

ΦΤΣ

The Honor Society of Food Science and Technology

Phi Tau Sigma Newsletter July 2023

News:

New Contributing Partner and New Award: Dr. S. Suzanne Nielsen Chapter Program Award

The Chapter Program Award of Phi Tau Sigma, sponsored by Dr. Suzanne Nielsen, is intended as an award to help a Chapter organize, sponsor, and hold a special program during the upcoming year. The program proposed must be consistent with the mission and purposes of Phi Tau Sigma, increase the visibility of the organization, and benefit students in the field of Food Science and Technology.

This award is intended to help a Chapter do something more impactful than it could manage with its own funds. Preference will be given to Phi Tau Sigma Chapters that: 1) have not won this award for at least one year, and 2) work cooperatively with other relevant organizations, both inside and outside the department (e.g., Food Science Club, Food Science Graduate Student Association, other scientific societies, nonprofits, etc.), to organize and implement the planned program/event. The application requires endorsement of the proposed plans by a Faculty Advisor/Department Head associated with the Phi Tau Sigma Chapter.



Up to two awards, of \$500 each, will be made yearly to two selected Chapters. Applications for the award are due by November 1 and awards will be announced by December 1. The program/event funded with this award must be held within one year of receiving the funding (December 31 of the following year). Go to: <http://phitausigma.org/awards/> for more information and the nomination form.

Thank you, Dr. Nielsen for initiating and fully sponsoring this great opportunity for Chapters.

Editor's Note: More awards can be given if there are contributors to this endowment. If Dr. Suzanne Nielsen has made an impact in your life, whether as a teacher, researcher/cooperator, advisor, mentor, and/or friend, please contribute. If you want to promote the students in Phi Tau Sigma Chapters, or Phi Tau Sigma in general, please contribute. If you want to facilitate programs that Chapters would not normally be able to afford, please contribute.

To contribute, go to the Phi Tau Sigma Store <http://phitausigma.org/store/>. Scroll down and click the yellow Donate button. Add your contribution amount, answer any other questions that apply to you, then choose the "Dr. Nielsen Award" option from the scroll down menu. You can choose to use your PayPal account, or your debit or credit card. You will be redirected to PayPal, where you enter your payment information. Once complete, you will receive a receipt from PayPal. Thank you for supporting this new award and all the Dr. Suzanne Nielsen has done.

Phi Tau Sigma Virtual Awards Ceremony – July 11, 2023

The Phi Tau Sigma Awards Ceremony will be presented virtually on July 11, 2023 at 2pm eastern, 1pm central, 12 noon mountain, and 11am pacific times.

To attend go to the Phi Tau Sigma website: www.phitausigma.org. Or the direct YouTube video link is <https://youtu.be/uKqHhHRwq08>.

Everyone, Phi Tau Sigma members or not, is invited. Bring your colleagues, family, friends. Please attend and support our honorees.



Let Your Colleagues Know You are a Phi Tau Sigma Member:

Please remember to find your lapel pin to wear during your meeting this summer or fall. If you cannot find it, or do not have one, order one now to receive it in enough time before your meeting. Please allow 3 weeks for delivery. <http://www.phitausigma.org/store/>



Membership Nomination Reminder:

Please use the most up-to-date nomination form when sending in membership nominations. The form comes in two formats: Word and writable pdf. Either format can be used. The proper form will have '2022' in the title, and a revision date of June 1, 2021 as the footer of the second page.

The most up-to-date forms can always be found on the Phi Tau Sigma website: www.phitausigma.org.

Upcoming Phi Tau Sigma Networking Events:

The Networking Lunch at RMC was a great success, but we are not done yet. There are still Networking Dinners concurrent with IAFP and IFT this summer.

IAFP

When: Monday July 17, 2023; 6:30pm eastern time
Where: Mercatto Taverna, 120 Bremner Blvd., Toronto

Details: Everyone will pay for their dinner separately. Please contact Lauren Jackson, Ph.D., President (Lauren.Jackson@fda.hhs.gov) as soon as possible if you would like to attend the dinner as seating is limited to 20.

IFT

When: Tuesday July 18, 2023, 6:30pm central time

Where: Italian Village Restaurant, 71 W. Monroe St., Chicago

Cost: \$70 (early bird: \$60) for Professional Members; \$35 (early bird: \$30) for Student Members: free for 2023 Phi Tau Sigma scholarship and award winners.

[The deadline for ticket purchases has passed, but you can contact us to be wait listed, Kathryn L. Kotula, Ph.D., Executive Director (klkotulla@msn.com).]

Promote your Presentations at Upcoming Professional Meetings

We will continue to publicize your presentations at upcoming professional meetings (IFT, IAFP, ACS, the Reciprocal Meat Conference (RMC) of AMSA, Cereals and Grains Association (CGA), or any other Food Science & Technology meetings or conferences) in the upcoming Phi Tau Sigma Newsletters.

Please provide the following information:

- Title of the presentation
- Presenter (and terminal degree and affiliation)
- Authors (with terminal degree and affiliation)
- Presentation Description/Summary
- Meeting or conference
- Date, time, session, and room number of presentation

Please send the presentation/session information to Dr. Terri Boylston

(tboylsto@iastate.edu) and copy Dr. Kathryn L. Kotula (klkotulla@msn.com). Thank you for sharing with Phi Tau Sigma members.

Phi Tau Sigma members presenting posters at professional meetings are encouraged to include the Phi Tau Sigma logo on their poster. Stickers will also be available so you can let your colleagues know that you are a Phi Tau Sigma member.

Upcoming Member Presentations:

Presentation of Lisa L. Dean, Ph.D. for the American Peanut Research and Education Society meeting

“Runner Peanut Quality Parameters as a Function of Roast Times”

Lisa L. Dean, Ph.D. USDA, ARS, SEA, Raleigh, NC

Authors: Jacy R. Weissburg, M.S., General Mills, Minneapolis, MN, Lisa L. Dean, Ph.D., Keith W. Hendrix, M.S., USDA, ARS, SEA, Raleigh, NC

Description: Currently, the industry uses the surface darkness to monitor roast completion, although this is not always indicative of optimal peanut flavor or quality, since peanut seeds within a lot can vary in composition even after being sorted for size due to maturity effects. An evaluation of the physical and chemical changes in runner peanuts at distinct times during the roasting process was performed. The Hunter L, a, and b color of pasted seeds and of whole seed peanuts, moisture content, total lipid content, seed size, descriptive

sensory analysis, free amino acid content, and carbohydrate content were determined on raw and roasted peanuts from each aliquot. Moisture content declined with increasing roast time, and ranged from 3.134% after 4 minutes, to 0.327% after 24 minutes of roasting. A trained descriptive sensory analysis panel reported an increase in roast peanutty until approximately 12 minutes, followed by a decline. When mathematically modeled, the peak roast peanutty score was at 12.15 minutes. The surface darkness of the seeds was equal to the internal seed darkness at 12.97 minutes, when the Hunter L-value of the pasted and whole seed roasted peanuts intersected. The relationship between the moisture and these compounds was involved in optimizing roasted peanut flavor. This indicated that other parameters, especially moisture, may be better predictors of roasted peanut flavor than surface color alone.

Availability: This presentation is part of "Food Science, Harvesting, Shelling and Storage" symposium. American Peanut Research and Education Society, Tuesday July 11, 2023, 3:15 PM, DeSoto Hotel, Savannah, GA, Cumberland Room.

Poster of Urvi Shah, M.S., Ph.D. Candidate for the Poultry Science Association meeting

"Waterless Plasma Treatment for the Safety of Shell Eggs"
Urvi Shah, M.S., Ph.D. Candidate, North Carolina State University

Authors:

Urvi Shah, M.S., Ph.D. Candidate and Deepti Salvi, Ph.D.
North Carolina State University

Description:

The U.S. Food and Drug Administration (FDA) estimates that 79,000 cases of foodborne illness and 30 deaths each year are caused by eating eggs contaminated with *Salmonella*. The massive recalls of shell eggs due to frequent outbreaks are accompanied by substantial economic losses to the industry. Our current study investigates the efficacy of a novel technology plasma in sanitizing shell egg surfaces. Plasma, the fourth state of matter, is an ionized gas produced by applying high electrical energy. The reactive species generated by plasma have been shown to inactivate pathogens and spoilage organisms in various environments. We hypothesized that waterless plasma treatment of inoculated shell eggs will inactivate the microorganisms.

A plasma jet with compressed air as a feed gas was used to produce plasma at high velocity through a rotating nozzle (> 2000 rpm). Eggs spot inoculated with avirulent strain *Salmonella* Typhimurium MHM112 or nalidixic acid resistant *Klebsiella aerogenes* B199A were treated with plasma for various times with eggs kept at various distances from the plasma nozzle. Our preliminary results indicate a treatment at a distance of 2 cm for 3 min provided a reduction of 3.4 ± 0.64 log per egg for *K. aerogenes*. A higher distance of 3 cm for eggs inoculated with *K. aerogenes* and *S. Typhimurium* treated for 3 min gave a reduction of 2.5 ± 1.1 log per egg and 2.2 ± 0.5 log per egg respectively. A statistical analysis using student t-test for the 2 distances (2 cm and 3 cm) tested for *K. aerogenes* inoculated eggs indicate no significant difference at $p < 0.05$. This indicates that type of organism plays an important role in the efficacy of plasma system. Studies are currently conducted to evaluate higher and lower distances on both organisms. Our future plans are to evaluate the quality characteristics of shell eggs post-plasma treatment. Plasma can be a new sustainable technology to replace the existing washing system in the United States with

a gas-based system to improve the safety of shell eggs. This technology has shown promise in the reduction of target microorganisms but needs optimization. Plasma technology has the potential to sanitize eggs and reduce water and chemical usage.

Availability:

Poultry Science Association Annual Meeting, Philadelphia, PA

Tuesday July 11, 2023, 5 pm

Poster of Christina Allingham, Ph.D. for the International Association of Food Protection (IAFP) meeting:

“Hybrid Sanitation Programming for Small Processors Guided By Industry Feedback”

Christina Allingham, B.S., Ph.D. Candidate, University of Massachusetts Amherst, Amanda Kinchla, M.S., University of Massachusetts, Clint Stevenson, Ph.D., North Carolina State University, Robson Machado, Ph.D., University of Maine, Jason Bolton, Ph.D., University of Maine, Stephanie Cotter, Ph.D., North Carolina State University, Lynette Johnston, Ph.D., North Carolina State University, Julie Yamamoto, M.Ed., North Carolina State University

(Description in the May Newsletter)

Availability: IAFP Annual Meeting, Toronto, Ontario Canada

Tuesday July 18th, 8:30am-6:30pm, Metro Toronto Convention Centre Poster Hall

Presentation of Yaozheng (Tess) Liu, M.S., Ph.D. Candidate for the IFT meeting:

“Comparison of Physical and Sensory Properties of Milk Protein Beverages Processed by Ultrapasteurization, Pilot Scale Retort, and Autoclave” Yaozheng (Tess) Liu, M.S., Ph.D. Candidate, North Carolina State University

Authors:

Yaozheng (Tess) Liu, M.S., Ph.D. Candidate, North Carolina State University, David M Barbano, Ph.D., Cornell University, MaryAnne Drake, Ph.D., North Carolina State University

Description:

The protein beverage category continues to grow. Consumers want great tasting protein beverages with simple ingredient lists. The objective of this study was to determine the impact of different heat processes (ultrapasteurization, retort and autoclave) on the physical, chemical and sensory properties of 6.5% milk protein beverages. Milk protein concentrate powder, dipotassium phosphate (DKP) (0.15% w/w) and vanillin (0.15% w/w) were rehydrated at 4°C and held overnight at 4°C. The next day, the protein beverages were heat processed by ultrapasteurization (141°C for 3 sec), retort (123°C, F0=5), or autoclave (121°C for 6 min). Subsequently, pH, color, viscosity, particle size distribution, proximate analyses, particle size, furosine, trained panel sensory properties, general volatiles and sulfur volatiles were measured. The entire experiment was replicated twice. Univariate and multivariate statistics were used to evaluate data. Beverage pH was decreased by heat process ($p < 0.05$) (6.95 unheated vs 6.89 UP vs 6.80 retort/autoclave). Both retort and autoclave beverages had darker color than UP beverages ($p < 0.05$). The unheated protein beverage had the highest furosine value ($p < 0.05$), and furosine contents of the heat processed beverages were lower ($p < 0.05$) (UP > retort/autoclave) than the unheated beverages. Sensory properties and volatile compounds were also distinct among

the heat processed beverages. The retort beverage had the highest cooked/milky and caramelized flavors and the highest relative abundance of hexanal, benzaldehyde, 2-pentyl furan, 2- ethyl furan and 2-methoxy phenol ($p < 0.05$). The UP beverage had the strongest overall aroma intensity and the highest cardboard/cron chip flavor. It was also the only beverage with detectable sulfur/eggy flavor. Autoclaved beverages were similar in furosine and volatile compounds to retort beverages ($p > 0.05$), but total solids, viscosity, color and sensory properties were distinct ($p < 0.05$). Retort and ultrapasteurization processes generate beverages with distinct physical and sensory properties. An autoclave processed beverage is not identical to pilot scale retort beverage. This study provides an understanding of how heat processes impact physical and sensory properties of milk protein beverages. These results are crucial for product development and process scale-up.

Availability:

- Dairy Foods Division Graduate Student Oral Competition: Tuesday, 2 pm CST, via Zoom
- Poster presentation: IFT, July 17, 10:15-11:00am and July 18, 12:15-1:00pm, South Hall Booth S0170, Poster #049.

Presentation by Keren Kles, Ph.D. for the IFT meeting:

“Insect Protein: A Sustainable Alternative for Enhancing Global Food Security”
Keren Kles, Ph.D., Dr. Kles Consulting

Description:

Significant efforts are taken to prioritize sustainable alternatives to animal proteins that can help with the world's food scarcity issues; however, the rationale for using insects as alternative protein sources is still debatable.

Availability: This presentation will be part of the Scientific & Technical Forum entitled “What Processing Technologies Are Leading to More Sustainable and Resilient F&B Production?”
IFT, Tuesday July 18 3:45 - 5:00 pm. McCormick Place, Room S403

Presentation of Sarah Corwin Ph.D., RD for the IFT meeting:

“Optimizing Nutrition in Plant-Based Foods via Fermentation Technologies”
Sarah Corwin, Ph.D., RD
(Description in the May Newsletter)

Availability: This presentation will be part of a symposium entitled “Scientific & Technical Forums: What Processing Technologies are Leading to Improved Nutrition?”
IFT, July 18, 2023 2:15pm - 3:30pm, McCormick Place, Room S402

Presentation by Jacob R. Tuell, Ph.D. for the IFT meeting:

“Physically Disrupting Muscle Structure to Improve the Tenderization of Fresh Beef during Aging”
Jacob R. Tuell, Ph.D., Assistant Professor at Northwest Missouri State University
(Description in the May Newsletter)

Availability: IFT – July 17, 11:45am-12pm, McCormick Place, South Hall, Booth S0170.

Presentation by Emerson Nolasco, M.S. for the IFT meeting:

“Understanding the role of the gastrointestinal microbiota in modulating the anti-hypertensive effect of egg white hydrolysate”

Emerson Nolasco, M.S., University of Nebraska-Lincoln; Devin Rose, Ph.D., University of Nebraska-Lincoln; Kaustav Majumder, Ph.D., University of Nebraska-Lincoln
(Description in the May Newsletter)

Availability: IFT, Poster session ID 302

Poster Showcase 1: Monday, July 17, 10:15-11:00am

Poster Showcase 2: Tuesday, July 18, 12:15-1:00pm

Presentation of Claire Sand, Ph.D. for the IFT meeting:

“Best Practices in Applying the Value Chain to Remove Chemicals of Concern in Food Packaging”

Claire Sand, Ph.D., Packaging Technology and Research, and Swati Sood, Ph.D. Western Michigan University
(Description in the May Newsletter)

Availability: IFT, Tuesday, July 18, 2:15pm – 3:30pm. Location to be determined.

Another Presentation of Claire Sand, Ph.D. for the IFT meeting:

“Use of Bayesian Networks to Make More Sustainable Food Packaging Choices That Prevent Food Waste”

Claire Sand, Ph.D., Packaging Technology and Research, and Ziyet Boz, Ph.D., University of Florida
(Description in the May Newsletter)

Availability: IFT, Tuesday July 18, 2:15pm – 3:30pm. Location to be determined.

Save the Date – Webinar by the 2022 Dr. Carl R. Fellers Award Honoree, Dr. Purnendu Vasavada – October 4

Dr. Purnendu Vasavada, 2022 Dr. Carl R. Fellers Award Honoree will present a webinar on ‘Myths, Misinformation, and Conspiracy Theories: Role of Science Communication in Stopping the Spread of False Information’ on Wednesday October 4 at 2pm (eastern). We are looking forward to an interesting presentation by Dr. Vasavada on how we can improve consumer awareness and understanding of the food industry. This will be a great virtual networking opportunity for all Phi Tau Sigma members. The link for the webinar will be provided in the September Newsletter.



Phi Tau Sigma Research Poster Competition

The Program Committee is sponsoring the Phi Tau Sigma Research Poster Competition for all Phi Tau Sigma student and post-doctoral members that have had a scientific presentation at a professional meeting or conference between November 1, 2022 and October 31, 2023. Undergraduate students, graduate students, and post-doctoral students are encouraged to compete for awards. Students will have the opportunity to share their research presentations through the Phi Tau Sigma newsletter, website, and social media. The top 6 students will present their research in the competition in late January/early February. If you or your company are interested in making a donation to the Research Competition, please contact Terri D. Boylston, Ph.D., President Elect and Program Committee Chair (tboylsto@iastate.edu) or Kathryn L. Kotula, Ph.D., Executive Director (klkotula@iastate.edu). Complete details for the competition will be available in the September Newsletter.

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.

Due to multiple requests, the EMGAM Campaign is being extended until August 31, 2023.

The leader thus far in the EMGAM Campaign is: Ravi Kiran Tadapaneni, Ph.D. Be a leader!

IFT FIRST 2023

IFT FIRST 2023 Annual Meeting and Expo will be held July 16-19, 2023, at McCormick Place, Chicago. During the annual meeting, the 2023 honoree of the Dr. Carl R. Fellers Award will be recognized at the annual Awards Celebration. In addition, Phi Tau Sigma will be sponsoring the Undergraduate Student Research Competition. More details on IFT FIRST 2023 can be found at <https://www.iftevent.org/>
Future Phi Tau Sigma Newsletters will provide more details once they come in.

Ribbons to attach to one's IFT badge will be available, at no charge, to Phi Tau Sigma Members in Good Standing (those who have paid their dues). There are two types of ribbons: those for regular members who have paid their annual \$20 student or \$40 professional member dues; and those for Lifetime Members, who have paid the one-time \$400 Lifetime Member dues:

PHI TAU SIGMA
Honor Society

PHI TAU SIGMA
Lifetime Member

Ribbons can be picked up in the registration area of the convention center at the ribbon desk. If you have not paid your dues, you must pay them before **June 20, 2023** to be included (see directions in the Dues Reminder section of each Newsletter). If you are not sure if you have paid, look for your dues status on the cover email sent with this Newsletter.

Cereals & Grains 23

[Save the Date for Cereals & Grains 23](#)

Protecting Our Agronomic Future: From Field to Families

Mark your calendar and plan to join us for this year's annual meeting on October 18–20 at the Hyatt Regency Schaumburg in Illinois, USA!

We all are aware that protecting our agronomic future is critical to ensure that we can continue to meet the growing global demand for grains and legumes. As a reflection of all of the important science needed to support this effort, we are focusing programming for Cereals & Grains 23 around the theme, "Protecting Our Agronomic Future: From Field to Families."

From field to families, we must work together to protect our agronomic future and ensure that everyone has access to the nourishing foods they need to thrive. We hope you will join us on this journey by attending or presenting research at our 2023 annual meeting.

The official website is coming soon! Stay tuned for hotel reservation details and more information on the exciting program for 2023!

[Abstract Submission Opens in April](#)

Submission for technical abstracts opens in April. Now is the time to start preparing your research for submission. Abstracts will be accepted for both oral and poster presentations. Don't miss this opportunity to contribute to the programming at this year's annual meeting!

For more information, go to:

<https://www.cerealsgrains.org/meetings/CG23/Pages/default.aspx>

Career Opportunities at FDA - Bedford Park, IL

A number of new ORISE fellowships are available at FDA in Bedford Park, IL. Links to each fellowship are listed below. For more information about these opportunities, please contact Lauren Jackson (Lauren.Jackson@fda.hhs.gov).



Research Microbiologist (B.S. or M.S.):

<https://www.zintellect.com/Opportunity/Details/FDA-CFSAN-2023-0012>

Research Microbiologist (Ph.D.):

<https://www.zintellect.com/Opportunity/Details/FDA-CFSAN-2023-0013>

Research Engineer (M.S. or Ph.D.):

<https://www.zintellect.com/Opportunity/Details/FDA-CFSAN-2023-0014>

NATIONAL NEEDS FELLOWSHIPS FOR MS FOOD SCIENCE STUDENTS AT THE UNIVERSITY OF HAWAI'I AT MĀNOA (UHM)

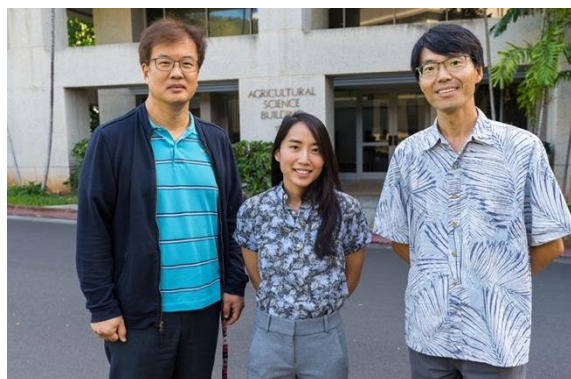
About the university

UHM is one of 146 R1: Research Universities and is a land-, sea-, space-, and sun-grant institution. UHM is committed to being a leading indigenous serving university and proudly delivers a unique multicultural global experience in a Hawaiian place of learning. UHM has a long history of adherence to the principles of sustainability and the essence of aloha—truly like nowhere else on earth.

About the fellowship opportunity

Food Science faculty at UHM were recently awarded a National Needs Fellowship Program grant from the US Department of Agriculture's National Institute of Food and Agriculture. The broader goal of this fellowship opportunity is to empower underrepresented students with advanced training in food science and to develop the future leaders of our nation's food system.

The food science team, Drs. Kacie Ho, Soojin Jun, and Yong Li are recruiting MS students through this opportunity. Students will be hired in each of the three main general research focus areas: 1) food processing/engineering, 2) food safety/microbiology, and 3) food analysis/chemistry. Special consideration will be given to students from **underrepresented** backgrounds, particularly **Native Hawaiian, Native American, and Alaska Native**.



Drs. Soojin Jun (left), Kacie Ho (middle), Yong Li (right) shown in front of the Agricultural Sciences Building, the home of the food science program at UHM.

What fellows should expect if hired

Selected fellows will conduct thesis research in the [MS food science program](#), which is within the [Department of Human Nutrition, Food and Animal Sciences](#). As part of the graduate program requirements, fellows will take course work related to food science and their research areas, serve as a teaching assistant for one semester. All thesis students in the M.S. food science program are required to pass a comprehensive candidacy exam and final thesis defense examination to graduate from the program. Fellows will also engage in different outreach and professional training opportunities to develop holistically as a scientist and future professional.

How to apply for the fellowship

The flyer for this fellowship opportunity is [here](#). Prospective students should apply following the UHM Graduate Division requirements. The priority deadline for Spring 2024 admission is September 1, 2023. If positions are still available, then the priority deadline for Fall 2024 admission is February 1, 2024.

Calendar:

->Phi Tau Sigma Scholarship and Awards Schedule:

- November 1: Deadline to submit nominations to the Awards Committee for the Dr. S. Suzanne Nielsen Chapter Program Award
- 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/>)

-> Dr. Carl R. Fellers Award

- January 15: Deadline to submit Nominations for the and other IFT Achievement Awards.

(More information: <https://www.ift.org/community/awards-and-recognition/achievement-awards/carl-r-fellers-award>)

->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 (See details on page 2 above)

- June 26: Phi Tau Sigma Networking Lunch, during the AMSA committee lunches
- July 11: Phi Tau Sigma Awards Ceremony, 1pm central time (virtual)
- July 18: Phi Tau Sigma Networking Dinner (concurrent with the IFT meeting)
- July 17: Phi Tau Sigma Networking Dinner (concurrent with the IAFP meeting)
- TBD: Phi Tau Sigma Business Meeting (virtual)

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

- June 25: Visit our table at the AMSA 2023 RMC Career and Networking Fair
1pm -4:30pm
- June 26: Phi Tau Sigma Networking Lunch, during the AMSA committee lunches

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

-> July 16-19, 2023 - International Association of Food Protection, Toronto, Ontario, Canada

-> October 18-20, 2023 - Cereals and Grains Association, Schaumburg, IL

Lifetime Member Tribute: Changmou Xu, Ph.D.

Research Associate Professor, University of Nebraska-Lincoln
Co-founder/CEO, A+ Berry

Why did you become a Lifetime Member?

I helped activate the Phi Tau Sigma Chapter at the University of Nebraska-Lincoln in 2018 and have been a Professional Member for several years. I feel it is very valuable for our students and also myself to be a member of this great organization. As a result, I became a Lifetime Member to continue my support to the Phi Tau Sigma Chapter at the University of Nebraska-Lincoln.

Education:

- Postdoc., University of Florida, Gainesville, Florida (Food Science) (2015)



- Ph.D., University of Florida, Gainesville, Florida (Major: Food Science; Minor: Food and Resource Economics) (2014)
- M.S. (Honor), China Agricultural University, Beijing, China (Food Biotechnology) (2010)
- B.S. (Honor), Jiangxi Agricultural University, Nanchang, China (Food Science and Engineering) (2007)

Experience/Accomplishments:

- 2015 – Present, Research Assistant/Associate Professor, The Food Processing Center, Department of Food Science & Technology, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln
- 2021 – Present, Co-Founder/CEO, A+ Berry, Nebraska Innovation Campus, Lincoln, NE
- 2016 – 2019, N-MEP/NIST Project Manager, Nebraska Manufacturing Extension Partnership (N-MEP, National Institute of Standards and Technology), University of Nebraska-Lincoln

Areas of Expertise:

Value-added Food Processing, Intelligent Food Processing, Food By-product Utilization, Entrepreneurship and Innovation

Awards and Honors (selected list):

Emerging Innovator of the Year Award, University of Nebraska-Lincoln, 2022

Personal: Family, Interests, Hobbies:

When I'm not at work, I like to stay with my family, play with my kids, cooking, watching movies, exploring the outdoors, and traveling.

Advice to university students and career food scientists and technologists:

Some advice I have for students and junior food scientists is: pursue things that are truly interesting to you since those will drive your learning, accumulate your skills in that area, and eventually help you to become an expert in the area. Dare to take challenges when you feel you would like some change in your life as these could be great opportunities taking you to a higher level.

Member News:

The Importance of the Phi Tau Sigma – AMSA ‘Research with Impact’ Scholarship

Contributed by Shulan Xiao, M.S., Ph.D. Candidate and the 2023 honoree of the Phi Tau Sigma-AMSA ‘Research with Impact’ Scholarship

Receiving the Phi Tau Sigma-AMSA ‘Research with Impact’ Scholarship is a significant honor that confirms my dedication and hard work. It signifies that my efforts have been recognized and appreciated by others, and that alone is a considerable motivation for me to keep working hard.

Throughout my academic journey, I have faced various challenges, both personal and academic. These issues often left me feeling overwhelmed, and there were times when I



nearly gave up on my dreams of pursuing advanced studies. However, with the support of family, friends, and now this scholarship, I am more motivated than ever to keep pushing forward. It provides me with a renewed sense of purpose and confidence in my abilities to succeed in my academic endeavors.

The scholarship also provides me financial support to focus on my studies and pursue academic excellence. It is a platform on which I can build a foundation for a prosperous career and make a difference in the world. I hope to use this opportunity to motivate other aspiring students.

This scholarship is a symbol of the endless possibilities that come with hard work, perseverance, and determination. With this scholarship, I am confident that my future will be bright, and I am excited to see where this journey takes me.

The Phi Tau Sigma – AMSA ‘Research with Impact’ Scholarship is sponsored by Hawkins, Inc.



[Editor's note: A description of Shulan's research and other accomplishments can be found in the June Newsletter.]

Sterling B. Hendricks Award



Dr. Gary R. List is the honoree of the 2023 Sterling B. Hendricks Memorial Lecture. The award honors the memory of Sterling Hendricks (1902-1981) and recognizes those who have made outstanding contributions to the chemical science of agriculture. The award is sponsored by the Agricultural Research Service, US Department of Agriculture and the American Chemical Society. List is the 4th ARS scientist to be honored since 1981. Dr. List was a research chemist at the Northern Regional Research Laboratory in Peoria, Illinois from 1963 -2007. His research encompassed oilseed processing and edible fats and oils. He is the author of 490 publications, book chapters and books edited. Dr. List has presented numerous invited lectures nationally and internationally in China, Turkey, Austria, Canada, and Taiwan. He is the recipient of the top awards in lipid chemistry sponsored by the American Oil Chemists Society, the Institute of Food Technologists, the American Chemical Society, and the European Federation of Lipid Technology. He is a Fellow in AOCS, IFT, AGFD and RSC. Dr. List is the recipient of the Phi Tau Sigma Dr. Carl R. Fellers Award (2016). He has been a leader in the American Oil Chemists Society for nearly 60 years and has received the Award of Merit, and the A.R. Baldwin Award, which is the Societies highest service award.

Honorees of the Signal Service Award of the American Meat Science Association:

The AMSA Signal Service Award was established in 1956 and is given to members in recognition of devoted service and lasting contributions to the meat industry and to the association. All Signal Service Award winners—current, past and future—are designated as an American Meat Science Association Fellow.

Susan Shivas, M.S. is a Phi Tau Sigma Lifetime Member. A Tennessee native, Susan Shivas attended the University of Tennessee – Martin for undergraduate studies, earning her B.S. in Animal Science. Susan then went on to pursue her M.S. in Meat Science from Kansas State University, studying under Dr. Curtis Kastner. While a graduate student at KSU, Susan’s research focused on the effects of electrical stimulation, hot boning, and chilling of beef muscle quality. Susan also conducted research on the effects of ascorbic acid on ground beef display shelf-life. After graduating from Kansas State University, Susan began her path to industry leadership at the Tennessee Department of Agriculture – Food and Dairy Division as a chemist.



Early in her career, Susan followed her interest and passion for R&D by joining Kraft – Oscar Mayer’s R&D department. Through her skill and leadership, she rose to Section R&D Manager. Susan then expanded her industry impact and influence by leading Land O’ Frost’s R&D and QA departments for several years and then The Oberto Sausage Company’s R&D and QA departments, leading a team of 25 scientists and subject matter experts, as their Director of Technical Services. At each of these locations, Susan’s long-term contribution to the industry centered on developing scientists’ abilities related to meat/poultry product development, quality adherence, and food safety initiatives for products across the retail and foodservice channels. By joining Solae in 2002 as their Director of Applied Technology, Susan Shivas became a true technical support to all the meat industry, helping numerous companies develop innovative meat items which included soy protein. It was at Solae that Susan and other scientists applied for a patent relating to High Protein Snack Products.

In 2005, Susan joined Tyson Foods as R&D Director, later as Sr. Director of R&D, leading meat/poultry product development across multiple successful retail brands, namely Tyson®, State Fair®, and Aidell’s®, as well as for foodservice distribution and retail deli. While leading the Tyson® brand product development team, Susan helped launch the Tyson Any’tizers® line of products and the Tyson Grilled & Ready® fully cooked fillets, among many other products. The Tyson Anytizer’s® line was an IRI 2008 “New Product Pacesetter” and continues to be a highly successful product line on shelf today. Through Susan’s leadership and mentorship, her Tyson teams launched hundreds of new products and contributed more than \$4 Billion in sales from their products.

In addition to Susan’s productive career and industry leadership, Susan Shivas is a long-time member of the AMSA, serving as both director and treasurer on the Board of Directors, as treasurer of the Development Council, and as chair for the Meat Industry Research Conference Planning Committee. In addition, Susan has given of her time and talent as member of more than 20 committees in as many years and continues to give back to the

industry in the form of mentorship and young professional development. Through Susan Shivas's leadership and innovation mindset, Susan's lasting contributions to the industry are numerous but center on three things: mentorship and development of young professionals (of which she has led many), new products launched which are still thriving on shelf, and intellectual property developed for the companies for which she worked that are in use today.



Dr. Wes Schilling, a Phi Tau Sigma Lifetime Member, is a professor of meat science, sensory science, and food chemistry at Mississippi State University (MSU) in the Department of Food Science, Nutrition, and Health Promotion where he served as the Undergraduate Advisor for Food Science from 2004 through 2021. From March 1st, 2022 through January 31st, 2023, Dr. Schilling has served as the interim department head of Poultry Science at Mississippi State University. Dr. Schilling received an M.S. in Food Science under the direction of Jim Claus, a M.S. degree in Applied Statistics, and a PhD in Food Science and Technology at Virginia Polytechnic Institute & State University in 2002 under the direction of Norm Marriott. Since coming to Mississippi State University, he has developed 5 courses that focus on hands-on experiences and real-world examples that he has experienced through interaction with food companies. Real world examples are related to topics taught through food chemistry, instrumental analysis, and sensory testing

principles. His research focuses on sensory science, meat processing (poultry, beef, pork, and catfish), meat quality, flavor chemistry, proteomics and statistical methods. His specific research program on sensory research, broiler meat quality, and relationships between sensory quality, flavor chemistry, and consumer science studies have earned him numerous University and National awards. Dr. Schilling has secured over \$4,500,000 in funding for his laboratory while working in conjunction with administrators and scientists in securing over \$9,500,000. He has published greater than 185 peer reviewed journal papers since 2003, and more than 100 since 2014. Since 2008, he has also published 18 chapters in textbooks, including 8 in the 6th edition of Principles of Food Sanitation that was released in 2019. He has presented greater than 130 papers at professional meetings. He has written more than 60 invited articles for trade magazines such as Food Technology, Meatingplace and Carnetec and completed a sabbatical in 2012 at Johnsonville Sausage, which helped him learn to better design research projects to impact business decisions. Dr. Schilling has served as the graduate student advisor for 38 students, with 35 graduate degrees conferred to these students to date. Dr. Schilling has been awarded the Ralph E. Powe Award: Most Outstanding Researcher Award at Mississippi State University, Mississippi State University Outstanding Graduate Student Mentor Award, the Achievement Award by the American Meat Science Association, the MAFES Outstanding Research Award, the Rosalind and Rodney Foil Teamwork Award, the Gamma Sigma Delta Excellence in Research Award, the Recent Alumnus Award for CALS at Virginia Tech, and the MSU CALS/MAFES Outstanding Research Award.

New IFT Fellow:

Dr. Dojin Ryu, Phi Tau Sigma Lifetime Member, is a Professor of Food Science (in the Department of Animal, Veterinary and Food Sciences) at the University of Idaho. Dr. Ryu has been working on microbial and chemical food safety since he finished his Ph.D. in Food Science and Technology with emphasis on environmental toxicology at the University of Nebraska-Lincoln. His recent work is focused on developing food safety education for the Deaf and hard-to-reach populations as well as chemical food safety focusing on molds and mycotoxins in foods and their chemical and toxicological fate during food processing.



Dr. Ryu has been serving the public and professional community in various capacities – including Science Board to the FDA, Board of Trustees of the International Food Information Council, and Scientific Editor for the Journal of Food Science. Recently, he has been named director of the Division of Food, Nutrition and Exercise Sciences (FNES) in the College of Agriculture, Food and Natural Resources (CAFNR), and chair of the Department of Nutrition and Exercise Physiology (NEP) in CAFNR and the School of Medicine at the University of Missouri-Columbia, effective Aug. 1, 2023.

Who was Dr. Carl R. Fellers? And what did he do that warrants Phi Tau Sigma to name a very prestigious Award for him? The short answer is that he was phenomenal, multi-faceted, impactful, and caring. Read on...

(Due to multiple requests, we are re-running our series on Dr. Fellers. Thank you for the suggestions.)

Memories of Dr. Carl R. Fellers:

(Contributed by Rauno A. Lampi, Ph.D., Charter member of Phi Tau Sigma, UMass Amherst) (reprinted from March 2011)

I had known Doc (Dr. Fellers) as an undergraduate, but my first one-on-one contact with him was in 1953 when I was still in the Air Force, but about to be separated from active duty. I had obtained a meeting with him to search where there might be jobs. We met in his office and talked over half an hour – partly because I was still in the military and Doc was proud of his contribution in WW II, so we were in the same “fraternity”. Suddenly, he jumps up and goes to leave, loudly saying over his shoulder that he was 20 minutes late to give a speech next door in Stockbridge to half the bankers in Massachusetts on why the food industry could be a good venture. An example of his selective memory and the priority he gave students.



Dr. Carl R. Fellers

His selective memory was recognized and accepted by many of us close to him. He was known to go hunting early in the morning, occasionally with his sons, and not think of his 8 o'clock class. So, there were, I believe, three of us grad students who

would take turns showing up at 8 o'clock on these days just in case he did not make it. In some natural way, none of us considered this an imposition, but just as an opportunity to help.

(Memories of Dr. Lampi to be continued in June)

(We encourage individuals who knew Dr. Fellers to provide us with their memories of Dr. Fellers for this section of the Newsletter.)

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. If paying by check:

- Make your check payable to **Phi Tau Sigma**
- Mail your check to: **Kantha Shelke, Ph.D.**
33 West Ontario, Suite 57F, Chicago, IL 60654.
- Email Kantha to let her know to expect your check (kantha@corvusblue.net),
- Send a scan of your check and envelope to Executive Director Kathryn Kotula, Ph.D. (klkotula@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, to 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.

I am here to help.

Questions? Comments? Suggestions? Contact me at klkotula@msn.com, and put Phi Tau Sigma in the subject line.

I am here to help.

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.; Misha Patel, M.S., Professional Research Correspondent.

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 Phi Tau Sigma – AMSA Research with Impact Scholarship and its endowment.)



Food Ingredients Group 

Hawkins, Inc. is a Silver level Contributing Partner.

Anonymous. Contribution to sponsor an Achievement Scholarship, towards the Phi Tau Sigma Networking Dinner in Chicago, and the endowment for the Phi Tau Sigma – AMSA 'Research with Impact' Scholarship.

S. Suzanne Nielsen, Ph.D. is a Past President of Phi Tau Sigma, a Lifetime Member; and is retired as a professor and Department Chair of the Food Science Department at Purdue University. (Contribution to sponsor and endow the Dr. S. Suzanne Nielsen Chapter Program Award.)

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.)

Claire Zoellner, Ph.D., Food Safety Scientist at iFoodDS, is a Lifetime Member of Phi Tau Sigma and currently serves as the Associate Newsletter Editor, Chair of the Social Media Subcommittee, and the Chair of the ad hoc Student Relations Committee. (Donation towards the Phi Tau Sigma Outstanding Chapter of the Year Award).

Lauren Jackson, Ph.D., Lifetime Member and President of Phi Tau Sigma, is a Supervisory Food Technologist at U.S. FDA. (Donation towards the Dr. Gideon "Guy" Livingston Scholarship and the Phi Tau Sigma Outstanding Chapter of the Year Award.)

Dr. Rodrigo Tarté, a Lifetime Member of Phi Tau Sigma, and current Past President of Phi Tau Sigma, is an Associate Professor of Animal Science and of Food Science & Human Nutrition at Iowa State University. (Donation towards the endowment for the Phi Tau Sigma – AMSA 'Research with Impact' Scholarship.)