

IMPACT

海外华人农业，生物
与食品工程师协会

**Association of
Overseas Chinese
Agricultural, Bio-
logical and Food
Engineers
(AOCABFE or AOC)**

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President's Message

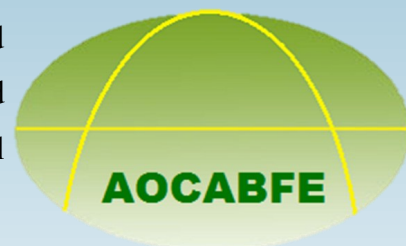
Dear Friends, Colleagues, and AOC members,
As many of you may know, this year is the AOC's 15th anniversary. It is an honor for me to serve as the President of our organization at such a landmark time, as we reflect on and commemorate the AOC's past, as well as build on those achievements for AOC's future. I hope that in the coming year, we will, with our combined efforts, create a more thriving and influ-

ential AOC.

This summer, we held a successful AOC annual business meeting and award banquet in Orlando, Florida during the 2016 Annual International Meeting of ASABE. During the business meeting, we elected four new members at large to the AOC board. I also appointed Dr. Zifei Liu of Kansas State University to serve as Vice President. Aside from his eminent qualifications, he has, throughout the years, made lasting contributions to AOC. At the AOC award banquet, 150 people attended the festivities, and I was thrilled to meet and catch up with old and new members, students, and friends of AOC, as well as to celebrate the past 15 years of our wonderful organization.

Indeed, during the past 15 years, so many people have helped to brilliantly shape and define AOC. We also have obtained pivotal support from organizations such as ASA-BE and research agencies and universities in China. My goal this year is to not simply continue AOC's success but to build on it. I hope to particularly do so by establishing

1. Updating and improving our bylaws. This year, we are going to revisit AOC's bylaws, with the objective of removing ambiguities and revising with more accurate statements. We also will be adding items into the bylaws regarding the President's Nomination and Advisory procedures.
2. Improving AOC's social media and Internet presence. Fifteen years ago, the iPhone hadn't even been released, and Internet speeds were treacherously slow. Today, most, if not all of us, operate primarily via the Internet and our mobile devices. I aim to have AOC get further up to speed on the Internet front. We'll be revamping our website, not only by updating and improving our layout and design but also by increasing functionality. We also plan on expanding and furthering our social media presence through LinkedIn, Facebook, Twitter, and, of course, WeChat. I strongly encourage all members to join our groups on these various platforms, and I hope that these groups will not only keep members updated on AOC's activities but also fuel further collaborations and dialogue between AOC members.
3. Improving AOC programs and promoting membership. We will be heavily evaluating the current AOC programs and improving them. We also will be moving to create an ASABE-level award, and making efforts to increase the size of our individual and institutional membership.
4. Establishing a mentor program on the web and/or mobile platforms for AOC senior members, to help students and young scientists/professors overcome issues and problems in work and social life. One of my great personal joys at the AOC activities was meeting students and younger AOC members, and hearing about their burgeoning careers in our field. They are the future and hope of our community, and as they forge their careers, they will face various challenges, and will need the guidance and assistance of our more senior members. I hope we can initiate this mentorship program this year, and create the foundation for this program to continue under future AOC leadership.
5. I want to thank all the members of AOC again for their enthusiasm and passion for our terrific organization. As your president, I hope that I will meet and hear from many of you throughout this year, and of course, I would love to hear your suggestions and feedback on the leadership and operation of AOC. This organization has had 15 wonderful years—here is to many, many more!



President's interview

E *ditors' words:* Dr. Yanbo Huang started to serve as the President of AOC in July 2016 in Orlando, Florida, during the ASABE Annual Meeting. Dr. Huang is a Research Agricultural Engineer and Lead Scientist of USDA-ARS Crop Production Research Unit at Stoneville, Mississippi. Dr. Huang has received B.S. from University of Science and Technology Beijing in 1983, M.S. from Chinese Academy of Mechanics and Electronics Sciences in Beijing in 1986, and Ph.D. from Texas A&M University in 1995. The editors of IMPACT contacted Dr. Huang for an interview and we hope that overseas Chinese students and young professionals could benefit from this talk and Dr. Huang's experience.

Q1: Thank you for taking the interview, could you please introduce your early education and research in China?

I received B.S. in Industrial Automation from University of Science and Technology Beijing (北京科技大学) in 1983, then continued my M.S. study at Chinese Academy of Mechanics and Electronics Sciences in Beijing from 1983-1986 with the same major. After receiving M.S. degree, I worked as a Software Engineer at Beijing Research Institute of Automation for Mechanics and Electronics Industry for 5 years to develop industrial management information systems. I was one of earliest researchers in that field in China, and I visited many enterprises in Sichuan and Heilongjiang provinces during my tenure. In addition, I collaborated with China Academy of Agricultural Sciences to develop an Expert System based on artificial intelligence for smart control of fertilization, and at the time we were the pioneers in this field as well.

Q2: What brought you to the USA?

I moved to the USA at the end of 1990. I started my Ph.D. study in January 1991 at Texas A&M University and received my Ph.D. in August 1995. My Ph.D. study was "Snack food frying process input-output modeling and control through artificial neural networks", based on which I published two papers in Trans. ASAE in 1997 and 1998, respectively. I continued to work as a Postdoctoral Research Associate at Texas A&M for two years and then was promoted as Associate Research Scientist/Extension Associate. I joined USDA-ARS in 2007 as a general engineer in Area-Wide Pest Management Research Unit in Texas. Later, I moved to Application and Production Technology Research Unit and Crop Production Systems Research Unit in Stoneville, Mississippi, and I started to serve as a Lead Scientist in early 2016.

Q3: Could you tell us somethings about your AOC experience?

I served as Member-at-Large for a couple years and later as AOC Treasurer for three years. I was elected in 2015 as AOC President for 2016-2017 and officially started to serve as President in July 2016.

Q4: What is your plan in 2016-2017 for AOC’s development?

In the past 15 years, AOC has obtained pivotal support from organizations such as ASABE and research agencies and universities in China. My goal this year is to continue AOC’s success and build on it. I hope to particularly do so by establishing new features for AOC’s future development. With this goal in mind, the primary tasks I have prioritized in my agenda are (1) updating and improving our bylaws; (2) improving AOC’s social media and Internet presence; (3) improving AOC programs and promoting membership; and (4) establishing a mentor program on the web and/or mobile platforms for AOC senior members, to help students and young scientists/professors overcome issues and problems in work and social life.



Dr. Huang’s Lab

The 2016-2017 AOC IMPACT Editorial Board Call for News & Activity Reports

The 2016-2017 IMPACT editorial Board invites you earnestly to submit news and activity reports related to ASABE and AOC. Please send your writeup and/ or picture news to the Editorial Board at aoc.impact@gmail.com. The IMPACT Board will work with you to put your news into the publication. It is our publication and it is your publication as well. We sincerely thank each and every AOC members for their support!

征稿启事

2016-2017 IMPACT 编委会真诚邀请您踊跃投稿。任何ASABE和AOC有关的新闻，活动，图片，学术心得分享，招聘信息，生活感悟趣闻等均欢迎。如您有稿件，请寄到邮箱 aoc.impact@gmail.com。我们将与您通力合作，发表您的稿件。这是我们的出版社，也是您的出版物。诚挚感谢您的鼎力支持！

2016-2017 AOC Executive Board



Yanbo Huang, USDA
ARS, President



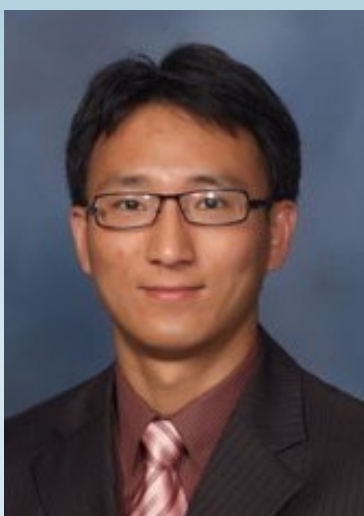
Zifei Liu, Kansas State
University, Vice Presi-
dent



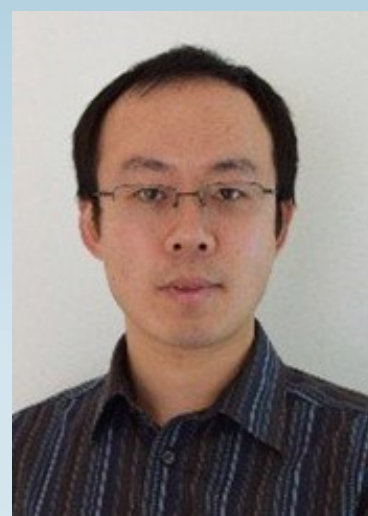
Zhiming Qi, McGill
University, President-
Elect



Lie Tang, Iowa State
University, Past Presi-
dent



Yufeng Ge, University
of Nebraska-Lincoln,
Member at Large/
Treasurer



Jian Jin, Purdue Uni-
versity, Member at
Large



Liangcheng Yang, Illinois State University, Member at Large/ Membership Development



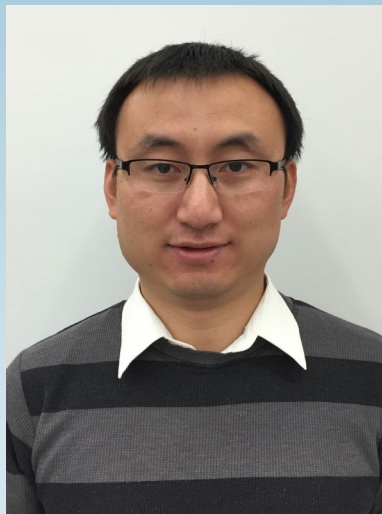
Jian Shi, University of Kentucky, Member at Large/Web Manager



Yongbo Wan, University of Kentucky, Member at Large/Professional Development



Yeyin Shi, Texas A&M University, Member at large/Secretary



Yang Zhao, Mississippi State University, Member at large



Lilong Chai, Iowa State University, Member at large/Newsletter Editor



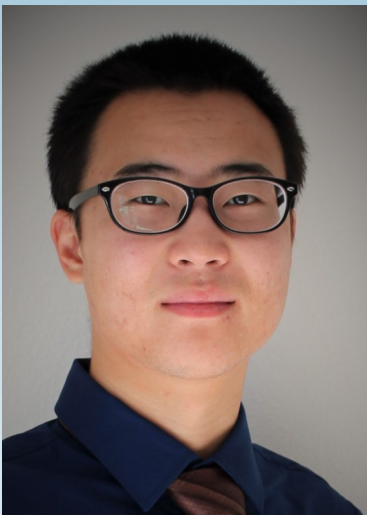
Naiqian Zhang, Kansas State University, Student Advisor



Yingkuan Wang, Chinese Academy of Agricultural Engineering, IJABE Editor-in-Chief



Liping Chen, NERCITA., CHINA, Institutional Membership



Yin Bao, Iowa State University, SAC Chair.



Yue Rong, University of Florida, SAC Vice Chair



Yang Liu, Kansas State University, SAC Vice Chair

2016 AOC Achievement and Service Award



AOC Fellow
*Dr. Naiqian
Zhang, Professor,
Kansas State
University*



***Distinguished
Career Award***
*Dr. Hongwei Xin,
Distinguished Pro-
fessor, Iowa State
University*



***Outstanding
Service Award***
*Dr. Zhuping
Sheng, Professor,
Texas A&M Uni-
versity*



***Early Career
Award***
*Dr. Yufeng Ge, As-
sistant Professor,
University of Ne-
braska-Lincoln*

2016 AOC Student Competition and Award

AOC Student Paper Competition

Ranking	Title of the paper	Awardees
1 st Place	Monitoring moisture content of gas-phase biofilter based on impedance under different conditions	Zhonghua Zheng, Liangcheng Yang, Xinlei Wang
2 nd Place	A portable and automatic biosensing instrument for simultaneous detection of foodborne pathogens using nanobead-based magnetic separation and quantum dot-labeled fluorescent measurement	Zhuo Zhao, Lizhou Xu, Qinqin Hu, Ronghui Wang, Hong Wang, Yanbin Li
3 rd Place	Computer simulation model development and validation of radio frequency heating for bulk chestnuts based on single particle approach	Lixia Hou, Zhi Huang, Xiaoxi Kou, Shaojin Wang
3 rd Place	Spatial and Temporal Variations of Secondary Inorganic PM2.5 in North Carolina	Bin Cheng, Lingjuan Wang-Li
3 rd Place	Infield Biomass Sorghum Yield Component Traits Extraction Pipeline Using Stereo Vision	Yin Bao, Lie Tang, Patrick S. Schnable, Maria G. Salas-Fernandez

AOC Graduates Student Research Presentation Competition

Ranking	Awardees	Affiliation	Advisor
1 st place	Yin Bao	Iowa State University	Dr. Lie Tang
2 nd place	Long Lin	Ohio State University	Dr. Yebo Li

AOC Graduate Scholarly Achievement

Yingqian Lin, Michigan State University

Zhi Huang, Northwest A/F University

AOC Graduate Leadership and Service Award

Kai Liu, SAC Chair, 2015-2016

AOC Outstanding Service

Jian Jin, Editor of the Newsletter IMPACT, 2015-2016

Long Lin, Associate Editor of the Newsletter IMPACT, 2015-2016

Zhenghong Bao, Associate Editor of the Newsletter IMPACT, 2015-2016

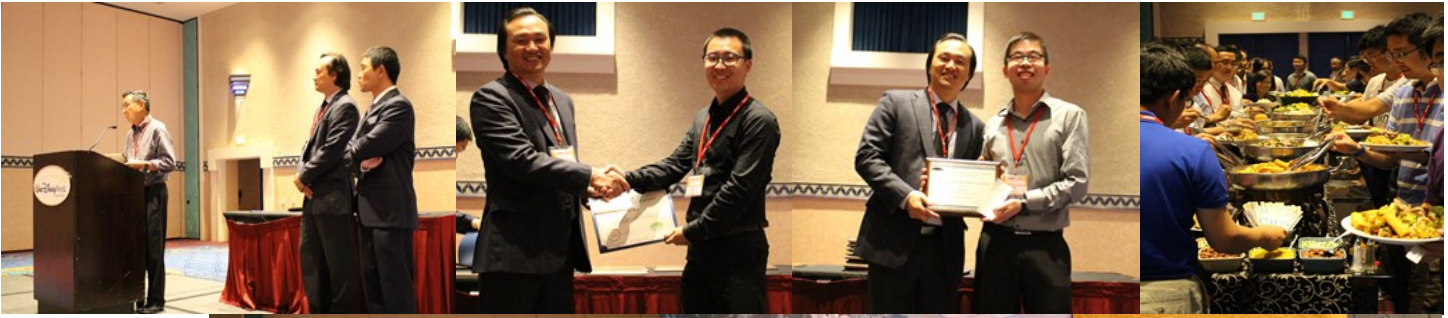
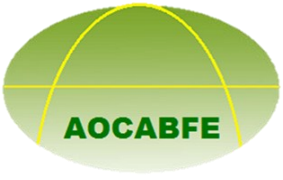


Photo Gallery
**AOC Events during 2016 during
ASABE Annual International
Meeting**
July 26th - Orlando, FL





Dr. Yanbo Huang at 2016 China Exchange Forum



Drs. Naiqian Zhang, Lie Tang and Zhiming Qi (from left to right) at 2016 AOC Award Banquet.

Attendees: Zifei Liu, Yanbo Huang, Lie Tang, Yin Bao, Yang Liu, Jian Shi, and Yeyin Shi.

The meeting started at 3pm CST

AOC board meeting minutes August 19, 2016

1. Yanbo Huang presented the treasurer's report on behalf of Yufeng Ge. The current balance is around \$28900. Yufeng will provide a detailed balance with the deficit of the past few years and the number of people attending the banquets.

2. Yanbo Huang discussed the progress of planning next year's China Exchange Forum on behalf of Zhiming Qi, and would like to receive recommendations of speakers from board members.

3. Lilong Chai provided an outline of the next IMPACT Newsletter. Five associate editors joined the editorial board. The next issue (Volume 15, issue 3) will be published in September.

4. Jian Shi provided the status of AOC web update. Jian will facilitate updating the web contents to reflect the new board and the ASABE meeting activities. Zifei and Yang Liu will help transfer the software and knowledge to Wenqi and Jian. The board also discussed what improvements need to be done on the website. Suggestions include: redesigning the interface (including logo and color theme); adding new functions such as forum and links to LinkedIn, Facebook, and Twitter, etc.; creating webpages for institutional members; documenting 10-year anniversary PowerPoint slides and photos; adding a page on the history of AOC; displaying newsletters in HTML format with downloadable PDF; creating an application for mentor program, etc. Jian and Dr. Huang will list all the redesign ideas and discuss them in follow-up board meetings.

5. Lie Tang updated the institutional membership and suggested to appoint a board member to manage institutional membership activities. We will ask Dr. Changying Li to continue to work on promoting institutional members.

6. Yanbo Huang will provide a list of potential by-law revisions for the board to approve. (For example, write the nomination committee into by-law, include notes from Changying and Zhiming, and include the advisory committee/Changying to follow up.)
 7. Yanbo Huang and Zifei Liu will facilitate the Fellow program and the ASABE level award.
 8. Yin Bao and Yang Liu provided an update on SAC activities: student WeChat group and student membership database.
 9. Yanbo Huang suggested to create a WeChat group for 2016-2017 AOC board and to ask Dr. Naiqian Zhang to create another WeChat group for AOC.
- Meeting adjourned at 4:22pm CST.

2016-2017 AOC SAC First Board Meeting Minutes

Time: September 8, 2016, 7:30 PM - 8:30 PM (CST)

Attendees: Yin Bao, Xinjie Tong, Jie Xu, Zhenghong Bao, Yue Rong, Jiangong Li, Enshi Liu, Yang Liu, Jingyao Gai, Yu Jiang, Rui Xu, Xindi Zhu, Chen Zhang. Notes taken by Jingyao Gai.

Items

1. Yin Bao, SAC chair called the meeting to order at 7:30 PM CST.
2. All SAC board members approved the meeting agenda.
3. 10 new members have joined SAC since the 2016 ASABE AIM. They are Xinjie Tong, Shangpeng Sun, Jie Xu, Mengyun Zhang, Jiangyao Gai, Xindi Zhu, Jiangong Li, Nan Nan, Enshi Liu and Wenqi Li. New AOC SAC members were welcomed. Each attendee gave a self-introduction of his/her name, institution, current year of study, research area, and hobbies.
4. Several positions were added this year. Yin Bao introduced the duties of the positions. By discussion, the positions were assigned as follows:

Secretary: Jingyao Gai

Foundation Director: Jie Xu

Activity Director: Jiangong Li, Rui Xu

Technology Director: Enshi Liu (Facebook),
Wenqi Li (AOC website update)

Career Director: Chen Zhang

Academic Director: Yu Jiang

Director of Membership Development: Xinjie Tong (Email list)



AOC Student Party

5. Members were asked for their information to update the AOC website. The information includes name, program of study (MS/PhD), institution, and photo; members were asked to send these to Yin Bao via email.
6. Yin Bao proposed to create a database for AOC student members. In addition, a web application based on this database would be available for student members to search peers with similar interests. The first task would be collecting basic information from AOC student members. The information includes name, institution, Wechat ID, email, research area and hobbies. Possible methods of information collection were discussed. Yin Bao will assign each SAC board member to contact several AOC student members and update their infor-



智慧畜牧业国际研讨会部分参会者

News of First Asian Conference on Precision Livestock Farming.

2016年9月9日，由“动物环境与福利国际研究中心”（IRCAEW）主办的首届“智慧畜牧业国际研讨会”（First Asian Conference on Precision Livestock Farming, PLF-Asia）在北京举行。本次大会由中国农业大学，中国农业工程学会共同主办。中国农业大学

的李保明教授和美国Iowa State University的辛宏伟教授担任会议的联席主席，来自世界各地60个单位的近200名代表参加大会。此次大会由两个主旨报告，9个大会报告和22个分会场报告以及墙报展示组成。主旨报告分别介绍了我国畜牧业转型升级的背景与其面临的挑战以及转型升级的任务与措施，EU-PLF，Bio-Business等欧盟项目进展情况，并且分析了智慧畜牧业技术的应用前景以及利益。报告重点围绕畜禽健康养殖的音视频技术，个体与群体行为识别，健康检测与早期预警，互联网技术与应用，生物传感器开发等方面进行了系统交流与研讨。智慧养殖技术已在饲养过程与环境调控、疾病监测与预警、动物福利状况客观评价等方面发挥了越来越重要的作用。

本次会议是在亚洲范围内首次举行的PLF国际会议，提出了智慧畜牧业概念，此前欧洲连续举办了7届精准畜牧业研讨会。据悉，第二届智慧畜牧业（亚洲）学术研讨会将于2018年10月17-20在重庆荣昌畜牧科学院召开，欢迎感兴趣的学者关注。

消息来源：

中国农业大学

http://news.cau.edu.cn/art/2016/9/10/art_8769_467551.html

The 25th World's Poultry Congress in Beijing



辛宏伟教授（左）与其他WPC参会者

2016年第25届世界家禽大会9月5日在中国国家会议中心大会堂拉开序幕。世界家禽学会于1912年成立，1921年在荷兰举办了首届世界家禽大会，经过中国畜牧家禽领域的三代科学家的近百年努力，终在2016年由 中国申办方举办成功。2016年世界家禽大会历时3天半，共有来自72个国家和地区的3376位注册代表参会。大会安排了3场全体会议和38场分论坛，邀请了65位世界知名专家学者在集中大会和分论坛上发言，还有255篇口头报告和600多篇墙报。此次会议在参会人数，会议场次，海报数量等多个方面打破历史记录。2016年9月9日上午，世界家禽大会闭幕式在309会议室召开。会议结束后，代表们仍在会议室内沟通交流。

Upcoming Events

ASABE

September 12-14, 2016: Conference of Food Engineering (CoFE) 2016, Columbus, OH

October 11-14, 2016: Improving Irrigation Water Management, Fort Collins, Colorado

October 24-27, 2016: Engineering and Technology Innovation for Global Food Security, Cape Town Stellenbosch, South Africa

December 3-9, 2016: 21st Century Watershed Technology Conference and Workshop, Quito, Ecuador

February 13-15, 2017: 2017 Agricultural Equipment Technology Conference, Louisville, Kentucky

February 21-24, 2017: 45th International Symposium Actual Tasks on Agricultural Engineering, Opatija, Croatia

July 16-19, 2017: 2017 ASABE Annual International Meeting, Spokane, WA.

July 29 – August 1, 2018: 2018 ASABE Annual International Meeting Detroit, MI.

July 29 – August 1, 2018: 2018 ASABE Annual International Meeting Detroit, MI.

Canadian Society of Bioengineering

August 6-10, 2017

2017 CSBE/SCGAB Annual General Meeting and Technical Conference

Joint meeting with CIGR Section VI: Postharvest Technology and Process Engineering

Winnipeg, Manitoba, Canada

US Egg Industry Center

April 19-20, 2017

9th Egg Industry Issues Forum
Columbus, Ohio, USA

CIGR

April 22-26, 2018

The XIX CIGR World Congress 2018
Antalya, Turkey

International Society for Horticultural Science

June 18-22, 2017

XII International Controlled and Modified Atmosphere Research Conference – CaMa
Warsaw, Poland

Interview with Dr. Yeyin Shi



Yeyin Shi is currently working as a research scientist in the Department of Biological and Agricultural Engineering at the Texas A&M University, and will join in the University of Nebraska at Lincoln in January, 2017. Prior to her current work, she worked as a postdoctoral research associate in the University of Florida. She graduated from Oklahoma State University emphasized on the sensing technology for Precision Agriculture, and is currently working on aerial- and ground-based sensing and information systems for high-throughput phenotyping and agronomic research and applications.

Q1: Why did you choose this field?

My undergraduate degree was in Mechanical Engineering at Nanjing Forestry University, where we had some courses about agricultural and forestry engineering in the senior year. When I was applying for the graduate schools in the US, I queried some professors in the department who had scholar visiting experiences overseas. They recommended me to apply for agricultural engineering. Later on I was lucky to be admitted by the graduate program at the Oklahoma State University with financial aids. I ended up having both my Master and PhD degrees in the same lab. Anyway, it might not be obvious but it was natural for me to become an agricultural engineer.

Q2: What is the favorite part of your current job and why?

My current job is assistant research scientist at the Texas A&M University. I guess the favorite part of my job is the interaction with a group of great students, faculty and staff, and working together toward a same goal. Working on a team project with experts in different fields is exciting. It stimulates good ideas and speeds up the progress of research. On one hand, you have your own duty and independence in the overall project; on the other side, the success depends on the success of each member. Whenever any of us makes progress, people cheer for each other which makes us feel rewarded. Moreover, my current work is a mix of working in front of the computer, working in the field and interacting with people. The nature of being an agricultural engineer, especially if you are in the field of machinery and automation, determines that we have to work on the farm. Though it is very hot working in the farm in the summer, it is a good balance of long-time sitting in front of the computer in the office. This is the case for my graduate study and my previous postdoc work in the University of Florida. If you do not like field work, be cautious when you choose your area :).

Q3: What is the biggest challenge you had in your profession?

As stepped out of graduate study not long ago, my biggest challenge so far is perhaps the transition from a student to an independent professional. Though I have only touched the surface of it, I've already started to feel the difficulties. I hope IMPACT can continue its great work and have more interviews with senior faculty members. The challenges I had faced during my graduate studies were similar to everyone's – how to overcome difficulties in the course work and research projects, how to make better presentations, how to write papers, how to find a job, etc. You may think these are too common, but that is the truth. If you are facing these difficulties, do not panic, you are not alone. Keep going and be patient. You will find out the solution. The most important thing is to stay confident and keep optimistic during this process. It's going to be hard anyway, but you'll feel the sense of accomplishments afterwards.

Q4: How do you relieve your work stress?

Like boys play PC games, we girls like to watch TV series and movies. I think it is a way to experience a virtual life, which can temporarily take you away from what you are worrying about. Everyone has his/her own way to feel relaxed. It can just be as simple and effective as having a good sleep or a delicious meal. Find your own way. Also, we want to be left alone sometimes but try not to be always sheltered. International students often do not have families here, so making good friends and having your own network is important. I appreciate that I am lucky to have great family members, friends and advisors along the way.

Q5: Comparing with native student in the US, what are our strength and weakness in profession and academy? How can we improve ourselves?

Chinese students are usually very smart, have good science and engineering knowledge bases, and, most importantly, working hard with perseverance. This is why Chinese students have good impressions for many research groups in the US. But language and sight are probably our weakness. Language is always a problem, and we can only improve it but not completely solve it. On the other hand, we need to realize that lots of people working in US very successfully without having the perfect English. So just keep improving it by listening, speaking and writing. American students have many things that we can learn from. Firstly, they do what they like to do, so they have great passion for what they pursue and enjoy the process. They also tend to be more creative. Chinese students are educated to be target-oriented which is definitely good, but we need to be cautious of not becoming just task-completers. Secondly, I think American students have broad visions and knowledge in both the academia and the industry they are in. This really helps them during the job finding process. As I told myself, try to not only focus on the research projects you are working on, but also have an antenna to be sensitive to things going on outside. Finally, be confident! We may not be the best, but we are

definitely not bad. Everyone has some talent that others do not have. Be proud of what you have accomplished, even if it's just a little!

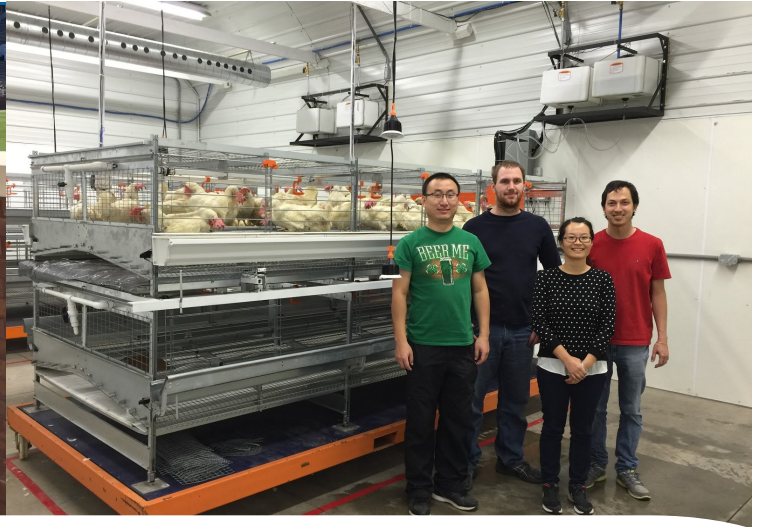
Q6: What is your advice to AOC students for achieving success in their career?

I think it first depends on how you define 'success'. We are educated to believe that going to good schools, having good records and having high degrees are 'successes'. That is not true because we can be successful in many ways. Finding what you like to do and make true contributions to it is considered as a success in my opinion. So if you like inventing things such as developing a sensor system or a way of fermentation, learn more related knowledge and devote your time to become a great engineer. If you like engineering and having your own business, keep track of the latest development of technology, find good partners for collaboration and keep an eye on the potential opportunities. Similarly, if you like research and you decide to become a researcher, go for it, do projects and write papers no matter the difficulties you'll go through. If you like teaching or extension, find opportunities to practice and keep improving with passion, students are going to like you whether you are a native speaker or not. Understand yourself and understand what you like to do and what you are good at. Do not follow or compare with others. Be perseverant yet flexible. I wish you all have a great future.

Graduate studentship at Auburn University

The Agroclimatology Group in the Department of Crop, Soil, and Environmental Sciences and the Climate, Human and Earth System Sciences (CHESS) Cluster at Auburn University is seeking several highly-motivated graduate students (PhD or Master). The successful candidate will have the opportunity to design and conduct agroclimatology research in one or more of the following areas: 1) use of climate forecasts to improve crop, water, and nutrient management; 2) assessing impacts of climate change and variability on agricultural systems, water systems, and food security; 3) improving crop and/or hydrologic forecasting and modeling using climate and remote sensing information. The new student will be expected to conduct research, assist teaching, present research findings in national or international conferences, and publish in peer-reviewed scientific journals. A competitive stipend and tuition waiver will be provided to qualified candidates.

Dr. Di Tian, Department of Crop, Soil and Environmental Sciences, 201 Funchess Hall, Auburn University, AL 36849, USA; Telephone. (334) 844-3819; Email: tiandi@auburn.edu. Webpage: <http://cses.auburn.edu/di-tian/>



Interview with Dr. Yang Zhao

Biosketch of Dr. Yang Zhao

Dr. Yang Zhao received his B.S. and M.S. degrees from China Agricultural University, and a PhD from Wageningen University in the Netherlands. He is currently an Assistant Scientist in the Department of Agricultural and Biosystems Engineering at Iowa State University. He will join Mississippi State University in the beginning of 2017, as an Assistant Professor. Dr. Zhao's research focuses on animal environment management, welfare, and disease transmission in livestock and poultry production. His scholarly accomplishments include author/co-author of 90 published scientific articles; Co-PI of \$1.3 million in contracts and grants; assistance in mentoring 19 undergraduate and graduate students. He serves on various academic committees at national and international levels.

Q1: Could you introduce a little about your educational background and professional experiences?

First of all, thank you and AOC for giving me this

opportunity to showcase myself. I received my B.S. and M.S. degrees in Agricultural Engineering from China Agricultural University, and a PhD from Wageningen University in the Netherlands. After that, I came to Iowa State University and was trained as a postdoc. In January 2017, I will join the faculty at Department of Agricultural and Biological Engineering at Mississippi State University. Everything about my research is to improve the productivity and welfare of livestock poultry by enhancing the environmental conditions through engineering ways.

I serve in several academic committees, including Plant, Animal & Facility Systems in American Society of Agricultural and Biological Engineers and graduate student research committee in Wageningen University. As part of my appointment, I am frequently interacting with livestock and poultry industry to address concerns of animal producers.

Q2: Why did you choose this field?

It attracted my attention just because I would have opportunities to work with animals which I have passions for, that's it. However, as I worked more in this area, I found Agricultural Engineering has such a great impact to make animal lives better, to sustain the entire industry, and to relieve the world of hunger. My Ph.D. supervisor once told me – engineering can solve every problem, except those for God. It used to be overpromising to me, but I'd agree with him now. I am very thankful that the young me made the right choice.

Q3: What is your favorite part of your current job and why?

My current job involves heavy research appointment, light extension and supervision appointments. I like all parts of my current job. The research part helps to address my curiosity of the unknown; the extension part, or interaction with the animal producers, enlightens me with their issues and provides me the opportunity to serve the industry; and the supervision is the way of knowledge passing on. Every time when my manuscripts and proposals get accepted, it makes me feel great. I also love attending professional conferences where I can update myself with the progress in Agricultural Engineering. Of course, my family may enjoy the experience if the conference is in a tourism city.

Q4: What is the biggest challenge you had in your profession?

The challenges we encountered in the past may not be

challenges anymore now, because we have already gained the skills to handle them. So my biggest challenge is to identify the right skills and master them efficiently.

Q5: Comparing with the native students in the US, what are our strength and weakness in profession and academy? How can we improve it?

There are huge variations among individuals. In general, students from China are smart, passionate and committed to study. The personalities of our students are tolerant and less sharp which are very helpful in their profession and academy.

I think language and culture difference are still the major barriers for Chinese students studying in U.S. The situation become much better these years as I see more and more Chinese students excel at English and get acclimated to the new environment without a hitch. But there are still quite a few students struggling with these two barriers. The only solution is to get involved in native communities and practice English with native speakers. Some students may have received less systematic scientific training, as compared to native students, before they study in the U.S. But they can catch up pretty fast through dedicated study.

Q6: What is your advice to AOC students for achieving success in their career?

Work hard on what you like, and success will come and find you.

Graduate Assistant Position in Agricultural and Biological Engineering

Position Summary

The Department of Agricultural and Biological Engineering at Mississippi State University (MSU) is seeking a highly self-motivated graduate student assistant who is interested in precision and intelligent animal production. The individual will be supervised by MSU faculties and specialists in USDA Agricultural Research Service (USDA-ARS). She/he is expected to engage in multiple research projects that address cutting-edge topics related to environment control and welfare in poultry and livestock production through one or more activities listed below:

- improve existing techniques to relieve animal heat stress;
 - engineer novel equipment to improve indoor environment and enhance animal health and production;
 - perform intensive environmental and animal behavioral monitoring, and develop algorithms/method for (big) data analysis;
 - understand antibiotic-free impact on animal health and production;
 - develop intelligent tools for animal husbandry.
- The successful candidate needs to take classes and acquire adequate credits within hiring period.

Qualifications

The candidate should have:

- an earned B.S. or M.S. in Agricultural Engineering or closely related degree;
- enthusiasm to work in livestock and poultry production environment;
- experience with programming software/languages (e.g. LabVIEW, VBA, C#, Matlab etc.) which is highly preferred but not a must;
- ability to formulate and conduct experiments including data collection and analysis;
- credentials sufficient for admission into the MSU graduate school and for qualification of assistantship (GPA \geq 3.0; TOEFL \geq 79 for international students; GRE test scores);
- strong oral and written communication skills.

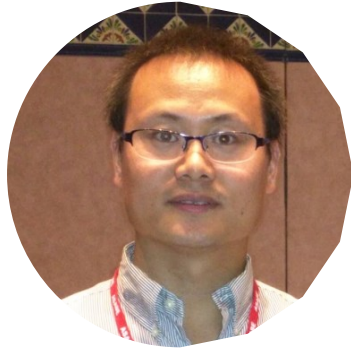
Salary and Benefit

Full research assistantship (RA) will be granted, and is commensurate with education and experience.

Proposed Start Date: Spring (preferred)/summer/fall of 2017.

Guaranteed Consideration Date: 11/15/2016.

Editorial Board Members of IMACT Newsletter



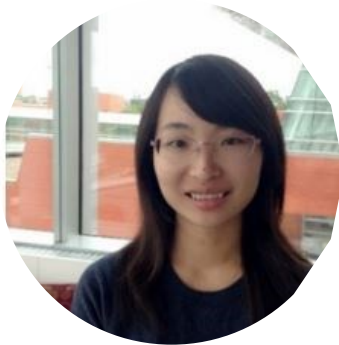
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