Agricultural and Food Chemistry Division

Spring 2026

CORNUCOPIA

including the AGFD program for the
271st American Chemical Society (digital & live) National Meeting on
March 22 - 26, 2026
in

ATLANTA

Coralia Osorio
Program Chair

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Going to Atlanta?
Join the AGFD Chair's Reception at
STATS Brewpub
Tuesday, March 24 from 6:00-8:00 pm

10 minute walking directions from the Convention Center: exit the Center and turn left onto Andrew Young International Blvd. Walk 0.2 mi. to Marietta St. NW. Turn left. Walk 0.4 mi. to STATS on your left (300 Marietta St. NW).

Visit our website - www.agfoodchem.org - for a pdf of Cornucopia, job postings, awards and more. Check out our Facebook page www.facebook.com/agandfood We're a LinkedIn group & on Instagram, too →

@AGFD_ACS

MESSAGE FROM THE CHAIR

I am honored to be elected AGFD chair in 2026 and grateful to all EXCOM members for their guidance, especially to Liz Kreger, a very enthusiastic past chair, who gave me this responsibility and shared files and tips. The experience and generous support of Kathryn Deibler, Mike Morello, Alyson Mitchell, Carl Frey, Michael Tunick, Michael Appell, and Stephen Toth allowed me to successfully carry out this role from Bogotá, Colombia. I thank the Divisional Activities Committee and the Abstract Team (Ryckera and Sarah) for constant support in coordinating the scheduling of symposia and non-technical events. I am also grateful to AGFD for the opportunity to participate in the 2026 ACS Leadership Institute—an enriching experience that allowed me to exchange ideas and perspectives with ACS members from the United States and abroad. From my international perspective, and in my role as Deputy Editor of ACS Food Science & Technology journal, I believe these interactions help strengthen connections and serve as a bridge between different scientific communities.

We are at the point of achieving the goals and strategies proposed for AGFD during a 5-year period: share division impact & value to our stakeholders, connect divisions and the greater ACS community, and provide support and recognition. We are on our way, organizing joint symposia with other divisions such as AGRO, ANYL, CARB, ENVR, PMSE and POLY, among others. Some webinars have been held on topics relevant to AGFD, and the communication with our members and community has flowed since Elyse Doria and Poll Zhang, UC Davis students, started managing social media. Engaging the next generation of scientists is essential to strengthening and advancing AGFD activities.

The ACS Fall 2025 organization was challenging due to external factors affecting attendance of several presenters leading to a higher number of speaker withdrawals compared with previous years. Nevertheless, these challenges were successfully managed, resulting in 18 well-executed symposia comprising 38 sessions, including six jointly programmed with other divisions and three offered in a digital-only format. Topics were related to ACS Microbiome Consortium, Advances in Allergen Detection and Quantification, Innovations in Natural Polymer Science for Sustainable Agriculture and Food Security, Chemistry of Alcoholic Beverages, Chemistry of Flavor Compounds in Quality, Safety, and Sensory Properties of Foods and Food Products, Nutraceutical and Functional Food: Emerging Techniques for Characterization and Bioavailability Analysis, Sustainable Agriceuticals, Tackling World Hunger & Food Security Reducing Food Waste - Food Security CCC, Using Artificial Intelligence to Improve Agriculture and Food Systems, and Whole Grains Bioactives & Human Health. AGFD awarded retired USDA scientist Dr. H.N. Cheng with the 2025 Award for the Advancement of Application of Agricultural and Food Chemistry and University of British Columbia Assistant Professor Dr. Tianxi Yang, as the 2025 AGFD Young Scientist Award. Our challenge is to share quality results that foster "*trust in science*" as a target.

For ACS Spring 2026, we are hosting 10 symposia (1 digital) and more than 140 abstracts. Topics include: Advances in Food Ingredients: Bridging Innovation to Traditional Technologies, Advances in Agricultural and Food Chemistry (Food Analysis & Technology, Food Analysis & Technology and Food Analysis & Sensory Evaluation), Agri-Derived Bioactives and Their Therapeutic Potential, Artificial Intelligence in Food and Agricultural Chemistry: From Molecular Insights to Field Applications, Food Ingredients: Sustainability and Natural Alternatives, Artificial Intelligence and Advanced Sensing for Enhancing Food Safety, and The Chemistry of Nonalcoholic and Alcoholic Beverages. Among them, we will give for the first time the Thomas H. Parliment Award in Flavor Chemistry to Prof Dr. Terry Acree from Cornell University. Congratulations, Terry. I was delighted to meet you and to host you at the First International Flavor and Fragrance Conference in 2017 in Cartagena, Colombia.

The American Chemical Society (ACS) is celebrating its 150th anniversary throughout 2026 with a global campaign highlighting the history, community, and future of chemistry. "*Experience the legacy and future of chemistry - told through the voices and breakthroughs that define it*". I invite you to participate in all of the activities on the framework of this celebration (https://www.acs.org/acs-150th-anniversary.html), taking into account the 12 anniversary themes: leadership, integrity, interdisciplinary collaboration, sustainability, partnership, safety, celebration, innovation, lifelong learning, community, gratitude and progress. I hope you can include all of them in your chemistry research activities. Thus, science continues answering the community's requests as a tool for solving problems.

Some key milestones in Agricultural and Food Chemistry over the past century across the seven subdivisions include:
In **Food Bioengineering**, major advances encompass the industrialization of microbial fermentation for production

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of enzymes, amino acids, and antibiotics; the emergence of recombinant DNA technology and metabolic engineering enabling microorganisms to synthesize food ingredients; and more recently, the development of precision fermentation, synthetic biology, genome editing technologies (e.g., CRISPR), and systems-based bioprocess engineering for the production of sustainable proteins, flavors and nutraceutical compounds as well as the development of resilient crops.

In **Flavor Science**, milestones include the structural elucidation of key aroma compounds through advanced analytical techniques (e.g., GC–MS, GC–olfactometry), development of biotechnological and enzymatic processes for natural flavor production and the integration of molecular sensory science and flavoromics to understand flavor perception.

In **Food Safety**, transformative developments include the implementation of Hazard Analysis and Critical Control Point (HACCP) preventive systems, advances in microbial detection and quantitative risk assessment and the adoption of molecular diagnostic tools such as PCR and whole-genome sequencing for rapid pathogen identification, surveillance, and traceability in food systems.

In **Functional Foods and Natural Products**, major milestones include the identification and characterization of bioactive phytochemicals, the development of nutraceuticals and probiotic-based foods and the application of metabolomics and other omics technologies to elucidate the mechanisms linking dietary bioactive compounds with human health outcomes.

In **Nutrition and the Gut Microbiome**, important progress includes recognition of the fundamental role of the intestinal microbiota in host metabolism and immunity, the development of probiotic and prebiotic concepts and the application of high-throughput sequencing and multi-omics approaches to characterize diet–microbiome–host interactions.

In **Sustainability and Green Technologies**, milestones include the application of green chemistry principles in food processing, the development of biorefinery concepts for biomass utilization, advances in sustainable agricultural intensification and the implementation of circular bioeconomy strategies including food waste valorization and precision agriculture technologies to reduce environmental impacts.

Finally, in **Agriceuticals**, progress has focused on the discovery and enhancement of health-promoting phytochemicals in crops, the development of biofortified agricultural products, and the integration of metabolomics, plant breeding and biotechnology to improve the nutraceutical value of agricultural commodities.

Together, these advances highlight the evolving role of the seven subdivisions in addressing emerging scientific challenges and underscore the importance of continued interdisciplinary efforts to support future symposia and research initiatives in Agricultural and Food Chemistry. Welcome to Atlanta—connect with colleagues, expand your professional network and enjoy the many activities of ACS Spring 2026. Let's celebrate that chemistry is both impactful and FUN.

Coralia Osorio AGFD Chair 2026

Honoring Black and African American Chemists Pioneers, Innovators and Trailblazers for Black History Month

(as featured on the ACS Publications Axial Blog)

Omowunmi (Wunmi) Sadik, AGFD Member and current chair of the Sustainability & Green Technology Subdivision serves as Vice Provost for Faculty Affairs and Distinguished Professor of Chemistry and Environmental Science at New Jersey Institute of Technology where she directs NJIT's BioSMART Center (BioSensor Materials for Advanced Research and Technology). Her work (>200 papers and 5 patents) ranges from sustainable chemistry, low-cost, paper-based biosensors farmers use to diagnose crop diseases, developing nanocatalytic methods to degrade persistent environmental pollutants, detect explosives and turn industrial waste into valuable resources. She co-founded the non-profit Sustainable Nanotechnology Organization and established the ACS Sustainability and Green Technology subdivision.

FUTURE PROGRAMS

CHICAGO August 23-27, 2026 ACS THEME - Chemistry Making History. Be Part of It.

ACS Microbiome Consortium: The Gut Microbiome and Its Relationship to Diet and Human Health Coralia Osorio cosorior@unal.edu.co Jaime Amengual Terrasa jaume6@illinois.edu Tom Wang tom.wang@usda.gov Christopher Courtney cleathe3@vols.utk.edu Jenni Firrman jenni.firrman@usda.gov

Advances in Agricultural and Food Chemistry (General Papers) Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org Coralia Osorio cosorior@unal.edu.co

Advancement of Application of Agricultural and Food Chemistry Award Symposium in Honor of Michael Appell Coralia Osorio cosorior@unal.edu.co Mike Morello mjmorello226@gmail.com Gary List grlist@telstar-online.net

AGFD Awards: Young Scientist, Young Industrial Scientist, JAFC Best Paper Award, and Sterling B Hendricks Memorial Lecture Youngmok Kim youngmok.kim@finlays.net Bhimanagouda Patil Bhimanagouda.Patil@ag.tamu.edu Thomas Hofmann jafc@jafc.acs.org William King WKing@acs-i.org Michael Appell Michael.appell@gmail.com Booson Park bosoon.park@ars.usda.gov Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

Agnes Rimando International Student Symposium Roberta Tardugno roberta.tardugno@uniba.it Michael Tunick mhtunick@gmail.com

Bioproducts from Biomass Majher I. Sarker majher.sarker@usda.gov Brajendra Sharma brajendra.sharma@usda.gov Yadav Madhav madhav.yadav@usda.gov Helen Ngo helen.ngo@usda.gov

Chemistry of Aroma and Taste Modification Robert McGorrin robert.mcgorrin@oregonstate.edu Elizabeth Kreger elizabeth.kreger@sensient.com

Climate-Resilient Agriculture: Chemistry at the Food–Environment Interface Hamidreza Sharifan hsharifan@utep.edu Weilan Zhang wzhang4@albany.edu Jason White Jason.white@ct.gov

General Posters Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

Feeding the World Through Chemistry Michael Tunick mhtunick@gmail.com Roger Egolf rae4@psu.edu Beth Lorsbach beth.lorsbach@nufarm.com Dena Barrett dbarrett@agrodiv.org Sara Whiting sara.whiting@bayer.com

Nutraceuticals, Food Bioactives, and Functional Foods: From AI and Emerging Analytical Techniques to Personalized Nutrition Jianping Wu jwu3@ualberta.ca Xiaohong Sun xiaohong.sun@dal.ca

Spencer Award Symposium Mike Morello mjmorello226@gmail.com

Strategies for Advancing Food Packaging Technology and Safety John Koontz John.Koontz@fda.hhs.gov Timothy Duncan Timothy.Duncan@fda.hhs.gov

Sustainable Agriceuticals Linshu Liu Linshu.liu@usda.gov Yuzhu Zhang Yuzhu.zhang@usda.gov Ying Wu ywu@Tnstate.edu Wally Yokoyama wally.yokoyama@usda.gov Hyunsook Kim Hyunsk15@hanyang.ae.kr

Sustainable Chemistry for Circular Bioeconomy Systems Shu-Yuan (Sean) Pan sypan@ntu.edu.tw Ellen Caixia Wan wanca@missouri.edu Daeseung Kyung dkyung@ulsan.ac.kr Qiangu Yan Qiangu.yan@usda.gov

Transformative Natural Polymers of 21st Century ACS Series Symposia IV Wei Gao weigaoacs@gmail.com Jun Wang junwang@acs-np-ccc.org Feng Jiang feng.jiang@ubc.ca Charlie Fehl charlie.fehl@wayne.edu Lingyun Chen lingyun1@ualberta.ca

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Virtual Graduate Students Symposium in Asia-Pacific Region on Agricultural and Food Chemistry Daxi Ren dxren@zju.edu.cn Chunxiao Zheng czheng@acs-i.org

Whole Grain Bioactives and their Health Effects Shengmin Sang ssang@ncat.edu Dmitriy Smolensky dmitriy.smolensky@usda.gov

150 Years of Biopolymer Chemistry Toward a Sustainable Future Feng Jiang feng.jiang@ubc.ca Lingyun Chen lingyun1@ualberta.ca Charlie Fehl charlie.fehl@wayne.edu

NEW ORLEANS March 21–25, 2027

Advances in Agricultural and Food Chemistry (General Papers) Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

Biopolymers From Sustainable Resources and Their Emerging Applications in Agriculture, Food, Nutraceuticals and Other Industrial Sectors Linguyn Chen lingyun1@ualberta.ca Lucy Yu lyu5@umd.edu Michael Appell Michael.appell@gmail.com

Chemistry of the Bar Nick Flynn nflynn@wtamu.edu Neil DaCosta neil.dacosta@iff.com

Dynamic Flavor Analysis Jonathan Beauchamp jonathan.beauchamp@ivv.fraunhofer.de

Food Flavor - Innovation, Analysis, Application, Generation Keith Cadwallader cadwlldr@illinois.edu Steven Toth Steven.Toth@iff.com Mike Morello mjmorello226@gmail.com Xiaofen Du xdu@twu.edu Kathryn Deibler kdd3@cornell.edu

General Posters and Undergraduate Poster Competition Kathryn Diebler kdd3@cornell.edu Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

Withycombe-Charalambous Graduate Student Symposium Kathryn Diebler kdd3@cornell.edu Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

SAN DIEGO August 22-26, 2027

Advances in Agricultural and Food Chemistry (General Papers) Karley Mahalak Karley.mahalak@usda.gov Kenny Xie kyx@usp.org

Chemistry of Alcoholic Beverages Nick Flynn nflynn@wtamu.edu Neil DaCosta neil.dacosta@iff.com

Climate-smart Foods: Boosting Nutrition, Flavor, Resilience and Consumer Acceptance Bhimu Patil b-patil@tamu.edu Deepak Kumar Jha deepakkumar.jha@ag.tamu.edu Vikas Dadwal Vikas.dadwal@tamu.edu

Emerging Challenges of Contaminants in Cannabis and Phytocannabinoid Products Navindra Seeram nseeram@uri.edu Hang Ma Hang_ma@uri.edu

Food Polymers Lingyun Chen lingyun1@ualberta.ca

Heat-Induced Compounds in Foods: Balancing Risks and Benefits of Thermal Processing Coralia Osorio cosorior@unal.edu.co Edisson Tello tellocamacho.1@osu.edu Devin Peterson peterson.892@osu.edu

Sulphur Containing Compounds: Bioactivity and Flavor Lucy Yu lyu5@umd.edu Dejian Huang dejian@nus.edu.sg

Tackling World Hunger & Food Security Reducing Food Waste Kenny Xie kyx@usp.org Mike Morello mjmorello226@gmail.com
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OTHER SYMPOSIA OF INTEREST

ABCChem Atlantic Basin Conference on Chemistry, **Chemistry for Global Impact: Strategic Partnerships for Sustainable Innovation** Barra da Tijuca, Rio de Janeiro, Brazil 6–9 December 2026 **https://abcchem.org/**
Sustainable Food and Agricultural Chemistry Transformation for a Circular Future Coralia Osorio cosorior@unal.edu.co Laura McConnell laura.mcconnell@bayer.com Leonardo Fraceto leonardo.fraceto@unesp.br Roselena Faez faez@ufscar.br

International Flavor Conference Lima, Peru 2027

Executive Committee Meeting Minutes

Sunday August 17, 2025 Washington D.C.

Attendees: Coralia Osorio Liz Kreger, Karley Mahalak, Alyson Mitchell, Steve Toth, Michael Appell, Lucy Yu, Neil Da Costa, Robert McGorrin, Michael Morello, Jane Leland, Michael Qian, Changping Wu, Stephen Toth, Jianping Wu, Kenny Xie, Keith Cadwallader, Kathryn Deibler, Jinwen Zhang, Poll Zhang, Mike Tunick, Carl Frey, Yixiang Wang, Xiaohong Sun, Jason Soares, Jiayi Hang, Lingyun Chen, Yi-Shu Tu, Jane Tseng, Yu Fang, Clare Jiang, Jinwen Zhang

Elizabeth Kreger called the meeting to order at 4:11PM (EDT). The minutes of the previous Executive Committee meeting were approved with no changes and are published in the Fall 2025 Cornucopia.

In the **Program Report**, Elizabeth Kreger indicated that there were 10 technical symposia at the Spring 2025 National Meeting, four of which were jointly programmed with other divisions. Coralia Osorio indicated that there where a total of 18 symposia were held at the Fall 2025 meeting, including six jointly programmed with other divisions and three offered as digital-only. AGFD experienced a significant number of speaker withdrawals (AGFD submitted abstract numbers: 387; AGFD withdrawn abstract numbers: 53, 13.7%) due to the federal government's unexpected travel freeze and visa restrictions, as well as ACS's decision to condense programming to Monday through Thursday. This change required converting several oral presentations into posters. In total, AGFD faced an unprecedented 53 withdrawals. Concerns were raised regarding member engagement, particularly the impact on networking with multiple poster sessions compared to the traditional single general poster session. To address this issue, Mike Morello proposed forming a task force (including himself, Coralia Osorio, and Kathryn Deibler) to evaluate poster programming for future ACS meetings. This concern was heightened by the fact that the DAC/ACS abstract team implemented these programming changes without consulting the Division. As a result of these shifts, AGFD was also forced to move the annual Awards Dinner from Tuesday to Wednesday, which came as an unexpected change for AGFD members. Mike Morello reminded members of the importance of filling out the post-meeting survey. Members can highlight how difficult the on-line app and meeting program tools are to use.

In New Business the Division is expanding its online presence. A recently launched Instagram account has already attracted more than 100 followers. In addition, the Division's Instagram, Facebook, and LinkedIn pages are now linked directly to the Division's webpage, making it easier than ever for members to stay connected. Mike Tunick shared that DAC now has 'Communication Grants' providing up to $7500 to a Division to improve their communications. AGFD may want to consider applying for one of these grants. To further boost visibility, Elizabeth Kreger suggested encouraging some of AGFD's high-profile members to follow and engage with the Division's accounts. These members will be contacted individually to help amplify the Division's outreach and networking potential.

In **Subdivision Reports,** Jason Soares, on behalf of Chair Yuzhu Zhang, indicated that the **Agriceutical Subdivision** has one symposium planned for Spring 2025, and Qinchun Rao has been appointed as the new Secretary. The **Flavor Subdivision**, led by Joonhyuk Suh, reported a very successful symposium at the Fall 2025 meeting co-organized with Jeehye Sung and featured two sessions with 20 oral presentations and seven posters. Looking ahead, the subdivision is preparing four symposia for Spring 2026. Topics will include artificial intelligence in food and agricultural chemistry,

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advances in food systems, sustainable citrus and sustainable food ingredients. Each symposium will be led by different members, reflecting strong leadership and collaboration within the subdivision. Additionally, nominations for subdivision leadership include Liyun Ye as Secretary in 2026 and Jeehye Sung as Secretary in 2027. The **Food Bioengineering Subdivision** report was delivered by Changping Wu. Two sessions focused on micro/nanoplastics were organized for the Fall 2025 meeting, featuring a total of 16 talks. Professor Kwang-Geun Lee of Dongguk University (Seoul, Korea) has been appointed as the subdivision's incoming Secretary for 2026. The **Food Safety Subdivision**, chaired by Boyan Gao, did not submit a report or nominations this cycle. The **Functional Foods & Natural Products Subdivision** report was presented by Yingdong Zhu. The subdivision organized three oral presentations and one poster session at the Fall 2025 meeting. Raliat Abioye was appointed as the new Secretary. For the **Nutrition & Gut Microbiome Subdivision**, Karley Mahalak delivered the report on behalf of Chair Ida Pantoja-Feliciano. One session was held at the Fall 2025 meeting and Cortney Christopher has been nominated as the incoming Secretary. The **Sustainable & Green Technology Subdivision** report was given by Chair Lingyun Chen. This group co-organized a symposium with the ACS POLY Division at the Fall 2025 ACS Meeting, titled *Innovations in Natural Polymer Science for Sustainable Agriculture and Food Security*. The symposium included three half-day sessions with 33 oral presentations and 17 posters. Building on this success, the subdivision plans to continue collaborating with POLY at the 2026 ACS Fall Meeting in Chicago. In addition, Mike Appell suggested developing a future session focused on regulatory issues related to green chemistry.

The **Awards Committee Report** was given by Michael Morello. All awards are listed in the Fall 2025 Cornucopia, and awardees will be recognized at the award's dinner to be held on Wednesday. The Advancement of Application of Agricultural and Food Chemistry Award (AAAC) was awarded to H.N. Cheng, collaborator USDA, ARS, SRRC., and a symposium in his honor was organized for Monday afternoon. Mike Morello asked the committee to consider a motion to allow giving the Exemplary Leadership Award through the mail to accommodate senior members who are frequently targets for this award but for whom travel is difficult. The motion passed unanimously.

The **Student Activities Report** was given by Ethan Lee. A tour of Compass Coffee is organized for Monday at 2:30 PM. Ethan pointed out that lack of Sunday programming had a negative effect on our hospitality table. Members had nowhere to convene, network and obtain meeting information. A brief discussion was held on how the changes ACS is making without consultation of Divisions is impacting members in ways not understood. For the next student event, Elizabeth Kreger suggested a tour of Coca Cola in conjunction with the Atlanta meeting.

The **Councilors Report** was given by Mike Tunick and Alyson Mitchell. Council is voting on amending and names to two committees, realigning the committee on Publications and establishing a LGBTQ+ committee. The 150th anniversary is coming up, and ACS is going to change the logo to commemorate the anniversary.

The **Nominations Report** was given by Jason Soares. Kenny Xie was nominated as the 2026 Vice-Chair, which will be finalized by vote at the Business meeting on Tuesday. There are no current vacancies in the Councilor, Alternate Councilor or At-large Executive Committee positions. All other positions that require a nomination and vote are also filled until 2026 or beyond. All sub-divisions have a 2026 secretary except Food Safety and Functional Food & Natural Products. Liz will transition from Chair to the Nomination Chair role and will have 2 Councilor, one Alternate Councilor and two At-large Executive Committee member positions for coordination/nomination. The At-large position can be appointed through the Chair and/or EXCOM but those interested in any of these nominated positions should reach out to Liz prior to the Spring meeting.

Stephen Toth gave the **Treasurer's Report**. Revenue for the year was \$60,491 and expenditures were \$66,221. The Division has \$1,265,429 in total assets and is financially healthy. A budget of \$35,000 was set and approved for the 2026 spring meeting in Atlanta. Mike Morello asked that we double the allocation for the Thomas Parliment award to which all agreed. A motion was made to approve a budget of \$1,500 for a camera and microphone for collecting social media content. The motion passed.

The **Cornucopia Report** was given by Carl Frey. An electronic version of the Cornucopia was sent out to members via email and 100 hard copies of the short (no abstracts) version were printed for distribution at the Washington D.C. meeting. The Instagram QR code and ACS logo have been added to the cover of the Cornucopia.

The **Hospitality/Public Relations Report** was given by Alyson Mitchell who indicated that 50 tickets were made

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available for the Division Awards Dinner being held Wednesday, August 20 from 6:00-8:00 PM at Zatinya. A dinner for the Executive Committee was organized at Yard House after the Executive Committee meeting.

The **Membership Report** was given by Alyson Mitchell on behalf of Michael Qian. Membership stands at 2262, increased from low 1924 back in 2022-2023, but still much lower than the highest 3110 in 2020. The US has 1475 members (accounting for 65.21% of the total), followed by China (111 members, 4.91%), Nigeria (82 members, 3.63%) and India (81 members, 3.58%). Compared with 2022, the division had a net increase of 339 members, an 18% increased from 2022. The major increase was from China (+83 members, +296%), followed by Nigeria (+72, +720%), India (45, +125%), and Colombia (+26, +433%). More than 50% of new members were recruited by Michael Qian through the 4th International Flavor Fragrances Conference. The drivers for increases from other countries are unknown. Japan had the largest membership drop (-11, -22%), whereas US membership remained unchanged.

Coralia Osorio gave the **Journal Report**. The ACS Agricultural and Food portfolio continues strong growth in 2025. Manuscript submissions are rising across *Journal of Agricultural and Food Chemistry (JAFC)*, *ACS Food Science & Technology*, and *ACS Agricultural Science & Technology*, with all three seeing higher Journal Impact Factors; JAFC reaching a record 6.2. ACS welcomed a new addition to the portfolio: *ACS Nutrition Science*, led by Editor-in-Chief Prof. Thomas Hofmann and Deputy Editor Dr. Jaume Amengual (University of Illinois Urbana-Champaign). The journal opened for submissions in June and will publish its first issue in early 2026. The JAFC-AGFD Research Article of the Year Award was awarded to Dr. Hanna Lang and co-authors for their work on the DNA reactivity of 3-Acetylacrolein. Dr. Lang will present on Tuesday, 2:00–2:35 pm, in Convention Center Room 143B. Finally, ACS Publications is continuing to offer AGFD members $1,000 Open Access discount tokens for publishing in ACS Agriculture and Food journals in 2025. To date, participation has been modest, and we greatly appreciate your support in spreading the word to help make this pilot program a success. Thank you to AGFD for ongoing partnership and support of the ACS Agriculture and Food journals!

The **Communications, Website, and Social Media Updates** were presented by Michael Appell and Alyson Mitchell. Michael will also give a presentation on *Social Media Best Practices for Technical Divisions* on Monday at 12:30 PM in the ChemSpark Theater (#2807), Expo Hall B. Our Wix website platform is currently managed by a team of webmasters and communications directors, including Michael Appell, Lingyun Chen, Alyson Mitchell, and Poll Zhang. The team is working to refresh AGFD's social media presence and improve the website interface for members. Best practices recommend using a single shared email for all AGFD social media accounts (LinkedIn, Facebook, Instagram, and X), allowing the communications team to coordinate posts and share updates more effectively. The Division will benefit from having someone fluent in social media to lead timely postings across platforms, especially prior to and during meetings. Overall, AGFD's communications, through newsletters, websites, and email, are comparable in frequency and style to other ACS divisions. However, AGFD has historically had limited social media activity beyond member-generated content, our LinkedIn account, and the newly launched Instagram account.

In **Old Business**, Coralia Osorio suggested that the next IFF meeting should occur in the Americas and also indicated that Kanjana Mahanatawee, from Thailand, offered the possibility of holding it there. Mike Qian stated that he is currently working with contacts in Peru for the next IFF meeting (2027). Coralia suggested Universidad Agraria La Molina as host in Peru, since she has some contacts there.

The meeting adjourned at 7:00 PM *Submitted by Elizabeth Kreger*

Business Meeting Minutes

Sunday August 17, 2025 Washington D.C.

Attendance: Coralia Osorio, Liz Kreger, Karley Mahalak, Alyson Mitchell, Steve Toth, Michael Appell, Neil Da Costa, Robert McGorrin, Michael Morello, Michael Qian, Jane Leland, Jason Soares, LinShu Liu, Changping Wu, Stephen Toth, Jinwen Zhang, Mike Tunick, Carl Frey, Roberta Tardugno.

Elizabeth Kreger called the hybrid meeting to order at 12:06 PM (EST). A vote was held to approve the nomination of **Kenny Xie** as **Vice-Chair.** The nomination passed unanimously. With this vote, the 2026 AGFD Officers and Committee leadership slate is complete.

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The members discussed the need for a formal process to address **non-responsive sub-divisions** and options for adjusting their leadership. The discussion focused on the **Food Safety Sub-division**, which did not provide either a report or a secretary nomination at the Spring or Fall meetings. Lucy Yu noted that the current chair, Boyan Gao, has been unable to travel to the U.S., which may have negatively impacted the subdivision's activities. Considering the absence of a secretary nomination, Alyson Mitchell nominated **Roberta Tardugno for Food Safety Sub-division Secretary**. Jason seconded the motion, and the nomination was approved. Jason Soares indicated that although he frequently sent information to subdivision leaders regarding responsibilities and AGFD Bylaws, he largely did not receive much feedback. Alyson Mitchell suggested having the past leadership committee host a bi-monthly Zoom meeting with subdivision leadership to mentor subdivision officers. Mike Appell and Mike Morello agreed to address this through the Past Leaders Committee, and will report back to the Executive Committee in the next month with a plan for mentoring the subdivision leadership.

A robust discussion was held on the potential for perceived bias in AGFD Fellow awards. While many ideas were raised, no resolution was reached. A Canvassing Committee had been established at the Fall meeting. Mike Morello proposed maintaining the current nomination process for this year to assess the effectiveness of the Canvassing Committee. The issue will be revisited at the next meeting.

Elizabeth Kreger noted the lack of a central repository for AGFD documents and reported that she has set up a Gmail account to serve this purpose.

LinShu Liu announced that the Sustainable Agricultural Symposium will award $100 for the best presentation, selected by the committee and funded through the symposium.

A recommendation was made to add meeting agenda outlines for all AGFD meetings to the *Cornucopia*.

The meeting adjourned at 1:10 PM *Submitted by Elizabeth Kreger*

Strategic Planning by the Divisional Activities Committee (DAC)

Report by Michael Tunick, AGFD Councilor

In February, I participated in a strategic planning session (SPS) for the DAC. SPS are held by ACS committees every five or six years to make sure they are moving forward. AGFD had a SPS in October 2023. Three goals, each with three strategies, were established for DAC.

Goal 1 - Promote: Share Division Impact & Value to Our Stakeholders. Strategies -
--pilot a standardized value proposition template for divisions to quantify member benefits/report impactful successes
--develop a branding toolkit for divisions
--create two communication forums for sharing divisional success stories within divisions and to ACS leadership.

Goal 2 - Connect: Connect Divisions and the greater ACS Community. Strategies -
--build a divisional platform for discussions and connections
--create a quarterly forum component for committees to expand programming
--develop engagement activities connecting divisional leaders with regional meetings.

Goal 3 - Support: Provide support and recognition. Strategies –
--implement technologies to maximize and harmonize capabilities with and within divisions
--recognize exemplary division activities
--build and strengthen networking opportunities for Divisions, DAC,and committees.

Every strategy has two or three champions who make sure the work is completed. I am on the 'recognize exemplary division activities' part. The tasks are to assemble a rubric for new ChemLuminary awards, get approval from DAC, have outreach to divisions to identify outstanding items in their annual reports, compile data, determine the winners and present the awards - all by the Fall 2027 Meeting.

AGFD DIVISION MEMBERSHIP APPLICATION

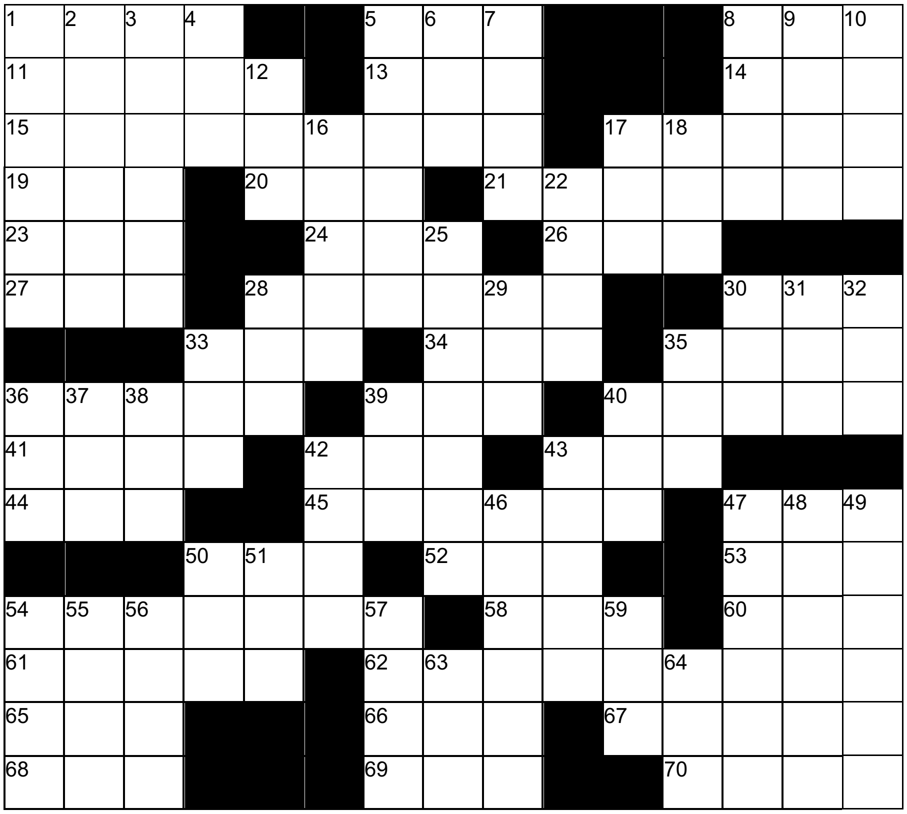
The Agricultural and Food Chemistry Division (AGFD) of the American Chemical Society (ACS) is a non-profit organization dedicated to the technical advancement of all aspects of agricultural and food chemistry. AGFD encourages technical advancement in the field by -
- organizing symposia/workshops on agricultural/food chemistry at ACS national meetings and other venues
- publishing proceedings of AGFD symposia
- publishing the *Cornucopia* newsletter
- updating members several times a year via e-mail blasts
- hosting social and networking gatherings at ACS national meetings
- providing cash awards and recognition to leading undergraduate and graduate students, young scientists and established scientists in the field of agricultural and food chemistry

At ACS National Meetings you can discuss division activities at the AGFD information table located near the AGFD technical session rooms. Join ~2300 AGFD members via the application form (below) or on-line at www.agfoodchem.org or www.acs.org (click on Communities, Technical Divisions, Technical Division List) or call ACS (800)333-9511 (in US) or 616-447-3776 (outside US). Payment by Visa/MasterCard or AmEx.

Check out AGFD on You Tube: https://www.youtube.com/watch?v=CyBMAnOuFKE

	APPLICATION FOR AGFD DIVISION MEMBERSHIP (7623P)
Title	
Name	
1st address line	
2nd address line	
City	
State	
Zip code	
Country	
e-mail address	
Phone	
check one	**MEMBERSHIP FEE**
[ ]	I am an ACS member and wish to join AGFD ($10.00)
[ ]	I am not an ACS member and wish to join AGFD ($15.00)
[ ]	I am a full-time student and wish to join AGFD ($10.00)
Be cool J O I N A G F D	Return application, with payment (payable to American Chemical Society), to AGFD Membership Chair: Michael Qian, Professor, Department of Food Science and Technology, Oregon State University, Corvallis OR 97330

ACROSS & DOWN IN ATLANTA TOWN



A prize to the first send a correct solution to Carl Frey (via smartphone photo/e-mail) to - cfreyenterprise@gmail.com

ACROSS

1 Daybook meeting abbrev.
5 'Green' prefix
8 Queen, king, __
11 Trumpeter Armstrong
13 2000 pounds
14 Deface, make imperfect
15 Atlanta men's HBCU
17 A most refreshing drink
19 Big player in the nail biz
20 Amt. amassed since Jan.1
21 Atlanta women's HBCU
23 Ready, __, go!
24 Skirt lower edge
26 UFO pilots
27 Attempt, make an effort
28 Halvah & bagel seed
30 __, Humbug!
33 Source of 2x4s
34 __ soda or __ Mineo
35 Periodic table info.__
36 *Wonder Woman* Gal __
39 Hog heaven
40 It should be God's honest
41 'Tickle me' Muppet
42 Common ship reference
43 Egoist's repeated refrain
44 __ Taylor or __ Cheney
45 Kit __ or Johnny __
47 *To __ is human*
50 Wanted poster abbrev.
52 Daytime illuminator
53 Born with the name
54 Atlanta NFL franchise
58 Cambridge school of note
60 Recipe unit abbrev.
61 Photo session illuminator
62 Atlanta's 'main' street
65 '97-'06 SNL Tina __
66 Violent '*Rings*' creature
67 Free from dirt
68 Iron(II) sulfide
69 Many college instructors
70 Ancient inhabitant of Central Europe & Britain

DOWN

1 Not quite
2 Party __ or __ scooper
3 Degree of being free of contaminants
4 Situation leading to overtime
5 Piano practice pieces
6 Adj. side / hypotenuse
7 A cash register slot
8 Digital clock switch setting
9 Tijuana home
10 __ go bragh!
12 Once bitten, twice __
16 This, that and the __
17 Toto, Dino or Snoopy
18 Chicago, IL. transports
22 Orange zest or rind
25 Major golf tournament in Augusta, Georgia
28 Don't stand there!
29 April showers bring __ flowers
30 Heat energy unit
31 Picnic intruder
32 Lab water
33 What Dave Grohl fights
35 Jackie's second
36 __ electrophoresis
37 'The Greatest'
38 Once N/S Vietnam divider
39 Doo-wop group __ Na Na
40 Stannous element
42 Skim, digitize, monitor
43 Like H+, Cl- or NH4+
46 Trees of genus Rhus with leaves that turn red in the fall
47 Menu course before dessert
48 What a Zip-Loc bag can do
49 Best recourse for a sinner
50 AGFD parent
51 Potassium hydroxide
54 A really lousy report card
55 Where to shelter in a storm
56 Chip powerhouse
57 Note, observe, recognize
59 Cannabis active component
63 Historic period
64 RN's specialty

AGFD OFFICER & COMMITTEE LEADERSHIP ROSTER

Chair - Serves 1 year. Presides over Division meetings/appoints committees
Coralia Osorio UNAL
cosorior@unal.edu.co

Chair-Elect - Serves 1 year. Substitutes for Chair as needed. Organizes technical programs at national meetings.
Karley Mahalak USDA-ARS
karley.mahalak@usda.gov

Vice-Chair - Serves 1 year. Assists Chair-elect. Develops future technical programs. Kenny Xie
U.S. Pharmacopeia KYX@usp.org

Secretary - Responsible for Division correspondence and meeting minutes.
Alyson Mitchell
University of California, Davis
aemitchell@ucdavis.edu

Treasurer - Responsible for Division finances.
Stephen Toth III
International Flavors & Fragrances, Inc. R&D Union Beach NJ
stephen.toth@iff.com

Cornucopia Editor - Edits newsletter.
Carl Frey cfreyenterprise@gmail.com

Councilors - Represent Division for 3 years on ACS council.
Alyson Mitchell (thru '26)
aemitchell@ucdavis.edu
Lauren Jackson (thru '26)
lauren.jackson@fda.hhs.gov
Michael Tunick (thru '27)
mhtunick@gmail.com

Website Editor - Maintains web site.
Michael Appell
michael.appell@ars.usda.gov

Student Activities – Attract/retain graduate/undergraduate student membs.
Ethan Lee (thru '27) elee1212@umd.edu
Jiayi Hang (thru '26) jhang1@ualberta.ca

Nominations - Develops officer slate. Served by immediate past chair. Liz Kreger Elizabeth.Kreger@sensient.com

Finance - Monitors Div. finances. Served by immediate past chair. Liz Kreger Elizabeth.Kreger@sensient.com

Hospitality - Organizes receptions and banquets. Alyson Mitchell
aemitchell@ucdavis.edu

Alternate Councilors - Substitute for Councilors. Serve 3 years.
Kathryn Deibler (thru '27)
kdd3@cornell.edu
Michael Qian (thru '27)
Michael.qian@oregonstate.edu
Brian Guthrie (thru '26)
Brian_Guthrie@cargill.com

At-Large Executive Committee Members - Assist in Div. management. Serve 3 years.
Jane Leland (thru '26)
JLelandEnterprises@gmail.com
Robert McGorrin (thru '26)
robert.mcgorrin@oregonstate.edu
Keith Cadwallader
cadwlldr@illinois.edu (thru '27)
Jonathan Beauchamp (thru '27)
jonathan.beauchamp@ivv.fraunhofer.de

Awards – Oversee awards process.
Chair Michael Morello
mjmorello226@gmail.com
AGFD Fellow Awards
Fereidoon Shahidi fshahidi@mun.ca
Young Scientist Award
Youngmok Kim
youngmok.kim@finlays.net
Young Industrial Scientist Award
Bhimanagouda (Bhimu) Patil
b-patil@tamu.edu
AGFD Distinguished Service Award
Michael Tunick mht39@drexel.edu
Roy Teranishi Graduate Fellowship
Liangli (Lucy) Yu lyu5@umd.edu
Grad/Undergrad Student Awards
Kathryn Deibler kdd3@cornell.edu

Multidisciplinary Program Planner
Helps coordinate nat'l mtg programs
Neil Da Costa International Flavors & Fragrances, Inc. neil.dacosta@iff.com

Membership – Recruits/retains members. Michael Qian
michael.qian@oregonstate.edu

Agriceutical Sub.Div.
Chair Yuzhu Zhang
yuzhu.zhang@usda.gov
Chair-elect Ying Wu ywu@Tnstate.edu
Vice-chair Bailiang Li
15846092362@163.com
Secretary
Songtao Li lisongtao@vip.126.com

Food Bioengineering Sub.Div.
Chair Hongsik Hwang
hongsik.hwang@usda.gov
Chair-elect Changqing Wu,
changwu@udel.edu
Vice-chair Jinwen Zhang
jwzhang@wsu.edu
Secretary Hye-Seon Kim
hyeseon.kim@usda.gov

Flavor Sub.Div.
Chair Joonhyuk Suh J.Suh@uga.edu
Chair-elect Yun Yin yunyin2@vt.edu
Vice-chair Yu Fang
yufang@coca-cola.com
Secretary Clare Jiang
clare.y.jianf@gmail.com

Food Safety Sub.Div.
Chair Boyan Gao gaoboyan@sjtu.edu.cn
Chair-elect Vivian Wu
vivian.wu@usda.gov
Vice-chair Yanhong Liu
Yanhong.liu@usda.gov
Secretary Roberta Tardugno
Roberta.tardugno@gmail.com

Functional Food/Nat Product SubDiv
Chair Yingdong Zhu yzhu1@ncat.edu
Chair-elect Khizar Hayat
khizaraura@gmail.com
Vice-chair Xiaohong Sun
Xiaohong.sun@dal.ca
Secretary Yanfang Li yanfang.li@usda.gov

Nutrition & Gut Microbiome Sub.Div.
Chair Ida Pantoja-Feliciano
ida.g.pantojafeliciano.civ@mail.mil
Chair-elect Tom Wang
Tom.wang@usda.gov
Vice-chair Jenni Firrman
Jenni.firrman@usda.gov
Secretary Jianghao Sun
jianghao.sun@usda.gov

Sustainability/Green Tech. Sub.Div.
Chair Lingyun Chen
lingyun.chen@ualberta.ca
Chair-elect Omowunmi "Wunmi" Sadik
sadik@njit.edu
Vice-chair Yi-Shu Tu
georgetu@gmail.com
Secretary Yixiang Wang
yixiang.wang.mcgill.ca

Public Relations – Publicizes Division.
Alyson Mitchell aemitchell@ucdavis.edu

Agricultural and Food Chemistry (AGFD) Division of the American Chemical Society (ACS) Graduate Student Symposium Competition

This AGFD sponsored competition is designed to showcase the research talents of agricultural and food chemistry graduate students anticipating a 2027 graduation. All applicants must hold membership in AGFD and ACS. This symposium will comprise part of the ACS National Meeting held in New Orleans, Louisiana between March 21 and March 25, 2027. Students chosen as participants in the competition will receive $1000 in travel expenses to allow them to present at the meeting. Competition winners will receive cash awards - $500 (1st place), $250 (2nd), $100 (3rd).

Application requirements (submitted in the following order as a single PDF document) – 1-Completed application form (below), 2-Resume (2 page max.), 3-Abstract (also entered on ACS MAPS on-line system as part of the AGFD Graduate Student Symposium), 4-Recommendation Letters (1000 words max., each) from 2 professors, one preferably the graduate advisor.

Email complete application, **no later than Sept. 25, 2026**, to Dr. Kathryn Deibler kdd3@cornell.edu

APPLICATION FORM

Agricultural & Food Chemistry (AGFD) Division of the American Chemical Society (ACS)

Withycombe-Charalambous Graduate Student Symposium Competition

Name: ______________________________

University: ______________________________

Major(s): ______________________________

Undergraduate Grade Point Average (provide scale): ______________________________

Graduate Grade Point Average (provide scale): ______________________________

Address: ______________________________

Phone number: ______________________________

Email address: ______________________________

ACS membership number: ______________________________

Member of AGFD? (check one) Yes ( ) No ( )

Research advisor: ______________________________

ACS MAPS Abstract Submission Number: ______________________________

Complete all application requirements (submitted in the following order as a single PDF document) –

1-Completed application form (above)

2-Resume (2 pages max.)

3-Abstract (also entered on ACS MAPS on-line system as part of the **AGFD Graduate Student Symposium**)

4-Recommendation Letters (1000 words max., each) from 2 professors, one preferably the graduate advisor.

Email complete application, **no later than September 25, 2026**, to Dr. Kathryn Deibler kdd3@cornell.edu

Agricultural and Food Chemistry (AGFD) Division of the American Chemical Society (ACS) Undergraduate Student Poster Competition

This AGFD sponsored competition is designed to showcase the research talents of agricultural and food chemistry undergraduate students, provide a professional forum for presenting their research and promote their continued agricultural and food education. All applicants must hold membership in AGFD and ACS. This poster session will comprise part of the ACS National Meeting held in New Orleans, Louisiana between March 21 and March 25, 2027. Students chosen as participants in the competition will receive $1000 in travel expenses to allow them to attend the meeting and present their poster. Competition winners will receive cash awards - $500 (1st place), $250 (2nd), $100 (3rd).

Application requirements (submitted in the following order as a single PDF document) – 1-Completed application form (below), 2-Resume (1 page max.), 3-Abstract (also entered on ACS MAPS on-line system as part of the AGFD General Poster Session), 4-Recommendation Letter (1000 words max.) from 1 professor.

Email complete application, **no later than September 25, 2026**, to Dr. Kathryn Deibler kdd3@cornell.edu

APPLICATION FORM

Agricultural & Food Chemistry (AGFD) Division of the American Chemical Society (ACS)

Undergraduate Student Poster Competition

Name: ______________________________

College/University: ______________________________

Major(s): ______________________________

Grade Point Average (provide scale): ______________________________

Address: ______________________________

____

Phone number: ______________________________

Email address: ______________________________

ACS membership number: ______________________________

Member of AGFD? (check one) Yes ( ) No ( )

Research advisor: ______________________________

ACS MAPS Abstract Submission Number: ______________________________

Complete all application requirements (submitted in the following order as a single PDF document) –

1-Completed application form (above)

2-Resume (1 page max.)

3-Abstract (also entered on ACS MAPS on-line system as part of the **AGFD General Poster Session**)

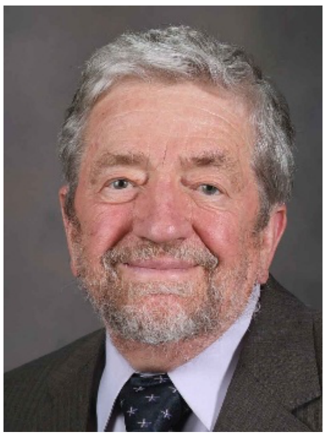
4-Recommendation Letter (1000 words max.) from 1 professor.

Email complete application, **no later than September 25, 2026**, to Dr. Kathryn Deibler kdd3@cornell.edu

AWARD NEWS

Congratulations to AGFD members **LinShu Liu** (USDA ARS-ERRC), **Jerry Wayne King** (retired) and **Katherine N. Malone**y (Point Loma Nazarene University) for being named **ACS Fellows** - recognizing their significant achievements in chemistry and for their extensive volunteer efforts supporting ACS.

John W. Finley



recipient of a 2025 AGFD Exemplary Leadership Award

recognizing his substantial and extended service to AGFD, including -

--Member since 1976 and Division Chair 1988
--Chair: Food Bioengineering Subdivision: 2019-2020
--Chair: Food & Nutritional Biochemistry Subdivision 1997
--Alternate Councilor: 2003-2010
--National Meeting Symposia (since 1996): 22
--AGFD Councilor: 1997 - 2020
--Symposium Series Books: 8
--JAFC Editorial Advisory Board: 1989-1998
--JAFC Associate Editor: 1999 – 2017
--AGFD Fellow: 1990
--AGFD Distinguished Service Award: 1990
--Sterling B. Hendricks Memorial Lectureship: 2019
--ACS Fellow: 2011

AGFD congratulates all awardees and looks forward to their continued successes and contributions.

See the 'with abstracts' version of Cornucopia on the AGFD website for information on all AGFD awards.

The ACS AGFD Division Student Activities team invites you to join them in a tour of

The WORLD OF COCA – COLA

Noon, Tuesday, March 24
121 Baker Street NW
Atlanta

Contact
Elee1212@umd.edu
Jhang1@ualberta.ca

(advance registration required)

All are welcome!

Student tix = $15 + tax

Gen. Admission tix = $25 + tax

AGFD TECHNICAL PROGRAM

Find abstracts of these presentations in the 'with abstracts' version of Cornucopia posted on the AGFD website.

******** **CORRECTION** ******** The abstract (ID 4338286) referencing a presentation given on Monday 8/19/2025 at the D.C. ACS National Meeting did not reference all contributing authors. The correct listing follows: *Effect of bioconverted postbiotics on sarcopenia*
Hyunsook Kim, Dept. of Food & Nutrition, College of Human Ecology, Hanyang Univ., Seoul, South Korea hyunsk15@hanyang.ac.kr
Seung Hyeon Jung, Dept. of Food and Nutrition, College of Human Ecology, Hanyang Univ., Seoul, South Korea j0721sh@hanyang.ac.kr Subin Hwang, Dept. of Food & Nutrition, College of Human Ecology, Hanyang Univ., Seoul, South Korea subin0719@hanyang.ac.kr Kun Ho Seo, KU Center for Food Safety, College of Veterinary Medicine, Konkuk Univ., Seoul, South Korea

SUNDAY MORNING March 22 World Congress Center A301

Advances in Food Ingredients - Bridging Innovation to Traditional Technologies Z. Xie, L. Ye, *Organizers* Y. Yin, *Organizer, Presiding*

8:00 Introductory Remarks.
8:05 . Ensuring safety and quality in natural food colors: New guidelines toward standardization. **Z. Xie**
8:25 . Effect of two:step ultrasound treatment on emulsifying properties of polyphenol:protein complex from spent coffee ground and brewer's spent grain. **N. Woojin**, K.G. Lee
8:45 . From structure to function: SAXS-based modeling of phycocyanin dissociation. **Q. Li**, A. Abbaspourrad
9:05 . Decoding preservation dynamics: Benchmarking polysaccharides and lipids in mushroom coatings. **M. Salim**, B. Tardy
9:25 Intermission.
9:45 . Single-atom catalysts as novel antibacterial agents in catfish packaging: Impacts on flavor and quality. W. Wei, M. Ponder, Y. Kim, D. Shuai, H. Huang, **Y. Yin**
10:05 . Deep learning-assisted analysis of co-electrospinning starch with plant-based proteins for the fabrication of fibrous Pickering emulsifiers. **J. Li**
10:25 . Using low-pressure air plasma to improve chickpea (*Cicer arietinum* L.) seed germination by altering the seed coat surface. **P. Aguilera**, M.J. Hawker
10:45 . Top-down fabricated potato starch nanoparticles for delivery of bioactive compounds. **Q. Wu**, P. Li, A. Abbaspourrad

World Congress Center A302

Advances on Agricultural and Food Chemistry - General Papers - Food Analysis & Technology K. Mahalak, *Org.* C. Osorio, *Org./Pres.*

8:00 Opening Remarks.
8:05 . Acrylamide formation and mitigation in fried sweet potato products. **M. Allan**, S. Johanningsmeier, V. Truong, B. Stickley, J. Schultheis, K. Pecota, C. Yencho
8:25 . Effects of ultrasound-assisted extraction on the physicochemical properties of legume extracts. **K.G. Lee**
8:45 . Endophytic microbiome of maca (*Lepidium meyenii*) and its influence on glucosinolate catabolism leading to macamide and benzenoid formation during traditional Andean postharvest drying. **G. Guerrero**, E. Esparza, G. Mormontoy, N. Salinas, E. Cosio
9:05 . Statistical assessment of sodium nitrite variability in Costa Rican curing salts: A two-year study on food safety and regulatory compliance. **J. Ramírez**, J.A. Rodriguez Corrales, K. Hernandez Ugalde
9:25 . Dietary fish oil intervention mitigates metabolic dysregulation triggered by a potato chip diet through the Gut–Liver axis. **X. Wan**, D. Meng, Y. Zhang
9:45 Break.
10:00 . Techno-economic analysis of microbial losses during sugarcane and sugar beet processing and raw sugar manufacturing. **E. Terrell**, G.O. Bruni, T. Zimmerman
10:20 . Breaking down cell walls: Arabinoxylan remodeling in cool-season forages during fermentation with fibrolytic rumen bacteria. **P.R. Pandeya**, S.D. Newhuis, B.E. Davis, M. Flythe, I.A. Kagan, **R.R. Schendel**
10:40 . Impact of carbon composite on the germination of *Trifolium pratense* in two different soil types. **D. Alabi**, V. Paul
11:00 Conclusion Remarks.

DIGITAL SESSION

Global Virtual Symposium: Agri-Derived Bioactives and Their Therapeutic Potential P. Garg, N. Jha, K. Raghav Chaturvedi, *Org.* A. Girija, V. Krishnan, S. Thandapilly, *Org., Pres.*

8:00 . Agri-derived essential oil bioactives as functional ingredients to reduce parasitic infections through food-based delivery systems. **J.E. Andrade Laborde**
8:20 . Toward sustainable carotenoid extraction using green solvents. **A. Focsan**, G. Sreenilayam, L. Kispert
8:30 . GC-MS analysis of *Justicia secunda* and *Pelargonium hortorum* plants: In silico evaluation against SARS-CoV-II proteins. **J. Patiño Rivera**, C. Gomez, F. Cassasola Jiménez, K. Ramírez Adan, G. Borja Meza, G. Tejada Melo
8:40 . Food protein-derived peptides as potential therapeutic agents against hypertension and hypercholesterolemia. **R. Aluko**
9:10 . Harnessing agri-derived bioactives for anti-fibrotic Therapeutics: A translational framework bridging ai-driven molecular modeling and clinical dermatology. **T. Wilson-Rawlins**, K. Madison, M. Rabiu, A. Anderson, J. Trevino
9:20 . From individual fibers to designed mixtures: A new paradigm for microbiota modulation. **T. Cantu-Jungles**, B. Hamaker
9:50 . Transforming spent coffee grounds into microrobots for sustainable water purification. **A.K. Singh**, T. Basireddy, J.L. Moran
10:00 . Bag to bottle®: Transforming scientific discovery into scalable, market-ready industrial impact. **R. Raliya**
10:20 . Engineered plant viral particles for targeted delivery into solid tumors: applications in medicine and beyond. **K. Hefferon**
10:40 . Influence of berry polyphenols on gut and vaginal microbiota and metabolic health through in vitro, animal and human dietary interventions. A. Kirkendall, C. Teets, S. Arbizu, H. Shakoor, J. Minj, C. Jarrett, P. Solverson, **F. Carbonero**
11:00 . Farming in the final frontier: Exploring agriculture in microgravity. **A. Bhutey**

SUNDAY AFTERNOON World Congress Center A302

Advances on Agricultural and Food Chemistry - General Papers - Food Analysis & Sensory Evaluation
K. Mahalak, *Organizer* C. Osorio, *Organizer, Presiding*

2:00 Opening Remarks.
2:05 . Effect of barrel aging on a straight rye whiskey produced in Tennessee. **T. Nguyen**, J.P. Munafo
2:25 . Identification of bitter and astringent tastants in chardonnay marc fractions. **N. Nguyen**, J.P. Munafo
2:45 . Using grape volatilome as a way to understand and track grape maturity. **K. Kent**, A. Rumbaugh
3:05 . Identification of odor-active compounds in sharp-leaf galangal (*Alpinia oxyphylla*) rhizomes. **K. Jha**, T. Nguyen, N. Nguyen, J.P. Munafo
3:25 . Chemical and sensory effects of fruit protease from pineapple and kiwifruit on robusta coffee via pulsed electric field-assisted vacuum impregnation. **J. Yun**, K.G. Lee
3:45 Break.
4:00 . Evaluation of orange peel extract as a natural fortifier in dairy and plant-based yogurt: Antioxidant properties, cytotoxicity, and sensory acceptability. **O.E. Ogunjinmi**, O.M. Banwo, B.T. Fayoyin
4:20 . Carbon dots as a dual-action platform for next-generation food packaging. **K. Ahmad**

4:40 . Organogels derived from eugenol-related agro-based materials. A. Biswas, **H. Cheng**, B. Chisholm, R. Beni, Z. Liu, K. Vermillion, M. Appell, K. Forson
5:00 . Fully portable smartphone-integrated device coupled with nanozyme-based assay for rapid detection of TBHQ. **Q. Wu**, M. Kamruzzaman
5:20 . Behavior of hydrophilic particles in oil droplets: From interfacial trapping via microfluidics to spontaneous double-emulsion transition. **P. Li**
5:40 . Concluding remarks

World Congress Center A301
Withycombe-Charalambous Graduate Student Symposium
K. Deibler, *Organizer, Presiding*
2:00 Introduction.
2:25 . Impact of post-harvest treatments on the micronutrient availability of spinach (*Spinacia oleracea* L.). **E. Lee**, X. Wu, L. Yu
2:50 . Peptide directed immobilization of PETase for microplastic bioremediation. **S. Su**, J.M. Goddard
3:15 . Key flavor compounds in various *Vanilla* species and their biosynthetic pathways before harvest. **D. Kim**, Y. Wang
3:40 Intermission.
3:50 . Low temperature gelation of hemp protein for co-encapsulation of resveratrol and epigallocatechin gallate. **T. Dissanayake**, R. Rodriguez, F. Koksel, J. Bonilla, N. Bandara
4:15 . On-site detection of thiram on apple surfaces using a flexible bacterial cellulose-based SERS substrate. **L. Xiao**, X. Lu
4:40 . Estimation of brewers' spent grains' proximate composition using NIR sensor and multivariate analysis. **V. Karuppuchamy**, L. Rodriguez-Saona, O. Campanella

World Congress Center B3/B4 exhibit hall
Posters – NOON - Artificial Intelligence and Advanced Sensing for Enhancing Food Safety
Cospons. AGRO, ANYL, ENVR B. Park, J. Yi, *Organizers*
12:00 . Development of fluorometric 3D PCL-PEO electrospun nanofiber scaffolds loaded with lysozyme for biosensing *Escherichia coli* in foods. **R. Wang**
12:00 . Qualitative analysis of pulegone in mint plants across the fourteen (14) parishes of Jamaica by gas chromatography-mass spectrometry. J. Thomas, R. Reid, D. Davis, **A. Goldson-Barnaby**
12:00 . Biodegradable & functional packaging films via coaxial electrospinning of micellar casein, pullulan, and thymol-based emulsions. **E. Peker**, U. Yucel, V. Trinetta
12:00 . Geometrical and numerical analysis for crop growth effect on pesticide residue dynamics. **K. Iijima**, K. Kondo, **F. Iwasaki**, T. Watanabe

World Congress Center B3/B4 exhibit hall
Posters – NOON - Undergraduate Poster Competition
12:00 . Resveratrol-enhanced oat straw cellulose films for food packaging applications. **K. Rosenau**, S. Regmi, S. Paudel, S. Bhattarai, S. Janaswamy
12:00 . Parameterization of the fermentation process of pineapple juice (*Ananas comosus*). **M.S. Rodriguez**, A. Castro
12:00 . Color transformations in sunflower seed butter: A natural colorant source?. **B. Bragg**, S.C. Habibi, K.L. Kuntz
12:00 . Leveraging local water composition: A practical toolkit for consistent microbrewery beer quality. **C. Walesch**, J. Guerrero, D.J. Lecaptain
12:00 . Visualizing plant stress: Hyperspectral imaging of invasive weeds in Monterey County. **E.W. Brunnengraeber**, A.K. Sharma, T. Cassidy
12:00 . Evaluation of phosphate-solubilizing capacity of rhizobacteria from rice fields in Guanacaste, Costa Rica: A step toward biofertilizer development. **S.P. Castro**, E. Potoy Requene, M.B. Gómez Bogantes, I. Hilje Rodriguez, S. Hernandez Villalobos, M. Madriz Martínez, J.Á. Rodríguez Corrales
12:00 . Development of a computational tool for kombucha titration analysis. **C. Pearson**, J. Kegerreis, J.N. Richardson, L. Melara

General Posters – NOON
Congress Ctr B3/B4 exhibit hall
K. Deibler, K. Mahalak, C. Osorio, *Organizers, Presiding*
12:00 . Fermentation of artichoke by-products for the sustainable production of bioactive cosmetic molecules. **N. Cicero**, L. DeMaria, R. De Pasquale, E. Di Salvo, R. Vadala, R. Costa, G. Lo Vecchio
12:00 . Enhancing functional properties of pea protein through glycation with hydroxypropyl methyl cellulose. **B. Castellanos**
12:00 . Using alphafold to engineer transient tertiary structure (TTS) tags for enhanced expression and phosphorylation of casein proteins. **S. Murrell**, M. Bartolovich, C. Liu, J. Zhao, J.J. Love
12:00 . Optimization of chemical and physical conditioning of distillers' dried grains (DDGS) with solubles for biodegradable film production. **E. Peker**, U. Yucel, V. Trinetta, H. Dogan
12:00 . 3D food printing enhances lutein delivery. **O. Amusat**, S. Ahmadzadeh, S. Barekat, A. Ubeyitogullari, S. Lee
12:00 . Managing the malolactic fermentation to drive stylistic differences in Pinot Noir wines. **N.C. Mannino**
12:00 . Valorisation of rice husk biosilica for cereal and legume seeds preservation. **Z. Bertrand**
12:00 . Comparative exposure and risk assessment of heavy metals, nutrients, and organochlorine pesticides in cow and plant-based milks. **T. Phan**, S.C. Good, C. Anakwue
12:00 . Molecular dynamics simulation of ovalbumin at a triolein-water interface. **J. Fetrow**, C. Bilgrien, J. Zhao, S. Hong, L. Hwang, **C. Liu**
12:00 . Integrated processing effects of high pressure homogenization and gellan gum on soymilk's physical stability and physicochemical properties. **J. Janahar**, **S.K. Chang**, **Y. Zhang**, **L. Bi**
12:00 . Extraction, encapsulation, and antioxidant capacity of anthocyanins from Peruvian purple corn (*Zea mays L.*). **D.V. Alvino Garcia**, M. Rabanal
12:00 . Changes in digestibility, viscosity, and microstructural properties of waxy and non- waxy rice starches after microwave heat-moisture treatment. **A. Anderson**
12:00 . Analysis of vitamin K content in traditional Korean soy-based fermented foods. K. Kim, M. Ju, **J. Sung**
12:00 . Salicylic acid enhances the muscle-protective effects of garlic sprouts. **S. Hong**, J. Lee
12:00 . Green extraction and quantitative analysis of Polyphenols. **P. Acharya**, E. Hilderbrand, B. Gardner, A. Seamans
12:00 . Tharsis AeroFarm Project - Agricultural chemistry innovation: Development and design of a hermetically sealed aeroponic cultivation system for operation in extreme terrestrial and space environments. **S.M. Quintero Blanco**
12:00 . Impact of roasting temperature on lignan content and antioxidant activity of safflower seeds. **Y. Kim**, G. Kim, J. Lee, Y. Kim
12:00 . Biological potentials of Citrus unshiu flower extracts in metabolic diseases. **J. Lee**, S. Hong, H. Lee
12:00 . Enhancement of bioactive compound accumulation and muscle-protective activity in *Gynura procumbens* leaves by ultrasound treatment. **H. Lee**, T. Jeong, J. Lee
12:00 . Enhancing biological control of bacterial pathogens in fruit tree crops using a probiotic targeted delivery system. **M.M. Deinys**, J. Pereira, E. Luis Vieira Aguilar De Souza, S. Santra
12:00 . Antimicrobial activity of a biobased polymer produced from a phenolic compound and lipids. **X. Fan**, H. Ngo, K. Wagner
12:00 . Environmentally friendly CNCs as nanocarriers for copper-based antimicrobial treatments. B. Sharma, **R. Apsingekar**, J. Pereira, S. Santra
12:00 . Analysis of toxic heavy metals in processed consumables. **T. Phan**, S.C. Good, V. Tran, V. Tran, K. Hadnot, S. Jackson, T. Nguyen, T. Gin, C. de la Cerda, K. Anthony
12:00 . Development of chemical-based reference standards for Korean distilled soju aroma wheel. S. Park, **S. Lee**
12:00 . Reducing peanut allergenicity via magnetic nanoparticles for immunotherapeutic use. **M. Harris**, **B. Lozano**, A.I. Omoike
12:00 . HPLC-based characterization of phenolic pigments in *Thespesia grandiflora*. **K. Lassala**, J.L. Vera
12:00 . Molecular dynamics simulation of heat-induced denaturation of ovalbumin. **C. Bilgrien**, J. Zhao, S. Hong, L. Hwang, **C. Liu**
12:00 . Molecular dynamics simulation of ovalbumin behavior at the air-water interface. **E. Ortiz**, A. Hernandez, C. Bilgrien, J. Zhao, S. Hong, L. Hwang, **C. Liu**
12:00 . Protein language model-based prediction of allergens in *Arthrospira platensis*. **L. Feng**, S. Daley, Z. Du, Y. Li, J.J. Love, C. Zuñiga, J. Zhao, **C. Liu**
12:00 . Structural dynamics of casein isoforms in water. **R. Roni**, S. Iller, C. Bilgrien, J.J. Love, J. Zhao, S. Hong, L. Hwang, **C. Liu**
12:00 . Molecular and structural signatures of predicted allergens in *Chlorella vulgaris*. **S. Daley**, Z. Du, Y. Li, J.J. Love, C. Zuñiga, J. Zhao, **C. Liu**

12:00 . Advancing eco-friendly latex production: Tissue culture and agronomic studies of Dandelion (*Taraxacum officinale*). **R. Bharadwaj**, **T. Harish**, **N. Kumar**, **S. Devarakonda**, **A. Menezes**, B.K. Poudyal
12:00 . Integrated analysis of sugars, organic acids, and volatile compounds for flavor characterization in Korean strawberry cultivars. Y. Jeon, Y. Oh, **J. Sung**
12:00 . Growth effects of fluorescent, biopolymer-coated gold nanoparticles on hydroponically grown basil. **M. Johnson**, D. Kirby
12:00 . Combining soybean-induced carbonate precipitation and methylcellulose for dust suppression in semi-arid agricultural environments. **A.M. Orenstein**, S.C. Wright, N.K. Knowlton
12:00 . Hepatoprotective potential of *Citrus maxima* (pomelo) peel extracts against drug-induced liver injury. **Z. Su**, S. Huang, P. Lin, P. Lin, Y. Tung
12:00 . Crop-specific microbial biofertilizer for Indian ricegrass: A sustainable strategy to supplement alfalfa cultivation. **C. Hyman**, **D. Johnson de Lacy**, N.K. Knowlton
12:00 . Yeast-Mediated biotransformation of polyphenolics in grape pomace. **A. Chandran Matheyambath**, H. Brown
12:00 . Mycorrhizal fungi as a biofertilizer: A pot experiment with legumes under natural conditions. B.K. Poudyal, **A. Vijayant**, **R. Thayil**
12:00 . Improved quality control testing of saffron botanicals using NMR. **B. Hayes**, S.M. Lamos

DIGITAL SESSION
MONDAY MORNING March 23
Global Virtual Symposium: Agri-Derived Bioactives and Their Therapeutic Potential
P. Garg, N. Jha, K. Raghav Chaturvedi, *Org.* A. Girija, V. Krishnan, S. Thandapilly, *Orgs, Pres.*
6:30 . Improvement of cognitive function by a blood-brain barrier-transportable dipeptide. **T. Matsui**
6:50 . Exploring the mechanism of ?-glucan in alleviating colitis. **S. Nie**
7:10 . Constituent-taste relationship of Monascus-fermented cheese: Unveiling taste characteristics through untargeted metabolomics. **Y. Wang**, **Y. Wang**, **X. Wang**, B. Wang
7:20 . Potential bioactives from Himalayan bioresources for food and pharma applications. **S. Yadav**
7:50 . Green extraction of bioactive compounds from *Thuja orientalis* leaves and cones using microwave- and ultrasound-assisted techniques optimized by response surface methodology. **R. Abdullah**
8:00 . Translating plant science into agri-derived bioactives and functional foods: Lessons from durian and beyond. **S. Sirikantaramas**
8:20 . Essential oil profiling of the novel cardamom variety "Ranweli Yasas Sri" by gc-ms and raman spectroscopy. **H. De Zoysa**, H. Perera, N. Abeyasinghe, J. Weerasena, N. Fernando, S. Handunnetti, I. De Silva
8:30 . Non-enzymatic amperometric determination of hydrogen peroxide in cassava using chitosan-nano-silver/graphene oxide sensors. **A. Akitoye**, **I.A. Akinbulu**, **W. Okiei**, T.A. Silva
8:40 . Phytochemical profiling and antimicrobial potentials of *Opuntia ficus-indica* Cladodes: A promising pharmaceutical resource. **O.O. Onawumi**, A. Abubarka, O.A. Adewusi, **J.A. Olaniyan**, **S.S. Ojo**
8:50 . Polyphenols from Brazilian biodiversity and its health benefits. **M. Junior**
9:00 . Oat protein processing, functionality and allergenicity: New insights from Canadian oat lines. **M. Malalgoda**
9:30 . Cottonseed bioactive materials regulate glucose transport gene expression in mouse macrophages. **H. Cao**, K. Sethumadhavan, H. Cheng

World Congress Center A301
Food Ingredients - Sustainability and Natural Alternatives
K. R. Cadwallader, Y. Fang, *Organizers* X. Du, *Organizer, Presiding*
8:00 Opening Remarks.
8:05 . Innovations in natural functional food ingredients for enhancing food safety and performance in clean label food products. **P. Soma**, S. Lineback
8:30 . Evolution of food products *via* new ingredients: Product taste and meeting consumer expectations. **S. Nadathur**
8:55 . Cyclodextrin-assisted extraction and electrospun biodegradable nanofibers for valorization of grape pomace bioactives. **Z.I. Yildiz**, E.I. Gulamov, M. Aboelkheir, T. Uyar
9:20 . Metabolic dynamics of kojic acid and other compounds in solid-state fermentation of two white grape pomaces by *Aspergillus oryzae* And *A. Tamarii*. D. Salta, D. Wang, **X. Du**
9:45 Break.
10:00 . Turning plants into nanoparticles: Advancing sustainable natural colorants for foods. **H. Zhou**
10:25 . Physicochemical characteristics of different fermented legume protein and flour by lactic acid bacteria. T. Parveen, **D. Wang**
10:50 . Unlocking the value of fruit and vegetable by-products: Validating texturizing and shelf-life extension functionality in real-world food systems. **A. Grygorczyk**, A. Jenkins, A. Blake, C. Kempthorne, T. Wu
11:15 . Extraction, characterization, and efficacy of rosmarinic and carnosic acids as natural preservatives in enhancing the shelf life of food models and nephroprotective potential. **S.N. Olatunji**, M. Adebanji, V. Eze, I.S. Salako

The Chemistry of Nonalcoholic and Alcoholic Beverages
S. Lafontaine, *Organizer, Presiding* World Congress Center A303
8:00 Introductions.
8:05 . Industrial hemp as a hop alternative: Chemical, volatile, and cannabinoid profiles in dry-hemp beer. K. Kawachika, S. Keene, D. Budner, J. Reyes De-Corcuera, S. Verma, A. Sharma, M. Zhang, B.J. Pearson, A.J. MacIntosh, **K. Witrick**
8:35 . Impact of different commercially available SCOBY compositions on the fermentation of kombucha. **D. Budner**, V. Jordan, B. Di Pillo, B. Normandin, A. Morisset, R. Maley, P.J. Yeboah, B. Zhang, K. Witrick
9:05 . Targeted analysis of purine derivatives in beer and fermented beverages using HPLC-QDA with single ion recording. **R. Sen**, H. Rani, C. Schubert, S. Lafontaine
9:35 Break .
10:05 . Chemical composition vs. sensory reality: Investigating smoke phenol interactions in wine matrices. J. Thrall, C. Sartori, **E. Tomasino**
10:35 . Mechanistic control of polyfunctional thiols in fermentations: Wine-informed sulfur-aldehyde pathways in beer. **S. Chatterjee**, R. Elias, M.T. Kwasniewski
11:05 . HS-SPME-GC-MS metabolomic profiling of flavor variation in Utah whiskey: Effects of charring and yeast strain. **I. Wixom**, J.T. Flood, R. Kochambilli
11:35 Wrap up and final discussion.

MONDAY AFTERNOON World Congress Center A301
Food Ingredients - Sustainability and Natural Alternatives
K. R. Cadwallader, Y. Fang, *Organizers* X. Du, *Organizer, Presiding*
2:00 Opening Remarks.
2:05 . From by-product to breakthrough: Antineurodegenerative promise of coffee pulp procyanidins. **M.B. Bamikale**, C. Noe, Aguila, S. Jose
2:30 . Gastrointestinal fate of turmeric-derived nanoparticles and its enhanced bioavailability of curcumin. **M. Wang**, X. Gong, H. Zhou
2:55 . Atmospheric plasma treatment for meat curing: A comparison with conventional and plant-based systems. **S.P. Vanare**, R.B. Pegg
3:20 Break.
4:00 . Disease tolerance with sweet orange flavor. **Y. Wang**, **D. Kim**
4:25 . Potential solutions for citrus greening disease. **W. Johnson**
4:50 . Evaluation of citrus juices in the era of citrus greening. **S.Allmon**

Georgia World Congress Center A303
The Chemistry of Nonalcoholic and Alcoholic Beverages
S. Lafontaine, *Organizer, Presiding*
2:00 Introductions.
2:05 . Exploring aroma-taste interactions in alcohol-free beers: Effects on sweetness and bitterness perception. **J.A. Piornos**, A. Claret, J. Meléndrez-Ruiz, C. Sinding
2:35 . Interactions between aroma compounds and ethanol: implications for aroma release in hydroalcoholic solutions. **L. Joubert-Laurencin**, C. Salles, T. Thomas-Danguin, J.A. Piornos
3:05 . Understanding rice traits that drive extract efficiency in brewing. M. Aitkens, C. Schubert, H. Rani, **S. Lafontaine**
3:35 Break.
4:05 . Exploring malting and brewing properties of diverse rice germplasm. **H. Rani**, M. Aitkens, R. Sen, B. Guimaraes, M. Shults, C. Peace Onwuchekwa, S. Lafontaine
4:35 . Making chemistry accessible: Formal and informal education using beverage alcohol. **L. Demoranville**
5:05 Wrap up and final discussion.

MONDAY EVENING – 8:00PM Congress Ctr B3/B4 exhibit hall
AGFD SCI-MIX
8:00 . HS-SPME-GC-MS metabolomic profiling of flavor variation in Utah whiskey: Effects of charring and yeast strain. **I. Wixom**, J.T. Flood, R. Kochambilli
8:00 . Physicochemical and protein characterization of Canadian winter wheat for food applications. **S. Rivera Alba**, N. Muhandiram, C. McCartney, M. Malalgoda
8:00 . 3D food printing enhances lutein delivery. **O. Amusat**, S. Ahmadzadeh, S. Barekat, A. Ubeyitogullari, S. Lee
8:00 . Chemical composition vs. sensory reality: Investigating smoke phenol interactions in wine matrices. J. Thrall, C. Sartori, **E. Tomasino**
8:00 . Evaluation of orange peel extract as a natural fortifier in dairy and plant-based yogurt: Antioxidant properties, cytotoxicity, and sensory acceptability. **O.E. Ogunjinmi**, O.M. Banwo, B.T. Fayoyin
8:00 . Metabolic dynamics of kojic acid and other compounds in solid-state fermentation of two white grape pomaces by *Aspergillus oryzae* And *A. Tamarii*. D. Salta, D. Wang, **X. Du**
8:00 . Targeted analysis of purine derivatives in beer and fermented beverages using HPLC-QDA with single ion recording. **R. Sen**, H. Rani, C. Schubert, S. Lafontaine
8:00 . Using grape volatilome as a way to understand and track grape maturity. **K. Kent**, A. Rumbaugh
8:00 . Development of fluorometric 3D PCL-PEO electrospun nanofiber scaffolds loaded with lysozyme for biosensing *Escherichia coli* in foods. **R. Wang**
8:00 . Dietary fish oil intervention mitigates metabolic dysregulation triggered by a potato chip diet through the Gut–Liver axis. **X. Wan**, D. Meng, Y. Zhang
8:00 . Development of chemical-based reference standards for Korean distilled soju aroma wheel. S. Park, **S. Lee**
8:00 . Low temperature gelation of hemp protein for co-encapsulation of resveratrol and epigallocatechin gallate. **T. Dissanayake**, R. Rodriguez, F. Koksel, J. Bonilla, N. Bandara
8:00 . Growth effects of fluorescent, biopolymer-coated gold nanoparticles on hydroponically grown basil. **M. Johnson**, D. Kirby
8:00 . Biodegradable & functional packaging films via coaxial electrospinning of micellar casein, pullulan, and thymol-based emulsions. **E. Peker**, U. Yucel, V. Trinetta
8:00 . Improved quality control testing of saffron botanicals using NMR. **B. Hayes**, S.M. Lamos

TUESDAY MORNING March 24, 2026 World Congress Ctr A301
Advances on Agricultural and Food Chemistry - General Papers - Functional Ingredients and Food Processing
K. Mahalak, C. Osorio, R. Tardugno, *Organizers, Presiding*
8:00 Opening Remarks.
8:05 . Tandem mass spectrometry-based characterization of celiac antigenicity in Canadian oat cultivars. **S.C. Senarathna**, M. Malalgoda
8:25 . Carbohydrate and whey protein-based microcapsules for stabilizing β-carotene and Vitamin B12 in fortified foods. **Y. Weng**, A. Baldelli, K. Magallanes, K. Liu, H. Oguzlu
8:45 . Physicochemical and protein characterization of Canadian winter wheat for food applications. **S. Rivera Alba**, N. Muhandiram, C. McCartney, M. Malalgoda
9:05 . Differential zinc speciation modulates pfoa bioavailability and ecotoxicological responses in alfalfa:soil systems. N. Easmin, **H. Sharifan**
9:25 . Impact of UV-A light dehydration on sensory properties, volatile profiles, enzyme activity, and nutritional quality of fruits and mushrooms. **S. Karami**, L.J. Bastarrachea
9:45 Break.
10:00 . Pyrroloquinoline quinone and hydrolyzed collagen: Bioenergetic synergy and pro-collagen effects in human dermal fibroblasts. **G. Scapagnini**, A. Medoro, S. Davinelli, E. Iorio, A. Mazzucco
10:20 . Edible oil-based extraction of hemp roots: Effect of solvent and temperature on bioactive yield and antioxidant activity for cosmetic applications. **J.A. Guerrero Amaya**, W. Xu, P. Charpentier
10:40 . Phytochemical characterization and bioactivities of buckwheat seeds (*Fagopyrum esculentum*) polyphenols: Linking extraction, profiling and *in vitro* effects. **R. Tardugno**, G. Caggiano, A. Spano, M. Clodoveo, A. Stasi, P. Pontrelli, L. Gesualdo, F. Corbo
11:00 . Analysis of prebiotics using *in vitro* model systems. **K. Mahalak**, A.B. Narrowe, J. Firrman, J. Lemons, L. Liu
11:20 Conclusion Remarks.

World Congress Center A302
Thomas H. Parliment ACS Award Symposium for Advances in Flavor Chemistry: honoring Terry E. Acree
K. Deibler, X. Du, M. J. Morello, *Organizers, Presiding*
8:00 Opening remarks.
8:05 . From cells to smells and back. **N. Rawson**
8:35 . Dynamics of chemosensory consumption and perception. **L.M. Kay**
9:05 . Taste and flavor. **L.M. Bartoshuk**, P. Rozin, K. Beicke
9:35 Intermission.
10:00 . Subconscious processing of tastes, smells, and flavors. **P. Breslin**
10:30 . Rapid methods of trace volatile analysis: Practical Considerations for chromatography and Chromatography-Free techniques. **A.P. Kalenak**, G.L. Sacks

TUESDAY AFTERNOON Georgia World Congress Center A301
Artificial Intelligence in Food and Agricultural Chemistry - From Molecular Insights to Field Applications
B. Park, J. Suh, J. Sung, J. Yi, *Organizers* N. Lee, *Presiding*
2:00 Opening remark.
2:05 . Identification of multi-target anti-alzheimer's compounds from Korean citrus peel flavonoids using deep neural networks. **S. Park**, J. Sung
2:25 . Novel approach for the discovery of bioactive peptides from corn gluten meal: Artificial intelligence-assisted *in silico* screening to selective peptide purification and bioactivity confirmation. **S.O. Ogundipe**, R.B. Pegg, J. Suh
2:45 . Machine learning-assisted prediction of fragmentation patterns in GC-MS/MS for volatile compound identification without authentic standards. M. Vasconez, **D. Kim**, Y. Wang
3:05 . Scalable molecular featurizer pipeline: From quantum/chemoinformatic descriptors to machine-learned odor profiles. **Z.T. Gardner**, N.C. Lok, Q. Ai, C. Risko
3:25 . Redefining food safety and authenticity through aptasensors, nanotechnology, and AI-driven approaches. **M. Shoaib**, L. Xiaoli
3:45 Intermission (break).
4:05 . Precision-controlled environment agriculture with AI-driven nutrient sensing and 3D phenotyping. **Y. Huang**
4:25 . A joint metabolomics and machine learning approach: A new direction in food chemistry and agriculture. M. Kang, **J. Suh**
4:45 . Integrating artificial intelligence and chemical validation for multiplex detection of agrichemical stress in citrus leaves. **M.M. Deinys**, G. Diracca, W. Bu, J. Pereira, S. Santra
5:05 . Machine learning-driven insights into the chemical basis of apple flavor perception. **K. Kim**, J. Suh, J. Sung
5:25 . Non-volatile precursors as predictors of roasted peanut flavor: A metabolomics and machine-learning approach. **N. Lee**, K. Adhikari, A. Mishra, N. Brown, J. Suh
5:45 . Concluding remarks

Georgia World Congress Center A302
Thomas H. Parliment ACS Award Symposium for Advances in Flavor Chemistry: honoring Terry E. Acree
K. Deibler, X. Du, *Organizers* M. J. Morello, *Organizer, Presiding*
2:00 . Odor mixtures: A chord with silent notes. **S. Firestein**
2:30 . Teaching mice to speak: Investigating olfactory perception using a mouse model. **D. Rinberg**
3:00 . From smoke to signal: Human olfactory ERPs at millisecond resolution. **A. Barwich**
3:30 intermission.
3:50 . Award Address (Thomas H. Parliment Award for Advances in Flavor Chemistry supported by an endowed fund established by Thomas H. Parliment). Flavor psychophysics. **T.E. Acree**, T. Hsu, Y. Jiang, Q. Wu, H. Zheng, H. Chen
4:35 Panel Discussion.

AGFD CORNUCOPIA

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Schedule of AGFD Technical, Business and Social Meetings (all Eastern Daylight Time)

Sun. March 22	noon-2:00pm	AGFD Poster Session	Congress Ctr. B3/B4 exhibit hall
Mon. March 23	noon-1:00pm	AGFD Leadership Luncheon	Congress Ctr. C107
Mon. March 23	1:00-2:00pm	Future Program Meeting	Congress Ctr. C107
Mon. March 23	5:00-7:30pm	Executive Committee Meeting	Congress. Ctr. C107
Mon. March 23	8:00-10:00pm	Sci-Mix	Congress Ctr. B3/B4 exhibit hall
Tues. March 24	noon	Student Activities Team Event	See details on page 15
Tues. March 24	3:50pm	Thomas H. Parliament Award Address	Congress Ctr. A302
Tues. March 24	6:00-8:00pm	AGFD Chair's Reception	STATS Brewpub (see front cover)