

IMPACT

President's Message

INSIDE THIS ISSUE:

President's Message	1
AOC Board Member	2
AOC Institutional Membership	4
President-elect Candidate	5
Member-at-large Candidate	6
AOC Meeting Minutes	7
SAC Meeting Minutes	8
AOC Exchange Program	9
AOC Banquet Information	10
AOC Students Gathering Info.	11
Boston Tour Info.	12
News	13
Interview with Dr. Hao Gan	14
Recruitments	16



Dear AOC Members and Friends:

As the calendar turns to July, we are just a few days away from our 2019 Annual Meeting and Award Banquet in Boston on July 8th. AOC activity preparations are underway for you through careful planning and organizing efforts involving many AOC Executive Board members, SAC members, and volunteers. We look forward to seeing many of you in Boston. In this newsletter, you can find more information about those major activities, including China Exchange Forum, AOC Annual Business Meeting, AOC Award Banquet, and AOC Student Dinner Party.

Our annual endowed NERCITA China Exchange Forum is organized by Dr. Yufeng Ge and will be held on Monday, July 8th. Six world renowned experts will share their views of point on Research and Educational Development in China and USA. Our AOC annual business meeting will be held immediately after the China Exchange Forum to provide status and updates for our association, including AOC officer election. You are invited to join our annual award dinner to recognize achievement of our colleagues and our Student Activity Committee Dinner Party to share your stories. We are also making a progress for the 3rd annual African, Chinese, and Indian engagement forum cosponsored by AOC, ANGASABE, AABFEIO, and ASABE on Resource Development for Agricultural and Biological Engineering Challenges in Africa, China, and India on Tuesday, July 9th. Dr. Baoming Li from China Agricultural University will represent China and present in this forum.

This is my final message as AOC President. Thank you for affording me the privilege of serving in this capacity for the past year. We have been successful with our member recruitment and there have been successful activities in student career development. I believe the future of our beloved AOC is dependent upon our ability to attract our students. One of the member recruitment initiatives was led by Dr. Haiyan Cen and SAC to engage more student and faculty members in China who had oversea experiences. We will try our best to maximize their participation and expand AOC influence through them. I also believe we need to start thinking more about our existing and potential institutional and industry members to ensure that they want to be engaged. With more institutional and industry member engagement, students should become engaged because they will covet the opportunity to network with prospective employers. We need to work collectively towards our goal in the days ahead.

I would like to express my deepest appreciation to our AOC members for your continuous support. We sincerely invite you to participate in AOC activities as well as ASABE events. You are welcome to bring your family members and guests to these activities. I look forward to seeing you in Boston!

Sincerely yours,

Hong Li
AOC President (2018-19)



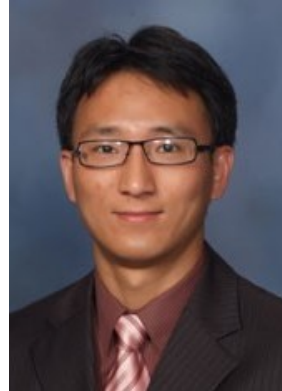
AOC 2018-2019 Executive Board



LI, HONG
University of Delaware,
PRESIDENT



QI, ZHIMING
McGill University,
PAST PRESIDENT



GE, YUFENG
University of Nebraska
PRESIDENT-ELECT



ZHAO, YANG
Mississippi State Univer-
sity,
VICE PRESIDENT



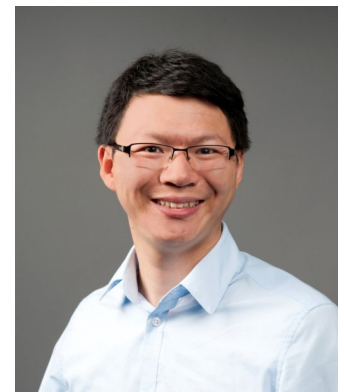
ZHANG, NAIQIAN
Kansas State University,
STUDENT ADVISOR



WANG, YINGKUAN
Chinese Academy of Agri-
cultural Engineering, EXEC-
UTIVE EDITOR OF IJABE



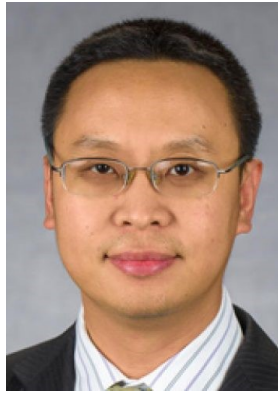
CHEN, LIPING
NERCITA., China,
DIRECTOR OF INSTITUTION-
AL MEMBERSHIP



HUANG, HAIBO
Virginia Tech,
MEMBER-AT-LARGE, PRO-
FESSIONAL DEVELOPMENT



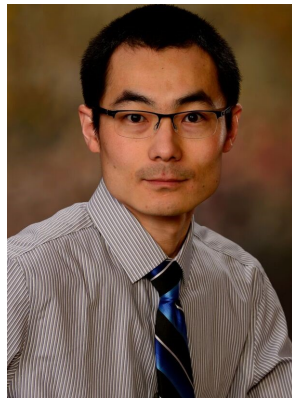
WU, SARAH (XIAO)
University of Idaho
MEMBER-AT-LARGE,
LIAISON



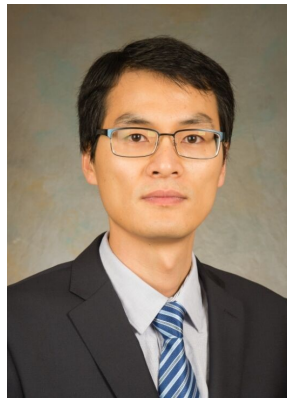
SHI, JIAN
University of Kentucky,
WEB MANAGER



SHI, YEYIN
University of Nebraska-Lincoln,
NEW TREASURER



WANG, YI
Auburn University,
MEMBER-AT-LARGE, NEWS-
LETTER EDITOR



ZHENG, YI
Kansas State University
MEMBER-AT-LARGE,
MEMBERSHIP DEVELOPMENT



CEN, HAIYAN
Zhejiang University
MEMBER-AT-LARGE,
MEMBERSHIP DEVELOPMENT



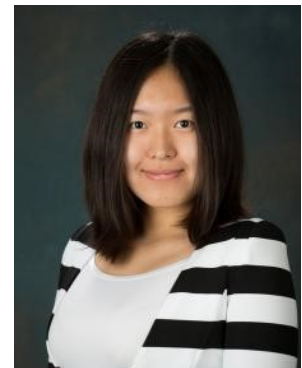
HOU, CONGYU
University of Illinois at Ur-
bana-Champaign
NEW SAC CHAIR



LIU, ENSHI
University of Nebraska-
Lincoln
NEW SAC VICE CHAIR



GAO, ZONGMEI
Washington State Univer-
sity
NEW SAC VICE CHAIR



TONG, XINJIE
Ohio State University
NEW 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
华南农业大学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
南京农业大学工程学院	College of Engineering, Nanjing Agricultural University

President-elect Candidate



Dr. Jian Shi is an Assistant Professor in the Department of Biosystems and Agricultural Engineering at University of Kentucky. He got his MS from China Agricultural University and PhD from North Carolina State University and lately worked at national lab and industry before joining the faculty in 2015. Dr. Shi has a long history serving the AOC community. He participated the student activity committee (SAC) during 2005-2007 and designed the earliest SAC website. He serves as the web manager since 2016 and the Vice President of AOC during 2017-18 term.

If selected as President-Elect, he plans to work on the following aspects:

“Connection” – improve networking between colleagues and institutions in US and China, and beyond; *“Fostering”* – formalize mentor/mentee and advising mechanisms for young AOC members; *“Friendship”* – host events and activities for AOC members via new platforms; and *“Growth”* – reach out to new members and explore new ways of fundraising. He will continue engage in AOC board and contribute to the growth and success of this great association.

Member-at-large Candidate

Dr. Kai Liu has been an Assistant Professor of Jockey Club College of Veterinary Medicine and Life Sciences at City University of Hong Kong since March 2019. His current research focus on the area of precision livestock farming, mostly in intensive poultry and swine production systems. Dr. Liu obtained his PhD degree in Agricultural and Biosystems Engineering from Iowa State University in 2017, and then joined the Swine Teaching and Research Center at the University of Pennsylvania School of Veterinary Medicine as a postdoctoral researcher in 2018. Dr. Liu has been a member of ASABE and AOC since 2013 and has previously served on the AOC executive board for two years (as SAC chair and vice chair). Dr. Liu is named as the 2019 Class “New Faces of ASABE – Professionals” by the American Society of Agricultural and Biological Engineers. As an agricultural and biological engineer working in animal agriculture, Dr. Liu is dedicated to applying engineering strategies and innovation, and to seeking data-driven solutions to address global challenges related to food animal production and sustainability, particularly the ever-growing issues related to animal welfare and behavior. Dr. Liu is very passionate to serve on AOC again as a new faculty member.



AOC Board Meeting Minutes

Time: 8:00pm-10:00 pm, March 8th, 2019.

Attendees: Hong Li, Zhiming Qi, Yang Zhao, Yufeng Ge, Haiyan Cen, Jian Shi, Yeyin Shi, Yi Wang, Yi Zheng, Haibo Huang, Congyu Hou

1. Meeting agenda was approved by all attendees. No addition topic added.
2. All attendees approved that the minutes of AOC board meeting on November 9th, 2018.
3. Yufeng was organizing the NERCITA China-Exchange program this year and looking for a special topic for the forum. The topic of the forum could include research, teaching, education, recruiting, and information exchange among institutions. Haiyan emphasized that there was an urgent need on teaching, instruction, and education. Several potential speaker names from US were suggested: Mr. Maury Salz (ASABE president), Dr. Prasanta Kalita on teaching excellence (UIUC), Dr. Xiuzhi Sun (the inventor of the year from KSU). Haiyan will provide a list of suggested speakers from China. Half of the speakers will be from China and the other half of the speakers will be from US or other countries.
4. Hong provided an update the 3rd annual African, Chinese, and Indian engagement forum at the 2019 ASABE AIM in Boston. The aim of the forum is to share experiences and discover opportunities to foster research collaboration between the three communities. The theme of this year's forum is "Resource development for agricultural and biological engineering challenges in Africa, China, and India." The structure of the forum will consist of presentations by speakers representing Africa, China, and India and a moderated discussion session. AOC will help to identify a speaker to represent China.
5. Jian reported recent updates for the website: AOC will repurchase the old AOC website domain name that will be available soon.
6. Congyu proposed to recruit student members in China and develop a framework for the recruiting process. Wechat public account could be utilized, and AOC liaisons at Chinese institutions also can help to reach out to the students who are interested in joining AOC. The bylaws on member recruiting needs to be revisited to make sure the process is following AOC bylaws. The student member record keeping is also challenging while Wechat became the main way to keep track of the student membership and student email list is not used. SAC will initiate a plan on a standardized recruiting process for student members.
7. Yang reported banquet preparation and potential locations. The restaurant for the banquet should be able to host 150 to 180 guests. Yang will work with Yeyin to finalize the menu and reservation.
8. Yeyin reported the treasurer transition was finished and the new balance of \$19,000, approximately.
9. Haibo reported updates on the professional development seminar series. The second seminar was held and manuscript and grant proposal writing was discussed. There were 11-12 student participants. The topic of the 3rd seminar will be on professional networking.
10. Yi (Wang) reported the Impact newsletter publication. Award nomination announcements for the annual meeting will be included in the next issue.
11. In memory of Dr. Jiantao Wei: we will remember Dr. Wei at our annual business meeting.
12. Meeting adjourned.

SAC Meeting Minutes

May 31 2019 9:00-10:00PM CST

会议主持人：侯聪宇

会议参加人：侯聪宇，高宗梅，刘恩世，陈龙，万亮，麻志宏

1. 总结2018-2019年工作

- a. 由高宗梅负责的“老师---同学辅导项目”取得不错反响，在本年度内成功举行五次线上Zoom meeting，该项活动会在明年继续举行；
- b. 由刘恩世同学和陈龙同学负责的网站更新工作有条不紊地实施，成功更新本年度信息，该项工作将在明年继续由陈龙同学担任；
- c. 在去年ASABE年会期间，由SAC board负责的学生见面会和帮助组织的banquet获得不俗反响，今年SAC board将继续负责该两项事务。

2. 安排2019年于波士顿举行的ASABE年会准备工作

- a. 学生见面会将继续举行，会议上决定陈龙同学将在波士顿遴选出预计符合要求的地址并且在微信群中交由大家讨论并最终决定；
- b. 今年AOC活动所需要志愿者将在来参加ASABE年会的同学中进行招募，该项活动国内部分由万亮负责，国外部分由侯聪宇负责；
- c. 今年AOC banquet门票管理将采用多阶段售票的方式进行，即在学生见面会和AOC business meeting均进行banquet门票出售，banquet时拥有门票的老师同学将可以优先入场并且跳过登记过程，与此同时，拥有门票的老师或同学需要将自己的名字和学校写在门票上以方便统计；
- d. 今年将在年会上分发新一届AOC SAC入会表格并且进行SAC主席团纳新，该项活动由所有SAC board同学负责；

3. 2019届SAC主席竞选将在高宗梅和陈龙同学之间展开，会议上以（7/10）通过以下竞选规则：

- a. SAC board由老师和同学总计十人组成，除二位参加竞选的同学外其他人均有选举权；
- b. 具有选举权的同学将所选人员通过微信或者电子邮件的方式告知现任主席侯聪宇并由其担任计票工作；

AOCABFE & NERCITA China Exchange Forum

Time: July 8, Monday, 2019; 2:30pm-5:00pm (25-Minutes each)



Moderator: Yufeng Ge, University of Nebraska, Lincoln, NE

1. TBD

2:30 - 2:55pm

Yong He

Professor, College of Biosystems Engineering & Food Science, Zhejiang University, Hangzhou, China

2. Five years, a little baijiu and lots of discussion to reach one data point: The development and progress to date for the UNL-NWAFU Food Science and Engineering 3+1 Program

2:55 - 3:20pm

Curt Weller,

Professor, Department of Food Science and Technology, University of Nebraska-Lincoln, Lincoln, NE, USA

3. International Research Cooperation Between WSU and NWAFU

3:20-3:45pm

Shaojin Wang

Professor, College of Mechanical & Electronic Engineering, Northwest A&F University, Yangling, China

4. Development of smart agriculture in China: Policy and practice

3:45-4:10pm

Yingkuan Wang

Professor, Chinese Academy of Agricultural Engineering, Beijing, China

5. Overview of agricultural engineering program at Nanjing Agricultural University

4:10 - 4:35pm

Xiaochan Wang

Professor, College of Engineering, Nanjing Agricultural University, Nanjing, China

6. TBD

4:35-5:00pm

Ning Wang

Professor, Department of Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater, OK, USA

AOC BANQUET INFORMATION

When: 7:00-10:00 pm, Monday, July 08, 2019.

Where: Hei La Moon Restaurant (喜临门大酒楼), 88 Beach St, Boston, MA 02111

How to get there? The distance is 1.1 miles from the Boston Marriott Copley Place to the banquet place, and it may take ~25 min to walk or 13 min to drive. The map with walking directions is attached.

Dinner menu (subject to change): Seaweed and egg soup, Salted shrimp, mapo tofu, braised vegetable in broth, sautéed chicken with ginger and onion, stewed sea bass, dry-fried French bean, cold jellyfish with dressing, stir-fried beef filet with broccoli, lobster, dessert, white rice, red and white wine.

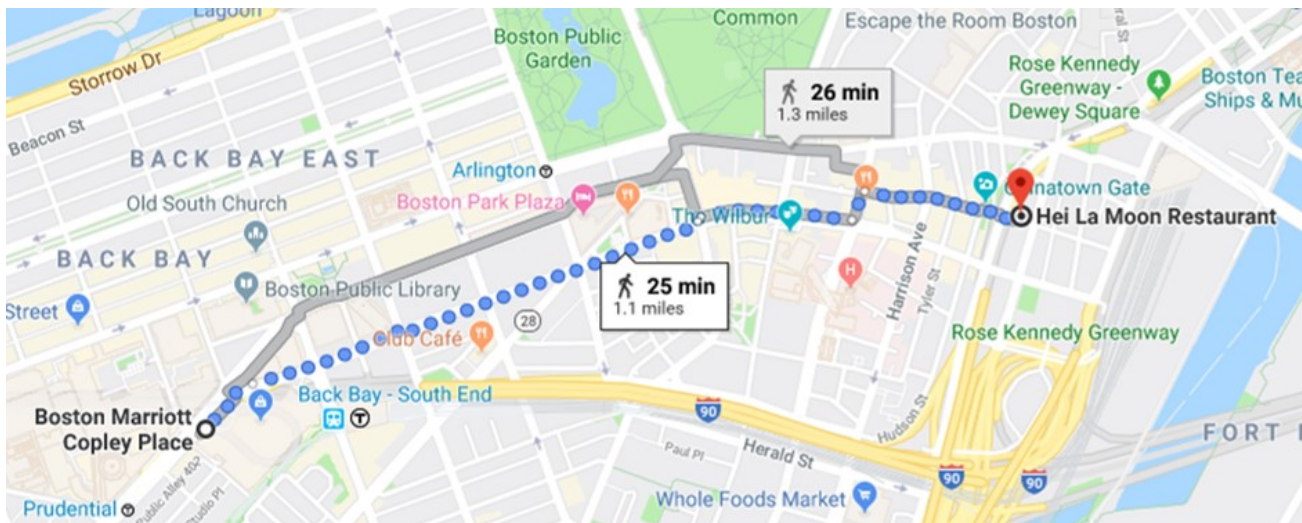
Cost: \$65 per person (\$20 for students). If not paid in advance, guests may still pay on-site.

Additional info: Guest arrival will start at 7:00 pm and dinner will start at 7:15 pm ish.

Additional alcohol is available on your own cost.

Restaurant contact: 617-338-8813 (John Mu, restaurant manager).

Map and photo: Here is the map to the place, and the front view of the restaurant.



AOC Students Gathering Information

Dear all AOC students: You are sincerely invited to the 2019 AOC students gathering party in Boston.

When: 6:00-9:00 pm, Sunday, July 7, 2019.

Where: The Pour House, 907 Boylston St #21, Boston, MA 02115

Distance: 0.4 mile from the Boston Marriott Copley Place to the party place, 8 min walking.

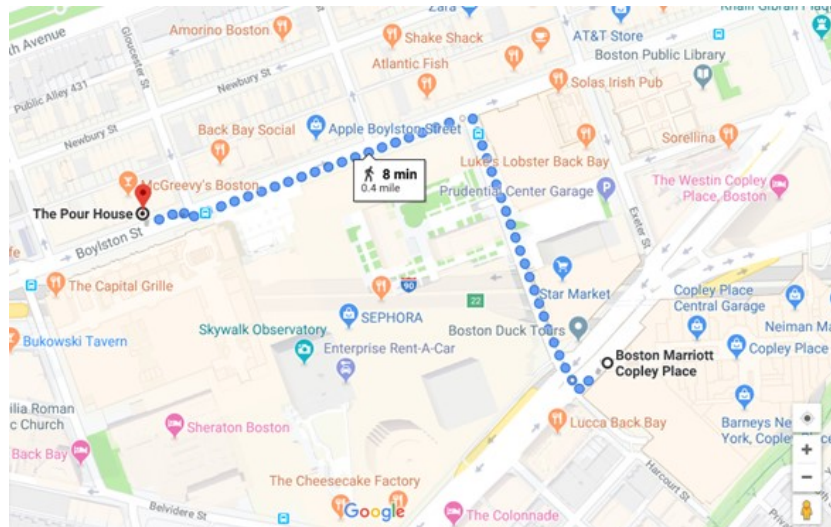
Dinner Menu: Dinner buffet style.

Cost: Free for all AOC students attending 2019 ASABE in Boston. **Soft drinks are free, you need to pay your own alcoholic beverages due to AOC budget limit.**

Kind reminder: Guests may arrive at the party place around 5.30 pm and dinner will start on time at 6.00 pm. We have a strict 3 hours' time limit for this party. **Students can buy the AOC banquet tickets (\$20) during the party.**

Restaurant phone: (617) 236-1767

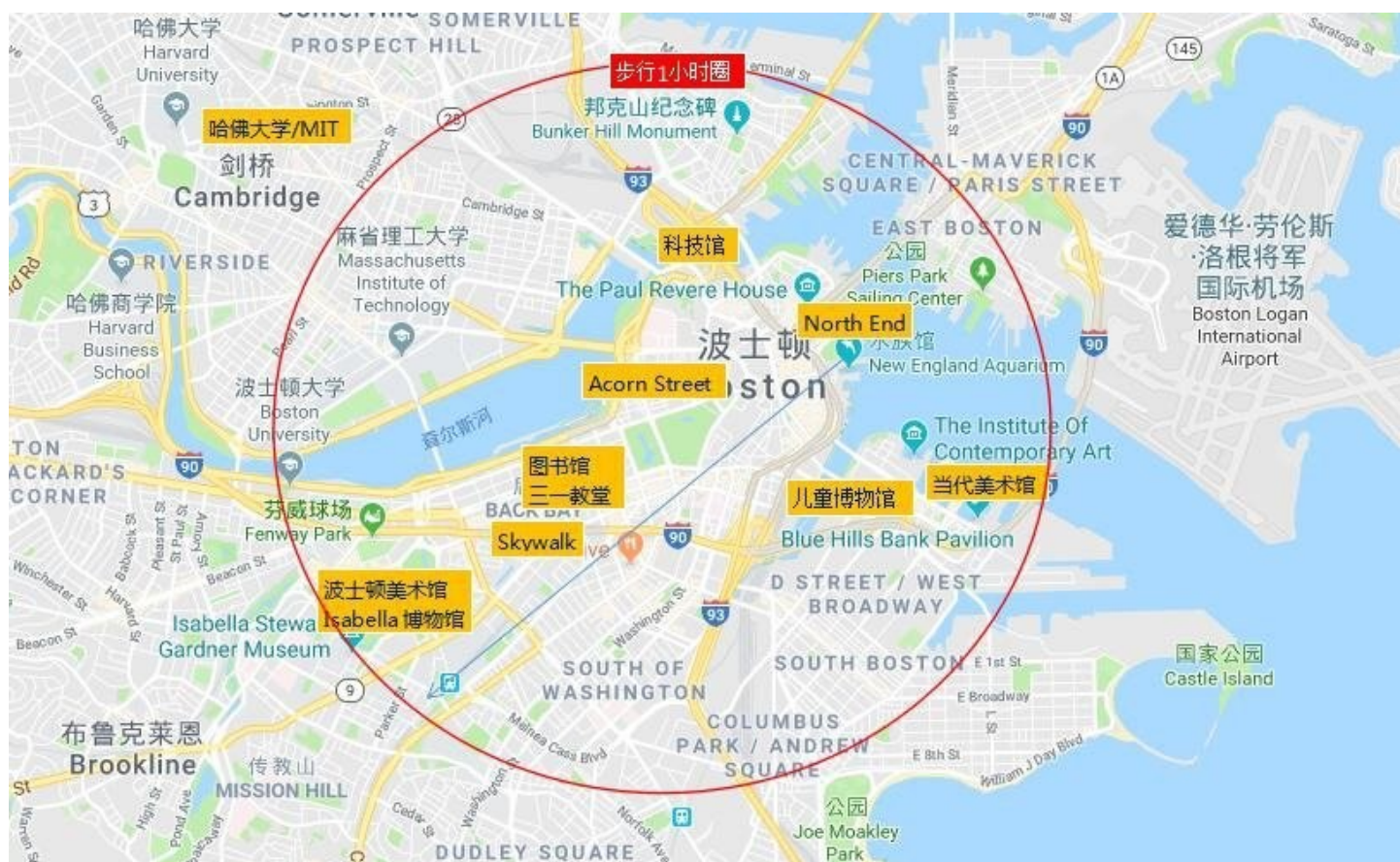
Google map and the Pour House photo



波士顿的游玩攻略

Reference: <http://www.meilvtong.com/viewthread.php?tid=32>

各位亲，我们发现上面的网站给出了非常详尽的有关波士顿的游玩攻略。大家可以仔细阅读，找到你们需要的信息。我们这里就不转载了。祝大家玩得愉快！！



Events and News from AOC Members

1) Dr. Zhongli Pan received the award from The State Administration of Foreign Experts Affairs, China



Dr. Zhongli Pan received the award from The State Administration of Foreign Experts Affairs, China as one of the 40 Most Influential Foreign Experts in the Past 40 Years Since China Initiated Its Policy on Reform and Opening up. This award is a recognition of Dr. Pan's outstanding leadership and contribution to the international cooperation in education, and food and agricultural engineering research. Dr. Pan is Adjunct Professor in the Department of Biological and Agricultural Engineering, University of California, Davis. He also served as a Research Engineering at the Western Regional Research Center, USDA-ARA and Director of China Program, World Food Center of UC Davis.

2) 孙大文教授当选波兰科学院外籍院士

(转自人民网) 8月24日(2018年), 华南理工大学教授孙大文当选波兰科学院外籍院士证书颁发仪式在波兰共和国驻华大使馆举行。波兰驻华大使赛熙军受波兰科学院委托, 向孙大文颁发了波兰科学院外籍院士证书。

赛熙军大使发表致辞对孙大文的学术成就表示祝贺。他指出: “孙大文教授主要致力于食品工程的发展, 他的学术成就得到了广泛的国际认可。他是波兰科学院历任九位华人院士中的一员, 同时也是现今四位华人外籍院士之一。”



波兰共和国驻华大使赛熙军向孙大文颁发波兰科学院外籍院士证书

孙大文表示: “作为一名中国人, 能在国际舞台上为祖国取得这样的成就, 我深感荣幸和自豪。我正尽最大的努力, 把世界上最先进的技术带回中国, 加速祖国的科技发展。” 他讲述了自己与波兰学者开展学术合作的经历, 称“将继续为促进两国之间的科技合作、为促进两国之间的友谊做出更大贡献”。

波兰科学院成立于1952年, 是波兰国立科研机构, 下设5个学部、79个研究所。波兰科学院院士称号是波兰国家的最高终身学术荣誉。2017年12月, 孙大文在波兰科学院全体院士大会上以最高票数当选波兰科学院外籍院士。

Interview with Dr. Hao Gan

Dr. Hao Gan is currently an Assistant Professor in the Department of Biosystems Engineering and Soil Science at the University of Tennessee. Dr. Gan joined the ASABE in 2013 and the AOC in 2016.



Could you introduce your educational or training background briefly?

I received my B.S. degree in Mechanical Engineering from Yangzhou University in 2012, my M.S. degree in Ag & Bio Engineering from the University of Illinois Urbana-Champaign in 2015 and my Ph.D. degree in Ag & Bio Engineering from the University of Florida in 2018. My research focuses during my graduate studies include robotics and precision agriculture. Most of the work has been focusing on developing sensing systems for specialty crops.

Do you enjoy your job?

I enjoy most parts of my job. First of all, successfully fulfilling the process of identifying problems – making research plans – tackling challenges – and pursuing impactful outcomes gives me a sense of achievement. The fact that I can carry out that process in the area of my research interest makes my job more enjoyable. On top of that, my job also allows me to schedule my work based on my preferences, e.g. focusing on writing in the mornings and evenings when my mind is sharp and doing less challenging work in the afternoon. Surely, there are frustrations here and there, but I guess every job has two sides – things you like and things you dislike. I selected my career (carefully I believe), I better like it and also learn how to enjoy it more.

What is your biggest challenge you have faced so far?

There are challenges in my work every now and then, but I have a hard time to tell which one is the biggest. Maybe I am just lucky that I have had extremely difficult challenges to deal with. However, as a graduate student, and now an assistant professor, it is the nature of my work to perform multi-tasks simultaneously all the time. I think that is a continuous challenge to me, also to many other students/professors. Personally, I am not good at multi-tasking because of lacking motivations (maybe also patience) of making detailed plans. I have two strategies. The first one is to make a rough plan based on the emergency (priorities and deadlines) of each task. The second one is concentrating on one thing at a time and mentally blocking other tasks (not think about the existence of other things). There are many other challenges such as getting stuck on some problems, receiving rejections from journal reviewers, not being able to balance between work and life occasionally, etc. But I don't see them as big challenges. I see them as challenges I need to get used to and to be able to deal with.

What career advice would you give to AOC students?

I don't have experience in pursuing an industrial career, and I don't want to pretend to know anything about it. So, I will try to provide some useful advice to students who want to pursue a career in academia. Conducting solid research and publishing quality papers is obviously always the priority in our work (not in our life). Besides, I think being active is just as important. I understand that there are too many things (professional or recreational) to do and it is hard to choose the "right" ones. My opinion is that it won't matter. The easiest thing to do is to join other graduate students in things like poster/presentation competitions, outreach activities, community services, and some social events. Maybe there's not a single thing that will make your CV stand out, but when combined, those things can boost your abilities of communication, presentation, teamwork, and leaderships, and make you a competitor with multidimensional skills in the job market. So, step out of your comfort zone and be active.

There are Ph.D. research assistantship positions available with Dr. Gan. Please feel free to contact him.





Graduate Research Assistant Position (Ph.D.) in Biosystems Engineering

Position: The Department of Biosystems Engineering and Soil Sciences (BESS) at the University of Tennessee (UT) seeks one Ph.D. student (0.5 FTE) to conduct research on smart agriculture, remote sensing, robotics, machine vision, or sensors for biological systems.

Responsibilities: Fulfill the degree requirements for the Biosystems Engineering Ph.D. program, and conduct research in a timely manner.

Requirements: The candidate must have a master's or bachelor's degree in biosystems engineering, agricultural and biological engineering, electrical engineering, mechanical engineering, computer science or a closely related field with demonstrated research experience, and strong written and oral communication skills. For other requirements, please refer to the website:
<https://gradschool.utk.edu/admissions/applying-to-graduate-school/>

Preferred Skills: (1) Programming skills (Python, C/C++, Java, Matlab, etc);
(2) Experience in microcontrollers and circuit design;
(3) 3D drawing software (SolidWorks, AutoCAD, etc.);
(4) Experience in computer vision or image processing; and
(5) Experience in remote sensing using UAVs.

Salary: The successful applicant will receive a tuition waiver, an annual stipend, and health insurance.

Location: University of Tennessee, Knoxville

Start Semester: Fall 2019, Spring 2020 or Fall 2020.

Please refer to the following website for the application deadlines.
<https://ag.tennessee.edu/BESS/Pages/GradApplyDeadline.aspx>

To Apply: Please email a CV to Dr. Hao Gan at hgan1@utk.edu



GRADUATE RESEARCH ASSISTANT IN **BIOPROCESS ENGINEERING**

TITLE: *Graduate Research Assistant*

LOCATION: *University of Kentucky, Lexington, KY*

JOB DESCRIPTION AND RESPONSIBILITIES:

Graduate assistantships (M.S. or Ph.D.) are available for outstanding candidates who are interested in the following research areas:

Lignin valorization for fuels, chemicals and advanced materials

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 for applications in advanced-membrane technologies, water purification, and electro-chemical energy storage (through recent NSF EPSCoR RII Track 1 & 2 and USDA-NIFA awards, read more at: <https://www.uky.edu/bae/shi-lab>).

QUALIFICATIONS: The candidates should have:

- An earned B.S. or M.S. in Biological/Agricultural Engineering, Chemical Engineering, Environmental Engineering, or Material Science and Engineering
- Good knowledge of one or more of the aforementioned research areas
- With credentials sufficient for admission into the UK graduate school (GPA>3.0; TOEFL>93 or IELTS>6.5 for international students; GRE Test Scores)
- Applications must be received by March 15th/Fall or by August 15th/Spring Admission
- Ability to formulate and conduct experiments including data collection and analysis
- Strong oral and written communication skills

APPLICATION: Applicants may contact:

Prof. Jian Shi

Biosystems and Agricultural Engineering Department

115 Charles E. Barnhart Building

University of Kentucky, Lexington, KY 40546-0276

Phone: 549-218-4321

Email: j.shi@uky.edu

The University of Kentucky is an Equal Opportunity Employer.



Ph.D. Graduate Research Assistant Positions in Biosystems Engineering and Polymer Chemistry

Position Description:	The biomanufacturing lab in the Department of Grain Science and Industry at Kansas State University seeks two Ph.D. students to implement research in microalgae, smart polymers, bioremediation, and fermentation.
Responsibilities:	<ul style="list-style-type: none"> • Degree-required course work • Work on projects funded by NSF CAREER Award: <ul style="list-style-type: none"> o Project 1 <ul style="list-style-type: none"> § Thermoresponsive polymer (TRP) synthesis and characterization § Chemistry of TRP phase change § Understanding and visualization of interactions between TRP and microalgal cells § CO₂ fixation to enhance microalgae cultivation o Project 2 <ul style="list-style-type: none"> § Bioremediation of emerging contaminants with marine protists § Omics of marine protist for polyaromatics depolymerization and metabolism § System biology and genetic tool development of protist for value-added applications § Biotransformation and bio-fractionation of lignin
Requirements:	<ul style="list-style-type: none"> • Must have a master or bachelor's degree in Material Science and Engineering, Polymer Chemistry, Biosystems Engineering, Biological & Agricultural Engineering, Chemical Engineering, Environmental Engineering, Microbiology, Fermentation or closely related fields • Demonstrated research experience and strong written and oral communication skill • GRE>294 with writing >3.5, TOFEL>90 or IELTS>6.5 • GPA>3.0
Location:	Grain Science and Industry Department, Kansas State University, Manhattan, KS 66506
Salary:	\$27,000/year including stipend, tuition and benefits
Start Semester:	Fall 2019 or Spring/Summer/Fall 2020
To Apply:	Please e-mail a CV, a one-page personal statement and transcripts as well as GRE/TOEFL/IELTS scores to Dr. Yi Zheng at yzheng@ksu.edu with the e-mail subject as "PhD GSA-2019".

Ph.D. or M.S. opportunity at the University of Georgia

The Department of Poultry Science at the University of Georgia is seeking 1-2 highly self-motivated graduate student assistants in poultry environmental engineering, precision animal farming, and animal behavior and welfare. Students with M.S. or B.S degree from Agricultural Engineering, Biosystems Engineering, Animal or Poultry Science are encouraged to apply. Starting time is Fall of 2019 or Spring of 2020. Preference will be given to candidates with publications and commercial farm experience.

The University of Georgia, founded in 1785, is a flagship university in the USA. It is ranked 13th overall among all public national universities and 46th among all national universities in the 2019 U.S. News & World Report rankings. The Poultry Science Department at UGA was ranked US#1 in 2017 by Universities.com.

Requirements:

- TOEFL - At least 80 for overall score, 20 pts each on speaking and writing.
- IELTS - Min. bandwidth of 6.5 overall with no section below 6.0.
- GRE > 297; GPA > 3.0

Contact:

Dr. Lilong Chai

Department of Poultry Science

College of Agricultural and Environmental Sciences, University of Georgia

Athens, Georgia 30602, USA

Email: lchai@uga.edu

Phone: +1 706-542-8137



**UNIVERSITY OF
GEORGIA**

Two Ph.D. Research Associate positions are available for 2019 fall semester enrollment

The Department of Civil & Environmental Engineering at Virginia Polytechnic Institute and State University, also known as Virginia Tech, invites applications for two Ph.D. Graduate Research Associate positions in Environmental Engineering to pursue research in two research directions described below. These graduate students will conduct research in the Sustainable Environment Research Laboratory (SERL) of Dr. Zhiwu (Drew) Wang stationed at the Northern Virginia Campus within the Washington metropolitan area. Both positions can be available as early as summer 2019.

Both positions involve extensive fieldwork in local utilities, thus requires the graduate student to be able to drive vehicles between multiple experimental sites and work closely with industrial partners. The candidate with good hands-on ability and aspiration to finding solution to real-world engineering problems is preferred.

The ideal candidates should possess Master or Bachelor degrees in civil engineering, environmental engineering, chemical engineering, biological system engineering, or a related field with minimum GPA: 3.0. While our department does not have a minimum required score for the GRE, most admitted applicants have at least a 155 on the Quantitative Section of the exam. For international students, TOEFL score is required. Our departmental minimum is 90 (internet-based). Further, TOEFL scores of 20 or greater in Listening, Writing, Speaking, and Reading subsections are required. IELTS may be substituted for the TOEFL only if it is above 6.5.

Interested students are encouraged to contact Dr. Wang directly at wzw@vt.edu with email subject as “**2019 SERL GRA application**”. A curriculum vita should be provided in your email showing GPA, GRE and TOFEL scores, the contact information of three references, and a full list of publications if applicable. Interested candidates can find more information about Dr. Wang’s research at <https://www.water.cee.vt.edu>. The review process will begin immediately and continue until all positions are filled. Preference will be given to candidates with mathematical modeling skills. The selected candidates will be supported with monthly stipend around \$2,200 besides benefits and full tuition.

1. Advanced anaerobic digestion system:

A Ph.D. will be supported by this USDA funded project to revolutionize the modern anaerobic digestion systems by using special techniques to enhance the feedstock digestibility, improve digestate dewaterability, and close the loop of water budget by recirculating the purified effluent. Development of these techniques to coordinate and consolidate these integrated processes with the design and operation of anaerobic digesters is the focus of this study. Candidates with experience in using gas chromatography are especially welcomed.

2. Continuous-flow biogranulation technique:

A Ph.D. student will be supported by this project with the aim of enabling microbial granulation in continuous-flow bioreactors for multiple pollutants removal or value-added product generation. Candidates with previous experience in the design and operation of bioreactors and mathematical modeling are especially welcomed. Both fundamental and applied research opportunities can be found in this one project.

Zhiwu (Drew) Wang, Ph.D., P.E.

Assistant Professor

Department of Civil and Environmental Engineering, Virginia Tech



Biosystems Engineering Department

Ginn College of Engineering - College of Agriculture

Graduate Research Assistantships

The Department of Biosystems Engineering (BESN) at Auburn University (AU) is seeking applications for Graduate Research Associate positions (M.S. or Ph.D.) to conduct innovative research in smart cyber-physical systems in Agriculture and Forestry. The positions are available for Fall 2019, Spring 2020, and Fall 2020 semesters.

Responsibilities: The successful candidates will be responsible for fulfilling the degree requirements of the Biosystems Engineering Ph.D. or M.S. programs, and conduct research in a timely manner. The successful candidates will focus on engineering novel Sensing, IoT, Robotics, and Big Data Analytics technologies in Precision Agriculture and Forestry, and Predictive Phenomics. A wide range of subjects may be focused on including crops, livestock, and trees.

Qualifications: The candidates should have:

- An earned B.S. or M.S. in Biosystems/Biological/Agricultural Engineering, Mechanical Engineering, Computer Engineering, Electrical Engineering, or closely related engineering disciplines by the expected start date.
- Sufficient credentials:
 - * GPA > 3.0;
 - * GRE test scores;
 - * TOEFL > 79 with each subcomponent > 16, or IELTS > 6.5 for international students.
- Strong oral and written communication skills.
- Experience in one or more of the following areas:
 - ◇ programming (Python, C/C++, Matlab);
 - ◇ circuit design, instrumentation, and embedded systems;
 - ◇ computer vision, machine learning, and deep learning;
 - ◇ robotics and Robot Operating System (ROS);
 - ◇ 3D design (SolidWorks, Inventor, AutoCAD) and 3D printing;
 - ◇ web development.

Salary: The successful candidate will receive an annual stipend, a tuition waiver, and health insurance.

Application: Please email a CV and copies of test scores and transcripts to Dr. Yin Bao at yinbao@iastate.edu

209 Tom Corley Building
Auburn, AL 36849-5417
Telephone:
334-844-4180
FAX:
334-844-3530
www.eng.auburn.edu/bsen



IMPACT NEWSLETTER EDITORIAL BOARD

EDITOR

Yi Wang — Auburn University

ASSOCIATE EDITORS

Minliang Yang — Lawrence Berkeley National Laboratory

Xi Wu — University of California, Davis

Shuangye Qiao — McGill University

Long Chen — University of Nebraska–Lincoln

Fei Liu — Zhejiang University

Yang Zhou — Zhejiang University of Science and Technology

The 2018–2019 AOC IMPACT Editorial Board

Call for News & Activity Reports

The 2018-2019 IMPACT editorial Board earnestly invites you to submit 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!