Phi Tau Sigma Newsletter  February 2022

News:

Program Committee: Opportunity to have your presentations publicized to the Phi Tau Sigma membership
(Contributed by Lauren Jackson, Ph.D., President Elect and Chair Program Committee)

Do you have a presentation, symposium or technical session at IFT, IAFP, ACS, the Reciprocal Meat Conference (RMC) of AMSA, or any other meeting or conference in 2022? We would like to advertise these events in upcoming Phi Tau Sigma Newsletters.

Please send us your presentation/session information by the deadlines below, or as soon as you have it. (Keep in mind that publication dates are one month after the deadline given below.):

IFT - April 1, 2022  
RMC - April 1, 2022  
IAFP - May 1, 2022  
ACS - June 1, 2022 (for Fall ACS meeting)  
Other conferences/meetings - Please provide information at least 2 months prior to the conference or as soon as the information is available.

Please provide the following information: Title of the presentation, Presenter (and terminal degree, and affiliation), Authors (with terminal degrees, and affiliations), Presentation Description/Summary, Meeting of which association; Date, Time, and Room number. Feel free to add any other pertinent information such as Moderator. You may not have the date, time, and room number yet, but send these as soon as you do to the email addresses below.

Please send the presentation/session information to Dr. Lauren Jackson (Lauren.Jackson@fda.hhs.gov) and copy Dr. Kathryn L. Kotula (klkotula@msn.com).
Award and Scholarship Deadlines Approaching -

Phi Tau Sigma Outstanding Chapter of the Year Award deadline April 1.
The award includes an honorarium of $1000 and a plaque.

“The Phi Tau Sigma Outstanding Chapter of the Year Award shall be given to honor a Chapter of Phi Tau Sigma that has achieved excellence in the areas of research, scholarship, leadership and service. The award comes with a plaque and a $1000 honorarium to be used by the Chapter to advance distinction in the food science discipline.”

Send completed nomination forms for the Phi Tau Sigma Outstanding Chapter of the Year Award to Lili He, Ph.D., Awards Committee Chair, at: lilihe@foodsci.umass.edu, with a copy to Kathryn Kotula, Ph.D., at: klkotula@msn.com. Note that part of the nomination packet goes to Dr. He and Dr. Kotula, and a second part goes only to Dr. Kotula. Please read the instructions carefully.

Phi Tau Sigma–AMSA ‘Research with Impact’ Scholarship deadline April 19.
The award includes an honorarium of $2000 and a plaque.

The objective of the Phi Tau Sigma–AMSA ‘Research with Impact’ Scholarship “is to emphasize the importance of original research, carefully selected to solve vexing problems of the meat/food industry. The Phi Tau Sigma – AMSA Research with Impact Scholarship shall be given to a student Member or recently graduated Member of the American Meat Science Association whose undergraduate or graduate research has had, or is expected to have, a significant Impact - a practical and meaningful application.”

Send completed nomination forms for the Phi Tau Sigma – AMSA ‘Research with Impact’ Scholarship to Phi Tau Sigma Executive Director (klkotula@msn.com) and the AMSA Youth Programs Manager (scholarships@meatscience.org)

Full information for both opportunities can be found at:
http://www.phitausigma.org/awards/.

Nomination hints: (From the Editor)
• Read the Criteria carefully. Does the nominee fulfill the criteria?
• Read the Instructions carefully before and after filling out the nomination to be sure all instructions are followed properly, and the information requested is easy to find.
• Feel free to ask questions.
• Don’t wait for the deadline to send in the nomination. Early is good.

Phi Tau Sigma has QR codes. Give them a try.

For the Phi Tau Sigma website: We also have a QR code for contributions:
Save The Date: Student Research Lightning Talks – Feb 10

The Student Relations Committee is hosting a virtual student research event to connect members around exciting research topics of our student members. Please save the date for February 10th at 12pm PT/3pm ET. In this Lightning Talk event, three students will have 8 minutes and one slide to communicate their research and results. This event is open to all Phi Tau Sigma members. Registration for the event can be found here. After registering, you will receive a confirmation email containing information about joining the Zoom meeting. Contact Claire Zoellner, PhD (cez23@cornell.edu) with questions or for more information.

Impact of analytic-holistic cognitive style differences within consumer sensory perception and food experience. Tad Beekman, University of Arkansas, will provide a brief overview of the differences in how analytic and holistic individuals experience food, what they focus on within food situations, and how the environment impacts the two groups and then discuss two of his studies that highlight how these thinking styles can be an important variable in consumer-food scenarios and product development.

Effect of cinnamon on glycaemic potential of rice pudding during digestion: from a static gastrointestinal model to a more complex dynamic model. Yiwen Li, University of Georgia, will present her investigation into the effect of Cinnamon. cassia on glucose yield of rice pudding comparing two in vitro gastrointestinal (GI) methods (static vs. dynamic), providing evidence that data from static models must be interpreted with reservation, and dynamic models have the potential to effectively estimate the impact of food structure and composition on human health.

Integrated processing of brewer's spent grain into value-added protein feedstuff and biofuel. Yanhong He, Cornell University, will introduce brewer's spent grain (BSG) – a major byproduct generated by the brewing industry containing 14-30% protein and 50-70% of fiber that is predominantly used as low-value cattle feed or buried in landfills, leading to economic loss and environmental problems – and how she developed a novel integrated process to convert it into a value-added protein-rich feedstuff and biofuel.
**Upcoming Election – Three areas requiring your vote**

1) The election for Phi Tau Sigma Leadership: President Elect and four Directors will start March 1. **You MUST be a “member in good standing” (have paid your dues) before February 20 to be able to vote.** If you have not paid your dues, follow the instructions in the “Dues Reminder” section below. Your membership status is listed in the cover email of this Newsletter. If you have any questions, feel free to contact Executive Director Kathryn L. Kotula, Ph.D. at klkotula@msn.com.

2) As usual, you will have the opportunity to show your interest in membership on one of Phi Tau Sigma’s Committees. The opportunities include: Awards, Chapter Affairs, Constitution & By-Laws, Membership & Qualifications, Newsletter, Nominations & Elections, Program, Development, Strategic Relations, Student Relations, Website & Wikipedia, and Internship Organization.

3) A vote to modify the Phi Tau Sigma Constitution to document the positions of Assistant Treasurer and Assistant Executive Secretary. As Phi Tau Sigma has grown, so have the tasks involved in managing the Society. Therefore, putting these positions in place is necessary for the continued administration of Phi Tau Sigma. A copy of the Constitution with these changes will be a second attachment in your March Newsletter email.

**Calendar:**

**->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, Terri Boylston, Ph.D., (tboylsto@iastate.edu), with a copy to Dr. Kathryn L. Kotula (klkotula@msn.com).

**->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 Lili He, Ph.D. (lilihe@foodsci.umass.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)

->Election schedule:
  December 15: Nominations due to Nomination and Election Committee
  Note: Nominations are now closed due to overwhelming interest.
  (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

->June 12-15, 2022 - Reciprocal Meat Conference of the AMSA, Des Moines, Iowa

->Phi Tau Sigma Annual Meetings and Events:
  2022: To be determined

->July 10-13, 2022, Institute of Food Technologists Annual Meeting
**Student Research Synopsis: Atmospheric Cold Plasma Inactivation of *Escherichia Coli* K12 with and without Acid Adaptation in Apple Cider**

(Contributed by Emine Ozen, Ph.D. student, under the direction of Prof. Rakesh Singh, Ph.D., Food Science & Technology Department, University of Georgia)

**Adopted from a presented poster:** Ozen, E., Mishra, A., Kumar, GD., Singh, RK. Atmospheric Cold Plasma Inactivation of *Escherichia Coli* K12 with and without Acid Adaptation in Apple Cider. *E*-poster presentation, *IFT* annual meeting, July 19-21, 2021.

**Introduction:** Acidic fruits were considered safe from pathogens prior to *E. coli* O157:H7, *Salmonella*, and *Cryptosporidium* outbreaks that occurred after consuming unpasteurized apple and orange juices two decades ago. Increased foodborne illnesses associated with apple cider are generating interest in cider safety. Even though pasteurization provides safe apple cider, consumers choose unpasteurized apple cider because of its taste. In 1998, the U.S. Food and Drug Administration (FDA) changed the labelling laws requiring a warning on the label describing the risk of pathogen exposure if the juice is unpasteurized or the process does not have 5-log reduction. The regulation increased the importance of safety relevant to juices and non-thermal pasteurization techniques to protect juice quality. Atmospheric cold plasma (ACP) is one of the novel non-thermal juice processing technologies. It decontaminates food from pathogens without increasing temperature and without adding any chemical additive.

**Purpose:** The aims of this research were to investigate effect of cold plasma gas composition and treatment time on survival of *E. coli* K12 with/without acid adaptation in apple cider.

**Methods:** The treatment times ranged from 0 to 180 s. The plasma gas compositions were GI (80% Nitrogen + 20% Oxygen) and GII (90% Nitrogen + 10% Oxygen). Adaptations of *E. coli* K12 to acid were propagated in tryptic soy broth with lactic acid (pH=5). Enumeration of bacteria was done by using MacConkey agar and trypticase soy agar with 0.6% yeast extract.

**Results:** The effect of ACP treatment on *E. coli* K12 and acid-adapted *E. coli* K12 in apple cider under the different processing times and gas compositions investigated are shown in Figures 1 and 2, respectively. Acid-adapted *E. coli* K12 was less resistant to processing conditions than non-acid-adapted *E. coli* K12. More than 5-log reduction of acid-adapted *E. coli* K12 was achieved even in 120 s for both media and gas compositions. When nitrogen amount was increased in the gas composition, acid-adapted bacteria showed more susceptibility to the treatment (Figure 2).
**Significance:** Application of ACP on the inactivation of the acid and non-acid adapted *E. coli* K12 in apple cider had a good performance. Compared to thermal pasteurization of the juices, this method is less expensive, especially when air is used. Also, cold plasma is not a thermal method and protects the product from quality losses from thermal damage.

**References:**

**Figure 1:** Inactivation of non-acid adapted *E. coli* K12 exposed to GI & GII gases

**Figure 2:** Inactivation of acid adapted *E. coli* K12 exposed to GI & GII gases
Lifetime Member Tribute: Carl K. Winter, Ph.D.
Professor of Cooperative Extension, Emeritus. Food Toxicology Specialist, Department of Food Science and Technology, University of California, Davis

Why did you become a Lifetime Member?
After a long and enjoyable academic career, it became clear to me that Phi Tau Sigma is a special organization deserving of my continued support. Phi Tau Sigma is uniquely designed to honor and recognize contributors to the field of food science and technology and also to encourage exchange of scientific information and to promote networking of food science professionals. Such goals are laudatory and I am happy to contribute in my own small way to the success of the organization.

Education:
B.S., Environmental Toxicology, University of California, Davis (1980)
Ph.D., Agricultural and Environmental Chemistry, University of California, Davis (1987)

Experience/Accomplishments:
Environmental Hazards Specialist, California Department of Food and Agriculture, 1980-84
Cooperative Extension Toxicology Specialist, University of California, Riverside, 1987-91
Cooperative Extension Food Toxicology Specialist, University of California, Davis, 1991-2019

Areas of Expertise:
Food toxicology, particularly with respect to pesticides, natural toxins, and metals in food.
Risk assessment and risk communication.
Food safety education through use of music parodies.

Awards and Honors (selected list):
2020 – Dr. Carl R. Fellers Award, Institute of Food Technologists
2016 – Bernard L. Oser Food Ingredient Safety Award, Institute of Food Technologists
2012 – Council for Agricultural Science and Technology Borlaug Communication Award
2009 – NSF International Food Safety Leadership Award for Education and Training
2008 – Fellow, Institute of Food Technologists

Personal: Family, Interests, Hobbies:
Married (38 years) with one son (soon to be Ph.D. neuroscientist). Domestic and international travel. Active rock and roll musician (keyboards, guitar, vocals) playing in numerous gigging bands in the Sacramento area.

Advice to university students and career food scientists and technologists:
Inconvenience yourself by saying “yes” to opportunities even if they are difficult and beyond your immediate comfort zone. Such opportunities allow you to learn more about yourself and could stimulate further career development and future opportunities. Things that may seem inconsequential at the time might become springboards for rewarding path changes in the future. Don’t get bogged down – keep your options open!
Careers: Associate Professor
Contributed by Koushik Adhikari, Ph.D., University of Georgia

Introduction/Background: Currently, I am an Associate Professor (2018-present) in the Department of Food Science and Technology at the University of Georgia, Griffin Campus. I have served as the Graduate Coordinator for the Department from October 2019 to August 2021. I have more than 20 years of research experience in the areas of Sensory Analysis & Consumer Behavior, Product Development, and Food Chemistry. My research focuses on sensory analysis of consumer food products and commodities such as beef and peanuts. I study relationships between descriptive data and consumer acceptability data with chemical flavor data and other metabolomic data using multivariate statistical tools. I have published over 100 scientific articles including peer-reviewed research/review articles, extension publications, and conference proceedings as author or co-author.

At UGA, I have established the Sensory Evaluation & Consumer Lab, where in addition to research, I have provided sensory guidance to companies such as Monsanto (Vegetable Division), Nestle (Beverages Division), Pepperidge Farm/Campbell Snacks, Huddle House dining franchisor, Zaxby’s on various products and shelf life. I have substantial teaching experience (more than 18 years) in many areas of food science, including sensory analysis and product development. I have taught courses both at graduate and undergraduate levels in Sensory Analysis, Data Applications in Sensory Analysis, Introductory Food Science, Dairy Processing, Food Process Engineering, Food Chemistry, and very recently Research Methods in Food Science.

Qualifications:
Ph.D. Food Science, University of Missouri, Columbia, MO
M.S. Dairy Technology, National Dairy Research Institute, India
B.S. Dairy Technology, National Dairy Research Institute, India

Positions:
Last three positions are given below –
Associate Professor, University of Georgia
Assistant Professor, University of Georgia
Associate Professor, Kansas State University
I am also the Executive Editor (Sensory and Consumer Science) for the Journal of the Science of Food & Agriculture.

Duties: My current appointment is split between research (75%), instruction (15%), and extension (10%). I mostly do research in Sensory Analysis & Consumer behavior. In the last two years my focus has been more on collecting instrumental flavor data on products such as roasted peanuts, wines and coffee. I currently teach a graduate level class in research methods every spring semester. I also do a little bit of extension/outreach work for Georgia food companies.

Salaries: It can vary greatly; $70,000-130,000 per year with a median salary of $100,000 (just a guesstimate)
Benefits: Universities usually have very comprehensive health benefits and retirement plans, which is true for University of Georgia as well.

Conclusion: The foremost intangible benefit is mentoring students to be successful in their careers. I hope I have been successful in this endeavor!

Chapter News: University of Minnesota
(contributed by Sara Kleba, Ph.D. Student; Secretary, University of Minnesota’s Chapter)

Are you excited about your research and want to share what you’ve been doing with others?!?

The University of Minnesota’s Phi Tau Sigma Chapter is happy to announce the Second Annual Speedy Science Competition, which is to take place via ZOOM during the week of March 21st, 2022!!

This competition provides you and other food science students a wonderful opportunity to present research you are/will be doing to a panel of judges and event attendees in an engaging and approachable manner. The challenge...you only have 3-minutes to do it!!! The competition encourages you to think critically about the most important aspects of your research, to practice communicating scientific concepts to a broad audience, and to think about how you can get others excited about your research. To get a better idea of what Speedy Science is about, check out last year’s event on the UMN YouTube channel!!

This year the live event is open to Speedy Science sponsors, industry professions, students and professional Phi Tau Sigma members. Currently, we are accepting abstracts from food science students at the University of Minnesota (UMN), South Dakota State University (SDSU), North Dakota State University (NDSU), University of Wisconsin-Madison (UW-Madison), and Iowa State University (ISU). To submit an abstract for the competition please fill-out this form.

If you have any questions, concerns, or are interested in helping us put on the event by being a sponsor or judge, please contact Sara Kleba, Phi Tau Sigma-UMN chapter Secretary at kleba004@umn.edu.

Member News:

Howard R. Moskowitz, Ph.D., CoFounder & Scientific Director of the World Institute of Competitive Excellence, LLC (WICE), and Lifetime Member of Phi Tau Sigma, has produced a short introduction video to Mind Genomics available on YouTube entitled “Mind Genomics - Voyage of discovery”. The video can be found at: https://www.youtube.com/watch?v=QpH3X4qv6Ro
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).

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, Terri Boylston, Ph.D. at: tboylsto@iastate.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.

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: Networking and Conversational Tangents

Some of the most interesting, informative, and helpful things I have learned have come from Networking – meeting people, talking with them, and getting to know them and what they do. And reconnecting later on.

Network whenever you can. Face to face is best, but other methods work. Initiate the contact. Walk up to someone at a meeting. Call someone, or email, or set up a video call. Have an initial topic in mind about whatever it is that captured your interest (a paper, a course, a product, a process,…). But then let the conversation go where it does. And most importantly: Listen.

Having a network of colleagues, or even acquaintances, that one can call upon when searching for information, needing another opinion, or a reality check is invaluable. Feeling comfortable with the people in your network is important, and this comes from repeated contacts. Cultivate your network that way one should cultivate their garden.

Part of networking can, and should, include ‘conversational tangents’ – When the topic of conversation changes (whether quickly, or meanderingly) from the original topic. There are few topics or issues that are simple. Most are complex, and have many layers. Conversational tangents address these layers. But keep in mind that the original topic might be left behind, and a new topic, or several new topics, be addressed. Sometimes the conversation circles back to the original topic, sometimes not. Sometimes the conversational tangents tell you about the person more that the topic, and facilitate a friendship. Remember to Listen. Conversational tangents always have value.

About Phi Tau Sigma Communications:

The Phi Tau Sigma Newsletter Committee includes: Kathryn Kotula, Ph.D., Editor-in-Chief, Chair (kkotula@msn.com); Claire Zoellner, Ph.D., Associate Editor (cez23@cornell.edu); Anthony W. Kotula, Ph.D.; Tianxi Yang, Ph.D., Research Co-Correspondent; Tiantian Lin, Ph.D., Research Co-Correspondent; Samruddhi Jadhav, M.S., Careers Correspondent; Kaavya.Rathnakumar, M.S., Chapter News Correspondent; Diane Schmitt, Ph.D., Member News Correspondent; Ashwini Wagh, Ph.D.; Ravi Tatapaneni, Ph.D.; Damla Dag, M.S. (Ph.D. student), Social media Co-Correspondent; Sonali Raghunath, M.S. (Ph.D. student), Social Media Co-Correspondent

Please be responsive to their inquiries for information for the Newsletter.

Documents:

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

Phi Tau Sigma Membership Nominations

Phi Tau Sigma Scholarships and Awards Forms
http://www.phitasigma.org/awards/
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://phitasigma.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=QTA7NUHUEPP2). 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.phitasigma.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.phitasigma.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.

**2021-2022 Contributing Partners:**

**Hawkins, Inc.** is a progressive concern that 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.) **Hawkins, Inc. is a Silver level Contributing Partner.**

**Dr. Daryl and Mrs. Dawn Lund.** Dr. Lund is past President of Phi Tau Sigma, Lifetime Member, past Treasurer, current Assistant Treasurer, and an Emeritus Professor, University of Wisconsin-Madison. (Contribution to endow the Dr. Daryl B. and Mrs. Dawn L. Lund
Student International Travel Scholarship.) **The Lunds are a Platinum level Contributing Partner.**

**Catherine Adams Hutt, Ph.D., RD and Peter Barton Hutt, LL.B., LL.M.,** Phi Tau Sigma Lifetime Members. Catherine is a food safety and regulatory consultant and expert witness with RdR Solutions, and Peter is an attorney with Covington and Burling. Both are IFT Fellows. (Contribution for the Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B., LL.M. Food Regulation Scholarship) **The Hutts are a Platinum level Contributing Partner.**

**2021-2022 Sponsors and Donors:**

**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)

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. Rakesh K. Singh** is a Past President of Phi Tau Sigma, a Lifetime Member; and is a Professor 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.)

**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)

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

**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.)

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