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

海外华人农业、生物与食品工程师协会

IMPACT

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HIGHLIGHTS:

- YANGLING CONFERENCES IN NOVEMBER
- INTERVIEW WITH DR. LINGYING ZHAO
- CAREER OPPORTUNITY AT CAU & MSU

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http://www.AOC-web.org http://aoc.cau.edu.cn

IN THIS ISSUE

IMPACT is an electronic newsletter of AOCABFE and is published quarterly to inform members within the association (or, other subscribers applied). We invite you to submit comments, story ideas or news to our editors.

Editor:
Yufeng Ge (ge_yf@hotmail.com)

Associate Editor:
Yeyin Shi (yeyin.shi@okstate.edu)

Message from President

Dear AOC Family and Friends:

At first, I would like to congratulate all of you for the 10th anniversary of AOC. The achievements in the past decade depend on the strong leadership of past presidents and officers of the executive boards and the great support from AOC members and other professionals who always care for AOC. Today, AOC has become a well-recognized professional Association for promoting information exchange and networking among AOC members and worldwide professionals in agricultural, biological, and food engineering area. The 10th anniversary celebration marks the new stage of AOC. I am looking forward to work with all of you for a great future of AOC.

It is my great pleasure and honor to serve AOC as the president for the year of 2011-2012. Meanwhile, I am thrilled and humbles. I am standing on the shoulders of the senior colleagues and besides so many young successful professionals. The only thing I can do is to work hard and do my best to serve the Association and all of you. Your continue support and encourage will be precious treasures for my successful term.

Now, the new Executive Board has been established which include 15 members, 12 from USA and 3 from abroad (http://www.aoc-web.org/board.htm). We will mainly focus on (but not limited) the following tasks:

1. **Update current AOC official website**
   The AOC website was initially developed after the AOC was established in 2001. It was maintained by AOC members for uploading information constantly. With the new development of internet technology, website becomes imperative communication hub. Hence, a well-organized, informative AOC website is critical. A website update committee has been formed including AOC regular members, Drs. Lingying Zhao, Yebo Li, Ning Wang, and a student member, Weilin Wang. The Committee has initiated the planning of website upgrade. The committee is open for suggestions on the AOC new web design.
2. **Promote Chinese collaboration opportunities**

   Yangling International Academy for Modern Agriculture was established on July 9, 2010 in Yangling, Shaanxi. It is a base for AOC members to develop collaboration relationship and potential research projects with Chinese universities, research institutes, government agencies, and industries. We will continue working on smoothing the administration issues with Northwest A&F University and exploring research funding opportunities. Meanwhile, we will continue seeking for collaborations with other universities and research institutes.
3. **Enhance the collaborations with other Associations and Societies**

   We will continuously strengthen and deepen the working relationship with the American Society of Agricultural and

Biological Engineers (ASABE), Chinese Society of Agricultural Engineers (CASE), and the Chinese Society for Agricultural Machineries (CSAM). As always, we will bring large numbers of Chinese Agricultural, Biological, and Food Engineers into ASABE, and to bridge CSAE/CSAM with ASABE for their common interests and needs. We will also be seeking collaborations with other counterparts – CIGR, AAAE, CSBE (Canadian Society of Biological Engineers), etc.

4. **E-journal – International Journal of Agricultural and Biological Engineering**

   In 2008, AOC and the Chinese Society of Agricultural Engineers (CASE) successfully launched a joint English E-journal, the International Journal of Agricultural and Biological Engineering (IJABE). Since then, 12 issues and 110 papers were published. The journal was indexed by several well-known database and catalogues. To expand the impact of the journal and attract more readers, I will work with the editorial board to promote the journal and achieve the qualification of EI/Sci index. I encourage the AOC members to submit papers to IJABE and support our own journal.

5. **Membership Development**

   AOC members are the most valuable assets to the association. Because of their consistent support, AOC becomes strong today. I will work with the membership committee to keep the effort on recruiting both new regular members and student members in North America, China and other counties. The AOC newsletter, IMPACT, has been a great communication channel not only to link the members, but also present AOC to the readers outside AOC. I encourage the members to contribute news items, photos, articles to the newsletter to share the professional activities and life stories.

   AOC student members have been very active on maintaining their website and email list, organizing activities, and providing services to AOC annual meeting and award banquet. I encourage the student activity committee to keep up the good work.

6. **AOC foundation and fund raising**

   In the past years, Prof. Yanbin Li and his committee have been working diligently to develop collaborating relationship with many universities, research institutes, and government agencies in China and US. With their efforts, we were able to financially support AOC activities every year and the AOC 10th anniversary celebration. My sincere gratitude goes to all the donors and
   the members of AOC foundation. I believe with the new leader of Dr. Zhongli Pan, the AOC foundation will continue growing.

There are many more to do. As a new President, I will work closely with the executive board to achieve the goals and promote AOC mission. The success of AOC in the past ten years is because of the passion of all the AOC members. Let's work together to make a great start of the second decade of AOC. Please feel free to contact me at ning.wang@okstate.edu on suggestions and comments.

Best Wishes to all of your for a Wonderful New Year!

Sincerely,

Ning Wang, President, 2011-2012

Highlights

AOC 主席汪宁博士、候任主席盛祝平博士访问中国农业工程学会

http://www.csae.org.cn/news_look.asp?typecode=0602&Id=2023

应中国农业工程学会理事长朱明院长的邀请，海外华人农业、生物与食品工程师协会（AOCABFE）主席、美国俄克拉荷马州立大学副教授汪宁博士，新当选的 AOCABFE 下任主席、德克萨斯农工大学副教授盛祝平博士于 11 月 9 日访问学会。

访问中，朱明理事长介绍了中国农业工程学会(CSAE)刚在重庆西南大学成功召开的 CSAE 2011 学术年会的盛况，及邀请美国农业与生物工程师学会（ASABE）主席 Sonia Jacobsen，执行总监 Darrin Drollinger 参加年会交流并就中美农工学会开展学术交流、建设标准与注册工程师体系引进和科技项目合作等所进行的会谈和取得的成果。朱明理事长希望 AOC 肩负起沟通 ASABE 与 CSAE 之间的桥梁，充分调动 AOC 的专家资源，在开展中美农业科技学术交流与合作方面发挥更大作用，做出更大成绩。

农业部规划设计研究院信息中心副主任、《国际农业与生物工程学报》（IJABE）执行主编王应宽博士简要汇报了国际英文刊 IJABE 近年取得的成绩和面临的困难。大家一致认为，IJABE 近年来发展很快，取得了显著成绩，要以争取被《工程索引》(Ei Compendex)为突破口，争取更好更快的发展。IJABE 是 CSAE 与 AOC 长期合作的重要项目，AOC 的两位主席都表示，将会尽全力支持办好期刊。 王应宽担任 AOC 执委兼中国区负责人，最近又被增补为中国农业工程学会国际交流工作委员会副主任，他表示，将发挥有利条件和自身优势，积极加强与 ASABE，AOC，CSAE 三方的沟通与合作，为办好期刊、开展中美学术交流和科技合作多做工作。

杨凌现代农业国际研究院研究项目策划会议在陕西杨凌举行

YIAMA Research Planning Meeting Held in Yangling, Shaanxi

Chenghai Yang （杨成海）, USDA-ARS

A research planning meeting of Yangling International Academy of Modern Agriculture (YIAMA) was held at Northwest A&F University (NWAFU) in Yangling, Shaanxi on November 7, 2011 during the 18th China Yangling Agricultural Hi-Tech Fair. Nine AOC members, including Drs. Shufeng Han, Yubin Lan, Yanbin Li, Zhuping Sheng, Ning Wang, Shaojin Wang, Chenghai Yang, Xiusheng Yang, and Naiqian Zhang, attended the meeting after they attended Yangling International Agri-Science Forum. Profs. Maohua Wang and Xiwen Luo, academicians of the Chinese Academy of Engineering, were invited to attend the meeting. Prof. Zhong Zhao, Executive Vice President of NWAFU and Director of YIAMA Executive Board, and

Prof. Xi Hou, Vice President of NWAFU, were also present at the meeting. Prof. Changjian

Leng, Director of Scientific Research Division of NWAFU, Prof. Dongjian He, Dean of College of Mechanical and Electronic Engineering at NWAFU and Executive Vice Dean of YIAMA, and Prof. Fuzeng Yang, Vice Dean of College of Mechanical and Electronic Engineering at NWAFU and Vice Dean of YIAMA, as well as many professors and graduate students at NWAFU also attended the meeting.

AOC members attending the YIAMA research planning meeting and Session VI of the Yangling International Agri-Science Forum. From L to R: Ning Wang, Shaojin Wang, Zhuping Sheng, Xiusheng Yang, Chenghai Yang, Yanbin Li, Yubin Lan, Naiqian Zhang, and Shufeng Han.

This meeting was organized by the Academic Committee of YIAMA. The main objectives were to review the progress of the 12 seed projects supported by the YIAMA start fund, to understand regional and national research needs in the field of agricultural, biological and food engineering in Yangling, Shaanxi, and China, and to discuss research plans and collaborations with our counterparts at NWAFU and other institutes in China. The meeting was chaired by Dr. Chenghai Yang (Chair of YIAMA Academic Committee), Prof. Qing Yang and Dr. Yubin Lan (both Vice Chairs of YIAMA Academic Committee). Vice President Zhong Zhao first gave a welcome address. Prof. Xiusheng Yang, Overseas Dean of YIAMA, reported on the progress of the 12 seed projects. Director Changjian Leng gave a presentation on research needs and procedures to apply for provincial, national and international grants. Academicians Maohua Wang and Xiwen Luo provided important information on the national research needs and suggestions for applying for national grants. Vice President Xi Hou also made comments and suggestions regarding the progress and future development of YIAMA.

The second part of the meeting was focused on the discussion of research ideas and plans for the next one to two years. Based on research areas and interests, the participants were divided into four groups: Information, remote sensing and sensor technologies; Modern agricultural equipment; Water resources and ecology; and Food engineering and safety. After the discussion, each group gave a report about their research plans. Many interesting research ideas and topics were proposed from the four groups. The AOC members and their Chinese counterparts will work together to develop new research proposals.

2011 杨凌国际农业科技论坛第六议题“现代农业装备及信息技术”总结

何东健 杨福增

西北农林科技大学机械与电子工程学院

由西北农林科技大学机械与电子工程学院牵头，信息学院、农学院协办的"现代农业装备及信

息技术"专题于11月6日下午、11月7日上午在国际交流中心210会议室进行。

本议题是在美国农业部的兰玉彬教授前期与国家外国专家局领导、西北农林科技大学校领导充分沟通后今年第一次设立的。该议题共邀请到来自美国农业部、美国德州农工大学、美国华盛顿州立大学、美国堪萨斯州立大学、美国俄克拉荷马州立大学、美国康涅狄格大学、日本东京大学等海外嘉宾15人，汪懋华院士、罗锡文院士及中国机械工业总公司副总裁陈志教授、国家农业信息化工程技术中心主任赵春江教授、国务院学科评议组成员丁为民教授、国家农业智能装备工

孙其信校长会见陈志副总裁和兰玉彬教授

程技术中心主任陈立平教授、现代精细农业集成系统集成研究教育部重点实验室主任李民赞教授、《农业工程学报》（EI核心期刊）副主编王应宽博士、陕西省农业机械化管理局负责人等国内嘉宾10人。论坛上，20位海内外专家学者做了精彩的报告发言，来自机电学院、信息学院、农学院200余名师生参加了报告会，并利用会场互动、茶歇间隙积极与专家学者们进行讨论交流。

论坛期间（11月6日），孙其信校长特意会见了前来参加论坛的中国机械工业集团有限公司副总裁、中央研究院院长陈志和美国AOC（海外华人农业、生物和食品工程师协会）前主席，美国

农业部和德州农工大学兰玉彬教授，并介绍了学校和机电学院学科发展情况。陈志副总裁对机电学院与美国德州农工大学联合开发的温室遥控电动拖拉机很感兴趣，希望参与共同开发研制，并已达成初步的合作意向。机电学院院长何东健教授陪同会见。

为了办好此次论坛，学院做了精心的组织安排和积极的准备工作。由院长亲自挂帅，多次组织信息学院、农学院召开专题会议协商论坛准备工作；积极与海内外专家沟通交流，确保信息畅通，保证了文字资料、接送信息的准确无误；精心安排论坛期间的各项工作，保障了各项会议程序的顺利进行。

本次论坛，广大师生零距离聆听了海内外专家的精彩报告、全方位感受了国际论坛的氛围，进一步了解了国内外现代农业装备及信息技术的研究现状、研究热点，交流了思想、锻炼了队伍，同时也就现代农业装备及信息技术等方面的科研合作进行了进一步的沟通，力争在以后的科研方面取得更好的成绩。

Interview

美丽人生 - 访 AOC 副主席赵灵英博士

Yeyin Shi (施叶茵), Oklahoma State University

赵灵英博士现为俄亥俄州立大学(Ohio State University)食品、农业及生物工程系副教授。她1990年硕士毕业于中国农业大学生物环境工程系，2000年获得美国伊利诺伊大学农业工程博士学位，于2001年开始在俄亥俄州立大学任教至今。赵老师的研究集中在空气质量和生物环境的工程监测、控制与模拟。作为PI或者Co-Investigator在过去的几年里，她主持或参加过二十多项联邦和工业界支持的科研与技术推广项目，项目金额大约四百万美元，已发表几十篇的peer-reviewed journal和proceeding论文，是Transactions of the ASABE的副编辑以及数个杂志的审稿人……

带着一丝紧张，我打通了赵灵英老师的采访电话。那头传来的是一个亲切而愉悦的声音，仿佛邻家阿姨，瞬间就卸载了我的顾虑。赵老师是个爱说能说的人，既有着敏捷的思维，又有着理性的思考。在采访过程中，我着重关注了几个广大中国留学生们关注的问题，包括学业事业和家庭生活。就让我们一道来和赵老师分享她美丽人生的秘籍吧！

BE CREATIVE! BE OPEN!

在培养学生的时候，赵老师格外注重挖掘学生的兴趣。她相信一个人的精力是有限的，要想达到事半功倍的效果，就应当将有限的精力投入到自己热爱的方向上去，尽全力去做好。赵老师说，“我们要有积极主动的态度，做事要做精做好”。从另一个方面来说，农业工程系是一个多工程的交叉学科，我们就应当格外强调各个学科间的交叉合作。除了专业课程之外， 还可以多听学术讲座、选修其它方向的课程来扩大自己的知识面。Be creative! Be open! 就像Steven Jobs说的: “求知若渴, 虚怀若愚.”在平时学习中，主动地去查找资料，和导师讨论是十分有必要的。如果今后想在学术界发展，还可以试着去参与proposal的撰写、教学。“Practice is the key! 点点滴滴，习惯就成自然了。” 我们做研究的时候，不但要考虑到技术的可行性，而且要考虑实际应用的可行性，以及经济的可行性。我们的研究和开发分为早期理论基础研究，中期实验室和小规模应用开发, 和终端大规模实际应用三个阶段。虽然我们在博士或者硕士阶段的研究很有可能只是处在早期阶段，但是我们必须要考虑到后面应用的阶段，这样我们的研究才能有实用价值。

平衡而丰富的生活

这是赵老师崇尚的生活。“学习和工作很重要，但我们的生活中不应当只有学习和工作”。学校里有各种社团，还有各种活动，要培养自己的广泛爱好，要让生活亮起来,丰富多彩! 赵老师强调合理的安排和劳逸结合，“事先一定要有清晰可行的目标以及良好的计划，包括daily goal，weekly goal，short-term goal，and long-term goal。争取高效, 定点做事, 到点做完，正向循环；到点没有完成，也要坦然放开，不能因此而影响到下一个目标的实现”。“可如果事情实在太多，就要分轻重缓急, 先做又重要又紧急的事, 然后再做重要但不紧急的事, 不重要的事不管紧急不紧急, 少做为好。”赵老师如是说。

校园情结

从中国农大的学士, 硕士，然后留校，再到UIUC攻读博士，最后到Ohio State University任教，赵灵英老师一直跟校园有着不解的情缘。其实，赵老师也曾在工业界工作过一段时间，开始于她在UIUC博士毕业的前一年。 抱着对工业界工作的好奇以及对中美技术产品交换的兴趣，她开始了一段白天在公司上班，晚上在学校做研究的生活。八点上班，五点下班，七点到实验室“上班”，十二点从实验室“下班”，那不是一段轻松的日子。但是只有尝试了才不会后悔。在工业界工作的日子让赵老师越发地感觉到自己还是更加适合高校的工作，她怀念校园，怀念校园优美的环境，怀念校园里相对自主、公正的氛围，怀念校园里年轻的生命力！于是两年之后，她放弃了工业界相对高薪的工作，回到UIUC做博后。一年之后，赵老师成功地应聘了Ohio State University的教职，从此开始在美丽的Columbus书写精彩。

想对女性同胞们说……

“学术界和工业界的工作没有孰优孰劣，关键看你自己的爱好。”赵灵英老师说，“不过我建议女生们还是首先考虑学校里的工作岗位。”赵老师笑着补充道。“工业界的工作有很多优点，但缺点之一是不太稳定。相比之下，学校里对women faculty更加重视和理解，有专门的培训和帮助。”另外一点赵老师特别想提醒我们女留学生的就是，尽量一口气读完想读的书，因为有了停顿之后，比如说在有了家庭和下一代的负担后，常常需要加倍的精力和时间方能完成同等量的任务。

“女 + 子 = 好”

赵老师有着一个让人羡慕的幸福的家庭：爱人在工业界工作，女儿今年刚刚跨入大学，儿子在上四年级。幸福的家庭需要每个成员的相互爱护和支持。回忆走来的一路，赵老师最感激的是父母家人和身边朋友。赵老师的智慧不单单在学术上，在家庭生活上她也颇有章法。“It takes the community to raise the kids”她引用希拉里的话来表明在生活中我们应当互相帮助，营造和谐互爱的环境，好好利用社区的条件设施。 ☺

赵灵英老师一家人

Research Hotspots

In Agricultural, Biological & Food Engineering

Bioproducts and Bioenergy Research Laboratory at Ohio State University

Mr. Mauricio Espinoza,
Ohio State University

The Bioproducts and Bioenergy Research Laboratory (BBRL) is located on the Ohio Agricultural Research and Development Center (OARDC) campus of the Ohio State University and is under the direction of Dr. Yebo Li. The goal of Dr. Li's research at the BBRL is to develop advanced technologies that utilize renewable sources for the production of bioenergy and bioproducts, which can be commercialized by industry partners. The

current research of the BBRL focuses on two areas: anaerobic digestion and algae.

Anaerobic Digestion

Dr. Li and his collaborators received a $2 million grant from the State of Ohio's Third Frontier Advanced Energy Program to commercialize an integrated anaerobic digestion system dubbed iADs, which can cost-effectively produce clean energy from both solid and liquid organic wastes through anaerobic digestion - a process in which microorganisms break down organic matter in the absence of oxygen and produce biogas. Biogas can be used to generate electricity and thermal heat; it can also be cleaned, separated and dried to produce natural gas, or compressed to fuel automobiles (compressed natural gas, or CNG).

The iADs is an innovative (patent-pending) technology developed by Dr. Li and his collaborators. The system is called "integrated" because it combines a liquid biodigester, which processes wastes such as manure and sewage sludge, and a "dry" biodigester, which processes cellulosic biomass with lower moisture content, such as yard trimmings and crop residues. iADs is able to boost biogas production in the "dry" digester by treating solid waste with a byproduct of the liquid anaerobic digestion process: the effluent - remaining when digestion is complete. This liquid effluent is rich in the type of microorganisms that help break down solid organic matter during biodigestion.

The Third Frontier funds will make it possible for industry partner, quasar energy group, to demonstrate iADs technology at its current Zanesville biogas facility, where it will add a

"dry" biodigester to its liquid digestion system. The integrated system will be able to process over 30,000 tons of biomass annually with more than 750 kW of electrical generation capacity, with approximately 300 kW being generated via the "dry" digester. Anaerobic digestion has been utilized in the United States for years to treat manure and sewage sludge and to produce methane for various energy applications. In fact, quasar is currently operating several plants in the US that utilize municipal and food processing wastes to produce electricity.

Dr. Li began collaborating with quasar after the company established its engineering office on the OARDC campus in 2008. He has helped the company to build its lab on the OARDC campus and provided technical support for the operation of their digesters.

Algae

The BBRL is working with West Virginia-based Touchstone Research Laboratory in the development of a system that integrates innovative technologies for efficiently and profitably growing algae in open ponds for production of fuels and other high-value, bio-based products. Algae, which requires only one-tenth of the land soybeans need to

produce the same amount of oil, has the potential to be a significant source of biofuels and bioproducts. Because algae contain up to 60 percent biomass after the lipids (oil) are extracted, there is also an opportunity to use this biomass residue as a fertilizer or as a feedstock for generating energy through anaerobic digestion.

Funded by nearly $7 million in grants from the U.S. Department of Energy, Touchstone will be testing this innovative system in four algae-producing ponds at Cedar Lane Farms, a greenhouse nursery located about 6 miles from the OARDC campus. The algae system is designed to use the "waste" flue gases discharged by a fluidized bed burner that uses coal to heat the greenhouses and serves two "green" purposes - preventing up to 60 percent flue gas CO_2 from being released into the environment and providing algae with the CO_2 - all plants need to adequately grow.

For this project, the BBRL is focused on the use of nutrient-rich effluent from an anaerobic digester to enhance algae growth. Dr. Li's previous research has shown that the effluent can grow algae much faster than commercial fertilizers. Currently, BBRL researchers are perfecting the nutrient formula which will then be tested in the algae ponds. BBRL researchers are also using anaerobic digestion to assess the energy potential of the algae biomass residue after removal of the oil. In addition, this project incorporates a cost-effective technology developed by Touchstone exclusively for algae systems. A phase-changing material will cover a majority of the pond surface and evaluated for its effectiveness in regulating daily temperature fluctuations, controlling the infiltration of invasive species, and reducing evaporation (a big problem with open-pond algae systems).

When completed, the ponds are expected to have an annual production capacity of about 2,000 gallons of oil, which will be processed into biofuel. Other partners in this unique research and business-incubation venture include engineering firm GZA GeoEnvironmental of Cincinnati, Ohio and SRS Energy of Dexter, Michigan.

Research at the state-of-the-art BBRL is expected to continue to expand as the need to develop renewable resources for bio-based fuels and products grows. Dr. Li's focus on developing cost-effective technologies to address real-world challenges will provide additional opportunities for collaboration with industry.

More information is available at: http://www.oardc.ohio-state.edu/bioenergy/

News

Congratulations to Dr. Naiqian Zhang and Dr. Yuanhui Zhang for Receiving 2011 Class of ASABE Fellows

http://www.asabe.org/awards-landmarks/grade-of-fellow/2011-fellows.aspx

Naiqian Zhang, professor and director of graduate studies, Biological and Agricultural Engineering Department, Kansas State University, Manhattan, Kansas, is being honored for his outstanding and dedicated performance in educating engineering professionals and in developing new sensors and control applications for agricultural and biological systems.

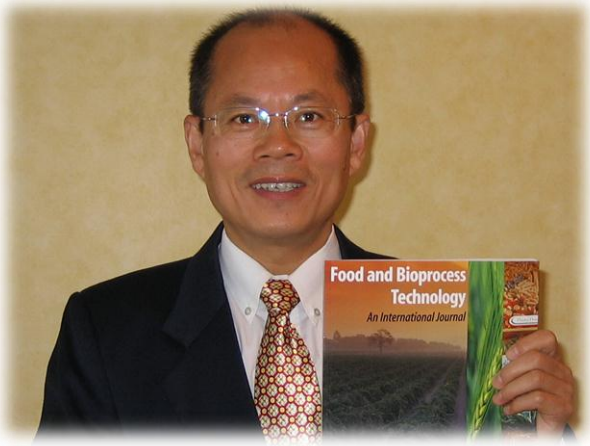
Yuanhui Zhang, P.E., the Innoventor Professor in Engineering, and leader, Bioenvironmental Engineering Section, associate head, Agricultural and Biological Engineering Department, University of Illinois, Urbana, Illinois, for his outstanding contributions as a teacher and researcher in bioenvironmental engineering.

Dr. Naiqian Zhang (back row the third from right) and Dr. Yuanhui Zhang (back row the first from right) receiving the fellowship with other colleges during the ASABE 2011 annual meeting.

《FABT》学术期刊影响因子再创新高

http://www.csae.org.cn/news_look.asp?typecode=0602&Id=1977

据美国汤森路透集团科学情报研究所（Institute for Scientific Information，简称ISI）刚刚发布的2010年世界最权威学术期刊影响因子（Impact Factor，简称IF）的最新排名，由国际著名华人食品科学家、爱尔兰皇家科学院院士、都柏林大学（UCD）终身教授孙大文（Da-Wen Sun）创办和主编的国际学术期刊《Food and Bioprocess Technology，简称FABT》（食品与生物加工技术）获得了3.576的高影响因子，从而



使该期刊在《科学引文索引》（SCI）所收录的126种食品科学与技术的期刊中排名提升至第4位，比2009年排名第19位整整提升了15位，成为国际上该领域最有影响的学术期刊。

SCI数据库是国际上用于基础研究和应用基础研究成果的最具权威性的评价体系，是当代世界上最为重要的大型数据库，被列为国际著名检索系统之首。SCI影响因子是指某期刊刊登的文章在特定年份或时期被引用的频率，是国际上通行的期刊评价指标，也是衡量一个学术期刊影响力的重要指标。

孙大文院士2008年创办《FABT》期刊，该期刊由世界著名的Springer出版社出版发行，创刊一年即被SCI和EI等国际重要数据库收录。《FABT》创刊时为每期100页的季刊，2010年起扩刊改为双月刊，2012年计划改为月刊，每期页数将增至200页。扩刊后，论文刊载量大大增加，以适应期刊快速发展的需要。

在短短三年多的时间内，《FABT》期刊一举跃升为世界上最有影响的学术刊物，这与孙大文院士的学术造诣和国际影响力，以及他严谨的治学风格、睿智的办刊理念和辛勤奉献是分不开的。

"Green Polyurethane Foam" - Commercialization

Mauricio Espinoza

http://extension-cms.cfaes.ohio-state.edu/news-releases/archives/2011/march/oardc-helps-mansfield-company-produce-2018green2019-polyurethane-foam-jobs/

Waste is a terrible thing to waste. That's the mantra guiding an Ohio State University researcher and a bioenergy entrepreneur in the development of a brand-new, renewable source of polyurethane foam that's expected to create up to 30 jobs in Mansfield, Ohio, in the next two years.

The product (known as a bio-polyol) is made from crude glycerin, a byproduct of biodiesel production that has so little commercial value it's practically considered waste. Mixed with other biomass -- through a patent-pending process developed by Yebo Li, a biosystems engineer with the university's Ohio Agricultural Research and Development Center (OARDC) in Wooster -- this crude glycerin becomes the foundation for making polyurethane foam, which is used in a variety of products in the construction, automotive, appliance and other industries.

"Polyurethane foam made with our bio-polyol is renewable, biodegradable and its quality is comparable to petroleum-based foam," said Jeff Schultheis, chief operating officer of Mansfield-based Poly-Green Technologies, LLC, a start-up formed to commercialize Li's invention. "And while other bio-polyols now in the market use virgin oils, such as castor bean or soybean, we use a true waste-stream. This makes our product 5-10 percent cheaper than petroleum-based or natural oil-based foams. So we are competing not just on being 'green,' but also on overall quality and cost."

"Between July and September of this year, we plan to enter the market," Schultheis said.

"We feel we could sell 1 million gallons a year for the first two years, and 5 million gallons per year by the fifth year. Within the next two years we will go from three employees currently to between 20-30 employees, so this will be a very good small business for the Mansfield area that's desperately needing jobs."

AOC Meeting Minutes

Minutes of AOC Executive Board Teleconference

Prepared by Lingying Zhao, Vice President

Present: Yufeng Ge, Yanbo Huang, Xuan Li, Yebo Li, Zhongli Pan, Zhuping Sheng, Ning Wang, Yingkuan Wang, Xiusheng Yang, Lingying Zhao
Regrets received: Yubin Lan and Naiqian Zhang

Friday, Oct 7, 2011, 3:00 to 4:40 p.m. Central Daylight Time.

1. Call the Board meeting to order by AOC President, Dr. Ning Wang at 3:30 PM and then introduced new elected Board Members and appointed officers.

2. Approve new board members and appointed officers (Ning Wang)

Zhuping Sheng moved and Yebo Li seconded the approval of the following new board members and appointed officers:

President: Ning Wang
Past President: Yubin Lan
President elect: Zhuping Sheng
Vice President: Lingying Zhao
Student Advisor: Naiqian Zhang
Treasurer: Yanbo Huang
Director of Foundation: Zhongli Pan
Overseas Dean of Yangling Academy of Modern Agriculture: Xiusheng Yang
Member-at-Large (Impact Editor): Yufeng Ge
Member-at-Large (Membership Development Director): Yebo Li
Member-at-Large (Technology Cooperation Director): Changying Li
Member-at-Large (IJABE Editor-in-Chief, China Regional Coordinator): Yingkuan Wang
Regional Directors:
Xiwen Luo (Director of Asia-Pacific Region)
Jun Zhu (North America)
Dawen Sun (Europe)
Secretary position is open.

3. July 1 teleconference call minutes was approved and published in IMPACT V10N3.

4. IMPACT AOC Newsletter (Yufeng Ge)

Yufeng reported that two issues will be published: One special issue related to AOC 10th anniversary celebration, and the first issue of Volume 11. They are schedule to be published in middle of November. One of Ning Wang's student, Yeyin Shi, is recommended to serve as one of the associate editors. You are encouraged to contribute to both IMPACT issues, please contact Yufeng. Zhongli Pan

suggested that the special IMPACT issue be published early. He also recommended that the Board consider combining the Secretary position with the IMPACT Editor and ask Yufeng to serve both positions.

5. Financial report (Yanbo Huang)

Yanbo reported that Yubin Lan and he met last week. The AOC has about $24,000 balance in the AOC bank account. Only approximately $1000 is left for AOC activity fee, while the rest of funds are dedicated to AOC Foundation. In the next year, the AOC does not have enough money to cover expenses of activities. The AOC will either use the Foundation funds, or need to raise money for activity expenses, which is about $5000-$6000. A detail financial report will be issued later.

6. Website & AOC 10th Anniversary CD (Ning Wang)

Ning Wang summarized current status of the AOC Website and suggested to update both contents and new technology utilization. Zhuping suggested separate regular maintenance and re-design of the whole website. Yingkuan suggested that we first correct contents, for example official Chinese name of AOC and improve readability. He also suggested that we link AOC website with other related Chinese Universities. Paul Chen, MN, has a very good experience in website design. Xiusheng suggested form a sub-committee to prepare a plan of work and present it to the AOC Board for review and approval. Yebo, Lingying and Ning will form the Committee to review the website and identify needs for changes/improvement.

It was suggested that AOC 10th Anniversary CD will be used for fund raising, which will help promote AOC and support AOC further development as well. The CD will be given as a gift. Donation is voluntary. A certificate of donation will be issued to donors. Donors' name will be published in IMPACT per their preference.

Xiusheng moved the motion "distributing the AOC 10th anniversary CDs during the CSAE meeting for donation to support development of AOC" and Lingying Zhao seconded the motion. Motion is approved anonymously. It is better to have an AOC member attending the CSAE meeting to host the booth for distributing CDs.

7. Membership development (Yebo Li and Lingying Zhao)

Improvement of membership development will be conducted in conjunction with AOC website updates. Yebo Li, Lingying Zhao, and Ning Wang will meet separately next month to discuss specific action plans.

8. Fund raising plan (Zhongli Pan)

The foundation aims to support activities organized by AOC and sustain long-term healthy operation of AOC. Currently there are no guidelines for how the funds should be used. The Foundation funds can be used for AOC regular activities, the foundation committee members agreed and recommended that Foundation funds should be separated from the funds for regular activities. He suggested to include current & President-elect in the Foundation Committee. Yanbo will prepare a report on the income and expenditure of the AOC activities in the past three years, which will help us to understand how to operate AOC and how to make a policy on use of the Foundation funds. Pan will attend ASABE foundation meeting and hope to learn more about operation of Foundation and

guidelines for fund raising and utilization. He encouraged that the Board members continue to seek additional donations for foundation. The Committee will draft guidelines/rules for use & investment of the Foundations' funds and present to the Board for review.

9. SAC activities in 2011-2012 (Xuan Li)

The SAC had a meeting last week. Two At-Large-Members are added to the existing SAC board. SAC is to assist AOC and organize student banquette during the ASABE annual meeting.

SAC will update the website contents to reflect activities in 2010 and 2011 including student awards, photos, meeting minutes, and historical documents. Student new mailing list is being updated. SAC has decided to explore other internet platform such as Facebook, and LinkedIn for enhancement of network. NingWang suggested select one student to work with Yebo, Ning and Lingying on AOC website. Email student member list to Zhuping (received, see attachment).

10. IJABE (Yingkuan Wang)

Three issues, 10 articles per issue have been published. About the third issue, web publishing is done and paper copies have not been finished. The Website has been moved to the US and becomes more effective, better design and faster server. Publishing of IJABE is on schedule. We have one more issue to publish this year with enough articles received already. Currently, we are running on pre-donation, some publication fees, and funds generated from organizing conferences (4 conferences last year, and three this year: one to France for CIGR section 6th meeting, one to ASABE 2011 meeting, and the 3rd one to Australia to attend Australia ASABE).

A Symposium on New Technologies at Agricultural Engineering was held in Shangdong in this May. We invited several AOC experts and had a successful turn out. Collaboration efforts will be enhanced. We invited Australia SABE Chair to visit China to enhance the collaboration between CSAE and Australia SAE. Ning expressed appreciation for his effort on behalf of AOC Board.

11. Yangling Academy of Modern Agriculture (Xiusheng Yang)

A meeting on work plan of the Academy was held at Louisville, KY during the ASABE meeting. A future work plan was discussed. A project planning meeting is proposed to be held in Yangling on November 7. We need to organize project teams, consisting of at least 3-4 AOC members to target large scale important projects in China.

Current 12 projects with Yangling Academy of Modern Agriculture are running well and have resulted in 8-9 papers and brought in 2-3 new projects funded by Chinese NSF. Resolutions regarding administration of some projects made in March have not fully realized. More coordination between the Northwest Agricultural & Forest University and the Academy is needed to improve performance.

12. Other business

- China Exchange (2012) (Zhuping Sheng)

ASABE meeting proposal is due soon. Zhuping proposed to establish a theme for every year's China Exchange. Session proposal is due Jan. 4th. Please help to come up with speakers. Several topics were raised. The group agreed that to have a theme for the forum is a good idea and the forum will still focus more on China Exchange. The purpose of AOC China Exchange forum is to promote collaboration and scientific exchange. Therefore, presentations will be on big

picture view of topics of interest, instead of technical details.

The theme for next year forum is "Sustainable Agriculture". Zhuping will draft a proposal with some subtopics related to sustainable agriculture and send it to Board members for review. He will also send request and reminder to the Board members for recommendations of speakers. Lan Yubin will organize a remote sensing symposium at the close time period as the ASABE meeting. Other topic may be related to water resources management.

13. The meeting is adjourned at 4:40pm CST.

Attachment: 2011-2012 SAC Board Member List

Xuan Li, Ph.D. student
University of California, Davis
SAC President
Job Role: President leads the SAC board and oversees each board member in carrying out their functions. The President represents the whole SAC and the SAC executive board in communication affairs with AOC board.

Weilin Wang, Ph.D. student
University of George
SAC vice president
Job Role: The Vice President shall assist the President in conducting the affairs of the SAC. Particularly, the Vice President shall assist the President on affairs regarding board meeting organization, membership development and management. The Vice President performs the duties of the President in the President's absence.

Xu Wang, Ph.D. student
Kansas State University
SAC technical director
Job Role: The technology director usually maintains and updates the SAC website, email list and handles other related internet development tasks. The technology director Xu Wang will take charge of the management of email list and SAC webstie.

Yongbo Wan, Ph.D. student
Oklahoma State University
SAC activity director
Job Role: Activity director shall assist the President to arrange the student activities/events in each year's ASABE meeting.

Tianxin Wang, Ph.D. student
Beijing University of Chemical Technology
Exchanging student at the University of California, Davis
SAC academic and careers director
Job Role: The Academic and Career director shall make the newsletter regarding some academic news and job openings, based the requirements of the SAC executive board. Tianxin Wang will participate newsletter editing and find job hunting information from websites, universities and other approaches.

Members -At-Large are open.

Minutes of Student Activity Committee 2011 Meeting

By Xuan Li

Attendees (alphabetically by family name): Xuan Li, Yongbo Wan, Tianxin Wang, Weilin Wang, Xu Wang

Date: Saturday, October 1st, 2011.

Time: 1:00pm-2:00pm (PDT)

Proposed Agenda: 1) Introduced board members; 2) Introduced SAC board structure and appointed positions; 3) Discussed SAC activities in the following year; 4) Next meeting.

1. Introduced board members

In order to know each other well, board members introduced themselves at the beginning of the meeting, including their names, degrees, institutions, study areas, and so on. Xuan Li from University of California, Davis, Weilin Wang from University of Georgia, Tianxin Wang from Beijin University of Chemical Technology, Xu Wang from Kansas State University, and Yongbo Wan from Oklahoma State University will work as SAC board members in the next year. Their information will be updated in SAC website. Members at large are still open for all SAC members.

2. Introduced SAC board structure and appointed positions

There are six positions in the SAC board. Xuan and Weilin were appointed as president and vice president by the previous SAC executive board. They introduced the SAC board structure and duties of each position to new board members. Then, the rest positions were appointed based on the interest of board members. The positions and duties are listed as follows:

The President (Xuan Li): President leads the SAC board and oversees each board member in carrying out their functions. The President represents the whole SAC and the SAC executive board in communication affairs with AOC board.

The Vice President (Weilin Wang): The Vice President shall assist the President in conducting the affairs of the SAC. Particularly, the Vice President shall assist the President on affairs regarding board meeting organization, membership development and management. The Vice President performs the duties of the President in the President's absence.

Technology director (Xu Wang): The Technology director usually maintains and updates the SAC website, email list and handles other related internet development tasks. The technology director Xu Wang will take charge of the management of email list and SAC webstie.

Academic and Career director (Tianxin Wang): The Academic and Career director shall make the newsletter regarding some academic news and job openings, based the requirements of the SAC executive board. Tianxin Wang will participate newsletter editing and find job hunting information from websites, universities and other approaches.

Activity director (Yongbo Wan): Activity director shall assist the President to arrange the student activities/events in each year's

ASABE meeting.

At-large members, Representatives (open): The At-large members and Representatives shall represent SAC student members in their units to serve in the Executive Board, assist the President in conducting the affairs of SAC.

3. SAC activities in the following year

In the following year, SAC board will organize student banquet for the 2012 ASABE meeting; assistant AOC for organizing student activities; maintain and update SAC website information; improve the developed email list as a communication platform for all SAC members, which will be used to collect and deliver academic and job hunting information; explore other online communication platform for all SAC members, such as facebook.

4. SAC Website update:

4.1 General procedures

Each person takes charges of 1-3 webpages for the SAC website refreshment. Update tasks for each section include highlight out-of-date information needs to be updated; collect the lasted information (i.e. pictures, member rosters, etc); prepare a newer manuscript/materials with the collected newest information; Once the tasks are done, each person sends his prepared materials/information to Xuan Li for review. The deadline is due to October 16th; Weilin will work with Xuan and Xu for the technique issues about website update; Xuan will review all materials collect from different board members; Xu will upload all reviewed and finalized information to AOC website.

4.2 Assigned tasks:

Weilin: Welcome to students; and Board member; Xuan: Board meeting minutes; Student roaster; Join us; Tianxin: Success story; student news; RA and Job Info; Xu: award; Yongbo: Photoes （2011 from Weilin's pictures）

4.3 Follow-up work:

Xuan will prepare the first board meeting record and send to all board members to review (future board meeting record will be documented by members turn by turn). Xuan will send a template of member introduction around. Each member sends their member information to Weilin. Weilin will send necessary website update details to Xuan and Xu. Xu or Yongbo will share the AOC 10th anniversary PPT within in board members. Yongbo will contact Weilin for 2011 SAC student banquet pictures and select pictures for 2010 student activities from the AOC 10th anniversary PPT. Weilin will send Xuan the past 2010 meeting record for website update. Xu will collect 2010 and 2011 award information from Dr. Niaqian Zhang or Ganjing. Tianxin will work with Xuan for the improvement of webpage including student news, successful stories and so on. Xuan will send Weilin the newest student roaster.

5. Next Meeting

Next meeting will be hold once all assigned tasks are done. Xuan Li will specify the date and inform all board members.

Career Opportunity

Career Opportunity at China Agricultural University

Two Positions: Assistant/Associate/Full Professor

Location: College of Civil and Water Resources Engineering, China Agricultural University, East Campus (Former Beijing Agricultural Engineering University)

Date Available: January 1, 2012 or until the positions are filled

Nature of work: Two engineering science positions are created in the area of Environment-Enhancing Energy, to convert algae and biowaste (animal, human and bioprocessing) into crude oil and chemicals, capture carbon, recycle nutrients and clean wastewater. This is new research program funded through the National '1000-Talent' program, within China Agricultural University, a '985' research university, with unprecedented opportunities for academic career development. Responsibilities include conducting high quality research in the newly established Thermochemical Conversion Laboratory, teaching at undergraduate and graduate levels, supervising graduate students, writing research proposals, conducting research projects, and publishing research results. Successful candidates are expected to develop a leading research program nationally and internationally.

Qualifications: PhD degree in engineering (such as agricultural, biological and chemical) or chemical science with proven record of high quality research. Strong background in chemistry and chemical engineering is preferred. Experience in thermochemical conversion experience is an asset. According to the professional credentials, each position can be at the rank of Assistant/Associate/full professor.

Salary: Commensurate with qualifications and experience。

Benefits: Standard benefit package for faculty including health, dental, and life insurance, vocation and leaves. Housing assistance may be available according to the CAU policy. A start-up package will be negotiated according to qualification (visit CAU website:
http://zhaopin.cau.edu.cn/resume/index.php/position_info/high_position/3
http://zhaopin.cau.edu.cn/resume/index.php/position_info/high_position/5

Application: To ensure full consideration, applications must be received by December 10, 2011. Candidates should submit a resume (including coursework and experience) and the names and addresses of three references to:

Contact: Dr. Chaoyuan Wang
Telephone: 010 62736904
E-mail: gotowchy@cau.edu.cn

Ph.D. Graduate Research Assistantship in the Department of Crop and Soil Sciences at Michigan State University

Positions: Graduate Research Assistant

Nature of work: A graduate research assistantship (Ph.D. in soil physics) is available to study the fate and transport of environmental contaminants in soil and water systems. We are seeking an outstanding and highly motivated individual interested in interdisciplinary research on the fate and transport of colloid, microorganisms, engineered nanomaterials, emerging contaminants, etc.

Qualifications: Applicants must have earned a BS or MS degree in soil science, hydrology, environmental chemistry, geology, natural resources, environmental engineering, chemical engineering, agricultural engineering, or related disciplines, while a MS degree is preferred. Proven experiences with experimental work and/or mathematical modeling are highly desired. Applicant should have strong work ethic, ability to work independently and collaborate effectively with other team members. The assistantship includes stipend, tuition and fees, and health benefits as per the school policy (http://www.css.msu.edu/Assistantship.cfm).

Application: Qualified students are encouraged to apply by submitting a personal statement indicating your academic, research, and career interests and curriculum vitae prior to a formal application electronically to Dr. Wei Zhang at weizhng@gmail.com. The following materials are expected in a formal application: 1. Personal statement; 2. Curriculum vitae; 3. Academic transcripts; 4. GRE and/or TOFEL scores; 5. Complete contact information for three references.

Post-doctoral Position: Contaminant Transport Processes in the Vadose Zone in the Department of Crop and Soil Sciences at Michigan State University

Positions: Post-doctoral Position

Nature of work: Applications are invited for a 12-month post-doctoral position (with the possibility of extension for the second year) in the Department of Crop and Soil Sciences at Michigan State University. Individual interested in interdisciplinary research on transport processes of water, solutes and/or particles in saturated and unsaturated subsurfaces are encouraged to apply.

Qualifications: Applicants must have a Ph.D degree in soil science, hydrology, geology, natural resources, environmental engineering, chemical engineering, agricultural engineering, or related disciplines. Demonstrated record in research and peer-reviewed publications are desirable. Applicant should have excellent writing and communication skills, strong work ethic, and ability to work independently and collaboratively within a team. The successful candidate will focus on conducting research on the fate and transport of engineered nanomaterials, colloids, microorganisms, and/or emerging contaminants through laboratory experiments and/or mathematical modeling. Strong laboratory or modeling skills are an asset. He/she will participate in experimental work, modeling, and preparing reports, grant proposals, and manuscripts for publications.

Salary will be commensurate with qualifications and experience. Excellent fringe benefit will be provided.

Application: Qualified individual are encouraged to apply by submitting curriculum vitae, statement of research interests, and complete contact information for 3 professional references to Dr. Wei Zhang (weizhng@gmail.com).