News:

100th Issue of the Phi Tau Sigma Newsletter:

This issue of the Phi Tau Sigma Newsletter (October 2019) is the 100th Newsletter that my Dad (Anthony W. Kotula, Ph.D.) and I have produced. We, and the various Newsletter Committee members, have endeavored to deliver Phi Tau Sigma news and interesting features to you.

We would like to acknowledge the persistent quality work of Associate Editor, Claire Zoellner, Ph.D. who brings in many of the features, some News items, and diligent editing of the final copy. Claire started her work with us as a student 2014, and has graduated, performed a post-doc, and is now gainfully employed in the industry. Thank you, Claire.

December Graduates:
1) Remember to send in your new contact information so we can update our records before your move. We do not want to lose you. Send to Executive Director, Dr. Kathryn L. Kotula klkotula@msn.com your new email address, alternate email address, postal address, company or school, and phone numbers.

2) November 1 is the deadline to order Phi Tau Sigma Honor Cords and lapel pins to ensure delivery before Fall graduation dates.

Nominations & Elections Committee:
(Contributed by Tom Aurand, Ph.D., Chair of the Nominations and Elections Committee)

The new Phi Tau Sigma administrative year has started and it is time to begin to thinking about who we would like to represent the Society on the Board of Directors and as President-Elect. The nominations and election process has a key role in the long term impact on the viability of the Society through programs that are developed by the Board and will translate into the enthusiasm of our members for the Society.
Every year we elect four Directors and the President-Elect to serve on the Phi Tau Sigma Board of Directors. The Board of Directors is responsible for the strategic thinking and planning so the organization will achieve its mission. We have a very successful organization that has been built on strong leadership over the years. To continue our growth and leadership within the field of Food Science and Technology, we need to look for strong, innovative leaders to guide the society into the future.

The Nominations process is now open to identify candidates for the four open Director positions and for the President-Elect position. Directors serve on the Board for three years and are responsible for attending monthly conference calls, and may serve/lead various committees within Phi Tau Sigma. The President-Elect serves for 3 years; the first year they are accountable for the Phi Tau Sigma annual program at IFT; the second year as President of the Society; and the third year as Past President and mentor to the Board. These positions have a great impact on the future of the Society as well as programs that the Society will provide its members. I would like to challenge all the members to submit nominations for these important positions, especially thinking of strong leader for the President-Elect role.

The schedule for the Nominations & elections Committee is:

December 15: Nominations due to Nomination & Election Committee
(Tom Aurand, Chair; email: tom.aurand@gmail.com)

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 1: The list of candidates will be emailed to the Members for balloting.

April 1: Deadline for turning in ballots.

April 8: Deadline for tabulation of ballot results.

July: Phi Tau Sigma President will present the newly elected individuals to the Membership, at the Annual Business Meeting of Phi Tau Sigma

The Nominations & Elections Committee is now canvassing for potential candidates and would like to collect as many viable candidates as possible. If you would like to nominate someone or volunteer yourself, please send an email to Tom Aurand. The Committee will contact potential candidates to answer any questions that they may have and ensure they are willing and able to serve, if elected. I will be looking forward to hearing from you.

Awards Committee:
(Contributed by Ravi Chermala, MS, MBA, Chair of the Phi Tau Sigma Awards Committee)

Dr. Daryl B. Lund Student International Travel Scholarship – Deadline November 30

The Dr. Daryl B. Lund Student International Travel Scholarship is presented annually to a student Member of Phi Tau Sigma - The Honor Society of Food Science and Technology, to supplement international travel for educational purposes. The scholarship, in the amount of $2,000, is presented to honor the commitment of Dr. Lund, whose international reputation for outstanding scholarly contributions and inspired leadership has fostered and facilitated the global advancement of food science and technology.
Nominees shall be students who are members in good standing during the administrative year of the nomination, although they may have graduated by the presentation of the award.

Nomination materials must be submitted to the Chair of the Awards Committee by email by November 30th (ravichermala@gmail.com), with a copy to the Executive Director (klkotula@msn.com). For more information on the nomination process please visit the Awards section of the Phi Tau Sigma website (http://www.phitasigma.org/awards/). For information specific to this scholarship, including the nomination form, please visit http://www.phitasigma.org/lund-scholarship/.

**Phi Tau Sigma Awards Schedule:**

- **November 30:** Deadline to submit nominations to the Awards Committee for the Dr. Daryl B. Lund 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, and the Phi Tau Sigma Founders’ Scholarship.
- **April 1:** Deadline to submit nominations to the Awards Committee for the Phi Tau Sigma Outstanding Chapter of the Year Award.

- -> December 18: Deadline to submit Nominations for the Dr. Carl R. Fellers Award, and other IFT Achievement Awards.

(More information: http://www.ift.org/Membership/Awards-and-Recognition/Achievement-Awards.aspx)

**Program Committee:**

(Contributed by Martin Sancho-Madriz, Ph.D., President Elect and Chair, Program Committee)

The Phi Tau Sigma Program Committee is seeking help from members who are active participants in the leadership of their IFT Divisions to assist us in establishing partnerships to co-sponsor symposia or sessions for the IFT 2020 Annual Meeting. Some of the advantages of these partnerships are:

1. Phi Tau Sigma will publicize the symposium through its monthly Newsletter creating additional visibility to promote participation
2. Sponsorship of symposia or sessions increases the chance of IFT approval
3. Phi Tau Sigma members could contribute by either joining the organizing teams or participating as speakers
4. Increase the visibility of your Honor Society

If you are willing to help establish partnerships to co-sponsor symposia or sessions, please contact Dr. Martin Sancho-Madriz at mfsancho@cpp.edu as soon as possible (IFT deadline for session proposal submissions is October 31, 2019).
EMGAM:
The “Every Member Get a Member” Campaign continues. If you have not yet nominated a colleague for membership in Phi Tau Sigma, please do so by the end of October. Questions about the Campaign, contact Daryl Lund, Ph.D. dblund@wisc.edu. Questions about the membership nomination form, contact Kathryn L. Kotula, Ph.D. klkotula@msn.com.

Know your Leadership:

About Your Phi Tau Sigma Executive Committee:

*Phi Tau Sigma President: Liz Boyle, Ph.D.*, is a Lifetime Member of Phi Tau Sigma and a Professor of Meat Science in the Department of Animal Sciences and Industry at Kansas State University. Liz received a B.S. in Wildlife Biology from the University of Minnesota, and a M.S. in Food Science and Nutrition and Ph.D. in Food Science with a Meats emphasis from Colorado State University, followed by post-doctoral studies at the University of Kentucky and the University of Minnesota. Her research and Extension activities have focused on meat safety and quality, and providing scientific and technical assistance to meat processors and trade associations. She has served as Chair of the Kansas State University Chapter of Phi Tau Sigma, Chair of the Muscle Foods Division and the Kansas City Section of the Institute of Food Technologists, Chair of the Reciprocal Meat Conference of the American Meat Science Association, National Academy of Science committee to evaluate scientific criteria to ensure safe food, and Council for Agricultural Science and Technology (CAST) Board of Directors. In 2016, she was recognized as a Fellow with the American Meat Science Association.

*Phi Tau Sigma President Elect: Martin Sancho-Madriz, Ph.D.*, is a Lifetime Member of Phi Tau Sigma and Professor in the Department of Nutrition and Food Science at Cal Poly Pomona, where he founded the local Phi Tau Sigma Chapter and now serves as Associate Vice President for Faculty Affairs. He earned a B.S./Licentiate degree in Food Technology from the University of Costa Rica, followed by M.S. and Ph.D. degrees in Food Science and Technology (FST) from Cornell University. Since being hired as the first and only FST tenure-track faculty member in 1997 and with his leadership as Chair of the Human Nutrition and Food Science Department, the Cal Poly B.S. in Food Science and Technology degree has grown to around 180 students, four tenure-track positions, a full lecturer position, and several part time lecturers. He is a graduate and Board member of the LEAD 21 leadership program as well as a Fellow of the Food Systems Leadership Institute, a program of the Association of Public and Land-Grant Universities. Dr. Sancho-Madriz was selected as the 2002-2003 IFT Congressional Science and Engineering Fellow under the American Association for the Advancement of Science Policy Fellowships Program. He has served in several IFT Committees including the Higher Education Review Board and chaired the Southern California Institute of Food Technologists Section (SCIFTS), and the Southern California Food Industry Conference. He is a recipient of the Don B. Huntley College of Agriculture Advisor of the Year Award and Teacher of the Year Award and received an SCIFTS Outstanding Volunteer Award and the 2018 SCIFTS Distinguished Achievement Award.

*Phi Tau Sigma Past President: Rakesh Singh, Ph.D.*, is Professor and Head of the Department of Food Science and Technology at The University of Georgia. He has been engaged in internationally prominent research programs that have addressed emerging
technologies for food processing, engineering properties of foods and food safety. He is Editor in Chief of LWT-Food Science & Technology, and on the editorial board of International Journal of Food Properties. He became a Professional Member of IFT in 1983 and has been actively involved in IFT at local, regional, and national levels. He has served on the IFT committees including Global Task Force, and scholarships and awards jury. He became Fellow of IFT in 2008 and received the Elizabeth Fleming Stier Award in 2009. He was inducted into Phi Tau Sigma in 1985 and became a Lifetime Member in 2013. He has served Phi Tau Sigma as Councilor At-Large, Chair of Awards Committee, Chair of Strategic Relations Committee, President Elect, and President.

**Phi Tau Sigma Treasurer:** Kantha Shelke, Ph.D., is a Lifetime Member of Phi Tau Sigma, and is currently a Principal at Corvus Blue LLC, a contract food science and research firm. She holds Master's degrees in Organic Chemistry and in Food Science and Nutrition, and a Ph.D. in Cereal Chemistry and Technology. She practices, writes, and teaches from end-to-end in food and supplement supply chains on the global front. An IFT Food Science Communicator, she is also the technical editor of PLMA Live! (Private Label Manufacturers Association), Prepared Foods magazine, and Food Quality and Safety magazine, and holds adjunct/visiting professorship positions at the Johns Hopkins University in Baltimore and at the MCI Management Center in Innsbruck, Austria. Her book "Pasta and Noodles: A Global History" was published in August 2016 by Reaktion Press, UK. When not teaching or working with clients, Kantha helps advance the understanding of food science and nutrition, food safety and regulations for enterprises successfully tackling food disruption, food safety, supply chain technology, novel ingredients, and precision agriculture.

**Phi Tau Sigma Assistant Treasurer:** Daryl B. Lund, Ph.D., is a Lifetime Member of Phi Tau Sigma, Past President of IFT (1990-91) and Phi Tau Sigma (2006-07 and 2007-08). He was instrumental in revitalizing Phi Tau Sigma to recognize excellence in our profession. He served as Treasurer of Phi Tau Sigma (2009-2018). Recipient of many awards, Dr. Lund has received the Nicolas Appert Award for lifetime achievement from IFT (2009), the Phi Tau Sigma Special Recognition Award and the Lifetime Achievement Award from the International Congress of Engineering and Food (2011), the Lifetime Achievement Award from IUFoST (2016), and the CALS UW-Madison Distinguished Service Award (2016). He is emeritus professor of food science at the University of Wisconsin-Madison, immediate Past President of the International Academy of Food Science and Technology (2010-12), and past Editor in Chief of IFT's peer-reviewed journals (2003-2012).

**Phi Tau Sigma Executive Director:** Kathryn L. Kotula, Ph.D., is the founder of Investigative Food Sciences in Storrs, Connecticut. She is a Lifetime Member of Phi Tau Sigma and has been Co-Editor, and now Editor, of the Phi Tau Sigma Newsletter since September 2010. Kathy is the recipient of the Achievement Award of the American Meat Science Association, the Dr. Carl R. Fellers Award of Phi Tau Sigma and IFT, and is a Fellow of IFT. She was the 2014 recipient of the Phi Tau Sigma Special Recognition Award.

**Calendar:**

- **Phi Tau Sigma Scholarship and Awards Schedule:**
  - **November 30:** Deadline to submit nominations to the Awards Committee for the Dr. Daryl B. Lund 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, and the Phi Tau Sigma Founders’ 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 Ravi Chermala, M.S., Chair, (ravichermala@gmail.com) and Executive Director Kathryn L. Kotula, Ph.D. (klkotula@msn.com). (More information: http://www.phitausigma.org/awards/)

->December 18: Deadline to submit Nominations for the Dr. Carl R. Fellers Award, and other IFT Achievement Awards.

-->Phi Tau Sigma Chapter Schedule:
November 1: 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
May 1: First call for Chapter annual reports
June 1: Second call for Chapter annual reports
July 1: Final call for Chapter annual reports
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, Claire Koelsch Sand, Ph.D., Chair, (clairekoelschsand@gmail.com) with a copy to Dr. Kathryn L. Kotula (klkotula@msn.com).

-->Election schedule:
December 15: Nominations due to Nomination and Election Committee
(Tom Aurand, Ph.D., Chair, tom.aurand@gmail.com)
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
June 2: Phi Tau Sigma President will present the newly elected individuals to the Membership at the Annual Business Meeting of Phi Tau Sigma

-->July 12-15, 2020, Institute of Food Technologists Annual Meeting, Chicago, IL:
July 12 (Sunday): (times tentative)
11:00am-12:15pm Phi Tau Sigma Executive Committee Meeting
12:15pm-1:30pm Lunch Break
1:30pm-2:30pm Phi Tau Sigma Leadership Council Meeting and Annual Business Meeting
12:30pm-1pm Student Competition Poster Set-up
1:00pm-2:30pm Student Poster Competition Judging
3:30pm-4:20pm  Phi Tau Sigma and IFT Division Competition Awards Ceremony
6:00pm-7:00pm  IFT Awards Celebration, includes the presentation of the Dr. Carl R. Fellers, Ph.D. Award sponsored by Phi Tau Sigma (Meet the Award winners at the IFT Networking Reception immediately following.)

Student Research Synopsis: Protection of anthocyanin-rich extract from pH-induced color changes using water-in-oil-in-water emulsions
(Contributed by: Jinning Liu, Ph.D. student under the direction of Prof. David Julian McClements, Department of Food Science, University of Massachusetts Amherst)

Introduction: The food, cosmetics, and personal care industries are increasingly interested in replacing synthetic colorants with natural alternatives. Anthocyanin is a renewable and sustainable source of plant-derived pigment which is suitable for application as a label-friendly natural colorant. Moreover, studies suggest that anthocyanin may also have some health benefits by preventing oxidative stress, inflammation, obesity, diabetes, and cancer (1, 2, 3). However, their application in commercial products is often limited because of their susceptibility to chemical degradation, which leads to color fading and/or a change in hue.

Objectives: In this study, we examined the efficacy of water-in-oil-in-water (W/O/W) emulsions for encapsulating, retaining, and protecting anthocyanin. This type of multiple emulsion consists of small water droplets trapped inside larger oil droplets, which are themselves dispersed throughout a watery medium. W/O/W emulsions were selected because anthocyanin could be trapped inside the internal water droplets and therefore protected from the surrounding aqueous phase. This type of multiple emulsion has previously been used to encapsulate a variety of hydrophilic food components, including mineral ions, proteins, probiotics, nutraceuticals, antioxidants, and vitamins (4, 5, 6). In the current study, we focused on the impact of pH on the retention and color stability of anthocyanin. Moreover, we examined the impact of pH on the physical stability of the W/O/W emulsions to establish if they would be resistant to the conditions that might be encountered in commercial foods.

Methods: Polyglycerol polyricinoleate (PGPR) was used as a hydrophobic emulsifier, while quillaja saponin was used as a hydrophilic emulsifier. First, W/O emulsions containing 20% aqueous phase and 80% oil phase (PGPR in corn oil) were prepared using a microfluidizer. Second, W/O/W emulsions were prepared by blending 20% W/O emulsion with 80% aqueous phase (saponin in water) using a high-shear mixer. Changes in color, particle size, charge, and anthocyanin leakage of the emulsions were measured when the external aqueous phase was changed from pH 7 to 3.

Results and significance: In this study, we showed that anthocyanin could be encapsulated within the internal aqueous phase of W/O/W emulsions. Encapsulation of the anthocyanin appeared to reduce pH-induced color changes (Figure 1A-D), which may have been because the pH of the inner water phase was different from that of the outer water phase. Interestingly, the presence of anthocyanin in the internal water phase appeared to interfere with emulsion formation, changing the size, shape, and structure of the W/O droplets formed. This may have been due to its ability to interact with the hydrophobic emulsifier used for formulating the W/O emulsions. The retention of the anthocyanin inside
the W/O droplets depended on storage pH and temperature. It should be noted that the anthocyanin used in this study was a commercial ingredient that contains a range of molecular constituents. In future studies, it would be useful to use a purified single anthocyanin to obtain a more mechanistic understanding of the relationship between their molecular features and physicochemical properties. Our results may be useful for optimizing the development of novel colloidal delivery systems for natural hydrophilic colors.

Figure 1. Effects of pH adjustment on the color of internal and external W/O/W emulsions during storage at 20°C. (A) a* (redness-greenness); (B) b* (yellowness-blueness); (C) C* (chroma); and, (D) digital photographs of samples.

References:
Why did you become a Lifetime Member? Being selected to be a member and becoming a Lifetime Member of the Phi Tau Sigma is one of the highest honors a food scientist can achieve. This requires that prospective member has distinguished him/herself by noteworthy achievement in food science and technology. I was elected a member when I was a graduate student at Purdue University and became the President of the Phi Tau Sigma Purdue Chapter. This provided me with a significant leadership training as our team worked on engaging members to be active and pursue noteworthy projects. After I graduated, I concentrated on my work and professional development and after several years, I reconnected with Phi Tau Sigma. It is a great honor and privilege to be a member which I would like to reciprocate by helping in our programs and assisting younger professionals in their career paths. Through this participation, I will also be able to enrich myself and expand my knowledge through interactions with young as well as established professionals. An added bonus for me is the close relationship of Phi Tau Sigma with IFT in which I have been very active for more than 15 years and was the chairperson of the IFT Carbohydrate and Nutraceutical and Functional Foods Divisions.

Education: Ph.D., Food Science, Purdue University, West Lafayette, IN

Experience/Accomplishments: After completing my B.S. degree, I have worked as a product developer in a fruit processing company, a scientist in a government research institution and then an instructor, lecturer and professor at the Far Eastern University and University of the Philippines before I came to the U.S. to pursue my Ph.D. After graduation, I worked as a research scientist at the Whistler Center for Carbohydrate Research under the tutelage of Professor James BeMiller, one of the world-renowned carbohydrate chemists. This instilled my love for research in the field of carbohydrate chemistry although my primary educational background is in food process engineering. Through these work experiences, I was able to offer solid and scientific-based resolutions in difficult and challenging issues and problems in product and process development. I was also instrumental in the development of thermal processes for safe and good quality low acid foods in my country (Philippines) by adopting and implementing the advances from more developed countries. I received several research awards including the 2016 Outstanding Food Science Award from the Department of Food Science, Purdue University for recognition of an outstanding career in the industry and this June was elected as one of the 2019 IFT Fellows, one of the highest recognitions a food scientist can receive in the world.

Areas of Expertise: Food Chemistry, Carbohydrate Chemistry and Food Process Engineering

Awards and Honors (selected list): 2019 IFT Fellow, 2016 Outstanding Food Science Award, 2007 CP McCormick Gold Award, 2008 McCormick Pyramid Award and several research awards.
Personal: Family, Interests, Hobbies: I have 3 kids: all are in the U.S. and two with doctorate degrees. I am very proud of my kids. I love to read and write, watch British and Australian mystery shows and listen to jazz music. I also like to travel and enjoy local cuisines whenever I have time.

Advice to university students and career food scientists and technologists: I learned early on that education is very important. Learning is a must and continuing to learn every moment of your life should be your goal in order to be productive and to be able to contribute to society. Learning is understanding things and what is going on in this world and applying what you learn to improve life around you. To be able to learn, one must be a good listener and observer. You must be a critical thinker and be able to dissect the simple and the complicated. If you can explain a complex phenomenon in simple terms, then you understand it fully. I end with these two thought-provoking and inspirational quotes from Marie Curie, one of the great scientists who inspired me in my work: “You cannot hope to build a better world without improving the individuals. To that end, each of us must work for our own improvement.” “Humanity needs practical men, who get the most out of their work, and, without forgetting the general good, safeguard their own interests. But humanity also needs dreamers, for whom the disinterested development of an enterprise is so captivating that it becomes impossible for them to devote their care to their own material profit.” Are you a practical man or are you a dreamer?

Chapter News:

Husker Chapter at University of Nebraska-Lincoln

The Phi Tau Sigma - Husker Chapter at the University of Nebraska-Lincoln was re-launched in 2018 with the help of Phi Tau Sigma’s national leadership group, after inactivation for nearly two decades. With the fast growth of our department in recent years, particularly the relocation to Nebraska Innovation Campus as Food Innovation Center, we strongly felt it was the time to reconnect with this Honor Society of Food Science and Technology, which will encourage us to remain committed to excellence while actively communicating with our peers. In the first year, we had 12 members nominated, and 11 of them were approved, including faculty, scientists, and students. Together with 2 previous Lifetime Members, the Husker Chapter has rapidly developed its members to 13 in total. In order to increase the awareness of Phi Tau Sigma in Nebraska, we have developed a webpage (https://foodsci.unl.edu/phi-tau-sigma) at the department to provide detailed background information about this organization. We anticipate more and more of our students will embrace this organization and commit themselves to the pursuit of excellence in their study. We also had our induction ceremony at the department’s annual student banquet in this April.

Next year we plan to nominate more members and organize more events, such as collaborating with the IFT Aksarben Chapter and Food Science Club at the department. We look forward to another wonderful year!
Kansas State University recently hosted its fourth annual meat science workshop from August 5-9 for 37 industry representatives from Mexico. What makes this workshop unique is the partnership that has developed between Kansas State University and Dr. Jesus Velazco, a KSU alumni and adjunct professor, together with ANITIF (Asociación Nacional de Establecimientos TIF, A.C.), the USA Poultry and Egg Export Council (USAPEEC), the Kansas Soybean Commission, H-E-B, and the Illinois Soybean Association. This hands-on workshop is the culmination of nine months of training for the industry representatives who meet monthly for educational lectures in Mexico. While at KSU, participants observe how beef fabrication is done in the U.S., followed by how beef is fabricated in Mexico. They experience fabricating a pork carcass, tour a RTE (ready to eat) meat processing facility,
and make a variety of processed meat products, while enjoying social events in the evenings.

2019 K-State Meat Science Workshop Participants

Pork setup

Pork cut-up
In Case You Were Wondering…Life’s twists and turns
(Contributed by Kathryn L. Kotula, Ph.D., Executive Director and Newsletter Editor)

Ever wonder how you got to be where you are? I am Executive Director and Newsletter Editor of Phi Tau Sigma because of a conversation my Dad had with Joe Angelini in April 1953. Yes, that long ago.

The rest of the story: (well abbreviated)

In April 1953, Dad (Anthony W. Kotula, Ph.D.) was on leave just before he was honorably separated from the U.S. Air Force as a First Lieutenant after serving at Kimpo Air Base in Korea during the war. He was pondering what his next step would be. Dad had a B.S. in chemistry from UMass, but states that he did not remember much chemistry. Joe Angelini (Agronomy major, who had the dorm room right across the hall from Dad when they were undergrads) suggested that Dad talk with Dr. Carl Fellers about opportunities in Food Science, and even walked over to Dr. Feller's office with Dad to make the introductions. (Joe, as an agronomy major, had taken a course from Dr. Fellers.) (Joe Angelini went on to become a Catholic Priest, and is the brother of Pio Angelini, Ph.D., a member of Phi Tau Sigma.)

Dr. Fellers agreed to take Dad on for a Masters. "Doc" was an outstanding adviser and phenomenal mentor. He even made the arrangements, and introduction, for the interview Dad had which led to Dad's 38 year career in the Agricultural Research Service of USDA in Beltsville, MD.

Jumping ahead, it was because of Dad's interactions with Dr. Fellers that Dad was so very thrilled to receive the Dr. Carl R. Fellers Award (2010). As you know, membership in Phi Tau Sigma comes along with that award if one is not already a member. And, in the spirit of contributing, Dad called Dr. Daryl Lund, to see how Dad could volunteer.

Daryl suggested the annual newsletter, which Dad agreed to do if it would be monthly throughout the academic year (but it was quickly expanded from 9 to 11 issues per year). Dad volunteered me at the same time. (I had received the Dr. Carl R. Fellers Award in 2009.)

Being a Co-editor of the Phi Tau Sigma Newsletter led to being the Editor, and concurrently becoming the Executive Secretary. The title of Executive Secretary was changed to Executive Director in early 2018 to more accurately reflect the responsibilities.

So, all this got started with Dad talking with a friend from his undergraduate dorm - back when Daryl was only 12 years old, and over 8 years before I was even born.
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. 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.

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. Lund International Scholarship Fund, Phi Tau Sigma Founders’ Scholarship, Phi Tau Sigma Chapter of the Year Award, the Program Fund, or the General Fund.

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, Amy Simonne, Ph.D. at: asim@ufl.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.

Editorial: Thankfulness

I have found that taking a moment to be thankful for even the smallest blessing every day can provide for a calmer and more contended day. Wonder is all around – we just need to notice, and be appreciative for it.

Taking a small moment to say “Thank you” to the people with whom we interact, or bestow a deserved compliment, can brighten their day as well as our own.

Thank you for reading the Phi Tau Sigma Newsletter. It is appreciated by those of us who work to bring it to you 11 months a year.

About Phi Tau Sigma Communications:

The Phi Tau Sigma Newsletter Committee includes: Kathryn Kotula, Ph.D., Editor-in-Chief, Chair (kikotula@msn.com), Claire Zoellner, Ph.D., Associate Editor (cez23@cornell.edu),
Anthony W. Kotula, Ph.D., Hossein Daryaei, Ph.D., Tianxi Yang, Ph.D., and Yiren Yue, Ph.D., Laura Stawn, Ph.D., Diane Schmitt, Ph.D., Gabriela John Swamy, Ph.D.
Please be responsive to their inquiries for information for the Newsletter.

The Newsletter Committee particularly wishes to share news from Phi Tau Sigma Members and Chapters. Any items for the monthly Phi Tau Sigma Newsletter should be emailed in Word to Editor Kathryn L. Kotula, Ph.D. at kikotula@msn.com or Associate Newsletter Editor Claire Zoellner, Ph.D. at cezz23@cornell.edu. Write “Phi Tau Sigma Newsletter” in the subject line. Please provide the information by the 1st of the month. Thanks.

Documents:

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

Phi Tau Sigma Membership Nominations
http://www.phitausigma.org/membership-nomination-form-pdf/
http://www.phitausigma.org/membership-nomination-form-word/

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/

Every Member Get A Member Campaign
http://www.phitausigma.org/growing/

Donors, Sponsors, and Contributing Partners:

Phi Tau Sigma accepts donations and has a variety of available sponsorship opportunities.

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.

Donations and sponsorships 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://www.phitausigma.org/sponsor/). Donations by check can be made by contacting: Treasurer Kantha Shelke, Ph.D. (kantha@corvusblue.net), 33 West Ontario, Suite 57F, Chicago, IL 60654. Please write “Donation” or “Sponsorship” in the subject line. 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 Phi Tau Sigma monthly Newsletter. Sponsorships of awards and scholarships are also available at levels of contribution sufficient to cover the associated cost of the award or scholarship. Endowments are also accepted.
Sponsorship opportunities are available for the Phi Tau Sigma Annual Recognition Event, 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. Lund 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, as well as the Program fund and the General fund. There are also endowment opportunities for student scholarships named for the sponsoring company.

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.

**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](http://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. (kkotula@msn.com). Please write “Donation” or “Sponsorship” in the subject line.
**2019-2020 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 support the Phi Tau Sigma Founders’ Scholarship, and the Phi Tau Sigma general fund.) **Hawkins, Inc. is a Bronze level Contributing Partner.**

**2019-2020 Sponsors and Donors:**

**Dr. Mary K. Schmidl** is the President of the International Union of Food Science and Technology (IUFoST), a Lifetime Member and a past President of Phi Tau Sigma, a Past President of the Institute of Food Technologists (IFT) and Adjunct Professor, 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 the Morse Alumni Distinguished Teaching Professor of Food Science and Engineering, University of Minnesota.

**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.

**Dr. Rakesh K. Singh** is the Past President of Phi Tau Sigma, a Lifetime Member; and is Professor and Head of Department of Food Science & Technology at the University of Georgia. He is also a Fellow of IFT and Editor-in-Chief of LWT – Food Science and Technology. (Sponsorship of a Phi Tau Sigma Student Achievement Scholarship.)

**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. (Sponsorship of the Dr. Daryl B. Lund Student International Travel Scholarship.)

**Peter M Salmon, M.S., MBA,** a Lifetime Member of Phi Tau Sigma, is the Founder and President of International Food Network, Inc., currently retired. (Sponsorship towards a Phi Tau Sigma Student Achievement Scholarship.)
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William Benjy Mikel, Ph.D., a Phi Tau Sigma past President and a Lifetime Member who appreciates the field of food science and technology. (Donation towards a Phi Tau Sigma Student Achievement Scholarship.)

Nina Teicholz, M.Phil. is an adjunct professor at New York University, investigative science journalist and author. Her international bestseller, The Big Fat Surprise has upended the conventional wisdom on dietary fat-especially saturated fat. The executive editor of “The Lancet” wrote, “this is a disquieting book about...ruthless silencing of dissent that has shaped our lives for decades ... researchers, clinicians, and health policy advisors should read this provocative book.” The Big Fat Surprise was named a 2014 *Best Book* by The Economist, the Wall Street Journal, Forbes, Mother Jones, and Library Journal. Teicholz is also the Executive Director of The Nutrition Coalition, a non-profit group that promotes evidence-based nutrition policy. She is a graduate of Stanford and Oxford Universities and previously served as associate director of the Center for Globalization and Sustainable Development at Columbia University. Teicholz is the only journalist to date to be elected to Phi Tau Sigma. (Sponsorship of the Phi Tau Sigma Special Recognition Award, and Phi Tau Sigma programs.)

David K. Park, M.S., Phi Tau Sigma Lifetime Member, is Principal, Food-Defense, LLC, providing expert food safety / food defense, USFDA and USDA-FSIS Process Authority consultation for thermal and non-thermally processed low acid canned foods (LACF), acidified foods (AF), and refrigerated extended shelf life foods (ESL) and their packaging systems. (Donation towards a Phi Tau Sigma Student Achievement Scholarship.)

Dr. Catherine Adams Hutt and Peter Barton Hutt, Phi Tau Sigma Lifetime Members. Catherine is food safety and regulatory consultant and expert witness with RdR Solutions, and Peter is an attorney with Covington and Burling. Both are IFT Fellows. (Donation for the Dr. Gideon “Guy” Livingston Scholarship)

A donation was made towards a Phi Tau Sigma Scholarship by a Phi Tau Sigma Lifetime Member who wishes to remain anonymous.