Spring 2022



AIChE Fellows Newsletter

Fellows Breakfast—San Antonio, TX., April 12th

This breakfast will be a "ticketed in-person" event.

Tuesday. April 12th 6:30 AM - 9:00 AM Fellows Breakfast Tuesday, April 12th 9:00 AM - 10:15 AM FC Meeting

However for those not able to come to San Antonio, a remote connection is being considered for the FC Meeting.

From the Fellows Council

This year our goal is to publish 4 newsletters. "Spring", "Summer", "Fall" and "Winter" Your comments are solicited as to content you would like to see, or if you would like to provide content. Our goal remains to involve you in furthering the mission of AIChE by promoting an active Fellowship!

<u>Click the links on the right</u> to jump to features on the following pages.

The Fellowship and AIChE are looking forward to greeting you at our gatherings, to considering your proposals for Fellows activities, and to receiving your thoughts about issues important to the Fellowship.

Best regards: Annette Johnston, Chair; Lori McDowell, Chair-Elect; Anthony Fregosi, Secretary; Robert Ofoli, Immediate Past Chair; John O'Connell, Past Secretary

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Special points of interest

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Come to Breakfast! Fellows Events

San Antonio, TX: April 12, 2022 Phoenix, AZ: November 14, 2022

Get Active with Students! Student Conferences

Meet our future professionals at the Annual meeting in Boston

Find Student Chapters

Get involved with a student chapter at a university near you

Useful Links

Fellows Leadership
FC organization and leadership

<u>Fellows Directory</u> Where to find an AIChE Fellow

<u>Fellows By-Laws</u> Current Governance Document

Fellows Volunteer Service.
Register your interests & availability to volunteer AIChE service

AICHE Academy
Education & training for chemical engineers & their companies

<u>AIChE Foundation</u>
Doing a World of Good

AICHE 2020 Annual Report
Complete information about AICHE activities, organization, and people

<u>Contact Us</u> Email the Fellows Council





"As Fellows, we have been recognized for our contribution to the practice of Chemical Engineering, and to AIChE. Now have the responsibility to "pay it forward"."

Fellows Council Activities

The AIChE Fellows Council oversees the organized activities of the Fellows. The FC meets at least four times per year to discuss Fellow activities and policies.

Two meetings are face-to-face at the Spring (National) and Fall (Annual) AIChE meetings; virtual meetings occur on the 4th Tuesday of the other months.

Fellows interested in being considered for FC service should contact us.

From the Chair of the Fellows Council

I am honored to follow in the footsteps of Robert Ofoli as this year's chair of the Fellows Council. I have been volunteering within AIChE for over 30 years starting with recruiting and assigning students to be Session Aides at the 1996 Chicago Annual Meeting. I went on to be the local section chair of the Chicago Section, the Program Chair for the Process Development Division, Meeting Program Chair at the Tampa Spring meeting in 2009, Chair of the Research and New Technology Committee, and AIChE Board Member. I received the honor of being a Fellow in 2012. I truly believe AIChE is the world home of Chemical Engineers.

As Fellows, we have been recognized for our contribution to the practice of Chemical Engineering, and to AIChE. Now have the responsibility to "pay it forward". We can "pay it" at Student Chapters, Local Sections, competitions, Foundation Activities, and nominating the next Fellows. Many of you already do so much, and I thank you. In

2022, the Fellows Council is going to consciously measure and increase its "reach". Reach is the same idea so often heard from June Wispelwey - in this case, it is the number of "touches" Fellows have with all the entities in AIChE. We are particularly interested to increase Fellow mentoring and support of Student Chapters, as they put together local and regional meetings, and supporting students participating in competitions, such as ChemE car, ChemE Cube and the AIChE Design Problem.. We were able to meet with the Student Chapter Presidents and Advisors at the Annual Meeting (in person!!), and have begun to recruit Fellows that are near chapters that have asked for help. Many thanks to Fernando Aguirre for setting up and monitoring an email box for the requests.

The Fellows Council is also committed to IDEAL. You will see a Fellows poster at the Spring Meeting, and several Fellows are on the EDI taskforce. We continue to support nominations that will build the diversity of the

AIChE Spring Meeting, San Antonio, TX



The <u>2022 Spring Meeting and 18th Global Congress on Process Safety</u>—April 10-14, 2022 — Henry B. González Convention Center, Hyatt Riverwalk, San Antonio, Texas, hosts the following topical conferences:

56th Annual Loss Prevention Symposium (LPS)

24th Process Plant Safety Symposium (PPSS)

37th Center for Chemical Process Safety (CCPS) International Conference

11th Process Safety Management Mentoring (PSMM) Forum

Perspectives on Process Safety from Around the World





New Fellows were celebrated with a video highlighting their contributions to the profession. Note: An ad is likely to play before the video. Congratulations New Fellows

Moment of Silence

Give our departed colleagues a moment of silence:

From the Chair of the Fellows Council (Cont'd)

Fellows Membership. We developed a little "movie" about how to do a nomination, which can be found on the Fellows page of the AIChE website. We are recruiting Fellows to assist with nominations, and to work with entities in AIChE that have not historically nominated many Fellows in the past.

I know that some of you are not yet comfortable meeting in person, or have difficulty traveling. While you may not participate directly with the Fellows at a face to face meeting, I hope you will find some joy in "hanging out" with AIChE members in your community. Stay tuned this year for those opportunities, which will be published in the newsletter, or found in a request in your email inbox. Let us know what you are already doing.

Happy Spring! I hope this year is better than last year for all of you.

When was the last time you visited the AIChE Fellows site on the AIChE Web site?

Please click on the following link to access the below site:

AIChE Fellow Site





2022 Board of Directors

Christine Grant, President—Christine Grant is a professor of Chemical and Biomolecular Engineering and the Inaugural Associate Dean of Faculty Advancement in the College of Engineering at North Carolina State University.

Billy B. Bardin, President-Elect — Billy B. Bardin, PE, is the Global Digitalization Director for Dow. He joined Union Carbide/Dow in 2000 and has held global leadership roles in research, development, and manufacturing.

Deborah L. Grubbe, Past President—A registered PE, she is a former Chair of the Law Enforcement and Ethics Committee of the Delaware Board, has consulted with NASA on safety culture after the Columbia Shuttle Accident, and has lectured extensively to students and professionals on safety and ethics.

MaryKathryn Lee, Secretary—MaryKathyrn (Kathy) Lee has been a researcher at ExxonMobil Corporate Strategic Research for 30 years. She has been an active AIChE member for more than 10 years and was recently elected Fellow.

Wendy Young, Treasurer—Wendy Young is the Sales & Marketing Manager for Chemstations, Inc. providing process simulation software solutions through the CHEMCAD suite of products.

James R. Beilstein, Director—Jim Beilstein is Vice President of Advanced Manufacturing at Owens Corning. In this role, he has responsibility for the technology of manufacturing operations, process innovation, capital engineering, and equipment purchasing.

Linda J. Broadbelt, Director—Linda Broadbelt is Sarah Rebecca Roland Professor in the Department of Chemical and Biological Engineering (ChBE) and Associate Dean for Research of Engineering at Northwestern University. She was Chair of the Department of ChBE from 2009-2017.

Donna Bryant, Director—Youth hasn't stunted Bryant's career trajectory. As the youngest superintendent Syngenta's St. Gabriel Plant has ever had, she leads a 26-person unit that treats the wastewater streams for the entire plant and removes the remaining waste from the site.

Paulette Clancy, Director—Paulette Clancy is a professor and the inaugural Head of the Dept. of Chemical and Biomolecular Engineering at Johns Hopkins Univ. She also serves as the Samuel and Diane Bodman Professor Emerita of Chemical Engineering at Cornell Univ. and as Chair of the faculty oversight team for Advanced Research Computing at Johns Hopkins' High-Performance Computing facility.

Brian Davison, Director—Brian Davison is Chief Scientist for Biotechnology at Oak Ridge National Laboratory (ORNL). He is also the Chief Science Officer of the U.S. Dept. of Energy's (DOE's) new Center for Bioenergy Innovation, and the previous BioEnergy Science Center.

Julianne Holloway, Director—Julianne L. Holloway is currently an Assistant Professor in Chemical Engineering at Arizona State University, where she began in 2016. Julianne received her Ph.D. in Chemical Engineering at Drexel University in 2012.

Ann Lee, Director—Ann Lee is currently the Chief Technical Officer at Prime Medicine, Inc. She was previously SVP and Head of Cell Therapy Development and Operations (CTDO) SVP and Head of Cell Therapy Development and Operations (CTDO) at Bristol Myers Squibb from 2019 to July 2021.

Peter Lodal, Director—Peter Lodal is a retired Technical Fellow of Eastman Chemical Company, having spent nearly 42 years with Eastman in various positions including process engineering, process safety and loss prevention.

Anne O'Neal, Director—Anne O'Neal is Manager of Process Safety Culture and Competency at Chevron, and an AIChE Fellow. Her 40-year career includes senior positions in process safety, as well as health, environment and safety.

William Raiford, Director—Bill is Senior Director Technology - Titanium Technologies for The Chemours Company in Wilmington, DE. He is accountable for the R&D, product development and manufacturing technology organizations of the global titanium dioxide pigment business.

Elsa Reichmanis, Director—Elsa Reichmanis is Professor and Carl Robert Anderson Chair in Chemical Engineering in the Department of Chemical and Biomolecular Engineering of Lehigh University.



Here are the Top 10 science anniversaries of 2022

Recently inducted Fellow Phil Kneiper provided the following

By Tom Siegfried - January 28, 2022.

Tom Siegfried is a contributing correspondent. He was editor in chief of *Science News* from 2007 to 2012 and managing editor from 2014 to 2017.

Even though it is only even odds that 2022 will turn out to be less of a disaster than 2021 (or 2020), at least 2022 is the best recent year for compiling a Top 10 list of science anniversaries.

Curiously, many of those anniversaries are of deaths: the astronomer William Herschel for instance, who died in 1822, Hermann Rorschach, Alexander Graham Bell and the mathematician Sophie Bryant (all in 1922) and Louis Leakey (1972).

However, there are also some notable firsts (the original slide rule, for instance) and births, including the scientist who illuminated how science could save society from devastating infectious diseases. Honorable mentions go to the birthdays of physicists Rudolf Clausius (200th), Leon Lederman (100th) and C.N. Yang (100th). They just missed edging out the oldest anniversary, a death from an earlier millennium:

10. Al-Nayrīzī - 1,100th anniversary of death

Abū'l-'Abbās al-Faḍl ibn Ḥātim al-Nayrīzī was a Persian mathematician and astronomer, probably born around A.D. 865 in the town of Nayriz (in present-day Iran), which is why he became known as al-Nayrīzī. He died in 922 or thereabouts (close enough for Top 10 purposes). He got a job in Baghdad with the caliph al-Mu'taḍid, writing treatises on math and weather, among other topics.

Unfortunately, many of al-Nayrīzī's writings were long ago lost. However, other writers mention his works and report that he was a master of astronomy and geometry. Among his surviving works is a translation and commentary on Euclid's *Elements*. Al-Nayrīzī also attempted a proof of Euclid's famous postulate about parallel lines never meeting. One of Al-Nayrīzī's treatises for the caliph discussed how to determine the distance to upright objects. Had golf been invented yet, the caliph would have used such knowledge to calculate the distance to the flagstick without need of a GPS app.

9. Invention of mathematical weather forecasting, 100th anniversary

Lewis Fry Richardson, a mathematician who later turned to psychology, worked early in his career at England's National Peat Industries. He was given the task of calculating optimal designs of drainage systems for peat moss subjected to different amounts of rain. He worked out the equations and then realized they could be applied to other problems, such as predicting the weather.

In the years leading up to World War I, he worked on a book, to be titled *Weather Prediction by Numerical Process*. He showed how values for temperature, humidity, air pressure and other weather data from one day could be processed by his equations to make a forecast for the next day. He took a break to be an ambulance driver during the war and then finished his book, published in 1922.

As Science News-Letter reported that year, one U.S. Weather Bureau scientist believed the book to show "that meteorology has become an exact science." Unfortunately, to make the next day's forecast from one day's data took Richardson six weeks of calculation time. Only decades later did modern electronic computers make the mathematics of weather forecasting practical, and sometimes useful.

8. Invention of slide rule, 400th anniversary



William Oughtred, born in England in 1575, became a priest and part-time mathematician and tutor. In 1631, he wrote a book summarizing arithmetic and algebra, which became widely popular, later earning lavish praise from Isaac Newton.

Nine years before his book, Oughtred had designed the first slide rule. In 1614, John Napier had invented logarithms, showing how multiplication could be accomplished by addition. Six years later the astronomer Edmund Gunter had



the bright idea of marking numbers on a straightedge proportional to their logarithms. Multiplication could then be performed by using a compass (the caliper kind, not for finding north) to find the answer by measuring the distances between the numbers to be multiplied.

In 1622, Oughtred had the even brighter idea of placing two such rulers next to each other. Sliding one along the other to properly position the numbers of interest allowed him to read the product of a multiplication right off one of the rulers. Oughtred later designed a circular slide rule, but one of his students claimed to have had that idea first, initiating a nasty priority dispute.

Further advances in slide rule design, incorporating things like cubes and trigonometric functions, made slide rules the premier computing devices of the 19th and 20th centuries — UNTIL electronic calculators came along, sadly depriving slide rules the opportunity to make it to age 400. Nevertheless, some people alive today once used slide rules, and probably still have one in a box somewhere.

7. Maria Goeppert Mayer, 50th anniversary of death



Maria Goeppert - Everett Collection Historical/Alamy Stock Photo

Was born in what is now Poland in 1906. Encouraged by her father, a university

professor, to pursue higher education, Maria chose mathematics. Nevertheless, in the mid-1920s her fascination with a newfangled idea called quantum mechanics induced her to shift to physics. After earning her Ph.D., she married a chemist (Joseph Mayer) and moved to the United States. She was allowed to teach classes where her husband was on the faculty (first at Johns Hopkins, later at Columbia and then Chicago) but not offered a job of her own. She was free to pursue research projects, though, often in collaboration with her husband or other scientists, and she produced important work on many topics at the interface of quantum physics and chemistry.

She was a master of the math needed to understand spectroscopy; her studies of the light emitted by the newly discovered transuranic elements in the 1940s showed that they belonged in a chemical family related to the rare-earth elements — an essential clue to the proper positioning of the transuranics in the periodic table. After World War II, she began studying nuclear physics and soon deduced the existence of a shell-like structure for the arrangement of nucleons (protons and neutrons) in the atomic nucleus. Her findings complemented similar work by Hans Jensen, with whom she later collaborated in writing a book on the nuclear shell model. Jensen and Goeppert Mayer shared the 1963 Nobel in physics for that work.

There are many resources available to us as members.

Below are links to but a few:

About AIChE

<u>AIChE Communities</u> — Including access to Technical Groups and Technical Entities.

<u>AlChE Academy</u> — is the Definitive Resource for Engineering Education.

<u>AIChE Events</u> — Links and information on all Conferences & Events

AIChE Publications — Links to various Publications

<u>AlChE Institute for Learning and Innovation</u> — An Engineer's Career is No Longer a Straight Path.

<u>AIChE Engage</u> — AIChE Engage connects AIChE members with each other and their chemical engineering communities

<u>AIChE Foundation</u> — We are the philanthropic arm of AIChE, where chemical engineers give back.



Maria Goeppert Mayer, who died in 1972, received a Nobel Prize in physics for her work on the arrangement of protons and neutrons in the atomic nucleus.

Her shell model research was aided by a suggestion from Enrico Fermi, the physicist famous for his work on the secret Manhattan Project to build the atomic bomb. That was only fair, as when Fermi disappeared from Columbia University in 1941 to work on the bomb, Goeppert Mayer was hurriedly recruited to teach his class. In 1960, Goeppert Mayer finally was awarded a full-time primetime job of her own at the University of California, San Diego, but shortly thereafter she suffered a stroke, limiting her ability to do research in the years before her death in 1972.

6. Aage Bohr, 100th birthday

Niels Bohr was awarded the Nobel Prize in physics in 1922, the same year as the birth of his son Aage.

Aage grew up surrounded by physicists (who came from around the world to study with his father) and so naturally became a physicist himself. During World War II, Aage accompanied his father to the United States to work on the Manhattan Project, afterwards returning to his native Denmark to earn his Ph.D. at the University of Copenhagen. During that time, Aage turned his attention to a problem with the atomic nucleus.

His father's theory that a nucleus behaves much like a drop of liquid had been applied successfully in explaining nuclear fission. Nevertheless, more recent work by Maria Goeppert Mayer (remember her?) showed that nuclei had an inner shell-like structure, suggesting ordered arrangements of individual particles, not collective, liquid like behavior. Aage developed a new theoretical view, showing that his father's view could be reconciled with Goeppert Mayer's shell model. He then worked on experiments that corroborated it and shared the 1975 physics Nobel "for the discovery of the connection between collective motion and particle motion in atomic nuclei and the development of the theory of the structure of the atomic nucleus based on this connection."

5. Gregor Mendel, 200th birthday

Born July 22, 1822 to a family of farmers in what is now the Czech Republic, <u>Johann Mendel</u>

preferred higher education to farming, enrolling in a philosophy program properly complemented with math and physics. When the time came to return home and take charge of the family farm, he opted instead to enter a monastery (where he adopted the monastic name Gregor). He did not particularly enjoy his priestly duties, though, so he got a job as a teacher, which required him to enter the University of Vienna for advanced science education. There, in addition to more math and physics, he encountered botany. Later he returned to the monastery, where he applied his botanical skills to investigating patterns in the physical features of successive generations of pea plants.

In 1866, he published results implying the existence of "differentiating characters" (now known as genes) that combined in different ways when transmitted by parents to offspring. Apparently, nobody very astute read his paper, not even Charles Darwin, who would have been intrigued by Mendel's mention that his work was relevant to "the history of the evolution of organic forms." Only at the dawn of the 20th century, was Mendel's work translated into English and then recognized for its importance to heredity, evolution and biology in general.

4. Pioneer 10, 50th anniversary of launch

Of all the robotic spacecraft launched from Earth into space, Pioneer 10 was truly the pioneer. It was the first craft to fly beyond the orbit of Mars and the first to exceed the distance of the solar system's outermost planet, Neptune. Launched March 2, 1972, Pioneer 10's mission was to visit Jupiter to take some cool snapshots of the giant planet and a few of its moons. Pioneer's escape velocity from Earth surpassed 51,000 kilometers per hour (about 32,000 miles per hour), at the time a solar system speed record for any flying machine or bird. After dodging asteroids (most of them anyway) on its journey, Pioneer 10 reached the solar system's largest planet in late 1973, passing within 131,000 kilometers (about 81,000 miles) on December 4.



The record-setting Pioneer 10 launched in 1972 to fly by and take pictures of Jupiter. NASA

Pioneer continued transmitting signals back to Earth until 1997, when budget cuts forced NASA to stop listening except for an occasional check-in. The very last signal came on January 23, 2003,



from 7.6 billion miles away. By now Pioneer 10 is roughly 12 billion miles away, headed in the direction of the star Aldebaran. It will arrive in a mere 2 million years or so. If any Aldebaranians encountering it can decipher the sketches of a man and woman and the map revealing the point of origin, perhaps they will refuel it and send it back.

3. Insulin treats diabetes, 100th anniversary

In a century of medical miracles, one of the earliest and most dramatic was the discovery of insulin for treating diabetes. Diabetes had been recognized as a serious disease in ancient times. By the 20th century, scientists suspected that the pancreas produced a substance that helped metabolize carbohydrates; a malfunctioning pancreas meant a person could not extract energy from carbohydrates in food, resulting in dangerously high blood sugar levels while depriving the body of needed energy. It was nearly always fatal in children, and adults diagnosed with diabetes could hope for only a few more years of life.

As Science News-Letter reported in 1922, diabetes ranked "with cancer in fatality and incurability."

Nevertheless, in that year, a young doctor reported success in treating diabetes with a substance secreted by the pancreas. That doctor, Frederick Banting, had tried the idea with dogs the year before and gave the first insulin injection to a human, a 14-year-old boy, in January 1922. Banting originally used insulin purified from animals; in the decades since, researchers have engineered more sophisticated forms for human use. But even with the animal insulin, success was so dramatic that Banting and his lab director John Macleod were awarded the Nobel Prize in physiology or medicine in 1923.

2. Science News, 100th birthday

In its first year of providing news of science to the world, the organization then known as Science Service transmitted a weekly package of mimeographed pages (labeled Science News Bulletin) to newspapers and other media around the country. Soon other groups (such as libraries) as well as individuals began to request the package, and so Science Service initiated a new strategy with issue No. 50. On March 13, 1922, <u>Science News-Letter was born</u>, with a new masthead offering subscriptions for \$5 per year, postpaid. Its first article: an account of a

U.S. Department of Commerce report on the allocation of radio wavelengths. The report assured everybody that "widespread use of radio for the broadcasting of public information and other matters of general interest" would be forthcoming. In 1966, the magazine dropped "Letter" and became *Science News*, providing an excuse for another centennial celebration in 2066.

1. Louis Pasteur, 200th birthday

Born in France in December 1822, <u>Louis Pasteur</u> was not a precocious youth. His interests tended toward art, but later some inspiring lectures shifted his attention to chemistry, and he became one of the greatest chemists of all time. Also one of the greatest biologists. In addition, although he received no medical education, he provided the foundation for modern medicine's ability to fight disease.



Nastasic/DigitalVision Vectors/Getty Images Plus

Louis Pasteur, born in 1822, has done more than any one person to preserve human health and prevent unnecessary deaths. Pasteur's understanding of microorganisms led to the recognition of their capacity to damage human health. His tenacity in conducting rigorous experiments and his pugnacious public promotion of his findings established the germ theory of disease and encouraged new methods of hygiene. Time after time, he was called on to devise solutions for perplexing problems facing various industries. He saved the silk industry. He showed how to prevent wine from going sour, and how to make milk safe to drink. He devised vaccines for various diseases, including one to cure rabies. No one person in history is more responsible than Pasteur for preserving human health and preventing unnecessary deaths. He is lucky he was born 200 years ago, though. If he were around today, he would be getting death threats.



Fellows-Student Chapter Task Force Update & Input Request

"One of our aspirations is to connect Fellows with every AIChE Student Chapter"

The Fellows-Student Chapter Task Force is actively pursuing its mission of building relationships and actions that make Fellows an active and helpful resource to students of Chemical Engineering and Student Chapters of the AIChE. The task force meets monthly and has developed a set of strategies that move us toward that goal.

One of our aspirations is to connect Fellows with every AIChE Student Chapter, offering an experienced voice and advisor to students in a way that fits both the student chapter needs and the interests of the Fellows. This could include career/technical advice, seminars, introduction of students to networks of experienced engineers or even discussions with students about challenging student projects. These relationships will form a foundation for a number of other strategies that the task force is developing.

We want to hear from you! Please drop us a note at aichefellowswithstudents@gmail.com

- If you are a Fellow with an existing relationship with chemical engineering students, let us know so we can include you in our early pilot and benefit from your experience. Tell us the student chapter / school you are (or have been) connected with, along with a description of what activities/roles you have been involved with. We are interested in all of the connections and activities you have been involved with, regardless of frequency or scale.
- If you haven't yet engaged with students and you're interested in joining us, let us know via the link above! And if there is a school that you have a particular interest in, let us know that as well. Your interest could be the result of past affiliation, geographic location, or just the knowledge that you have something to offer.

Thanks so much for your help! We will keep you up to date with our progress in each issue of the Fellows Newsletter.

Fernando J. Aguirre, Harold Conner, Jr. Annette Johnston, Stephen Martin Robert Ofoli, Greg Yeo, Chair Gina Gatto, AIChE Staff

Save and <u>download</u> the new AIChE Fellow ribbon and add it to your email signature to show your pride in belonging to AIChE!





Notes from Virtual Fellows Council Meetings January 24, 2022 and February 28, 2022

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JANUARY	FEBRUARY	MARCH	APRIL
Publish 2022 "Winter"	1 Fellow Nomination Cutoff	Prepare for Fellows	10-14 Spring Meeting San
Newsletter (Annual Meeting		Gathering	Antonio, TX
Results) in January 2023	ACE4G Decision		*In-Person Fellows Ticketed
		Reach Check	Event Tuesday, April 12th
Reach Check	May Nomination Class	Mentor Count	
	Reach Check		Reach Check
		Publish "Spring" Newsletter	
MAY	JUNE	JULY	AUGUST
1 Fellow Nomination Cutoff	Publish "Summer"		1 Fellow Nomination Cutoff
August Nomination Class	Newsletter (Spring Meeting	ACE4G Call for Papers	Student Chapter Connection
Reach Check	Results)	Intl Reach Check	Nov Nomination Class
Mentor Count	Reach Check	Mentor Count	Reach Check
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SEPTEMBER			
Barak Charle	Reach Check	1 Fellow Nomination Cutoff	Reach Check
Reach Check		13-18 Annual Phoenix, AZ	
Mentor Count		Reach Check	
FC Nominations		Mentor Count	
Publish "Fall" Newsletter		2023 Goals	

The AIChE Fellows Council oversees the organized activities of the Fellows and meets four times per year to discuss Fellow activities and policies. Two meetings are at the fall (Annual) and spring (National) AIChE meetings, and virtual meetings are held most months. Summaries of the meetings are below; full notes are posted on the Fellows website blog. Fellows are encouraged to contact any of the FC leaders directly or by sending an email to fellowscouncil@aiche.org about issues that should be considered.

A FC zoom meeting was held on **January 24, 2022** The following items were discussed:

- Note: "Reach Check" (Every Meeting) to monitor activities such as ACE4G, Student chapters. Volunteers to develop Reach Check. Fernando Aguirre and Robert Ofoli. Make a list of activities in program & report on Box.
- Review 2022 Goals

To increase the diversity of Fellows members by supporting and encouraging nomination of candidates representing the diversity of the overall Institute membership.

To increase engagement of Fellows with Student Chapters until each Student Chapter has a personal relationship with a Fellow.

Support all AIChE activities that are enriched by mentorship. For example, supply mentors for ACE4G papers, ChemE cube, ChemE Sports, ChemE Jeopardy, and Design Problems.

Volunteers for monitoring/supporting Fellow Nominations

Two volunteers needed to help in nominations. Coordinate tracking nominations & nominees for assistance & monitoring diversity. Tim Anderson and John O'Connell have volunteered to coordinate. Publicize guidance slides. Look at entity officers & award winners.

- *Information provided by John O'Connell following the meeting.
- *Tim Anderson and John O'Connell volunteered to search through AIChE leaders to uncover individuals probably worthy of nomination and seek out potential nominators for them, with a focus on Equity, Diversity and Inclusion (EDI).



Notes from Virtual Fellows Council Meetings January 24, 2022 and February 28, 2022

- *The necessary information needed will be the current list of Fellows with affiliations and access to what years that potential individuals became senior members.
- Volunteers for finding mentors requested by student chapters.
- Student chapter interactions. Greg Yeo, Fernando Aguirre and William (Bill) Parrish have volunteered to coordinate. Increase engagement with AIChE & ACE4G. Two chapters made requests for mentors: fulfilled. Coordinate with Local Sections? The LS Committee Chair (J. Patrick Abulencia) was contacted to discuss potential FC/LS coordination efforts. Continue to inform student chapters about successes from interactions.
- AIChE Chemical Engineering For Good (ACE4G) preparing for vote at February Council Meeting
- ACE4G: Funds from Foundation, especially Fellows Endowment. Prize money: \$3000, etc. compared to Design problem \$500, etc. Currently, Greg Yeo working with Alliance for Plastic Waste (APW) to develop competition problem that would make contributions toward a real issue. Decision to commit to relationship with APW since great enthusiasm & expertise in organization. ACE4G oriented toward sustainability & international students & only a paper whereas Design problem is actually a design and commonly part of student design course, though not necessarily a global problem. Want to elevate ACE4G. Issue is whether part of design course, level of quantitative content, engage professional workers outside university. Could be AIChE design problem? Separate meeting with all stakeholders: ACE4G leaders (Alan Zagoria & John Cirrucci), SCC, SIOC, CEOC, FC, Foundation, etc. to develop governance plan for vote at February FC meeting. First decision in February is whether Fellows to continue supporting ACE4G, requiring an FC subcommittee for administration.
- Gina Gatto San Antonio Breakfast may be only in person with recording to be made available. To be updated in February. Remote connection for FC meeting in San Antonio being considered.
- Bill Parrish Student conference professional licensing exam presentation to be given.

A FC zoom meeting was held on **February 28, 2022**. The following items were discussed:

- "Reach" Activities
- Fellow Nominations
- John will provide report to Fellows Council (Gina to provide info to John)
- John and Tim will submit a request for information to Gina to support this effort
- John and Tim working on developing candidates for Fellows (with look to ward IDEAL)
- Then reach out to potential nominators
- Process likely 2 3 months
- 13 nominations came in for February
- Fellows / Student Chapters Engagement
- Fernando working on database to connect SC and Fellows



Notes from Virtual Fellows Council Meetings January 24, 2022 and February 28, 2022

Fernando has stored database on Box

•	3 requests from SC for engagement with Fellows		
•	Outreach from University of Tennessee has occurred but may not be updated in Box yet.		
•	ACE4G		
•	Vote to discontinue funding of ACE4G until it can be evaluated		
•	"Motion to discontinue FC funding of ACE4G until its transformation is		
•	finalized" – Motion AJ, Second FA, Discussion/Background – Motion Carried		
•	Vote to ask the Foundation to propose some alternative activities that should be funded.		
•	"Motion to ask the Foundation to propose other pilot projects for the FC to fund" - Motion AJ, Second GY - Discussion/Background - Motion Carried		
•	AIChE Design Problem		
•	Moving forward this item will be taken out of the FC meetings – but Fellows		
•	interested in these discussions are invited to participate.		
•	Design Problem Discussions		
•	Robert calling leadership (SCC) of design problem		
•	Gina and staff held zoom meeting to discuss potential to connect AEWP/design problem		
•	"Off-Line" discussion to be held to move this concept forward		
•	Fernando, Robert, Gina, Greg and AEWP to hold meeting at 2022 Spring Mtg.		
•	Student Chapters Committee is not normally at the Spring		
•	Meeting is a Zoom connection possible?		
•	Greg Yeo will construct a follow up on this concept and keep fellows informed.		
•	New/Other Business		
•	Start working on FC Outreach efforts to Local Sections		
•	Discussion with LSC Chair J. Patrick Abulencia was held.		
•	Discussions regarding how this may integrate with Fernando's work with Student Chapters.		
•	IDEAL Poster at Spring in-person meeting		
•	Poster (IDEAL reception - Tuesday, April 12th, 5:00 pm)		
•	Poster session on Wednesday, April 13th, 5:00 pm		
•	Greg could be able to attend – but can't make the poster		
•	If "someone" can send Lori information with which to make the poster		
•	Gina will provide what AIChE already has		
•	Pictures of events are a good source of information		
•	What is the target audience?		

