The Association of Korean Agricultural, Biological & Food Engineers

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### **About the AKABFE**

The Association of Korean Agricultural, Biological, and Food Engineers (AKABFE) was originally established on July 30, 2012 in Dallas, Texas, USA. The AKABFE has grown up to 53 participants last year in Houston, Texas, from 35 participants in 2023.

### **Connect with the AKABFE**

Website: <a href="http://www.akabfe.org/">http://www.akabfe.org/</a>

LinkedIn: <a href="https://www.linkedin.com/in/akabfe-network-55b53283">https://www.linkedin.com/in/akabfe-network-55b53283</a>

### **AKABFE's mission**

- (1) promote information exchange and networking among agricultural, biological, and food engineers who are interested in the development of agricultural and biological science and technology in Korea; (2) foster educational exchange programs between Korean universities and organizations and institutions in the United States of America;
- (3) facilitate the transfer of technology to and from Korea; and (4) encourage professional development among members within the American Society of Agricultural and Biological Engineers (ASABE).

# **Greetings from the President**



Dear AKABFE members and colleagues,

Greetings from the AKABFE Executive Board!

I hope this newsletter finds you well. In spite of the challenges during the pandemic, the AKABFE successfully hosted two virtual meetings on both 2020 and 2021 and finally reunified in person meeting during the ASABE 2022 Annual International Meeting at Houston, TX on July 19, 2022. On behalf of the AKABFE Executive Board, I would like to express my sincere gratitude and appreciation to all 49 participants of the AKABFE who attended the meeting by overcoming the time difference and requirements for covid-19. The ASABE 2023 Annual Meeting will be held at Omaha, NE on July 9 - 12, 2023.

I would like to thank the leadership provided by the four past presidents, Drs. Bosoon Park, Chris Choi, Daniel Lee, and Seung-Chul Yoon who served for founding and shaping the structure of our community. I sincerely appreciate their time and efforts devoted to AKABFE. Now we are entering the second generation of AKABFE and would get more fruitful results through our association activities.

Finally, I appreciate our U.S. and Korean student representatives who have assisted with the publication of this newsletter.

I wish you a healthy, peaceful, and prosperous Year!

Young K. Chang AKABFE President

# The 10<sup>th</sup> Annual AKABFE meeting in Houston, Texas



The annual meeting of the Association of Korean Agricultural, Biological and Food Engineers (AKABFE) was held on Tuesday, July 19, 2022, during the American Society of Agricultural and Biological Engineers (ASABE)'s Annual International Meeting in Houston, Texas. This meeting was held as the first offline meeting since the outbreak of the pandemic. A total of 53 members attended the AKABFE annual meeting held in the Marriott Marquis Houston, which lasted for two hours. The technical session was highlighted by two invited speakers, "Digital Agriculture, driving force for agricultural growth in South Korea" given by Dr. Kangjin Lee and "Solving Land & Water Issues for Over 100 Years" given by Dr. Jaehak Jeong. After the technical session, the award ceremony for the Research Spotlight Competition and the group dinner were held at a nearby local Korean restaurant.

#### 2022 AKABFE Research Spotlight Presentation Competition Winners

We were proud to award the 3<sup>rd</sup> AKABFE research presentation winners, as follows:

Grand Prize Changho Yun (Seoul National University),

1st Prize Joo Shin Kim(Seoul National University),

2nd Prize Soung Yun Book (Changnon National University)

**2<sup>nd</sup> Prize** Seung Yun Baek (Chungnam National University),

**3<sup>rd</sup> Prize** Jeongho Han (University of Illinois Urbana-Champaign), and

**4<sup>rh</sup> Prize** Yeong Su Kim (Kyungpook National University)

### **Member News**



**Dr. Seung-Chul Yoon**, Research Electronic Engineer at the USDA, ARS, USNPRC at Athens, Georgia, became a new editor for ASABE, Information Technology, Sensors and Control Systems (ITSC) journals. His 3-year term as ITSC Community Editor started in August 2022.



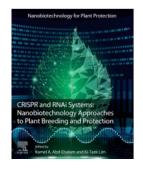
**Dr. Kang Jin Lee**, Former director of Department of Agricultural Engineering in National Institute of Agricultural Science, was elected as the 29th president of the Korean Society for Agricultural Machinery (KSAM) with a two-year term (1/1/2022 – 12/31/2024). Dr. Lee will lead the KSAM with focusing on establishing a close cooperation system with related organizations such as research institutions, universities, industries and the government and fostering new talents to lead the future of Korean agriculture.



**Dr. Kyung-Sook Choi**, Professor of Department of Agricultural civil engineering in Kyungpook National University(KNU), was elected as the 35th president of the Korean Society for Agricultural Engineers (KSAE) with a two-year term (1/1/2022 – 12/31/2024). She was also elected dean of the College of Agriculture and Life Sciences in KNU in July 2022.



**Dr. Ki-Taek Lim,** Professor of Department of Biosystems Engineering, Kangwon National University, edited a book entitled *CRISPR and RNAi Systems:* Nanobiotechnology Approaches to Plant Breeding and Protection published by Elsevier.



## **Award Announcements**



In recognition of his contributions to academic advancement with his developing intelligent, ecofriendly electric tractor technology, Professor Yong Joo Kim of the Department of Biosystems Machinery Engineering, College of Agriculture and Life Sciences at Chungnam National University, received the Ministerial Commendation at the 24th Agriculture, Food and Rural Affairs Science and Technology Awards held on September 8, 2021.



In recognition of his contributions to the advancement of agricultural technology and enhancement of the global academic understanding of the field of non-destructive quality measurement instruments, Professor Byoung Kwan Cho of the Department of Biosystems Machinery Engineering, College of Agriculture and Life Sciences at Chungnam National University, received the Ministerial Commendation at the 25th Agriculture, Food and Rural Affairs Science and Technology Awards held on November 28, 2022.





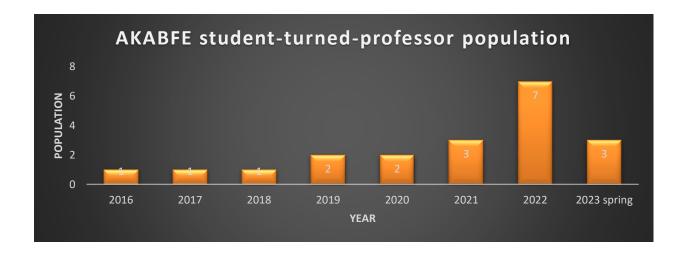
Professor Yong Joo Kim of the Department of Biosystems Machinery Engineering, College of Agricultural and Life Sciences at Chungnam National University, won the Best Paper Award at the 2021 AIM (Annual International meeting) of the ASABE. Professor Kim's research team published a paper titled 'Development of Prediction Model for Axle Torque of Agricultural Tractors' in 'Transactions of the ASABE. 63(6): 1773-1786 (DOI: 10.13031/trans.14012)'.



Soo Hyun Park, Principal Research Scientist at the Smart Farm Research Center of the Gangneung Institute of Natural Products, received the Outstanding Science and Technology Paper Award at the 2022 Korea Science and Technology Annual Meeting hosted by the Korea Federation of Science and Technology Societies at the Korea Institute of Science and Technology Center in Seoul on the 29th. Park was recognized for his contributions to the development and advancement of science and technology by submitting a paper titled 'Voice recording classification of layer chicken and cows using CNN model'.

# Member's New Professorship

Ever since its establishment in 2012, AKABFE has been a place where 245 researchers have made connections and many student researchers have taken their careers to the next step by networking with leading researchers and scholars. Among the researchers who have attended AKABFE as students, 20 have been appointed as assistant professors as of 2023, marking their first steps as future leaders. It is with our great pleasure to be able to share the news of 13 members who have been appointed from 2021 to the present in this newsletter.





**Dr. Woo Jae Cho** began his assistantship professorship in the Department of Bio-Industrial Machinery Engineering, Gyeongsang National University in 2021.



**Dr. Hyungseok Nam** began his assistantship professorship in the Department of Convergence & Climate Change, Kyungpook National University in 2021.

#### Website:

https://sites.google.com/view/ceelnam/professormembers

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**Dr. Jinhyuk Park** began his assistantship professorship in the Department of Convergence & Climate Change, University of Suwon in April 2021.

#### Website:

https://www.suwon.ac.kr/mainHp/prointro/detail.html?eno=1214509



**Dr. Dae-Hyun Jung** began his assistantship professorship in the Department of Smart Farm Science, Kyung Hee University in 2022.

#### Website:

https://smartfarmsci.khu.ac.kr/smartfarm/user/bbs/BMSRooo47/view.do



**Dr. Won Seok Jang** began his assistantship professorship in the Department of Ecological Landscape Architecture Design, Kangwon National University in August 2022.

**Website**: https://forest.kangwon.ac.kr/forest/prof/professoro3.do



**Dr. Soo Chung** began his assistantship professorship in the Department of Biosystems Engineering, Seoul National University in 2022.

**Website**: https://bslab.snu.ac.kr/



**Dr. Wan-Soo Lee** began his assistantship professorship in the Department of Bio-Industrial Machinery Engineering, Kyungpook National University in 2022.

**Website**: https://aim.knu.ac.kr/



**Dr. Byeong Eun Moon** began his assistantship professorship in the Department of Convergent Biosystems Engineering, Sunchon National University in 2022.

Website: https://www.scnu.ac.kr/sangi/main.do



**Dr. Jaesung Park** began his assistantship professorship in the Department of Bio-Industrial Machinery Engineering, Pusan National University in 2022.

Website: https://sites.google.com/view/ssspa-pnu/



**Dr. Tae-hwan Ha** began his assistantship professorship in the Department of Agricultural & Rural Engineering, Chungnam National University in 2022.

Website: https://bslab.snu.ac.kr/



**Dr. Daeung Yu** began his assistantship professorship in the Department of Food and Nutrition, Changwon National University in 2022.

Website: https://www.changwon.ac.kr/foodenglab/main.do



**Dr. Yeon Soo Kim** began his assistantship professorship in the Department of Bio-Industrial Machinery Engineering, Pusan National University in 2023.

**Website**: https://bime.pusan.ac.kr/bime/70854/subview.do



**Dr. Cheol-Woo Han** began his assistantship professorship in the Department of Agricultural Life Science Biosystem, Korea Polytechnics, which was newly established in 2023.

Website: https://bime.pusan.ac.kr/bime/70854/subview.do



**Dr. Myongkyoon Yang** began his assistantship professorship in the Department of Bioindustrial Machinery Engineering, Jeonbuk National University in 2023.

Website: https://sites.google.com/view/adilab2022

# **ASABE 2023 Annual International Meeting**



#### **Annual International Meeting**

Hilton Omaha Nebraska and CHI Health Center JULY 9-12, 2023 #ASABE23

ASABE 2023 presents a forum to expand awareness of current industry trends, promote and acknowledge innovations in design and technology, and provide opportunities for professional development – all with a focus on the economic, political and societal impacts facing industry.

### ASABE 2023 Highlights

- Networking Opportunities
- More than 1,000 Technical and Poster Presentations
- Professional Development Sessions
- Specialty Sessions which include invited speakers, panel discussions and round-table discussions
- Technical and Cultural Tours
- Professional Development Hours/Credits
- Career Fair

### **2024 CIGR International Conference**









The world's largest international agricultural and machinery academic conference, the "CIGR International Conference," has been finally decided to host Korea in 2024. The CIGR Secretariat announced on the 30th of last month that it would finally approve the hosting of the 2024 Korea in response to the Korea Agricultural Mechanics Association's bid.

#### **Newsletter editors**

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#### **Useful Websites**

American Society of Agricultural and Biological Engineers (ASABE): <a href="http://www.asabe.org/">http://www.asabe.org/</a>
한국농공학회, Korean Society of Agricultural Engineers (KSAE): <a href="http://www.ksae.re.kr/">http://www.ksae.re.kr/</a>
한국농업기계학회, Korean Society for Agricultural Machinery (KSAM): <a href="http://www.ksam76.or.kr/">http://www.ksam76.or.kr/</a>