

ΦΤΣ

The Honor Society of Food Science and Technology

Phi Tau Sigma Newsletter *May 2018*

News Alerts:

Election Results: *New Phi Tau Sigma Leadership:*

President Elect: Liz Boyle, Ph.D., Kansas State University

Directors:

- Stephen G. Campano, M.S., Hawkins, Inc.
- Lili He, Ph.D., University of Massachusetts, Amherst
- Rodrigo Tarté, Ph.D., Iowa State University
- Claire Zoellner, Ph.D., Cornell University
- Kantha Shelke, Ph.D., Corvus Blue LLC will replace an At-Large Councilor/Director who has left the position (one year term)
- Wesley N. Osburn, Ph.D., Texas A&M University At-Large Councilor/Director will serve out the term of Dr. Liz Boyle who moves to President Elect (two year term)

The proposed change to the Phi Tau Sigma Constitution was approved by 98.03% of the voting members.

We had an extremely good turnout of 55.96% of members in good standing having voted. Congratulations to all! We look forward to working with you.

New Phi Tau Sigma Website Launched:

(Contributed by Dr. Kathiravan Krishnamurthy)

The Website Committee is happy to announce the release of the newly designed **Phi Tau Sigma website at www.phitausigma.org**. Our primary objective was to make the website user-friendly. A significant amount of new content was also added. We are also making further improvements to the website on a regular basis. If you have any suggestions for improving the website, please let Dr. Kathiravan Krishnamurthy (Kathiravan.rps@gmail.com) know. Stay tuned for future updates to the website.



Students about to graduate:

Please remember to:

- 1) Order your Honor Cord and lapel pin in plenty of time for them to be mailed to you before graduation. Store web address: <http://www.phitaisigma.org/store/>
- 2) Forward your new contact information (especially your new email address) to the Executive Secretary (klkotula@msn.com).

Thank you, and Congratulations on your graduation!

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

PHI TAU SIGMA
Honor Society

PHI TAU SIGMA
Lifetime Member

Ribbons can be picked up in the registration area of the convention center at the ribbon desk. If you have not paid your dues, you must pay them before **May 28, 2017** to be included (see directions in the Dues Reminder section of each Newsletter). If you are not sure if you have paid, look for your dues status on the cover email sent with this Newsletter.

Pins. Remember to bring and wear your Phi Tau Sigma lapel pin during the IFT Annual Meeting. If you do not yet have one, or are in need of another, pins may be purchased in the Phi Tau Sigma Store by Members in Good Standing (those who have paid their dues). Pins will not be sold at IFT this year, so please visit the Store and purchase your pin before **May 28, 2018** to ensure time for mailing. Please provide your mailing address if it is different from your credit card billing address. [Pin cost is \$7.]

Store web address: <http://www.phitaisigma.org/store/>



Dues Status

To be listed as a **Member in Good Standing** before the Annual Meeting, pay your dues before **June 15, 2018**. The cover email for this Newsletter will tell you your dues status. If you have dues due, please follow the directions in the cover email, or in the Dues Reminder section of the Newsletter.

Phi Tau Sigma Annual Meetings and Symposia at IFT 18:

Editors Note: Please print this page, and bring it with you to Chicago. For specific details about the symposia, including moderators, affiliations, and session descriptions, please refer to the April 2018 Phi Tau Sigma Newsletter.

All events are in [McCormick Place](#)

July 15-18, 2018, Institute of Food Technologists Annual Meeting, Chicago, IL:

July 15 (Sunday):

- 11:00am-12:15pm** Phi Tau Sigma Executive Committee Meeting – [Location: S101A McCormick Place](#)
- 12:15pm-1:30pm Lunch Break
- 1:30pm-3:00pm** Phi Tau Sigma Leadership Council Meeting and Annual Business Meeting – [Location: S101B McCormick Place](#)
- 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 (also called: Phi Tau Sigma Annual Recognition Event) - [Location: S405AB McCormick Place](#)
- 6:00pm-7:00pm IFT Awards Celebration, includes the presentation of the Dr. Carl R. Fellers, Ph.D. Award - [Location: S100-Ballroom McCormick Place](#)
(Meet the Award winners at the IFT Networking Reception immediately following.)

July 16 (Monday):

- 10:30am-12pm** Advances and Challenges in the Design, Development and Implementation/Commercialization of Novel Food Processing and Packaging Technologies [Location: S404A McCormick Place](#)

July 17 (Tuesday):

- 12:30pm-2pm** Educating the Future Food Scientists Capable of Facing Evolving Regulatory and Technological Challenges in Global Food Industry [Location: S501ABCD McCormick Place](#)

July 18 (Wednesday):

- 8:30am-10am** Shedding Light on Food Safety, Quality, and Nutrition: Opportunities and Challenges with the Light-based Technologies [Location: N426C McCormick Place](#)
- 10:30am- 12pm** The Future of Food Packaging [Location: S404A McCormick Place](#)

Calendar:

->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.

Send completed nomination forms to both Awards Committee Chair Poulson Joseph, Ph.D., (pjoseph@kalsec.com) and Executive Secretary 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.
(More information: <http://www.phitausigma.org/fellers-award/>)

->Phi Tau Sigma Chapter Schedule:

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
November 1: Deadline to order Honor Cords and lapel pins to ensure delivery before Fall graduation dates

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, Dr. Mary Schmidl (mschmidl@umn.edu) 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 1: List of candidates will be emailed to the Members for balloting
March 31: Deadline for casting ballots
April 8: Deadline for tabulation of ballots
July 15: Phi Tau Sigma President will present the newly elected individuals to the Membership at the Annual Business Meeting of Phi Tau Sigma

Lifetime Member Tribute: Maria G. Corradini, Ph.D.

Assistant Professor, University of Massachusetts Amherst

Why did you become a Lifetime Member?

I became a Lifetime Member of Phi Tau Sigma because I recognize the importance of this Society for our discipline and I know that my interest as a member will not fade through time. Additionally, I wanted to contribute to the ability of this Society to its long term capital planning to maintain its activities, conferences, and particularly the scholarship programs. All of them are essential to supporting the formation of experts in the field of food science. I also consider that a Lifetime Membership will provide immediate above average infusions of financial support that help address both the long and short-term economic needs of the organization. Finally, I see a Lifetime Membership as an opportunity to indicate the value of this organization to my peers through my long term commitment.



Education

I received a B.Sc. in Food Technology from the Catholic University of Buenos Aires, Argentina and an M.Sc. and Ph.D. in Food Science from the University of Massachusetts Amherst under the mentorship of Professor Micha Peleg.

Experience/ Accomplishments

Last year, I joined the faculty of the Department of Food Science at the University of Massachusetts, Amherst as an Assistant Professor. From 2013 to 2016, I worked as an Assistant Research Professor at the Department of Food Science, Rutgers, The State University of New Jersey. Previously, I was an Adjunct Professor and Senior Researcher at Universidad Argentina de la Empresa, Argentina. I have authored and co-authored more than 90 research articles in refereed journals, 13 book chapters, a contribution to an encyclopedia, and an educational kit on photophysics for middle school students.

Areas of Expertise

My research focuses on developing novel methodologies to increase the use of optical biophysical techniques (in particular, luminescence spectroscopy) to study food systems and their biophysical behavior and to gain insights into the relationship between the physiological functionality of food components to their molecular structure, physical properties and processing conditions. I am also interested in the development and implementation of novel data analysis and modeling approaches to obtain additional information from data sets and aid in data interpretation.

Awards and Honors

Among my awards and honors, I have received a Fulbright and Monica Mourier de Archibald scholarship to conduct graduate research studies in Food Science and the Argentina Award in recognition for outstanding applied research in Food Quality and Safety.

Personal

I enjoy cooking and tinkering with electronic and mechanical devices with my husband.

Advice to university students and career food scientists and technologists

As a food scientist that had the opportunity to start my career in the industry and now have an academic position at the oldest Food Science Department in the US, I would advise students and food scientists to take advantage of all the opportunities that are available to them through their universities and professional societies such as Phi Tau Sigma. A job candidate with hands-on experience either in a lab or through an internship is more appealing than someone that has never been in the work place. Networking and participating in professional associations are crucial to advance your career and voice your interests and concerns. Finally, as food scientists and technologists we can shape the future of our food supply, acquiring expertise about the whole food chain which provide us with important knowledge to come up with transforming solutions and products that address the consumer's necessities and have a positive impact in the consumer's wellness and health.

Student Research Synopsis: Studying the isolated influence of water activity on the thermal resistance of *Salmonella* in low-moisture foods (Contributed by Ravi Kiran Tadapaneni and Juming Tang, Department of Biological Systems Engineering, Washington State University, Supported by USDA AFRI CAP Grant 2015-68009-23415)

Recent publications:

- Tadapaneni R.K., Xu J., Yang R. and Tang J. (2018) Improving design of Thermal Water Activity Cell to study thermal resistance of *Salmonella* in low-moisture foods. *LWT - Food Sci. Tech.*, 92, 371-379.
- Tadapaneni R.K., Syamaladevi R.M., Villa-Rojas R. and Tang J. (2017) Design of a novel test cell to study the influence of water activity on the thermal resistance of *Salmonella* in low-moisture foods. *J. Food Eng.*, 208, 48-56.

Introduction: Bacterial cells in low moisture environments are more tolerant to thermal treatments, compared to those in high moisture conditions (Fig.1). Persistence of foodborne pathogens such as *Salmonella* spp. in low-moisture foods (LMF) and its high resistance to thermal treatments has caused a worldwide concern. In LMF, water activity (a_w) influences the thermal resistance (D-value) of *Salmonella* (1,2,3). In previous studies on the D-values of *Salmonella* in LMF, the inoculated LMF samples were treated in sealed test-cells/pouches at high temperatures while a_w of LMF at the room temperature was reported. However, a_w of LMF (at constant moisture content) in an enclosed system changes with the temperature, which may vary based on the sorption isotherms (4,5).

Study objectives: (a) Development of test cells with ability to control the relative humidity (RH) (corresponding a_w) of test LMF sample in an enclosed set-up at elevated temperature and (b) evaluating the D-values of *Salmonella* in LMF samples in test cells with controlled RH environment at the elevated temperatures against the data from conventional thermal death time (TDT) cells.

Methods: A novel test-cell (TAC) was developed to control headspace RH (a_w of LMF) at the elevated temperatures by using LiCl solutions of specific molality. Further, an improved version of TAC (TAC II) was designed to reduce the equilibration time between LMF and headspace RH environment during thermal treatments by increasing sample exposure area and reducing sample thickness. $D_{80^\circ\text{C}}$ -values of *Salmonella* in wheat flour (WF) under controlled RH environments in TAC II and TAC were evaluated against thermal resistance data from the conventional thermal death time (TDT) cells.

Results: TAC II reduced the equilibration time for WF (<4 min) with controlled RH of headspace during thermal treatments compared to TAC (>10 min). $D_{80^\circ\text{C}}$ -values of *Salmonella* in WF from TAC II were observed to be significantly higher than the data from TAC and TDT cells ($p < 0.05$) as shown in Table 1. The higher $D_{80^\circ\text{C}}$ -value for *Salmonella* in TAC II than TAC was due to the shorter equilibration time for the WF and the more exposure of the bacterial population to the controlled headspace environment (46% RH) at 80°C as controlled by the LiCl solution. While in TDT cell, the lower $D_{80^\circ\text{C}}$ -value of *Salmonella* was due to the increase in a_w of WF from 0.45 ± 0.02 at room temperature to 0.73 ± 0.02 at 80°C as indicated by the sorption isotherms of WF (6).

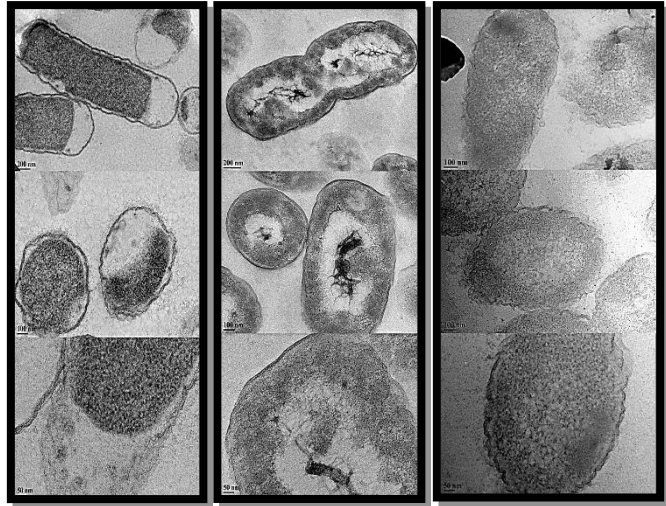
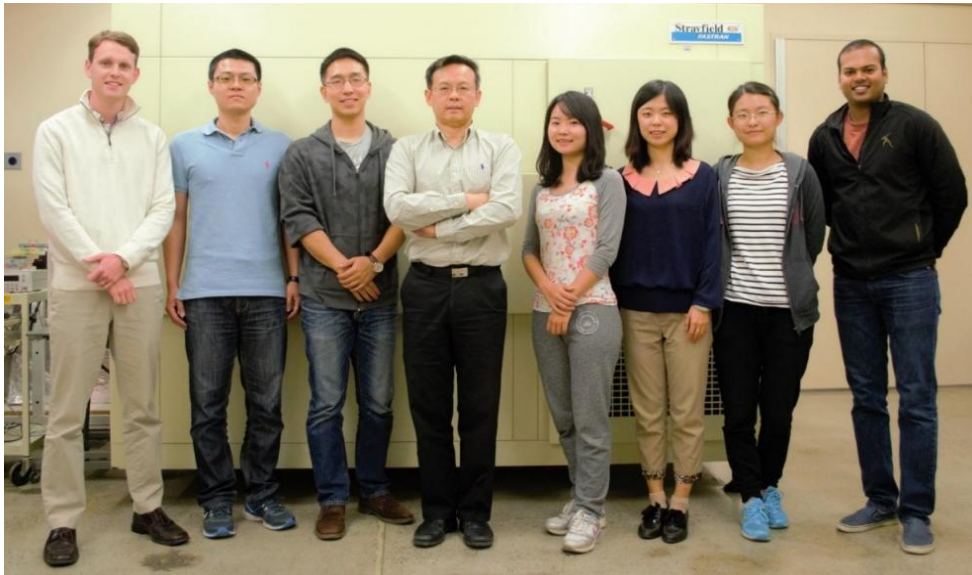


Fig. 1. *Salmonella* before thermal treatment (left), after heating at 80°C for 20 min in high moisture medium (center), after heating at 80°C for 20 min in dry medium (the temperature refers to sample center temperature, time refers to holding time after reaching the temperature). Images taken by Jie Xu, a fellow student in the same research group at Washington State University.

Table 1. $D_{80^\circ\text{C}}$ -values of *Salmonella* in WF when treated with different test cells; Different letters in superscript show a significant difference when compared to each other ($\alpha=0.05$).

Inoculated WF (initial $a_w = 0.45 \pm 0.02$) and treated method	$D_{80^\circ\text{C}}$ -values \pm SE (min)	a_w at 80°C
TAC II (replicates=3)	20.7 ± 1.1^a	0.50 ± 0.01 (6)
TAC (replicates=6)	7.3 ± 0.7^b (6)	0.50 ± 0.01 (6)
TDT (replicates=3)	4.3 ± 0.2^c (6)	0.73 ± 0.02 (6)

Impact: By using RH (a_w) controlling tools such as TAC II in the isothermal treatments of LMF, the effect of high-temperature a_w (corresponding RH of the environment) on the thermal inactivation of *Salmonella* in LMF can be isolated from other influencing factors. TAC II will serve as a valuable tool for the research community and the food processors to develop a quantitative relationship between a_w and thermal resistance of pathogens in LMF and thus, establish preventive controls for LMF as required by the Food Safety Modernization Act.



Low-Moisture Food Safety Group at Tang Lab, Department of Biological Systems Engineering, Washington State University, Pullman, WA. From left to right: Graham Barnett, Long Xie, Ren Yang, Dr. Juming Tang, Shuxiang Liu, Jie Xu, Yuqiao Jin and Ravi Kiran Tadapaneni.

References:

1. Archer, J., Jervis, E. T., Bird, J., & Gaze, J. E. (1998). Heat resistance of *Salmonella* weltevreden in low-moisture environments. *Journal of Food Protection*, *61*, 969–73.
2. Smith, D. F., & Marks, B. P. (2015). Effect of Rapid Product Desiccation or Hydration on Thermal Resistance of *Salmonella enterica* Serovar Enteritidis PT 30 in Wheat Flour. *Journal of Food Protection*, *78*(2), 281–286.
3. Villa-Rojas, R., Tang, J., Wang, S., Gao, M., Kang, D.-H., Mah, J.-H., ... Lopez-Malo, A. (2013). Thermal inactivation of *Salmonella* Enteritidis PT30 in almond kernels as influenced by water activity. *Journal of Food Protection*, *76*, 26–32.
4. Syamaladevi, R. M., Tadapaneni, R. K., Xu, J., Villa-Rojas, R., Tang, J., Carter, B., ... Marks, B. (2016). Water Activity Change at Elevated Temperatures and Thermal Resistance of *Salmonella* in All Purpose Flour and Peanut Butter. *Food Research International*, *81*, 163–170.
5. Syamaladevi, R. M., Tang, J., Villa-Rojas, R., Sablani, S., Carter, B., & Campbell, G. (2016). Influence of Water Activity on Thermal Resistance of Microorganisms in Low-Moisture Foods: A Review. *Comprehensive Reviews in Food Science and Food Safety*, *15*, 353–370.
6. Tadapaneni R. K., Syamaladevi R. M., Villa-Rojas R. & Tang J. Design of a novel test cell to study the influence of water activity on the thermal resistance of *Salmonella* in low-moisture foods. *Journal of Food Engineering*, 2017, 208, 48-56.
7. Tadapaneni, R.K., Xu, J., Yang, R., Tang, J. 2018. Improving design of Thermal Water Activity cell to study thermal resistance of *Salmonella* in low-moisture foods. *LWT-Food Science and Technology* 92:371-379.

Member News:

2018 IFT Achievement Award Recipients:

Dr. Carl R. Fellers Award

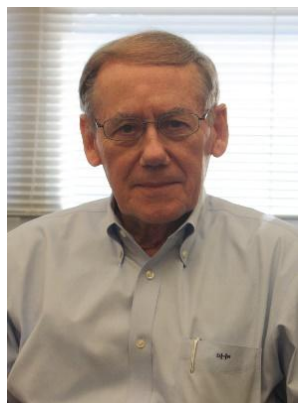


Charles H. Manley, CFS, Ph.D., $\Phi\tau\Sigma$ New Member

Charles H. Manley, LLC

Dr. Charles Manley has brought honor and recognition to the profession of food science through his distinguished career in the food industry, with major contributions in developing principles for food ingredients safety. His many years of dedicated service and leadership to professional and trade organizations, especially the Institute of Food Technologists and the Flavor and Extract Manufacturers' Association, have focused on educating and mentoring food scientists in the importance of these food ingredient safety principles and regulations.

Nicolas Appert Award



Dennis R. Heldman, Ph.D., $\Phi\tau\Sigma$ LTM

The Ohio State University

Dennis R. Heldman is the 2018 recipient of the Nicolas Appert Award. Dr. Heldman is the Seiberling Endowed Professor of Food Engineering at Ohio State. His career has been dedicated to applications of engineering principles to processes for delivery of safe and high quality foods to consumers. He is author (or co-author) of four textbooks, and Editor (or co-Editor) of three handbooks or encyclopedias. Dr. Heldman was President of IFT, has been elected as a Fellow to three professional societies, and is the recipient of numerous national and international awards.

Babcock-Hart Award



Casimir Akoh, CFS, Ph.D., $\Phi\tau\Sigma$ LTM

University of Georgia

Casimir Akoh is the 2018 Recipient of the Babcock Hart Award. The technological contributions of Dr. Akoh's research and recent developments on trans fats have had great impacts in human nutrition. Casimir is recognized for his exceptional, pace-setting, focused, and innovative contributions to the enzymatic modification of lipids to produce trans-free fats suitable for commercial applications in margarines, spreads, shortening, and baking, as well as for the development of various infant formula fats to improve infant nutrition and health.

Bor S. Luh International Award



P. Kumar Mallikarjunan, Ph.D., $\Phi\tau\Sigma$ Professional Member
University of Minnesota

Dr. P. Kumar Mallikarjunan is the 2018 recipient of the Bor S. Liu International Award. He has distinguished himself internationally in research, teaching and outreach, and is considered by peers as an example of success in international programs. Kumar's contributions have been largely to enhance the processing and storage of cereals, nuts, fruits and vegetables, and the development of appropriately scaled technologies for developing countries, especially sub-Saharan African countries (Uganda, Kenya, Tanzania, Malawi, Zambia, Mozambique, Rwanda, Ethiopia and Ghana). His accomplishments show a balance between technology transfer, understanding issues and the international exchange of ideas.

Calvert L. Willey Distinguished Service Award



Patti Pagliuco, our $\Phi\tau\Sigma$ -IFT Liason
Institute of Food Technologists

Patti Pagliuco has received the 2018 Calvert L. Willey Distinguished Service Award for her forty years of dedicated leadership and service to IFT members from all walks of life. As a "go-to person" within IFT headquarters, Patti works with various IFT executive directors as well as volunteer leaders from various sections, divisions, IFTSA, and Phi Tau Sigma, among others. As an exemplary IFT staff member, Patti genuinely cares about IFT members and goes out of her way to assist them. Patti embodies the volunteer spirit of her former colleague Cal Wiley, who would be proud to have her honored with this namesake award for all that IFT service she has done for nearly half a century.

Gilbert A. Leveille Award & Lectureship



Rui Hai Liu, MD, Ph.D., $\Phi\tau\Sigma$ LTM
Cornell University

Rui Hai Liu has received the 2018 Gilbert A. Leveille Award and Lectureship for his pioneering research in whole foods and the potential health benefits of bioactive compounds in foods. His research has focused on diet and cancer, and the effects of functional foods and bioactive compounds on chronic disease risks. He has published over 185 peer-reviewed articles. He is an IFT Fellow, an IAFoST Fellow, an AGFD of ACS Fellow, and an AAAS Fellow.

Research and Development Award



The Innovative Infrared Research and Development Team:

Zhongli Pan, **Tara H. McHugh** ($\Phi\tau\Sigma$ Professional Member), Ragab Gebreil, Chandrasekar Venkitasamy, & Hamed M. El-Mashad
USDA-ARS-WRRC and University of California-Davis

The Innovative Infrared Research and Development Team is the recipient of the 2018 Research and Development Award for its contributions and accomplishments in innovative research and development and commercial implementation of sustainable infrared heating technologies for improved food healthfulness, quality, and safety while saving energy and water during food processing. The research team includes Drs. Zhongli Pan, Tara H. McHugh, Chandrasekar Venkitasamy, Ragab Gebreil, and Hamed M. El-Mashad.

Samuel Cate Prescott Award for Research



Barbara Kowalcyk, Ph.D., $\Phi\tau\Sigma$ Professional Member

The Ohio State University

Dr. Barbara Kowalcyk is the 2018 recipient of the Samuel Cate Prescott Award for Research for her outstanding contributions to the food safety community. Her multidisciplinary expertise includes food safety, epidemiology, public health informatics, risk science, regulatory decision making, and public policy.

Sensory and Consumer Sciences Achievement Award



Jacqueline H. Beckley, $\Phi\tau\Sigma$ LTM

The Understanding & Insight Group, LLC

Jacqueline Beckley receives the 2018 Sensory and Consumer Science Achievement Award for her leadership, dedication, and contributions to the field of sensory and consumer sciences. She is an advocate for context-based understanding of people, behaviors, and products. She supports collaborative approaches whether in knowledge and trend trekking, trade-off analysis, or redefining texture by identifying different types of human mouth behaviors. She has influenced the field with numerous scholarly publications and coaching on four continents.

Trailblazer Award & Lectureship



Roger Clemens, CFS, Ph.D., ΦΤΣ LTM

University of Southern California

Dr. Roger Clemens is the recipient of the 2018 Trailblazer Award in recognition of his leadership in advancing the science of nutrition and food science. Dr. Clemens' research, mentorship and support of students, presentations at professional society meetings, and contributions to government policy through the USDA 2010 Dietary Guidelines for Americans Committee have increased our understanding of the interactions between food, medicine and health. In recognition of his leadership, Dr. Clemens was elected a Fellow of four scientific societies: the Institute of Food Technologists, American College of Nutrition, American Society for Nutrition, and the International Academy of Food Science and Technology.

[Biographies and photos provided by IFT]

2018 IFT Emerging Leaders Network Award Recipient:

Dr. Poulson Joseph is the Principal Scientist & Team Lead/Protein at Kalsec®, Kalamazoo, Michigan. He received his Ph.D. (2011) in Animal and Food Sciences from University of Kentucky, followed by post-doctoral research at Mississippi State University.

At Kalsec®, Poulson leads the Protein Team with research emphasis on natural antioxidants and works closely with food & pet food industry by offering technical and analytical support. He leads the team efforts in providing innovative natural and clean label solutions for improving meat and pet food quality and shelf-life. Poulson has delivered invited lectures in professional meetings, academic institutions, and industry workshops globally.



At IFT, Poulson is serving as IFT Muscle Foods Division's Chair. He is actively involved in the American Meat Science Association, as well as Phi Tau Sigma (the Honor Society for Food Science). He received IFT Muscle Foods Division's Member-of-the-Year Award (2016) and IFT Division Best Volunteer Award in 2014.

Poulson has authored/co-authored several publications, including 35 peer-reviewed journal articles and 3 book chapters. Poulson and his wife Soya, and their two sons Josh and Johan, live in Kalamazoo, Michigan.

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.)

Mail your check to: **Daryl Lund, Ph.D.** (Do **not** address to Phi Tau Sigma.)

May 1 to October 31: 151 E Reynolds Street, Cottage Grove, WI 53527.

November 1 to April 30: 11815 N 97th Avenue, Sun City, AZ 85351.

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, Honorary Society Advancement Fund, or the President's 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, Mary Schmidl, Ph.D. at: mschmidl@umn.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:

As you have probably noticed, the Annual Dues Drive has started. (Your dues status is listed in the subject line and cover email to this Newsletter. If your dues are now due, there are instructions on how to pay them. Please do so.)

But what are dues used for? Many great things including:

- the Scholarship and Awards program,
- expenses for the Annual Meeting, including the Phi Tau Sigma and IFT Division Competition Awards Ceremony catering,
- initial costs for the items in the Phi Tau Sigma Store,
- administrative costs of running the Society.

Paying your dues allows the Society to flourish, and is a necessary facet to the success and continuation of our Society. (Other facets include dedicated Volunteers; donations, sponsorships, and Contributing Partners; a philosophy of excellence, and building for the present and the future of Food Science and Technology;...)

Please, if you haven't already, pay your dues. Your contribution means a lot!

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., Assistant Editor (cez23@cornell.edu), Anthony W. Kotula, Ph.D., Afef Janen, Ph.D., Hossein Daryaei, Ph.D., Tianxi Yang, M.S. (Ph.D. Candidate), and Yiren Yue, B.S. (Ph.D. Candidate). 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 (97-2003 compatibility mode) to Editor Kathryn L. Kotula, Ph.D. at klkotula@msn.com or Assistant Newsletter Editor Claire Zoellner at cez23@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/>

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 Daryl Lund, Ph.D. (dblund@wisc.edu). 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 (\$5000)

- 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, Daryl Lund, Ph.D. (dblund@wisc.edu), or the Executive Secretary, Kathryn L. Kotula, Ph.D. (klkotula@msn.com). Please write "Donation" or "Sponsorship" in the subject line.

2017-2018 Donors and Sponsors:

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 recent 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 fully sponsor a Phi Tau Sigma Student Achievement Scholarship.)



International Food Network, Inc. is a consultancy based in Ithaca, New York that serves the food, beverage and nutrition industry, providing services in the areas of value optimization, corporate development, mergers & acquisitions and divestitures. Peter Salmon is IFN's founder and principal. (Donation to fully support a Phi Tau Sigma Student Achievement Scholarship.)

Dr. Mary K. Schmidl is the President-Elect 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. Daryl and Mrs. Dawn Lund. Dr. Lund is a past President of Phi Tau Sigma, a Lifetime Member, and current Treasurer; and is an Emeritus Professor, University of Wisconsin. (Contribution to sponsor the Dr. Daryl B. Lund Student International Travel Scholarship.)

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

Dr. Rakesh K. Singh is the President-Elect 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 towards a Phi Tau Sigma Achievement Scholarship.)

David K. Park, M.S., Phi Tau Sigma Lifetime Member, is Principal, Food-Defense, LLC, providing expert food safety / process authority / food defense consultation for traditional and novel low acid canned foods (LACF), acidified foods (AF), and refrigerated extended shelf life foods (ESL) for USFDA and USDA-FSIS- inspected products, packaging and processing systems. (Donation towards a Phi Tau Sigma Scholarship.)

Dr. Yaguang (Sunny) Luo, a Lifetime Member of Phi Tau Sigma, is a Food Scientist with US Department of Agriculture, Agricultural Research Service. Her work focuses on food quality and safety of fresh and fresh-cut produce. Dr. Luo currently chairs the IFT's Fruit and Vegetable Product Division, and is the Past President of Chinese American Food Society. (Donation towards a Phi Tau Sigma Scholarship.)

Kantha Shelke, Ph.D., CFS, a Lifetime Member of Phi Tau Sigma, is a Principal at Corvus Blue, a food science and research firm contracted by the mid-market sector (\$50 - \$500m sales) to expedite development and commercialization of honestly healthful products and technologies. Previously employed at ACNielsen, Ben & Jerry's, Continental Baking Corporation, and Pillsbury, she provides expert witness services to food industry litigations, writes for trade and consumer media, and serves as adjunct faculty in Johns Hopkins University's Master of Science in Food Safety Regulation program (Baltimore, MD), and visiting professor at the Department of Food Science and Nutrition, at Management Center Innsbruck (MCI), Austria. (Donation towards a Phi Tau Sigma Scholarship.)

Nina Teicholz, M.Phil. is an 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. (Donation towards a Phi Tau Sigma Scholarship, and Phi Tau Sigma programs.)

Professor J. Ralph Blanchfield, MBE, Consultant in food science, food technology and food law with his own international practice for the past 36 years, following 34 years in industrial food science and technology and management.