



THE PARTICLE TECHNOLOGY FORUM (PTF) NEWSLETTER

An American Institute of Chemical Engineers (AIChE) Forum

A Glance at the Newsletter

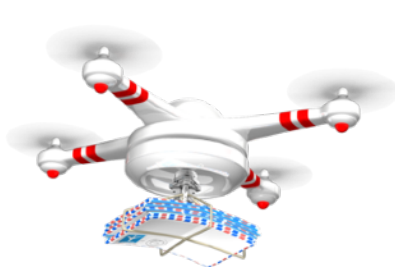


- ◆ [Statement on Diversity and Inclusion](#)
- ◆ [2021 AIChE Annual Meeting](#)
- [Message from AIChE](#)

- [Program-At-A-Glance](#)
- [2021 PTF Award Recipients](#)
- [PTF Committee and Programing Meetings](#)
- [Special Sessions](#)
- ◆ [New Book](#)
- ◆ [Job Posting](#)
- ◆ [Treasurer's Report](#)
- ◆ [PTF Organization](#)



Message from the Chair



Greetings!

Fall is here, and so is the AIChE Annual Meeting! I am looking forward to attending in person and seeing many of you there. Boston is a great location and I only wish we were operating under normal conditions. Several other major conferences are hybrid or still run entirely virtual. I was recently at another meeting and while travel is not overly stressful, the extra precautions are taxing during these high-energy events that are draining under normal conditions. I am personally grateful to the AIChE leadership and their careful foresight and planning that has allowed those of us who plan to travel to do so feeling a reasonable level of safety and consistency. If you have the chance, thank the organizer. And on that note, special thanks to Dr. Ben Freireich for maintaining the high quality of programing for this meeting.

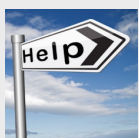
The in-person sessions are the week of November 7th-12th and the virtual sessions are planned for the next week. Many people cannot attend in person due to company travel restrictions or valid concerns for their health or the health of loved ones. For those attending, we are having our student poster competition and sincerely hope you will attend to socialize during this event.

Editorial

Dear Fellow
PTF Members,



I hope you and your families are safe and healthy! The “hybrid” 2021 AIChE Annual Meeting is around the corner. It will be *in-person* in Boston from November 7-11, 2021, followed by *virtual* from November 15-19, 2021. This newsletter highlights opportunities to witness recent research advancements in the field of particle technology, and celebrate the achievements of our peers who are receiving prestigious PTF awards. I hope you are as excited as I am about attending the meeting either in Boston or virtually.



Please feel free to reach out to me with your idea by January 15, 2022, if you would like to contribute to the 2022 Spring newsletter.

Stay safe!! Stay healthy!! Stay strong!! Stay positive!!

Regards,

Mayank Kashyap, SABIC

Editor - PTF Newsletter

We have several events online beyond the originally planned virtual programming by AIChE. These include the awards lectures for our Elsevier Lifetime Achievement Award by Professor Jesse Zhu, our Thomas Baron Award by Professor Lakis Mountziaris, our PSRI Lectureship Award in Fluidization by Dr. Sofiane Benyahia. Congratulations to all of the awardees featured in this issue! Huge thanks to Dr. S.B. Reddy Karri and all who served on the awards selections committees for completing these tasks during a time when additional service is on top of an already difficult work-load in each of our careers. Other programmatic meetings will be held virtually or hybrid for those who wish to stay active within our Forum. I'm sure we will have several discussions regarding the ways to move forward and engage existing and new members. A reminder that we have decided **not** to host a PTF Awards Dinner. For those who have an interest in meeting informally, please fill out this form (whether you plan on attending or not) to help us gauge interest in participating in an informal PTF social get-together:

<https://forms.gle/QCurKoV6dDaj8LwY6>

I can attest that the post-lockdown mode of the pandemic has been as challenging if not more challenging than during the height of the pandemic. I can only imagine the difficulties for early career researchers in new positions. At Lehigh, we have gone to great lengths, as many academics have, to try to connect with students who essentially from whom a whole year of college was stolen. One endeavor I have taken is to spend significantly more time talking with undergraduates in chemical engineering, and those considering the major, to discuss what we can do to engage with students. I was fortunate enough to work with a group of undergraduate students who, among other outreach activities, designed a new first year elective course entitled *Coffee and Cosmetics: Engineering of Consumer Products*. The purpose of this course is to 1) allow students to have input with regard to the topics they learn, 2) attract students to chemical engineering through commonly known areas such as production of coffee and cosmetics, 3) actively recruit women to chemical engineering through the traditionally gendered topic of cosmetics (note: men, they are for you too), and 4) use experiential learning to engage with prospective students and alumni. I am grateful to the undergraduates who designed the

course and have greatly enjoyed teaching it for the second time this semester. If you would like to learn more about our approach, reach out to me and/or visit <https://go.lehigh.edu/coffeeandcosmetics>. I made it a point to highlight the importance of particle technology in consumer products in the podcast featured on the home page. The take-home message here is that we need to listen carefully to our new members – though much experience resides with the established membership, we have much to learn from the next generation to guide the future of our Forum.

My continued gratitude to our newsletter's editor, Dr. Mayank Kashyap, for keeping us connected and serving through these challenging times, and all members of the executive committee who keep programming and events running smoothly.

Hope to see you in person (or virtually) in Boston soon!

Regards,

James Gilchrist, Professor, Lehigh University

Chair, The Particle Technology Forum of AIChE

[Email](#), [Website](#), Twitter: @Gilchrist_Lab, [LinkedIn](#)

Our Commitment on Diversity and Inclusion

Approved at 2019 AIChE Annual Meeting

The AIChE Particle Technology Forum is committed to maintaining a diverse and inclusive community of highly skilled chemical engineering professionals within the environment of the Institute and profession in which all members, regardless of characteristics such as gender identity and expression, race, religion, age, physical condition, disability, sexual orientation, educational level, socioeconomic class, nationality or ethnicity, are valued and respected.”



As a global scientific and engineering society, we affirm the international principles that the responsible practice of science, free from discrimination in all of its forms, is fundamental to scientific advancement and human wellbeing, as outlined by the International Council for Science's (ICSU) Statute 51. We also affirm our commitment to an engineering and scientific environment that facilitates the planning, execution, review and communication of engineering and scientific work with integrity, fairness, and transparency at all organizational levels. This extends to our general scientific endeavors—including our professional interactions and engagement with other engineers, scientists, students, trainees, and the general public. We recognize that harm to our profession, our scientific credibility, individual wellbeing, and society at large is caused by not doing so.

To this end, the PTF will implement the principles of diversity, inclusivity, and equity within PTF leadership and membership to build a community across the chemical enterprise. We are committed to quantifying and monitoring our diversity at least annually at the Executive Committee and reported at the general business meeting.

2021 AIChE Annual Meeting - Hybrid

Boston (November 7-11, 2021) and Virtual (November 15-19, 2021)



Message from AIChE Sent on March 29, 2021

Dear Colleague,

We are holding our upcoming 2021 AIChE® Annual Meeting in Boston at the John B. Hynes Convention Center, the Marriott Boston Copley Place, and Sheraton Boston, as well as in the virtual world for those unable to attend in person. After the past year, bringing together our engineering community has never been so critical. This hybrid meeting is being designed to bring you the best of both worlds, and will take place over a two-week period, from November 7-11 in person and from November 15-19 virtually.

As everyone knows, nothing beats a live experience and we look forward to offering an excellent program in Boston. But it's important to us that we provide a virtual experience too. Our in-person sessions will be recorded and made available for viewing on the virtual platform for all attendees. So whether you "fly, drive or click in," we are building a great conference.

The program's theme "Building the Bridge in 21st Century Education: Chemical Engineering Industry + Academia" applies now more than ever! Our program includes a special discussion on new learning paradigms and will also encompass AIChE's highest lectures presented by Arup Chakraborty (MIT), Eric Shaqfeh (Stanford) and David Schaffer (UC Berkeley), 700+ sessions programmed by our divisions and forums and topical conferences, including the new program on Material Interfaces as Energy Solutions.

For attendees joining us in Boston, please note that your safety is our primary concern. AIChE is working with the venues to adhere to all local and national directives for social distancing and sanitizing protocols.

For now, keep an eye out for updates by email, social media and our [conference website](#). We are happy to answer any questions—just email us at programming@aiche.org.

We are excited to see you all in Boston or virtually!

A handwritten signature in black ink that reads 'June C. Wispelwey'.

June C. Wispelwey

Executive Director and CEO, AIChE

Particle Technology Forum Programming

[Program At-A Glance](#)

[Programing Meetings](#)

[Awards Lectures](#)

[Special Sessions](#)

2021 AIChE Particle Technology Forum Awards

Elsevier PTF Lifetime Achievement Award



Jesse Zhu
Western University, Canada

Professor Jesse Zhu is a Distinguished University Professor and Canada Research Chair at Western University (formerly known as the University of Western Ontario), in London, Canada. Since 1982, he has worked on many areas of fluidization and particle technology including several years at Shell in the Netherlands, and working with fluidization pioneers like John Grace and Mooson Kwauk. With nearly 500 journal publications, 50+ patents, and over 250 graduate students and postdoctoral fellows supervised, he has worked on a very wide range of R&D projects, many from the industry. In addition to fundamental research, he is particularly active in technology developments and transfers, with several inventions commercialized or being



commercialized. Companies established by his graduate students and postdoctoral fellows have spanned from materials to environmental and then to pharmaceutical industries.

At Western University, he established the Particle Technology Research Centre in 1999 and has served as its Director since then. He is a Fellow of Chemical Institute of Canada and Engineering Institute of Canada, and a Fellow of Royal Society of Canada and Canadian Academy of

Engineering for which he is a current Board Director. He has chaired many conferences, including two annual conferences of the Canadian Society for Chemical Engineering and the 7th International Conference on Circulating Fluidized Bed. He has received many awards, including three major awards from the Canadian Society for Chemical Engineering (Syncrude Innovation Award for Outstanding Young Chemical Engineer, Bantrel Award in Design and Industrial Practice, and R.S. Jane Award as the highest career award of the society), the PSRI Fluidization Lectureship Award, the Premier's Research Excellence Award, the Ontario Professional Engineers Engineering Medal, and the Distinguished University Professorship and the Hellmuth Prize for Achievement in Research (the highest research award) at Western University.

Thomas Baron Award in Fluid-Particle Systems



Triantafillos Mountziaris
University of Houston

Professor T.J. Mountziaris earned a Diploma (5-yr degree) from the Aristotle University of Thessaloniki, Greece, and a PhD from Princeton University, both in Chemical Engineering. After completing postdoctoral studies at the University of Minnesota, he joined the Department of Chemical and Biological Engineering at the University at Buffalo (SUNY), where he was a member of the faculty from 1989 to 2005. From 2003 to 2005, he served as rotating Program Director for Particulate and Multiphase Processes at the National Science Foundation (NSF) and contributed to the National Nanotechnology Initiative. From 2005 to 2020, he was Professor of Chemical Engineering at



the University of Massachusetts-Amherst and served as Department Head from 2005 to 2014. Under his leadership, the Department enjoyed a period of significant growth with substantial increases in the size and diversity of the faculty and student bodies and the annual research expenditures. From 2015 to 2019, he served as rotating NSF Program Director for Process Systems, Reaction Engineering and Molecular Thermodynamics and led several new initiatives, including the NSF Emerging Frontiers in Research and Innovation (EFRI) Program on Distributed Chemical Manufacturing. In 2021 he joined the University of Houston as the inaugural William A. Brookshire Department Chair of Chemical & Biomolecular Engineering. His research interests are in the areas of reaction engineering and reactor design, synthesis of photonic materials, biosensors, and multiphase flows. He is also active in translational research, and two of his US patents are licensed by a startup company. He is a Fellow of the American Institute of Chemical Engineers (AIChE) and the American Association for the Advancement of Science. He is a recipient of the Norman Hackerman Award in Solid-State Science and Technology from the Electrochemical Society and the Shell Thomas Baron Award in Fluid-Particle Systems from the AIChE.

PSRI Fluidization and Fluid Particle Systems Award



Sofiane Benyahia
National Energy
Technology Laboratory

Dr. Sofiane Benyahia

currently works as a research engineer at the National Energy Technology Laboratory in Albany, Oregon. Dr. Benyahia has more than 20 years experience conducting computational fluid dynamics (CFD) simulations of multiphase flows resulting in more than 40 peer-reviewed publications. He focuses on developing computationally efficient and physically accurate numerical tools to better understand, predict, and troubleshoot fluidized bed systems at the heart of most energy and chemical industries. Dr. Benyahia earned a bachelor's in chemical engineering from Polytechnic School in Algiers (Algeria) and a doctorate in chemical engineering from Illinois Institute of Technology in Chicago.



Dow Particle Processing Recognition Award



Richard Lueptow
Northwestern University

Professor Richard M.

Lueptow is Senior Associate Dean at the McCormick School of Engineering and Applied Science, Co-Founder of the Master of Product Design and Development Program, Professor of Mechanical Engineering and of Chemical & Biological Engineering (by courtesy), and former Charles Deering McCormick Professor of Teaching Excellence at Northwestern University. He received his BS in engineering (1978) from Michigan Technological University and his master's degree (1980) and doctorate (1986) in mechanical engineering from the Massachusetts Institute of Technology. He has five years of product development experience in the biomedical



industry and over three decades of academic experience on the faculty at Northwestern University. His research interests and expertise range from fundamental flow physics to water purification to dynamical systems. His current research focuses on granular flow dynamics and molecular simulations. He has published over 170 journal papers and six patents. He has received numerous teaching and research awards and is a Registered Professional Engineering, as well as a Fellow of both the American Physical Society and the American Society of Mechanical Engineers.

SABIC Young Professional Award

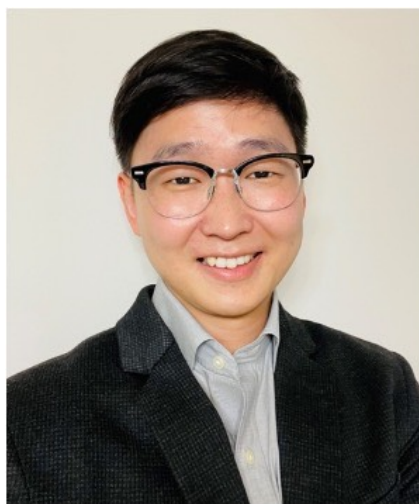


Dr. Heather Emady is an associate professor of chemical engineering at Arizona State University, with a growing research program in particulate process and product design. Her current research efforts include particle wettability, granule formation, bulk particle flowability, granular heat transfer in rotary drums, and discrete element method simulations. Dr. Emady has won prestigious early career grants including the Bisgrove Scholar Award from Science Foundation Arizona and the NSF CAREER Award. She



holds B.S. and Ph.D. degrees in Chemical Engineering from the University of Arizona and Purdue University, respectively. She did postdoctoral work in Procter & Gamble's Microstructured Fluids group, and in Rutgers University's Catalyst Manufacturing Science and Engineering Consortium (CMSEC) and Engineering Research Center for Structured Organic Particulate Systems (ERC-SOPS). For the PTF, Dr. Emady currently serves as the Treasurer, an Academic Liaison, and the Area 3a Chair.

George Klinzing Best PhD Award



Dr. Guanhe Rim received B.S. and M.S. in Chemical Engineering at Sungkyunkwan University, South Korea, and a Ph.D. in Earth and Environmental Engineering at Columbia University in 2020 under the guidance of Prof. Ah-Hyung Alissa Park. His Ph.D. research focused on coupled kinetic and mechanistic studies of elemental extraction from silicate minerals and alkaline industrial wastes for CO₂ utilization, and he designed a unique internal grinding reactor system to enhance diffusion-limited



University of
Pittsburgh

elemental extraction behavior. Currently, Dr. Rim is continuing his research in Prof. Christopher W. Jones's and Prof. Ryan P. Lively's groups at the Georgia Institute of Technology as a postdoctoral Fellow. His research focuses on the synthesis and characterization of amine-impregnated MOF powder/monolith sorbents for sub-ambient DAC (direct air capture).



PTF Committee and Programming Meetings

Meeting	Date/Time (PST)	Location
PTF Executive Committee Meeting (by invitation)	Sunday, November 7, 2021, 5:30 PM - 6:30 PM	Sheraton Back Bay - Gardner and virtual (email to follow)
PTF General Business Meeting (open to ALL members)	Monday, November 8, 2021, 6:00 PM - 7:00 PM	Sheraton Back Bay - Fairfax A/B and virtual (email to follow)
PTF Group 3A Meeting	Tuesday, November 9, 2021, 10:30 AM - 11:50 AM	Sheraton Back Bay - Fairfax A/B
PTF Group 3B Meeting	Tuesday, November 9, 2021, 10:30 AM - 11:50 AM	Sheraton Back Bay - Dalton
PTF Group 3C Meeting	Tuesday, November 9, 2021, 10:30 AM - 11:50 AM	Sheraton Back Bay - Gardner
PTF Group 3D Meeting	Tuesday, November 9, 2021, 10:30 AM - 11:50 AM	Sheraton Back Bay - Hampton
PTF Group 3E Meeting	Tuesday, November 9, 2021, 10:30 AM - 11:50 AM	Sheraton Back Bay - Ballroom A

Special Sessions at 2021 AIChE Annual Meeting

In response to the ever uncertain COVID-19 pandemic, AIChE has split the Annual Meeting across two weeks. The first week in-person, as usual; while the second week will be virtual. With this unprecedented format, and ever evolving global situation, the program is still in constant flux. That said, AIChE is closely monitoring and it seems that a majority of attendees are still expected to be present in person. We also have nearly 159 talks currently scheduled, spanning over 17 sessions. In addition to our award session, the Particle Technology Forum is also hosting two honorary sessions. Area 3B, Fluidization and Fluid-Particle Systems, is hosting a session honoring the late Prof. John Grace. Area 3C, Solids Flow, Handling, and Processing, is hosting a session honoring Dr. John Carson (*Written by Dr. Ben Freireich*).

★ **PTF Student Workshop - World of Particle Technology Presented and Chaired by Dr. Ben Freireich**

Perhaps the most important component of our mission, as the PTF, is to teach young engineers the importance of particle technology as well as make them aware that we exist as a community of resources. To that end, this year we continue the tradition of holding a seminar titled "World of Particle Technology" at the AIChE Annual Student Conference. In this talk the students are shown that particle technology exists, they likely have very little exposure, the challenges are ubiquitous, many times the solutions are counter intuitive, but there are many useful resources (such as the

PTF). In the past we've had audiences of several hundred students, with many returning from previous years. We expect to have the same level of enthusiastic engagement this year.

★ **SABIC Young Professional Award Talk by Dr. Heather Emady**

Session 72: Fluidization: Fundamentals, Monday, November 8, 2021, 9:20 AM - 10:00 AM, Sheraton Back Bay, Fairfax A/B

★ **Honorary Sessions**

♦ **389 - Particle Technology - Honoring John Carson**, Tuesday, November 9, 2021, 3:30 PM - 6:00 PM, Sheraton Back Bay - Gardner

♦ **254 - Honorary Session for John Grace**, Wednesday, November 17, 2021, 12:30 PM - 3:00 PM (Virtual): To honor Prof. John Grace's memory, AIChE is providing us with a special virtual session at this year's annual meeting that highlights his legacy through his students. Please consider attending the session with the following contributions:

1. **Xiaotao Tony Bi**, "The lasting legacy of Prof. John Grace"
2. **Poupak Mehrani, Andrew Sowinski, University of Ottawa**, "Relationship between the net electrostatic charge inside a fluidized bed and particles accumulation on the column wall"
3. **Tingwen Li, SABIC**, "Numerical study of particle tracking measurements in fluidized bed reactors"
4. **Mohammad Abdur Rakib, Saudi Aramco**, "Developments in CFD simulations of industrial FCC Units"
5. **Farzam Fotovat, Sharif University of Technology**, "CFD-DEM simulation of the onset of fluidization for large particles in a bed of fine sand"
6. **Sina Tebianian, IFPEN**, "Characterization of the main components of fluidization technology applied to thermochemical conversion of solid fuels"
7. **Chen Li, Yuzhou Zhang, Ning Zhu (Lightsource.), Heather N. Emady (ASU), Lifeng Zhang, University of Saskatchewan**, "Experimental investigation of wet pharmaceutical granulation using in-situ synchrotron X-ray imaging"
8. **Allan Issangya, PSRI**, "Solids flux profiles in high velocity CFB risers of FCC catalyst particles"
9. **Alissa Park** with closing

There are papers from all over the world, from academia and industry, focusing on the experimental and the modeling. It is a representation of the breadth and depth of John's contribution to the science and technology.

Xiaoto Tony Bi, University of British Columbia

Ah-Hyung Alisa Park, Columbia University

Ray Cocco, PSRI

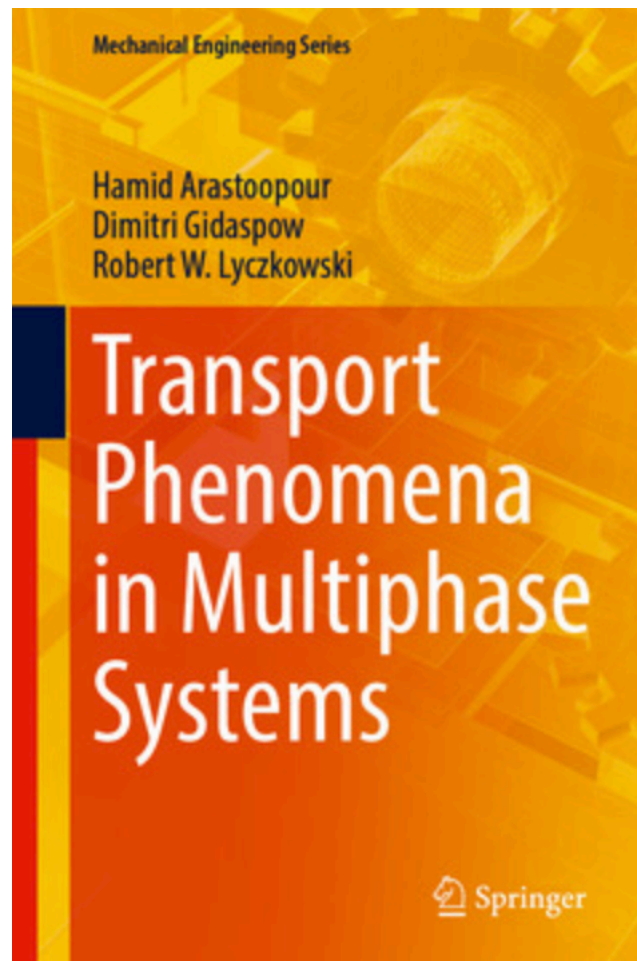
★ **Poster Sessions**

- ◆ **511 - Poster Session - Particle Technology Forum**, Wednesday, November 10, 2021, 3:30 PM - 5:00 PM, John B. Hynes Veterans Memorial Convention Center - Exhibit Hall C/D
- ◆ **665 - Poster Session - Particle Technology Forum**, Monday, November 15, 2021, 10:30 AM - 12:00 PM (Virtual)

★ **Particle Technology Forum Award Presentations**

- 497 - Particle Technology Forum Award Presentations and Baron Award Lecture**, Monday, November 15, 2021, 3:30 PM - 6:00 PM (Virtual)
- ◆ **497a - Thomas Baron Award in Fluid-Particle Systems (Sponsored by Shell):** Design of Multiphase Reactors for the Synthesis of Renewable Chemicals and Semiconductor Nanocrystals, **T.J. Mountziaris**, 3:30 PM - 4:15 PM
 - ◆ **497b - Elsevier Lifetime Achievement Award:** Fluidization Centennial -- Reflection on the Past and Prospection in the Future, **Jesse Zhu**, 4:15 PM - 5:00 PM
 - ◆ **497c - PSRI Lectureship Award in Fluidization:** CFD as a tool to better understand multiphase flow physics, **Sofiane Benyahia**, 5:00 PM - 5:45 PM

New Book



Job Posting

Solids Processing Research Scientist at Dow Chemical, Texas

Dow's Plastics & Hydrocarbons R&D organization has an exciting opportunity for a talented & motivated **Research Scientist** with expertise in Solids Processing and Handling (particle technology) in our New Process Technology Development organization. This organization is responsible for process research & development, technology implementation, and troubleshooting across all technology platforms and global assets aligned to our Plastics & Hydrocarbons businesses. As a member of this team, you will work closely with capital project & engineering teams as well as our technology centers to conceptualize, innovate, and design new processes. While the group has a global presence, the current position will be located in Lake Jackson, TX at our Texas Innovation Center – a premier work environment with modern offices & laboratories equipped with the latest technology.



The key responsibilities for this role will be to provide technical expertise in the areas of solid particle conveying (pneumatic and mechanical), silo storage, fluidization & fluidized bed processes, drying, coating, feeding/dosing, classification, separation technologies (solid-solid, gas-solid, solid-liquid), mixing/blending and particle engineering. The ideal candidate will bring in-depth expertise and practical knowledge across a breadth of these solids processing technology areas, and apply scientific principles for innovation, troubleshooting and problem solving.

Required Qualifications:

- A minimum of a Master's degree in Chemical or Mechanical Engineering is required; emphasis on solids processing & handling (particle technology) preferred
- Minimum of 7 years of relevant experience preferably in the field of solids processing after graduation with the highest degree

Preferred Qualifications:

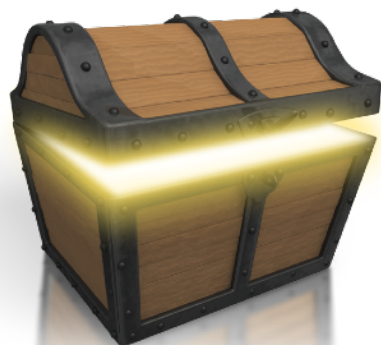
- PhD with emphasis in solids processing / particle technology
- Prior industrial experience in pilot plant or manufacturing plant operations, ideally involving troubleshooting real world problems and developing innovative & practical solutions
- Proven track record of high performance and ability to convert complex technical issues into straight-forward value propositions
- Ability to generate and interpret data to make statistically relevant conclusions that will be used for process development and design

For additional details and to apply (before November 15, 2021) for this position...

https://dow.wd1.myworkdayjobs.com/ExternalCareers/job/Freepport-TX-USA/Research-Scientist_R2021460

If you have any questions, please contact **Dr. Shrikant Dhodapkar** (sdhodapkar@dow.com)

Treasurer's Report (2019-2020) by Dr. Heather Emady



AICHe ACCOUNT	Starting	Income	Expenses	Balance
Dues Income - Divisions (09/2020)		\$ 585.00		\$ 14,557.56
Dues Income - Divisions (10/2020)		\$ 780.00		\$ 15,337.56
Corp Sponsorship Inc (Fund transferred from NYC account) (10/2020)		\$ 8,488.16		\$ 23,825.72
Dues Income - Divisions (11/2020)		\$ 450.00		\$ 24,275.72
Corp Sponsorship Inc (Elsevier\$1342) (11/2020)		\$ 2,842.00		\$ 27,117.72
Supplies - Special Purpose (Bruce Hook) (11/2020)			\$ 798.80	\$ 26,318.92
Dues Income - Divisions (12/2020)		\$ 450.00		\$ 26,768.92
Monetary Awards (Shell Thomas) (12/2020)			\$ 1,000.00	\$ 25,768.92
Invest Inc - Interest (12/2020)		\$ 1,605.28		\$ 27,374.20
Dues Income - Divisions (1/2021)		\$ 240.00		\$ 27,614.20
Monetary Awards (Service, Elsevier, PSRI) (1/2021)			\$ 3,000.00	\$ 24,614.20
Corp Sponsorship Inc (Shell\$1257, Upitt\$757) (1/2021)		\$ 2,014.00		\$ 26,628.20
Dues Income - Divisions (2/2021)		\$ 240.00		\$ 26,868.20
Corp Sponsorship Inc (PSRI\$1257) (2/2021)		\$ 1,257.00		\$ 28,125.20
Corp Sponsorship Inc (Fund transferred from NJ account) (2/2021)		\$ 26,704.36		\$ 54,829.56
Dues Income - Divisions (3/2021)		\$ 255.00		\$ 55,084.56
Corp Sponsorship Inc (SABIC\$1257) (3/2021)		\$ 1,257.00		\$ 56,341.56
Dues Income - Divisions (4/2021)		\$ 195.00		\$ 56,536.56
Dues Income - Divisions (5/2021)		\$ 135.00		\$ 56,671.56
Corp Sponsorship Inc (ANSYS\$1257) (5/2021)		\$ 1,257.00		\$ 57,928.56
Dues Income - Divisions (6/2021)		\$ 60.00		\$ 57,988.56
Monetary Awards (Best PhD, SABIC) (6/2021)			\$ 1,500.00	\$ 56,488.56
Dues Income - Divisions (7/2021)		\$ 225.00		\$ 56,713.56
Dues Income - Divisions (8/2021)		\$ 435.00		\$ 57,148.56
Totals as of 10/2021	\$ 13,972.56	\$ 49,474.80	\$ 6,298.80	\$ 57,148.56

PTF Membership

To continue receiving the PTF newsletters (3 issues per year) and stay current with particle technology events and news, please make sure to renew/ start your membership by either:

- Checking Particle Technology Forum when renewing your AIChE membership annually,
- Becoming a PTF lifetime member so that you don't have to renew membership every year

Become a PTF only member

(Annually \$15, Lifetime \$150)

If you don't see the PT membership in your renewal screen, you can choose "Update Membership Options" and add PTF to your order.

You can also contact AIChE customer service at 800-242-4363 (US); 203-702-7660 (Outside the US); or email customerservice@aiche.org for membership questions and help.

- PTF Membership Committee



PTF Award and Dinner Sponsors



ELSEVIER

Lifetime Achievement
Award



Thomas Baron Award



PTF Service Award



Particle Processing
Award



Fluidization and Fluid
Particle Systems Award



Young Professional
Award



University of
Pittsburgh

George Klinzing Best
Ph.D. Award







PTF Dinner







Student Travel Grants





Particle Technology Forum Organization

◆ *Officers*

<p>Chair Dr. Jim Gilchrist gilchrist@lehigh.edu</p>	
<p>Co-Chair Dr. S.B. Reddy Karri reddy.karri@psri.org</p>	
<p>Treasurer Dr. Heather Emady heather.emady@asu.edu</p>	
<p>Past Chair Dr. Bruce Hook bdhook@dow.com</p>	

◆ *Executive Committee*

Industry	
<p>Michael Molnar michael.molnar@dow.com</p>	
<p>Willie Hendrickson whendrickson@aveka.com</p>	
<p>Dr. Wyatt Casey LaMarche casey.lamarche@psri.org</p>	
<p>Dr. Mayank Kashyap mkashyap@sabic.com</p>	

Academic	
<p>Dr. Heather Emady heather.emady@asu.edu</p>	
<p>Dr. Aaron Moment ajm2293@columbia.edu</p>	
<p>Dr. Bodhi Chaudhuri body.chaudhuri@uconn.edu</p>	
<p>Dr. Maria Silvina Tomassone silvina@soe.rutgers.edu</p>	

◆ *Liaisons and Committee Chairs*

CTOC Liaison	Dr. Ah-Hyung (Alissa) Park	ap2622@columbia.edu
Nominating Committee Chair	Dr. Michael Molnar	michael.molnar@dow.com
PTF Newsletter Editor	Dr. Mayank Kashyap	mkashyap@sabic.com
PTF Webmaster	Dr. Madhusudhan Kodam	mkodam@tesla.com
PTF Student Workshop Chair	Dr. Ben Freireich	bfreireich@originmaterials.com
PTF Programming Chair	Dr. Ben Freireich	freireib@gmail.com
PTF Dinner Sponsorship	Dr. Jim Gilchrist	gilchrist@lehigh.edu
PTF Awards Sponsorship	Dr. Reddy Karri	reddy.karri@psri.org
PTF Education Committee Chair	Dr. Shrikant Dhodapkar	sdhodapkar@dow.com
Staff Liaison	Ms. Darlene Schuster	darls@aiche.org
	Ms. Diane Cappiella	dianc@aiche.org
Accounting	Ms. Leila Mendoza	leilm@aiche.org

◆ *Programming Leadership*

Group 3A: Particle Production and Characterization	Group 3D: Nanoparticles
Chair: Dr. Bryan Ennis bryan.ennis@powdernotes.com	Chair: Dr. Timothy Brenza timothy.brenza@sdsmt.edu
Co-chair: Dr. Heather Emady heather.emady@asu.edu	Co-chair: Dr. Eirini Goudeli eirini.goudeli@unimelb.edu.au
Group 3B: Fluidization and Fluid-Particle Systems	Group 3E: Energetics
Chair: Dr. Jia Wei Chew jchew@ntu.edu.sg	Chair: Dr. Travis Sipper tsippel@iastate.edu
Co-chair: Dr. Casey LaMarche casey.lamarche@psri.org	
Group 3C: Solids Flow, Handling and Processing	
Chair: Dr. Rich Lueptow r-lueptow@northwestern.edu	
Co-chair: Dr. Yi Fan yfan5@dow.com	