

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