

ΦΤΣ

The Honor Society of Food Science and Technology

Phi Tau Sigma Newsletter November 2022

News:

Are you contributing to the EMGAM Campaign?

Phi Tau Sigma grows through membership. The Chapters are doing their part through student nomination. Here's your opportunity to participate in growth through the Every Member Get a Member (EMGAM) Campaign for Phi Tau Sigma. To facilitate nominating a colleague or someone you know who should be a member, go to <http://phitausigma.org/membership/> for the nomination form.

The leaders thus far in the EMGAM Campaign are: Halak Mehta, M.S. (Ph.D. student) and Claire Zoellner, Ph.D. Be a leader!

Dr. Daryl B. & Mrs. Dawn L. Lund Student International Travel Scholarship of Phi Tau Sigma

(Contributed by Elena Castell-Perez, Ph.D., Awards Committee Chair)



In 2006, Dr. Daryl B. Lund became President of Phi Tau Sigma and began a revitalization of the Honor Society. He charged an *ad hoc* committee of past presidents, to forge a path of revitalization. He found volunteers to help him form a duly elected Executive Committee, publish a monthly Newsletter, and develop a functioning, structured Society that conforms to the Constitution and Bylaws of our incorporated Society. He has now led Phi Tau Sigma to become *The Honor Society of Food Science and Technology*, striving to bring recognition to the best Food Scientists and Technologists in the world. His vision for Phi Tau Sigma and its Members, includes a Global perspective to food production, processing, distribution, safety, quality, nutrition, and all aspects of the essentials for the public's well being. Dr. Lund led an extraordinary effort in the revitalization of Phi Tau Sigma, which has been as significant a contribution to Phi Tau Sigma as those of the Founding fathers.

The Dr. Daryl B. & Mrs. Dawn L. Lund Student International Scholarship of Phi Tau Sigma, The Honor Society of Food Science and Technology, shall be given to a student

Member of Phi Tau Sigma to supplement international travel for educational purposes. The award is presented to honor the commitment of Dr. Lund and Mrs. Lund to international development and relations. The scholarship honorarium is based on the Dr. Daryl B. & Mrs. Dawn L. Lund Student International Scholarship Endowment and is \$2,000.

Nominations for the Daryl B. & Mrs. Dawn L. Lund Student International Travel Scholarship will be accepted until November 30th, 2022.

Information about the scholarship, the nomination form, and instructions can be found at: <http://phitausigma.org/awards/>.

The Nomination Form and Statement shall be submitted to Elena Castell-Perez, Ph.D. at ecastell@tamu.edu, with a copy to the Executive Director, Kathryn Kotula, Ph.D. (kkotula@msn.com) by email by November 30th of this year. A photograph (optional but encouraged), and 2 to 3 paragraph Summary of the nomination statement (in Word), both suitable for publication in the Phi Tau Sigma Newsletter, shall be sent to the Executive Director by the same date. Please write "Dr. & Mrs. Lund Student International Travel Scholarship" in the subject lines of both emails.

If you have any questions, please contact Awards Committee Chair Elena Castell-Perez, Ph.D. (ecastell@tamu.edu), or Executive Director, Kathryn Kotula, Ph.D. (kkotula@msn.com).

Opportunity To Volunteer For Inaugural Research Projects With ILSI US & Canada

Phi Tau Sigma has begun to partner with the International Life Sciences Institute (ILSI) US & Canada to bring members the opportunity to participate in research projects of pressing global priorities in food safety and sustainability. A brief description of the inaugural projects is provided below. If you are interested in volunteering to serve on one of the committees, send an email with your interest to: Connie Weaver, Chair Phi Tau Sigma Future Directions Committee, cmweaver@sdsu.edu.



ILSI US & Canada Research Projects:

BIOACTIVES AND FUNCTIONAL FOODS: Few evidence-based recommendations exist for consumption of bioactives, the amounts of ingredients in so-called "functional foods", or the foods themselves that contain some of these bioactives. ILSI proposes working to provide definitions of functional foods; creating a database of evidence of the composition, health and safety aspects of those functional foods; and developing guidelines for dietary supplements across global regions. This project is led by April Stull, PhD, Baylor University (Waco, TX), USA. [Video Recording](#)

RISK ASSESSMENT OF CELL-BASED CULTIVATED FOOD PRODUCTS: This ILSI project takes a scientific approach to monitor the integrity and safety of cultivated meat, as well as hybrid and adulterated foods. The goal is to explore a presently unknown territory and prepare and develop a benchmark for what the risks are in each step of the process for the benefit of the

consumer's safety, the regulatory landscape, and the industrial production of these novel foods. This project is led by Helene Tournu, PhD, ILSI Global, USA. [Video Recording](#)

FOOD SAFETY AT THE INTERFACE BETWEEN FOOD, WATER, AGRICULTURE, AND THE ENVIRONMENT: WHERE THE ACTION TAKES PLACE This ILSI proposal focuses on the emerging need of cross-disciplinary activities in controlling foodborne pathogens, harmful chemicals and other contaminants, including microplastics, at the intersection of food, water and agriculture. The identification of future research needs, as well as team building to bring together interdisciplinary and collaborative scientists, are the main goals of this project. This project is led by Lee-Ann Jaykus, PhD, North Carolina State University, USA. [Video Recording](#)

THE IMPACT OF CLIMATE CHANGE ON FOOD SAFETY, SUSTAINABILITY, SECURITY AND NUTRITION: This ILSI project aims to bring together interdisciplinary teams to identify future challenges to the safety, sustainability and nutritional content of the food supply that can be directly linked to climatic factors, such catastrophic weather events, rising sea levels, drought or flooding. Understanding these risks and their likely consequences will pave the way for proactive changes in how global regions will safely and sustainably grow and process nutritious foods in the future. This project is led by Lee-Ann Jaykus, PhD, North Carolina State University, USA. [Video Recording](#)

UNDERSTANDING THE RELATIONSHIP BETWEEN SOIL HEALTH AND HUMAN HEALTH: Product developers and agencies are encouraging the adoption of soil health practices. However, the impact of these changes in food production practices on the safety and nutritional value of crops is not yet well understood. This ILSI proposal aims to identify the research gaps and priorities, as well as establish an active network with agricultural research stations and nutrition/safety experts to address these knowledge gaps. This project is led by Shawna Lemke, PhD, SLL Consulting & Services, LLC, USA. [Video Recording](#)

OPEN DATA SHARING FOR CLINICAL FOOD AND NUTRITION TRIALS: Effective January 2023, the U.S. National Institutes of Health will require the open sharing of individual participant-level data from clinical trials supported by public funds. ILSI aims to develop requirements, standards and best practices for managing, tracking and sharing data from clinical food and nutrition trials, with the goal of addressing quality linked to the FAIR (Findable, Accessible, Interoperable, Reusable) attributes of the data. This project charter was led by Michael I. McBurney, PhD, University of Guelph (Canada) and Tufts University (USA). [Video Recording](#)

Membership Qualifications and Evaluation Committee:

(contributed by Elizabeth Grasso-Kelley, Ph.D., MQ&E Committee Chair)

The MQ&E Committee invites you to nominate a colleague or student for membership into Phi Tau Sigma.

Benefits of Phi Tau Sigma include:

- Recognition – Only those nominations with the highest standards of excellence are approved for membership.
- Networking – Opportunities to connect and pursue excellence with others having outstanding expertise!

- Leadership – Opportunities to serve in elected positions or via appointment to Committee(s).
- Awards & Scholarships – Opportunities for all, especially students!

Nomination forms in pdf and word formats can be found at: <http://phitausigma.org/membership/>. Membership criteria for student and professional membership are found on pages 3 - 4 of our current nomination form. We encourage the completion of the nomination form in full to aid in the review process.

The Membership Qualifications and Evaluation Committee is eager to review nominations and welcome new members into Phi Tau Sigma - The Honor Society of Food Science and Technology. Please do not hesitate to reach out if you have any questions or would like to submit a nomination. (elizabeth.grasso-kelley@fda.hhs.gov).

Reminders to Fall Graduates:

We would like to stay in touch with you even after you graduate and continue to bring you new opportunities for career growth and camaraderie. So, if you are graduating this fall, please fill out the Contact Information form found at <http://phitausigma.org/contact-information/> and send to Executive Director, Dr. Kathryn L. Kotula (klkotula@msn.com) to allow us to stay in touch.

Know your Leadership - Directors



Navam S. Hettiarachchy, Ph.D., an IFT Fellow, an IUFOST Fellow, and an AOCS fellow, is a Lifetime member of Phi Tau Sigma. She earned her Ph.D. in Biochemistry, Hull University, England; M.S. University of Edinburgh, Scotland, and B.Sc in Chemistry, Madras University, India. She is a University Professor/an active University Professor Emeritus, Department of Food Science at the University of Arkansas, Fayetteville. Prior to this she was an Associate Professor and the Director of Food Science program at North Dakota State University and served in R&D in food industry. As a researcher she combines an interdisciplinary background with skills and develops and implements strategies for high-impact research for a diversified integrated structure-chemistry-function properties of food

proteins and bioactive peptides with special focus on pulses, and rice, adding value to industry co-products, phytonutrients specifically curcuminoids - polyphenolics, and moving onto preparing of 3D ink printing of targeted nutritious and healthy foods for life. She has seven patents, co-edited 3 books, over 24 book chapters, published over 170 peer reviewed journal articles (over 90% as corresponding author), and over 400 presentations at international, national, regional and local levels. She is a resource Professor to Japan in training food science related courses to 18 countries. She served as the Chair of the Awards, Research Reproducibility & Replicability, and Research Council Committees at the University of Arkansas. She has a history of advising and coaching teams of students to several first- place award winnings at international, national and local levels including IFT Disney product development, and College Bowl competitions. Navam received several teaching and research awards at all levels. She is the past Presidents of: American Association of Food Scientists for the Indian sub-continent – Institute of Food Technologists

(AAFSIS-IFT), and Stem Cell Coalition (University of Arkansas Medical School). Navam is an active member of Phi Tau Sigma (Board of Directors), Institute of Food Technologists (IFT), AAFSIS-IFT, and American Oil Chem. Society.

Poulson Joseph, Ph.D., is the Director of Food Protection & Protein Innovation at Kalsec®, Kalamazoo, Michigan. He received his Ph.D. in Animal and Food Sciences from University of Kentucky focusing on applications of proteomics in meat quality and strategies to improve meat color and oxidative stability. Subsequently, Poulson completed his post-doctoral research on muscle food quality at Mississippi State University. At Kalsec®, he leads the Food Protection & Protein team with research emphasis on natural food protection solutions and works closely with food/pet food industry clients by offering technical and analytical support. He spearheads the team's effort in innovative natural and clean label solutions for improving protein-based foods' quality and shelf-life. Poulson has delivered invited lectures in professional meetings and academic institutions and had conducted industry workshops globally. He is actively involved in American Meat Science Association (AMSA), as well as Phi Tau Sigma. At Phi Tau Sigma, he served as the Chair of Awards Committee from 2017-2019. At the Institute of Food Technologists (IFT), he had served as IFT Muscle Foods Division's Chair and as member of Leadership team from 2013-2019. He was the recipient of IFT Division Best Volunteer Award (2014), IFT Muscle Foods Division's Member-of-the Year Award (2016), AMSA Achievement Award (2018), and IFT Emerging Leader Network Award (2018).



Fanbin Kong, Ph.D., a Lifetime Member of Phi Tau Sigma, is a Professor of Food Engineering at the University of Georgia. He received his B.S. and M.S. degrees in Environmental Engineering from Tianjin University and Tsinghua University, China, respectively. He had several years of industry experience working in wastewater treatment. He then obtained another M.S. degree in Food Science from North Dakota State University, and received his Ph.D. degree in Food Engineering from Washington State University in 2007. He received postdoc training at UC Davis before joining UGA in 2011 as an Assistant Professor. He was promoted to Associate Professor in 2016, and Professor in 2021. Dr. Kong has developed vigorous research and teaching programs. His research emphasis included developing dynamic in vitro gastrointestinal models to study food digestion, and using radio frequency (RF) heating technology to pasteurize low moisture foods. Dr. Kong has a strong interest in developing and using innovative teaching methods to improve student learning outcomes. He received the NACTA Teacher Award of Merit in 2015. Dr. Kong has been active in several professional organizations including IFT and IAFFP, and participated in various activities including reviewing abstracts and proposals and organizing sessions for annual meetings. He served as the President of the Chinese American Food Society (CAFS) for 2018-2019.

Matthew (Matt) Taylor, Ph.D. is a Professor in the Department of Animal Science at Texas A&M University in College Station, TX. He joined the faculty there in 2007 after completing his Ph.D. in Food Science and Technology at the University of Tennessee in Knoxville, TN. Bachelor and Master of Science degrees were both earned in Food Science from North Carolina State University. His teaching, research, and outreach programs all center around the microbiological safety of foods. His specific research interests lie in encapsulation of antimicrobial additives/preservatives to improve their usefulness in food products. Nevertheless, his research program in recent years has expanded to incorporate process validation for members of the U.S. rendering industries, helping to provide pathogen destruction validation to comply with FDA regulatory requirements for these industry members. His outreach program focuses on interacting with other food safety stakeholders and industry members, where he provides training, as well as works with organizations that promote food safety in the U.S. and globally. In recent years, he has partnered with IFT to help re-configure food microbiology and food safety content offered through their Certified Food Scientist preparatory course, working to develop training that demonstrates the integration of the disciplines within food science for food product processing. He has served Phi Tau Sigma as a committee chair for multiple committees, recently the Constitution and Bylaws committee.



Stephen Campano, M.S., a Lifetime Member of Phi Tau Sigma, is Vice President of Research and Applied Technology for Hawkins, Inc. He received a B.S. degree in Animal Science and M.S. degree in Animal Industries from the University of Connecticut in 1978 and 1981, respectively, and has spent the past 30+ years working with the meat industry in a variety of positions with processors and allied suppliers. Steve has been involved in developing and directing food safety research initiatives with government, industry and academic institutions, and has been instrumental in the development and application of new food ingredient technologies, both domestically and internationally. He was elected to the American Meat Science Association Executive Board, served as President in 2008/2009, was conferred an AMSA Fellow in 2011. Steve is Chair of the Phi Tau Sigma Audit Committee, past Chair of the Membership and

Qualifications Committee, the Awards Committee, the Recruitment Campaign Committee, and the Development Committee. Steve was the 2015 recipient of the Phi Tau Sigma Special Recognition Award.



Dennis R. Heldman, Ph.D., a Lifetime Member of Phi Tau Sigma, is the Dale A. Seiberling Endowed Professor of Food Engineering at The Ohio State University. He served as President of Phi Tau Sigma, the Honorary Society for Food Science and Technology from 2010-11. He has been a member of the faculty at Michigan State University, the University of Missouri and Rutgers, The State University of New Jersey. In addition, he has held positions as VP of Process R&D at Campbell Soup Company, Executive VP for the National Food Processors Association (now GMA) and as consultant with the Weinberg Consulting Group Inc. He was President of IFT from 2006-07. He has been elected Fellow in the International Academy of Food Science & Technology and was recognized with the Life Achievement Award from the International Association for Engineering and Food. He was recipient of the Frozen Food Foundation Freezing Research Award and the Dr. Carl R. Fellers Award from Phi Tau Sigma. He received the Harold Macy Food Science and

Technology Award from the Minnesota Section of IFT, and the 2018 Nicholas Appert Award from IFT. He has been inducted into the Food Science and Technology Hall of Distinction at The Ohio State University. His teaching and research have a focus on the application of engineering principles and concepts to the processes used to transform raw food materials into consumer food products in the most sustainable manner.

Amarat (Amy) Simonne, Ph.D., a Lifetime Member of Phi Tau Sigma, is a Professor of Food Science and Technology and Extension Food Safety Specialist with the Department of Family, Youth and Community Sciences in the College of Agricultural and Life Sciences at the University of Florida. Her research theme centers around food quality and food safety, and she has published more than 300 technical articles. Amy has long standing service records for her professional organizations such as the Institute of Food Technologists and International Association of Food Protection. She serves as a scientific editor and on editorial boards of many prestigious journals in her field. <https://foodsystems.ifas.ufl.edu/people/faculty/amy-simonne/>



Rick Falkenberg, Ph.D., a Lifetime Member of Phi Tau Sigma, Rick has just concluded a five-year assignment as Co-Chair of the Microbiological Committee for the Institute of Thermal Process Specialists. He is a member of International Association for Food Protection, Microbiological Modeling and Risk Analysis PDG as well as Hygiene and Sanitation PDG. He has been a member of Phi Tau Sigma Membership and Qualifications Committee for several years, and member and current Chair of the Constitution and Bylaws Committee. At NPD he is currently serving as Chair of the Industry & Outreach Committee and has been member of the IFT Annual Meeting Scientific Advisory Panel, Division Leaders Collaboration Group, Chair of the William V. Cruess Excellence in Education Award Jury and Chair-elect, Chair and Past Chair of the Central Valley Subsection.



He works internationally with processed food & beverage, nutraceutical, spice and nut manufacturers on recall investigations, problem-solving, training, and FDA, USDA FSIS and CODEX compliance. He has delivered workshops to industry as a Lead Instructor with the FDA-recognized curriculum for Preventive Controls Qualified Individuals. He has taught and consulted with companies on microbiological issues, laboratory methods, interpretation of lab results, quality assurance, sanitation, environmental monitoring, Standard Operating Procedures, Good Manufacturing Practices, Hazard Analysis and Critical Control Points and the FDA's Food Safety Modernization Act. Having spent much of his career working with Thermal, Nonthermal and Low Moisture foods, specifically in process validation and optimization efforts, Dr. Falkenberg is considered a Subject Matter Expert for Thermal Process Sterilization and Thermal Bacteriology.

Adam Baker, Ph.D., is a Lifetime Member of Phi Tau Sigma and is a Biologist at the U.S. Food and Drug Administration (FDA)/Center for Food Safety and Applied Nutrition (CFSAN)/Office of Food Safety (OFS), Division of Produce Safety (DPS), located in College Park, MD. He received his B.S. in Biology from the University of Arkansas-Fort Smith, his M.S. in Food Science from the University of Arkansas, and his Ph.D. in Food Science from the University of Florida. Adam's background is in food safety microbiology and has worked with a diverse set of food products. Upon graduation from the University of Florida, Adam worked for two years as a Postdoctoral Researcher at the University of Arkansas. Adam has served on the International Association for Food Protection student professional development group as Secretary (2018) and Treasurer (2019) and continues to serve Phi Tau Sigma as the Development Committee Chair (2021-23).



Martha Cassens, M.S., is currently the Vice President of Product Innovations, Development, and Quality at ACH Food Companies. She previously worked at Hillshire Brands, Sara Lee, ConAgra (Armour Swift-Eckrich) and Vienna Beef. She has 30 plus years of meat and food industry experience in research, quality assurance, and product / process / package / innovation development. Martha earned her B.S. in Food Science, specializing in Meat and Processing, and her M.S. in Food Science, specializing in Nitrite and Frankfurters, both from the University of Illinois. Martha is an active member of the American Meat Science Association, Institute of Food Technologists, Research Chefs Association and Lifetime Member of Phi Tau Sigma, and has served on various committees for each of the associations. Martha is an IFT Fellow and has received a Dupont Global Packaging Award, AMSA Meat processing Award, AMSA Distinguished Achievement Award and many company awards.



Elizabeth M. Grasso-Kelley, Ph.D., a Lifetime Member of Phi Tau Sigma, is Chief of the Food Technology Branch at the U.S. Food and Drug Administration (FDA)/Center for Food Safety and Applied Nutrition/Division of Food Processing Science and Technology, located in Bedford Park, IL. Prior to joining FDA, she served as a Scientist and Assistant Professor at the Illinois Institute of Technology / Institute for Food Safety and Health. Elizabeth received her B.S. in Food Science from The Pennsylvania State University and her M.S. in Food Science and Nutrition and Ph.D. in Food Science and Technology from The Ohio State University. Her research has focused on low water activity food safety, including; microbial survival, persistence, and inactivation as well as sanitation of low water activity environments. Previously she served as the Chair of the Low Water Activity Professional Development Group for the International Association for Food Protection. Dr. Grasso-Kelley serves on the Editorial Board for the Journal of Food Protection, on the Board of Directors and as the Membership Qualification and Evaluation Committee Chair for Phi Tau Sigma, and as the incoming Chair for the Food Microbiology Division of the Institute of Food Technologists. She received FDA awards including the Public Health Award for Excellence in Laboratory Science in 2014 and Honor Award for Return2Facilities during the Covid-19 pandemic in 2021.

Mary K. Schmidl, Ph.D., is a Lifetime Member and a Past President of Phi Tau Sigma, Institute of Food Technologists (IFT) and the International Union of Food Science and Technology (IUFoST). She received her Bachelor of Science degree from the University of California-Davis and a M.S. and Ph.D. degrees in Food Science (emphasis Food Chemistry) from Cornell University. She is the former Vice President of Science and Technology for the Humanetics Corporation where she was responsible for new drug discovery. She was the Director of Research, Clinical Division of Novartis (Nestle, Inc.). Prior to her work with Nestle, Dr. Schmidl directed the Nutrition Research Department for AG Bayer and was involved with intravenous feeding systems and medical foods. She has commercialized more than 75 new products, authored or co-authored over 100 refereed research papers, magazine articles, patents, book chapters, books. Dr. Schmidl received the Babcock Hart Award for Nutrition, Dr. Carl R. Fellers Award, Patrick Award for Research, the MNIIFT President's Award, Phi Tau Sigma Special Recognition Award, the Award of Distinction from the University of California-Davis, the "Friendship Award" and "Scientific Spirit Award" from the Chinese Institute of Food Science and Technology. Mary is a Fellow of IFT, IFST and IUFoST. She currently the Faculty Advisor for Phi Tau Sigma at University of Minnesota.



Calendar:

->Phi Tau Sigma Scholarship and Awards Schedule:

- November 30:** Deadline to submit nominations to the Awards Committee for the Dr. Daryl B. and Mrs. Dawn L. Lund Student International Scholarship.
- February 1: Deadline to submit nominations to the Awards Committee for the Phi Tau Sigma Special Recognition Award, the Phi Tau Sigma Student Achievement Scholarship, the Dr. Gideon "Guy" Livingston Scholarship, the Phi Tau Sigma Founders' Scholarship, and the Food Regulation Scholarship.
- April 1: Deadline to submit nominations to the Awards Committee for the Phi Tau Sigma Outstanding Chapter of the Year Award.

Send completed nomination forms to both Awards Committee Chair Elena Castell-Perez, Ph.D., Chair (ecastell@tamu.edu) and Executive Director Kathryn L. Kotula, Ph.D. (klkotula@msn.com). (More information: <http://www.phitausigma.org/awards/>)

->Phi Tau Sigma – AMSA 'Research with Impact' Scholarship Schedule:

- April 19: Deadline to submit nominations for the Phi Tau Sigma – AMSA Research with Impact Scholarship.

Send completed nomination forms to Executive Director Kathryn L. Kotula, Ph.D. (klkotula@msn.com), and the AMSA Youth Programs Manager (scholarships@meatscience.org). (More information: <http://www.phitausigma.org/awards/>)

- >January 14: Deadline to submit Nominations for the **Dr. Carl R. Fellers Award**, and other IFT Achievement Awards.
(More information: <https://www.ift.org/community/awards-and-recognition/achievement-awards>)

->Phi Tau Sigma Chapter Schedule:

- October 25: Deadline to order Honor Cords and lapel pins to ensure delivery before Fall graduation dates
- March 15: Deadline for membership nominations to ensure decisions from the Membership and Qualifications Committee before the Annual Meeting
- April 1: Deadline to order Honor Cords and lapel pins to ensure delivery before Spring graduation dates
- August 1: Deadline for Chapter annual reports

Reminder to all Chapters: In order to receive the *Certificate of Merit* or *Certificate of Excellence*, Chapters must submit their annual reports for evaluation by **August 1**. Please send your annual report to the current Chair of the Chapter Affairs Committee, Lester Schonberger, Ph.D. (hlschon@vt.edu), with a copy to Dr. Kathryn L. Kotula (klkotula@msn.com).

->Election schedule:

- December 15:** Nominations due to Nomination and Election Committee (Liz Boyle, Ph.D., Chair, lboyle@ksu.edu)
- January 2: Nominations and Elections Committee convenes
- January 21: Deadline for Nomination and Elections Committee to submit slate of candidates to President

February 5: Last date on which nominations by petition may be submitted
March 2: List of candidates will be emailed to the Members for balloting
March 30: Deadline for casting ballots
April 8: Deadline for tabulation of ballots
May: Newly elected individuals announced to the Membership in the May Phi Tau Sigma Newsletter

->Phi Tau Sigma Annual Meetings and Events: 2023 (dates to be determined)

July: Phi Tau Sigma Awards Ceremony (virtual)
July: Phi Tau Sigma Networking Dinner

->July 16-19, 2023, Institute of Food Technologists Annual Meeting, Chicago, IL

->June 25-28, 2023 - Reciprocal Meat Conference of the AMSA, St. Paul, Minnesota

Lifetime Member Tribute: Ogechukwu Tasié, Ph.D.

NIFA Postdoctoral Fellow, Alabama Agricultural & Mechanical University



Why did you become a Lifetime Member? I was actively involved in the food science club and Institute of Food Technologists (IFT) activities in graduate school. After becoming a Phi Tau Sigma member as a graduate student, I decided to become a Lifetime Member once I graduated. I became a Lifetime Member because of my great commitment to this esteemed group of food professionals which has given me the avenue to exchange scientific knowledge and network with other food science professionals.

Education:

- Ph.D. Alabama Agricultural & Mechanical University, Normal, Alabama (Food Science) (2018)
- M.S. Alabama Agricultural & Mechanical University, Normal, Alabama (Food Science) (2014)
- B.S. Enugu State University of Science & Technology, Enugu, Nigeria (Applied Microbiology & Brewing) (2003)

Experience/Accomplishments:

- NIFA Postdoctoral Fellow, Alabama A&M University. (Food Toxicology Laboratory) (2021-Present)
- Membership & Qualifications Committee, Phi Tau Sigma – The Honor Society of Food Science and Technology (2020-present)
- International Volunteer Experience-Canning Specialist, USAID ACIDI/VOCA, Farmer-to-Farmer program Tajikistan (September-October 2021)
- Serv Safe Food Protection Manager (Certified)
- Graduate Research/Teaching Assistant/Lab Manager at Alabama A&M University (2012-2018)
- Educational programs at Elementary/Middle Schools

Areas of Expertise:

Food Processing, particularly utilizing non-thermal processing in reducing antinutrients in foods.

Awards and Honors (selected list):

- Mentor North Alabama for Educational Excellence High school summer program-2022
- Certificate of Appreciation (Earth team Volunteer) by Madison County Soil and Water Conservation-2019
- Certificate of Merit Finalist Nutrition Division Research Poster Competition, IFT-2019

Personal: Family, Interests, Hobbies: I am happily married and blessed with three wonderful children. I love cooking, reading, listening to music, singing, and volunteering.

Advice to university students and career food scientists and technologists:

My advice to students is to stay focused and make effective use of their time and every opportunity that comes their way, to volunteer their time in a lab in the department to acquire and develop some basic laboratory skills, to take their academics seriously, and seek help on time if needed. Students should also get involved in departmental activities, attend career sessions, find a mentor, and apply for scholarships and internships. To the recent graduates starting their career in food science and technology, keep applying for jobs, network, volunteer, and have a positive mindset.

Careers: Roles in Food Ingredient Innovation

Simran Kaur, Ph.D., Lead Scientist-Color Innovation, Kalsec Inc.

Introduction: The science of food covers a broad spectrum of careers in product development, quality control/quality assurance, food regulations and much more. As a student, I received significant exposure to various types of positions, and over time I was drawn to opportunities in food ingredient innovation. These positions focus on development and application of ingredients like preservatives, antimicrobials, antioxidants, emulsifiers, sweeteners, colorants, flavors and spices, hops, sweeteners, acidulants, enzymes and more. The food ingredient industry is experiencing rapid growth around the globe and is projected to reach USD 196.2 billion by 2027 worldwide, according to Research and Markets.



Qualifications: A bachelor's degree in food science/food engineering, chemical engineering/chemical technology and even material science, is generally required. Other STEM degrees can be supplemented with experience or additional education. A Master's degree will lay the foundation of independent research skills, while a Ph.D. will enhance those abilities, and both are often valued at higher level entry positions in ingredient innovation.

Positions: An application scientist may work to understand functionality of an ingredient in specific food applications, while a formulation scientist will develop those ingredients. Other positions may include technical specialists, technologists, production specialists, engineers and in some cases hybrid positions that require both technical and customer facing abilities.

Duties: One can anticipate the importance of understanding the nuances of ingredient chemistry, interactions between ingredients and food applications, innovation in developing new formulations or ingredients, harnessing technologies and analytical tools and staying relevant to the evolving needs of the regulatory environment. Hands-on experience with production/processing equipment, analytical equipment, project management and data management skills will also be useful.

Salaries: This will be highly dependent on educational background, experience, needs of the position and much more. Entry level ranges \$50,000- \$95,000

Benefits: 401k, Health insurance, Dental insurance, Vision insurance, Life insurance, Flexible Spending Account/Health Savings Account, Paid Time Off, maternity/paternity leave, bonus/incentive programs, membership to scientific organizations, training opportunities etc.

Conclusion: Take advantage of opportunities to learn and work alongside people from different backgrounds, and always stay intentionally curious. Determine the fundamental concepts in food science that excite you and allow those to steer your career decisions. Continuously expose yourself to new products, concepts, and technologies. My experiences have led me to an exciting career in natural color innovation. Where will yours take you?

How/Why I came to be in Food Science/Technology

Lauren Jackson, Ph.D., U.S. Food and Drug Administration

I attribute my decision to pursue degrees and a career in food science to exceptional advice I received from my high school guidance counselor. I was planning to get an undergraduate degree in biochemistry or biology with the intent to pursue a career medicine/veterinary medicine or medical research. My guidance counselor recommended food science as a major since many of the required courses are the same as those taken by biology or biochemistry majors. She also mentioned that food scientists were able to find good positions in the food industry after graduation, even if they didn't obtain a graduate degree.



Based my guidance counselor's sound advice, I obtained my undergraduate degree in food science at Cornell University. While an undergraduate at Cornell, I was given the opportunity to work in Dr. Dennis Miller's laboratory where I was able to assist some of the graduate students with their research and conduct a project of my own. This exposure to research was responsible for my desire to further my education and obtain M.S. and Ph.D. degrees in food science, from the University of Wisconsin-Madison (UW), with Dr. Ken Lee as my advisor. At UW, my M.S. and Ph.D. research projects were aimed at understanding how processing impacts nutrient bioavailability and ways to improve nutrient stability and uptake through microencapsulation.

In 1991, the U.S. Food and Drug Administration (FDA) was hiring food scientists to work at the newly created FDA Center of Excellence, the National Center for Food Safety and Technology (NCFST), located in Bedford Park, IL. I was lucky enough to obtain a post-doctoral fellow position at FDA (1991-1994) and was eventually hired as an FDA research scientist in 1994. In 2014, I was promoted to the position of Chief of the Process Engineering Branch (PEB). In this position, I provide managerial leadership, program direction, guidance and general oversight to FDA scientists of varying backgrounds (engineers, food technologists, microbiologists, chemists). I also am responsible for initiating, leading and conducting research projects dealing with processing and its effects on food safety, more specifically, the effects of processing on food constituents and contaminants, food allergen control, and the stability of biothreat agents. In addition to my research and management duties, I also serve in several regulatory roles within FDA, one of which is FDA's subject matter expert on food allergen control.

We are pleased to have started this new series of articles in the Newsletter. Please share your story with us. Contact the Newsletter Editor at: klkotula@msn.com.

In Memoriam: The Outstanding Career of John H. Litchfield, Ph.D.

[contributed, with highest respect, by Dr. Ken Lee, Phi Tau Sigma Past President (2011-2012), Dr. Fergus M Clydesdale, Phi Tau Sigma Past President (1992-1993), Dr. Daryl B Lund, Phi Tau Sigma Past President (2006-2008), Dr. Dennis Heldman, Phi Tau Sigma Past President (2010-2011)]

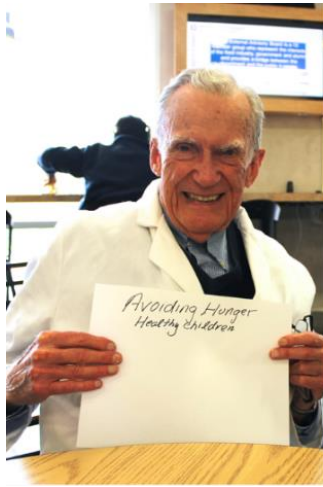
Phi Tau Sigma Lifetime Member John Litchfield passed away on Sept. 17, 2022, at the age of 93. He was internationally recognized for his work in food science, food technology and industrial microbiology. He exemplified honor in our profession as a mentor and coach to many. His good works were shared with friends, students, and colleagues, always willing to listen and offer insightful solutions with humor and empathy.



Litchfield earned a B.S. in food technology from MIT in 1950. He served as chief scientist for the Searle Corporation in Hollywood, FL from 1950-51, after which he went on active duty in the Korean War. A First Lieutenant, Litchfield was assigned as food advisor of the Berlin Command and later served as a scientific analysis staff officer in the Army Reserve.

After the war, Litchfield earned his Ph.D. in food technology and microbiology from the University of Illinois Urbana-Champaign. He worked as a research scientist at Swift & Co. from 1956-57, and then as an Assistant Professor of food engineering at the Illinois Institute of Technology. In 1960, he started a 33-year career at the Battelle Memorial Institute as a research leader, where he served as one of the two leading food scientists at the largest independent nonprofit applied science organization in the world. Litchfield was a co-author of *Food Plant Sanitation* and contributed many articles to several scientific journals on topics of food science and industrial microbiology.

John helped create a new food science department at Ohio State and chaired its Industry Advisory Committee in 1977, where he became an adjunct faculty member. His ability to inspire students is evident as he advised student college bowl teams for 20 years, leading to six regional wins and three national championships. His coaching of student product development teams and instruction of food product development courses was peerless. The Ohio State Board of Trustees bestowed its Distinguished Service Award on John in 2016, the highest honor from the university for exceptional contributions. Perhaps most telling is the Professor of the Year title and multiple Meritorious Service to Students Awards bestowed by student votes.



We need to transform the total infrastructure from production to consumer. It doesn't do good to increase agricultural productivity if we cannot deliver to the consumers and do not have a sustainable transporting process. 40% of food is lost in the chain – how do we prevent that? I have conducted research in the water waste management field including the reuse of water and achieving optimum use of resources.

-- Dr. John Litchfield, Adjunct Professor in Food Science and former IFT President

Throughout his career, Litchfield earned numerous accolades for his scholarly and applied work in food technology. He was elected Fellow of the AAAS in 1966. He was named an IFT Fellow in 1980 and served as 1991–92 IFT President. He received the Phi Tau Sigma Dr. Carl R. Fellers Award in 1994 for his truly outstanding and remarkable work that brought honor and recognition to our profession. His presence but not his impact will be greatly missed.

Dues Reminder:

Your dues status is listed in the cover email of this Newsletter. If you have not already paid your dues, Phi Tau Sigma Member dues are \$40 per year, but students get a discount, so their dues are \$20 per year. Lifetime Membership is \$400 (just once). Please access the Phi Tau Sigma Membership Dues Page at: <http://www.phitausigma.org/membership-dues/>. Proceed on to pay by PayPal. Be sure to include your address. Once you are successful with your PayPal payment, you will receive a receipt. If you do not receive a receipt, please try again.

Dues can also be paid by check payable to **Phi Tau Sigma**, (made with U.S. Funds and drawn on a U.S. Bank). (Do not send a money order.) Do **not** write the check to Kantha. Mail your check to: **Kantha Shelke, Ph.D.** (Do **not** address to Phi Tau Sigma.)

33 West Ontario, Suite 57F, Chicago, IL 60654.

Send an email to Kantha to let her know to expect your check (kantha@corvusblue.net), and a scan of your check and envelop to Executive Director Kathryn Kotula, Ph.D. (kkotula@msn.com).

You are welcome at any time to give a donation to the Dr. Carl R. Fellers Award Fund, the Dr. Gideon "Guy" Livingston Scholarship Fund, Phi Tau Sigma Student Achievement Awards Fund, Phi Tau Sigma Special Recognition Award Fund, Dr. Daryl B. and Mrs. Dawn L. Lund Student International Scholarship Fund, Phi Tau Sigma Founders' Scholarship, Phi Tau Sigma Chapter of the Year Award, the Phi Tau Sigma – AMSA 'Research with Impact' Scholarship Fund, the Program Fund, or the General Fund. <http://phitausigma.org/store/> Scroll down to Donate and click the yellow Donate button.

We also ask each Chapter to send a list of their current, and lapsed, members along with contact information to the Chapter Affairs Committee Chair, Lester Schonberger, Ph.D. at: hlschon@vt.edu, help ensure our records are accurate.

Phi Tau Sigma Store:

Phi Tau Sigma has an online store. Items featured include Honor Cords, Official Lapel Pins, Banners (podium and wall/table), Annual and Lifetime Member dues, printed Certificates of Membership, and an opportunity to make tax deductible donations to Phi Tau Sigma. The Society Store can be found by going to www.phitausigma.org/store.

Support Phi Tau Sigma through AmazonSmile:

If you shop at Amazon, please register Phi Tau Sigma as your charity through AmazonSmile (<https://smile.amazon.com/>). There is also a mobile app that one can access. Instructions for the mobile app can be found at: <https://www.amazon.com/b?ie=UTF8&node=15576745011>.



The AmazonSmile Foundation will then donate 0.5% of the purchase price of eligible products to Phi Tau Sigma. This may not sound like a lot, but it adds up. Be sure to enter Amazon through AmazonSmile every time you shop (<https://smile.amazon.com/>). **Thank you!**

Editorial: Dr. & Mrs. Lund Scholarship

The deadline for the Dr. Daryl B. and Mrs. Dawn L. Lund Student International Travel Scholarship is November 30. This is the first of our many scholarships. Please review the criteria for this and the other scholarships and awards to determine possible nominees – perhaps yourself. <http://phitausigma.org/awards/>.

Phi Tau Sigma scholarships and awards are one of the perks of membership.

Questions? Please contact Awards Committee Chair Elena Castell-Perez, Ph.D. (ecastell@tamu.edu), or me (kkotula@msn.com).

About Phi Tau Sigma Communications:

The Phi Tau Sigma Communications Committee includes: Kathryn Kotula, Ph.D., Editor & Chair (klkotula@msn.com); Claire Zoellner, Ph.D., Associate Editor (cez23@cornell.edu); Kathiravan Krishnamurthy, Ph.D., Website Manager, (kathiravan.rps@gmail.com), Anthony W. Kotula, Ph.D., Member News Correspondent; Tianxi Yang, Ph.D., Research Co-Correspondent; Tiantian Lin, Ph.D., Research Co-Correspondent; Lida Rahimi Araghi, M.Sc.(Ph.D. Candidate); Minwei Xu, Ph.D.; Avinash Patel, Ph.D.; Kaavya.Rathnakumar, Ph.D., Chapter News Correspondent; Ashwini Wagh, Ph.D.; Ravi Tadapaneni, Ph.D.; Samruddhi Jadhav, M.S., Careers Correspondent; Damla Dag, Ph.D.; Sonali Raghunath, M.S. (Ph.D. student), Social media Co-Correspondent; Emine Ozen, M.S. (Ph.D. student); Xinyue Fan, M.S.; Lily Yang, Ph.D., Social media Co-Correspondent; Dajun Yu, Ph.D.; Halak Mehta, Ph.D. student; Shruti Sharma, Ph.D.

Please be responsive to their inquiries for information for the Newsletter, which may also be shared on our social media sites, and our website.

Documents:

Phi Tau Sigma Documents can be found on our website at: www.phitausigma.org.

Phi Tau Sigma Membership Nominations

<http://phitausigma.org/wp-content/uploads/2021/07/Phi-Tau-Sigma-Nomination-2022.doc>

<http://phitausigma.org/wp-content/uploads/2021/07/Phi-Tau-Sigma-Nomination-2022.pdf>

Phi Tau Sigma Scholarships and Awards Forms

<http://www.phitausigma.org/awards/>

Phi Tau Sigma Constitution and By-Laws

<http://www.phitausigma.org/constitution/>

<http://www.phitausigma.org/bylaws/>

Phi Tau Sigma Mentorship Program

<http://www.phitausigma.org/mentorship/>

Sponsors, Donors, and Contributing Partners:

Phi Tau Sigma accepts contributions and has a variety of available sponsorship opportunities, as well as the General fund and Program fund.

Phi Tau Sigma is a non-profit 501(c)(3) charitable organization, so your contributions are tax deductible to the extent provided by U.S. law.

Contributions may come from, but are not limited to, Corporations, Companies, Universities, Government agencies, Associations, Consultants, and individuals.

Contributions are appreciated in any amount, and can be made by way of the Phi Tau Sigma website (<http://phitausigma.org/store/> Scroll down to Donate and click the yellow Donate button, or by going directly to PayPal

https://www.paypal.com/donate?hosted_button_id=QTA7NUHUEEPP2). Contributions by check (written from a US bank) can be made by sending to our Treasurer: Kantha Shelke, Ph.D., 33 West Ontario, Suite 57F, Chicago, IL 60654. Please write "Sponsorship", "Donation", "Contributing Partner", etc. in the subject line. [A Sponsorship covers the cost of the honorarium and the administrative costs (PayPal, plaque, postage). A Donation covers only the cost of the honorarium. The Contributing Partners program is described below.]

Contributions of \$500 or more will be recognized publicly by the Society at the annual meeting, on the Phi Tau Sigma website, in printed material associated with relevant programs and events, and in the monthly Phi Tau Sigma Newsletter. Endowments are also accepted.

Contribution opportunities are available for the Phi Tau Sigma Special Recognition Award, Phi Tau Sigma Student Achievement Award (up to 3 will be awarded), the Dr. Gideon "Guy" Livingston Scholarship Fund, the Phi Tau Sigma Founders' Scholarship, the Dr. Daryl B. and Mrs. Dawn L. Lund Student International Scholarship Fund, and the Phi Tau Sigma Outstanding Chapter of the Year Award. Donations can be made towards the awards and scholarships listed above (on a 'first come' basis), as well as the Program fund (which includes the Phi Tau Sigma Awards Ceremony) and the General fund.

Phi Tau Sigma has a **Contributing Partners Program** with five levels of sponsorships as described below. The Contributing Partner receives all of the benefits in the previous levels, plus the addition of the benefit listed for that level. (<http://www.phitausigma.org/sponsor/>)

Bronze (\$5,000)

- Company listing in the "Donors and Sponsors" section of the Phi Tau Sigma Newsletter.
- Recognition with company name on www.phitausigma.org.
- Prominent recognition at all major Phi Tau Sigma events.

Silver (\$10,000)

- Bronze benefits.
- Posting your company's job openings and internships in the Phi Tau Sigma Newsletter.

Gold (\$15,000)

- Silver benefits.
- Acknowledgement of sponsorship and placement of corporate logo on plaque or scholarship/award memorabilia.

Platinum (\$20,000)

- Gold benefits.
- A press release associated with significant contributions, distributed to allied professional and trade associations for circulation to their membership via their publications, e-news and/or listservs.
- Complimentary access to student resume database.

Diamond (\$25,000)

- Platinum benefits.
- Prominent multi-year listing on the Phi Tau Sigma website as a sponsor of an Endowed Program.

Some corporations will match individual contributions of their employees, so check with your company about matching funds.

For more information contact the Treasurer, Kantha Shelke, Ph.D. (kantha@corvusblue.net), or the Executive Director, Kathryn L. Kotula, Ph.D. (klkotula@msn.com). Please write "Contribution" in the subject line.

2022-2023 Contributing Partners:

Hawkins, Inc. manufactures and distributes specialty chemicals and provides functional solutions for a wide variety of industries. The Food Ingredients Group is a leading manufacturer of innovative pathogen control technologies and ingredients for the food industry. The formation of Ingredient Works, an entity conceived to capitalize on expertise in functional ingredient applications, food industry knowledge, technical service, and an extensive product portfolio, is focused on the comprehensive science of shelf-life, providing customized solutions to both the common and the highly complex issues faced every day by food manufacturers. The ultimate goal for the Hawkins Food Ingredient Group is to re-define the concept of shelf life and become a complete solution provider to the food industry. (Contribution to sponsor the Phi Tau Sigma Founders' Scholarship, and to sponsor the new Phi Tau Sigma – AMSA Research with Impact Scholarship and its endowment.)



Food Ingredients Group 

2022-2023 Sponsors and Donors:

Peter M Salmon, M.S., MBA, a Lifetime Member of Phi Tau Sigma, is the Founder of International Food Network, Inc., currently retired. (Sponsorship of a Phi Tau Sigma Student Achievement Scholarship.)

Dr. Rakesh K. Singh is a Past President of Phi Tau Sigma, a Lifetime Member; and is a Professor and Graduate Coordinator in the Department of Food Science & Technology at the University of Georgia, where he was department head from 2001 to 2020. He is also a Fellow of IFT, Fellow of IAFoST, Fellow of National Academy of Agricultural Sciences of India, and Editor-in-Chief of LWT – Food Science and Technology. (Sponsorship of a Phi Tau Sigma Student Achievement Scholarship.)

The **American Meat Science Association (AMSA)** works to cultivate a global community of professionals and students to discover, apply and communicate meat science and technology. An independent, objective, and credible voice for meat science and technology, AMSA is an organization recognized for its unmatched competence and commitment to attracting and developing meat industry leaders. We are an association that encourages our members' active participation and engagement, welcoming collaborative relationships with other groups and organizations.



Anthony W. Kotula, Ph.D., a Lifetime Member of Phi Tau Sigma, retired in 1992 as a Supervisory Food Technologist after 38 years of service at the Agricultural Research Service, USDA; 25 years of which were as the Leader of the Meat Science Research Laboratory.

(Donation towards the endowment for the Phi Tau Sigma-AMSA 'Research with Impact' Scholarship)

Anonymous donation towards the endowment for the Phi Tau Sigma – AMSA 'Research with Impact' Scholarship.

Dr. Fergus Clydesdale, a Lifetime Member of Phi Tau Sigma, is the Distinguished Professor and Director of the UMass Food Science Policy Alliance, University of Massachusetts Amherst and a member of Phi Tau Sigma since the 1960's. (Donation to the General Fund)

William Benjy Mikel, Ph.D., a Phi Tau Sigma past President and a longtime Lifetime Member. (Recurring donation towards the endowment for the Phi Tau Sigma-AMSA 'Research with Impact' Scholarship)

Dr. Mary K. Schmidl is a Lifetime Member, Past President, and currently serves as Director on the Board of Phi Tau Sigma. Mary is also a Past President of the Institute of Food Technologists (IFT), a Past President of the International Union of Food Science and Technology (IUFoST), and Adjunct Professor, Department of Food Science and Nutrition, University of Minnesota.

Dr. Theodore P. Labuza is a Lifetime Member of Phi Tau Sigma, a Past President of the Institute of Food Technologists (IFT) and an Emeritus Morse Alumni Distinguished Teaching Professor of Food Science and Engineering, Department of Food Science and Nutrition, University of Minnesota. Ted has been a member of Phi Tau Sigma since 1962.

Robert Cassens, Ph.D., Professor Emeritus, University of Wisconsin, and long-time member of AMSA; and **Martha Cassens, M.S.**, a long-time member of AMSA, a Lifetime Member and Director of Phi Tau Sigma, and Vice President of Product Innovation, Development & Quality at ACH Food Co. Inc. (Donation in honor of Dr. Anthony Kotula towards the endowment for the Phi Tau Sigma – AMSA 'Research with Impact' Scholarship.)