

PRESIDENT’S REMARK



Dear AOC Members, colleagues, and friends,

It is my great honor to serve as the President of AOC for the 2017-2018 term. Since becoming a student member in 2007 at the ASABE centennial meeting in Minneapolis, my association with the AOC has proven a pleasant journey with many enriching experiences. Over the intervening ten years, I have served the AOC as SAC Board Member, SAC Chair, IMPACT Newsletter Editor, Vice-President, and President-Elect.

I would like to take this occasion to thank the AOC membership, colleagues and friends for their support and involvement in AOC activities. Moreover, I would like to express my deepest gratitude to the board members for allowing me to serve on the AOC Board in 2017-2018. Without your support and contributions, our goals cannot be attained. I am very appreciative of the past board members and President Yanbo Huang for handing on to us a legacy of success. I would also like to thank all the previous board members and past presidents for their hard work and stewardship of the AOC.

At the July 2017 AOC business meeting in

Spokane, Dr. Jian Shi, Assistant Professor, University of Kentucky, was appointed Vice-President. A senior member of AOC, Jian has managed the AOC website since 2016. Dr. Hong Li, Assistant Professor, University of Delaware won the vote and became the President-Elect. Congratulate Jian and Hong for your new roles on the AOC Board and thank you for your commitment!

While the AOC has sailed calm seas for 16 years, no sharp turn will occur during our one-year term, and all the past glories will be maintained. However, while building the seventeenth story of the AOC tower, our efforts will primarily focus on:

Promoting the collaboration between the ASABE and Chinese professionals in agricultural and biological engineering. Our board members Dr. Yang Zhao (Mississippi State) and Dr. Xiao Wu (University of Idaho) will be working to develop relationships targeted to enhancing this collaboration.

Membership management. To better manage the membership, we will adopt an approach modelled on that of the ASABE. A reminder will be sent to encourage AOC members to officially register their membership and pay a membership fee through the ASABE website.

Remodelling and improving the structure of the China Exchange Forum. The Forum has seen a declining trend in attendance. Accordingly, efforts will be made to increase the event’s popularity.

Sincerely,

Zhiming Qi

AOC President (2017-2018)

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AOC 2017-2018 Executive Board



Zhiming Qi
McGill University,
President



Yanbo Huang
USDA ARS,
Past President



Hong Li
University of Delaware
President-Elect



Jian Shi
University of Kentucky
Vice President
Web Manager



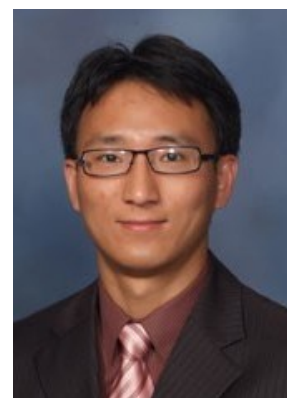
Naiqian Zhang
Kansas State University,
Student Advisor



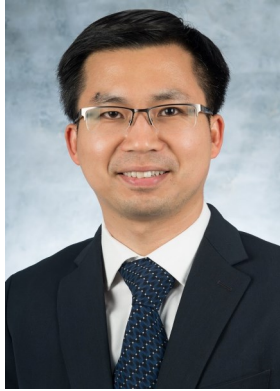
Yingkuan Wang
Chinese Academy of Agricultural Engineering,
IJABE Editor-in-Chief



Liping Chen
NERCITA., CHINA, Institutional Membership



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



Liangcheng Yang

Illinois State University
Member-at-Large
Membership Development



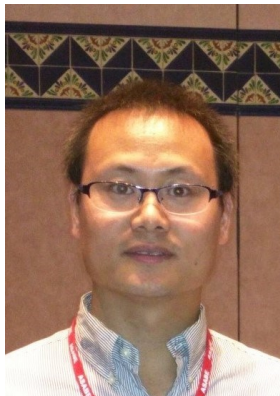
Yeyin Shi

University of Nebraska-
Lincoln, Member-at-large
Secretary



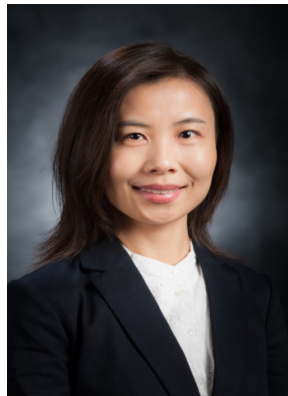
Yang Zhao

Mississippi State University
Member-at-large,
Liaison



Lilong Chai

Iowa State University
Member-at-large
Newsletter Editor



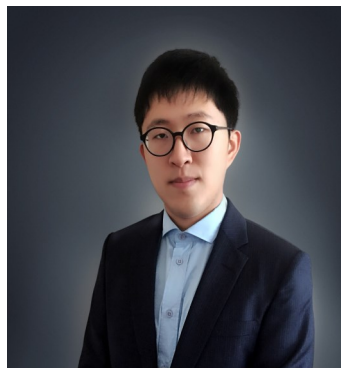
Sarah Wu

University of Idaho
Member-at-large
Liaison



Haibo Huang

Virginia Tech
Member-at-large
Professional Development



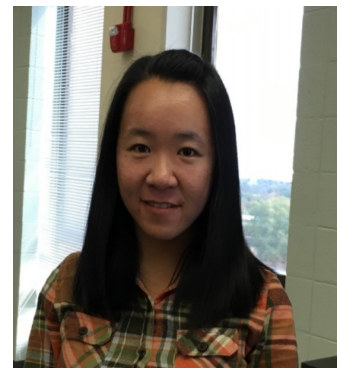
Jiangong Li

University of Illinois at Ur-
bana-Champaign
SAC Chair



Jie Wu

Washington State University
SAC Vice Chair



Mengyun Zhang

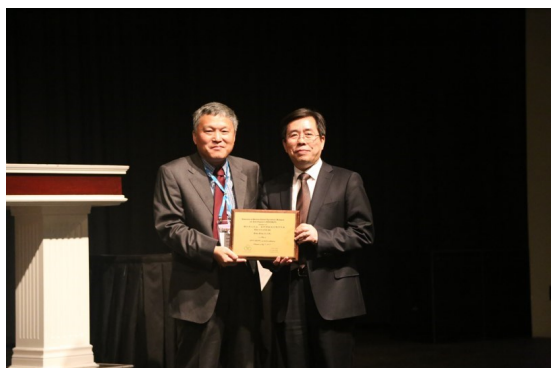
University of Georgia
SAC Vice Chair

AOC Institutional Membership

中国科学院农业水资源重点实验室	Key Laboratory of Agricultural Water Resources, the Chinese Academy of Sciences
浙江大学	Zhejiang University
新疆兵团农业装备产业联盟	Xinjiang Production and Construction Corps
国家精准农业航空中心	International Precision Agricultural Aviation Center South China Agricultural University
浙江理工大学机械与自动控制学院	College of Mechanical Engineering and Automation of Zhejiang Sci-Tech University
西北农林科技大学机械与电子工程学院	College of Mechanical and Electronic Engineering Northwest A&F University
华中农业大学理学院物理系	Department of Physics in College of Science, Huazhong Agricultural University
中国农业大学中欧农业信息技术研究中心	China-EU Agriculture Information Technology Research Center, China Agricultural University
中国农业大学信息与电子工程学院	College of Information and Electrical Engineering, China Agricultural University
沈阳农业大学信息与电子工程学院	College of Information and Electrical Engineering, Shenyang Agricultural University

AOC AWARD BANQUET

AOC Fellow



Dr. Yibin Ying

Distinguished Career Award



Dr. Juming Tang

Outstanding Service for AOC



Dr. Yanbo Huang

Remark from AOC new president

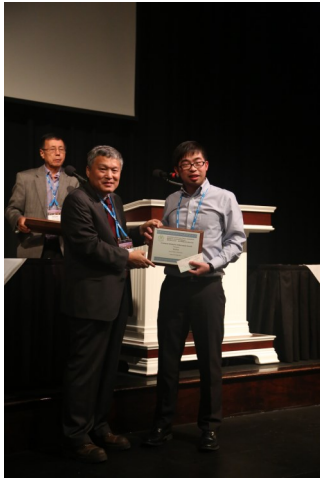
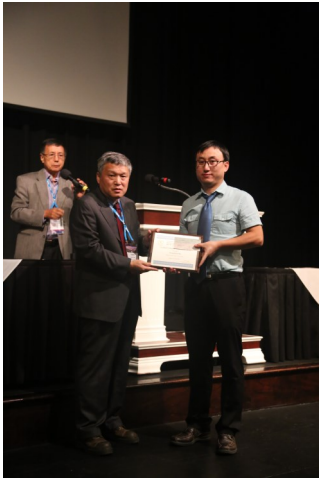


Dr. Zhiming Qi

Outstanding student paper award



Student Competition Award



AOC Award Banquet



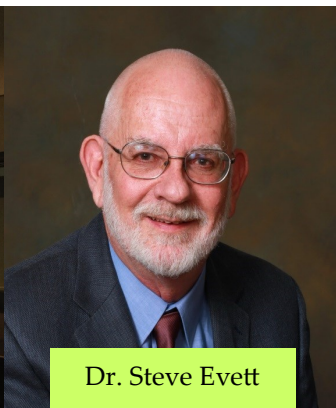
2017 AOC AWARD SUMMARY

AOC Fellow	Dr. Yibin Ying
Distinguished Career Award	Dr. Juming Tang
Graduate Leadership and Service Award	Yin Bao Yang Liu
Graduate Scholarly Achievement Award	Kai Liu Zhenghong Bao Lixia Hou
AOC Student Presentation Competition Award	Yin Bao (1st place) Bin Cheng & Zhi Huang (2nd place [tied]) Kai Liu (4th place) Jianxiang Du(5th place)
Recognition of IMPACT editors	Dr. Lilong Chai (Editor) Yin Bao (Associate editor) Minliang Yang (Associate editor) Shuangye Qiao (Associate editor) Yanxi Lu (Associate editor) Xinjie Tong (Associate editor)
Recognition of retired AOC board members	Dr. Jian Jin Dr. Yongbo Wan
Recognition of retired SAC board members	Yang Liu Yue Rong Zhenghong Bao Chen Zhang Yu Jiang Yin Bao
Recognition of new Institutional Membership	Key Laboratory of Agricultural Water Resource, the Chinese Academy of Science
Recognition of the 2016-2017 AOC president	Dr. Yanbo Huang

China Exchange Forum during 2017 ASABE Meeting



Dr. Vijaya Raghavan



Dr. Steve Evett



Dr. Mary Leigh Wolfe



Dr. Songming Zhu



Dr. Yanjun Shen



Dr. Yingkuan Wang



Dr. Wei Ma

In total, seven guest speakers were invited for presentation this year, including **Dr. Vijaya Raghavan**, President-Elect and Fellow of Academy of Science, Royal Society of Canada, President of Canadian Society of Bioengineering, James McGill Professor of Bioresource Engineering Department of McGill University; **Dr. Steve Evett**, President-elect of American Society of Agronomy, USDA Representative to the USDA-China MOST Water Saving Technologies Flagship Project, Acting Deputy Administrator for Natural Resources and Sustainable Agricultural Systems, USDA ARS; **Dr. Mary Leigh Wolfe**, Past President of the American Society of Agricultural and Biological Engineers, Head and Professor of Biological Systems Engineering Department, Virginia Tech; **Dr. Songming Zhu**, Dean of College of Biosystems Engineering and Food Science, Zhejiang University, China; **Dr. Yanjun Shen**, Assistant Director, Center for Agricultural Resources Research, Chinese Academy of Sciences; **Dr. Yingkuan Wang**, Director of the Information Center, Chinese Academy of Agricultural Engineering and Chief Editor, International Journal of Agricultural and Biological Engineering. **Dr. Wei Ma**, Research Scientist, National Engineering Research Center for Information Technology in Agriculture.

AOC BOARD MEETING

Time: 3:00-4:40 pm, October 20th, 2017.

Attendees: Lilong Chai, Yanbo Huang, Wenqi Li, Jiangong Li, Zifei Liu, Yeyin Shi, Xiao Wu, Liangcheng Yang, Yang Zhao

Scribe: Yeyin Shi

- ◆ Meeting agenda was approved by all attendees. No addition topic added.
- ◆ All attendees approved that the minutes of 2017 AOC Business Meeting will be held and approved in 2018 AOC Business Meeting next year. So, it will not be included in the next newsletter.
- ◆ Yanbo and Zhiming summarized the 2017 AOC business meeting, banquet and China exchange Forum. Highlights were the approval of new by-laws, retirements of three board members, a successful banquet with invited guests; less attendees in the China Exchange Forum. The attendees discussed possibilities to improve the forum attendance, including better advertisement, setting feature topics each year.
- ◆ Wenqi reported recent updates for the website: some updates already made according last meeting; Zhejiang Agricultural University information has been updated; 2017 AOC business meeting and banquet pictures has been updated. Zhiming: board members also need to be updated. Wenqi: needs update information including pictures of new members. Lilong will send Wenqi relevant information later.
- ◆ Liangcheng updated the membership situation. 58 members by May 2017. Problem raised about the membership fee issue. Currently the membership fee is paid at the same time with ASABE membership fee. But people may not know how to pay the annual membership fee.
- ◆ Clarification on board member responsibilities:
 - ◇ Newsletter: Lilong
 - ◇ Institutional membership development: Liping Chen and Yanbo Huang. Zhiming will send an email to Liping to get her consent of continuing serving this position.
 - ◇ Foundation: used to be Yubin Lan; not sure what to do now; difficult job
 - ◇ Professional development: Haibo Huang
 - ◇ Relationship development: Zhao Yang and Xiao Wu; relate to item 7 about the plans for this term
 - ◇ SAC (student activity committee): Jiangong Li.
 - ◇ Jiagong also reported the SAC activities so far, including establishing WeChat account which got lots of interests and reads during the 2017 ASABE conference. He also mentioned the issue that the board members currently are too many (17 members) and need to be reduced. He also wondered the plans for SAC in the next years. Other attendees thought SAC is independent and has the flexibility to conduct activities they are interested in with the support by the AOC board. Attendees agree to discuss about this in the future.

AOC BOARD MEETING

- ◆ Attendees brainstormed about plans for this term. Zhiming was wondering if we can organize or co-organize symposium with members in China. Yanbo agreed and reiterate the idea to help bridging ASABE with universities in China for symposium and other universities. Yang was wondering how we can get funding for that. Yanbo mentioned the possibilities of applying workshop to federal funding agencies.
- ◆ At the last, attendees had a discussion on the new logo issue raised by Zhongli Pan on the 2017 AOC business meeting. The current new logo was open for opinion to the previous AOC board members before being approved by the board; however, it was not open to the whole AOC community. Yanbo carefully checked the old and new AOC by-law but did not find any rule about the approval process for editing logo. The attendees agreed that this can be something to add in the by-law in the future.
- ◆ we did get the opinions from the board members but not the whole AOC community. They also agreed to have a letter to the whole AOC community to inform the change of logo.

Follow-up / action items:

- ◆ Lilong needs information of Hong Li (president elect), Jiangong Li from UIUC to add in the newsletter; also, student activity updates; today' s minutes can be prepared by Yeyin soon and used by the Newsletter.
- ◆ Improve the China Exchange Forum attendance, including better advertisement, setting feature topics each year, etc. (Jian Shi)
- ◆ Lilong will send Wenqi pictures of new members later for he to update the website.
- ◆ Better way to pay membership fee.
- ◆ Plans for this term, such as organize or co-organize symposium in China.
- ◆ Plans for SAC in the next years. SAC is independent and has the flexibility to conduct activities they are interested in with the support by the AOC board.
- ◆ Plans for this term, such as organizing or co-organizing symposium with members in China, help bridging ASABE with universities in China for symposium and other universities. Where to get funding for that? Possibilities of applying workshop to federal funding agencies?
- ◆ Draft a statement and publish to whole community to inform the using of new logo. (Yeyin Shi)

AOC Member News



2017 Chinese Government Friendship Award

Dr. Zhongli Pan

USDA-ARS

Adjunct Professor at UC Davis



2017 Iowa State University International Service Award

Dr. Hongwei Xin

Distinguished Professor at Iowa State University



2017 Rain Bird Engineering Concept of the Year Award- ASABE

Dr. Changying Li

Professor at University of Georgia



Elected as Resident Director of Texas A&M AgriLife Research Center-El Paso

Dr. Zhuping Sheng

Professor at Texas A&M University

Events and News from AOC Members

2017 ISAEW (动物环境与福利养殖国际研讨会)

2017年10月23—26 由动物环境与福利国际研究中心（中国农业大学与Iowa State University联合主席研究机构）、中国农业工程学会主办，重庆市畜牧科学院和农业部设施农业工程重点实验室（中国农业大学）等单位联合承办的第四届暨2017 International Symposium on Animal Environment and Welfare (2017动物环境与福利养殖国际研讨会) 在中国畜牧科技城、国家现代畜牧示范核心区——重庆荣昌隆重启幕。美国Iowa State University 教授 Jim Roth院士，中国农业大学汪懋华院士、李德发院士，科技部计划司原巡视员申茂向，重庆市荣昌区委书记曹清尧，中国畜牧兽医学会副秘书长马闯，农业部人力资源中心谢军处长，重庆市科学技术委员会国际合作处处长周艳，动物环境与福利国际研究中心中方主任、农业部设施农业工程重点实验室主任、中国农业大学李保明教授，动物环境与福利国际研究中心外方主任、美国蛋品工业中心主任、Iowa State University辛宏伟教授，重庆市畜牧科学院院长刘作华研究员，重庆市畜牧科学院党委书记，副院长唐德荣等出席开幕式。来自美国、加拿大、荷兰、比利时、丹麦、奥地利、克罗地亚、巴西、澳大利亚、日本等16个国家和地区，以及国内17余个省市自治区的300余位专家、学者及企业负责人云集开幕式现场，共同见证“2017动物环境与福利养殖国际研讨会”的胜利召开。

开幕式由东北农业大学校长包军教授主持，动物环境与福利化养殖国际研讨会组委会主任、重庆市畜牧科学院院长刘作华研究员致开幕辞，动物环境与福利化养殖国际研究中心主任李保明教授，重庆市科委科技合作处周艳处长，荣昌区委书记曹清尧分别致辞。开幕式结束后，大会进入学术报告交流与专题研讨阶段。中国工程院院士、中国农业大学汪懋华教授，美国医学科学院院士、Iowa State University兽医学院Jim Roth教授，中国工程院院士、中国农业大学李德发教授等12位专家作大会报告。大会分别设“环境监测、评价和控制”，“粪肥管理与利用”，“畜禽行为、福利与健康”，“生物安全和疾病控制/管理”，“生产系统、设备和技术”等49个专题报告。本届大会主题为“动物环境与健康养殖”，与会人员将充分利用这次世界性本领域顶级专家聚会的机会，重点围绕提高动物福利和健康、生产效益和环境管理水平，减少抗生素使用、保障畜产品安全等问题展开研讨、相互学习、共同提高，达到合作共赢。研讨会于26日圆满结束，动物环境与福利国际研究中心外方主任Iowa State University辛宏伟教授主持了闭幕式。



Interview with Dr. Zhiming Qi

Dr. Zhiming Qi is an assistant professor in the Department of Bioresource Engineering at McGill University in Montreal, Canada. He earned his Ph.D. degree in Agricultural Engineering and Environmental Science in 2009 from Iowa State University. Before joining McGill University, he worked as a Postdoctoral Fellow at the Iowa State University, the USDA-ARS Agricultural Systems Research Unit, and at the International Food Policy Research Institute. Dr. Qi has served as the AOC President since July 2017.



Q1: Thank you for taking the interview, could you talk about your early education and research in China and what brought you to the USA?

I got my B.S of Irrigation and Drainage Engineering and M.S. of Soil and Water Engineering in 2000 and 2003 from China Agricultural University, in Beijing, China. In 2004, I moved to the USA to pursue my Ph.D. in Agricultural Engineering (and co-majored in Environmental Science) at Iowa State University (ISU).

Q2: What was your career path in North America?

After receiving my Ph.D. in 2009, I worked as a post-doctoral researcher in the same group for 8 months, then I moved to Fort Collins, Colorado from 2010-2012, as a post-doctoral research associate with USDA-ARS Agricultural Systems Research Unit and the Department of Civil Engineering in Colorado State University. In 2012, I briefly served as Post-doctoral Fellow with the Environment and Production Technology Division of the International Food Policy Research Institute in Washington, DC. Then, in the same year, I accepted an Assistant Professor (tenure-track) position in the Department of Bioresource Engineering at McGill University.

Q3: Could you tell us about your AOC experience?

I joined AOC as a student member as early as 2007, then I served on the AOC board in many roles, including the SAC Chair, IMPACT newsletter editor, and Vice President of 2015-2016. I was elected as AOC Precedent-Elect in 2016 at the business meeting in Orlando, FL.

Q4: Could you give some suggestions on career plan to AOC student members?

Based on my own experience and my observation of other successful students, I would suggest AOC student members to do the following: 1) set a goal and make an executable plan for it; 2) make very efficient use of your time; 3) take the FE and PE exams as soon as possible. A PE license or the possibility to obtain the PE license is required for many jobs; 4) always make publishing papers as your priority. Publication is the most important factor to evaluate students (in particular for graduate students) and your advisor loves papers.



Q5: What's your plan for the development AOC during your term as President?

AOC has made significant achievements under the leadership of past presidents and board members. We will continue traditional AOC programs such as fellow, awards, competitions, student activities, as well as professional development and institutional membership. At our first board meeting, we will brainstorm new activities to better serve the community. My personal perspective of AOC development is to enhance the relationship between ASABE and the professionals in China. AOC can serve as a bridge to connect ASABE and Chinese agricultural and biological engineers through academic activities—for instance, a workshop or symposium jointly endorsed by ASABE and institutions in China.



Dr. Zhiming Qi's group at McGill University

Interview with Dr. Yi Wang

Assistant Professor at Auburn University

Dr. Yi Wang received his B.S. from University of Science and Technology Beijing in 2003, M.S. from University of Science and Technology of China in 2006, and Ph.D. from University of Illinois at Urbana-Champaign in 2012. He is currently an Assistant Professor at the Biosystems Engineering Department of Auburn University, Alabama.

Please find more details about Dr. Wang's research
www.eng.auburn.edu/users/yzwoo66/



Could you please tell us about your educational background and professional experience?

I received my B.S. in Environmental Engineering from the University of Science and Technology Beijing (USTB) in 2003, and then M.S. in Environmental Engineering from the University of Science and Technology of China (USTC) in 2006. In 2012, I obtained my Ph.D in Agricultural and Biological Engineering from University of Illinois at Urbana-Champaign (UIUC). After working as a post-doc Research Associate for two years at the Center for Advanced BioEnergy Research (CABER) at UIUC, I joined the Biosystems Engineering Department at Auburn University in January 2015.

What brought you to your current research field?

I selected an Environmental Engineering major for my undergraduate study because I thought environmental protection and sustainable development are important issues for the society. Later, during my M.S. study, I got into research projects relating to wastewater treatment using biological strategies. After that, I felt that I needed to learn more in order to understand the mechanism of the environmental and biological processes at the molecular level. I continued to pursue my study in the areas of environment, agriculture, and renewable energy during my Ph.D., with more emphasis on molecular biology and metabolic engineering. The 21st century is a century of biology and biotechnology. As a young investigator, I aim to establish a research program focusing on Bioprocess Engineering and Biotechnology for Bioenergy and Environmental sustainability, dedicating to sustainable energy production, water treatment, bioremediation, and environmental sustainability. At the same time, I will use this established research platforms to train the next generation of researchers and professionals, by serving as their valued instructor and advisor.

What is the biggest challenge you have faced in your profession?

The biggest challenge I have faced is to get funding to support research programs. In order to sustain a productive research program, the Principle Investigator (PI) needs to secure enough extramural funding. Unfortunately, this process is not easy, especially for an investigator who is starting in the field.

Another challenge is that, as a young investigator, I need to keep my research priorities current. This means I need to constantly explore new research areas, and apply established techniques or expertise into these new areas. Sometimes I also find it challenging to balance research, teaching, and family life.

Comparing with the American students, what are the strengths and weaknesses of Chinese students in the profession and academia? How can we improve ourselves?

Comparing to the American students, our Chinese fellows have various strengths: Chinese students generally have very strong knowledge background, and are generally hard-working. However, our Chinese students also have obvious weaknesses: We are not good at expressing ourselves or public presentations (could be partially because of the language issue), we do not know how to sell well our research ideas and results, and sometimes we lack the capability to get a big picture about the profession and academia.

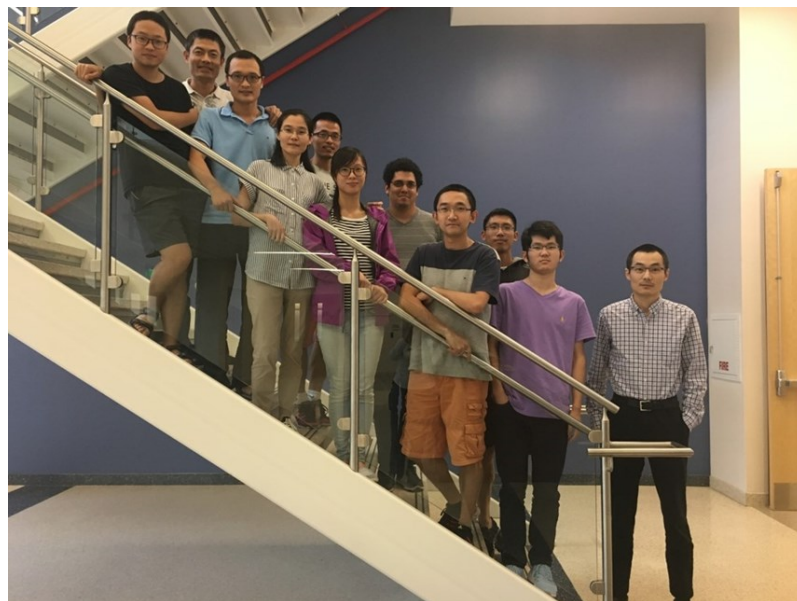
I encourage the students to identify these weaknesses as early as possible (by talking to senior peers, advisors), and thus improve ourselves correspondingly.

What is your advice to oversee Chinese students for achieving success in their career?

First of all, we should keep up the good work, generate products of high quantity and good quality (publications, etc.), and thus build up a strong Vitae. Secondly, we should improve the capability to sell ourselves, by addressing the weaknesses as mentioned above.

Particularly for the individuals who want to go to academia, I would suggest get some teaching experiences during the graduate study. On the other hand, it is also important to obtain some granting writing experiences during the graduate study and Post-doc work. These are both highly appreciated for the academia job positions.

Another important aspect is networking: it is helpful to join the professional societies early, attend scientific conferences, and network with peer researchers in the relevant field.



Dr. Yi Wang's group at Auburn University



Graduate Research Assistant in Bioprocess Engineering (Fall 2018)

Graduate Assistantships (Ph.D.) are available for outstanding candidates who are interested in the following research areas:

- Lignin valorization for fuels, chemicals and advanced materials using ionic liquids;
- Catalysis and biocatalysis for lignocellulosic biomass;
- Fermentation process development and modeling;
- Bioproducts separation and recovery;
- Municipal, food and agricultural waste treatment and conversion.

You will work together with a cluster of university wide researchers to explore lignin based chemicals and advanced materials, advanced-membrane technologies for energy production and water purification, and electrochemical energy storage applications (through recent NSF EPSCoR funding, read more at: <http://kynsfepscor.org/>).

Qualifications: The candidates should have:

- An earned B.S. or M.S. in Chemical Engineering, Biosystems/Agricultural Engineering, Environmental Engineering, Biotechnology, Microbiology, or Chemistry.
- Good knowledge of synthetic and analytical chemistry.
- With credentials sufficient for admission into the UK graduate school (GPA>3.0; TOEFL>93 for international students; GRE Test Scores) – **Applications must be received by March 15th.**
- Ability to formulate and conduct experiments including data collection and analysis.
- Strong oral and written communication skills.

Please send in your CV and 2-page research summary to Dr. Shi (j.shi@uky.edu) if you are interested in applying to this position.

Visiting Scholar/Visiting Student Program in Bioprocess Engineering

We offer opportunities for visiting students/visiting scholars who are interested in one of the following bioprocess engineering area: 1) biomass conversion and fermentation 2) system biology/metabolic engineering 3) bioprocess modeling and life cycle analysis, and 4) synthetic chemistry or biomaterials. Specific research topics may include biomass pretreatment and fractionation using solvent-based catalysis; catalytic or biological valorization of lignin for biofuels and chemicals; products separation and recovery using advanced-membrane technologies; cellulose and lignin based bioproducts and biomaterials.

Welcome to join

**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

<http://www.AOC-web.org>



海外华人农业生物食品工程师协会



该二维码7天内(11月16日前)有效, 重新进入将更新





IMPACT NEWSLETTER EDITORIAL BOARD

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—Iowa State University

ASSOCIATE EDITOR

Yin Bao

—Iowa State University

Minliang Yang

—Iowa State University

Shuangye Qiao

—McGill University

Yanxi Lu

—University of Illinois at Urbana-Champaign

Xinjie Tong

—Ohio State University

The 2017– 2018 AOC IMPACT Editorial Board

Call for News & Activity Reports

The 2017-2018 IMPACT editorial Board invites you earnestly to submit of news and activity reports related to ASABE and AOC. Please send your write-up 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. We sincerely thank each and every AOC members for their support!

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