



SUMMER 2021

The Bent

Of Tau Beta Pi

THE ENGINEERING HONOR SOCIETY



Meet the 2021 TBP Fellows
Your Leadership Journey

ALUMNI CHAPTERS

79 ALUMNI CHAPTERS
47 ACTIVE

Inactive chapters shown in **BLUE**

DISTRICT 1

Central CT, Hartford
Greater Boston Area, MA

DISTRICT 2

Buffalo, NY
Central Jersey, NJ
LI Suburban, NY
Newark, NJ
New York City, NY
New York Capital District, NY
Rochester, NY
Southern Tier, Binghamton, NY

DISTRICT 3

Lehigh Valley, Bethlehem, PA
Philadelphia, PA
Pittsburgh, PA
Wilmington, DE

DISTRICT 4

Baltimore, MD
Hampton Roads, Newport News, VA
Kanawha Valley, Charleston, WV
Research Triangle, Durham-Chapel Hill-Raleigh, NC
Richmond, VA
Washington, DC

DISTRICT 5

Atlanta, GA
Central FL, Orlando
Daytona Beach, FL
Gainesville, FL
Miami, FL
Midlands, Columbia, SC
Palm Beach/Broward, FL
Piedmont, Clemson, SC
Puerto Rico
Tampa Bay, FL

DISTRICT 6

Bluegrass, Lexington-Frankfort, KY
Central Alabama, Birmingham
Great Smoky Mountains, Knoxville-Oak Ridge, TN
Greater Gulf Coast, Mobile, AL
Louisville, KY
Mid-South, Memphis, TN
Rocket City, Huntsville, AL

DISTRICT 7

Ann Arbor Area, MI
Central MI, Lansing
Cincinnati, OH
Columbus, OH
Dayton, OH
Flint, MI
Ohio's North Coast, Cleveland
SE Michigan, Detroit
West Michigan, Grand Rapids

DISTRICT 8

Chicago Area, IL
Central Illinois, Urbana-Champaign
Indianapolis, IN
Milwaukee Area, WI

DISTRICT 9

Kansas City, KS
Pioneer, OK
Rolla, MO
St. Louis, MO

DISTRICT 10

Central Texas, Austin/San Antonio
North Texas, Dallas-Fort Worth
Greater New Orleans, LA
Texas Gulf Coast, Houston

DISTRICT 11

Ames, IA
Minnesota, Twin Cities, MN

DISTRICT 12

Pikes Peak, CO
Front Range, CO/WY
Salt Lake City, UT
Treasure Valley, Boise, ID

DISTRICT 13

Albuquerque, NM
El Paso, TX
Phoenix, AZ
Sun City, AZ
Tucson, AZ

DISTRICT 14

Columbia River Basin, Richland, WA
Portland, OR
Puget Sound, Seattle, WA

DISTRICT 15

Sacramento Vly, CA
SF Bay Area, CA
SF Peninsula, Palo Alto, CA

DISTRICT 16

Los Angeles, CA
Orange County, CA
Greater San Diego, California
Southern California

COLLEGIATE CHAPTERS

256 COLLEGIATE CHAPTERS
616,781 MEMBERS

6 Inactive chapters shown in **BLUE**

A = ALPHA
B = BETA
Γ = GAMMA

Δ = DELTA
E = EPSILON
Z = ZETA

H = ETA
Θ = THETA
I = IOTA

K = KAPPA
Λ = LAMBDA
M = MU

N = NU
Ξ = XI
O = OMICRON

Π = PI
P = RHO
Σ = SIGMA

T = TAU
Υ = UPSILON
Φ = PHI

X = CHI
Ψ = PSI
Ω = OMEGA

AL ALPHA Auburn University
BETA University of Alabama
GAMMA Univ. of Ala. at Birmingham
DELTA Univ. of Ala. in Huntsville
EPSILON Univ. of South Alabama
AK ALPHA Univ. of Alaska Fairbanks
AZ ALPHA University of Arizona
BETA Arizona State University
GAMMA Northern Arizona University
DELTA Embry-Riddle Univ., Prescott
AR ALPHA University of Arkansas
BETA Univ. of Ark. at Little Rock
CA ALPHA UC Berkeley
BETA Calif. Institute of Technology
GAMMA Stanford University
DELTA University of Southern Calif.
EPSILON UC Los Angeles
ZETA Santa Clara University
ETA San Jose State University
THETA Calif. State Univ., Long Beach
IOTA Calif. State Univ., Los Angeles
KAPPA Calif. State Univ., Northridge
LAMBDA UC Davis
MU Calif. Poly St. Univ., San Luis Obispo
NU Calif. State Poly Univ., Pomona
XI San Diego State University
OMICRON Loyola Marymount Univ.
PI Northrop University (inactive)
RHO California State Univ., Fresno
SIGMA UC Santa Barbara
TAU University of California, Irvine
UPSILON Calif. St. Univ., Sacramento
PHI University of the Pacific
CHI California State Univ., Fullerton
PSI UC San Diego
OMEGA Harvey Mudd College
ALPHA ALPHA Calif. St. Univ., Chico
ALPHA BETA UC Riverside
ALPHA GAMMA San Francisco St. Univ.
ALPHA DELTA UC Santa Cruz
ALPHA EPSILON Univ. of San Diego
CO ALPHA Colorado School of Mines
BETA Univ. of Colorado at Boulder
GAMMA University of Denver
DELTA Colorado State University
EPSILON Univ. of Colorado at Denver
ZETA U.S. Air Force Academy
CT ALPHA Yale University
BETA University of Connecticut
GAMMA University of Hartford
DE ALPHA University of Delaware
DC ALPHA Howard University
BETA Catholic Univ. of America
GAMMA George Washington Univ.
FL ALPHA University of Florida
BETA University of Miami
GAMMA University of South Florida
DELTA University of Central Florida
EPSILON Florida Atlantic University
ZETA Florida Institute of Technology
ETA FL A&M Univ.-FL State Univ.
THETA Florida International Univ.
IOTA Embry-Riddle Aero. Univ.
GA ALPHA Georgia Institute of Technology
BETA Mercer University
ID ALPHA University of Idaho
BETA Idaho State University
GAMMA Boise State University
DELTA Brigham Young Univ.-Idaho
IL ALPHA Univ. of IL at Urbana-Champaign
BETA Illinois Institute of Technology
GAMMA Northwestern University
DELTA Bradley University
EPSILON S. Illinois Univ. at Carbondale
ZETA University of Illinois at Chicago
IN ALPHA Purdue University
BETA Rose-Hulman Inst. of Technology
GAMMA University of Notre Dame
DELTA Valparaiso University
EPSILON Trine University
ZETA Indiana Univ.-Purdue Univ. Indpls.
IA ALPHA Iowa State University
BETA University of Iowa
KS ALPHA University of Kansas
BETA Wichita State University
GAMMA Kansas State University

KY ALPHA University of Kentucky
BETA University of Louisville
GAMMA Western Kentucky University
LA ALPHA Louisiana State University
BETA Tulane University
GAMMA Louisiana Tech University
DELTA Univ. of Louisiana at Lafayette
EPSILON University of New Orleans
ME ALPHA University of Maine
MD ALPHA Johns Hopkins Univ.
BETA University of Maryland
GAMMA U.S. Naval Academy
DELTA Univ. of Maryland Baltimore Co.
EPSILON Morgan State University
MA ALPHA Worcester Polytechnic Inst.
BETA Massachusetts Inst. of Tech.
GAMMA Harvard University (inactive)
DELTA Tufts University
EPSILON Northeastern University
ZETA University of Mass. at Amherst
ETA Boston University
THETA Univ. of Massachusetts Lowell
IOTA Western New England Univ.
MI ALPHA Michigan State University
BETA Michigan Technological Univ.
GAMMA University of Michigan
DELTA University of Detroit Mercy
EPSILON Wayne State University
ZETA Kettering University
ETA Lawrence Technological Univ.
THETA Oakland University
IOTA Univ. of Michigan-Dearborn
KAPPA Western Michigan Univ.
LAMBDA Grand Valley State Univ.
MN ALPHA Univ. of Minnesota-Twin Cities
BETA Univ. of Minnesota, Duluth
MS ALPHA Mississippi State University
BETA University of Mississippi
MO ALPHA Univ. of Missouri-Columbia
BETA Missouri Univ. of Science & Tech.
GAMMA Washington University
DELTA Univ. of Missouri-Kansas City
EPSILON Saint Louis University
MT ALPHA Montana State University
BETA Montana Tech of the Univ. of MT
NE ALPHA Univ. of Nebraska-Lincoln
NV ALPHA University of Nevada, Reno
BETA Univ. of Nevada, Las Vegas
NH ALPHA Univ. of New Hampshire
BETA Dartmouth College
NJ ALPHA Stevens Institute of Technology
BETA Rutgers University
GAMMA New Jersey Inst. of Tech.
DELTA Princeton University
EPSILON Rowan University
ZETA The College of New Jersey
NM ALPHA New Mexico State University
BETA University of New Mexico
GAMMA NM Inst. of Mining & Tech.
NY ALPHA Columbia University
BETA Syracuse University
GAMMA Rensselaer Polytechnic Inst.
DELTA Cornell University
EPSILON New York Univ. (inactive)
ZETA Brooklyn Polytechnic (inactive)
ETA City College of CUNY
THETA Clarkson University
IOTA Cooper Union School of Eng'g.
KAPPA University of Rochester
LAMBDA Pratt Institute (inactive)
MU Union College
NU SUNY at Buffalo
XI Manhattan College
OMICRON SUNY at Stony Brook
PI Rochester Institute of Tech.
RHO NYU Tandon School of Eng'g.
SIGMA Alfred University
TAU Binghamton University
UPSILON U.S. Military Academy
NC ALPHA North Carolina State Univ.
BETA Univ. of North Carolina (inactive)
GAMMA Duke University
DELTA Univ. of NC at Charlotte
EPSILON NC A&T State University
ZETA East Carolina University

ND ALPHA North Dakota State University
BETA University of North Dakota
OH ALPHA Case Western Reserve Univ.
BETA University of Cincinnati
GAMMA Ohio State University
DELTA Ohio University
EPSILON Cleveland State Univ.
ZETA University of Toledo
ETA Air Force Institute of Tech.
THETA University of Dayton
IOTA Ohio Northern University
KAPPA University of Akron
LAMBDA Youngstown State Univ.
MU Wright State University
NU Cedarville University
XI Miami University
OK ALPHA University of Oklahoma
BETA University of Tulsa
GAMMA Oklahoma State University
OR ALPHA Oregon State University
BETA Portland State University
GAMMA University of Portland
DELTA Oregon Institute of Tech.
PA ALPHA Lehigh University
BETA Pennsylvania State University
GAMMA Carnegie Mellon University
DELTA University of Pennsylvania
EPSILON Lafayette College
ZETA Drexel University
ETA Bucknell University
THETA Villanova University
IOTA Widener University
KAPPA Swarthmore College
LAMBDA University of Pittsburgh
MU Penn State Erie, Behrend College
PR ALPHA University of Puerto Rico
RI ALPHA Brown University
BETA University of Rhode Island
SC ALPHA Clemson University
BETA University of South Carolina
GAMMA The Citadel
SD ALPHA S. Dakota Sch. of Mines & Tech.
BETA South Dakota State University
TN ALPHA University of Tennessee
BETA Vanderbilt University
GAMMA Tennessee Tech. University
DELTA Christian Brothers Univ.
EPSILON University of Memphis
ZETA Univ. of Tenn. at Chattanooga
TX ALPHA University of Texas at Austin
BETA Texas Tech University
GAMMA Rice University
DELTA Texas A&M University
EPSILON University of Houston
ZETA Lamar University
ETA Univ. of Texas at Arlington
THETA Univ. of Texas at El Paso
IOTA Southern Methodist University
KAPPA Prairie View A&M University
LAMBDA Texas A&M Univ.-Kingsville
MU Univ. of Texas at San Antonio
NU Univ. of Texas Rio Grande Valley
XI University of Texas at Dallas
UT ALPHA University of Utah
BETA Brigham Young University
GAMMA Utah State University
VT ALPHA University of Vermont
BETA Norwich University
VA ALPHA University of Virginia
BETA Virginia Poly Inst. & State Univ.
GAMMA Old Dominion University
DELTA Virginia Military Institute
EPSILON Virginia Commonwealth Univ.
WA ALPHA University of Washington
BETA Washington State University
GAMMA Seattle University
DELTA Gonzaga University
WV ALPHA West Virginia University
BETA West Virginia Univ. Inst. of Tech.
WI ALPHA Univ. of Wisconsin-Madison
BETA Marquette University
GAMMA Univ. of Wisconsin-Milwaukee
DELTA Milwaukee School of Eng'g.
EPSILON Univ. of Wisconsin-Platteville
WY ALPHA University of Wyoming



The Bent

SUMMER 2021

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COVER: University of Houston graduate Lindsey Muscara, TX E '21. She served as chapter president for Spring 2021 and has accepted an entry-level flight controller position with KBR.

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Managing Editor: Patricia B. McDaniel

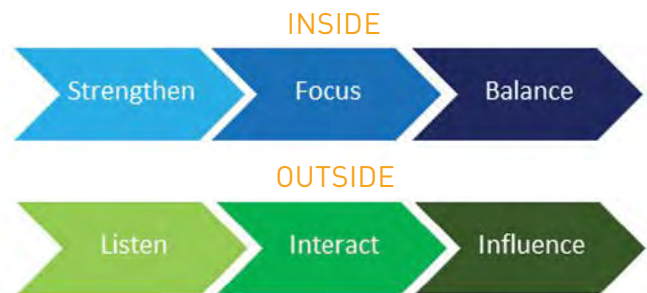
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Tau Beta Pi was founded at Lehigh University, South Bethlehem, PA, June 15, 1885, by Edward H. Williams Jr., A.B., A.C., E.M., Sc.D., LL.D. (1849-1933). Key and name registered in U.S. Patent and Trademark Office.

Member, *American Society for Engineering Education*; co-founder *Association of College Honor Societies*; and Affiliate, *American Association for the Advancement of Science*.



06 Meet our 88th group of TBPI Fellows.



14 Looking to improve your leadership skills? Work through your options and next steps.



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VISIT www.tbp.org

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COUNCIL'S CORNER

George Youssef, NJ Γ '01, TBI 2021 Treasurer

THE NEXT CHAPTER

Continue to uphold and live by the tenets that have guided you.

Dear Tau Bates...May is the month of celebration, not only because of graduation from college, but it also signals the beginning of a new chapter in life for some of you. Regardless of what career path you might take next—academia, government, entrepreneurship, or the private sector, there are many principles that you should continue to carry with you to ensure success on your new journey. **Integrity, Excellence, and Giving Back** are three we will focus on here.

Integrity—It's no surprise it is one of the pillars of our creed (Integrity and Excellence in Engineering) and the first on the list. It is the main ingredient of the energy that fuels success throughout your career. With integrity comes trust and with trust comes higher roles with greater responsibilities. Integrity is a vital characteristic of all Tau Beta Pi members and new members are reminded, for example, an honorable engineer's report is the same regardless if the client is the seller or buyer. True integrity is

always doing the right thing even when no one is watching. Integrity is your foundation and it needs to be solid and able to withstand times of hardship and challenges.

Excellence—This is the second pillar of our creed and as important as Integrity. It has been proven over and over that every time you put 100 percent of your efforts into any project, despite the challenges and setbacks you might face, you are rewarded for working both hard and smart. Excellence is not about perfection but how you learn from your mistakes and share it with others so they can benefit as well. You will make many mistakes along the way but how you get up and dust yourself off is the important step.

Giving Back—The feelings of joy and excitement after giving someone a gift never gets old and that should remain the same after graduation when you start giving back to all who helped you along the way. Giving back does not

refer to financial gifts only. It can be in the form of mentorship or ambassadorship and that is a key element to remember. By giving, you will realize that many new opportunities will come knocking on your door and being humble will allow you to see different perspectives that otherwise may not have been visible.

Congratulations again on your graduation! I wish you all the best and much success in the next chapter of your life's story. I especially hope you continue to be engaged with Tau Beta Pi and always remember you are a Tau Bate for Life.

GEORGE YOUSSEF works for General Electric as a quality manager, having served in a number of positions and leadership roles from New Jersey to Dubai. He was a TBI District 2 Director from 2009-16, joined the Executive Council in 2017, and was re-elected in 2019. He graduated from the New Jersey Institute of Technology with a bachelor's degree in electrical engineering. George is married and has one daughter.

Ensuring the successful future of Tau Beta Pi is a family affair!

Meet Michael and Tina Pierce — Donor-Advised Fund Contributors

Michael, CO A '90, and Tina, CO A '89, were inducted into TBI at the Colorado School of Mines and years later were excited to reconnect when an alumni chapter formed in their area. As active volunteers, they were indispensable in helping to run the registration desk at the 2018 Convention in Denver. After creating a Donor-Advised Fund (DAF), Michael and Tina decided to direct donations to TBI. A DAF is a charitable giving account that allows donors to make a contribution, receive an immediate tax deduction, and then recommend grants from the fund over time. Donors can contribute to the fund as frequently as they like, and then recommend grants to their favorite charities whenever it makes sense for them. Donor contributions are tax-deductible and the assets in the DAF grow tax-free.



For information, email Sherry Jennings-King at development@tbp.org or visit www.tbp.org/?Give

Curtis D. Gomulinski, *MI E '01*, TBII Executive Director



MASTERING OUR TECHNOLOGICAL TOOLS

Modernizing the Association's chapter and membership management systems.

About twenty years ago, Tau Beta Pi moved its member records from a mainframe system managed by the University of Tennessee to a new system owned and operated by the Association. We examined existing systems and realized no systems were available that would meet our needs. While enterprise systems existed, they were far above the price that Tau Beta Pi could afford. We worked with a local company to develop a custom solution to meet the Association's need for the new millennium. These new systems included "Memblist" for managing the member information previously stored on the UT mainframe and the Electronic Reporting System, which replaced most of the paper reports we required chapters to submit for new members and chapter operations.

In the intervening years, these systems were enhanced to meet the continually evolving needs of the Association. In addition to changes to the original systems, new tools were developed to manage our donor relationships, Convention attendance, Fellowship and Scholarship applications, and chapter project reports. While we have been able to extend the systems' capabilities, there is always a lengthy list of requests for additional capabilities and reports that remain unaddressed with our limited staff resources.

A few years ago, we reviewed the marketplace and noted that the Association Management System (AMS) industry had grown substantially. An AMS is computer software which provides an organization the functionality to provide services and capabilities to its

members, volunteers, and staff. There were now commercial systems available that might be able to effectively support the operations of Tau Beta Pi. While we met with a few potential vendors, we recognized we did not have the expertise or resources to effectively identify our current and future needs, research the marketplace, or identify a system we could implement given our available resources at the time.

As the pandemic unfolded, we realized we could no longer put off the decision to identify and implement a new AMS. While we were able to pivot to a virtual operation fairly well, we needed to put a number of short-term fixes in place to support the HQ team, Association Officials, and chapter leaders to continue our operations. Several of these fixes were time-consuming to implement and support and were not ideal from a sustainable operational perspective. In addition, the growing list of needs from our volunteers would require additional staffing to address in any reasonable time frame.

At the beginning of the year, Tau Beta Pi engaged the services of DelCor to identify a new AMS for the Association. They are an IT consulting firm that is very knowledgeable in the AMS environment and specializes in working with organizations to identify an AMS that best meets its needs. DelCor does not sell or recommend a particular AMS product.

Fifteen interview meetings were arranged in February and March to identify the existing and future needs of our HQ team and members. In total, the meeting participants identified

nearly 1,500 requirements for a new AMS! Some of these were identified as mandatory, others preferred, and some as optional. While we realize that no single system will meet every need of Tau Beta Pi, we are looking for a solution that will meet the majority of our core needs and provide the flexibility to interface with other third-party systems that will provide additional capabilities to effectively manage our operations.

A core project team consisting of HQ team members and volunteers across the Association have been working with DelCor to identify a new AMS for Tau Beta Pi. In the coming months, we will be interviewing possible vendors and comparing their solutions against the requirements laid out in our request for proposal. We plan to make a decision over the summer and begin the lengthy process of implementation over the next year. Our hope is that the new system will come online prior to the start of the 2022 academic year next August.

I want to express my gratitude to the core project team, the dozens of volunteers who participated in the interview meetings, and the HQ team members. This is a huge undertaking which requires the input and support of many people!

.....
CURT GOMULINSKI is the fourth TBII Executive Director, assuming the role in 2011. He holds a B.S. in electrical engineering from Wayne State University and an M.S. in computer science and engineering from the University of Michigan. He previously served as a TBII chapter president, District 7 Director, and chapter advisor.

Patricia McDaniel and Dylan Lane

HYBRID CONVENTION

The 2020 Unvention was a categorical success and opened the Convention experience to more members, but we are looking forward to hosting the 2021 Convention in-person in Knoxville, Tennessee, home of TBP Headquarters!

The 115th TBP Convention will be held October 21-23 in Knoxville, hosted by the TN Alpha Chapter located at the University of Tennessee and the Great Smoky Mountains Alumni Chapter.

Convention planning is underway, with in-person events and some live stream options for virtual attendees. A tentative schedule has been posted and plans include a Convention app this year.

The Corporate & Grad School Recruiting Fair will be held virtually October 18-19. Last year's Fair, supported by Career Fair Plus' virtual platform, was hugely successful and we expect another great event this year.

Professional Development Sessions will be hosted in-person with a select few also being offered virtually before the Convention starts.

Please check the Convention home page on our website for updates. There are also plans to record and stream some of the popular events, including speakers!

More info at:

www.tbp.org/conv/2021/conv.cfm

or contact convention@tbp.org

Send letters to media@tbp.org. Text may be edited for length and clarity; not all letters can be published.

Integration & Interfaces

The article ("Integration & Interfaces," Spring 2021) hits upon many important points regarding interdisciplinary engineering. I was fortunate to attend a university that embraced that concept decades ago. Hopefully, that option is widely available these days. Another key foundational part of curriculum support for engineering across "Interfaces & Integration" is the P.E., Professional Engineering preparation courses. I was required (thankfully) to take coursework in mechanics and electronic circuits, (and computer programming) as part of my chemical engineering major (bio-option). Not only did those broadening courses prep me for the P.E. exams, post-graduation, but that knowledge prepared me for the real world of engineering and technology, where rarely does one discipline deliver a business solution.

Jeffrey C. Sen, MI '83

Political Issues

I am surprised and quite disappointed to learn that Tau Beta Pi has chosen to get involved in purely political issues. In particular, political concerns of race and gender have no basis whatsoever in physical (natural) laws. And physical laws are the heart and soul of the knowledge that engineers use to design systems and equipment that are our professional concern.

Every engineer has rights to engage in political concerns and to join in with any organization(s) of their choice to support whatever political activity we may wish to support.

For my part, as a former Professional Engineer (retired), I do not want to observe my fellow engineers discussing (and taking positions on) issues of political "solutions" to "problems" that are perceived rather than demonstrable from physical laws. Especially not in a professional organization's journal.

My fundamental objection is based on the fact that political solutions to non-physical problems inevitably cause harm to some individuals and favoritism to others.

Phil G. Sexton, TN A '56

More Member Letters

On the one hand, I want to congratulate the staff on the excellent content of the Spring 2021 issue. The articles were very informative and readable. They remind me of the content of yesteryear.

On the other hand, I sorely miss the Letters pages of times past. It seems TBP has gone the route of *Time Magazine*, replacing pages of letters from subscribers with barely a paragraph in passing. If you could only review *The Bent* or *Time* issues of the relatively recent past or current issues of the *Yale Alumni Magazine*, you would find lively, intelligent conversations going back and forth between subscribers to argue issues related to global warming and similar controversies relevant to our times. Instead, we find mind numbing pages of contributors and deaths.

Having been a faithful reader of *The Bent* for 60+ years, I must tell you that I am more drawn to the warmth and humanity of my colleagues than I am to columns of statistics.

Stephen Altschuler, CT B '54

New Editorial Board Member

I always enjoy *The Bent* but I must say that I read it primarily for the people and breeze by the technical articles. I realize that we're all engineers, but I find my enjoyment of the magazine is to read about the goings-on of Tau Bates. (Maybe that's why I moved on in my career from eng'g to technical sales management.)

In that vein, I was delighted to see the article on Alison Hu's appointment to the Editorial Board ("Association Briefs," Spring 2021). Alison & I first met back in the 90s when we were Engineering Futures Facilitators. It's easy to hit it off with Alison who is such an exuberant, outgoing, and fun-loving person.

I enjoyed catching up on Alison's career/life (she was a Stanford grad student when we met) but the article didn't mention that she is also an accomplished cellist. She invited my wife and I to attend a concert at Stanford where she gave a solo performance with the orchestra. She was sensational!

Congrats on the appointment, Alison!

Joseph A. Kuspa, CA I '93



WHO'S WHO IN TAU BETA PI

Recognizing Tau Beta Pi accomplishments.

David A. Bader Ph.D.

Pennsylvania Alpha '90

has been elected as a Fellow of the Society for Industrial and Applied Mathematics. He is a distinguished professor in the department of computer science and inaugural Director of the Institute for Data Science at New Jersey Institute of Technology. He is a Fellow of IEEE, AAAS, and SIAM, and advises the White House, most recently on the National Strategic Computing Initiative.



Patrick P. Gelsinger

California Zeta '83

joined Intel in February as the company's 8th chief executive officer. He is an accomplished CEO and industry veteran with more than four decades of technology and leadership experience, including 30 years at Intel, where he began his career. Previously, he led software maker VMware as CEO, from 2012. He has B.S. and M.S. degrees in electrical engineering from Santa Clara and Stanford universities.



Rao Mannepalli

Massachusetts Alpha '87

has been elected as a Fellow of the Royal Aeronautical Society (RAeS), the society's highest grade bestowed upon professionals. Founded in 1866, RAeS is the oldest aeronautical society in the world. He is a chief engineer at Raytheon Technologies, Fellow of NIBIB, Distinguished Scientist of ACM, and life member of Astronautical Society of India. He joined TBPI as an eminent engineer in 2020.



Jenna P. Carpenter Ph.D.

Indiana Alpha '83

was elected American Society for Engineering Education (ASEE) president-elect and will serve a one-year term beginning in June, followed by a full year as ASEE president. She is the founding dean of Campbell University's (NC) School of Engineering, won the ASEE's Sharon Keillor Award for Women in Engineering Education, and is an ASEE Fellow.



Linda G. Griffith Ph.D.

Georgia Alpha '82

was awarded the 2021 Bernard M. Gordon Prize for Innovation in Engineering and Technology Education "for the establishment of a new biology-based engineering education, producing a new generation of leaders capable of addressing world problems with innovative biological technologies." She is a professor of biological and mechanical engineering and MacVicar Fellow at MIT.



Cynthia B. Paschal Ph.D.

Tennessee Beta '86

has been elected to the American Institute for Medical and Biological Engineering (AIMBE) College of Fellows. She is senior associate dean and a professor of biomedical engineering at Vanderbilt University. AIMBE Fellows are comprised of the top two percent of U.S. medical & biological engineers. She was chosen as a 2021 Fellow for contributions to service-learning and imaging education.



Mung Chiang Ph.D.

California Gamma '00

has been selected a Fellow of the National Academy of Inventors. He is dean of engineering and distinguished professor at Purdue University. He spent a year in public service with the U.S. Dept. of State as the science and technology advisor to the secretary of state and is the founding CEO of DataMi, a startup that pioneered "open toll-free" solutions for mobile data operators in six continents.



Deborah L. Grubbe P.E.

Indiana Alpha '77

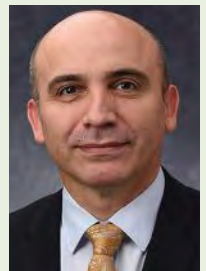
will serve as president in 2021 of the American Institute of Chemical Engineers (AIChE). She is owner and president of Operations and Safety Solutions, LLC, and was awarded an Honorary Doctorate in Engineering from Purdue University, where she earned her B.S. in chemical engineering. Previously, she worked at DuPont for 27 years in corporate director positions in safety, operations, and engineering, and is an AIChE Fellow.



Aleksander Stevanovic

Ph.D., P.E. *Florida Epsilon '98*

has been named a Fellow by the ASCE Board of Direction. He is an associate professor of civil & environmental engineering at the University of Pittsburgh. His teaching and research interests include traffic engineering and adaptive traffic control systems. He's published 150+ journal papers, presented at 100+ seminars, and serves on 6 editorial boards of international transportation journals.



TBP FELLOWS

28 members have been awarded for a year of graduate study in 2021-22.

Abraham O. Atte KS A '20
Hennis No. 2 | Aerospace eng'g

Casey M. Baker VA A '18
Record No. 29 | Biomedical eng'g

Kimberly R. Bennett CA AB '21
Fife No. 231 | Medical eng'g

Nan (Louise) Chen NY P '20
Record No. 31 | Materials Sci. & eng'g

Amanda O. Christensen WY A '21
Sigma Tau No. 47 | Biomedical Sciences

Joseph M. Cloud TX H '19
Tau Beta Pi No. 833 | Computer eng'g

Kara L. Combs OH M '21
King No. 60 | Industrial eng'g

Kelly M. Crumley MI Γ '20
Anderson No. 18 | Biomedical eng'g

Emily D. Fabiano NJ B '21
Record No. 32 | Biomedical eng'g

Anna C. Feldman NY B '21
Spencer No. 66 | Environmental Science

Megan C. Flynn MA B '21
Hanley No. 11 | Mechanical eng'g

Ian Ho RI A '21
Stark No. 42 | Bioengineering

Yin Fung Khong CA K '17
Tau Beta Pi No. 832 | Computer eng'g

Fikunwa O. Kolawole DC A '19
Anderson No. 17 | Mechanical eng'g

Xinming (Lily) Liu NY Δ '20
Nagel No. 24 | Operations Research

Ming Yang Lu MD A '19
Fife No. 233 | Electrical eng'g

Wilson (Will) H. McNeil WV A '21
Matthews No. 24 | Environmental eng'g

Veronica Montgomery MA B '16
Williams No. 42 | Biomedical eng'g

Elisa B. Nieves FL A '20
Record No. 30 | Biomedical eng'g

Ashle M. Page NC A '17
Tau Beta Pi No. 831 | Bioethics

Parker S. Ruth WA A '21
Tau Beta Pi No. 834 | Computer science

Ayushi K. Sangoi NJ Γ '20
GEICO No. 6 | Biomedical eng'g

Shikha Srinivas CA Γ '21
Forge No. 9 | Sustainable Design

Charles Van De Mark CO B '19
Swalin No. 5 | Novel Genetic Circuits

Ronald (RJ) Vogler KY A '21
Dodson No. 8 | Chemical eng'g

Joseph Wakim MA Θ '19
Zimmerman No. 10 | Chemical eng'g

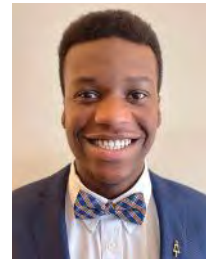
Yiming (Jason) Zhang AL Γ '21
Fife No. 232 | Biological eng'g

Dell H. Zimmerman TN Z '21
Centennial No. 36 | Chemical eng'g

Abraham O. Atte

Hennis Fellow No. 2

Abraham is a Ph.D. student in aerospace engineering at Georgia Institute of Technology with a research focus on the aerodynamic performance of eVTOL UAM vehicles and experimental investigation of multirotor aerodynamic interactions. He also teaches an experimental fluids lab. Abraham was initiated into TBII at the University of Kansas, where he graduated with a B.S. degree in aerospace eng'g with distinction. He served as KS Alpha Chapter initiation chair from fall 2018 until graduation. He was also active in the National Society of Black Engineers, Phi Mu Alpha Sinfonia, Sigma Gamma Tau, and as a university ambassador. Abraham was involved in undergraduate research in experimental fluid mechanics and completed a summer internship with the National Space R&D Agency in Abuja, Nigeria. Outside of academics, he dedicates time to community outreach focused on showcasing the opportunities afforded by a STEM degree to underrepresented students. Upon completion of his Ph.D., he plans on remaining in academia as a professor.



The **Anderson Fellowships** are named for Mabel E. and Marshall Anderson, MI Γ '32, who was TBP Fellow No. 19 and left a bequest to the Society in 2005.

Given for the 36th time, the **Centennial Fellowship** honors the Society's most outstanding fellow and commemorates Tau Beta Pi's 100th anniversary.

The **Dodson Fellowship** is sponsored by the late Charles R. Dodson, MD B '30, who made a gift to the Association in 1998.

The three **James Fife Fellowships** are presented in memory of the father of the late member William Fife, CA A 1921.

The **Forge Fellowship** is named for Charles O. Forge, CA Γ '56, who left a bequest in 2010.

The 11th **Hanley Fellowship** is awarded in honor of Mary A. and Edward P. Hanley, IL B '42, TBP Fellow No. 84, who left a bequest to TBP in 1991.

The **Hennis Fellowship** is awarded for the 2nd time thanks to a generous gift from Lee A. Hennis, CA Δ '65, to continue mentoring young engineers.

The **Harold M. King Fellowship**, awarded for the 60th time, honors the 1954-58 president of TBP, Harold M. King, MA A 1910, and is given to that recipient whose participation in his/her technical society is judged worthy of special mention.

The **Matthews Fellowship** is awarded in honor of R.C. "Red" Matthews, IL A 1902, who served as Secretary and Secretary-Treasurer from 1905-47 and as Secretary-Treasurer Emeritus in 1947-78.

The **Nagel Fellowship** is given in honor of Robert H. Nagel, P.E., NY Δ '39, for his service as Editor and Secretary-Treasurer from 1942-82 and as Secretary-Treasurer Emeritus in 1982-97.

The **Record Fellowships** are awarded commemorating Leroy E. Record, KS A '29, whose generous bequest will provide earnings to support awards in perpetuity.



The Fellowship Board has announced the selection of 28 engineering students from 336 applicants for graduate fellowships. More than \$8,000,000 in stipends will have been given by the Society when this 88th group of fellows completes its graduate work. These awards bring the total to 1,736 fellowships since the program began in 1929. The Association is grateful to volunteer members for their role in the selection process; reviewers are listed at www.tbpi.org/?Fellows.

Casey M. Baker

Record Fellow No. 29

Casey graduated with highest distinction from the University of Virginia with a B.S. in biomedical engineering and a double major in psychology. At UVA, she served as the Virginia Alpha Chapter vice president and was a teaching assistant for classes in the applied math and BME departments. As an undergraduate, she conducted research on vascular wound healing, mental health stigma, and gut-brain interactions. After college, she worked in Dr.



Steven Flavell's systems neuroscience lab at MIT before returning to graduate school to work towards her Ph.D. in biomedical engineering at Duke University. She is an NSF Graduate Research Fellow and is a member of Dr. Yiyang Gong's lab where she uses novel imaging techniques to observe and manipulate neural circuits. Outside of lab, Casey has volunteered as a crisis hotline volunteer for the National Suicide Prevention Hotline, as a big buddy for Comfort Zone Camp, and as an event coordinator for Relay for Life. She hopes to pursue a career in academia with an emphasis on teaching.

Kimberly R. Bennett

Fife Fellow No. 231

Kimberly is graduating with honors from the University of California, Riverside, with a B.S. in bioengineering. She is a 2020 TBPI Scholar and served as CA Alpha Beta Chapter president her senior year. As an undergraduate, Kimberly has participated in numerous research positions, completed an NSF International Research Experience at Tsinghua Univ. in 2018, and is an NIH MARC U-STAR research trainee. She conducted research under Dr. Victor Rodgers and Dr. Byron Ford, investigating the use of a protein therapeutic as a neuroprotective treatment for ischemic stroke. Her involvement in research has resulted in several presentations, numerous awards, and a pending first-author journal publication. Kimberly is passionate about mentoring other first-generation college students and minorities in STEM. She will pursue a Ph.D. in medical engineering and medical physics at the Harvard-MIT Health Sciences and Technology Program. Fully funded as a UCEM Scholar, she plans to conduct translational research focused on targeted drug delivery for oncological applications.



Nan (Louise) Chen

Record Fellow No. 31

Nan (Louise) graduated summa cum laude from New York University with a B.S./M.S. in chemical engineering in May 2020. She served as NY Rho Chapter president (2017-18) and is now TBPI NYC Alumni Chapter secretary. Passionate about teaching and mentoring, she was a TA for senior design, tutored students on a variety of introductory science courses, and mentored high school & undergrad students in research at NYU. She was awarded the Thompson Bartlett Fellowship for her undergrad research. She developed a solution-processing technique to fabricate inorganic thermoelectric thin film devices for waste heat capture, which resulted in her first-author paper that was featured on Editor's Choice at *Nanoscale Advances*. She is pursuing a Ph.D. in materials science and engineering at Johns Hopkins Univ., where she researches on organic semiconductors and conducting polymers for OFET, thermoelectrics, and vapor sensing applications.



The **Sigma Tau Fellowship**, given for the 47th time, perpetuates the name of Sigma Tau, a national engineering honor society founded at the University of Nebraska in 1904 and merged with Tau Beta Pi in 1974. It also commemorates Sigma Tau's former national president and secretary-treasurer, Clarel B. Mapes.

The **Charles H. Spencer Fellowship** is given for the 66th time. Named for Tau Beta Pi's president from 1936-47, Charles H. Spencer, *IL B 1913*, it is awarded to that recipient whose contributions to his/her collegiate chapter are judged worthy of commendation.

The **Donald A. Stark Fellowship** is supported by a gift from a charitable trust named for the man who contributed much to progress in the fluid-power industry.

The **Swalin Fellowship** is named in honor of Helen M. and Richard A. Swalin, Ph.D., *MN A '52*. Dr. Swalin and his wife left a bequest in 2015 to support TBPI scholarships and fellowships.

The **Tau Beta Pi Fellowship** is supported by matching gifts from companies as part of the annual alumni giving.

The **Edward H. Williams Jr. Fellowship**, awarded for the 42nd time, honors the founder of Tau Beta Pi. It is given to a recipient who plans to earn a doctoral degree and become a professional engineering teacher, as was Dr. Williams, *PA A 1875*.

The **Zimmerman Fellowship** is named for Marlin U. Zimmerman Jr., *MD A '44*, who left a bequest in 2011.

The **GEICO Fellowship** is supported through a partnership with GEICO Insurance.

Amanda O. Christensen

Sigma Tau Fellow No. 47

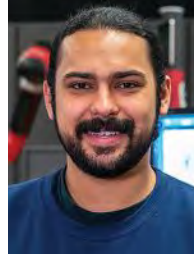
Amanda is a 2021 graduate with majors in chemical engineering and physiology and an honors minor from the University of Wyoming. She worked for four years as a Wyoming Research Scholar in the Cherrington/Navratil physiology labs. As a researcher, she has worked closely with a physician-scientist investigating the mechanisms of rheumatoid arthritis (RA) and the gender-skew towards women within the disease. Through this work, Amanda has interacted directly with patients and made significant progress towards developing a mouse model for RA with respect to female reproductive hormones. These experiences inspired her to pursue a career as a physician-scientist. She has served as WY Alpha Chapter VP and coordinated an online eng'g awards banquet while serving as AICHe student president. Over the summer, she joined the Wyoming COVID-19 surge team and looks forward to a career combining medicine, eng'g, and community service.



Joseph M. Cloud

Tau Beta Pi Fellow No. 833

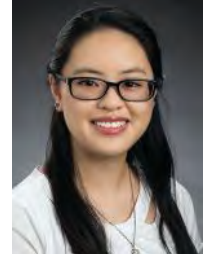
Joe graduated summa cum laude from the honors college at the University of Texas at Arlington with a B.S. in computer engineering and minor in mathematics. As a freshman, he worked with UTA's high energy physics group to build a supercomputer in support of the ATLAS experiment at CERN. For undergraduate studies, he researched machine learning-based control frameworks for teaching robots to perform tasks with humans. His work led to authorship and presentation of several papers at international conferences. He has completed internships with NASA Langley research center and Kennedy Space Center, working on a terrestrial rover to validate an instrument for future Mars missions, and researched machine learning techniques for excavating robots on the Moon. He is an NSF Graduate Research Fellow pursuing a Ph.D. at UTA, past NASA Texas Space Grant graduate fellow, and will work on robotic learning for space missions.



Kara L. Combs

King Fellow No. 60

Kara graduated summa cum laude from Wright State University in 2021 with a B.S. in industrial and systems engineering and a minor in supply chain management. She served as corresponding secretary, vice president, and will transition to a graduate student advisor this year with the Ohio Mu Chapter. She was also involved with the Institute of Industrial and Systems Engineers (IISE), the Dean's Student Advisory Board, and the student ambassador & mentor program. She was awarded a TBI Scholarship (2019) and the 2021 IISE James Barany Award for student excellence. She is continuing at Wright State for her M.S. in industrial and human factors engineering and has started on her thesis concerning applications of analogical reasoning. After her master's degree, Kara intends to transition to a full-time industry position and potentially join a Ph.D. program in the future. Regardless of her career path, she hopes to continue mentoring others and assisting with her professional organizations.



Kelly M. Crumley

Anderson Fellow No. 18

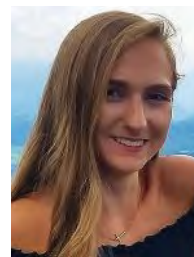
Kelly graduated from the University of Michigan with a B.S.E in biomedical engineering and a minor in computer science in 2020 and will graduate with an M.S.E in biomedical engineering in 2021. She is pursuing a Ph.D. in biomedical engineering at the University of Michigan in Dr. Lonnie Shea's lab. Her work focuses on the generation of function pancreatic islets for treatment of type-1 diabetes, utilizing stem cells and controllable microenvironments. She also completed summer research projects at the Naval Surface Warfare Center, Johns Hopkins University, and research labs at the University of Michigan, with topics ranging from materials characterization, to study of the pathology of disease of the retina, to generation of patient specific models of neural anatomy to guide neuromodulation. She joined the MI G Chapter in 2018 and has served in multiple roles, including graduate student vice president. In the future, she plans to remain committed to the study of regenerative medicine and make a meaningful impact on our ability to treat chronic illnesses.



Emily D. Fabiano

Record Fellow No. 32

Emily graduated summa cum laude from Rutgers University with a B.S. in chemical engineering and a minor in HR management. She served as NJ Beta Chapter public relations chair, was the VP of Omega Chi Epsilon, and a member of Phi Theta Kappa. As a transfer student from the honors college at Raritan Valley Community College, Emily served as a mentor for transfer students to Rutgers School of Engineering. She was also heavily involved with Rotaract Club, where she took part in several humanitarian missions abroad to Nepal. Throughout her graduate studies and professional career, Emily hopes to generate increased awareness to further assist the communities in Nepal. Emily interned with Bristol Myers Squibb in product development, where she developed an internally novel tool to expedite the drug production process. She will be pursuing her Ph.D. at Vanderbilt University, in the biomedical engineering program, with a focus on cancer metastasis. Ultimately, Emily hopes to pursue a career in pharmaceuticals.



Anna C. Feldman

Spencer Fellow No. 66

Anna graduated with honors distinction from Syracuse University in 2021 with a B.S. in environmental engineering and a minor in environment and society. Anna has a passion for preserving water resources and protecting water quality through research, STEM outreach, and environmental stewardship. As an undergraduate, Anna was a regular volunteer for a local STEM education program and served as NY Beta Chapter president. She is a 2019 NOAA Hollings Scholar, 2020 Udall Scholar, and is recognized by Syracuse Univ. as the best all-around senior engineering student in her graduating class. Her undergraduate research focused on the occurrence and concentration of organic micropollutants in the waterways of Kampala, Uganda. She will continue water quality research this fall at Yale University as she pursues a master's of environmental science. She aims to work as a hydrologist for the USGS.



Megan C. Flynn

Hanley Fellow No. 11

Megan graduated from the Massachusetts Institute of Technology with a B.S. in mechanical engineering, focused in controls, instrumentation, and robotics, with a humanities concentration in Spanish. Megan served as

MA Beta Chapter tutoring committee chair and directed the MIT Leadership Training Institute, mentoring high school students and helping them create service projects in their communities. Megan also served

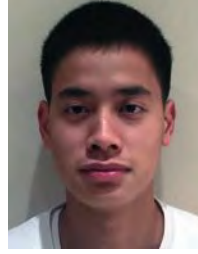
as a teaching assistant in the mechanical engineering and physics departments and taught high school science classes in Germany and Italy during two January terms. She was also a part of the Div. III field hockey team and gathered several personal, academic, and athletic honors; the team was NEWMAC champions in 2017 & 2019 and reached the NCAA Elite Eight in 2019. Megan will pursue an M.S. in mechanical eng'g at MIT with a planned focus in mechatronics and controls.



Ian Ho

Stark Fellow No. 42

Ian is majoring in mechanical engineering at Brown University. He is originally from Hong Kong. Since his freshman year, he has worked in the Harris lab investigating fluid solid interaction at the capillary scale. In his first publication at the lab, he investigated the boundary layer drag on centimeter-sized disks sliding on an air-water interface. In his second publication, he performed direct measurements of the capillary attraction between two objects floating on an air-water interface. For several years, he has worked as a monitor at Brown's design workshop makerspace and is also involved with the RI Alpha Chapter, where he serves as the cataloger. Ian will attend Stanford University as a Ph.D. student in bioengineering and is excited about investigating the intersection between fluid mechanics and biological systems. His future aspirations are to work in academia.



Yin Fung Khong

Tau Beta Pi Fellow No. 832

Yin graduated summa cum laude with a B.S. and the Distinction and Outstanding Graduate Award with a master's degree in computer engineering from California State University, Northridge. He served as the CA Kappa Chapter president and council president to the student engineers' council (2017-19). Yin served on the TBPI Convention Financial Affairs Committee (2017) and chaired the committee (2018). He was awarded the President's Volunteer Service Award (2016-19)—gold medal in recognition of community contributions. Yin completed his honors thesis, resulting in a first-authorship and co-authorship in two publications presenting a novel approach for efficient implementation of nucleus detection and classification, and a high-performance leukocytes algorithm using digital image processing and ML techniques. He will pursue a Ph.D. in computer eng'g with a focus in real-time image processing and embedded systems, continue signal processing research, and pursue a career in academia.



Fikunwa O. Kolawole

Anderson Fellow No. 17

Fikunwa graduated summa cum laude from Howard University in 2019 with a B.S. in mechanical engineering. At Howard, he served as president of the university's chapter of Engineers Without Borders. He also contributed to various initiatives to increase diversity and equity in STEM. Additionally, he worked in the Applied Mechanics and Materials Lab led by Dr. Gbadebo Owolabi, in the Biosensors lab, under the guidance of Dr. Hyung Bae, and was a research intern



at the department of applied mechanics with the FDA. He has received various awards such as the Lucien Rich Scholarship, Phi Beta Kappa Locke Award, and the Howard Founders Scholarship. Fikunwa is a mechanical engineering Ph.D. student in the Cardiac Magnetic Resonance lab at Stanford University led by Dr. Daniel Ennis. His research, which is at the interface of engineering and medicine, leverages expertise in mechanical eng'g, computational modeling, and cardiac magnetic resonance imaging to understand heart biomechanics in health and disease. Fikunwa's desire is to revamp the medical industry of his native country, Nigeria.

Xinming (Lily) Liu

Nagel Fellow No. 24

Xinming (Lily) graduated summa cum laude from Cornell University double majoring in computer science and operations research in May 2020. She worked as an undergraduate research assistant for various professors at Cornell on both human behaviors modeling and applications of optimization. She has also worked as a teaching assistant since her sophomore year. In her junior year, she was inducted into the NY Delta Chapter, served as the professional development chair for 2019-20, and received a TBPI scholarship in 2019. Currently, Xinming is pursuing a Ph.D. degree in operations research at Massachusetts Institute of Technology. Her research focuses on applying data-driven optimizations and behavioral insights for social good. She is working on technology adoption through small-holder farmers' social networks. Xinming plans to pursue a career in academia.



Ming Yang Lu

Fife Fellow No. 233

After graduating from Johns Hopkins University with a dual major in biomedical engineering and applied math & statistics in 2019, Ming worked as a computational researcher in Prof. Faisal Mahmood's lab at Harvard Medical School. He developed interpretable machine learning algorithms to improve the diagnosis of cancer from histology slides. In Fall 2021, Ming will start a Ph.D. in the electrical engineering & computer science dept. at MIT. He hopes to work with aspiring computational researchers, engineers, and clinicians across both academia and industry to develop quantitative methods for integrating different data modalities. Through this research, he wants to answer questions about causal mechanisms of biological diseases and investigate plausible interventions that might improve patient outcomes. After his Ph.D., Ming hopes to lead a research team and work on the translation of biotechnology to benefit human health.



Wilson (Will) H. McNeil

Matthews Fellow No. 24

Wilson (Will) is an honors graduate with a B.S. in civil engineering from West Virginia University. With a passion for conservation, Wilson's research focuses on the nexus of environmental engineering and public policy. He works with a multidisciplinary research group that advises WV lawmakers about scientific advances aimed at enhancing water quality. He also worked as an environmental eng'g intern in San Diego monitoring industrial water quality at facilities in Southern California and Tijuana, Mexico. Wilson is an avid Eagle Scout, published an illustrated children's book on service and scouting, and donates all proceeds to his local Boy Scout council. Because of his passion for service and public policy, he was a finalist for the Truman Scholarship. Wilson will begin graduate school in environmental eng'g at the University of California, Berkeley, in August. His goal is to work as a researcher or policy advocate for an environmental eng'g agency.



Ashle M. Page

Tau Beta Pi Fellow No. 831

Ashle graduated summa cum laude from North Carolina State University with a B.S. in chemical engineering and a B.S. in polymer and color chemistry. She also completed an M.A. in bioethics and science policy at Duke University and a J.D. at the University of North Carolina at Chapel Hill. As an undergraduate student, she was inducted into the NC Alpha Chapter. She completed four internships with NASA Langley Research Center, was part of the Engineering Entrepreneurs Program, and served as a mentor in STEM programs. Ashle also served in leadership positions with multiple journals, service organizations, and academic committees. She currently serves as secretary of the TBPI North Carolina Research Triangle Alumni Chapter.



Veronica Montgomery

Williams Fellow No. 42

Veronica graduated from MIT (2016) in biological engineering with minors in Spanish and materials science and eng'g. She served as MA Beta Chapter corresponding secretary and eligibles chair. She also served as an associate advisor for three years and held leadership positions as the faculty relations chair of BMES and co-vice president and co-founder of the MIT Microbiome Club. She conducted research in the Langer Lab for three years, working on improved methods of oral drug delivery which resulted in two co-authored publications. She participated in internships related to the link between health and the human microbiome at Openbiome in Boston and Clínica Alemana de Santiago in Chile. Veronica is working on a Ph.D. in biomedical eng'g under the direction of Prof. Mark Prausnitz at Georgia Tech, focused on using the skin microbiome for therapeutic purposes. She hopes to pursue a research career in the biotechnology industry.



Parker S. Ruth

Tau Beta Pi Fellow No. 834

Parker is completing his undergraduate degrees in computer engineering and bioengineering at the University of Washington in Seattle. As a member of the UbiComp Lab advised by Dr. Shwetak Patel, he explores applications of computing tools to improve the quality and accessibility of healthcare. His research includes prototyping mobile health systems to measure medical vital signs and risk factors, building wearable sensors to perform continuous physiological sensing, and designing computing tools to support population health and assay automation. Parker is fortunate to work closely with colleagues in computer science, electrical engineering, and bioengineering, in addition to several outstanding clinical collaborators from University of Washington Medicine. He will be starting Ph.D. studies in computer science at Stanford University. After obtaining his Ph.D., he hopes to become a tenure-track faculty member at an R1 research university.



Elisa B. Nieves

Record Fellow No. 30

Elisa graduated with a B.S. in biomedical engineering from the University of Florida in 2020 where she worked in Dr. Christine Schmidt's lab. Her research focus was the assessment and optimization of decellularized tissue scaffolds using heart, lung, and sciatic nerve tissues. At UF, Elisa presented research at several conferences, including the 2018-19 Annual Biomedical Research Conference for minority students and the 2019 Biomedical Engineering Society's annual meeting. Elisa is a first-year biomedical eng'g Ph.D. student in the joint Georgia Tech and Emory Univ. program. Supported by an NSF Graduate Research Fellowship, she is currently a member in Dr. Andrés García's lab. Her project looks at quantifying the forces cells exert on the extracellular matrix through the use of 3D traction force microscopy; understanding of these traction forces is critical to the study of mechanotransduction and the ability to modulate cellular activities and downstream tissue processes.



Ayushi K. Sangoi

GEICO Fellow No. 6

Ayushi graduated summa cum laude from New Jersey Institute of Technology with B.S. degrees in both biomedical and computer engineering in 2020. She received the distinction of the 2020 Newark College of Engineering Outstanding Engineer Award and Presidential Leadership Award. Ayushi serves as NJ Gamma Chapter president and an advisor to NJIT Girl Up, focused on empowering women in 3rd world countries. A three-time provost undergraduate research fellowship recipient, Ayushi has an established foundation in biophysics research and biomedical data analysis. After graduating, she accepted a competitive two-year provost fellowship and started her Ph.D. in biomedical eng'g with NJIT and Rutgers University. She serves as a TA while researching the neural mechanisms of vision therapy in the Vision and Neural Engineering Lab under Dr. Tara Alvarez. Ayushi has two co-authored publications, one first-author journal publication in review, aspires to mentor future female STEM leaders, and use clinical measures & predictive analytics to create personalized treatments.



Shikha Srinivas

Forge Fellow No. 9

Shikha will graduate from Stanford University this year with a B.S. in environmental systems engineering and a minor in human rights. She is motivated to encourage equitable infrastructure development in the face of climate change and urbanization trends. On campus, she is involved with sustainability, environmental justice, and STEM mentorship organizations. She has interned with the Air Force Civil Engineer Directorate, U.S. Green Buildings Council, and New Story, a housing non-profit. In the 2021-22 school year, she will complete a master's degree in sustainable design and construction at Stanford, with a focus on sustainable urban systems. Whether in the public or private sector, she hopes to contribute to affordable housing, disaster resilience, social computation, and urban innovation. After graduation, she plans to find opportunities designing sustainable cities and centering environmental justice in engineering practices.



Joseph Wakim

Zimmerman Fellow No. 10

Joe graduated at the top of his class from the University of Massachusetts Lowell (UML) in 2019 with bachelor's degrees in chemical engineering and mathematics. At UML, he researched microfluidic device designs for cell separation and passive mixing applications under the mentorship of Dr. Orbey and Dr. Barry. He held leadership positions in chemical engineering organizations and regularly interfaced with prospective students to promote the discipline. Today, Joe is a Ph.D. candidate in the chemical engineering department at Stanford University. Under Dr. Spakowitz, he applies polymer theory and simulation to model epigenetic factors dictating chromosomal organization. He is passionate about teaching, serving as a TA for an applied machine learning course. As an active member of Stanford's chemical engineering graduate student action committee, Joe helps coordinate first-year graduate student mentorship. After his Ph.D., he plans to apply his expertise in biophysical modeling towards a career in biotechnology R&D and would like to return to academia as a teaching professor to inspire future computational biologists.



Charles Van De Mark

Swalin Fellow No. 5

Charles graduated from the University of Colorado at Boulder with a B.S. degree in electrical engineering with a minor in biomedical engineering. His research included the development of organic electrochemical transistors for biosensing, RF devices, and methods to study the effects of EM fields on living organisms. He was also involved in many clubs and extracurricular activities, including the IEEE club, the engineering leadership program, and various tutoring and service organizations, as well as serving as CO Beta Chapter corporate liaison and event coordinator. Now at MIT, he is studying novel genetic circuits to advance the field of synthetic biology. After earning his Ph.D., Charles hopes to continue working in academia as a research professor. In the long term, his goal is to use synthetic biology principles to work towards novel treatments of neurodegenerative disease and life extension therapies.



Yiming (Jason) Zhang

Fife Fellow No. 232

Yiming (Jason) graduated summa cum laude with a B.S. in biomedical engineering and a minor in mathematics from the University of Alabama at Birmingham. As an undergraduate, Jason explored diverse areas of research including clinical, industrial, and laboratory research. In graduate school, he is interested in combining engineering, molecular, and quantitative biology to push the technological frontier of immunoengineering. Outside of research, Jason served as the AL Gamma Chapter social chair. He is also heavily involved with Housing and Residence Life as a resident assistant for three years, where he earned 2018-19 Best Program of the Year and 2019-20 Best RA of the Year. With a passion for entrepreneurship, he was named a University Innovation Fellow by Stanford University Hasso Plattner Institute of Design. After graduation, Jason will pursue a Ph.D. in biological engineering at the Massachusetts Institute of Technology starting in Fall 2021.



Ronald (RJ) Vogler

Dodson Fellow No. 8

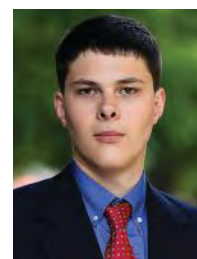
Ronald (RJ) graduated from the University of Kentucky in May 2021 with a B.S. in chemical engineering. Since 2018, he's conducted research on the synthesis and modification of polymeric membranes for applications such as heavy-metal adsorption, selective separations, and ion capture. He also completed NSF Research Experiences for Undergraduates programs at UK under Dr. Bhattacharyya and at the Univ. of Arkansas under Dr. Wickramasinghe. His research has led to three second-author publications, multiple presentations, and awards at conferences hosted by AIChE and the North American Membrane Society. Outside of research, he has collaborated with students to reestablish the UK Energy Club and create the interdisciplinary engineering outreach organization. This fall, RJ will begin pursuing a Ph.D. in chemical engineering at the University of Texas at Austin. He hopes to research sustainable technologies for chemical separations or catalysis.



Dell H. Zimmerman

Centennial Fellow No. 36

Dell earned a bachelor's degree, summa cum laude, in chemical engineering from the University of Tennessee at Chattanooga in May 2021. He has conducted research in applied nanotechnology and has published the results in the *Beilstein Journal of Nanotechnology* and the *Journal of Nanomaterials*. Notably, his research into nanoscale fertilizers represents a core contribution to the founding of S&J NanoChemicals, Inc. Dell participated in the National Science Foundation's iCompBio research experience for undergraduates in 2019. Dell was awarded a 2020 Goldwater Scholarship and a Tau Beta Pi Stabile Scholarship. He has also held multiple leadership positions within UTC's Chem-E-Car team and served as TN Zeta Chapter president during the 2020-21 school year. Dell recently completed work on an Oak Ridge National Laboratory center for nanophase material sciences user proposal. Dell will pursue his Ph.D. in chemical engineering at the University of Wisconsin-Madison.



BRAIN TICKLERS



Results From Winter

Perfect Scores

Strong, Michael D. PA A '84
Voellinger, Edward Non-member

Other

Bannister, Kenneth A. PA B '82
*Berman, Alan D. CA E '91
Berthold, Kristopher D. TX B '04
Bertrand, Richard M. WI B '73
*Bohdan, Timothy E. IN T '85
Coleman, Benjamin J. NH B '20
*Cooper, Benjamin Non-member
Couillard, J. Gregory IL A '89
Dechman, Don A. TX A '57
Fine, Joseph M. PA Z '75
Glaze, James B. KS T '75
*Griggs Jr., James L. OH A '56
*Gulian, Franklin J. DE A '83
Gulian, Joseph D. Son of member
Hasek, William R. PA T '49
*Janssen, James R. CA T '81
*Johnson, Mark C. IL A '00
*Kimsey, David B. AL A '71
Lalinsky, Mark A. MI T '77
Maino, Jon PA @ '20
Miller, David J. MA E '71
*Norris, Thomas G. OK A '56
Oliver, Christopher R. AL E '08
Parks, Christopher J. NY T '82
Penlesky, Richard J. WI B '73
Richards, John R. NJ B '76
Riedesel, Jeremy M. OH B '96
Rowe, Steven A. ME A '81
Barr, David A. Non-member
*Schmidt, V. Hugo WA B '51
*Stegel, Timothy J. PA A '80
*Spong, Robert N. UT A '58
Spring, Gary S. MA Z '82
Spring, Mitchell G. Son of member
Spring, Olivia Non-member
Summerfield, Steven L. MO T '85
Withers, Derek R. UT T '19
Zison, Stanley W. CA @ '83

*Denotes correct bonus solution

Winter Review

The hardest problem was number 5 (bowling balls) with only 31 percent correct answers.

The next hardest problem was number 3 (air bubble) with only 39 percent correct answers.

The Bonus (roller coaster) came in third with 53 percent correct answers.

Spring Answers

1: The solution to the cryptic addition is **688, + 68371, + 65, = 70245,**

The problem statement says that we're working in a base less than 10. There are nine different letters, so we must be working in base 9.

Column 4 3 2 1 0

Carries	C_4	C_3	C_2	C_1				
			A	L	L			
	A	L	0	N	E			
				A	T			
	N	I	G	H	T			

Having two Ts in column 0 tells us that $L + E = 9$ and $C_1 = 1$. C_2 can be 0, 1, or 2. Having two different digits in column 3 tells us that $C_3 = 1$. Having two different digits in column 4 tells us that $C_4 = 1$ and $N = A + 1$.

The only way C_4 can be 1 is if $L = 8$ and $I = 0$. Knowing $L = 8$ tells us that $E = 1$.

We cannot reuse 0, 1, or 8 for A, H, or N so A must be 2, 3, 5, or 6. There are 12 possible A & 0 pairs only one of which does not reuse a previously assigned digit: $A = 6$ & $0 = 3$ which implies that $N = 7$, $H = 4$, and $G = 2$. That leaves only one possible value for T: $T = 5$.

2: The exact probability of getting a sum of 50 is **0.0374894389.**

This question is related to the study of partitions. One could look to the large body of literature on the subject or use dynamic programming to find that the exact probability of getting a sum of 50 is $374,894,389 / 10,000,000,000$.

3: The probability that the reported Celsius temperature is wrong is **2 / 15.**

In any given 9 degree Fahrenheit span, there are four intervals in which the reported Celsius temperature is wrong. Taking the span 32 deg F – 41 deg F as an example:

32.5 \leq T < 32.9: Sign = 1 deg C (should be 0)

34.5 \leq T < 34.7: Sign = 2 deg C (should be 1)

38.3 \leq T < 38.5: Sign = 3 deg C (should be 4)

40.1 \leq T < 40.5: Sign = 4 deg C (should be 5)

The probability of being in one of these spans is $(0.4 + 0.2 + 0.2 + 0.4) / 9.0 = 2 / 15$. Since the problem stated that the actual temperature was equally likely to be in a range of 72 degrees F (a multiple of 9 deg F), the answer is 2 / 15.

4: One interesting approach to this problem: Start with a 4x4 magic square made up of the numbers 1 through 16. For example:

1	3	16	14
8	15	2	9
13	6	11	4
12	10	5	7

Add 11 to each entry:

12	14	27	25
19	26	13	20
24	17	22	15
23	21	16	18

Reverse each entry:

21	41	72	52
91	62	31	2
42	71	22	51
32	12	61	81

Those reversed digits form a magic square.

A computer search shows that there are 7,040 magic squares made up of the digits 1 through 16 and 5,696 of those will lead to a reversed magic square using this procedure.

5: Part A: The expected number of boxes is $363 / 20 = 18.15$

Part B: The expected number of boxes is $188,107 / 9,240 \cong 20.36$

This is an example of the Coupon Collector's Problem. One could approach this via closed form equations from the literature dedicated to this type of problem, via absorbing Markov chains or via simulation. The answers for our specific scenarios are above.

BONUS:

The flagpole's shadow rotates at approximately **69 deg/hr**.

In the diagram below:

Point O is the center of the Earth
Point N is the North Pole

- Point A is Albuquerque [Latitude = M (for Member) = 35 degrees]
- Point S is the solar subpoint [Latitude = T (for Tilt) = 23.5 degrees]

The thick blue arcs are great circles on the Earth's surface. The thin green lines are vectors from the Earth's center to surface points.

The dashed red arcs are angles between vectors.

Let's define four angles:

- A is the angle between planes AON and SOA
- N is the angle between planes NOS and AON
- a is the angle between vectors OS and ON = $90 - T$
- n is the angle between vectors OA and OS (varies with time)

By the spherical law of sines:

$$\frac{\sin(A)}{\sin(a)} = \frac{\sin(N)}{\sin(n)}$$

When we get very close to solar noon:

- A gets close to 180 so $\sin(A)$ approaches $180 - A$
- N gets small so $\sin(N)$ approaches N
- n approaches $M - T$

Substituting, rearranging, and differentiating:

$$\frac{180 - A}{\sin(90 - T)} = \frac{N}{\sin(M - T)}$$

$$180 - A = N * \frac{\sin(90 - T)}{\sin(M - T)}$$

$$A = 180 - N * \frac{\sin(90 - T)}{\sin(M - T)}$$

$$\frac{dA}{dN} = - \frac{\sin(90 - T)}{\sin(M - T)} = - \frac{\cos(T)}{\sin(M - T)}$$

The Earth rotates 15 deg/hr, so we finally have:

$$\frac{dA}{dt} = \frac{dN}{dt} * \frac{dA}{dN} = (-15 \frac{deg}{hr}) * (- \frac{\cos(T)}{\sin(M - T)})$$

The flagpole shadow rotates on the north side of the flagpole as fast as the Sun rotates on the south side of the flagpole so our answer is 69 deg/hr.

DOUBLE BONUS:

136,694 out of the possible 15,820,024,220 deals are a gin.

Working out the combinatorics for many of the gin combinations is challenging. The overall problem has the additional challenge of tracking hands that qualify as gin in more than one way. Take, for example, a hand with the following cards: 2, 2, 2, 3, 3, 3, 4, 5, 6. This qualifies as gin in two ways:

- 3 of a kind (2, 2, 2) + 3 of a kind (3, 3, 3) + 4 card straight (3, 4, 5, 6)
- 3 of a kind (2, 2, 2) + 4 of a kind (3, 3, 3, 3) + 3 card straight (4, 5, 6)

Adding up the ways of making each possible gin combination (141,982) and subtracting the number of hands that qualify as gin in more than one way (5,288) leaves us with 136,694 gins.

New Summer Problems

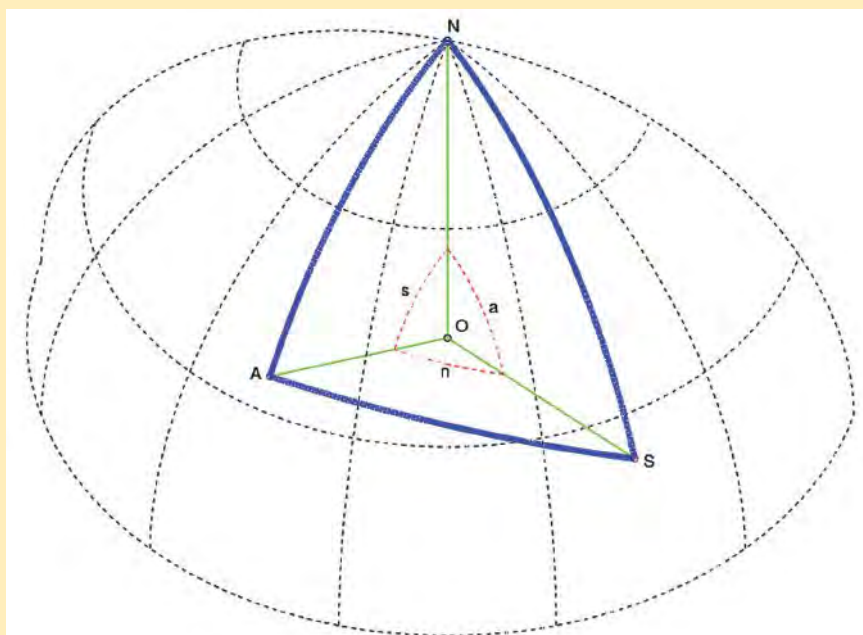
1: Wrongs Make a Right

Contrary to conventional wisdom, two wrongs can make a right, at least in the sense that the cryptic addition WRONG + WRONG = RIGHT has a solution. In fact, it is also possible to have three WRONGs equal a RIGHT. Our question is, what is the minimum value of w ($w > 1$) such that w WRONGs do not equal a RIGHT? The usual rules of cryptics apply and one can assume all the values are in base 10. Of course, the same letter can have different values in different solutions.

—Howard J. McIlvried, PA Γ '53

2: Tennis Rankings

The Nets and the Deuces play each other in a tennis tournament.



BTs continue on page 43.

YOUR LEADERSHIP JOURNEY

What do you think of when you think about improving your leadership skills?

BY MICHAEL L. PETERSON, IOWA ALPHA '89

Is improvement something on your “bucket list” that you always mean to get to, but haven’t been able to start?

Or, would you like to improve but you haven’t been sure how to start? Have you thought that perhaps you’ve already grown all you can and that you’ve hit your limit in this area? Is it an area that you feel has been taken over by self-help gurus, CEOs, and award winners who you have a hard time relating to?

If you’ve ever had any of these kinds of thoughts, this article is designed to help you move past those hesitations, get you energized (or re-energized) about your untapped leadership potential, and also **give you some concrete, achievable next steps that will move you forward in your leadership journey.** We’ll also stop along the way to hear from great leaders throughout history to reinforce some of the concepts we uncover here.



“I long to accomplish a great and noble task; but it is my chief duty to accomplish small tasks as if they were great and noble.”

—Helen Keller, American writer and activist



“You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.”

—Jane Goodall, British anthropologist

First, if we’re going to improve our leadership skills, we need to be clear on what we mean by leadership. There are all kinds of definitions in the literature, but the one I’ve found most useful in my journey is this: “causing an action or change to happen which would not have happened otherwise.” At first glance, this makes sense because most people expect a leader to make things happen, but there’s a few other deeper insights in this definition which I find helpful.

Anyone can be a leader and grow their leadership skills. The definition doesn’t say how big or impactful the actions need to be. You can be the leader of a nation or a company, of course, but you can also be a leader in a dorm room, in a

family, in a work group, or even a leader of yourself, to get started. You also don’t need an official title to be a leader; as long as you’re causing things to happen, that counts!

Therefore, if anyone can be a leader and leaders make things change, anyone can make a difference. This means that we can and need to make a difference wherever we are, instead of giving up because problems seem insurmountable or because we’d like to assume it’s “their” responsibility to address them, rather than ours. One positive metaphor which is helpful in this regard is taking an attitude of “plus one;” rather than expecting to change the world or totally fix the problem you’re working on, start out by aiming for a small improvement of “plus one.” Once you figure that out, you’ll learn from and get a boost from the experience, which will help you achieve “plus two,” “plus three,” or even more the next time.

We’ll focus on two general areas of effort, which feed on and synergize with each other:

1. Getting the **INSIDES** right: Strengthen, Focus, Balance
2. Getting the **OUTSIDES** right: Listen, Interact, Influence



GETTING THE INSIDES RIGHT
STRENGTHEN:
KNOW AND
LEVERAGE
YOUR
STRENGTHS



"The finest thing in the world is knowing how to belong to oneself."
—Michel de Montaigne, French writer and philosopher



"If you spend your life trying to be good at everything, you will never be great at anything." —Tom Rath, American consultant and author

Although the world can seem daunting and incredibly complex at times, the positive flipside is that there are so many opportunities to choose from to make things happen! Before you choose where to start, though, it's best to take an inventory of yourself and figure out what excites you and what inner strengths you can bring to the party. There are many tools available to help with this (Clifton-Strengths, Meyers-Briggs, and others), but at a high level, the common starting point is to figure out what you're good at, what energizes you, and where you'd

like to put your energy. Here's a few practical questions, to get started:

- **What 5 positive adjectives would you use to describe yourself?**
- **What are your 5 favorite activities that give you energy and make you happy?**
- **What would you consider your 5 biggest successes in the last year? What common traits do you see across any 2 or more of these?**

For example, do you get excited by organizing things, creating new ideas, putting processes into place, teaching others, or by finding answers to interesting questions? Any of these, and many more, can be areas where you can lead and make change happen. Also, as you create your lists, keep in mind that not everyone is good at what you are good at, so don't assume you have nothing to offer or that the items on your list are too common to be useful. I can guarantee that your list will be different than anyone else's and, therefore, you have unique gifts to bring to the table!

As you work on identifying your strengths, here are three common negative behaviors to avoid to help you truly make the most of your talents:

Don't focus on your weaknesses, at least not yet. There's a lot of pressure at times to think you need to fix your weaknesses to get better, but research shows overwhelmingly that you can accomplish more by finding what you're good at and spending time there and let others (with different strengths) focus on the actions that would require skills in your weak spots.

Don't try to be everything to everybody or to satisfy everyone by your actions. There are plenty of actions out there you can choose to focus on, so pick a few that excite you and focus on those. Let some of the 7+ billion other people in the world work on the other ones for now.

Don't be envious of others' strengths. It's easy to fall into the trap of assuming that others have it easier, or wasting time wishing you had the strengths you see in other people, but that's not going to move you forward. Instead, take stock of your own strengths and work with those; be assured you have plenty of potential to work with on your own, rather than wishing you could have someone else's!

GETTING THE INSIDES RIGHT

FOCUS: DETERMINE YOUR DEFINITION OF SUCCESS



“Insist on a life of meaningful work.”

—Adrienne Rich, American poet



“Each man is the architect of his own destiny.” —Appius Claudius Caecus, Roman politician

Once you have a feel for what your strengths are, you will have a great start on where you should focus to make the best use of them. The important next step here is to define what success means for you. As you do this, it's important to think about and focus on the time frame—are you looking to define long-term success or short-term success?

To better hone your definition of long-term success, spend some time developing answers to these questions:

- **How will you know if your life has been a success?**
- **How do you want your obituary to read?**
- **What is the one sentence that you would use to sum up your life's work?**

These are heavy questions; many people go their whole lives without totally figuring these out, or their answers evolve over time as new experiences and opportunities come up.

So, if you're not quite ready for this level of definition, that's OK; an easier starting point may instead be to do a much shorter-term version of this, specific to a single project or activity, or a short time frame:

- **How will you define success for the next paper you write?**
- **How will you know that your current project at work has been successful?**
- **At the start of a new day (or week or month), what are the 3 tasks you'd like to accomplish and how will you know when they are done?**

These may sound like simple questions, but it is crucial to define your own success measures; otherwise, how will you know if the change you trigger is the right one? Your definition of success will be very personal to you and will probably be different than your friend's or co-worker's, even for the same task, which is OK! Take the time to try this on at least one task or activity each day, whether it's a workout, an assignment, an article you choose to read, or a conversation you have with a friend. As you practice this for short-term activities, you will build up your “success” muscles and strengthen your ability to set goals and define your priorities so that you can start to think longer-term and bigger-picture as you move forward in life.

GETTING THE INSIDES RIGHT

BALANCE: GROW AND LEARN EACH DAY



“Every day, in every way, I am getting better and better.”

—Emile Coue, French psychologist

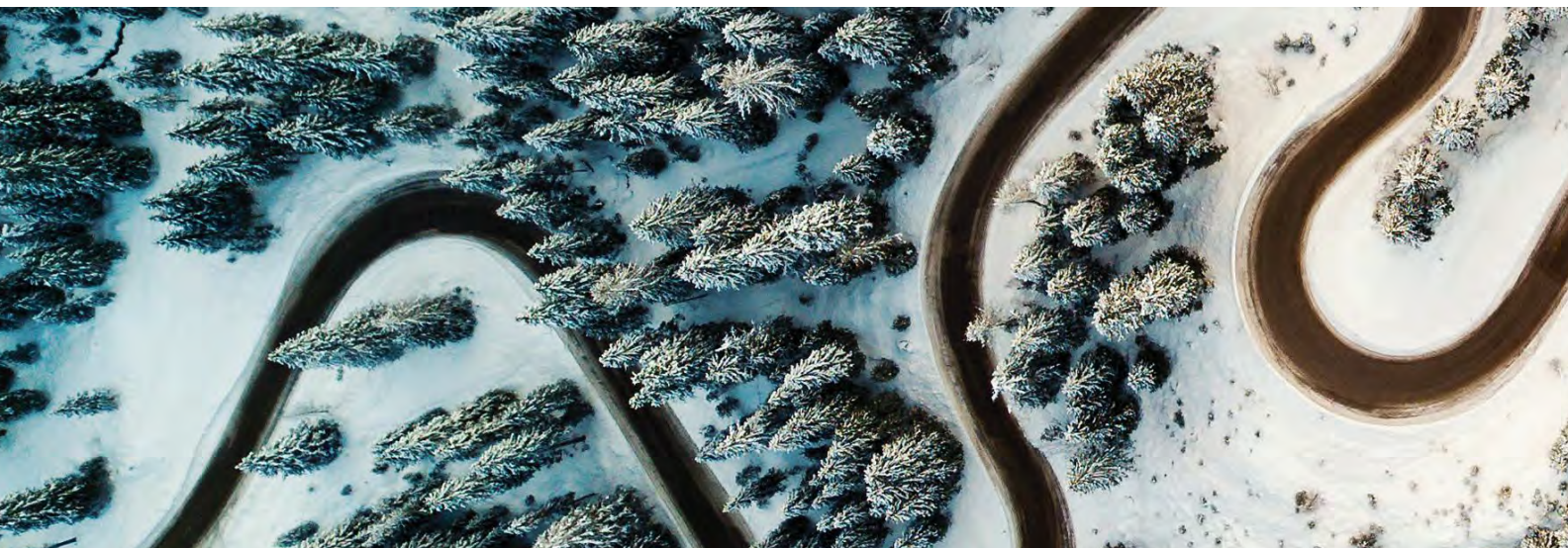


“Why stay on the earth, unless to grow?”

—Robert Browning, British poet

Nobody would argue that it's not a good thing to grow each day; the world of life and business is founded on this principle. To make sure you're growing (no matter your age!), pick a couple areas you want to improve on, and start small with what you do differently each day, to turn work into a habit that you look forward to each day, rather than a chore that must be done. As with your strengths or your success definitions, be sure not to take on too much at once; after all, growing in just one area is better than growing in none! Don't worry, too, about picking areas that seem to be big, important, or directly relevant to your roles in life for now; it's far more important to start by picking areas you are excited about, can have fun with, and that allow you to try something new and different. Here are some examples of areas and small goals to get started:

Physical: Pick a workout you enjoy and do it for 15 minutes at least 3 days a week (pick a time of day that you can stick to and be consistent).



Mental: Read 5 minutes a day (for example, books or magazines you wouldn't normally pick up; and scrolling through Facebook or Instagram doesn't count!), do a brain-training app each day, start a book club with a couple friends or family members

Social: Send a note each week to a contact you haven't talked to in 6 months (via LinkedIn, email, etc. – whatever is most convenient for you)

Spiritual: Say a prayer or meditate for 5 minutes each day (quietly in a room or even during a car drive if that's your best available alone-time)

GETTING THE OUTSIDES RIGHT

LISTEN: BE AWARE OF WHAT'S GOING ON AROUND YOU, BUT CHOOSE FOR YOURSELF IF, WHEN, AND HOW YOU RESPOND



“Some misfortunes we bring upon ourselves; others are completely beyond our control.

But no matter what happens to us, we always have some control over what we do about it.” —Suzy Szasz, American writer



“It's not what happens to you, but how you react to it that matters.”

—Epictetus, Greek philosopher

Now that you've got the “inside” right (or at least better), it's time to start focusing on how the “outside” affects you and how you can affect it. One of the most powerful ideas in philosophy and success literature deals with the gap between when you receive an input (stimulus) and when you choose how you will react to it (response). In most cases, you don't have much control over the stimulus, but you always have control over your response (believe it or not). Famous thinkers, from the Stoic philosophers of ancient Greece to Elie Weisel, Holocaust survivor and Nobel Peace Prize winner, have all stressed how important this is. To improve your ability to handle that gap between stimulus and response appropriately, the first key is to figure out if the stimulus is in your control. If it's not, don't blame yourself or others; that will just burn up energy and not accomplish anything. Instead, accept it for what it is and manage your response. Remember, **you** get to control this!

For example, when the phone rings, do you really have to answer it right then? When you get an email notification, do you really have to stop what you're doing and answer that email right then? When you see a negative news article, is it accomplishing anything for you to react and have an opinion on it? The answers to these questions is **NO** far more often than you may realize; by choosing not to react, you will let yourself focus instead on what you can control and finish first. (Better yet, for these kinds of distractions, figure out how to mute your phone and shut off your email notifications and see how long you can go without those interruptions being in place before you get in trouble. Most likely, it's

a lot longer than you think, and you will be more productive as a result.)

GETTING THE OUTSIDES RIGHT

INTERACT: FORM RELATIONSHIPS WITH THE PEOPLE YOU MAY END UP LEADING



“The best way to find yourself is to lose yourself in the service of others.”

—Gandhi, Indian reformer



“Life is an exciting business, and most exciting when it is lived for others.” —Helen Keller

When it comes to people, you can only make changes happen successfully if you have a positive relationship with the people with whom you interact. This doesn't mean that everyone has to be your best friend, but it does mean you treat each other with respect and that you truly do respect others' strengths and abilities, just as you'd like them to do with you. This can often be a challenge, especially in cases where you're the “newbie” in a group, when you've joined a team during COVID that you've never met in person, or when everyone seems so busy that there's not time to get to know each other.





Here are a few ideas to improve and grow your interactions with those around you:

Start off team/club/work meetings with an icebreaker question, such as “what did you do last weekend?” “what’s something new you’ve made a habit of during the past year?” or “what’s the most important trait you look for in a coworker?” (Start with easy, silly, fun ones at first and move to deeper questions when the group is ready.) If you’re the facilitator of the group, add this to the agenda; if you’re not, ask the facilitator to try these some time.

Introduce yourself to someone you don’t know (at work, the gym, in a club). This is awkward for many of us (especially us introverts), but most everyone appreciates someone making the “first move” on this. Embrace the weirdness and just try it; for example, an opening line may be “Excuse me, I know we’ve passed each other in this building many times before, but I’ve never caught your name. I’m Mike...”

Take an attitude of servant leadership in your interactions. When you interact with people, don’t worry about what you’re going to get out of it; instead, focus first on what you can give someone else to help out. This gets the relationship off to a far better start, and you can be sure that the favors will come back to benefit both of you in many ways in the future.

GETTING THE OUTSIDES RIGHT **INFLUENCE:** TAKE A CHANCE AND TAKE A STANCE



“Why not go out on a limb? Isn’t that where the fruit is?”



“Trust that still, small voice that says, ‘This might work and I’ll try it.’”

—Diane Mariechild, writer

Here’s where the rubber meets the road. Now that you have your insides right, you’ve listened, and you’ve built a relationship with others, you’re in a great position to influence to make things happen. Here’s some final thoughts in how to lead successfully:

Think about what you’re asking for or wanting to see happen, before you ask for it. Before you ask for a change, take a second and think about “why do I want this to happen.” If you have a lot of good reasons, go for it. If you see pros and cons, be open and share those and have a discussion with others first to decide what to do; they may educate you and cause you to change your thinking about the right next step. Or, if you can’t think of any solid good reasons, maybe you should rethink your idea in the first place.

Pick your “battles.” Focus on leading or asking for change around areas that you are passionate about and that you know are in the control of the people you interact with. If these are in place, you will have a far greater chance of success, and if you stay consistent to your strengths and goals, you will gain the respect of others and be in even better shape to lead and drive the next change.

Celebrate success and don’t be afraid of failure. Asking for change is hard, and following through on changes is even harder, especially in a world of short attention spans and competing priorities. If you see progress happening, point it out and celebrate it. All humans, from CEOs down to small children, like to know they are making progress and doing the right thing; you don’t need to be in a position of authority for your feedback and complements to be greatly appreciated.

WHEW! THERE’S A LOT HERE, BUT DON’T FEEL LIKE YOU NEED TO TACKLE ALL 6 AREAS AT ONCE.

If it helps, think of this article as one big “stimulus,” but you get to choose your “response” now. Take a look back over these focus areas (**Strengthen, Focus, Balance, Listen, Interact, Influence**), and decide for yourself which one you are most excited about improving. From there, take one or two of the concrete steps mentioned in that section, and give them a try a few times, to see if you can form a habit of them or make an improvement there.

Better yet, if you know another Tau Bate who has this article, call them up and ask if they would be willing to be an “accountability partner” with you for a few weeks, where you each pick one of these areas, then check back in with each other each week or so, to share your progress or challenges in that area. Or, if you don’t have a Tau Bate handy nearby, share these ideas with someone else you know or would like to know and give them a try together. I wish you all the best for a successful next step in your leadership journey!

.....
MICHAEL L. PETERSON received his B.S. in electrical engineering from Iowa State University, where he was a founding member of the PrISum solar car team. He also has master’s degrees in mechanical engineering and management from MIT. His career at General Motors included a variety of manufacturing engineering and corporate strategy/planning positions. He retired at the end of 2018. Currently, he is a lecturer for the engineering and business schools at Oakland University and also a co-owner, with his wife Michelle, of Challenge Island - Oakland County East, a STEAM enrichment program for children ages 4-14. Mike was a chapter president at Iowa Alpha, and has also served TBII as a District 7 Director and Engineering Futures Facilitator before joining the Executive Council in 2019.

The STORY BEHIND The PHOTO

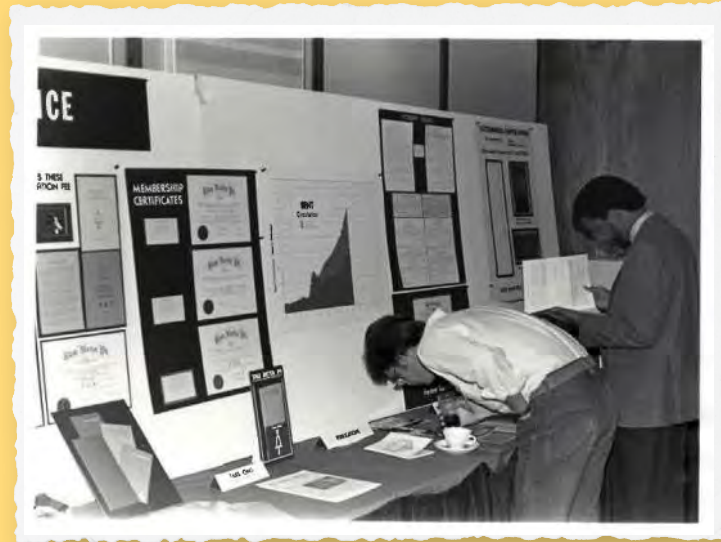
Announcing the Summer 2021 “Caption This Photo” Contest!

This photo from the Winter 1981 issue of *The Bent* was taken at the 1980 Annual Convention in Tulsa, OK, where the Convention display from Headquarters drew close scrutiny.

How to Enter: Send us your cleverest caption(s) for this photo from *The Bent* archives. If the judges vote yours as one of the top three (and you have not been a previous winner), we'll send you a TBP t-shirt of your choice!

Email your entry to captions@tbp.org or mail to *The Bent* of Tau Beta Pi, Caption Contest, P.O. Box 2697, Knoxville, TN 37901-2697.

DEADLINE: MONDAY, AUGUST 2, 2021.



The WINNERS of the Spring 2021 “Caption This Photo” Contest:

The Spring 2021 contest brought 56 entries from 46 readers. Thank you! View all entries, including captions and results from recent contests, at tbp.org/pubs/captionContest.cfm.

1ST PLACE:

“Next time an even bigger challenge: ‘Y’ALL (you all)”

Gary L. Garriott, *IN Δ '69*

2ND PLACE (2-way tie):

“It’s not just a greeting, it’s a lifestyle.”

R. Wayne Headrick,
Ph.D., P.E., *AZ B '70*,
and

“Howdy y’all, Welcome to Texan 101 and if y’all are ready and rarin’ to go then I’m fixin’ to teach y’all some Texas slang before y’all might could have a pop quiz!”

Gene A. Cochran, *MO B '66*

3RD PLACE:

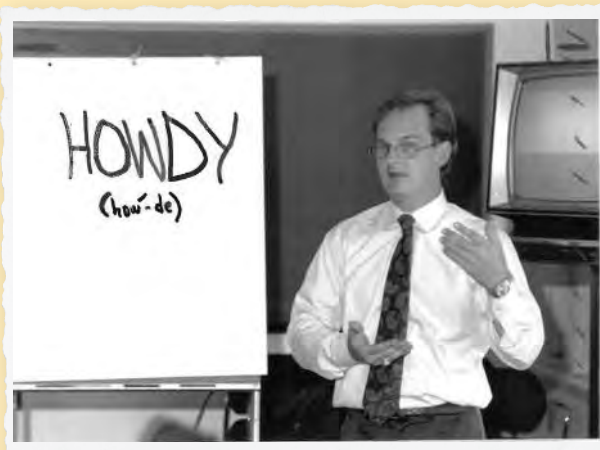
“A welcome greeting. Next sheet is how we dismiss someone, “Git.”

Frank S. Vaden III, *TX Δ '56*

4TH PLACE:

“Sixth and final day of review in Journalism 301 following WHODY, WHATDY, WHENDY, WHEREDY, and WHYDY.”

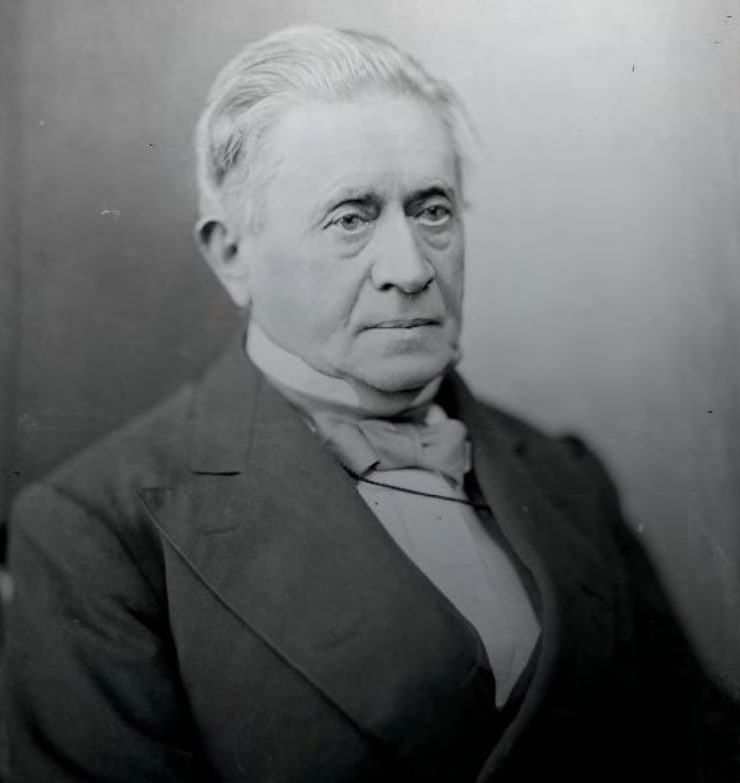
Lee A. Hunnell, non-member



**CONGRATULATIONS
TO OUR WINNERS!**

T-SHIRTS ARE IN THE MAIL!

▲ The Spring 2021 Caption Contest image, taken at the 1991 Convention at College Station, TX, shows Lloyd C. Lyons, *TX Δ '89*, teaching the finer points of “Texan” in one of the earlier Engineering Futures Sessions.



THIS IS THE NINTH IN A SERIES OF ARTICLES THAT EXPLORE THE HISTORY OF SCIENCE AND ENGINEERING.

One way in which this history has been preserved is in the names of the scientific units that we commonly use. Those units will serve as starting points for these articles as we explore “Why do we call it a...?”

By: **Lyle D. Feisel, Ph.D., P.E. (ret.), Iowa Alpha '61**

WHY DO WE CALL IT A...

HENRY

In the 18th and 19th centuries, the important scientific discoveries were being made in Europe and most of the scientific luminaries were located on that side of the Atlantic. There were, however, a few exceptions such as Benjamin Franklin, a quintessential American. He is remembered primarily for his political activities (and *Poor Richard's Almanac*) but was also known in the 1700s as a scientist. He performed several basic experiments in electricity, including his ill-advised but successful use of a kite in a thunderstorm to demonstrate that lightning was just the movement of electric charge—the same charge or “fluid” that could be collected in a Leiden jar. Another renowned American scientist was Joseph Henry, whose name is remembered in the unit of inductance in the SI system of units.

He made many contributions to science and is specifically credited with discovering and characterizing the phenomenon of self-inductance.

So, what is this self-inductance? Yes ... um ... well. It's complicated. About all I can say is that when we increase the current in a wire, a voltage opposing that increase will be “induced” in that wire. And when we decrease the current, a voltage will be “induced” that will try to keep that current flowing. If we don't *change* the current, nothing. Nada. In any event, it was the discovery and exploration of this phenomenon, self-inductance, for which our hero, Joseph Henry, is famous. But he did a lot of other things, too. Let me introduce him.

Joseph Henry was born in Albany, New York, on December 17, 1797.

The United States was less than twenty years old and John Adams had just succeeded George Washington as President. It is also the year that Albany became the capital of New York State. When his father died, Joseph was sent to live with his grandmother in Galway, NY, a small town farther upstate. There, he attended elementary school and also made ample use of the local library. Even as a child, Henry worked part time and at the age of 13 became an apprentice to learn watchmaking and silversmithing. When he was 15 (about 1812), Henry returned to Albany to live with his mother. About this time, he discovered that he had considerable talent for theater and seriously considered becoming a professional actor. But he also developed an interest in science or, as it was known then, natural philosophy.

In 1819, Henry became a student at the Albany Academy, a boy's prep school that had been founded a few years before (Note: The academy still exists. In 2007, it merged with the Albany Academy for Girls and the two continue to function as the Albany Academies). Here, he excelled as a student and soon was helping with the teaching. As he studied, he first considered becoming a medical doctor but then became increasingly intrigued with science and engineering. Fortunately for science—and for this narrative—he decided to make science his life work.

In 1824 (Henry is now 27 years old), he took a few months leave from the academy and served as the assistant engineer on a project to survey a proposed road in New York State. When he returned, his talent and hard work were recognized and he was appointed Professor of Mathematics and Natural Philosophy at the academy. Henry now had the time and resources to do some serious experiments.

One area that captured Henry's attention was the field of electro-magnetism: specifically, building ever bigger and more powerful electromagnets. In 1825, William Sturgeon, an English physicist, built a horseshoe-shaped electromagnet that was able to lift nine pounds. Henry read about this achievement, apparently viewed it as a challenge, and set out to extend the technology. By insulating his wires with silk, cotton, or linen (some say he used his wife's petticoat) he was able to pile more turns of wire onto increasingly large iron cores and support ever larger weights. His power source was, of course, galvanic cells or batteries and he experimented with varying numbers of cells connected in series or parallel to achieve different levels of lift. The maximum lift he achieved at Albany was 750 pounds.

In 1830, as now, elite universities strove to establish outstanding facilities and perhaps compete in the quality of their laboratories. Yale College (became Yale University in 1887) learned of Henry's prowess in the field of electro-magnetism and contracted with him to build a *really* powerful electromagnet. Henry was happy to comply and in 1831 unveiled the Yale electromagnet that was

able to lift an astounding 2063 pounds. One source states that, "It is eight times more powerful than any magnet hitherto known in Europe and between six and seven times more powerful than the great magnet in Philadelphia." Go Yale! Take *that*, Philadelphia!

While Henry was generally more interested in basic science than the practical application of that science, he did make some forays into gadgetry. One such gadget, shown (Figure 1 below) was a precursor to electric motors. The horizontal bar is an electromagnet that can rock back and forth. When it rocks to the right, the wires contact a battery that delivers a current that makes the bar rock to the left. When it rocks to the left ... well, you get the picture. He reached 75 oscillations per minute before moving on to other issues.

One of those issues was the matter of self-inductance. Henry observed that when he made a contact that sent a current through his electromagnet, nothing unusual happened. However, when he broke that contact, there was often a spark where it broke and, if he was holding the contacts, he experienced a shock. Both he and Faraday had demonstrated that changing a current in one wire could induce a voltage in another wire nearby. So Henry deduced that what he was seeing was a current-carrying wire inducing a voltage in itself—self-induction. Of course, the concept of voltage did not yet exist, but the spark and shock showed that something was happening. Scientists and engineers always want to measure things—so of course Henry wanted to measure the strength of the shocks he was inducing. The only device he could come up with was the human

physiological response. He recorded shocks that could be felt a) only on the tongue, b) as high as the shoulders, c) by 26 persons holding hands, and d) by 56 students holding hands. A crude scale by current standards, but it gave scientists of the 1830s a way to describe their findings. I have never found any writings to say how the students felt about this method of measurement.

While Henry is known primarily for his scientific contributions, there are other aspects of his career that are noteworthy. In 1832, he was appointed Chair of Natural History at the College of New Jersey, now known (since 1896) as Princeton University. Many of the scientific investigations described above actually took place at Princeton, where the college administration provided significant support. Henry was particularly appreciative of the services provided by his laboratory assistant, Sam Parker, a free Black man who performed much of the laboratory work.

In 1846, Henry was selected to lead the newly created Smithsonian Institution. His concept of the Smithsonian was that it should be primarily a research organization. Subsequent secretaries—for such is the title of the head of the Smithsonian—modified that vision to include serving as a museum, the dominant mission of the institution today. Henry served in this position until his death in 1878.

To this day, Joseph Henry is honored at Princeton University, the Albany Academies, and the Smithsonian Institution. His career was long and varied, but his most noted achievement was the discovery of the phenomenon of self-inductance. And that is why we call a henry a henry.

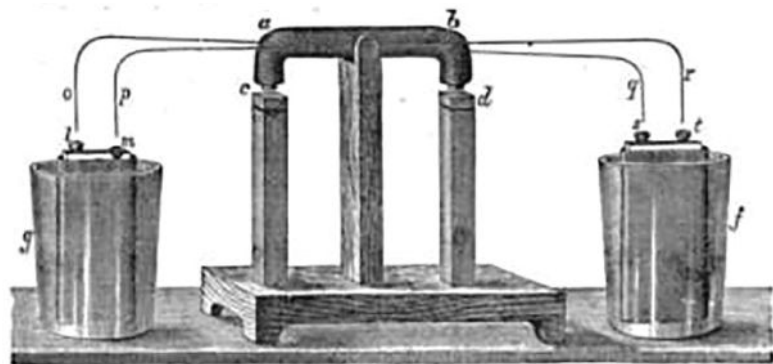


Figure 1: Electro-magnetic Engine

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The U.S. will be best served in the long-term by creating more scientists, mathematicians, and engineers.



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My engineering education has helped me in all aspects of my life.

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Kersten, Robert Donavon '49
Leach, David Robert '76
Wong, Jack Onc '81
- AZ Γ** West, Taylor Lincoln '84
- AR A** Gunderman, Stacy Linda '88
Kooker, Stephen Lowell '63
Sharp, Steven Harold '76
Weaver, Mark Edwin '77
- CA A** Dietsche, Laura Jean '81
Figueira, Michael Robert '73
Mar, Wing Jong '79
Ong, Allen '70
Secor, Kenneth Eugene '55
Wing, Jimmie '52
- CA B** McQuiston, James H. '51
- CA Γ** Barnum, James Robert '65
Dixon, Harvey Lewis '52
Elliott, Dennis M. '62
Frantz, Paul James '78
Ma, Contan Liang '99
Root, Steven Dale '75
Taniguchi, Brian Yoshito '77
- CA Δ** Barr, Juliana '80
Fernandez, Ferdinand Francis '58
Griffith, Glen Arthur '72
Johnson, Wesley Walter '66
Koppany, Charles Robert '63
Nakatani, David Takeshi '63
Roof Sr., Dwight Ellis '57
- CA E** Holzman, Eric Louis '84
Ohgi, Frank '60
Reichert, Ralph Jeffrey '67
Yoshizumi, Steven Akira '88

- CA Z** Nulk, Robert Anthony '58
Overbey, John Kirkwood '67
Perrin, Michael Elton '67
Vlahutin, Paul Andrew '65
Wagner, J. Arthur '61
- CA H** Asgari, Ramak '99
Clark, William Charles '72
Rawson, Rollin Fred '61
Sakai, Tessi '75
- CA Θ** Berg, Jeffrey A. '84
Blanco, Catherine Elaine '97
Kawahara, Lester Mitsuto '80
Kolderup, Nils Petter '60
Piburn, Russell J. '75
Schuck, Charles Michael '65
Thabault, Charles W. '91
- CA I** Bruce, Jack Edward '62
Dembegiotes, Pantele '84
Haan Sr., George Thomas '69
Hanna, Hugh Allen '60
Kuspa, Joseph Anthony '93
- CA K** Humphreys, Evan '75
Moncsko, George Edward '68
Taylor, Robert Derek '82
- CA Λ** Johnson, Lowell H. '65
Schmitz, James Arthur '83
Verbrugge, John Allen '77
- CA M** Clark, David James '99
Freeman, Karl Allen '89
Hagler, Richard Dwight '85
Johnson, Bruce William '78
Lee, Steven Yang-Sien '86
Sciacca, Joan Michelle '87
- CA N** Harenberg, Donald Dean '61
Howard, Robert Stanley '80
Jordan, Patrick Anthony '87
Lamoureux, Mark S. '81
Lopez, Michael Howard '95
Mayer, Robert James '85
Newberry, Conrad Floyd '57
Ortiz, Janet M. '82
Rheinhardt, Brian J. '83
Veit, Brian Richard '98
- CA Ξ** Doeing, Brian James '81
Dorrance, Gary Dennis '72
Greco, Anna Maria Elvira '81
Patterson, Richard Harold '74
Preston, Kimberly Denise '96
- CA O** Alvarez, Desi '75
Caballero, Ross Charles '72
Elliott, Pamela Ann '88
Mulvihill, Michael Edmund '60
Page, John Arnold '61
- CA Π** Mullen, Merritt David '70
Steinberg, Dennis Philip '72
- CA P** Costello, Vincent J. '08
Koehn, Calden Ray '81
Koehn, Lisa Renee '82
Mandrell, Nathan Keith '92
Owens, Lawrence Paul '82
Radasky, William Albert '81
Lotocky, Daniel A. '84
- CA Σ** Dawson, Carole Jeanne '85
- CA Φ** Shelly, Ronald W. '62
- CA Ψ** Chiu, Corinna Jane '93
- CO A** Trembly, Steven Alan '93
- CO B** Brooks Jr., Lowell Ward '62
Cormack, Christopher W. '82

- Herhold, Mark Kenneth '80
Hidahl, Jerry Paul Edward '77
McBride, Michael James '73
Strange, Lynn M. '81
Talcott Jr., Noel A. '73
Walker, John Sherwood '53
Watry, Michael Owen '86
Ton, Scott Marshall '74
†Weese, John Augustus '55
- CO Δ** Middlekauff, Stephen Allen '09
- CT A** Bennett, Beth Anne '91
Cleland, Alan Stuart '60
Cooper, Richard Craig '63
Hoffmann, William Hurlock '50
King III, C. Judson '56
Kucera, Daniel Jerome '61
Troutman, John Leo '65
- CT B** Devin, Maurice Roger '73
Fappiano, Michael D. '87
Pollack, Edward Eliot '70
Thompson, Gerald Franklin '50
Zajac, Gerald Edward '68
- CT Γ** Boccia, Chris-Michael '97
Judd, Kyle Peter '91
- DE A** Cercy, Michael James '81
Clements, Thomas Carter '75
Folsom, Steven Allen '77
Gulian, Franklin Joseph '83
Hahn, Charles Rodney '73
Packard, Lawrence Bruce '88
- DC A** Hull, Wayne Kenneth '59
- DC B** Delgado, Antonio J. '93
Lee, Wah H. '73
Orzech, Joseph Miller '71
Ratto, Christopher R. '07
- DC Γ** Grassel, Herbert Hans '77
Mitchell, Reginald Stuart '65
Whitham, Charles Lamont '61
- FL A** Bowles Jr., Carl Houston '54
Flewellen Jr., William Banks '50
Frazier, Lori Marie '77
Giolma, J. Paul '69
Gunson, William Edgar '50
Lorberbaum, Henri Stuart '77
Mennes, C. Martin '68
Traverse, Richard Stephen '71
Vande Vusse Jr., Gerald '65
Walton, Ray '77
Woodward, Michael Boyd '85
- FL B** Sipes, Alesia Jones-Parra '84
- FL Γ** Ball, Arthur Morley '70
Brookins, Thomas Michael '81
Chenkin, Joseph Alan '82
Dip, Anthony '86
Lancor, Barbara Jean '79
Stagner, Ralph Scott '82
- FL Δ** Woods, David Wayne '81
- FL Z** Fricke, Steven Allen '93
Hatfield, Thomas Anthony '87
Crawford, David William '61
Dixon, Daniel Benjamin '63
Faulkinberry, David Laws '77
Flegal, William Malcolm '66
Hair, James Graham '59
Kaduck Jr., William Walter '76
Lorenzo, Donald Kevin '77
Peatman, John Burling '56
Smith, Micheal Monroe '79

Alumni Giving



Delta Club

Col. William D. Benton, USAF, Ret.
MS A '71

I remain convinced that an engineering degree is the best investment a young person can make for their future and community.

Chi Club continued

- Sudderth, Stella K. '80
 - Tundermann, John Hayes '63
 - Ware Jr., Clyde Lee '59
- ID A**
 - Dafoe, Kathryn Michelle '05
 - Peters, Daniel J. '80
- IL A**
 - Bassler III, Robert Edward '74
 - Bein, Robert Walter '56
 - Benjamin, Roland John '50
 - Benzinger, Leonora Ann '86
 - Clark, Elliot Andrew '83
 - Cunningham, Lawrence K. '76
 - Jonas, Steven Geza '66
 - Kasik, Phillip Mark '68
 - Knox, T. '86
 - Lanzerotti, Louis John '60
 - Le Blond, Peter Carl '75
 - Rose, Richard C. '79
 - Rybalko, Michael '11
 - Schilson, Robert Earl '50
 - Smith, Leslie Garrett '48
 - Sorenson, Gregory Erik '03
 - Szumski, Daniel Raymond '80
 - Vogel, Rick M. '80
 - Waranauskas, Amy Louise '85
 - Wilkins, Gregory Martiné '92
- IL B**
 - Kusner, William John '59
 - McCormick, Thomas Joseph '60
- IL Γ**
 - Sodoma, Mark Thomas '82
 - Cunningham, Richard G. '43
 - Dietrich, George Wayne '66
 - Gubisch, Roland Werner '64
 - Miner, Warren Philip '59
 - Schwartzbard, David Leigh '91
 - Wilsak, Richard Allen '78
 - Witt, Frank A. '55
- IL Δ**
 - Toon, James Bertram '87
- IL E**
 - Garfield, William Michael '83
 - Williams, Michael Joe '95
- IL Z**
 - Wislek, Michael Anthony '89
- IN A**
 - Binash, Irene Marie '79
 - Bower, William Walter '67
 - Brinson, Robert James '60
 - Clodfelter, Donald Glen '55
 - Cripe, Duane Byron '82
 - De Poy, Phil Eugene '57
 - Delleur, Jacques William '49
 - Edwards, Deborah Jane '85
 - Findley, Richard Allen '66
 - Hall, Thomas Wayne '67
 - Herendeen, Robert Oliver '65
 - Hohn, Richard Edward '62
 - Kettering Jr., Floyd Firman '63
 - Mosier Jr., Andrew C. '78
 - Muehlbauer, James Herman '63
 - Paniaguas, John Steven '73
 - Paszkiel, Christine Ann '85
 - Risa, Kristen '69
 - Roby, Dennis Edgar '60
 - Schult, Thomas Herold '64
 - Sommers, Steven Raymond '78
 - Sosnay, Richard Gordon '66
 - Travis, John Charles '47
 - Warren, Scot William '83
 - Willis Jr., Charles Pressley '48
 - Wilson, Joseph Mark '50
 - Wright, Ronald Robert '71
 - Yoder, Norman Everett '71
- IN B**
 - Friel, Leroy '57
- Marum, Steven Edward '73
 - Rosenbarger, Donald Glenn '78
 - Schipper, Michael Joseph '82
 - Stant, George Robert '76
 - Yee, Stuart '89
- IN Γ**
 - Galezewski, Thomas M. '78
 - Hutchins, Robert Leon '62
 - Kenrick, Thomas James '81
 - Murray, Francis O'Brien '68
 - O'Connor, Brian Thomas '72
 - Springer, Denis Eugene '67
- IN Δ**
 - McAlear, Hugh M. '64
- IN E**
 - Liechty, Douglas Lynn '73
 - Shefer, Ilan Gideon '77
- IA A**
 - Tyler, Thomas Lee '54
 - Amos, L. Lyeal '69
 - Carosella, Sandy L. '88
 - Ellingrod, William Wayne '54
 - Hefty, Becky Kay '80
 - Henderson, James Allen '70
 - Keene-Mason, Alice Fay '05
 - King Jr., Maurice Albert '67
 - Maifield, Christopher James '95
 - McGinnis, Bryan John '63
 - Puffett, George E. '83
 - Rush, David Grant '85
 - Rustwick, John Douglas '71
 - Smith, William James '66
 - Van Zante, Dale Eugene '90
- IA B**
 - Boldt, Donald Bernard '57
 - Corrao, Debbie G. '93
 - Gozali, Paul '85
 - Smith, Richard Kenneth '60
 - Warner, Diana Hix '73
- KS A**
 - Benso, William Eldon '59
 - Conner, Harold Wayne '54
 - Harmony, Marlin Dale '58
 - Hinton, Robert Allan '61
 - Remsberg, James Carleton '57
- KS B**
 - Hockett, James Keith '66
- KS Γ**
 - George, Darin Lynn '86
 - Lebak, James Michael '89
 - Tracey, Deborah S. '86
- KY A**
 - Anderson, Lee Roy '71
 - Bittle, David F. '59
 - Congleton, Stephen Douglas '79
 - Cook, Robert Henry '74
 - Craig, Joe Lockett '50
 - Elwood, Persis Ann '85
 - Halloran, Stephen Richard '75
 - Hord, Jesse '56
 - Midkiff Jr., Kenneth Clark '79
 - Rhoads, Harold Spencer '68
 - Stephens, Michael Mauney '79
- KY B**
 - Jodrie, Mary Clare '85
 - Meyers, James Frank '69
 - Thornton, Patrick Joseph '82
 - Yee, Ngai Sandy '82
- LA A**
 - Armistead, William T. '71
 - Correa, Domingo Mateo '59
 - Corripio, Armando Benito '63
 - Nelson Jr., George Gus '52
 - Schexnayder Jr., Isby Louis '63
 - Smith, Stewart Van '73
- LA B**
 - Bourgeois, Brian Steven '82
 - Bourgeois, Edit Jorgetina '91
 - Marin, Justo Enrique '79
 - Rickman, Philip Mark '83
- LA Γ**
 - Jenkins, James S. '80
 - Owen, Mark Enos '92
 - Thomas, Robin Carol '92
 - Wood Jr., John Wright '65
 - Wyche III, James Egbert '59
- LA Δ**
 - Barbay, Norman John '74
 - Landry, Glen Ray '75
- ME A**
 - Atkinson III, Landy Guy '78
- MD A**
 - Ouellette, Alfred David '76
 - Capecci, Dennis W. '79
 - Cessna Jr., Lawrence Clyde '61
 - DiGiorgio, Joseph Brun '54
 - Gitomer, Steven Joel '64
 - Guzy, Jeffrey David '83
 - Hartlove Jr., Charles L. '76
 - Linaweaver, Pierce '55
 - Lu, Stanley '95
 - Monmonier, Mark '64
- MD B**
 - Sutera, Salvatore Philip '54
 - Amtmann, Louis Gerard '66
 - Bentz, Dale P. '84
 - Birkmire, John Christopher '95
 - Brownstein, Barry Jay '68
 - Chan, Michael '63
 - Gaske, Thomas Paul '76
 - Himes, Doug Lamar '82
 - Iacangelo, Gerard Felix '80
 - Jochum, Thomas Andrew '77
 - Marks, Richard William '70
 - Poulter, Harry David '88
 - Yourshaw, Sheryl Lynn '99
- MD Γ**
 - Surina Jr., John Joseph '86
- MA A**
 - Achilles, Heather Dale '83
 - Andel, Robert Matthew '73
 - Auclair, Jared Robert '01
 - De Andrea, Paul John '75
 - Haringa, Glenn E. '74
- MA B**
 - Ball, Norman Addison '60
 - Bishop, Peter B. '70
 - Ferguson, Keith McDowell '62
 - Honke, James Kazuo '63
 - Manganaro, James L. '61
 - Maskrey, Robert Hartley '63
 - Miller, Paul George '49
 - Patterson, John Bryan '68
 - Rogers, Peter Todd '82
 - Shinko, Martin Stanley '72
 - Slifka, Richard Barry '61
 - Wynn, Joseph Francis '75
- MA Δ**
 - Babaian, Peter Martin '99
 - Bloch, Frederick Hersh '68
 - Buffinton, Keith William '79
 - Gunn, John F. '64
 - Hildebrant, Eric Michael '92
 - Milauskas, Ronald Joseph '62
 - Raisler, Richard Allen '72
 - Russell, Jack Hesselstine '54
 - Savage, Paul David '77
 - Smeglin, Anthony Michael '76
 - Stark, Lucius Dickinson '64
 - White, Edward A. '47
- MA E**
 - Bielawski, Constance F. '75
 - Calvo, Alberto Bruno '70
 - Chiodo, Richard Anthony '71
 - Linscott, Anne Wiklord '80
 - Présumé, Hantz Antony '89
 - Soulis, Wilbur Taggart '72
 - Vesce, Paul James '64

- MA Z** Beliveau, Thomas Joseph '69
Benwood, Bruce Robert '69
Cooper, Perry A. '62
Moles, Peter A. R. '83
Philbrook, T. Varnum '73
Rainville, Robert Francis '68
Stumpf, Christian Reeve '82
- MA H** Whitley, Norman Lyle '75
- MA @** Allen, Karen Leonard '89
Gregg, John Edward '84
- MI A** Chaffee, Stanley Wendell '74
Garlick, Emory Wayne '58
Gidner, Richard V. '53
Hudson, Dean '58
Regenstreif, Joyce '78
Shannon, David Harlow '59
Suszko, Andrew M. '73
Woelzlein, Wilmar Marvin '51
- MI B** Bekins, Randell Lee '80
Bentley, James Herbert '57
Dejonge, Michael Kent '65
Lindgren, Douglas LeRoy '69
Mattson, James Arthur '70
Newman, Frederick Alan '83
Plutchak, Raoul Edward '62
Stehulak, Edward Stephen '86
- MI Γ** Ardis, Robert Boyd '46
Baxter, John Edward '57
Boesiger, Edward Alfred '82
Bull, Joseph Saples '52
Campbell, John Alexander '62
Capelli, Ronald B. '73
Davies, John Richard '50
Delgass, William Nicholas '64
Dieck, Donald Henry '65
Drago, Gary Alan '75
Fertel, Howard Kevin '79
Grossman, Michael Alan '88
Hansen, Peter Ernest '61
Leeds, Thomas Murray '85
Macika, Raymond Edward '86
Maugh, Roger Edward '55
Miller, Carol Jean '79
Miller, Stephen Scott '78
Nobunaga, Alan Shizuo '83
Nobunaga, Brian N. '83
Othman, Roger Mohamad '74
Snyder, Robert Joseph '77
Washburn, John Robert '69
Wentzel, Richard Dimert '60
Wingard, Joseph '80
Winter, Steven D. '81
Zechel, Gary Michael '62
- MI Δ** Caste, Richard Alan '68
Dolan, William John '62
Elward, Bob M. '75
Gallagher, James Anthony '68
Kaunelis, Pranciskus S. '69
Rutherford, Charles Robert '53
- MI E** Doughty, Robert Earl '65
Klaetke, George H. '55
Mahanes Jr., Harold Patrick '65
Mutzelburg, Ronald Edward '68
Sigler, David Rudolph '76
- MI Z** Foraker Jr., David Ernest '58
Gillham, Gregory V. '83
Kovacs, Robert Lewis '86
McEwen, Stephen N. '54
Reardon, Robert Warren '74
Roth, Maureen Lynn '91
Sadlo, Thomas George '77
Wallace, Stanley Edward '75
Zywiol, Gary Steven '76
- MI @** Messer, Bryan James '98
- MI K** Seymour Jr., Richard L. '97
- MN A** Christensen, Thomas M. '79
Halladay, Henry Earnest '64
Larson, Michael Lane '59
Maus, Brian Wayne '81
O'Leary, Stephen Holmes '69
Petrich, Gale Sean '86
- MS A** Backus, Alan Orin '78
Backus, Patricia Michel '78
Bui, Tuan Thanh '90
Hilkert, James Michael '71
Hodge, B. Keith '65
McKay Jr., Frank Fay '60
Miller, Elton Ray '70
Seitz, Thomas Bingham '63
Sutphen, Fred Marshall '73
Tisdale, Stanley Ray '78
Wachs, John Jay '71
- MO A** Gritzo, Ludwig Adam '58
Hammar, Phillip Carl '65
Hea, James Peter '68
Kehoe, Martin James '72
Oehrke, Timothy Chris '75
Potter, Charles Jarrett '71
Zimmerman, Mary Margaret '87
- MO B** Bodenhamer, Steven D. '75
Brewer, Lawrence Oliver '77
Buenemann Jr., Morris C. F. '82
Feurer, John Alphonse '70
Hendrickson, Richard C. '53
Horstmann, Paul William '73
Mahin, Clifford Alan '76
McJimsey, Edward Clair '71
Myers, Kenneth Raymond '72
Pannone, Gregory Michael '82
Scherrer, Paul Keith '71
Schwent, Dale Gerard '84
Willoughby, Ronald D. '73
- MO Γ** Fisher, John William '56
Galambos, Theodore Victor '53
Goldring, Stanley '64
Salman, Naif Diab '56
Standridge, Charles Robert '75
- MO Δ** Campbell, Newton A. '49
- MT A** Courville, George Eugene '59
Jellison, Gabe Lee '98
Kolb, Robert C. '61
Whitcomb, David L. '64
- NE A** Claar, Stephen Beryl '73
Cowling, Edgar Charles '75
Martin, John Craig '85
Patterson, Roger Kent '73
Paxton, William Glenn '87
Plummer, Scott Royce '81
Steube, Milan Ray '74
- NV A** Jones, Keith Alan '85
- NH A** Amazeen, Bruce Edward '65
Bailey, Joseph Gregory '86
†Dooley, George Hadley '53
- NJ A** Hoyt III, John George '76
Osborne, Scott Reynard '70
Seventko, Joseph M. '60
Turgyan, Terrence Joseph '75
Waricka, Peter Thomas '71
- NJ B** Bubenick, David Virgil '73
McCord, William Fred '64
Richards, John Reed '76
Shalayda, Robert George '73
Shelestak, Larry J. '75
Starr, James W. '73
- NJ Γ** Andrus, James '02
Becker Jr., George William '66
DiDomenico, Michael John '65
Dooley, Ronald M. '64
Furtado, Victor Cunha '58
Gupta, Punit Kumar '96
- Husson III, Matthew A. '66
McWilliams, John Paul '65
Otterbein, Richard Charles '71
Pinto, Dick Cunha '56
Puhan, Robert '75
Reitsma, David '65
Spinner, Gerard Francis '75
Tubello, Jeffrey '76
Tucker, John Harold '67
Vandemeulebroeke, Leon C. '89
Zierau, Siegfried Max '61
Zygo, John Peter '70
- NJ Δ** Brown, Geoffrey Scott '83
Coco, Elizabeth Halliday '87
Rafieyan, Kamran Lee '89
Whitesides Jr., Lawson E. '68
- NM A** Aragon, Frank Garcia '77
Bradt, David Jay '81
Havens Jr., Kenneth H. '78
- NM B** Andrews, Mark Jay '91
Gonzales, Michael Anthony '74
Turner, Diane '78
- NM Γ** Rocco, Jim Robert '85
- NY A** Blomberg, Richard David '67
Epling Jr., William Young '83
Kundakci, Vace '73
Morgan, Thomas Arthur '78
Reich, Herbert '84
Seckler, Howard Noel '48
- NY B** Chandler, George Dennis '70
Holt, Ralph Ephraim '50
Ragonese, Louis John '56
Roberts, S. William '58
Storrs, Edward Lee '81
Tobin, Michael R. '87
- NY Γ** Bergenthal, Jon Francis '75
Bond, Paul William '72
Buck, Frederick Alan '76
Dowgwillio, Robert Michael '75
Garland, Newton Cluff '46
Huie, Joseph Albert '52
Lewandowski, Michael '96
McCormick, Peter Elliott '80
Mucher, Craig Allen '82
Natale, Michael Robert '02
Roberts, John Walter '86
Schrier, Steven Brett '82
Svendsen, Harold Oliver '58
Veldman, John Peter '70
Walter, Buff Arthur '60
Weader II, Richard Jerome '64
Zmroczek, Leon Anthony '78
- NY Δ** Frantz Jr., Rolf A. '66
Frederick, Thomas Robert '87
Goldstein, Steven Mark '81
Humphrey, John Morgan '67
Klepeis, John Emrich '85
Kuehne, Donald L. '73
Livingston, Laura Jane '73
Logan, Joseph Skinner '56
Marshall, Donald Jay '59
Reynolds, David Allen '71
Roseman, Ann Lynn '81
Schwenker, David William '67
Van Arsdale, George Davis '62
Winkle, Roger Allan '67
- NY E** Brodsky, Wesley G. '71
Dobbins, Bob Mark '73
Febesh, Melvin '47
Grace, John Thomas '55
Hendrickson, John Laurence '71
Lee, John H-J '70
McConnell, Donald Patrick '71
Ueber, Russell Charles '61
- NY Z** Gersten, Marvin Charles '60

Alumni Giving

Chi Club continued

	Grail, Thomas Joseph '62		Fay, James Maurice '82		Eckhardt, Andrew James '79
	Kaczmarek, Richard '73	ND B	Jesh, Mark Steven '86		Gwin, Russel Willis '85
	Keller, Norman Kurt '58	OH A	Beach, Robert Chester '56		Rohr, Timothy Paul '80
	Labianca, Frank M. '61		Cross, Matthew David '05		Suhar, Richard Allen '83
	Sindel, Fred Hans '59		Hoh, Ka-Pi '84	OK A	Brown, Leslie Wray '70
NY H	Young, Raymond Joseph '74		Koch, Carl Conrad '59		Carnes Jr., Albert Cowser '56
	Goodman, Alvin Solomon '44		Kownacki, Edward Joseph '67		Dotson, Neil A. '84
	Kern, Frank John '70		Oblak, John Michael '62		Hysinger, T. '63
	Shakun, Melvin F. '50	OH B	Schuerger, Thomas Robert '50	OK B	Wustenberg, John Walter '84
	Welk, William '79		Allspach, Eugene Robert '70		Blais, Roger N. '66
	Wu, Randall '75		Dobashi, Harry Hideo '68		Perrault Jr., John Edward '75
NY O	Allen, John Harry '83		McCarthy, Martin David '70		Sherrill, Shirley Whitmore '82
	Baldwin, Alan Richard '70		Oliver, Fred William '65		Waldorf, John William '83
	Cornett, Dean Leo '71	OH G	Ruebusch, Robert Joseph '70	OK G	Weston, Kenneth Clayton '55
	Dec, Eugene Bernard '72		Amacher, Roy Harold '79	OR A	Dean, Philip Maxwell '74
	McKenney, John Lee '62		Case, William Frederick '64		Miller, Mark Wade '89
	Newman, Mitchell James '81		Chadwick, Harold Edwin '65	OR B	Sato, Ben '57
	Suran, Jerome J. '49		Del Tosto Jr., Joseph J. '87	PA A	Sutton, Carolyn Ann '08
	Thomas, John Anthony '86		Del Tosto, Judith Mary '87		Bradley Jr., Charles William '51
	Tracey, Michael Steven '86		Edwards, William Randall '71		Bradley, Gordon Hoover '62
	Ziki, Ann Louise '86		Frey, Mary Ellen '89		Knox, Robert Seiple '53
NY I	De Fazio, Michael Joseph '67		Heath, J. Allen '78		Melvin, William Larkin '89
	Grant, Richard Joseph '88		Johnston Jr., Robert Paul '67		O'Hara, John James '73
	Kalian, Arianna '88		March, Michael Ross '85		Ortlieb, John Richard '53
	Levy, Rami C. '92		Marsolo, Keith Allen '02		Parsons Jr., Donald Francis '70
	Teitelbaum, Howard Allan '79		Pierce, William Sellers '55		Pondo, Fredric '75
	Trentacosta, Joseph Daniel '69		Price, Ted Walter '59	PA B	Vosseller, Kenneth Franklyn '62
NY K	Curtis, Johnson Ottawa '66		Riedel, Nelson Andrew '67		Andrichak, Stephen Michael '58
	Hajim, Ed '58		Risch, Gary Allan '76		Bradt, Andrea '76
NY M	Meader, Lyla Rebecca '86		Shelley, Bill Raymond '74		Carretti, Katherine Grace '84
	Montgomery, Michael Earl '75		Steiner, William Samuel '63		Foster, Richard Donald '55
	Rest, George B. '75	OH A	Stumbaugh, Gary Allen '66		Gibson, John Parke '64
NY N	Aloysius, Ronald J. '85		Beach, Theodore Lyman '87		Kardos, John Louis '61
	Barnes, Robert Edward '84		Kurzen, Mark R. '71		Krolick, Ronald David '83
	Davis, James Steven '70	OH E	Evans, John Arthur '59		Kutz, Scott Allen '71
	Deckro, Richard Floyd '72		Kubinec, William Richard '67		Matthias, Tracey Dawn '89
	Humphrey, David Kenneth '67	OH Z	Babula, Maria '89		Pasko, Thomas Joseph '59
	Kocher, Lawrence Harold '67		Busbey, Bruce C. '84	PA G	Wilt, Kenneth Douglas '84
	Kuberka, Gregory '80		Dembrow, David Alan '82		Dvorsky, James Eric '81
	Mann, Michael '77		Novak, Eugene Clark '59		Kornuta, Nick Joseph '81
	Riebling, Robert William '60	OH H	Rober, Kenneth Jerome '68		Kuhr, Tina Michelle '81
NY E	Defelice, Nicholas James '77		Beurket Jr., Raymond T. '63		Riedel, Frederick William '68
	Machuca, Luis Arthur '69		Bloom, Richard Larry '74		Rudolph, Anna Jane '79
	Murphy, Vincent Gerard '65		Clarke III, DeFrance '81	PA A	Black, David L. '83
NY O	Doynow, Donald '75		Eggers, James Arthur '72		Hocker Jr., Robert Gerad '71
	Hofmann, Linda '79		Freyer, Gustav John '60	PA E	Amman, Richard Walter '64
	Lumish, Stan '78		Gressang, Randall Vernon '72		Coffey, James M. '75
	Ribuffo, Peter Vincent '79		Heaton, Mark Campbell '90		Cook Jr., Eugene Marshall '58
NY II	Barber, R. Todd '87		Kelso, Thomas Sean '88		Guest, Frederick Charles '59
	Grosch, David A. '85		Menna, Richard Joseph '62		Krein, Philip T. '78
	Hill, David Alan '77		Niemeyer, Joseph Bernard '85		Kulicki, John Milton '65
	Howles, Douglas '76		Schmoll, Joseph Herman '81		Matsumoto, Tadashi C. '60
	Turner, Clayton Phillip '90	OH O	Van Veldhuizen, David Allen '99		Nolan, Christopher William '86
	Lubrano, Michael '80		Decker, John William '65		Rodite, Robert R '64
NY P	Chacko, Vinny James '09		Evanzia, Gregorio Patrick '64		Ryan, Richard Edward '86
NY T	Alexander, Ralph Bell '76		Kamowski, Dennis Daniel '73		Schroeder, Karl Richard '49
NC A	Allen, William Dowell '88		Kramer, Lawrence Joseph '62		Wetzel, Edward Donald '74
	Blair, John Ramsey '77		Sero, Raymond James '67	PA Z	Yoder, Paul Eugene '49
	Freeman, Theresa Mooney '85		Sink Jr., Robert Dean '87		Aepli, Theodore Carl '62
	Frierson III, J. Lawrence '66	OH I	Larson, William Jed '75		Hudak, Joseph David '79
	Morton, Rodney Eugene '84		Schilling Jr., Walter William '97		Shaffer, David Eugene '78
	Phoenix, John Stuart '77	OH K	Brattoli, Mark A. '79		Silvasi, John J. '70
	Teague, Lisa Jones '81		Carver, Robert Michael '87		Susavidge, Mary Ann '89
	Trivette, Wendell Allison '82		Dudek, Scott Andrew '90	PA H	Weggel, John Richard '64
	Weirs, Gregory '91		Paridon, Charles Albert '81		Ellis Jr., Ira Thomas '56
	Wynegar, Kathleen M. '86		Stimler, Jeff Joseph '84		Hotchkiss, Jeffrey R. '69
	Younts III, William Ernest '79		Wielopolski, Richard John '76		Keil, Alan James '72
ND A	Dahlin, Earl Charles '58	OH A	Chegar, John Thomas '90		Price, Russell William '72



Delta Club
George R. Sterner
 PA B '62

Long before there was a STEM program, there was Tau Beta Pi.



Delta Club
Andrew C. Ask, P.E.
 IA A '64

When Tau Beta Pi gathers in Fort Meyers-Naples, I get to meet interesting and accomplished new people.

Chi Club continued

- PA ©** Reetz, Helen A. '78
 Coyle, Todd Frederick '77
 Dever, Patrick Brian '94
 Gallen, Robert Michael '64
 Girondo, Dominic Peter '70
 Lacz, Walter '69
 McLaughlin Jr., Philip V D '61
 Ryan III, Arthur Peter '65
 Threston, Joseph Thomas '57
 Woods Jr., Howard James '77
- PA K** Mangelsdorf, Frederick E. '53
- PA Λ** Anselm, Gregory Alan '81
 Fitzpatrick, Anthony Ryan '03
 Hovanec, Andrew Stephen '58
 Janocko, David Jeffrey '81
 Kvitkovich, James Francis '81
 Musselman, Thomas A. '73
 Taylor, Thomas Ray '73
- PR A** Fermaintt, Carlos Juan '84
 Irizarry, Arcelio '86
 Perez, Juan A. '78
- RI A** Foster, Nigel John '81
- RI B** Townsend, James Courtland '60
 Adamedes, Zoe '84
 Aubin, Timothy Francis '94
 Brady III, William James '80
 Hurdis, David Albert '62
 James, Charles Franklin '58
 Lamoureux, Suzanne May '82
 Lieberman, James '67
- SC A** Verrier, Donald Charles '54
 Blandford Jr., Joseph B. '58
 Gray Jr., Blaine Edward '72
 Hunter, James Richard '85
 McCormac, Jack C. '48
 Mims Jr., Paul Wilson '71
 Rast Jr., Heber Edward '63
- SC B** Haggerty, N. Kent '72
 Hidlay, Charlene Marie '96
 Lang, Christine Marie '80
 Pappas, Alexandros A. '71
 Van Zee, John William '75
 Walden, Gary R. '81
 Wilson Jr., Robert Lewis '69
- SC Γ** Cochrane, Jerry Wilson '55
 Gooley, Thomas Joseph '55
 Kelly, Robert Thomas '86
 Marbois, Matthew Clark '81
 Pastrick, Harold Lee '58
- SD A** Beck, Carl William '83
 Case, Robert Howard '75
- TN A** Kroetch, Christopher Allen '06
 Ayers, William Ralph '80
 Bowers, Bob '68
 Cashion, Gregory Lee '79
 Conner Jr., Harold Tilton '68
 Cowart, Joseph Lawrence '72
 Evans, Colby Russell '94
 Hickman, Charles Edward '57
 Hitch, Benjamin Franklin '67
 Hunt, Roy Joe '67
 Jackson, Karen Elizabeth '81
 Kennedy, Michael Earl '86
 Layman, Ronald Terry '77
 Lowe, Robert Alexander '70
 Meriwether, George H. '74
 Moore, Terry M. '67
 Peugeot, Richard Scott '60

- TN B** Rogers, Marvin Dale '70
 Tarrant, Charles Harrington '57
 Tomlinson, Edward Thomas '72
 Zimmerman, James L. '58
- TN Γ** Bass, Jay Kevin '87
 Burnett Jr., Wilton Wright '67
 Gray, William Harvey '70
 Morton, Wayne King '63
 Zabriskie, Kenneth Andrew '80
 Buell, Phillip Ray '95
 Dooley, Joseph Brooks '70
 Harvey, James Bruce '63
 McDonald, Gary Haywood '77
 Perkins, William Samuel '54
 Thompson Jr., W. William '68
- TN Z** Pyle, Angela Diana '91
 Wilson, Matthew William '00
- TX A** Abad-Fitts, Carmen Beatrice '80
 Crippen, Robert L. '60
 Edgar, Arlen Lewis '57
 Fuller, William Burke '82
 Henry, Wesley Bert '51
 Hurst, Terry Lee '76
 Kassler, Harlan Larry '91
 Lyle Jr., Fred F. '62
 Setliff, Sanford Ray '69
 Sweet, Paul Alan '70
 White, Karen Leigh '84
 Whitesides Jr., John Lindsey '65
 Wong, Lucas '84
- TX B** Boyd, Suzanna Ruth '81
 Hoiberg, John Arnold '64
 MacCallum, Gregory James '81
 Marasco, David Foster '87
 Osborne, David Charles '61
 Rossler, Steven Wayne '73
 Soules, James Gregory '79
 Uher, Edward L. '65
- TX Γ** David, Anne Marie '87
 Fisher, John David '70
 Horn, Kenneth Porter '61
 Koonce, Kenneth Terry '60
 Lodal, Jan Martin '65
 Maxfield, Robert Roy '64
 Popplewell, Thomas R. '74
- TX Δ** Coman, Paul Daniel '03
 Embry, Dale Lee '77
 Herring, Robert Lee '65
 Mason Jr., John Michael '81
 McClellan III, W. Roy '74
 Murthy, Prahlad N. '92
 Simpson, Stancy Jean '79
 Woram, Brian James A. '81
- TX E** Herrmann, Edwin Peter '67
 Hillegeist, Reynold Ben '63
 Lim-Smith, Yee Lan '82
 Martin, Samuel Ray '83
 Smith, Kevin George '81
- TX Z** Broussard, Lance Armance '97
- TX H** McCaleb, Jesse Earl '64
 Godwin, Albert Eugene '84
 Guinn, Douglas Edward '78
 Hightower, Janice M. '67
 Schaeper, Wilfred H. '76
 Southall, Hugh Landon '68
 Totten, Dwight Lee '66
 Williams, Larry Donal '80
- TX I** Harris, E. Douglas '83

- TX K** Daniels, Jerry D. '79
 Davis Jr., Hulén Mack '80
 Davis, Pamela Walker '90
 Jolley, Lawyer Curtis '79
- TX Λ** Carter, Jason Oliver '87
 Carter, Norhanani '87
 Hinojosa, Juan Jose '84
 Odom, Randall A. '57
- UT A** Malmquist, David August '62
- UT B** Patrick, William Moss '74
- UT Γ** Paxton, Thornton Shirrel '63
 Thompson, James Rowley '76
- UT Δ** Cleave, Mary Louise '79
 Torgesen, Greg Lau '80
- VT B** Guerrerri, Carl N. '62
 Henry, Thomas Arthur '70
- VA A** Conway Jr., George Franklyn '70
 Cosby, James Gordon '61
 Donoho, Thomas English '59
 Dye, Michael Loren '87
 Mac Glashan, Donald Welton '57
- VA B** MacKay-Smith Jr., A. '59
 Mann, Richard Jeffrey '75
 Pearson, Glen Hamilton '71
 Powell, James Davis '77
 Ray II, Robert E. L. '74
 Smith Jr., Sidney Crawley '63
- VA Γ** Austin, Andrew Stone '89
- VA Δ** Michael, Glenn P. '66
 Payne Jr., Lewis F. '67
- WA A** Brewer, Brian J. '82
 Chandler, Alan Scott '77
 Follett, Mark Samuel '74
 Fosberg, Theodore Michael '59
 Kinell, Donald Karl '64
 Oiyé, Martin Yasuyuki '76
 Orr, Peter Courtenay '71
 Otteman, Lloyd Gilbert '54
 Rising, Jerry Joseph '61
 Steinhauer, Loren Clifford '66
 Strickland, Elizabeth Ann '77
- WA B** Hyde, Gary M. '64
 Turi, Michael Allen '07
- WV A** Wahl, David John '62
 Baker, Walter Lee '74
 Boggs, Mark Steven '80
 † Glass, David Richard '75
 King, Staci Renee '96
 Lilly, Larry Joe '64
 Ramsey, Walter Jackson '74
 Skujins, Margaret Stuart '69
 Skujins, Ojars '68
 Spence, Peter Larkin '80
- WI A** Berman, Neil Sheldon '55
 Cattoi, Robert Louis '50
 Goehring, Henry G. '57
 Hoffman, Carl A. '85
 Johnson, Joseph William '79
 Kelly, Mark Christopher '88
 Martell, Donald Louis '60
 Schuh, Peter O. '63
 Senty, James Anton '60
 Shimko, Darl Vann '79
 Trnka, John Thomas '69
- WI B** Marcouiller, Roger Albert '60
 Murawski, Steven Lee '80
 Oehler, Daniel Arthur '79
 Penlesky, Richard J. '73

INTRODUCING TAU BETA PI'S

TRESTLE SOCIETY

Trestle Society is a loyalty giving society that honors Tau Beta Pi donors who have made gifts in each of the three most recent calendar years (January 1- December 31). When this distinction is achieved, these committed supporters are recognized for the total number of consecutive years in which they have made gifts to the Association.



TRES-TLE /'tresəl/ *noun* — a framework consisting of a horizontal beam supported by two pairs of sloping legs, used in pairs to support a flat surface such as a tabletop; an open cross-braced framework used to support an elevated structure such as a bridge.

HOW DO I BECOME A MEMBER OF THE TRESTLE SOCIETY?

By making a gift in each of Tau Beta Pi's three most recent calendar years, you will automatically become a member of the Trestle Society. This distinction is maintained by continuing to give each year. Gifts of any size to any of our programs count.

WHAT ARE THE MEMBERSHIP TIERS?

- 3+ years of consecutive giving
- 5+ years of consecutive giving
- 10+ years of consecutive giving
- 15+ years of consecutive giving
- 20+ years of consecutive giving
- 25+ years of consecutive giving
- 30+ years of consecutive giving
- 40+ years of consecutive giving
- 50+ years of consecutive giving

WHAT HAPPENS IF I MISS A YEAR?

If you miss a calendar year of giving, you will experience a lapse in Trestle Society membership which can be reinstated with three consecutive years of giving. Be sure to make your gift by the end of each calendar year—we also have many options for online giving through our website www.tbp.org/?give including PayPal and Venmo.



HOW DO I CONTACT YOU?

If you believe we have missed some of your giving or have questions about your Trestle Society status, please contact Sherry Jennings-King at development@tbp.org or 612-226-2922.

WHY DOES CONSISTENT ANNUAL SUPPORT MATTER?

Annual giving is instrumental in keeping our programs functioning at the exceptional levels for which we are known. Trestle Society members provide crucial ongoing support that makes so much possible for our students and programs.

WHAT RECOGNITION WILL I RECEIVE?

Trestle Society members receive an annual communication confirming their continued status and the number of consecutive years in which they've made gifts. Recognition may be included in the Alumni Giving listing of quarterly gifts in future issues of our publication, *The Bent*.

WHAT GIFTS COUNT?

Your annual contributions at any level, to any program, will establish and sustain your membership in the Trestle Society, which is designed to recognize your consistent support. Matching gifts from employers do count.

DO PLEDGES COUNT?

The Trestle Society recognizes donors who make gifts to the Association every year. While pledges do not count, contributions you make toward your pledges do count.



WHY SOME OF US DIDN'T MAKE THE CUT.

SHERRY JENNINGS-KING, TN A '93

The Trestle Society is an effort to celebrate an exclusive group of alumni who have achieved a history of giving for which the Association is grateful. Unfortunately, due to its nature, it excludes some faithful and impactful donors. As a member for 28 years, one might think attaining membership in this Society would be a shoo-in. Not so. I had a stretch for 13 years of consecutive giving (2004-16), which was interrupted in 2017-18 when we started giving in my husband's name in order to take advantage of a match opportunity his company provided, resulting in a bigger gift for Tau Beta Pi. I started giving again in 2019 and 2020 but this break in my giving (our preference is to keep our giving records separate) means I have only given consecutively two years, which does not qualify me for even the lowest tier. I look forward to becoming a member in 2021.



TIER 3+: STEPHAN KING-MONROE, MIE '08

As a former member of the Executive Council, I see first-hand the importance of annual support for the Association.



TIER 5+: TERESA HUTTON, WIB '91

The members of TBPI I know in the workforce are high performers. It feels good to regularly support student members who have high potential for positive impact through scholarships and fellowships.



TIER 10+: DUDLEY WHITE, VA A '76

The grand challenges of today will largely be solved by engineers in the future. Engineers will make the world a better place. TBPI supports and recognizes these young engineers at the college level as well as encouraging youth to consider engineering as a career. It is my privilege to financially support TBPI in these endeavors. I'm just paying it forward each year.



TIER 15+: CRAIG FOX, TX D '77

Giving consistently acknowledges that we are beneficiaries of those who went before us and that we should keep the next generation in mind. TBPI's mission across the engineering disciplines is unique and donating to the annual fund maintains a connection to a group of dedicated people who work tirelessly to advance the Association's programs.



TIER 20+: JIM EASTMAN, WA A '53

I give regularly because: 1. Engineering students should be recognized by a national honorary, and it is a credit to both the student and the school they attend. 2. To be effective, a central organization is needed to provide support and national visibility to student accomplishments. 3. Gifts support programs critical to the continuing education and development of engineering students.



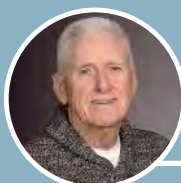
TIER 25+: PAUL ADAMO, TX A '85

After spending the last 25 years of my career in the financial services industry, I feel strongly that the world needs more engineers working in both traditional fields but also working in non-traditional fields. Funds donated to TBPI support the next generation of engineers.



TIER 30+: NORMA TABER, MO G '80

I give to TBPI because we are addressing real systemic barriers to becoming (and staying) an engineer. I give systematically because—wait for it—I'm a systems engineer. I give consistently, year after year, because that reflects my perseverance in making a difference for our world.



TIER 40+: JERRY MYERS, AZ B '70

Becoming a member of TBPI is a very special recognition of attaining education and professional excellence in engineering. I wish to see TBPI continue long into the future awarding recognition of engineering achievements and providing scholarships for those students striving to attain excellence.

TIER 50+

We are looking forward to many people reaching this level...

GEORGIA SOUTHERN UNIVERSITY



The petition for Georgia Southern to be installed as the 257th chapter of Tau Beta Pi was approved by the 2020 Unvention. The Georgia Gamma Chapter will be installed as soon as conditions permit.

OUR HISTORY

With almost 27,000 students, approximately 140 different degree programs, three campuses, and a single vision of growing others, Georgia Southern University is already moving and ready for more. The historic brick streets or moss-dripping oak trees may make our picturesque campuses seem pristine, but there's a lot of roll-up-your-sleeves work going on here. Research is focused on community impact. Teaching is focused on the students. And the students are focused on their future.

The foundation for this can-do spirit was born on December 1, 1906, when delegates from Statesboro, Georgia, traveled to the DeSoto Hotel in Savannah and offered the winning bid to establish a school of higher education in Statesboro.

When First District Agricultural & Mechanical School's inaugural academic year began in 1908, few could have foreseen a major American university growing out of four faculty members and 15 students in just a little more than one lifetime.

STATESBORO CAMPUS

The Statesboro Campus was founded in 1906 as a school for teaching modern agricultural production techniques and homemaking skills to rural school children. The First District A&M School began within two decades to shift its emphasis to meet the growing need for teachers within the state. Its name and mission were changed in 1924 to Georgia Normal School as a training ground for educators, though it continued to accept "preparatory" or high school

students. Five years later, in 1929, full-fledged senior college status was granted as South Georgia Teachers College.

Ensuing decades saw additional name and mission changes: to Georgia Teachers College in 1939 and Georgia Southern College in 1959. Continued program and physical expansion, including one seven-year stretch, 1984-91 in which enrollment doubled from just over 6,000 to more than 12,000 students, led to a final transformation in 1990 — to Georgia Southern University.

ARMSTRONG CAMPUS and LIBERTY CAMPUS

In 1935, Savannah Mayor Thomas Gamble founded the Armstrong Campus—then known as Armstrong Junior College—to help stimulate Savannah's

economy and advance opportunities for local youth who could not afford to attend college away from home. The school began with 175 students and was located in the historic Armstrong House on Bull Street at the northern end of Forsyth Park. In 1966, after receiving four-year status and a 250-acre donation from The Mills B. Lane Foundation and Donald Livingston, Armstrong State College moved to its current location on Abercorn Extension in Savannah's southside.

Throughout the next 30 years of growth, Armstrong added graduate programs in business and education and became a Regional Health Professions Education Center. The institution's growth culminated in 1996 with university status and a new name: Armstrong Atlantic State University. Just two years later, Armstrong collaborated with Georgia Southern and other USG institutions to create the Liberty Center in Hinesville to offer degree programs to the active duty and veteran military and their families in the area. Liberty County is the home of Fort Stewart, the largest military base east of the Mississippi.

CONSOLIDATION OF GEORGIA SOUTHERN UNIVERSITY and ARMSTRONG STATE UNIVERSITY

In 2018, Armstrong State University and Georgia Southern University consolidated, creating an institution that retained the Georgia Southern University name. The institution now encompasses nine colleges on three campuses: the Statesboro Campus, the Armstrong Campus in Savannah, and the Liberty Campus in Hinesville.

Georgia Southern Armstrong Campus in Savannah (left).

Georgia Southern Statesboro Campus (right).



The Manufacturing Engineering Laboratory is located on the Statesboro Campus.

Just as in the days of First District A&M and Armstrong Junior College, Georgia Southern University eagerly pursues new avenues to meet the challenges of a changing world.

GEORGIA SOUTHERN UNIVERSITY NOW

Today, as one university, Georgia Southern is the state's largest and most comprehensive center of higher education south of I-20. With programs at the bachelor's, master's, and doctoral levels, Georgia Southern is a public Carnegie Doctoral/R2 institution with three vibrant campuses — the Statesboro Campus, the Armstrong Campus in Savannah, and the Liberty Campus in Hinesville. Georgia Southern's nationally accredited academic programs include a heavy dose of real-world work, so our graduates are ready from

the day they graduate. A unit of the University System of Georgia, the university boasts 200-plus student organizations, outstanding Division I athletics, and state-of-the-art residence halls and campus facilities.

Since 1906, the university's hallmark has been a culture of engagement that bridges theory with practice, extends the learning environment beyond the classroom, and promotes student growth and life success. Central to the university's mission is the faculty's dedication to excellence in teaching and developing a fertile learning environment exemplified by a free exchange of ideas, high academic expectations, and individual responsibility for academic achievement. Faculty, staff, and students embrace core values of collaboration, academic excellence, discovery and innovation, integrity, openness and inclusion, and sustainability.

IN THE COLLEGES

Tau Bates having an impact at institutions of higher learning.

Raheem A. Beyah Ph.D.

North Carolina Epsilon '98

Raheem has been selected as Georgia Tech's Dean of the College of Engineering. Previously, he was Tech's vice president for Interdisciplinary Research, executive director of the Online M.S. in Cybersecurity program, and a professor in the school of electrical & computer engineering. He received his B.S. in EE from North Carolina A&T State Univ.



Richard A. Cooke Ph.D.

Illinois Alpha '93

Richard was initiated in fall 2020 as a TBIT Eminent Engineer by the Illinois Alpha Chapter at University of Illinois at Urbana-Champaign, for his dedication and outstanding contributions in conservation engineering. He has established an exemplary record in extension, research, and teaching at UIUC and is a world-renowned expert in drainage engineering.



Saikat Chaudhuri Ph.D.

Pennsylvania Delta '97

Saikat has joined the faculty at University of California, Berkeley, where he will serve as inaugural faculty Director of the Management, Entrepreneurship & Technology Program. He will also hold the Grimes M.E.T. Chancellor's Chair and a joint faculty appointment in the management of organizations and entrepreneurship groups at Haas, and department of ME in the CoE.



SPOTLIGHT: Michigan Space Consortium Research Grant Awarded— The project: "Monitoring Martian landslides using deep learning and data fusion" has been awarded a one-year research seed grant. **Sidike Paheding, Ph.D., AL E '13**, assistant professor of applied computing at Michigan Technological University, is co-primary investigator for this project, which is supported in part by funding provided by NASA, under the Michigan Space Grant Consortium. His research interests cover a variety of topics in machine learning, deep learning, computer vision, and remote sensing. He has authored/coauthored close to 100 research articles, including several top peer-review journal papers.

Commentary shines light on funding disparities — In a paper published in the scientific journal *Cell*, **Muyinatu Bell, Ph.D., MA B '06**, an assistant professor of electrical & computer engineering at Johns Hopkins University, and coauthors from 15 institutions assert that insufficient federal funding for research by Black scientists is a key factor in preventing equitable contributions to science and achievement. "Two factual statements in the paper concisely summarize the problem: All Americans pay the tax dollars that fund NIH. Inequitable distribution of these dollars is discrimination," Bell says. "Yet there is a documented 20-year history of inequitable distribution of these tax dollars to Black researchers for biomedical research."

Darrell W. Donahue Ph.D.

North Carolina Alpha '86

Darrell was appointed dean of Davis College of Agriculture, Natural Resources and Design at West Virginia University, beginning July 1. He is a leader and expert in process operations, risk assessment, and food safety. Previously, he served as chair of the dept. of biosystems and agricultural engineering and director of the Institute of Water Research at Michigan State University.



Luke A. Dosiek Ph.D.

Wyoming Alpha '10

Luke has received a prestigious CAREER Award from the National Science Foundation that will impact research, curricula, and opportunities for students and outreach to local schools. He is an assistant professor of engineering and the first professor to receive the honor at Union College. His EE degrees are from Clarkson Univ. and Wyoming Univ.



Xun (Steve) Jian Ph.D.

Illinois Alpha '12

Steve has received the National Science Foundation's most prestigious award for junior faculty: the Faculty Early Career Development Award. An assistant professor at Virginia Tech in computer science, his project explores how to co-design CPU and OS to maximize memory utilization in cyberinfrastructure systems to boost their performance growth.



Kim D. Jovanovich P.E.

Louisiana Epsilon '72

Kim was awarded the 2021 Engineering Faculty Professionalism Award by the Louisiana Engineering Foundation. He is assistant dean of engineering and endowed professor in electrical eng'g and a faculty member for 40 years at the University of New Orleans (UNO). He is a recipient of the UNO Presidential Staff Medallion and earned a B.S. from Tulane University.



Amelia Smith Rinehart J.D.

Louisiana Beta '96

Amelia has been selected dean of the West Virginia University College of Law. Previously, she was an experimental engineer at the Johnson Space Center, practiced patent litigation and prosecution in New York and Louisiana, and was associate dean for academic affairs at University of Utah's law school. She earned B.S. and M.S. engineering degrees from Tulane University.



Richard T. Schoephoerster

Ph.D. *Iowa Beta '85*

Richard became the new dean of Arkansas Tech University Graduate College in January. He previously held leadership positions at Florida International Univ., Univ. of Texas at El Paso, and the American Univ. of Sharjah in the United Arab Emirates in a higher education career that spans 30 years. He has three degrees in engineering from the University of Iowa.



FACILITIES: N.C. A&T Investment to Increase Student Readiness—A \$3-million investment from Dominion Energy Foundation to North Carolina Agricultural and Technical State University aims to increase student workforce readiness in the power and energy sectors. Dominion's six-year "HBCU Promise" program will provide \$25 million in funding to eleven total institutions by bolstering scholarships, endowments, and meeting essential campus needs. Part of the funding will go toward the naming of an energy and sustainability lab which will be housed in the engineering research and innovation complex, which is set to open in fall 2021. N.C. A&T was the only university in North Carolina selected for the program.

U.S. schools receive D grade for infrastructure—The American Society of Civil Engineers (ASCE) in its latest quadrennial assessment, gave school infrastructure a D grade. By comparison, the 16 other infrastructure categories' grades in the 2021 Report Card for America's Infrastructure ranged from B to D-. The organization pointed to a 2020 report from the Government Accountability Office, which found 53 percent of the nation's schools need to upgrade or replace multiple building systems, including HVAC. The same agency found nearly 41 percent reported issues with HVAC systems, with ASCE calling it a "significant concern," and that 16 percent of districts have not assessed their facilities in the past decade.

John B. Slaughter Ph.D.

Washington Beta '56

John has been appointed as the Deans' Professor of Education and Engineering at the University of Southern California. This joint promotion in the schools of education and engineering recognizes his exceptional contributions. He was the first Black Engineer of the Year Award recipient in 1987, joined USC in 2010, and was a 2015 White House Presidential Awardee for Mentoring.



Berrin Tansel Ph.D., P.E.

Florida Theta '78

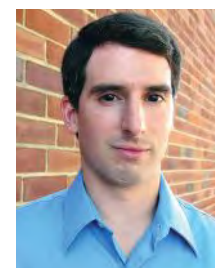
Berrin was presented an American Academy of Environmental Engineers & Scientists' 2021 Science Award for her contributions to the field of environmental engineering. She is a professor and undergraduate program director at Florida International University, where she was the first female faculty member to join the college of engineering & computing in 1990.



Edo Waks Ph.D.

Maryland Alpha '95

Edo received funding through the highly competitive Defense University Research Instrumentation Program. He is a professor of electrical & computer eng'g and Director of the Institute for Research in Electronics & Applied Physics at the University of Maryland. His project "Experimental Testbed for a Quantum Router Using Optical Quantum Memory" is supported by the AFRL.



CHAPTER ETERNAL

Our fellow Tau Bates who are gone, but never forgotten.



District of Columbia Alpha '54

Delon Hampton, Ph.D., P.E.

January 14, 2021

He was a pioneer in the civil engineering field, first Black President of ASCE, worked on the redesign of Pennsylvania Ave. & was a TBIT Distinguished Alumnus in 2014.

The condensed style of these notices is made necessary by the Association's large membership and space limitations in *The Bent*. Please contact the Editor for additional facts (if available) concerning the following deceased members. The assistance of all is earnestly sought in reporting the deaths of Tau Bates, including full name and date of death. You may report the death of a member by sending an email to chapter.eternal@tbp.org or by mail to P.O. Box 2697, Knoxville, TN 37901-2697.

ALABAMA

ALPHA AL A

Caddell, Carl Lamar, '49, Sept. 14, 2010.
Scott, Thomas Howard, '53, Jan. 23, 2021.
Rutland, James Millard, '61, Jan. 17, 2021.

BETA AL B

Carlton, Lindley Allison, '48, Dec. 30, 2009.
Robinette, Spurgeon L., '50, Nov. 22, 2002.
Waite Sr., Jack Hunter, '51, Dec. 24, 2020.
Mardis, Wayne Frederick, '53, April 21, 2004.
Sox, John Thomas, '58, August 21, 2002.
Peterson, Palmer D., '59, no details.
Praytor Jr., Jerry M., '62, March 27, 2011.
Covington Jr., William M., '67, April 21, 2010.
Blackburn, James D., '77, Sept. 25, 2011.

ALASKA

ALPHA AK A

Miller, John Mark, '60, no details.

ARIZONA

ALPHA AZ A

Skeels, Warren Edward, '62, no details.
McLennan, Clyde Jack, '66, Dec. 25, 2020.
Huskey, William Jean, '70, no details.
Schmidt, Henry J., '78, January 19, 2021.

ARKANSAS

ALPHA AR A

Summers, Gerald Clifton, '42, no details.
Boatright, James A., '48, March 26, 2017.
Donnell Jr., Roy H., '58, Sept. 21, 2011.
Drewry, William Alton, '59, June 23, 2020.
Falls, Carroll Ray, '68, July 14, 2020.

CALIFORNIA

ALPHA CA A

Holland, Kenneth M., '50, Sept. 2, 2016.
Judy, Harold Arthur, '52, May 30, 2019.

GAMMA CA Γ

Stolaroff, Myron Joe, '41, January 6, 2013.
Trane, Frank Hood, '53, January 13, 2021.

DELTA CA Δ

Ruoff, Laurence J., '60, Dec. 19, 2020.

EPSILON CA E

Harris, White J., '62, June 16, 2013.

ZETA CA Z

Peters, Robert W., '61, Sept. 22, 2020.

ETA CA H

Stillman, Edward Harold, '57, Dec. 2, 2020.
Myronuk, Donald J., '61, Sept. 10, 2004.
Glauninger, Walter Louis, '64, no details.
Chia, Hon-Kiong, '73, no details.
Petersen, Karen Sue, '83, May 12, 2015.

THETA CA Θ

Cleveland, Norman L., '68, Sept. 22, 2002.
Hesse, Robert Harrison, '71, Oct. 20, 2007.
Hufeld, William Jon, '87, March 4, 2003.
Hallwerck, David H., '88, Feb. 19, 2005.

KAPPA CA K

Carreno, Jorge L., '87, March 25, 2008.

OMICRON CA O

Newell, Mark Allen, '77, October 11, 2004.

RHO CA P

Maxwell, Douglas Todd, '91, Oct. 11, 2009.
Fernandez, Victor L., '94, Sept. 14, 2003.
Rayan, Nora Ahmed, '05, Feb. 9, 2008.

UPSILON CA Y

Phoebus Jr., Ronald W., '06, July 8, 2009.

COLORADO

BETA CO B

Trego, Douglas Grant, '44, Jan. 30, 2001.
Reeves, Roy Franklin, '47, May 5, 2007.
Atkinson, William G., '49, April 3, 2012.
Ingels, Raymond Martin, '49, no details.
Salyards, Donald Gene, '52, Dec. 5, 2020.
Bogart, Cloman Dale, '53, June 1, 2004.
Hallenbeck, Charles V., '54, Aug. 26, 2011.
Kromer, Ralph Eugene, '56, no details.
Pagcaliwagan, Jose C., '56, July 23, 2009.
Stoddard, Lawrence M., '74, March 30, 2008.

ZETA CO Z

Bostrom, Gary M., '78, August 28, 2017.

CONNECTICUT

ALPHA CT A

Gordon, Richard Edmund, '51, no details.
Blodgett Jr., Albert John, '60, Jan. 9, 2014.
Knoll, Samuel Henry, '62, Dec. 26, 2020.

BETA CT B

Jain, Rajendra Prasada, '54, Jan. 7, 2006.
Buonaiuto, Valentino C., '56, June 23, 2010.
Jarmoc, Edwin Adam, '60, June 19, 2009.
Duchesne Jr., Robert E., '69, Feb. 1, 2006.
Malek, Kurt Martin, '03, March 8, 2004.

DELAWARE

ALPHA DE A

Glick, James Joseph, '54, March 23, 2007.

DISTRICT OF COLUMBIA

ALPHA DC A

Hampton, Delon, '54, January 14, 2021.

FLORIDA

ALPHA FL A

Downs, Richard John, '49, Jan. 13, 2006.
Long, Richard A., '75, August 9, 2002.

BETA FL B

Frey, Claire Ellen, '85, no details.

GEORGIA

ALPHA GA A

Davis Jr., Craig Carlton, '41, Oct. 4, 2002.
Crutchfield, Paul W., '43, Jan. 26, 2004.
Boissy Jr., Alphonse N., '49, Aug. 15, 2010.
Haite, William Frederick, '49, May 16, 2005.
Frizzell, Everett E., '50, May 17, 2012.

Shepherd, William Henry, '50, no details.

Williams Jr., Lewis W., '50, Jan. 16, 2021.
Enyeart, William Roosevelt, '53, no details.
Dunwoody, Eugene Cox, '56, Jan. 9, 2021.
Fisher, James Richard, '57, Jan. 9, 2021.
Boland, Paul, '59, May 29, 2010.
Ray, Fulton Tremere, '59, July 19, 2000.
Cooke Sr., John Franklin, '61, Jan. 5, 2021.
Hackmeyer Jr., Ferdinand, '64, Jan. 3, 2021.
Williams Jr., Gordon E., '69, Sept. 4, 2003.
Corbett, Danny Kaye, '70, Dec. 8, 2001.
Ngo, Dung A., '86, no details.
Ziolkowski, Kevin Jay, '90, July 2, 2010.

IDAHO

ALPHA ID A

Bird, John M., '78, December 3, 2006.

ILLINOIS

ALPHA IL A

Steinberg, Martin, '41, August 10, 2007.
Kuhn, Donald Henry, '42, Oct. 15, 2005.
Bareither, Harlan D., '43, June 26, 2015.
Fox, Jerome Lewis, '47, no details.
Sikes, Philip Ganey, '49, no details.
Davis, Arthur Jackson, '50, Jan. 9, 2001.
Sternal, Raymond John, '50, Jan. 21, 2001.
Cameron, Scott Hogarth, '51, Feb. 3, 2013.
Mahaffy, Dwight A., '54, February 6, 2002.
Battuello, Frank L., '55, March 28, 2003.
Zartman, William N., '56, Jan. 17, 2021.
Ryan, Robert Emmett, '58, no details.
Hogan, Dennis Lee, '60, April 7, 2006.
Volsen, Arthur Jerry, '66, Nov. 24, 2014.
Steffen, David Eugene, '71, July 3, 2013.
Wisniewski, John Arthur, '80, no details.

BETA IL B

Hoshizaki, Akira, '56, November 2, 2011.
Taylor, Robert Spalding, '57, no details.

GAMMA IL Γ

Klotz, James Allen, '44, July 4, 2011.
Schoenfeld, Jack Robert, '47, Aug. 6, 2006.
Sitar, Ivan Joseph, '49, no details.
Brusenback, Robert A., '50, May 5, 2009.
Rath, Gustave Joseph, '52, March 20, 2004.
Kooyman, William John, '57, Dec. 13, 2020.
Hepner, Charles Francis, '61, no details.
Jacobsen, Herbert William, '68, no details.

INDIANA

ALPHA IN A

Ringham, Richard Fredrick, '41, no details.
Deuster, Ralph William, '42, June 23, 2000.
Currie, Robert Marion, '45, Sept. 1, 2000.
Gray, Robert Merle, '45, Sept. 5, 2005.
Hammerle, Kenn John, '45, Feb. 27, 2013.
Covault, Donald Orville, '48, July 8, 2016.
Durfee, Jack Merlin, '48, October 9, 2015.
Brinkman, Herbert C., '49, July 29, 2000.
Fox, Eugene Rudolph, '49, no details.

Spreecher, Newell Dwight, '49, no details.
Cox, Maurice G., '50, November 23, 2003.
Menzel, Howard Godfrey, '50, Jan. 1, 2021.
Morgan, Homer Garth, '51, no details.
Chilton, Ralph Henry, '52, no details.
Evans, John Allen, '52, January 10, 2018.
Savo, Theodore Anthony, '55, Jan. 1, 2002.
White Jr., Samuel, '53, no details.
Bascom Jr., Roger C., '54, Sept. 15, 2017.
Shouse, Robert Floyd, '54, Jan. 17, 2021.
Pfarrer III, Frederick H., '55, April 10, 2020.
Stimson, Richard Morris, '55, Jan. 6, 2002.
Chun, Myung Soo, '57, no details.
Thompson, John Robert, '57, no details.
Birnbaum, Howard F., '58, Aug. 29, 2005.
Schrock, Steven Lynn, '59, Nov. 11, 2005.
Walters, Richard Leroy, '59, Aug. 19, 2007.
Manlief, Scott Kieth, '61, Sept. 12, 2005.
Renn, Eugene John, '65, no details.
Silverthorn, Charles Robert, '65, no details.
Sparks, James B., '67, April 24, 2005.
Crosby, James Alan, '69, Sept. 1, 2007.
Elias, Robert John, '69, February 8, 2021.
Burgin, John Raymond, '75, Aug. 20, 2010.

GAMMA IN Γ

Barton, Edmund Charles, '63, Aug. 12, 2000.
Cannon, George Joseph, '63, no details.
Bell, Richard Albert, '65, Sept. 13, 2009.
Brown, William Vincent, '73, June 11, 2008.
Carlaccini, James Alan, '83, Nov. 10, 2020.

DELTA IN Δ

Rammelsberg, Marvin F., '52, Jan. 14, 2011.

EPSILON IN E

Derose, Charles Robin, '78, April 16, 2004.

ZETA IN Z

Gavankar, Rutuj, '21, November 8, 2020.

IOWA

ALPHA IA A

Carrell, Peter Knotts, '42, June 9, 2006.
Brown, Merrill Waiters, '43, no details.
Freitag, Maurice Eugene, '50, no details.
Hanson, David Werner, '52, July 11, 2018.
Pulliam, George Richard, '52, Sept. 17, 2009.
Cosgrove, John D., '56, January 23, 2021.
Cook, William John, '57, February 4, 2021.
Bakker, Donavon Leon, '58, no details.
Trimble, Melvin, '58, no details.
Soller, Thomas Michael, '59, Jan. 10, 2020.
Stacy, Denzil Wayne, '64, April 11, 2011.
Nicholas, David Cole, '67, Jan. 14, 2021.
Baenziger, Mardith Ann, '68, Oct. 12, 2019.
Deihl, Ronald Irving, '72, no details.
Akin, Joseph Daniel, '78, Dec. 26, 2017.
Brumley, Terry Robert, '78, Sept. 29, 2014.

BETA IA B

Perkins, Eugene Oral, '46, no details.
Marsh Jr., Curtis Leroy, '58, no details.
Coleman, David L., '77, October 30, 2002.

KANSAS

ALPHA KS A

Hare Jr., Paul White, '47, March 16, 2005.
Reynolds Jr., Frank Irving, '50, May 2, 2007.
Barenberg, Ernest John, '53, Jan. 19, 2021.
Brooks, David Rennison, '62, Dec. 22, 2013.
Norfleet, Richard N., '64, March 11, 2004.

GAMMA KS Γ

Raville, Milton Edward, '43, July 15, 2005.

KENTUCKY

ALPHA KY A

Nierenberg, Arthur A., '46, April 16, 2005.
Lewis, Owen Holt, '49, January 28, 2021.

Brown Jr., Claude Mitchell, '51, no details.
Burrus, Barry Garnett, '71, Oct. 21, 2009.
Fawkes, Jeffrey Ray, '05, February 4, 2021.

BETA KY B

Raymond, John Walker, '43, no details.

LOUISIANA

ALPHA LA A

Hymel, Marc Anthony, '47, March 11, 2016.
Preston Sr., Donald A., '54, Jan. 21, 2021.
Deale, Ronald Dexter, '69, no details.
Capell III, Robert Lyttleton, '70, Jan. 1, 2021.

BETA LA B

Favrot, David Blair, '54, January 20, 2021.
Gaspard, Kenneth C., '54, no details.
Graf, Rodney Peter, '61, August 10, 2013.

GAMMA LA Γ

Hughes, William Joseph, '51, Dec. 6, 2004.
Gaddy Jr., William C., '52, Dec. 31, 2002.
McRaney, William Kirby, '59, no details.
Martin, Stephen Hugh, '69, Oct. 6, 2013.

DELTA LA Δ

Kite, Mark Hubert, '57, April 29, 2007.

MAINE

ALPHA ME A

Anderson, Oscar Elwyn, '50, no details.
Beal, Calvin Howard, '52, no details.
Sherburne, Russell R., '66, April 28, 2020.

MARYLAND

ALPHA MD A

Rosen, Judah Ben, '43, April 28, 2009.
Kuchta, Francis Walter, '53, Aug. 22, 2020.

BETA MD B

Casson, John Edward, '50, Feb. 23, 2012.
Sampson, Harley G., '60, March 17, 2010.
Thompson, Clifford Frank, '60, Jan. 7, 2008.

MASSACHUSETTS

ALPHA MA A

Crosier Jr., Harold E., '42, no details.
Robertson, Wayne Wright, '52, no details.
Carpenter, Clint Wayne, '79, Nov. 25, 2002.

BETA MA B

Scarff, Donald Douglas, '41, Jan. 23, 2006.
Davis, John Robert, '42, July 2, 2020.
Madwed, Albert, '44, March 11, 2006.
Blitzer, Stanford David, '46, no details.
Page, Jack Culbertson, '48, no details.
Duecker, Donald Louis, '51, no details.
Ching, Calvin Lin Keong, '52, no details.
Conant, Barton Currie, '52, Feb. 24, 2003.
Blom, Sture Reino, '53, February 15, 2021.
Cady, Kendall Bingham, '56, Dec. 10, 2020.
Krooss, Robert John, '56, Nov. 28, 2001.
Dean III, Lee Wallace, '57, May 4, 2016.
Wiederhold, Michael L., '61, Jan. 6, 2015.
Huang, Alexander K-Y, '71, June 12, 2006.

DELTA MA Δ

Taitel, Max, '40, January 14, 2014.
Lash Jr., Michael, '46, no details.
Wentling, Edward Richard, '47, May 5, 2006.
Kay, Wesley Kendrick, '49, March 6, 2001.

EPSILON MA E

Wilson Jr., Lester Earl, '49, March 5, 2015.
Klein, John Joseph, '50, April 13, 2008.
Brown, Reginald Copley, '54, Oct. 10, 2005.
Morgan, Matthew Peters, '70, no details.
Cogan, Michael Scott, '71, no details.
Massa, Gerard Paul, '73, no details.
Morse, Douglas H., '84, October 24, 2020.

ZETA MA Z

Williams, Warren Allen, '51, Oct. 31, 2001.
Garry, Mark, '78, November 23, 2002.

THETA MA Θ

Fay, Leo D., '92, no details.

MICHIGAN

ALPHA MI A

Froelich, Eric S., '82, no details.

BETA MI B

Nelson, Reed, '42, April 30, 2011.
Kunz, Nelson Wilton, '48, April 25, 2002.
Haun, John W., '49, June 7, 2004.
Morrissett, Patrick Dean, '52, Nov. 10, 2002.
Price, Leslie Edwin, '52, Dec. 30, 2020.
Talbot, Richard J., '52, March 10, 2001.
Blanton, James Robert, '57, May 6, 2006.
Johnson, Edlen George, '59, no details.
Schwenk, Franklin C., '59, Dec. 8, 2004.
Laurich, Lawrence Alvin, '65, Oct. 26, 2014.
Worman, William Earl, '66, no details.
Kennedy, Douglas, '73, May 12, 2008.

GAMMA MI Γ

Connable, Tenho S., '42, Jan. 17, 2020.
Schomburg Jr., William H., '42, no details.
Dangl, Joseph Robert, '44, no details.
Heyn, William Otto, '51, October 17, 2017.
Yukawa, Sumio, '51, December 22, 2005.
Eckhart, Franklin F., '53, Dec. 18, 2020.
Hall, Howard David, '55, no details.
Wickman, Charles R., '55, July 21, 2013.
Shaklee, Francis S., '58, May 7, 2020.
Paul, David Louis, '63, June 23, 2002.
Woolley, Frank Edward, '63, June 4, 2020.

DELTA MI Δ

Schramm, John Edward, '49, no details.
Oberndorfer, William H., '51, March 4, 2018.
Dewitt, Kenneth Joseph, '61, Dec. 29, 2006.
Garrett, Robert Michael, '67, Dec. 29, 2020.
Marvin, Brian David, '83, Jan. 16, 2007.

EPSILON MI E

Dankovich, Joseph A., '53, April 26, 2002.
Della Torre, Edward, '54, Dec. 27, 2018.

ZETA MI Z

Houser, Morris Yorke, '49, Aug. 11, 2007.
Thebert, Alan Wilbert, '57, July 4, 2020.
Swantick, Julie Ann, '74, no details.

ETA MI H

Polubinski, Ann Terese, '85, Dec. 4, 2001.

MINNESOTA

ALPHA MN A

Baral, William Julius, '41, March 7, 2002.
Rosene, Robert Windom, '45, June 9, 2020.
Shibata, Harry Hiroyuki, '47, Nov. 4, 2010.
Latick, James Roger, '56, May 29, 2001.
Lindfors, Jason F., '56, Feb. 17, 2021.
Persons, Clyde Orval, '56, March 20, 2016.
Aske, Robert Len, '58, June 18, 2016.
Johnson, Chester, '58, Dec. 29, 2008.
Chase, Clement G., '66, Feb. 19, 2020.
Spear, Mark C., '71, no details.
Fitch, Linda Ruth, '80, November 11, 2004.

MISSISSIPPI

ALPHA MS A

Douglass, Thomas Eugene, '58, Dec. 6, 2020.

MISSOURI

ALPHA MO A

Campan, Kenneth Wilbur, '55, Dec. 19, 2020.
Lingle Jr., Ralph Arnold, '65, April 5, 2007.
Budenholzer, Paul C., '90, no details.

BETA MO B

Sexton, Robert Matheny, '41, no details.
Castrale, Arduino, '50, Dec. 11, 2005.
Freeman, David Jack, '50, April 26, 2007.
Haas, Paul Arnold, '50, February 5, 2021.
Davidson, John Noel, '51, no details.
Jenner, Kenneth C., '54, April 11, 2004.
Smith, Floyd Taylor, '55, July 20, 2011.
Carpenter, Lloyd Wayne, '59, July 15, 2004.

CHAPTER ETERNAL

Continued



Ohio Mu '85

Col. Stanley Rogers, Ph.D.

January 15, 2021

A research scientist/engineer at AFRL, recipient of the Black Engineer of the Year Award (2005) for career achievement and NSBE Distinguished Engineer Award (2005).

BETA MO B

Gassner, Gene Edward, '64, April 10, 2007.
Montgomery, Billy LeRoy, '65, July 2, 2009.
Olson, Elmer Carl, '72, no details.
Sanders, Marion Stan, '74, no details.
Schonfeld, William Johan, '80, Oct. 25, 2000.

GAMMA MO Γ

Bubb Jr., Frank William, '43, no details.
Reinert, Owen E., '49, Oct. 23, 2019.
Smith, Charles Edward, '49, Jan. 1, 2004.
Wochner, Charles John, '49, Sept. 11, 2001.
Bleikamp, Richard Paul, '50, Jan. 31, 2013.
Horn, Robert Herman, '51, Jan. 31, 2007.
Hilker, Robert Allen, '52, Nov. 29, 2009.
Jones, Spencer B., '52, no details.
Hibbits, Roger Milo, '57, August 3, 2007.
Patient, William Fred, '57, Feb. 25, 2020.
Hopkins, Douglas A., '84, Sept. 8, 2005.

MONTANA

ALPHA MT A

Lorell, William W., '47, no details.
Champion, Robert E., '55, March 30, 2019.
Minnehan, Timothy John, '85, Sept. 29, 2013.

NEBRASKA

ALPHA NE A

Dean, Randall Jay, '76, Oct. 13, 2010.

NEW HAMPSHIRE

ALPHA NH A

Ballhaussen, Frederic, '50, March 5, 2002.
Regan, Robert Bartlett, '50, no details.
Dooley, George Hadley, '53, Aug. 12, 2020.
Sullivan, James Richard, '69, no details.

NEW JERSEY

ALPHA NJ A

Smith, William Austin, '51, January 5, 2020.
Wojtaszek, Michael R., '68, Nov. 25, 2000.
Hess, Norman F., '69, February 9, 2009.
Hunt, Robert Niall M., '71, no details.
Waivers, Leo Edward, '74, March 15, 2012.

BETA NJ B

Barnes, William Edward, '49, July 28, 2001.
Terhune Jr., William R., '69, June 12, 2002.

GAMMA NJ Γ

Slamar, Frank, '41, May 17, 2012.
Messina, Joseph Paul, '47, Jan. 26, 2021.
Giacobbe, Andrew A., '51, May 6, 2008.
Kahn, Arthur Henry, '53, January 30, 2001.
Mitchell, David Marshall, '54, Jan. 16, 2006.
Amos, Douglas Raymond, '55, Jan. 1, 2009.
Schmitt, Charles Emil, '59, March 25, 2005.
Ricci, Roy Joseph, '60, April 4, 2003.
Huber, Charles J., '62, no details.
Walsh, Daniel Stephen, '63, June 2, 2000.
Willms, Charles F., '68, Sept. 14, 2013.
Branco, Jose Artur, '74, Dec. 12, 2003.
Matyas, Richard S., '74, Nov. 2, 2007.
Guarino, Robert S., '78, no details.
Chan, Eddie Poleung, '97, June 18, 2010.

DELTA NJ Δ

Roberts, Owen John, '56, Feb. 7, 2021.

NEW MEXICO

ALPHA NM A

Bacastow, Jack L., '73, Sept. 15, 2020.

NEW YORK

BETA NY B

Curtis, Truman Phillips, '41, no details.
Morecroft, Barton T., '49, Sept. 26, 2005.
Alperin, Norman Noel, '52, no details.
Kocsis, Matthew James, '89, no details.

GAMMA NY Γ

Lesko, James Stephen, '42, no details.
Moeller, Griswold L., '45, Oct. 17, 2011.
Farnham, George Errald, '51, Nov. 13, 2002.
Willenbrock Jr., Arthur, '51, Feb. 5, 2007.
Grotke, Gordon, '52, April 26, 2011.
Mendel Jr., Benjamin, '52, August 8, 2017.
Wilsner, Fred Albert, '52, January 30, 2000.
Cassaro, Michael A., '54, March 17, 2020.
Gagnon, Richard Norman, '54, Jan. 1, 2016.
Werner, Stuart Lloyd, '54, Sept. 22, 2020.
Califano, Leonard Earl, '57, Dec. 23, 2001.
Hoviss, David Irwin, '60, July 20, 2007.
La Fond, John Allen, '61, Nov. 18, 2007.
Tataronis, John Andrew, '63, Jan. 24, 2014.
Reinman, Kenneth Joseph, '71, Oct. 6, 2010.
Bamford, Thomas Anthony, '81, no details.
Rode, Harold, '82, no details.

DELTA NY Δ

Andrews, Harold, '48, May 15, 2007.
Feyk, Richard Peter, '49, August 17, 2008.
Christian, Edward H., '50, Nov. 23, 2002.
Kuhn, Herman August J., '53, Nov. 5, 2004.
Holt, Hamilton Bowen, '57, Jan. 18, 2021.
Merkle, John Graham, '57, Jan. 16, 2021.
Blaine, Gary Michael, '76, March 6, 2003.

EPSILON NY E

Phillips, Ronald Charles, '60, Aug. 10, 2009.
Schneider, John J., '62, no details.

ZETA NY Z

Lewyt, Alexander M., '56, no details.

ETA NY H

Zambuto, Mauro, '43, September 1, 2001.
Egan, Walter George, '49, Nov. 3, 2003.
Di Maggio, Oronzo, '54, August 3, 2003.
Halpert, Harry, '60, no details.
Ozerkis, David Irwin, '60, Sept. 12, 2005.
Garfinkel, Maurice, '67, March 5, 2009.
Eichenwald, Rolf, '72, no details.
Lee, Betty Wing-Kee, '90, no details.

THETA NY Θ

Claffey, Paul John, '43, July 16, 2011.
Harrison, William P., '44, Feb. 6, 2004.
Zurcher, Harold Everett, '51, no details.
Randles, David Wilson, '59, Nov. 22, 2003.
Stryker, William Everett, '69, no details.
Sweeney, Sharon Marie, '91, April 11, 2011.

KAPPA NY K

Brown, George Albert, '48, Nov. 9, 2020.

LAMBDA NY Λ

Mischke, Roland Alan, '50, Dec. 13, 2018.
Mizzi, John Vincent, '63, October 22, 2020.
Crispano, Gennaro, '74, no details.

MU NY M

Eisenhauer, Robert E., '61, Dec. 18, 2016.

NU NY N

Weedon, Benjamin F., '50, no details.
Trautman, Paul Jonathan, '62, Aug. 5, 2007.

XI NY Ξ

McNamara, Robert Anthony, '62, no details.
Lanzillotta, Joseph, '75, July 6, 2010.

RHO NY P

Rizk, Bassem, '85, no details.

NORTH CAROLINA

ALPHA NC A

Llewellyn, Robert W., '42, no details.
Baraff, Gene Allen, '56, January 3, 2010.
Elliott, Claude Franklin, '56, Dec. 30, 2020.
Ratliff, Morris, '57, February 19, 2021.
Lawrence, Thurman K., '70, June 9, 2006.
Isenhour III, William L., '71, Oct. 5, 2009.
Danner, Kenneth Ronald, '74, Oct. 19, 2011.

GAMMA NC Γ

Chapman, Frank Abbott, '50, Sept. 23, 2002.

DELTA NC Δ

Holshouser, Thomas E., '86, no details.
Hollar, Donna Alyn, '88, January 17, 2021.

NORTH DAKOTA

ALPHA ND A

Sewell, Daniel Keith, '49, Sept. 11, 2001.
Haibeck, Jeryl Maurice, '51, Oct. 1, 2007.
Matheson, Leslie Ray, '51, July 26, 2001.
Johnson, Gerald Jerome, '59, no details.
Satermo, Dwight Wayne, '59, April 19, 2000.

OHIO ALPHA

ALPHA OH A

Cooke, Thomas Lee, '53, no details.

BETA OH B

Hoff Jr., Russell Stratton, '51, Dec. 19, 2020.

GAMMA OH Γ

Postlewaite, Donald E., '41, no details.
March, Roy Franklin, '43, no details.
Lehman, Donald F., '48, no details.
Mankoff, Lawrence, '48, no details.
Pierce Jr., Glen S., '49, May 30, 2001.
Garmus, John William, '51, Dec. 19, 2020.
Geiger, Meredith Lynne, '51, no details.
Harkness, Kenneth A., '51, Nov. 14, 2000.
Reider, James E., '51, March 17, 2000.
Telfer, Robert C., '61, Feb. 23, 2003.
Walter, Carl Eugene, '75, Nov. 16, 2009.
Thornton, Donald B., '78, October 3, 2012.
Hudson, Thomas R., '80, no details.
Sweitzer, Stephen H., '86, May 31, 2007.

DELTA OH Δ

Greiner, Samuel Dale, '55, August 4, 2006.
Stump, Keith B., '63, December 6, 2020.
England, James G., '79, July 10, 2017.
Seaman, Gary Kenneth, '83, Feb. 11, 2021.

EPSILON OH E

Peschel, William Frank, '47, Sept. 28, 2007.
Starek, Conrad Francis, '67, June 8, 2019.

ZETA OH Z

Soncrant, Donald T., '50, May 15, 2008.
Steinmiller, Robert C., '67, Dec. 23, 2020.

ETA OH H

Lewis, LaVerne Fred, '41, Jan. 13, 2004.
Slater, David Charles, '80, May 30, 2011.

KAPPA OH K

Waters, Jeffrey Patrick, '87, Nov. 26, 2007.

MU OH M

Rogers, Stanley, '85, January 15, 2021.

OKLAHOMA**ALPHA OK A**

Box, Maurice Dale, '59, August 18, 2001.

GAMMA OH Γ

Banks, Jerry, '66, September 25, 2012.

OREGON**ALPHA OR A**

Myers, Howard Lewis, '53, Nov. 3, 2007.

Eide, Tor Birgler, '66, April 9, 2001.

Nicholson, Julie Ann, '81, Jan. 1, 2001.

PENNSYLVANIA**ALPHA PA A**

Bresler, Martin Arthur, '48, no details.

Owczarek, Jerzy Antoni, '50, Jan. 11, 2021.

Rettew, John Charles, '62, no details.

Underkoffler, Bruce Allen, '80, no details.

BETA PA B

Long, Robert Byron, '44, no details.

Rockwell, Wayne S., '49, March 14, 2017.

Strand, Richard Alvin, '50, Jan. 6, 2021.

Markoch, Jerome R., '51, Feb. 5, 2000.

Schuster, Max J., '53, March 25, 2002.

Holland, Allan L., '57, no details.

Heacox, Richard A., '58, June 12, 2011.

GAMMA PA Γ

Griffith Jr., Ole C., '42, February 17, 2021.

Gilbert, Lynford Wayne, '49, no details.

DELTA PA Δ

Navis, Herbert Albert, '45, July 26, 2015.

Finkle, Elliot Mandel, '62, Feb. 5, 2017.

Judelson, Lawrence D., '73, Aug. 31, 2003.

Lesch, Vincent Charles, '84, Nov. 4, 2010.

EPSILON PA E

Johnsen, Edwin Carl, '42, Sept. 4, 2000.

Rohland, William S., '50, Feb. 28, 2010.

White, William Edward, '50, no details.

Exley, Ronald Thomas, '54, no details.

Drosdick, Joseph William, '55, Jan. 2, 2021.

Volk, Joseph Harry, '57, no details.

ZETA PA Z

Plewes, Kenneth C., '41, no details.

McAllister, William J., '44, April 13, 2007.

Bogusz, John Francis, '51, June 16, 2018.

Wallack, Marvin H., '53, no details.

Margolis, David P., '56, Nov. 19, 2005.

Sawicki, John Felix, '70, Nov. 23, 2013.

ETA PA H

Sheffler Jr., Ira Smith, '44, Feb. 13, 2002.

Walker, John Ross, '53, January 6, 2010.

Pauls, Lawrence Alfred, '60, May 18, 2005.

Bulgher, David Everett, '78, Dec. 21, 2012.

THETA PA Θ

Labanca, Domenic L., '50, no details.

Urynowicz, Stanley M., '61, July 19, 2014.

PUERTO RICO**ALPHA PR A**

Guilbe Valen, Ausberto, '59, Jan. 27, 2010.

RHODE ISLAND**ALPHA RI A**

Thorne, John Reineche, '47, Feb. 13, 2008.

Schriefer, Herman F., '48, April 4, 2018.

Kenney Jr., Joseph H., '50, Aug. 5, 2020.

BETA RI B

Huttler, Joseph, '61, November 23, 2011.

Miller, Barry Allen, '64, November 5, 2009.

SOUTH CAROLINA**ALPHA SC A**

Mellichamp Jr., Leslie R., '43, Dec. 18, 2001.

TENNESSEE**ALPHA TN A**

Cole Jr., William George, '48, July 22, 2001.

Lundy, Ted Sadler, '54, January 13, 2021.

Long, George William, '57, Dec. 31, 2020.

McConnell, James W., '61, March 25, 2008.

Moore, Alexander Bishop, '61, Jan. 7, 2021.

Huray, Paul Gordon, '64, January 28, 2021.

Barker, Leland Wayne, '68, Jan. 23, 2021.

Milloway III, John Thomas, '80, no details.

Hewgley, Robert Andrew, '85, Sept. 21, 2011.

Evans II, John O'Brien, '92, Feb. 1, 2021.

BETA TN B

Pickel Jr., Thomas W., '51, Jan. 26, 2021.

Cook, George Edward, '60, Sept. 14, 2020.

ZETA TN Z

Carney, Terrance M., '56, Jan. 21, 2021.

TEXAS**ALPHA TX A**

Yuan, Shao Wen, '41, April 12, 2006.

Wood, James Richie, '46, no details.

Savage, Edgar Everett, '47, Dec. 27, 2005.

Knight, Graham Butler, '48, Jan. 17, 2020.

Moore, Charles Victor, '48, Aug. 31, 2006.

Murray Jr., Edward E., '48, Jan. 24, 2021.

Speer, Charles Everett, '49, Dec. 18, 2009.

Haschke, Chester Glen, '50, Nov. 14, 2020.

Frank III, M.P., '54, June 22, 2005.

Teague, James Winfrey, '58, May 26, 2006.

Huebner, Larry Edward, '71, no details.

Bilhartz, Lyman E., '74, May 24, 2004.

Thompson, Robert B., '79, April 11, 2009.

BETA TX B

Crosnoe, Ted Franklin, '44, no details.

Mendoza, Hector E., '50, June 28, 2007.

Schmitt, Donald Eugene, '59, Sept. 4, 2011.

GAMMA TX Γ

Chudleigh Jr., Walter H., '44, March 6, 2013.

Garland, Neel Emerson, '52, Jan. 18, 2021.

Kohler Jr., Arthur Degen, '58, Oct. 28, 2019.

DELTA TX Δ

Kilpatrick, Byron Keith, '48, March 1, 2004.

Lavis, John Richard, '49, no details.

Hunter Jr., James Alfred, '50, Feb. 28, 2011.

Sargent Jr., William M., '52, Sept. 9, 2001.

Killough, Carrol Paul, '57, Oct. 19, 2016.

Powers, Donald Frank, '58, March 6, 2005.

Fitts, John Murray, '64, no details.

Sheng, Patrick P. L., '68, July 10, 2007.

Lightsey, Kenneth Leon, '71, Nov. 29, 2004.

EPSILON TX E

Grupa Jr., Leon Michael, '74, Oct. 5, 2019.

ZETA TX Z

Yancey, Ashley Marie, '06, July 1, 2005.

ETA TX H

Taylor, Lee Deatherage, '68, Nov. 24, 2020.

Deorajsingh, Bhagwan, '88, July 21, 2003.

THETA TX Θ

Curtis, John Paul, '76, February 9, 2002.

IOTA TX I

Bollin, James R., '84, no details.

LAMBDA TX Λ

Nevill, Richard Allen, '42, Nov. 10, 2006.

Truitt, Marcus M., '47, no details.

Brooks, Garold Lawson, '74, Jan. 21, 2015.

Meza, Melissa, '02, April 21, 2010.

UTAH**ALPHA UT A**

Ryan, Norman Wallace, '42, no details.

Erickson, Robert L., '46, no details.

Maragakis, John Nick, '47, no details.

Anderson, Alvin R., '52, July 15, 2008.

Thomas, Arthur D., '61, Dec. 2, 2000.

Grimm, Siegfried Heinz, '62, Oct. 17, 2012.

BETA UT B

Stafford, John Carl, '68, no details.

Holm, Duane Thomas, '76, March 6, 2008.

VIRGINIA**ALPHA VA A**

Spangenberg Jr., Clay D., '51, July 6, 2011.

Morse, George Herman, '52, May 12, 2002.

Ferguson, Kenneth Estes, '59, July 15, 2001.

Riddle, Edwin Parker, '63, Dec. 31, 2004.

BETA VA B

Wood, Henry LeRoy, '43, no details.

Curfman Jr., Howard J., '45, July 23, 2018.

Devens, William George, '46, April 12, 2008.

Padis, Leo Archie, '48, no details.

Will, Robert Kingsley, '48, May 14, 2001.

Rudasill Jr., Charles L., '49, Feb. 2, 2021.

Quesinberry, Elmen C., '50, July 10, 2012.

Schwarz, William Harry, '50, Dec. 19, 2010.

Skinker Jr., Julian H., '50, Jan. 21, 2021.

Tucker, Harry McCallum, '50, no details.

Stouffer, Theodore Daniel, '51, no details.

Stinson Jr., Dewey Lee, '52, Jan. 8, 2012.

Sistrunk, Joel Banks, '61, no details.

Luning, Richard Burton, '63, no details.

McDowell, Jack R., '68, Nov. 23, 2006.

WASHINGTON**ALPHA WA A**

Sandholtz, Willis Arthur, '47, May 11, 2009.

Thomasson, Robert E., '50, Sept. 30, 2006.

Kelley, William Lewis, '55, no details.

Lapins, Uldis Egils, '55, June 27, 2004.

Costello, Edward Gerald, '56, Oct. 20, 2020.

King, Duane Alfred, '63, Sept. 24, 2010.

Bixler, Barry Stanton, '73, July 31, 2007.

Randles, Michael F., '75, June 25, 2005.

BETA WA B

Anderson, Robert W., '44, Oct. 16, 2011.

Larson, Delbert George, '44, July 3, 2011.

Terry, Robert Elmer, '61, no details.

Beseda, James William, '95, Sept. 23, 2006.

WEST VIRGINIA**ALPHA WV A**

Cochrane Jr., Thomas J., '50, no details.

Jarrett Sr., Harry M., '57, Nov. 2, 2020.

Comer, Joseph Ernest, '60, Sept. 23, 2008.

Mitry, Sameh A., '68, no details.

WISCONSIN**ALPHA WI A**

Drew, George William, '50, March 14, 2008.

Kopp, Robert Walter, '51, January 6, 2021.

Papenfus, John Douglas, '51, Jan. 3, 2021.

Downham, Roy Everett, '52, Jan. 27, 2021.

Larson, Nils Irving, '58, no details.

Anderson, Jerome Alfred, '59, Jan. 4, 2021.

Davis, Donald Carter, '88, Feb. 16, 2003.

BETA WI B

Venstrom, Earl Anselm, '42, no details.

Kirby, John Edward, '44, January 7, 2014.

Siebers, Robert W., '48, Feb. 19, 2003.

Dolan, Edward Francis, '49, no details.

Lutz, Eugene Joseph, '49, no details.

Watzin, Richard John, '50, Jan. 4, 2000.

Acheson, Robert Charles, '53, July 4, 2018.

Tronca, Edward G., '55, July 10, 2007.

Bonin, James Anthony, '56, Aug. 25, 2005.

Schmerda, Joseph M., '58, Nov. 22, 2005.

GAMMA WI Γ

Hoya, Terrence Keith, '71, March 25, 2004.

Durian, Stewart William, '84, Dec. 9, 2008.

Petitions Received

Tau Beta Pi has received four petitions for new collegiate chapters and all have been reviewed by the Executive Council, met the Constitutional requirements for a new collegiate chapter, and were approved for an inspection committee visit as soon as travel conditions allow. If the inspection committee's reports are favorable, final petitions from each school would be due in June 2022 and would be considered by the 2022 Convention.

AMERICAN UNIVERSITY AT SHARJAH

The Society at Sharjah, United Arab Emirates (U.A.E.), has operated since spring 2018. The group submitted a preliminary petition for a new chapter in December 2020. Founded in 1997, AUS is acclaimed throughout the Gulf Cooperation Council countries and the Middle East for academic excellence and multicultural campus environment. It is an independent, non-profit, coeducational institution of higher education formed on the American model, which integrates broad-based liberal arts education with professional education studies. At AUS, all classes and administrative functions are conducted in English.



MERRIMACK COLLEGE

The Society at Merrimack College in North Andover, Massachusetts, has operated since December 2017. The group submitted a preliminary petition for a new chapter in November 2019. Founded in 1947 by the Order of St. Augustine, it is a private institution of higher education with a 220-acre campus comprised of nearly 40 buildings. The school of science & engineering offers programs in civil engineering, computer engineering, computer science, data science, electrical engineering, environmental science, mathematics, mechanical engineering, and physics. Master's degrees in civil engineering, engineering management, and mechanical engineering are also available.



TEXAS A&M AT QATAR

The Society at Texas A&M University at Qatar in Western Asia, has operated as a branch chapter of Texas Delta since 2011. The group submitted a preliminary petition for a new chapter in June 2020. Since 2003, Texas A&M Univ. at Qatar has offered bachelor of science degrees in chemical engineering, electrical engineering, mechanical engineering, and petroleum engineering. It also offers two graduate degrees in chemical engineering since 2011: a master of science and a master of engineering. The curriculum offered at Texas A&M at Qatar are identical to the ones offered at the main campus in College Station, TX. Courses are taught in English and in a coeducational setting.



WESTERN CAROLINA UNIVERSITY

The Society at Western Carolina University in North Carolina has operated since January 2012. The group submitted a preliminary petition for a new chapter in April 2020. Founded in 1889 as a teaching college, Western Carolina provides comprehensive educational opportunities to more than 12,000 students in undergraduate and graduate programs. It is a public regional institution of higher learning. The college of engineering and technology offers undergraduate and graduate programs in engineering with concentrations in electrical, mechanical, and manufacturing engineering, as well as construction management.



Images above correspond to the institution profiled on the left.

District Doings



Zoom meeting attendees during District 2 Conference.

Due to COVID and safety precautions, all 2021 TBPI District Conferences were held via Zoom meetings. Thank you to all of the District Directors for organizing these virtual events to help collegiate chapter operations and officer transitions. Below are two Conference summaries.



District 2

District 2 Directors hosted 64 Tau Bates the evening of March 11. The group was a mix of student leaders from 23 collegiate chapters in New York and New Jersey with alumni, advisors, and TBPI officials also in attendance.

The Conference was a three-hour interactive chapter operations workshop over Zoom geared at transitioning outgoing and incoming chapter officers on a model year of TBPI chapter operations. While the event was not the traditional full weekend consisting of an in-person workshop, leadership development, and social & networking activities, it was considered a success given COVID-19 pressures and was well-received by attendees.

The District Directors urged all of the student leaders to take the information they had learned back to reinvigorate their chapters and grow membership.

District 9

The District 9 Conference was held on the evening of Friday, February 26, and the afternoon of Saturday, February 27, with students from Arkansas, Kansas, Missouri, Nebraska, and Oklahoma.

The evening session reviewed chapter operations modules with the chapter officers and incoming officers. Saturday started with chapter introductions including "Task-Master" video presentations, which showed the chapters throwing a piece of paper spectacularly into a bin. Prizes were awarded for the top three by popular vote: first place went to Kansas Gamma (Kansas State Univ.), second to Arkansas Alpha (Univ. of Arkansas), and third to Missouri Delta (Univ. of Missouri-Kansas City).

Next, everyone moved to breakout sessions for Interactive Chapter Exchange, an Alumni Q&A session, and a virtual interviewing round table. About 30-40 students were engaged at any one time.

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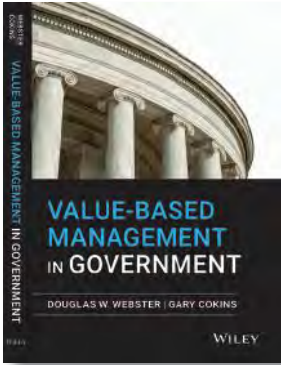
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Authors

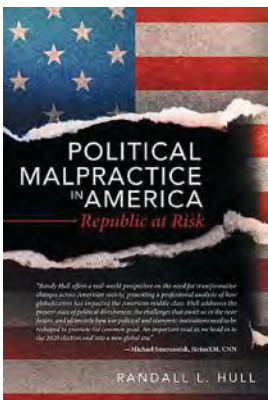
Recently published a book? If so, we would like to recognize you! Send details and a cover image to dylan@tbp.org.



Gary M. Cokins
New York Delta '71
Value-Based Management in Government
Gary is coauthor of this book published January 2020 by Wiley. He is an internationally recognized expert on advanced cost management and performance improvement. His career in consulting included work at Deloitte and SAS. Gary is the founder of Analytics-Based Performance Management, LLC.



Emily Hackett, Ph.D.
New York Kappa '94
Ghost Years: Recollections of an American Student in 1990s China
Emily is author of this book published in 2020. She is a software engineer and Certified Scrum Master. Her degrees are in mechanical engineering from the University of Rochester.

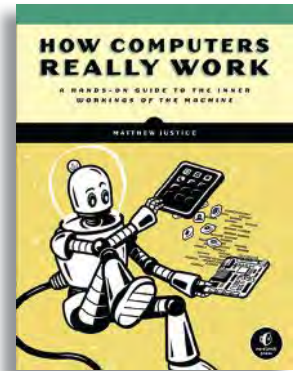


Randall L. Hull, Ph.D.
Pennsylvania Alpha '73
Political Malpractice in America: Republic at Risk
Randall is author of this book published in 2020 by Archway Publishing. He is a retired global business executive who worked in the energy and chemicals industries for 40+ years. He has degrees in mechanical engineering from Lehigh University and an MBA from Harvard University.

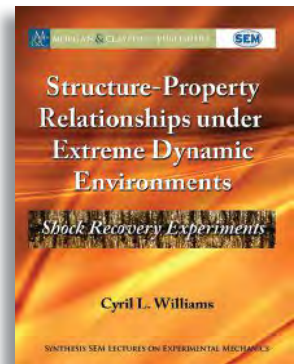
David A. Johnston, Ph.D.
Ohio Zeta '79
Mastering Software Engineering Discipline
David is coauthor of his first book published in September 2020. The eBook is an easy to follow guide for implementing disciplined processes for software development with a goal of quality code from start to release. David is a computer engineer with 40+ years of experience and is co-inventor on over 20 U.S. patents.



Matthew R. Justice
Tennessee Alpha '00
How Computers Really Work
Matthew published this book in December 2020 from No Starch Press. This guide to the inner workings of computers offers an accessible, hands-on approach to exploring hardware and software. He is a software engineer with 17+ years of experience. He wrote this book with his teenage daughters in mind.



Cyril L. Williams, Ph.D., P.E.
Maryland Alpha '97
Structure-Property Relationships under Extreme Dynamic Environments
Cyril is author of this book published January 2020 by Morgan & Claypool Publishers. He is a Senior Research Engineer at Army Research Laboratory. Cyril has two degrees from Johns Hopkins University (Ph.D. and M.S.) and two degrees (M.S. and B.S.) from UMBC, all in mechanical engineering.



Summer Problems *Continued*

Each team has three players ranked 1 through 3, where the player ranked 1 is the strongest player of the three, and rank 3 is the weakest. In the tournament, each player from one team is paired against one player from the opponent in a head-to-head match. If a player's ranking is A and his opponent's ranking is B, then the first player's probability of winning the match is $B \div (A + B)$. The Nets win the coin toss, which gives them the privilege of determining the pairings. What is the Nets best pairing strategy, and using that strategy, what is their probability of winning the tournament by winning a majority of the matches?

—Don A. Dechman, TX A '57

3: From the Movies

In the eponymous movie, Will Hunting, responding to the challenge of Professor Lambeau, drew eight, simplified (that is, no vertex has exactly two neighbors), unique trees with exactly 10 vertices. How many N such trees are there with exactly 11 vertices? Of those N trees, what is the maximum number of non-leaf vertices found on a single tree?

—adapted from:
Good Will Hunting, 1997

4: Gizmo Orders

Through an unfortunate logistics error, the SuperGizmo Company has received a large number of two sizes of boxes—one size holds 20 Gizmos and the other holds 43 Gizmos. They decide to only accept orders that they can fill with an exact combination of full boxes. Thus, they could fill orders for 558 ($15 \times 20 + 6 \times 43$), 559 (13×43), 560 (28×20), or 561 ($13 \times 20 + 7 \times 43$), but not 562. What is the largest order that cannot be filled? What is the general solution for any two containers of capacity x and y Gizmos, assuming x and y are relatively prime and are both greater than one?

—Madachy's *Mathematical Recreations*
by Joseph S. Madachy

5: Toroid Planet

Sometime in the future, five Tau Bate astronauts are exploring a recently discovered solar system and land on one of its small planets. To their amazement, they discover the planet is in the shape of a perfect torus. Furthermore, they detect a series of channels, each of which is a perfect circle formed by the intersection of a plane with the planet's surface. Suspecting that the channels were dug by intelligent beings, the five start out looking for artifacts.

Hannah follows one channel and finds its length to be 30 kms in circumference.

Jack follows a longer channel which does not cross Hannah's.

Dana's channel is 50 kms and crosses Jack's.

Ron's channel is 60 kms and also crosses Jack's.

Finally, Sarah follows a channel which is the maximum possible circumference.

What is the length of Sarah's channel?

—All-Start Mathlete Puzzles
by Richard I. Hess, Ph.D., CA B '62

BONUS: Fortunata considered twenty linear equations based on the English spellings of the numbers 1 through 20 (and yes, 0 is a variable, not to be confused with the digit 0):

$$\begin{aligned} O + N + E &= 1 \\ T + W + O &= 2 \\ &\dots \\ T + W + E + N + T + Y &= 20 \end{aligned}$$

There was no simultaneous solution to all twenty equations, but she did find a solution to nineteen of the equations. Her solution had exactly four of the specified variables equal to zero. What common English word could she spell by arranging the four letters that name those variables?

—Daniel L. Stock, OH A '80

COMPUTER BONUS:

On a remote island lives a tribe with a strange custom. On their New Year's Day, each member of the tribe must deliver to the chief one unit of grain for each year they are old. The grain is weighed using a set of seven sacred stones, each of which is an integral number of grain units. A traditional part of the ritual is that no more than three of the stones can be used for each weighing, although they need not all be on the same pan of the balance scale used. Another part of the tradition is that if any tribe member lives to an age such that their contribution of grain cannot be weighed using at most three stones, the levy will be suspended forever. Last year an elder died just a few months shy of this critical age, much to the relief of the chief. Assuming the seven stones are chosen to make the critical age the maximum possible, what was the elder's age when they died, and what are the weights of the seven stones?

—Sunday Times

Email your answers (plain text only) to any or all of the Summer Brain Ticklers to BrainTicklers@tbp.org or by postal mail to **Dylan Lane, Tau Beta Pi, P.O. Box 2697, Knoxville, TN 37901-2697.**

The method of solution is not necessary. The Computer Bonus is not graded. Where possible, exact answers are preferable to approximations. The cutoff date for entries to the Summer column is the appearance of the Fall *Bent* which typically arrives in mid-September (the digital distribution is several days earlier). We welcome any interesting problems that might be suitable for the column. Dylan will forward your entries to the judges who are **F.J. Tydeman, CA A '73; J.R. Stribling, CA A '92; G.M. Gerken, CA H '11;** and the columnist for this issue,

— J.C. Rasbold, OH A '83

ASSOCIATION BRIEFS

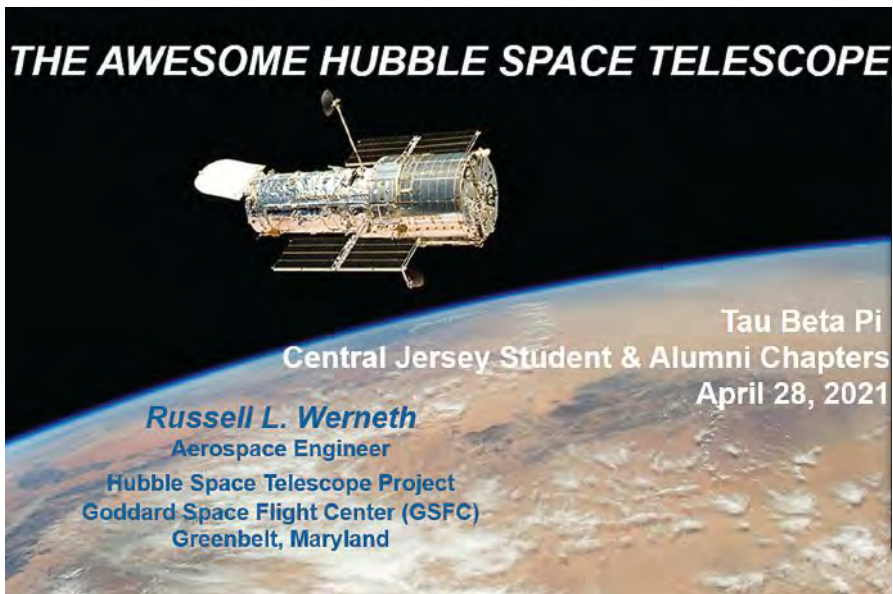


CHAPTER HIGHLIGHT: MISSOURI BETA

The above image of members at Missouri University of Science & Technology with the campus concrete Bent monument was taken by **Stacy M. Youngers, MO B '21**. She is the MO Beta Chapter social coordinator, an engineering management major, and designed the new TBI shirts the members are wearing.

The image to the left was also taken by Stacy and includes **Amr Elsayegh, MO B '21**, with the chapter's brass Bent monument. He is originally from Egypt and is majoring in civil engineering. Visit the MO B Facebook page to see all images from the photo session: www.facebook.com/taubetapi.mst

Have a unique chapter image/story?
Submit to media@tbp.org, so we can share it.



ALUMNI ACTIVITY: CENTRAL JERSEY

The Central Jersey Alumni Chapter hosted District 4 Director **Russ Werneth, MD B '64**, for a virtual talk about his experiences as the Hubble Space Telescope project ExtraVehicular activity manager. Several members attended and after the presentation one remarked "Russ made it feel like we were inside an episode of *Nova!*"

Thanks to Russ for presenting and to the chapter officers for sharing the details.

Visit the chapter's [Facebook page](#) to see a group picture taken of those who stayed on to ask questions.

To join the Central Jersey Alumni Chapter, email: CJAlumni@tbp.org.

ALUMNI ACTIVITY: RESEARCH TRIANGLE

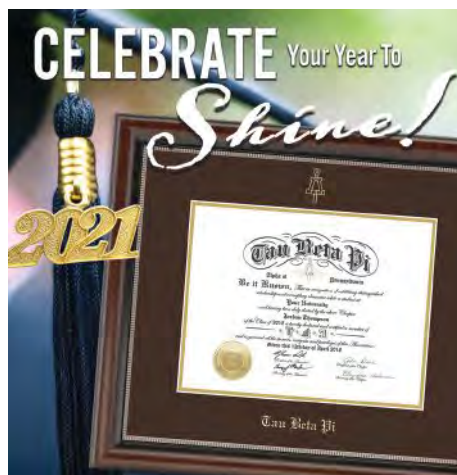
On April 7, the Research Triangle Alumni Chapter held a virtual panel event for collegiate chapter members. Students and affiliates from all Tau Beta Pi university chapters in North Carolina were invited to participate, including members at Duke University, East Carolina University, North Carolina A&T State University, North Carolina State University, and the University of North Carolina at Charlotte.

The event featured three distinguished panelists from the alumni chapter, including **Bradley K. Ashbaugh, Ph.D., CA E '91**, lecturer in business management at NC State; **Kathleen Owen, NC A '84**, air pollution control engineer and part of the ASHRAE epidemic task force; and **Heather A. Splawn, Ph.D., SC B '04**, Kyma Technologies president and CEO. Students were able to ask questions and hear from the panelists about their experiences in the engineering profession, including graduate school, entrepreneurship, and career transitions.

To join the Research Triangle Alumni Chapter, email: TriangleAlumni@tbp.org.

INTERESTED IN A BENT MONUMENT?

Many Tau Beta Pi Chapters across the U.S., and one in Qatar, proudly display Bent monuments on their campuses. This is a great way to bring attention to the Association and your chapter. Currently, our vendor offers a 4' unpolished Bent, an 18" unpolished Bent, and an 18" polished Bent. If your chapter is interested in ordering a monument or if you have questions, please contact angie@tbp.org.



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WORDPRESS BLOG: taubetapiathq.wordpress.com/

TWITTER: twitter.com/TauBetaPi

Alumni Giving



Delta Club
John C. Schmuhl
M I E '71

It's an honor to be a TBP member and to support our future engineers.

Chi Club continued from page 29

- WI Γ Petrie, Dennis James '78
- WI Γ Wolf, Thomas Francis '59
- WI Γ Formella, John Patrick '81
- WI Γ Merkel, Brian John '81
- WI Δ Stachowicz, Robert Walter '70
- WI Δ Gerloff, James Robert '00
- WI E Sullivan, Shawn Francis '02
- WY A Hubmann, Martin Thomas '13
- WY A Dwan, Terrence Edward '68
- WY A Galles, Daniel Joseph '74
- WY A Hill, Janet Lynn '95
- WY A Riley, Robert Hugh '82
- WY A Scharton, Craig Allen '85
- WY A Simon, Ronald Wayne '81

The SECOND CENTURY Club

\$500

- AL A Essing, John Earl '67
- AL A Grantham, Ronald Joe '77
- AL A Hardy, Joseph Fletcher '74
- AL A Malseed, Robert Allen '77
- AL A Singley, John Charles '73
- AL B Walkley, Kenneth Boland '71
- AL B Butner, Russell Edward '81
- AL B Grider, Kelly Vernon '58
- AL B Moyer, Robert E. '65
- AL B Pilleteri, Joseph '74
- AL Δ Fortune, Julie Lynn '01
- AL E Eubanks, Harold Z. '08
- AZ A Attaway, Michael Patrick '72
- AZ A Fish, James J. '50
- AZ A Leonardi, Suryanto Felix '86
- AZ A Mahr, Eric Michael '97
- AZ A Muterspaugh, Milo Eugene '66
- AZ A Tretschok, Cody D. '89
- AZ B Harary, Robert Mark '82
- AZ B Wilson, Richard Allen '72
- AR A Goodson, Gary Michael '77
- AR A Hegeman, Louis Edward '65
- AR A Magness, Joe Donald '55
- AR A Reed, John Lee '68
- CA B Andelin Jr., John Philip '55
- CA B Lalli, Stephen John '86
- CA B Whitehead, John Charles '82
- CA Γ Bankovitch, Walter John '87
- CA Γ Brown, Stephen Lawrence '58
- CA Γ Cummings, Alan George '76
- CA Γ Holsinger, Kevin Karl '84
- CA Γ McCloskey, David James '58
- CA Γ Nelson, Maren Louise '82
- CA Γ Putt, Brian Hollis '72
- CA Δ Sharp, Eugene Darrell '54
- CA Δ Bolliger, James E. '71
- CA Δ Dussia, Brent Alan '73
- CA Δ Kester, Larry Arthur '78
- CA Δ Lawson, William Edward '62
- CA Δ Rey, Daniel '66
- CA Δ Shiwota, Shigeto S. '59
- CA E Yamashiro, Keith Kotsu '79
- CA E Argabrite, A. Hugh '53
- CA E Axt, Robert Donald '66
- CA E Brenner, Mayer Alan '78
- CA E Dawson, Richard C. '73
- CA E Forman, Barry Joel '60
- CA E Ssutu, Louis '65
- CA E Vehrencamp, John Edward '50
- CA Z Blaney, Timothy John '86

- CA H Cepollina, Frank J. '59
- CA H McGuire, John Patrick '58
- CA H Sabbatini, Julian '68
- CA H Sako, Mitchell E. '79
- CA H Blythe, Kelly Richard '93
- CA H Costa, Michael '88
- CA H Lopez, Jeffrey Asuncion '06
- CA H Ramirez, Victor George '70
- CA H Thurston, Jeannie Lynn '77
- CA ⊕ Carpenter, Gordon Lee '49
- CA ⊕ Carpenter, Victorina Marie '07
- CA ⊕ Gilman, Larry '73
- CA ⊕ Koerber, Matt James '95
- CA ⊕ Koerkenmeier, Abigail S.L. '94
- CA ⊕ Nguyen, Tam Thanh '81
- CA ⊕ Regan, Keith M. '92
- CA ⊕ Skalka, Gregory Dennis '82
- CA ⊕ Stone, Ronald E. '66
- CA ⊕ Ward, Michael Lynn '67
- CA I Sun, John '85
- CA I Wrigley, Chris J. '96
- CA K Oliver, Carmen D. '91
- CA Δ Fujitani, Paul Edward '79
- CA Δ Khalaf, Marwan Adel '92
- CA Δ Reynolds, Hugh McGinnis '69
- CA Δ Smith, Robert Press '75
- CA Δ Empey, Daniel Martin '82
- CA Δ Lightcap, William Lawrence '86
- CA Δ Sass, Forrest Lee '73
- CA N Caballero, Luis Alberto '85
- CA N Darlington, William E. '66
- CA N Jimenez, Ramon '95
- CA N Johnson, Michael Robert '86
- CA N Rheinhardt, Mark Edward '84
- CA N Robertson, Alix Ann '03
- CA ⊖ Bloomer II, Thomas Wayne '99
- CA ⊖ Smith II, Gordon F. '97
- CA ⊖ Smith, Martha Alice '83
- CA O Mercado, Frank '79
- CA Π Nakauchi, Edward M. '69
- CA P Alexander, Dean Lee '80
- CA P Eberly, Barry Lynn '81
- CA P Motogawa, Bruce Joji '75
- CA P Sullivan, C. Bart '86
- CO A Akiyama, Frank Masaratso '55
- CO A Benjes III, Skip Henry H. '87
- CO A Devoe, Tracie Kay '82
- CO A McNeil, Charles Seward '71
- CO A Oakley, Jilene Marie '11
- CO A Wilson, Donald Earle '58
- CO B Erickson II, Thurston G. '74
- CO B Muterspaugh, Helen K. '78
- CO B Primeaux, Paul Rodney '67
- CO Γ Conway, Kent Waldo '52
- CO Δ DeCrescentis, Joseph M. '92
- CO Δ James, Miller Boyd '92
- CT A Gerson, Gordon '58
- CT B Dembiczak, Gerald Joseph '74
- CT B Greene Jr., Joseph Fred '53
- CT B Sobol III, Anthony Joseph '70
- CT Γ Godbout, Louis Francis '72
- DE A Neimeyer, Terry Francis '77
- DE A Rae, Kirk Alfred '88
- DE A Witt, Jeffrey Lawrence '81
- DC A Amisial, Wilfrid Jean '71
- DC A Morris, Joel Morton '66
- DC A Warren, Kenneth Anthony '80
- DC Γ Blackford, JP '95

- FL A Lintner, William Anton '82
- FL A Wilhelm, Eugene Bailey '86
- FL A Browell, Edward Vern '68
- FL A Garmizo, David W. '89
- FL A Gunter, Alan Dale '79
- FL A Hackett, David Frederick '71
- FL A Hines, John Stanley '63
- FL A Rathkopf, James Arden '79
- FL A Rauth, Terry Jean B. '77
- FL A Van Horn, William Alfred '82
- FL A Wabbersen Jr., William G. '90
- FL A Zegel, William Case '61
- FL B Berman, Gerald Adrian '55
- FL B Nunez, Ramon Luis '75
- FL Γ Anderson, John Lowell '81
- FL Γ Anderson II, Shannon R. '75
- FL Γ Johnson, William Alex '81
- FL Γ Pennington III, John W. '71
- FL Γ Suter, Bruce Wilsey '72
- FL Δ Bowman, Roger Dean '79
- FL Δ Bradshaw, Robert Henry '77
- FL E Sinibaldi, John Claude '85
- FL Z Seip, Ralf '90
- FL H Reinert, Richard Douglas '94
- FL ⊕ Prieto, Eduardo '04
- GA A Curry Jr., John Charles '58
- GA A Gumm, Milton Sherman '67
- GA A Hedrick, A. Fred '69
- GA A Jaklitsch, James Joseph '80
- GA A Priest, Anthony James '88
- GA A Royer, Steven Lee '88
- GA A Tyler, Stephen M. '84
- GA B Yarbrough, David Wylie '60
- GA B Jones, David Neal '92
- ID A Harris, Walter John '82
- IL A Allen, Charles Humphrey '66
- IL A Baumgartner, Richard A. '69
- IL A Fenves, Steven Joseph '57
- IL A Fisher, Robert Lee '80
- IL A Guill, Daniel Allan '73
- IL A Marlowe, Lyle Harrison '65
- IL A Miller, David Archer '61
- IL A Mueller, Vernon Charles '59
- IL A Picus, Joel '79
- IL A Rebeschini, Michael E. '77
- IL A Reichelt, Karl Lawrence '68
- IL A Resman, Tom A. '84
- IL A Wallace, John Robert '61
- IL A Wenzel, Kevin Wayne '84
- IL B Kaplan, Edward '65
- IL B Nelson, John David '60
- IL B Schlueter, Richard Paul '83
- IL B Ziomek, Arkadiusz '10
- IL Γ Christopher, James Mosko '84
- IL Γ Puscher, Wilfried Alex '74
- IL Γ Rivera, Angel Luis '80
- IL Γ Wong, Thomas T. Y. '80
- IL Δ Davis, Michael Raymond '78
- IL Δ Kraatz, Roland Lee '65
- IL E Finocchio, Samuel Domico '73
- IN A Alexander, John Albert '56
- IN A Becker, Kenneth Alan '81
- IN A Bertsch, Patricia Babette '76
- IN A Beuchel, Patrick Thomas '81
- IN A Brennan Jr., Paul John '46
- IN A Burch, Harry Carlton '75
- IN A Cunny, Robert William '46
- IN A Cyr Jr., Joseph Henry '60

	Dillard, James Orland '77		Ogden, William Richard '65		Day, Anthony Frank '65
	Eykamp, G. Richard '56		Parks, Ann Elizabeth '83		Ingalls, David Peabody '51
	Forster, Allen Vaan '72		Patton, Bradley Davison '76		Poppele, Richard Elwood '58
	Hammond, Joel Charles '83	KY B	Cummins, Dustin Ray '09		Contos, Gayaneh Y. '62
	Jebsen, Eric Richard '80	LA A	Arman, Ara '55		Hamel, Mark David '02
	Kawaguchi, Ray S. '69		Champagne, Sidney Alfred '68		Schoenfeld, Richard Alan '71
	Lee, Joseph K. '92		Chapoton Jr., Charles W. '60		Swanton, Bruce David '85
	Lee, Robert Edward '67		Knighten, James Leo '65		Thompson, John Woodruff '72
	McFarron, Gary Wayne '71		Lam, Chi-Kwong '66		Truxel, George Henry '68
	Monical, R. Duane '48		Stansbury, Merlin Conrad '71		Tsang, Janis Ka Ping '87
	Moore, Darrel Daniel '64	LA Γ	Nugent, Larry Edward '61	MA Z	Corn, Frederick Eliot '85
	Morgan, Rachel Diane '90	LA Δ	Gautreaux, Craig Anthony '79		Costa, Bruce A. '79
	Murphy, Thomas Frank '70		Melancon, Patrice Angelle '88		Gross, Stephen R. '80
	Newby, Karl Eugene '82	ME A	Carsley, Denice Loring '92		Tebo, David L. '88
	Peak, Steve Charles '71		Lamoreau Jr., Earl Bishop '86		Zarbo, Richard Mark '85
	Rieter, Robert Frederick '65		Laskey, Henry Lindon '51	MA H	Garde, Sharon Ilene '86
	Rude, Ronald Gregory '63		McCarthy Jr., Robert Henry '68	MA I	Walczak, Raymond '74
	Simnick, James John '74		Mortenson Jr., Victor A. '70	MI A	Brewer, Frederick Evans '57
	Smigielski, Thomas Stanley '65		Richardson, Paul Walter '56		Lowry, Peter Alexander '60
	Trickle, Chris Michael '13		Sprout, Otis Jennings '52	MI B	Hammar, Richard Harry '65
	Vanderheyden, Greg Paul '80		Therriault, Lucien Joseph '51		Klein, Raymond John '84
	Walker, Neil Renz '69		Whitten, Donald Lee '57		Kuhn, Jonathan L. '92
IN B	Galler, Stephen F. '05	MD A	Aaron, Nelson Harris '80		Phillips, Gerald Raymond '70
	Pauls, Jeffrey Dale '79		Beatty Jr., Millard Fillmore '59		Sauer, Daniel Michael '05
IN Γ	Bajura, Richard Albert '62		Burroughs, Matthew O. '63		Schoof, Louis Walter '65
	Bongiovi, Robert Paul '69		Cummings, Lori Lynn '83		Stone, David Garth '69
	Dickens, Michael Loren '10		Gormley, Paul Edward '68		Weber, Scott Charles '88
	Geer, Ivan Daniel '94		Levine, Jeffrey Scott '85	MI Γ	Ackenhusen, Thomas W. '89
	Grunert, William Edward '60	MD B	Brenner, David Joseph '60		Beman, Thomas J. '72
	Henry, Eugene Walter '54		Deschere, David Stewart '82		Blair, David John '57
	Kuehn III, Nicholas Henry '63		Galloway Jr., John Perrin '73		Brown, John M. '67
IN Δ	Yogan, Thomas James '82		Gillum Sr., Michael Joseph '91		Carpenter, David Robert '08
	Heidepriem, Heide E. '68		Horner, Matthew Lewis '01		Gniewek, Kenneth John '77
	Zendzian, Daniel D. '95		Leasure Jr., William August '66		Harris, Frederick Allan '64
IN E	Ali, Afzal '78		Lenhoff, Carl Edward '65		Holm, John Gustaf '89
	Hasbrouck, Christie Robyn '16		Ornett, William Seymour '59		Hubbell, Thomas W. '71
	Plank, Randall Jon '75		Purdum, Spencer William '70		Jackson, William Longstreth '70
IA A	Anders, Bryce Leroy '67		Richman, Howard Ross '91		Lambert, Thomas Joffre '77
	Dick-Peddie, John Irvine '53		Tracy, Anita Lynne '89		Lasher, William Charles '76
	Gallagher, Richard Ray '64		Wahl, Bill Floyd '82		Lazaroff, Joseph Louis '62
	Haack, Leland Arthur '53	MD Γ	Ernst, Charles M. '61		Linker, John Joseph '44
	Irvine, Alexander John '79		Hauge, Todd Allen '83		McCormick, James Robert '58
	Kurr, Amy Catherine '18	MD E	Akpa, Okechukwu Akpa '04		Plecha, David Anthony '83
	Matheson, Harold Moffat '55	MA A	Ahern, Michael Francis '78		Plecha, Gayle Eileen '83
	McGuire, Jack Francis '63		Brown, Mark William '82		Stoughton, Herbert Warren '73
	Mohr, Richard Lee '67		Burgarella, John Paul '50		Williams, Dean Stanton '61
	Nichols, Donald Orville '61		Cannon, Lewis Stephen '82	MI Δ	Brining, Dennis Wayne '68
	Olson, Scott E. '69		Cucchi, Thomas '85		Dauerer, Walter Peter '60
	Ryken, Mike Jon '96		Hunter, Nickie '93		Neyer, Jerome Charles '61
	Watson, Stephen Louis '67		Irwin, Michael Joseph '75		Nolan, James Henry '73
	Weiss, Verne Eugene '59		Proulx, Thomas Joseph '92		Olex, Michael Bernard '74
IA B	Croissant, Welton '50		Schurzky, Kenneth George '67		Sommerfeld, Jude Thomas '58
	Enemark, Donald Clifford '60		Steinka, Bradford Roland '81	MI E	Basberg, Douglas Spencer '69
	Sears, Larry Mac '61		Wielk, Michael Christopher '86		Billion, Godwin Paul '75
	Weber, Steven Wheeler '71		Wright, Neal Timothy '76		Capraro, Michael A. '70
KS A	Harden, Dan Roger '71	MA B	Appelstein, Gerald M. '80		Jerome Jr., George G. '94
	Hartman, Richard Henry '63		Buncher, Charles Ralph '60		Sieg, Mary Henderson '77
	Peters, Paul Eugene '57		Colavita, Michael Mark '81		Whitehead, Tonya J. '17
	Struble, Philip William '79		Delagrance, Arthur Daniel '62		Yee, Kingman Ethan '77
	Taylor, James Theodore '52		Fichtenbaum, Matthew L. '66	MI Z	Forest, Thomas Michael '87
KS B	Frutiger, Larry Dean '66		Greene, David Lockwood '68		Kowalik Jr., John '72
	Henderson, Westley Val '76		Hui, Anthony Y. '00		Lenz, Ronald Lee '81
	Jaeger, Robert Gene '70		Mleziva, Matt Louis '65		Lobkovich, Thomas Michael '83
	Straka, James Lavern '89		Morin, Gene Douglas '58		Miller, Gene H. '67
	Stuart Jr., James Franklin '67		Shedd, Walter Milo '66		Sitko, James Robert '70
KS Γ	Hohman, Jerrod Wayne '95		Smith, Kenneth Alan '58		Tidrow, Raymond Alvin '65
	Miller, Laurence F. '64		Smith, Thomas L. '67		Verhoff, Stephen John '00
	Roberts, Thomas Carrol '70		Strause, Philip Edward '65	MI Θ	Kanfer, Marvin Eliot '71
KY A	Blevins, Parker Ray '64		Wampler II, Charles Weldon '79		McMahon, Kathleen Simonyi '82
	Buemi Jr., Joseph Michael '74		Weinberg, Marc Steven '70	MI I	Lyle II, Arthur Raymond '93
	Click, Randall Robert '00		Woolling Jr., Kenneth Rau '71	MN A	Betterman, Lanny Ray '92
	Freeman, Richard Edwin '73		Ziegler, Philip Eugene '75		Hess, Craig Allen '72
	Gaffin, William O. '51	MA Δ	Anderson, Thomas T. '57		Loomis, Howard Burton '51
	Goerz, Jerry Walter '75		Blesso, Thomas Neal '73		Lucking, Rachel Mary '85
	Mullins, Chuck '87		Curless, Richard Walter '66		Magney, Mark Charles '79

Alumni Giving

Second Century Club continued

- Marpe, Donald Edward '57
Mortenson, Robert Lee '64
Oss, Don Gordon '58
- MS A** Johnson, Rodger Lee '71
MS B Cheng, Chia-Yung '70
MO A Adams, Charles Ray '65
Carlock, Jon Marion '71
Fairbanks, Robert William '62
Gardner, Roger William '63
Kuehnel, Charles George '62
Malin, Robert Clayton '83
- MO B** Bondurant, David William '71
Brockhaus, Douglas Adolph '68
Dalton, Thomas J. '84
Greco, Mary J. '84
Lytle Jr., Glenn Alden '66
McDaniels, John Louis '60
Preston, Scott Steven '97
Roam, John Harold '69
Saperstein, Lee Waldo '64
Steele, James Dean '66
Stevens, Robert E. '85
Weinkein, Katie Mae '03
- MO Γ** Chamberlin, Charles E. '71
Eddy, James Dale '80
Favre, Mark Edward '98
Lingren, Terry Dale '80
- MT A** Ausmus, Guy Howard '78
Kujawa, Stephan T. '73
Penberthy, John Thomas '75
- MT B** Montgomery III, Wayne W. '83
NE A Fuchser, Fay Eugene '51
Matthews, Deborah Jo '82
Moore, Thomas Paul '78
Nelson, Stuart Owen '50
Van Skiver, Max Alan '75 '87
- NV A** Ericksen, Spencer Lee '99
NV B Vodrazka Sr., Walter C. '55
NH A Davis, Paul Fraser '76
Johnson-Battista, Christine M.
Noyes Jr., Bertram Short '66
Qualters, Kevin Robert '85
- NJ A** Barrese, Anthony Louis '70
Carucci, Vincent Anthony '69 '5
Chen, Kevin Emmanuel '06
Kuhlberg, Joel Frederick '59
Newton, Thomas Joseph '58
Reinhardt, Gregory Charles J. '6
Stein, Gary Richard '67
- NJ B** Andre, Gerald R. '75
Capasso, Michael Anthony '82
Dola, Steven '55
Ets, Agu Raymond '68
Feder, Gerald Lewis '86
Masaryk, Joseph Stephen '67
Nixon, Allen Mackenzie '62
Valk, Stephen B. '77
Viechnicki, Dennis '62
- NJ Γ** Allison, Nathan Christopher '80
Balma, Peter Michael '75
Della Rovere, Richard '10
Dittrick, Dennis William '69
Germain, Dorothy M. '73
Hampel, Daniel '53
Jacobsen, Peter Christian '69
Kuchner, Robert Andrew '69
Labos, William Joseph '73
Tabor, Vincent Joseph '75
- Teheve, Toomas '64
Thompson, Susan M. '92
Adrignolo III, Anthony John '89
Cole, Peter Preston '72
Nash Jr., Raymond Allen '60
Wise, Frank W. '80
- NM A** Dietzman, W. Bruce '71
Tarbox, David George '80
Woodward Jr., Clinton B. '84
Tubb, Alan '13
- NM B** Seader, David '67
NY A Baleno, Anthony Paul '66
NY B Darling, Jonathan Karl '83
Gorey, Anthony George '84
Placentra, Nicholas Joseph '79
Brauchle, Richard Eric '92
Brenneman, Scott Andrew '83
Buell, Richard Edward '72
Capek, Thomas George '86
Jennings, Robert Edgar '63
Krause, Alfred Frank '52
Schoen, Edward Alan '69
Williams IV, Carter Nelson '66
- NY Δ** Degan, P. Michael '76
Hodgson Jr., Edward W. '68
Law, John S. '79
Reth, Thomas Bernard '64
- NY E** Duffy, John A. '71
Einson, Stephen Edward '59
Feldman, Robert E. '59
Markatos, Louis Gregory '65
Reber, Raymond Andrew '63
- NY Z** Hamm Jr., Bill '67
Nardo, Charles Thomas '66
Schnur, Albert Alfons '62
Weschke, Rainer '67
- NY H** Boland, Peter Lewis '69
Prager, Jay Martin '68
- NY Θ** Atkinson, William Clark '70
Berlat, Norman Robert '62
Grubb, Michael Alan '78
Hamm, Jeffrey H. '74
Harris, Everette C. '76
Quay, Jeffrey Robert '85
Thiemann, Peter Ernest '79
Tuttle, James Raymond '63
Boehm, Robert Andrew '79
Hartmann, Hans Gustav '70
Hoffner, Jeffrey Norman '71
Kuzma, Peter D. '88
Millman, David Seth '72
Weinberg, Aaron '69
Zwillenberg, Melvin Leslie '60
- NY K** Saucke, Alfred William '60
Singer, Bart Alan '82
- NY Λ** Madia, Michael '81
Novakoff, Alan K. '74
Schirripa, Robert Rocco '70
Bunk, Donald Samuel '55
NY N Dristy, Mark Edward '85
Feldman, Scott '75
Irwin, Christopher Joseph '92
Kosmerl, Richard David '72
MacNeil, Randall Lewis '69
Pardini, Thomas John '77
Roe, Kevin Peter '94
Tumminello, Paul Arthur '85
Boyle, Charles J. '76
NY Ξ Mohan, Anne Elizabeth '09
- Mohan, Marguerite Anne '04
Perrotta, Thomas '82
Tamaro, George John '59
Taylor, Maryanne Barbara '80
- NY O** Kadysiewski, Stephen J. '76
Lamberg, Michael Jay '83
Wickman, Richard Alan '76
- NY II** Knudsen, Walter Kristian '85
NY P Antes, Vincent Peter '76
Faeth, Mark Thomas '78
- NC A** Clark, Jennifer Anne '79
Cutchin IV, James McKenney '62
Doggett, William Ray '86
Helms, Chester Ethane '74
Norville, John Albert '58
Palmer III, Jacob Alexander '69
Poindexter, Richard Clinton '64
Purut, Cemil Mehmet '81
Skipper, Julie '81
Skipper, Lee Roy '82
Willis, John Keith '78
- NC Γ** Lemel, Page Howe '84
NC Δ Peters, William Thomas '59
Clark, Michael J. '75
Dempsey, Gary Lee '82
Goodwin, Edward Carson '89
- ND A** Kallis, Adrian G. '88
Nelson, Lyle David '58
Nyhus, Orville Kenneth '63
Sack, Larry Elroy '59
Sprynczynatyk, David Allen '72
Wiechmann, David Paul '85
Allison, James Franklin '57
Andersen, Kayla Brooke '17
Bracy, Kevin Norman '93
Diederich, Norman Francis '64
Drier, Delmar Waldemar '52
Kimmel, Paul Robert '69
Kirkland, Earl J. '75
Martens, John Douglas '93
Proctor, David George '52
Richenbacher, Wayne E. '75
Triznadel, Norman Thomas '60
- OH A** Bach, Wayne Stephen '72
Brunk, John Cortland '80
Bulcher, Thomas J. '76
Curless, Richard Anderson '68
Lockard, Chad William '01
Mayer, Robert Lawrence '69
Rex, Clinton Owen '92
Schoo, Donald Clarence '60
Shoger, Kristen Todd '97
Steiger, Gene Paul '57
Thrasher, Thomas Howard '81
Triplett, William James '76
- OH B** Howe, James Gavin '87
Milder, Nelson Louis '59
Mohr, John Glover '63
Sattler, Frank Joseph '62
Shade Jr., W. Norm '70
Shockling, Larry Anthony '68
Stambolis, James Nicholas '70
Vermillion, Thomas Ryan '80
- OH Δ** Ankrom, Linda Steele '79
Reese II, Jack R. '91
Shoup, Jerry Franklin '60
- OH E** Boulter, Brian Thomas '91
Dirks, Douglas Alan '83
Shaniuk, Thomas Joseph '85



Zeta Club
Donna R.H. Riggs, P.E.
 TN A '87
Monthly giving is important to me!



Second Century Club
Robert D. Axt
 CA E '66
I needed reinforcement in making the additional effort to continue with my engineering degree.

Second Century Club continued

- OH Z** Enderlen, Jeffrey Robert '80
Levey, Gary E. '74
Mowery, Thomas Troy '83
Sattler, David Vincent '69
Ziolkowski, Fredric '63
- OH H** Ball, James Allan '65
Crowder Jr., George Edward '77
Gilbert, John Ellis '70
Graham, Scott Robert '99
Hahn, Danny A. '83
Hartman, Dean H. '99
Merkle, Larry '92
Palazotto, Anthony Nicholas '55
Piske Jr., Andreus August '61
Rice Jr., John Warren '75
Wolfe, Stephen A. '85
- OH ☉** Beach, Nathan '03
Berger, Norman Rudolf '68
Centers, Robert Edward '70
Keller, Robert Lee '63
Mikalauskas, George A. '86
Trogus, Frank Joseph '69
Trovato, Joseph Anthony '71
Walsh, Michael Anthony '75
- OH I** Hurtig, Juliet Kay '91
Hurtig, Michael Lee '91
Liesner, Kevin Ralph '84
Matsick, Stephen Welsh '73
Snyder, Sharon E. '09
- OH K** McCarthy, Stephen Joseph '07
Volosen, John '77
- OH Λ** George, Thomas E. '87
Hallochak, Andrew John '77
Oakley, Robert Ray '77
Slovasky, Mark Stephen '85
- OH M** Huff, Richard Keith '94
- OK A** Duke, Chris '83
Patterson, John L. '85
Swihart Jr., John Donald '59
McKinley, Gordon Stuart '90
- OK B** Hanes, Larry Lewis '76
- OR A** Loughmiller, Bert Edward '64
Shaw, James Walter '70
- PA A** Bakis, Charles Emanuel '81
Beil, David LeRoy '68
Brunt, Thomas Barry '62
Donley, Shawn Thomas '71
Edwards, Alfred Belmont '71
Flaherty, Robert Emmet '68
Godshall, H. Lynn '62
Haas, Joseph William '90
Heffernan, Robert Booth '70
Johnson, Robert Scott '80
Jonas, Cynthia Joy '82
Megerle, William Georg '86
Midkiff, Alan Hayward '85
Moser, George M. '67
Muller, Eduardo E. '87
Schatz, John Anthony '77
Shah, Minesh Ashok '90
Shapiro, Michael Henry '70
Stanley, Richard Alan '63
Tomkiel, Stanley Anthony '72
- PA B** Anderson, David William '56
Bova, Francesco Antonio '05
Cook, William Joseph '54
Ferenci, Jack Edward '75
Fetchen, John Howard '69
Good, Michael L. '78

- Harvey, John William '95
Irwin, Thomas John '70
Pickenheim, Timothy Ronald '90
Reifsnnyder, Jeffrey Wayne '80
Sonstebly, Jon Michael '95
Wanenchak, Michael J. '69
- PA Γ** Kaplan, David Seth '03
Kromer, Robert Paul '82
- PA Δ** Baxley, John Hirst '88
Berger, Bruce Sutton '54
Blecherman, Barry Seth '82
Lang, David R. '85
Werwa, Eric '92
- PA E** Cimei, A. Kevin '84
Cottrell, Martin M. '67
Cross, David Wilson '67
Gentilucci, Joseph A. '53
Huber, Joseph Fowler '68
Murgas, William Joseph '53
Santo, William John '53
Schenck, Arthur Jacob '73
- PA Z** Angilletta, Gerald Vincent '79
Brecht, Howard Earle '63
Browne, Joseph Dominic '60
Chmielewski Jr., Thomas A. '77
Daly, Thomas Patrick '85
De Maio, Michael '76
Fanelle, John Donato '81
Hunt, Thomas Robert '84
Kirsch, Paul Andrew '75
Magee, Michael Patrick '97
Patti, Francis John '50
Wagner, William Andrew '89
- PA H** Hackman, Timothy Brown '68
Noble, John William '72
Waldner, Harold Eugene '58
Zimmerman Jr., Carle Clark '56
- PA ☉** Addotta, Robert Frank '77
Dreiss, Steven Anthony '83
Dugandzic, Joseph Phillip '83
Hinkle, John Lawrence '60
Norris, Clinton Joseph '61
Orsatti, Louis George '66
- PA I** Henry, Martin W. '72
Lorenz, Bryen E. '76
- PA K** Potthoff, Robert Edward '56
- PA Λ** Mozelewski, Stephen F. '86
Tjader, William Stephen '79
- PR A** Archilla, Joaquin '68
Bird, Hector Manuel '79
Santana, Juan Carlos '97
Velazquez, Marina D C '81
- RI A** Edgar, Richard B. '47
Newman, Gary Robert '73
- RI B** Burger, Laurie A. '76
Chalsen, Michael Joseph '81
Knickle, Harold Norman '62
Kolb, Robert Allen '66
Lebeau, Andrew Joseph '79
Palmer, Robert Perry '59
Pavia Jr., Robert J. '92
Sirois, Herbert Joseph '71
- SC A** Brooks, Nigel Robert '69
†Brown Jr., Bevan Wood '49
Cox Jr., Jacob H. '03
Paskel, Shella Ann '86
- SC B** Davis, Charles Marion '58
Hendricks, Irvine H. '62
Lesto, Kenneth Reed '58

- SC Γ** Barton Jr., Robert Harley '62
Beckman, Michael Anthony '93
Hinson, Mary Elizabeth '08
Kennedy Jr., Thomas W. '64
†Lancaster, Fred Lightsey '56
Lucas, William Ray '84
Messervy, Thomas Sinclair '00
- SD A** Byg, Jerald Norman '72
Eidsness, Karen Rose '83
Eisenbraun, Daniel Dale '75
Kerk, Carter J. '81
Stieha, John Kevin '80
- TN A** Brewington Jr., Percy '54
Broome, Joseph Carroll '65
Dye, Giles S. '61
Hutsell, Wilbur Riley '68
Long, William Polk '69
Masengill, Kimberly Lynn '88
Osborne, Bernie Bond '86
Ottinger III, Aurelious J. '87
Scott, Bobby Glenn '59
Sewell, John Ike '54
Stone Jr., Dewitt Boyd '62
Taylor, David Richard '69
Utzman, Forrest Mckae '95
Warren, Donald Earl '71
Whaley, Christopher Lewis '94
- TN B** Abrams, Karen Margaret '86
Casson, Leonard Walter '81
Cummings, Becky G. '76
Hawkins, Kenneth E. '88
Kammerud, John Eric '70
Clevenger, Jerry Anderson '65
Haile, Robert John '94
McCormick, Jack Randall '64
Moyers, Robert Lewis '05
- TN Δ** Luttmann, Lisa M. '82
Luttmann, Mark Joseph '82
- TN E** Funderburk, Rodger Miles '89
- TX A** Dria, Myra Ann '86
Felton, Charles Ronald '73
Foerster, Paul Adolph '57
Krieg, Raymond David '60
Kumpf, David Kenneth '70
Lambert, Rhonda Ellen '81
Luevano Jr., Richard '83
Nix Jr., Cecil Anson '57
Seaman, George Cook '66
Wales, Robert Curtis '65
- TX B** Atwood, Martin Price '76
Moss, Michael William '83
Talati, Deepak A. '84
- TX Γ** Cronin, Robert Hillsman '65
Kilgore III, Hardee C. '62
Turner, James Ward '76
Williamson, Kent Alan '77
Wolfram Jr., William Robert '68
- TX Δ** Beardesley, Brent Scott '93
Eng, Ronald Wey '71
Foster, Scott Alden '84
Hall, Charles L. '72
Johnson, Vance Clay '78
†Lock, Jack Allen '53
Massengale Jr., Levon '51
McCord, Jimmy Delwyn '70
Nolen, Kenneth Bernard '57
Pechacek, Ronald David '78
Perkins, Thomas Keeble '52

Alumni Giving

Second Century Club continued

- Rueter, Curtis Otto '86
- Stratton Jr., Jerald Jay '86
- Sullivan Jr., Samuel Lane '57
- Whitney, Herbert Ward '57
- †Wornat, Richard Oscar '49
- TX E** Brown Jr., Thomas Brooks '72
- TX H** Collins, Clyde Williams '69
- Loper, Thomas Lee '81
- McBay, Michael Raymond '73
- TX O** Goolsby, Tommy D. W. '84
- Van Reet, Leo Joseph '70
- TX I** Carter, Sherry Jeanette '86
- Maguire, Daniel Myron '81
- Smith, Jason Andrew '10
- TX A** Gonzalez, Israel T. '73
- UT A** Ferguson, Brian D. '80
- UT B** Ashby, Delroy '64
- Hinman, Paul Victor '71
- UT Γ** Anderson, Matthew O. '93
- VT A** Bouchard, Donald Raoul '81
- Moses, Almon Roderic '69
- VT B** Clark, David Thomas '81
- Melzar, Jonathan Preston '85
- VA A** Lanford Jr., Stanard Franklin '55
- McGhee, Kenneth Hamilton '64
- VA B** Beard Jr., Frank H. '64
- Cassell II, Ray Vaughn '88
- Meith, Robert M. '57
- VA Γ** Fries, Bradley Fuller '87
- Hartelius, John Taft '80
- Trotter, Vanessa Nanette '97
- WA A** Miller, Steven Claude '72
- Pizzano, Robert Carl '80
- WA B** Anderson, Kyle Joseph '03
- Brower, Michael Rex '70
- Groat, J. Everett '94
- Nelson, Bruce Edwin '54
- Owens, William Leo '53
- Schmieman, Eric A. '97
- Stephens, John Lawrence '51
- Williams, Harvey Ray '59
- WA Γ** Lock, Raymond Tan '83
- Ott, John '87
- WV A** Fisher, Ervin Charles '68
- Mongold Jr., Guy Earl '50
- Schuler, Arthur Kurt '71
- WV B** Capozzoli, Brent S. '84
- Powell, Jennifer Lee '81
- WI A** Cress, David Roger '63
- Davis, Scott Paul '78
- Flakas, Gerald Kenneth '66
- Horn, Robert William '68
- Jens, Barry Lee '64
- Thompson, Kenneth Gary '77
- WI B** Barone, Frank J. '62
- Bell Jr., Robert Bernhard '61
- Black, Jennifer A. '01
- Fedler, Richard Edward '65
- Garnier, John Edward '70
- Koester, Fred William '59
- Lubinski, Paul John '87
- Mueller, Gregory John '68
- Sommerville, Martin Glenn '94
- WI Γ** Beckley, Linda Kristine '88
- Figurski, Mark Anthony '83
- Jendrzek, Gary Steven '75

The FOUNDERS Club

\$250

- AL A** Armington, John Phillip '80
- Clary, Jacob Michael '14
- Holloway Jr., Coley Myer '94
- Jones, Win Eugene '75
- Murray, Scott Blansit '69
- Raney, Sonya Marie '94
- Reilly, Patrick Francis '93
- Strickland, John Curtis '55
- AK A** Cannon, Justin Michael '14
- AZ A** Berry, Robert Lee '67
- Chadik, Paul A. '84
- Coxon, Moran '54
- Fellner, Kenneth Mark '84
- Lee, Steve Eugene '77
- Van Veghel, Stephen John '72
- Whitlock, Charles N. '79
- AZ B** Brown Jr., Miller Herndon '73
- Ivan, William Thomas '92
- Lee, William H. '04
- AZ Γ** Tyler, Larry Earl '84
- AR A** Chastain, J. Dee '59
- Johnson, Cody '15
- McKinnie, Jane Lillian '84
- Morris, Stacey O. '73
- Tarini, Michael James '97
- Walton, Trent Avery '81
- CA A** Florez, Valerie Province '99
- Silva, Christopher Patrick '82
- Whisler, William D. '59
- CA B** Bejmuk, Bohdan I. '64
- Broido, Michael David '70
- Nguyen, Khanh Bao '87
- Olson, Lynn Bruce '77
- CA Γ** Bailard, James Alan '72
- Boehme, Carl R. '70
- Guo, Minggang '07
- Tedrow, James A. '70
- CA Δ** Larsen, David '80
- MacNeal, Paul D. '79
- Thorne, Douglas Boyd '61
- CA E** Chuang, Abraham Wenhai '97
- Green, Robert A. '72
- Harrington, Neil Milton '55
- Roark, John M. '58
- CA Z** Boessow, Daniel Shernood '57
- Grau, Judith M L '83
- Price, J. B. '63
- CA H** Florez, Paul Mark '06
- CA O** Gero, Jason Leon '11
- CA K** Gero, Jason Leon '11
- CA A** D'Albora, Emanuel Guy '77
- CA M** Calia, Kristin Denise '95
- Hunt, Catherine Balassu '88
- Kirkpatrick, Steven Edward '80
- CA N** Melton, Richard D. '72
- CA E** Edmonds, Gregory '70
- Hollestelle, Scott C. '90
- Sayah, Elias Boutros '80
- CA Π** Chhouk, Bounmy Namboun '92
- CA P** Azodi-Kazenroony, Alex '84
- Hewitt Jr., Robert Allen '86
- Buttacavoli, Kara Anne '97
- CA T** Reedy, James T. '85
- CA Y** Rubick, Jondavid Henry '08
- CA AΓ** Golden Jr., Robert Joseph '91
- CO A** O'Connor, Andrew Joseph '79

- CO B** Beeler, Samuel Logan '55
- Chavez, Greg Thomas '87
- Daubert, David Bruce '81
- Heagerty, Daniel Edward '60
- CO E** Hildebrand, Diane Marie '12
- CO Z** Fink, Diana L. '89
- Fink, Michael R. '76
- CT A** Watson Jr., Richard Brown '73
- CT B** Daunais, Derek Edward '97
- CT Γ** Allen, Elizabeth Anne '01
- Worrich, Colin G. '17
- DE A** Bloom, Steven David '84
- Gardiner Jr., Francis Espey '62
- Gorman, Harry H. '59
- Hudson, Daniel S. '82
- Shade, Patrick Joseph '76
- DC A** Dugger, W. Emmanuel '82
- Lee, Calvin '79
- DC Γ** Anand, Davinder K. '59
- Trandac, Trung '81
- FL A** James, John L. '66
- Kiersz, Donna Cecilia '80
- Knapp, Paul Edward '77
- Smith, Daniel J. '87
- York, Dennis Jean '76
- FL B** Fernandez, Wilfredo Manuel '78
- Ferrante, Michael Anthony '75
- Rodriguez, Carlos Manuel '77
- Greene, Robert Thomas '72
- Jones, Lawrence Edward '90
- FL Δ** Morgan, JoAnn '63
- Palmer, Carla N. '87
- FL O** Suarez, Eduardo M. '90
- GA A** Allison, Patton Manuel '08
- Bartlett, Claude Dale '66
- Cikanek III, Harry A. '82
- Cleveland, Paul H. '82
- Fowler, Charles Sidney '73
- McGhee, Bryan Wade '67
- Newberg, George Edward '84
- Winingder, Thomas Kendall '63
- ID A** Diedrick, Justin Michael '00
- IL A** Highland, Steven Douglas '68
- Jansen, Mark Allen '85
- McDowell III, Charles W. '94
- Papierski, Paul Eugene '82
- Ritt, Jack Arthur '52
- Schneider, David Ray '72
- Steinkamp, Diane Merna '96
- IL B** Kohnen, Robert Eugene '59
- Staschke, Ralph Arthur '50
- IL Γ** Lieske, John Charles '82
- Mapp, James Hartwell '61
- Puette, Robert Lee '64
- IL Δ** Yerby, Joel Talbert '56
- IL Z** DiPaolo, Giorgio '90
- Restis, Jude H. '89
- IN A** Andrews Jr., Paul D. '59
- Berman, Mitchell Leonard '74
- Cole, Larry Gene '64
- Ewart, Howard Lee '58
- Fischer, Stewart R. '64
- Hall, Robert Gordon '58
- Harrer, Robert Daniel '70
- Jochem, Stephen Kent '73
- Kenny, Michael Douglas '63
- Matsumoto, Randall Itsumi '75
- Porter, James C. '59
- Rehm, Ronald George '60

	Shimp, Alan Burke '55		Jeanes, David Charles '73		Natale, Patrick James '70
	Stark, Jack LeRoy '61		Luft, Frederick J. '81		Pisz, Frank Andrew '71
	†Stitz, Donald W. '58		Miller, Kendall Gifford '79		Quinn, Michael Francis '63
	Tarjan, Peter Paul '59	MA H	Salem, Hisham M. '86		Thompson, Peter A. '66
	Thornell, Richard Earl '64		Sanzo, Christopher John '87		Toporowski, Joseph Michael '98
	Wagner, Steven John '88	MA ⊕	Aste, Stephen Robert '99		Varga, John '91
IN B	Wolber, Raymond W. '80		Marchese, Paul S. '89	NJ Δ	Augustine, Norman Ralph '57
	Grammel, Cassandra Marie '10		McNally, Michael William '85		Lugannani, James C. '81
	Roll, Richard Russell '81	MA I	Villamaino, Mark John '75	NM B	Lacatena, Stephen Joseph '86
	Vanderlaan, Thomas C. '85	MI A	Amar, Jack Joseph '73		Walter, Ainslie Bruce '74
IN Γ	Durr, Christopher Jacob '10		Lipsitt, Harry Allan '52	NY A	Reda, James Francis '81
	Geist, John Michael '66		Moravek, Michael J. '78		Spring, Peter Gordon '68
IN Δ	Kretzmann, John Albert '73		Pfeil, Richard John '54	NY B	Chamberlain, Steven Craig '68
	Love-Pruitt, Jennifer Marie '81	MI B	Gosling, Christopher David '79		Kulpa, Theodore Andrew '62
	Sinko, Kenneth Michael '72		Hupy, Craig Allan '83		Mogish Jr., Andrew '78
IN E	Osipov, Michael Anthony '84		Johnson, David Norton '66		Tucci, Patrick Anthony '72
IA A	Buffington, Gregory D. '67		McKindles, Gerald Thomas '50	NY Γ	Canavan, Kevin Joseph '92
	Fehr, Gerald Keith '59		Pirkel, John Francis '62		Gross, Philip Murray '62
	Hegg, Bob Allen '66	MI Γ	Harris, Peter V. '58		Kellis Jr., Robert Francis '78
	Kirby, Herb '61		Hiltunen, Dennis Richard '83	NY Δ	Gordon, Susanna P B '87
	Romig, Bernard Edwin '59		Lorts, Daniel Joseph '77	NY E	Brolin, Stephen J. '57
	Schebler, Michael John '69		Ong, Shau-Chi '78		Torigian, Andrew '60
	Tekippe, George L. '69		Petrossian, Boghos '82	NY Z	Gucker, George Conrad '54
	Tennant, Jerry Ronald '61		Rice, Philip Alfred '59		Kilanowski, David Raymond '73
IA B	Mitchell, David James '94		Schmueser, David William '80		Levine, Howard Stanley '63
KS A	Barr, Deborah Susan '81	MI Δ	Cerquone, Peter F. '61		Sarcona, Roy Douglas '68
	Kulp Jr., Carl Raymond '82		Klaes, Leo James '55	NY H	Badalamenti, Salvatore '75
	Simpson, Trent Alan '89		Williams, William Brown '55		Fautale, Charles '63
	Wildin, Maurice Wilbert '58	MI E	Miesiak, Stephen Joseph '84		Palazzo, Cosimo J. '60
KS B	Cochran, John William '65		Walton, Gregory Francis '71		Pandey, Kabi Raj '99
KY A	Heaberlin, James Leslie '56		Yarne, Victor Carl '68		Pedersen, John Frankland '69
	Long, Robert Ritchey '84	MI Z	Kanaby, Kenneth Dale '73	NY ⊕	Wong, Keith Kin '79
KY B	Beavin, Rudy Cassell '61	MI ⊕	Long, Michael Charles '84		Adair, James Leonard '83
	Tockstein, Carl DeWayne '74		Quinn, Tom Ryan '18		Naber, Daniel Allen '66
	Tyler III, Wayne Paul '91	MI I	Schuster, Mike Edward '96		Watson, Richard Paul '78
LA A	Hicks, Richard Wayne '62	MN A	Brasket, Richard Gregory '58	NY I	Dies, Erik Harding '04
	Kumar, Anil '68		Han, Keesook Julia '91		Savatta, Domenico James '93
	Mickey, Brian Douglas '14	MS A	Wheeler, Robert Michael '63		Schulman, Richard Jerome '67
	Petitbon, John B. '86		Hatcher, Warren Andrew '72		Siegel, Arnold Brian '81
	†Shaffer, Allen Ardis '58	MO A	Lundy Jr., Frank Jefferson '63	NY K	Sullivan, Roger Kent '63
	Shoemaker, Harry Lawrence '69		Moffett, James K. '84		House, Mary Anne '93
	Vora, Suresh M. '73		Pearce, James M. '66	NY Λ	Leidig, Carl Frederick '85
LA Δ	Easley, Kelley V. '81		Satterlee Jr., George L. '52	NY N	Leonardi, Thomas S. '72
LA E	Diliberto, Marcella Dianne '03		Smith, Richard Vincent '72		Le Van, David Oliver '77
ME A	Hackett, John Arthur '59	MO B	Etling Jr., Norman George '73		Markunas, Justin Kenneth '01
	Verrill, Christopher Lee '85		Gruber, Myron Edward '64		May, Kenneth Robert '78
MD A	Fick, Steven Earl '73		Hord, William Eugene '59		Parnell, Gregory Samuel '70
	Horowitz, Harvey Allen '63		Huffman, Dyrk S. '96		Pawluk, Peter Stephen '65
MD B	Brundrett, C. Phillip '66		LaBundy, Jeffrey James '07		Rosenthal, Jordan Charles '95
	Cascio, Horace Eugene '77		Spirk, Donald Edward '65	NY Ξ	Watkins, Matthew Ace '05
	Flewelling, Arthur Samuel '69		Underwood, Mark Lee '91		Engels, Joseph Gerard '75
	Freedman, Earle Sherman '50	MO Γ	Ward, Terrence Ray '70		Mercandetti Jr., Anthony J. '99
	Hawkins III, Edward '86		Weese, John R. '74	NY O	Premo, Paul Mark '64
	Spitler, Philip '64		Fleschner, William Louis '67		Leu, Derek Huc-Keng '06
MD Δ	Pierson, Jeffrey Scott '05		Kline, Samuel Aaron '94	NY Π	Schuessler, Anne '87
MD E	Igwulu, Ifeanyi '07		Payne, Bradley A. '87	NY P	Newman, David A. '76
MA A	Abbate, James Martin '01		Peters, Christopher John '09	NY Σ	Hicks, Kyle Kaku '10
	Boggio, Joseph Edward '58	MO E	Rittmann, Bruce Edward '74	NC A	Amarakoon, Vasantha R W '80
	Geelan, Brendan John '66	MT A	Lyons, Frank T. '59		Agreda, Victor Hugo '79
MA B	Dessner, Herbert '52		Morse, Mark Harry '83		Corcoran, Kermit C. '04
	Hagerman Jr., Oliver S. '49	NE A	Sielinsky, James Walter '62		Ellington, Barry Todd '86
	Hamilton, Bruce K. '69		Cox, John Dean '85	NC Γ	Russell Jr., Parvin Masters '57
	Herrick, Groves Eckley '63		Silver, Harry Irvin '71	NC Δ	Austin Jr., Billy Willis '86
	Lim, Pean '85		Speece, Mary A. '82		Wirth, Thomas R. '87
	Moyer, Ilan E. '08	NH A	Wolff, Nicholas Lowell '00	ND A	Connolly, Donald P. '64
	Sedor, Gerald '70		Dalton Jr., William Leo '66		Gerorgeorge, John George '85
	Tarpgaard, Peter T. '68		Damiano, Paul John '74	ND B	Koch, Robert Eugene '95
MA Δ	Manoogian, David Victor '64		Gitschier, Herman Joseph '68	OH A	Wolf, Donald A. '53
MA E	Campinell, Brian F. '86	NJ A	Amato, Corrado '76		Bauer, Wolfgang Fred '59
	Marzetta, Aldo L. '68		Kelly, Arnold James '55		Contenza, Michael Dominic '78
	Mulvey, James Patrick '91		Wetter, Charles Herman '51		Lesco, Daniel James '62
	Thomas, Harry J. '72	NJ B	Hagerman, Janet Susan '82		Serafini, Tito Andrew '85
	Tsang, Paul Tze Leung '84		Russell, Kenneth Alfred '65	OH B	Engle, Charles Robert '92
MA Z	Fennessey, Neil Merrick '83		Vorndran, Ronald Noel '61		Guckian, John E. '77
	Hawrylcw Jr., Michael '65	NJ Γ	Camporini, George Alfred '67		Roe, Howard Irvine '68

	Rouse, James Alan '58				
	Russ, Daniel Joseph '73				
OH Γ	Elliott, Gary Leslie '63	3	PA Z		
	Jordan, Sarah Elizabeth '99				
	Knically, David Roger '61				
	Neal, Richard L. '64				
	Strang, David Arthur '51				
OH Δ	Buda, Steven M. '88				
	Deem, Sara Elizabeth '83				
	Felton, Stephen Scott '70				
	Logston, Robert Wesley '80				
OH Z	Gillfillan, Dana Chris '84				
	Kristie, Frank Martin '72		PA H		
OH H	Morrow Jr., Robert Bronaugh '6		PA Θ		
	Silkowski, Eric '90				
OH Θ	Marks, Steven James '85				
	Marshal, Katherine Luella '94				
	Ralston, David William '71				
	Rose, Thomas John '56		PA I		
OH I	Drouhard, Todd Anthony '98				
	Lehnert, Andrew B. '63		PR A		
	Whisler, Glendon E. '77				
OH K	Schwendeman, John Leo '88		RI B		
OH Λ	Repko, Raymond '77				
	Tataseo, George Michael '84		SC A		
	Ziemianski, John Joseph '82		SC B		
OH M	Blue, David Walter '95		SC Γ		
	Moore, Leah Beth '10				
OK A	Bley, John Howard '73				
	Greenberg, Charles M. '66				
OK B	Strawser, Donald Eugene '71				
OK Γ	Lakhani, Salim '85				
OR A	Eichelberger, Eric Evan '83		SD A		
	Gardner, Clifton Mark '91				
	O'Brien, Robert Merle '56				
PA A	Abbot, James Latimer '50		SD B		
	Fertig, James Henry '71		TN A		
	Grabner, Roy Walter '61				
	Radzelovage, William '61				
	Stein, Fred Paul '56				
PA B	Creese, Robert Claude '63				
	Frick, T. Scott '93				
	Koller, Keith Scott '81				
	McNally, Dianne Jean '85				
	Mudrinich, Richard Todd '85		TN B		
	Thomas, Kathleen Denise '80				
	Trautz, Todd Joseph '07				
PA Γ	Au, Tung '43		TN Γ		
	Gordon, Robert Wayne '60		TN Δ		
	Poellot, James Howard '61		TX A		
PA Δ	Lehner, John Roland '66				
	Lehr, Harry James '58				
	Lucas, Jay Philip '69				
PA E	Frabizzio, Michael Anthony '96				
	Johnson, Floyd Charles '49				
	Oberholzer, David James '68				
	Pudleiner, James David '76		TX B		
	Quin, James Robert '66				
	Skvoretz, David Mark '95				
	Stibitz, Mark Carl '87				
	Zetterberg, Dennis Ivan '82				
	Brown, Kathleen Ann Happ '85				
	Craighead, J. Jeffrey '78				
	Griggs, Robert Joseph '84				
	Levorgood, Darvin Lee '60				
	Lunde, Harold R. '69				
	Misiewicz Jr., Raymond F. '79				
	O'Rourke, John Francis '73				
	Robinson, William Arthur '62				
	Schey, Donald '61				
	Spitko Jr., John Edward '69				
	Miller, Donald Kenworthy '59				
	Ballay, Stephen Joseph '64				
	Capuzzi, Angelo Michael '71				
	Capuzzi, Lynda Ann '71				
	Sawyer, Stephen Gerard '65				
	Stilley, Thomas E. '83				
	McClellan, Karl R. '80				
	Meixner, Henry Martin '67				
	Muniz-Alfonso, Michael '02				
	Toro-Litts, Evelyn '93				
	Castro, Mark Y. '83				
	Vandeputte, Richard M. '69				
	Holcombe, Eric Benjamin '05				
	Litton, John Thomas '84				
	Burns, James A. '60				
	Gibson, Donald A. '65				
	Hoel, Jeffrey Scott '83				
	Kirk, Michael K. '59				
	Sherard, Joseph Sullivan '73				
	Suitt, Thomas Howard '48				
	Baker, Gary Allen '72				
	Pirner, Steven Mark '72				
	Weinacht, Daniel Joseph '84				
	Oster, Zachary James '07				
	Cofer Jr., Joseph Arnold '63				
	Harman Jr., Francis Edward '74				
	Kaley, John Straud '01				
	Neville, Randall Lee '75				
	Rochat, Raymond Agenor '57				
	Smith, Larry Gene '64				
	Weinberg, Brent Derek '01				
	Wunderlich, Walter O. '56				
	Cassen, Quentin C. '63				
	Jones, John Thomas '73				
	Myles, Jennifer Lee '94				
	Thomas, Sandy Anderson '64				
	Clark, Tony Lee '89				
	Gillespie Jr., Clarence Earl '65				
	Ehlers, Clarence James '66				
	Johnson, Mark Edward '78				
	Mills, Denver L. '57				
	Musler, Jeffrey Lynn '90				
	Persyn, Steve Gus '71				
	Thomas, Kurt Otto '79				
	Anderson, Roger Kent '60				
	Dunn, Luci Ann '86				
	Hansen, Gracie Arlene '04				
	Manney, Gary Allan '63				
	Meador, Don B. '68				
	Neill, John Michael '74		TX Γ		
	Adams, Glenn David '84				
	Grueneich, Grant Richard '65				
	†Jacobson, Marcus J. '52				
	O'Rear III, Edgar Allen '75		TX Δ		
	Kelling, Ronald Daniel '80				
	Newsome Sr., Robert Reese '90				
	Poulain, Marion Marquis '77				
	Ramby, Kenneth Wayne '59				
	Suhl, Amy Lynn '86				
	Szymczak, Edward J. '61				
	Klos, William Anton '63		TX E		
	Ergenbright, William Dee '71		TX Z		
	Hamm, Donald Charles '67				
	Zwillenberg, Gordon David '79				
	Farmer, Eddie Dean '75		TX H		
	Hartwig, Roger Earl '78				
	Shirolkar, Prashant Anand '97				
	Richards Jr., Fred F. '59		TX I		
	Cortinas, David B. '85		TX Λ		
	Luera, Luther G. '75				
	Pizana Jr., Robert '93				
	Rhudy, Ralph H. '62		UT A		
	Bracken, Allen T. '78		UT B		
	Larsen, Bradford Wayne '88				
	Olsen, Kettie Lynn '97		UT Γ		
	Garcia, Michael M. '87		VT A		
	Mazzini, Carl Andrew '68				
	Morrissey, Timothy Joseph '76				
	Nowlan, Nicholas P. '72				
	White, Janine L. '03				
	Davis Jr., Robert Francis '83		VT B		
	Klinger, Lloyd Edwin '57				
	Marsilius, Philip Roger '43				
	Barker Jr., R. Edward '52		VA A		
	Ginn, F. Lester '72				
	Kennedy, Michael Francis '72				
	Myers, Griffin Kyle '00				
	Bennett, James Preston '60		VA B		
	Dunkley, Barry Thomas '71				
	Gibson, Robert C. '61				
	Hippert Jr., Richard Owen '61				
	Spangler, Edward Grant '79				
	Cowen, Kenneth R. '90				
	Semke, Leon Kirkland '58		VA Γ		
	Dacquisto, John Fred '65		WA A		
	Dale, Bruce Allen '79		WA Δ		
	Froh, David '74		WI A		
	Tubbs, Dennis Howard '86				
	Webster, James L. '72				
	Hauser, Eric Donald '77		WI B		
	Morris, Leslie Raymond '78				
	Novak, David A. '77				
	Rupert, Jack R. '92				
	Wielebski, Rachel Ann '98				
	Zoeller, Leo Joseph '62				
	Muchmore, Royce Alan '93		WY A		
	Rasmusson, William Lee '74				

Pre-Club Members/Contributors Continues on TBP website

Due to the increasing size of Alumni Giving contributors, the Pre-Club Members will be acknowledged on our website (PDF) at: www.tbp.org/?AGP. All donations are essential to the continued success of the Association, but due to rising print costs in each issue, these donors will be listed with

all of the other contributors in a protected PDF document on the website. If you have questions or concerns, please contact development@tbp.org. Thank you for your understanding as we try to produce an enjoyable and efficient magazine for our readers.

Executive Council MEETING MINUTES

These are the summaries from Executive Council (EC) meetings — May through June 2020.

May 18, 2020

Virtual

The EC approved the following items:

Distinguished Service Award to **Diana Hasegan-Dan**, PA Δ '10, for 9 years as an EF Facilitator; Distinguished Service Award to **Julia M. Nolan**, CA Δ '03, for 15 years as an EF Facilitator; Distinguished Service Award to **Vanessa A. Bechtold**, FL Θ '09, for 7 years as an EF Facilitator; and a Resolution of Appreciation to **Melissa A. Childers**, OH K '16, for 4 years of service on the Student Advisory Board. Eighteen EF Facilitators were appointed to terms ending June 30, 2021, per request by Director of Engineering Futures, Katy Colbry.

Executive Director Gomulinski reported the following: The HQ staff will be moving back to the office, following Knox County guidelines, and will review again in June. Additional revisions of the online ritual were made after last month's EC meeting. The Convention was discussed with a possibility of a hybrid Convention with some virtual or online capability. Mr. Gomulinski contacted the parliamentarian and attorney regarding conducting Convention business virtually, including EC elections. Business or elections cannot be conducted virtually and in-person unless TBIT has standing rules and the rules would have to be pre-approved. In order to change the planning direction to a virtual Convention, a decision needs to be made in June and the hotel would need to be cancelled by July.

Treasurer Fable presented his report for the Finance Committee: the TAC meeting will be held later with consideration to add a third new member to the TAC. Current TAC member **James W. Johnson Jr.**, NC A '77, was contacted and he expressed interest in renewing his term; the committee has recommended **David A. Liu**, PA Δ '93, and **Yung B. Lim**, NJ Δ '87, for appointment to the TAC.

The Western Carolina University petition was presented and Mr. Gomulinski stated the petition meets all requirements; the EC approved on a voice vote. President Smith presented the amendments ballot information noting there was a low return rate on the ballots possibly related to the COVID-19 impact on the chapters. Mr. Smith moved that the EC cast ballots in favor of the four amendments based on the data from the received ballots and the EC passed the amendments on a unanimous voice vote.

June 7, 2020

Virtual

The EC discussed and passed by voice vote to send a statement either from the Executive Director or the Executive Council in response to the ensuing massive civil unrest following the death of George Floyd. The EC discussed how the statement will be shared with Tau Beta Pi's membership and determined that it would be sent to all members via email. The EC also discussed a moderated listening session, various teleconferencing software, and room limitations as to the number of participants.

June 22 & 23, 2020

Virtual

The Council approved the following appointments: **Robert E. Efimba**, MA B '63, to the Fellowship Board to a term expiring 6/30/2023, **Jeff S. Zola**, NY Δ '91, as a District 14 Director, and **Dakota Roberson**, WY A '13, as a District 12 Director to terms ending 6/30/2023. Discussion included re-appointing District Directors per request from the Director of the District Program and awarding District Director service recognition per request from the Director of the District Program. Councillor Alexander noted that there are directors who are not renewing their service and asked how these positions would be replaced. Mr. Gomulinski noted the Director of the District Program and the Director of Alumni Affairs are working to identify candidates and that the schedule was so that the District Directors do not all roll off at the same time.

Executive Director Gomulinski presented his report: Major Gifts Officer **Sherry D. Jennings-King**, TN A '93, will now have an expanded role with major gifts and annual fund appeals and a part time person will be added to assist with development activities. Council Minutes from 1970-2016 are now available. The Listening Session had 257 responses from members interested in attending.

The following policies were approved: Domestic Travel Cost Reimbursement; International Travel Cost Reimbursement; Annual Chapter Awards; Greater Interest in Government Grants; Chapter Performance Scholarship; Chapter Excellence Grants; Initiation of Petitioners, Remote Initiations, and Provisional Alumni Chapters.

Treasurer Fable presented the Finance Committee's report and noted the committee is working with HQ for analysis of the

future review of budget. The committee recommends appointing **Brent S. Beardsley**, TX Δ '93, to the TAC and reappointing James Johnson, to a three-year term. The Council approved Johnson's reappointment and Mr. Beardsley to a two-year term starting 7/01/2020.

Ray P. LeBeau, VA A '90, presented the report and action on the *Alumnus Selection Committee*: Four nominees were recommended for the Distinguished Alumnus Award and recommended the McDonald Mentor Award nominee. The report also includes additional recommendations for application packages as many of the packages were not complete and no contact information was provided. The committee made recommendations to clarify the application process including a potential rubric as no rubric was created previously.

Bruce L. Walcott, IN A '81, presented the report and action on the Outstanding Advisor Selection Committee. They met virtually to review five nominees. Dr. Walcott noted that there are years with no nominees and other years when there are many deserving candidates. The committee inquired about ramifications if they recommended more than one nominee and what they are to do in the event of a tie. Mr. Gomulinski stated that this is the first time the committee had asked about a tie and that governing rules state that only one person could receive the award and the committee should encourage the nominating chapters to nominate the advisor again the next year.

The EC reviewed the submitted report of the Laureate Selection Committee and President Smith moved that they accept the nominations as submitted by the Alumnus Recognition Committee and the EC approved on a unanimous vote.

The NY Eta Chapter submitted a report to expel a member and the EC passed on a voice vote and Councillor G. Youssef confirmed the process for a member to contest expulsion.

Mr. Gomulinski presented the EC with the financial ramifications of cancelling the annual Convention and that currently the Association is responsible for \$112,545. The Convention Survey results were presented which suggests the possibility that we could have a quorum, but may not; a quorum of attendees is 50 percent. The 2017 Convention recommended Atlanta, and if the EC does nothing, the Convention will be in Atlanta, in person. State and federal law trump TBIT's Constitution.

ALUMNI NOTES

Your fellow Tau Bates are interested in news about **you**.



COLORADO BETA '74

Bharat Bhushan Ph.D.

Bharat was awarded the Tribology Gold Medal Award by the Intl. Tribology Council for lifetime and supreme achievements in the field of tribology (study of friction, design of bearings & science of interacting surfaces in relative motion). He's a professor & eminent scholar at Ohio State University.



MARYLAND BETA '11

Helen Ji

Helen was named to the *Hot List 2020*, which honors law firm associates with noteworthy accomplishments and activities in diversity initiatives. She is an intellectual property associate whose practice primarily focuses on patent and trademark law with Schiff Hardin LLP. Her B.S. degree is in bioengineering.



MICHIGAN EPSILON '16

Maryssa L. Weir

Maryssa was a recipient of the Society of Women Engineers 2021 WE Local New ELITE (Emerging Leader in Technology & Engineering) Award for demonstrated outstanding technical performance and leadership in SWE and the community. She is a safety performance engineer at GM and past MI E Chapter president.



MISSOURI GAMMA '13

Katherine T. Peter Ph.D.

Katherine received the James J. Morgan Environmental Science & Technology Early Career Award, recognizing early career researchers who are leading the fields in new directions. She is a research chemist at the National Institute of Standards and Technology with a B.S. in chemical engineering.



OHIO ETA '08

Michael J. Beach P.E.

Michael has joined Broadbent & Associates, Inc., as director of engineering. Previously, he served as a civil engineering officer for 27 years in the Air Force, overseeing the execution of engineering and environmental solutions across the world. He earned a master's in engineering management from AFIT.



OHIO ETA '07

George C. Dalton II Ph.D.

George has joined CFD Research as vice president for Dayton operations. He has 37 years of experience in the military and defense industry, including 24 years on active duty. Previously, he was a director at KeyW Corporation, a subsidiary of Jacobs, and a DoD acquisition corps member for the U.S. Air Force.



PENNSYLVANIA BETA '85

Caryn A. Tabby P.E.

Caryn is President-Elect of Advocates for the American Osteopathic Association (AAOA) and previously served as a past director on the board. She works at Bruce E. Brooks and Associates as a consulting engineer and earned an architectural engineering B.S. degree from Pennsylvania State University.



PENNSYLVANIA DELTA '90

Catherine F. Corrigan Ph.D.

Catherine is President and Chief Executive Officer of Exponent. She joined the company in 1996, has consulted in the area of injury biomechanics and on issues related to motor vehicle and product safety for more than twenty years, and holds a Ph.D. in medical engineering from Harvard-MIT.



PUERTO RICO ALPHA '03

Eileen M. Vélez-Vega P.E.

Eileen has been named secretary of the Department of Transportation and Public Works for Puerto Rico. She is a member of the SWE board of directors, has 18+ years of experience in the management, design & construction of airfield paving, and previously worked for Kimley-Horn as an assistant VP.



SOUTH DAKOTA BETA '03

Holly A. Lehmkuhl Ph.D.

Holly received the Civil Engineer of the Year Award from the Kansas City Section of the American Society of Civil Engineers. She is a civil engineer at George Butler Associates, working with MoDOT on bridge and interchange projects. She has B.S. and M.S. degrees in CE from SD State Univ. and Iowa State Univ.



Send items about civic activities, honors won, weddings, promotions, etc. to Tau Beta Pi, P.O. Box 2697, Knoxville, TN 37901-2697 or to media@tbp.org. Material for publication must be received by August 1 for the Fall issue and by November 1 for the Winter issue. Include name, address, chapter/class year, and email address or phone number. Thank you!



TENNESSEE ALPHA '18

Emily A. Beckman

Emily was recognized as one of Tomorrow's Technology Leaders: The 20 Twenties by *Aviation Week Network* in collaboration with the AIAA. The award recognizes students on the basis of their academics, civic contribution, and research. She is at Purdue University pursuing an M.S. in aerospace eng'g.



TENNESSEE ALPHA '18

Andrey P. Karnauch

Andrey works at Northrop Grumman in Dayton, OH, as a software engineer. He has B.S. and M.S. degrees in computer science from the University of Tennessee. He worked at TBPI HQ, 2017-21, with member services and IT focusing on data entry, analysis, and coding to help create Convention web databases.



TEXAS THETA '84

Javier Adame

Javier was elected to retire from ExxonMobil as a Sr. Geophysics Advisor. He had the privilege to develop some of the world's largest oil/gas fields in Venezuela, the Gulf of Mexico, and Nigeria. He attained his M.S. in geophysics and B.S. degree in civil engineering from UTEP.



UTAH GAMMA '82

Lyndon C. Lamborn P.E.

Lyndon was named crack threat management subject matter expert at Enbridge Pipelines in Edmonton, Alberta. After a distinguished 30-year career at Boeing Helicopters and receiving 8 U.S. Patent awards, he will be managing 17,000+ miles of liquid transportation pipelines in the U.S. and Canada.



“Shariq is a true force for change — who has worked to transform our workplaces and the profession in the areas of equity, diversity, and inclusion.”

Bruce Chinn, President
Chevron Chemicals
at the AIChE Gala

TEXAS DELTA '74

Shariq Yosufzai

The American Institute of Chemical Engineers (AIChE) hosted its 2020 Virtual Gala in December. Shariq Yosufzai was honored with the AIChE Foundation's Doing a World of Good Medal, a prize that recognizes the achievements of an individual who has advanced the societal contributions of engineers.

Yosufzai “was cited for his leadership in creating a more equitable, diverse, and inclusive workforce within Chevron and across the chemical engineering community.”

He is a retired Vice President of Global Diversity at Chevron Corporation. In his acceptance speech, Yosufzai expressed his appreciation to others who had influenced him as an advocate for greater diversity and inclusion in industry and across institutions.

“I am deeply honored and also humbled to accept this award — not only on my behalf but on behalf of many people and many organizations that have inspired me in this journey,” Yosufzai said.

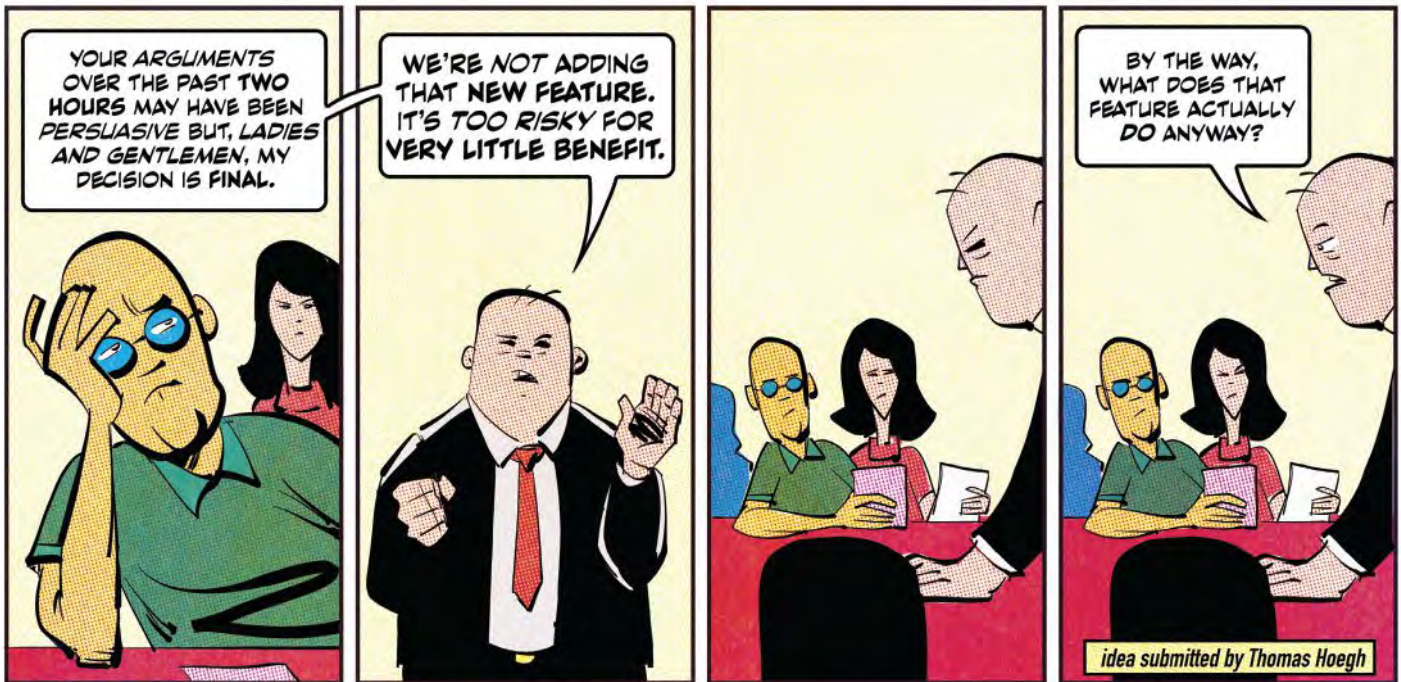
He earned his bachelor's degree in chemical engineering from Texas A&M University. He started working for Chevron in 1975 and was responsible for Chevron's Diversity & Inclusion and Ombuds functions and provided oversight for university partnerships and strategic relationships with professional societies and institutes, before his retirement.

Congratulations on a well-deserved recognition and thank you for your contributions to the profession!

TRUE TALES from the TESTBENCH...

Fellow engineers: the story you are about to read is *true*. Only the *names* have been changed to protect the guilty.

Words / Art:
Kristina M. Sadasivam
krishnadraws.com



Special thanks to **Thomas B. Hoegh (IN D '89)**, for submitting this True Tale.

DO YOU HAVE A TRUE AND HUMOROUS TALE FROM YOUR ENGINEERING EXPERIENCE TO SHARE?

It could be featured in the next True Tales from the Test Bench! Send your submissions for consideration to dylan@tbp.org.

EXECUTIVE COUNCIL MINUTES CONTINUED

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A straw poll was requested as to where the EC sits on Convention status with 7-2 against cancelling. Councillor M. Youssef met with District Directors and many expressed concerns regarding attending an in-person Convention and the concerns regarding the virtual Convention were lack of networking and socializing. However, with a virtual Convention, events can be offered to the entire membership instead of limited to the chapter's voting delegates. Councillor M. Youssef believes we can secure speakers at a lower cost. Councillor Peterson discussed the many creative things that can be done with Convention and that while students may miss the full in-person experience, we could invite them to a future Convention. The EC reviewed the Association's attorney's discussion regarding TN laws for our annual meeting. It is Mr. Gomulinski's interpretation that there may not be a problem if we do not have an annual meeting and that the prime business would be election of candidates and if no election is held the in-office members of the EC would continue their service. The overlap in TN code and our Constitution is that we require a ballot and if there is no in-person Convention, the ballot could be sent to all voting members. Councillor Fable stated if we are at the point of not holding Convention, the hotel should be contacted. Councillor King-Monroe moved to not have an in-person meeting in October 2020 in Atlanta, and the EC passed the motion on a voice vote. HQ will contact Convention site about the cancelled event and discussion ensued as to what action is needed for a virtual Convention.

THE BENEFITS OF MEMBERSHIP

See the complete list at: www.tbp.org/memb/benefits.cfm

DELL: Discount program with special pricing on all personal purchases and access to an additional 10 percent off coupon.

GEICO: Additional discounts on auto insurance.

LINKEDIN: Join 32,100 members in our official group for professional networking and career discussions (search: Tau Beta Pi Engineering Honor Society).

LOCAL HOSPITALITY: Access to a worldwide inventory of hotels at exclusively discounted rates.

PPI: 20 percent discount on professional licensing exam review materials (FE/EIT, PE, and more).

TAU BETA PI JOB BOARD: Post a resume online and browse hundreds of engineering jobs at top companies.

Advertise in *The Bent* for LESS!

Now you can reach MORE exceptional candidates — in the official quarterly publication of the largest engineering organization in the USA — *at a special reduced rate*. See our Media Kit www.tbp.org/?MediaKit or contact pat@tbp.org for information on advertising in print and digital issues.

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Questions? Contact Pat McDaniel: pat@tbp.org



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The Engineering Honor Society



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