

ΦΤΣ

The Honor Society of Food Science and Technology

Phi Tau Sigma Newsletter *January 2022*

News:

Catherine Adams Hutt, Ph.D., RD and Peter Barton Hutt, LL.B., LL.M. - Silver Contributing Partners to Phi Tau Sigma

(Contributed by Catherine Adams Hutt, Ph.D., RD)

Peter and I share a passion for food regulation and have delighted in careers in their application. One of Peter's most enjoyable parts of the year is his teaching of food and drug law and mentoring of young students. We both have had the pleasure of working inside a Federal regulatory agency and learned how important they are to the development and marketing of food. We want to encourage young professionals to become knowledgeable in the application of food regulations and hopefully share our excitement for a lifetime. We established the Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B, LL.M. Food Regulatory Scholarship to help students identify and support the potential of a career in food regulation.



Award and Scholarship Deadlines Approaching

Remember to submit your nominations by **February 1** 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 new Catherine Adams Hutt, Ph.D., RD and Peter Barton Hutt, LL.B., LL.M. Scholarship Recognizing the Importance of Food Regulation.

The student scholarships include an honorarium of \$1000 each and a plaque.

Send completed nomination forms to Lili He, Ph.D., Awards Committee Chair, at: lilihe@foodsci.umass.edu, with a copy to Kathryn Kotula, Ph.D. klkotula@msn.com.

Full information can be found at: <http://www.phitausigma.org/awards/>.
However, a short description of each is offered below:

"The **Phi Tau Sigma Special Recognition Award** shall be given to a Member of Phi Tau Sigma who has shown exceptional dedication to Phi Tau Sigma - The Honor Society of Food Science and Technology, as evidenced by significant accomplishments towards the goals and/or administration of Phi Tau Sigma. The award comes with a plaque and an appropriate memento."

"The **Phi Tau Sigma Student Achievement Scholarship** shall be given to a student Member of Phi Tau Sigma who has shown exceptional scholastic achievement and a dedication to Phi Tau Sigma."

"The **Dr. Gideon "Guy" Livingston Scholarship** of Phi Tau Sigma shall be given to a student Member of Phi Tau Sigma in honor of the founder of Phi Tau Sigma, and to acknowledge that student's scholastic achievements and dedication to Phi Tau Sigma."

"The **Phi Tau Sigma Founders' Scholarship** shall be given to a student Member or Member of Phi Tau Sigma whose graduate research has had, or is expected to have, a significant Impact - a practical and meaningful application. The objective of the Founders' Scholarship is to emphasize the importance of original research, carefully selected, to solve vexing problems of the food industry."

The "**Catherine Adams Hutt, Ph.D., RD and Peter Barton Hutt, LL.B., LL.M. Scholarship Recognizing the Importance of Food Regulation** shall be given to a student Member of Phi Tau Sigma who has shown exceptional scholastic achievement, a dedication to Phi Tau Sigma, and, very importantly, a strong documentable interest in food regulation as evidenced by course work, research, internships/work experience, and/or other food regulation accomplishments."

Upcoming, with a nomination deadline of April 1

"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."

Upcoming, with a nomination deadline of April 19

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 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."

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.

New: Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B., LL.M. Food Regulation Scholarship

The Awards Committee is proud to announce that the Board of Directors of Phi Tau Sigma have approved the formation of a new scholarship. The Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B., LL.M. Food Regulation Scholarship of Phi Tau Sigma shall be given to a student Member of Phi Tau Sigma who has shown exceptional scholastic achievement, a dedication to Phi Tau Sigma, and, very importantly, a strong documentable interest in food regulation as evidenced by course work, research, internships/work experience, and/or other food regulation accomplishments.

The Food Regulation Scholarship comes with a plaque and a \$1000 honorarium.

This scholarship was inspired by the careers and contributions of Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B., LL.M. to food regulation.

Initial funding for the award has been established through contributions from Catherine Adams Hutt, Ph.D., R.D. and Peter Barton Hutt, LL.B., LL.M. and is open to other donors. Donations can be made by going to the Phi Tau Sigma Donate page: <http://www.phitausigma.org/donate/> and clicking the yellow button. Please indicate that the donation is for the Food Regulation Scholarship. (Or send an email as to your intent to Kathryn L. Kotula, Ph.D. klkotula@msn.com. Kathy can also be reached for questions. Write "Scholarship" in the subject line.)

The deadline for submitting nomination materials is **February 1**. The scholarship nomination form and instructions can be found at: <http://www.phitausigma.org/awards/>

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: Aroma Characterization of Regional Cascade and Chinook Hops (*Humulus lupulus* L.)

(Contributed by Xueqian Su, Ph.D. Student, and Yun Yin, Ph.D., Department of Food Science and Technology, Virginia Tech)

Featuring recently published work: *Food Chemistry* 364 (2021), 130410

Introduction: Hop (*Humulus lupulus* L.) is used as the raw material to provide aroma and bitterness to beers [1]. Recently, hop production in U.S. has seen an increase in some non-traditional growing regions including the greater mid-Atlantic due to consumers' increasing interest in locally-sourced ingredients. The aroma characteristic of region-specific hops, however, is still unknown.

Purpose: This study aimed to characterize the authentic aroma profiles of Virginia-grown Cascade and Chinook hops using multiple identification and quantitation approaches.

Methods: Fresh Cascade and Chinook hops were harvested from Meadowview, Petersburg and Blacksburg in Virginia. The aroma-active compounds in hops were identified with headspace-solid-phase microextraction-gas chromatography-mass spectrometry-olfaction (HS-SPME-GC-MS-O) and quantitated by stable isotope dilution analysis (SIDA) and standard addition method (SAM). The intensity and importance of individual odorants were determined by aroma extract dilution analysis (AEDA) and odor activity values (OAVs).

Results: Among 33 aroma-active volatiles identified by HS-SPME-GC-MS-O, geraniol, β -myrcene, linalool, and caryophyllene were found to be the most impactful compounds in both varieties (Figure 1). SIDA and SAM quantitation results indicated that the total content of aroma-active compounds in hops from Meadowview were significantly higher than that from Petersburg and Blacksburg. In addition, β -myrcene, linalool and geraniol, which were responsible for typical herbal and citrus notes, were the most potent aroma compounds in all hop samples due to their high OAVs and flavor dilution factors.

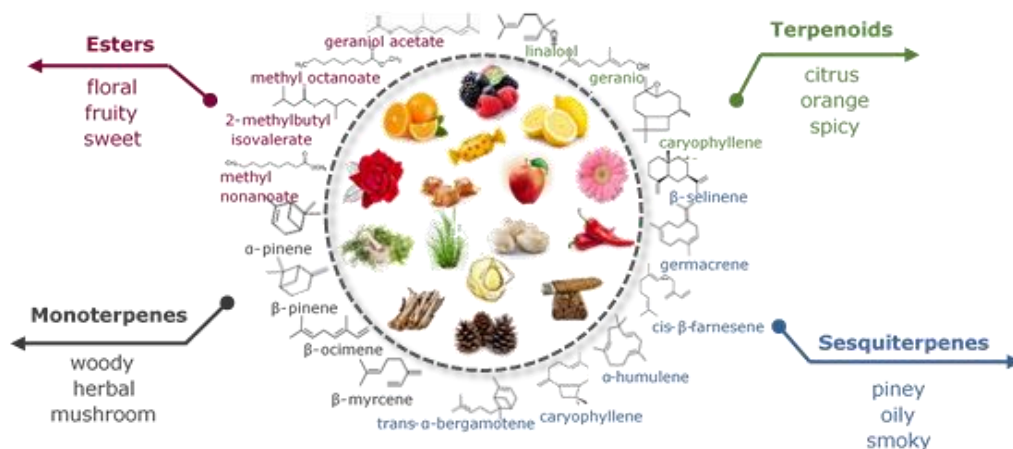


Figure 1. Aroma-active compounds in fresh hops with high odor intensities

Significance: The application of HS-SPME-GC-MS-O and hybrid quantitation techniques depicted the unique aroma characteristics of Virginia-grown hops. The findings will guide the selection of premier hops, improve product quality, and assist the development and marketing of this emerging crop.

References:

1. Almaguer, C., Schönberger C., Gastl, M., Arendt, E. K., & Becker, T. (2014). *Humulus lupulus*-a story that begs to be told. A review. *Journal of the Institute of Brewing*, 120(4), 289–314.

Lifetime Member Tribute: Adam Baker, Ph.D.

Postdoctoral Scientist, University of Arkansas

Why did you become a Lifetime Member?

I knew that I wanted to be a Lifetime Member early on in my career to gain experience in leadership roles, stay up to date with food science and technology news, and to network amongst professionals. Once I experienced the support from dedicated Phi Tau Sigma members, I felt that I wanted to be involved over the course of my career. I hope to live to 70 or 80, and if I do, I will save anywhere from \$800 to \$1200 over the years, funds of which I will probably use for gardening or some more dad shoes. All kidding aside, I am fortunate to be a part of the Phi Tau Sigma Honor Society as a Lifetime Member and hope to be able to provide support through donations as well as volunteering. I look forward to seeing where the Phi Tau Sigma Honor Society will take me and am eager meet many more great members along the way.

Education:

- Ph.D. University of Florida (Food Science) (2020)
- M.S. University of Arkansas (Food Science) (2015)
- B.S. University of Arkansas-Fort Smith (Biology) (2013)

Experience/Accomplishments:

- Chair, Phi Tau Sigma Development Committee (2021-22)
- Postdoctoral Scientist, University of Arkansas (Sept 2020 – present), Dr. Kristen Gibson’s Food Virology Lab Group
- Vegetable Safety Specialist/Consultant, Food and Agriculture Organization of the United Nations (FAO) (2021)
- Graduate Research and Teaching Assistant, University of Florida, FSHN, (2016-20)
- IAFP Student PDG Treasurer (2019) and Secretary (2018)
- English Teacher, Piyamaharachalai School, Nakhon Phanom, Thailand, (2015-16)
- Graduate Research Assistant, University of Arkansas, Food Science, (2013-15)



Adam and Sara Baker with their children, Thanksgiving 2021.

Areas of Expertise:

Pre- and postharvest produce safety, foodborne pathogen survival in soil, virus persistence on fomites.

Awards and Honors (selected list):

UF Graduate Fellowship, University of Florida (2016-2020), William C. and Bertha M. Cornett Fellowship (2020), Bob Olson Graduate Scholarship (2018, 2019), FMC Graduate Scholarship, UF FSHN (2018), Student Scholarship, Florida Association for Food Protection (2016), Michael G. Johnson Graduate Endowed Scholarship Excellence Food Microbiology (2014), Heartland Conference Second Team & Gold Glove Award (2013), UAFS College of STEM Biology Department Service Award (2013).

Personal: Family, Interests, Hobbies:

Husband to Sara Marshall Baker, a Ph.D. Candidate and sensory food scientist at the University of Florida focused on salt enhancement in food products with seaweed extracts. The semester we started dating, I took a food processing course at UF. Her father (Dr. Maurice Marshall) was retired at the time, but came back to teach the course, and the pressure was on. We have a wild 21-month-old boy and 2-month-old baby girl, as well as two hound dogs. We enjoy repurposing furniture, gardening, walking our dogs, canoeing (upper Buffalo National River please), going to garage sales, the farmer's market, the beach, and the lake.



Lou, blue-tick hound (left) and Ruby, red-bone hound (right)

Advice to university students and career food scientists and technologists:

1. Do not compare yourself with others. The real competition in life is with yourself.
2. Ask questions.
3. Be present.
4. Be nice to others.
5. Be nice to yourself.
6. Remember that positivity and negativity are contagious.
7. Remember that everything in life is temporary.
8. Surround yourself with positive people.
9. Be optimistic, one day can change everything.
10. As far as the science goes, don't ignore your 'negative' data.

Careers: Roles in Allied Industries

Contributed by Stephen G. Campano, M.S., Hawkins, Inc.

Introduction/Background: The Bureau of Labor Statistics suggests that in 2020 there were 37,400 jobs listed under the category of Agricultural and Food Scientists, and about 4,400 openings projected each year, on average, over the next decade. The website Collegefactual.com indicates that Colleges in the United States reported awarding 2,415 degrees in the 2019-2020 academic year, representing a difference of 315 over the prior year, or growth of 13.0%. The food industry as a whole employs many hundreds of thousands of workers, and relies heavily on the expertise of not only those directly employed, but also on the products and services from allied industries, such as engineering firms, heating, cooling, and packaging equipment and supply companies, chemical suppliers for sanitation and pathogen control, and food ingredient manufacturers, among others. Opportunities are abundant for those with an education in Food Science and related fields, especially in allied industries.



Qualifications: Generally speaking, the minimum of a B.S. degree is required. An advanced degree is helpful for positions that require test design and implementation, data collection, analysis and interpretation, but experience can often compensate for advanced degrees. Individuals with degrees in Food Science, Animal Science, Engineering, Chemistry and others fill roles in a number of allied industries, but experience in the food sphere, whether as an intern or full-time employee is indispensable. A college degree is usually indicative of one's ability to learn but there really is no substitute for hands-on experience, especially in a production environment. Having a basic understanding of the challenges and opportunities from the food production, operations, and regulatory perspective is not only enlightening but serves to develop one's ability to confidently relate and communicate to situations that would benefit from your firm's products and services.

Positions: Positions include Technical Service/Support/Sales, Product/Application Development, Business Development, Consulting Services and other Management opportunities.

Duties: Duties vary widely but a common denominator is the ability to communicate effectively. Travel is likely required for most allied sector positions.

Salaries: (general ranges) Starting salaries depend in part on education and experience but are generally in the range of about \$60,000 to \$90,000 and can escalate well into six figures.

Benefits: Most offer Medical, Dental, Vision, Life Insurance; 401k; Paid time off; Some offer bonuses or commission; Some offer profit sharing; Some offer Employee Stock Purchase Plans; All offer opportunities.

Conclusion: From my personal perspective, the experiences you accumulate along a career path translate to good fortune. I was fortunate to have had the opportunity early on to take risks, make mistakes, and expand my comfort zone. I trusted in mentors who took a

chance on me, and finally realized that working hard was a better option than hardly working. My advice to those who are considering a career in the food space would be to make the most of your opportunities - meet people, allow yourselves to be mentored, foster meaningful relationships, relish the experience, and build your reputation along the way. As big as the Food Industry is, word travels fast and your reputation is your most valuable commodity.

Member News:

Suzanne Nielsen, Ph.D., a Lifetime Member of Phi Tau Sigma, and President during 2012-2013, is preparing to retire. Congratulations Suzanne!

A wonderful, inspiring article about Suzanne, her early life, education, career, and legacy entitled "The best laid plans lead to an incredible career" can be found at: <https://ag.purdue.edu/stories/the-best-laid-plans/>

To start you out: "Suzanne Nielsen grew up on a farm in central Nebraska, where she started her education in a one-room schoolhouse with an inspiring teacher. "Mrs. Betty Kind was the first of many great teachers who influenced my career path and my teaching style," Nielsen says. "One of my earliest childhood memories is lining up my dolls on a sofa and teaching them like I was being taught."



She encountered other inspiring teachers in math, chemistry and music. As influential as they were, however, Nielsen's mother most inspired and motivated her.

"Sometimes we emulate what we see," she says. "My mom was a strong person. She drove trucks during harvest. She was the first woman school bus driver in our area. She always encouraged me in anything I wanted to do."

Starting with those days of playing teacher and throughout her academic career in food science in Purdue's College of Agriculture, Nielsen says she never thought there was anything she couldn't or shouldn't do.

On her first day of class at the University of Nebraska, which she attended on a home economics education scholarship, the professor told the students that there would not be enough jobs for all of them. Nielsen immediately began the search for another career path that pulled together what she most loved: science and teaching. Food science was that junction."

Continue reading at <https://ag.purdue.edu/stories/the-best-laid-plans/>
Congratulations Suzanne, and thank you for your impact on students, professionals, and the food industry!

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: Words of Wisdom

Have you noticed that the Lifetime Member Tributes (and this month's Careers article, also written by a Lifetime Member) end with advice? These are worth reading.

Our Lifetime Members encompass students, professionals, and retirees. They work (or have worked) in academia, industry, government, and associations. They have learned, and generously share their insights.

Particularly as we start a New Year, which is known for resolutions - Take a moment, read, and retain the advice. (And consider becoming a Lifetime Member if you are not one already.)

About Phi Tau Sigma Communications:

The Phi Tau Sigma Newsletter Committee includes: Kathryn Kotula, Ph.D., Editor-in-Chief, Chair (klkotula@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 Tadapaneni, 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.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.

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.**



Food Ingredients Group 

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 Huttts 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. Claire Zoellner, Food Safety Scientist at iFoodDS, Associate Newsletter Editor, past Phi Tau Sigma Director, and Past Chair of *ad hoc* Student Relations Committee. (Donation towards a Phi Tau Sigma Achievement Scholarship)

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.)