

Shepard Hall and Quadrangle - City College of New York (CCNY) 1904

# Chemical Engineering Newsletter

Grove School of Engineering at The City College of New York

06/2023

## Professor Morris Receives Rheology's Highest Honor - The 2023 Bingham Medal

**Jeffrey "Jeff" F. Morris**, Professor of Chemical Engineering and Director of the Benjamin Levich Institute, is the recipient of the 2023 Bingham Medal of the Society of Rheology "in recognition of his transformative research on the flow of suspensions, particularly of the mechanics of discontinuous shear thickening, and his application of rheology to practical problems in suspension flow, including his novel work on the rheology of hydrate-forming emulsions."

The Bingham Medal has been awarded annually for seventy-five years for outstanding contributions in rheology, which is the study of the deformation and flow of materials. This recognition is the culmination of a series of major awards for Professor Morris, including the 2022 Weissenberg Award of the European Society of Rheology, the 2020 Stanley Corrsin Award in Fluid Mechanics of the American Physical Society, and the 2017 Shell Thomas Baron Award in Fluid Particle Systems of the American Institute of Chemical Engineers.

In a series of landmark papers, Professor Morris and his colleagues demonstrated the minimal ingredients needed to reproduce experimentally observed discontinuous shear thickening, wherein the viscosity of a concentrated suspension undergoes a large discontinuous increase at a critical shear rate. This body of work, which received two Society of Rheology Publication Awards (in 2015 and 2020) has been transformative in fundamentally altering the dominant paradigm for studying the rheology of suspensions and opening a pathway for the rational analysis of suspension processing and flow.

Professor Morris and his colleagues have used rheology, visualization, and control of the thermodynamic state to study the formation and properties of gas hydrates, or clathrates, which form when a small guest molecule is captured in a "cage" of hydrogen-bonded water to form a crystalline solid. Clathrate formation can cause an abrupt change in the properties of an emulsion and can cause jamming in petroleum pipelines carrying oil and gas along with water and brine. Their work has revolutionized the understanding of hydrate-forming systems by developing a framework in which the control of material composition allows study of the mechanical basis for behavior, thus developing a rational foundation of constitutive and flow models needed for flow assurance and other applications.

Professor Morris came to CCNY *(Continued on Page 7)*



**Professor Jeffrey F. Morris**



Department website: [www.ccnycunyu.edu/chemeng](http://www.ccnycunyu.edu/chemeng)



[www.ccnycunyu.edu/engineering](http://www.ccnycunyu.edu/engineering)

# MESSAGE FROM THE “OUTGOING” CHAIR

Dear Alumni and Friends of the Department,

You may have wondered what happened to our Newsletter since it is three months late! Fortunately, it's for good reason, we have had an incredibly busy and productive Spring 2023 semester after an equally productive Fall 2022 semester. Between a successful ABET accreditation visit and favorable report showing our Department had “no weaknesses or deficiencies”; hosting our 11<sup>th</sup> Shinnar lecture presented by **Professor Michael Tsapatsis** from Johns Hopkins University; organizing our first in-person alumni reception since 2020 at the AIChE meeting in Phoenix, Arizona (2023); and, hiring new faculty, there was little time for anything else.

I am delighted to report that we attracted two new faculty members to the Department. **Professor Mitch Goldberg** joins us from NOAA's National Environmental Satellite, Data and Information Service (NESDIS) and will be a Distinguished Research Scientist in the NOAA Center for Earth System Sciences and Remote Sensing Technologies (CESSRST) at CCNY. He brings his vast experience in satellite remote sensing research and technologies



## **Prof. Ilona Kretzschmar Chair (01/2016 - 06/2023)**

to the Department. In addition, **Assistant Professor Chi Cheng** will join us in Fall 2023 from the University of Melbourne (Australia) where he led the nanofluidic and energy laboratory. At CCNY, his research group will study the molecular-level engineering of transport processes for low carbon manufacturing.

Since today is the last day of my tenure as Department Chair, I have been reflecting on the past 7.5 years and all the people, faculty, staff, and alumni I have had the privilege to meet and work with. The list is simply too long for me to thank everybody individually for all the support I received that allowed me to push the Department forward. So, a simple and heartfelt “THANK YOU!” must suffice. It has been a delight to serve as the Chair of the Department of Chemical Engineering at The City College of New York.

On a more sober note, I was saddened to hear about **Eva Grove's** passing. Her visit to The Grove School of Engineering with program manager Jose Santos in Fall 2017 was one of the highlights of my tenure as she was able to see first-hand the impact of The Grove Foundation's support on the ChE Department and specifically the Acrivos and A.X. Schmidt Scholarship programs.

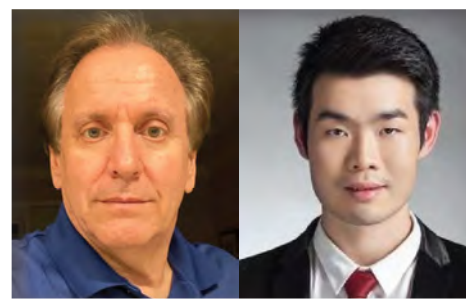


**Eva Grove & Jose Santos during their visit to GSOE in 2017**

Finally, I would like to introduce the incoming Chair who is no stranger to the ChE Department or to many of you as he's been frequently featured in our newsletter, **Professor Marco Castaldi**. He begins his three-year term tomorrow, July 1st, 2023 and having worked closely with him over the past year, I am confident he is well-suited to take over the helm of Chair. Professor Castaldi an internationally-recognized expert and consultant in the areas of waste-to-energy, air emissions, combustion, and catalysis. Since joining the faculty at CCNY in 2012, Professor Castaldi has taught the ChE rigorous department's senior design courses required for all ChE BE Seniors, been instrumental in building the Earth System Science and Environmental Engineering (ESE) bachelor's degree program at CCNY, as the Program's Director since Spring 2016, while also serving as Director of the Earth Engineering Center at City College, a leading waste-to-energy research center focused on advancing processes particularly in the high-efficiency recovery of energy from biomass processes using catalysis, with the aim of developing novel solutions to some of the world's most pressing problems. Prior to joining CCNY, Professor Castaldi was an Associate Professor at Columbia University's Earth & Environmental Engineering Department. He is a Fulbright Global Scholar, a fellow of the American Society of Mechanical Engineers (ASME) and a fellow of the the American Institute of Chemical Engineers (AIChE). Professor Castaldi received his B.S. ChE from Manhattan College and an M.S. and Ph.D. in Chemical Engineering from UCLA where he also minored in Advanced Theoretical Physics and Astrophysics. Congratulations, Marco!



**Prof. Michael Tsapatsis, JHU**



**Prof. Mitch Goldberg & Assistant Prof. Chi Cheng**



**Prof. Marco J. Castaldi  
“Incoming” Chair**

Enjoy the Newsletter and stay in touch!

- Ilona Kretzschmar

# Four Alumni Win NSF CAREER Awards

*We are immensely proud of the achievement of four of our alumni who recently won NSF Career Awards.*



**Prof. Ehssan Nazockdast**  
**CCNY ChE PhD '13**  
**UNC at Chapel Hill**

**Ehssan** joined the Department of Applied Physical Sciences at University of North Carolina (UNC) at Chapel Hill in July 2017 as a tenure-track Assistant Professor. His research interests include complex and biological fluids, such as mechanics of colloidal suspensions and cell cytoskeleton.

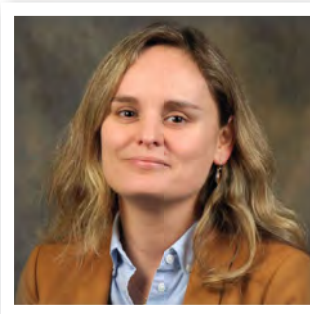
In 2020, Ehssan was awarded the NSF CAREER Award to study "Fluid-structure interactions in cytoskeletal assemblies." Cytoskeletal filaments are continuously moved by forces from molecular motors that attach to and walk along them. These movements generate flows inside the cell, inducing fluid-structures (filaments) interactions that are key to cytoskeleton mechanics, yet have been largely ignored in previous studies. The purpose of the research is to use computer simulations and mathematical modeling to develop a deep understanding of the role of fluid-structure interactions and cellular flows on cytoskeleton organization and mechanics.

More about his research can be found at: <https://aps.unc.edu/faculty-member/nazockdast-ehsan>.

**Lorraine** joined the Materials Science and Engineering Department at the University of Central Florida as a tenure-track Assistant Professor in January 2017. Her lab is focused on the design, synthesis, characterization, and application of dynamic peptide-based materials created by expanding the self-assembly toolbox to include multiple, synergistic molecular interactions.

In 2021, Lorraine was awarded the NSF CAREER Award that will enable her group to construct biomimetic droplets similar to those found in cells. The biomimetic droplets will be used to study multienzymatic reactions outside of cellular environments with the goal of making them more compatible with chemical manufacturing. With the goal increasing Hispanic participation in the STEM fields, Lorraine has integrated biomaterials education of K-12, undergraduate, and graduate students through the development of bilingual content throughout the project

More about her research can be found at: <http://mse.ucf.edu/biomolecules>.

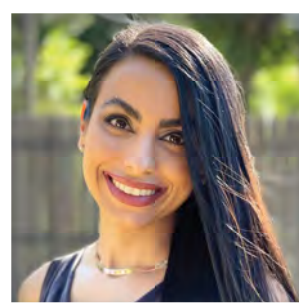


**Prof. Lorraine Leon**  
**CCNY ChE PhD '11**  
**University of Central Florida**

**Sepideh** is a tenure-track Assistant Professor in the Chemical, Biological, and Materials Engineering Department at the University of Oklahoma, specializing in complex fluidic systems. Her research focuses on understanding and predicting the thermodynamic, transport, and deformation properties of these systems.

In 2022, Sepideh was awarded the NSF CAREER Award that supports her research on wetting, spreading, and evaporation dynamics of multi-component fluidic droplets on various surfaces, with a particular emphasis on biological fluids. The research examines how the adsorption of surface-active species in complex fluidic systems can alter interfacial rheology, impacting droplet spreading dynamics and evaporation kinetics. Sepideh's findings have the potential to contribute to the development of sustainable soft materials and offer solutions for complex interfaces relevant to "water and energy sustainability" challenges.

More about her research can be found at: <http://srazavilab.com>.

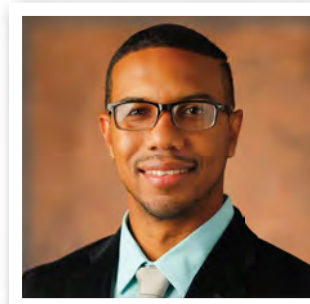


**Prof. Sepideh Razavi**  
**CCNY ChE PhD '15**  
**University of Oklahoma**

**Carlos** joined the Department of Chemical Engineering at Vanderbilt University in August 2017, as a tenure-track Assistant Professor. His research interests are colloidal systems, their self- and directed assembly, and electrokinetics.

In 2022, Carlos was awarded the NSF CAREER Award to understand the behavior of charged particles in the presence of simultaneous electric fields and concentration gradients. This knowledge will be used to direct the assembly of particles into advanced reconfigurable materials. Confocal microscopy will be used to visualize the response of charged particles while mathematical modeling of the system will provide further physical insight. With confocal microscopy, colloidal particles can be tracked spatially in three dimensions with great precision. Understanding the fundamentals of how this works and what parameters are used to control it will be important in the applied fields of materials, medicines, electronics, and more.

More about his research can be found at: <https://engineering.vanderbilt.edu/bio/carlos-silverabatista>.



**Prof. Carlos A. Silvera Batista**  
**CCNY ChE BE '06**  
**Vanderbilt University**

# Alumni Give Back

## Dr. Juan D. Jimenez Teaches ChE 43200 (Reaction Engineering)



**Dr. Juan D. Jimenez (ChE BE '15), Goldhaber Fellow, Brookhaven National Lab**

When Prof. Biddinger went on sabbatical leave, we found ourselves without an instructor for ChE 43200 (Reaction Engineering) in Fall 2022. We reached out to alumnus **Dr. Juan D. Jimenez (ChE BE '15)**, a native New Yorker and current Goldhaber Distinguished Fellow at Brookhaven National Lab to see if he would accept an Adjunct Assistant Professor position teaching ChE 43200. To the Department and our students' delight, Dr. Jimenez accepted the offer, coming equipped with the perfect amount of expertise and training to teach the course.

After obtaining his B.E. in Chemical Engineering at CCNY, Dr. Jimenez went on to get his PhD in Chemical Engineering at the University of South Carolina under the supervision of Professor Jochen A. Lauterbach. His dissertation centered on the fundamental understanding of carbon dioxide hydrogenation over transition metal heterogeneous catalyst. More specifically, his research focused on using several spectroscopic techniques to discern the chemical and structural properties of catalysts both at ambient conditions and in situ, revealing a mechanistic understanding of the reaction interface. Upon completion of his PhD, Dr. Jimenez successfully competed for the prestigious Goldhaber Distinguished Fellowship at Brookhaven National Laboratory, where he now works in the Catalysis: Reactivity and Structure Group with Dr. Sanjaya D. Senanayake and Professor Jose A. Rodriguez of the Chemistry Division. His current work delves deeper into understanding the basic science of C1 upgrading, such as carbon dioxide hydrogenation, methane valorization, or elucidating the complex interactions of carbon monoxide on unique transition metal surfaces. His primary specialization includes X-Ray Absorption Spectroscopy, Infrared Spectroscopy, kinetics, nanoparticle synthesis and characterization, gas and liquid phase reactor design, and operando spectroscopic methodologies.

Our students enjoyed the clarity of Dr. Jimenez' lectures and overall instruction, his vast expertise and excitement about the topic, and his straightforward communication of expectations. We would like to thank Dr. Jimenez for carving out time to give back to his alma mater and wish him success with his next career steps.

## Alumni Raise Funds to Honor the Late Professor Emeritus Harvey L. List

Starting in 2019, alumnus **Dr. Dominick Mazzone (ChE ME '82, PhD '86)** led a fundraising effort to name our Unit Operations Lab in honor of Professor Emeritus Harvey L. List. Dr. Mazzone's efforts were interrupted when the pandemic hit in 2020, but he was able to double down and continue to rally up support in 2022. However, just a few months shy of reaching the fundraising goal, Professor List passed away on September 29<sup>th</sup>, 2022 at age 98. He was aware of the fundraising campaign in his honor and his son, Ian List, was able to attend the naming ceremony, which you will hear more about in the Fall 2023 newsletter.

Professor Emeritus Harvey L. List, D. Ch.E., taught in the Department of Chemical Engineering at The City College of New York from 1955-1980. He was co-author, along with A.X. Schmidt, of the influential textbook entitled "Material and Energy Balances," as well as founder and editor of the noted industry newsletter "International Petrochemical Developments." Among his many achievements were being appointed a Fulbright Professor at Tunghai University; presenting the keynote address at the 1963 Annual Meeting of the China Chemical Society (Taiwan); being inducted in the acclaimed Who's Who in the East, the American Men of Science, and the Who's Who in Engineering. A devoted educator, Prof. List taught at both the undergraduate and graduate levels, including Material and Energy Balances, Unit Operations, Chemical Process Design, Pollution Control, and Petroleum and Petrochemical Technology. He received his B.Ch.E. and D. Ch.E. from Polytechnic University of New York.



**Prof. Emeritus Harvey L. List (1924-2022)**

The funds raised in Prof. List's honor will be used to provide endowed support of core operating purposes of the laboratory including maintenance, supplies, and instrumentation needs as well as materials in support of student design competitions held by the Department of Chemical Engineering. We would like to wholeheartedly thank Dr. Dominick Mazzone for leading this successful fundraising effort, our alumni and friends of the Department whose donations made the naming of the Unit Operations Lab a reality and for giving back to their alma mater in a meaningful way.

# Strengthening ChE Student Organizations

## **AIChE Chapter Leadership takes Juniors and Sophomores to Regional AIChE Conference**

The leadership of the CCNY AIChE Chapter and Professor Raymond Tu, their chapter advisor, took a group of sophomores and juniors to the Mid-Atlantic Student Regional Conference held at Virginia Tech in Spring 2023. The trip was a great success and the students reported that attending the AIChE conference inspired them to “establish connections with other chemical engineering students from various universities and industry professionals.” The students participated in the job and graduate school fair, ChE Jeopardy, the poster competition, and also saw the Chem-E-Car competition up close. To Prof. Tu’s relief, sophomores and juniors expressed interest in attending future conferences and mentoring underclassmen. They stated, “We gained an understanding of the competition process and observed the preparation required for success with the belief that we will successfully compete against top teams in the future.” The trip was made possible by the generous donation of alumnus **David Deutsch (ChE BE ’68)**, who is also very active in the Metro New York Section of AIChE. Thank you, David, your support means the world to our students!



**L-R: Iftekhhar Chowdhury, Maggin Calderon Monterroza, Heesoo Cho, Sara Avraham, Eden Chan, Schidza Cime, Tricia Marchese, and Lester Curo.**

## **Reinvigorating the OXE Chapter at CCNY**

After a year of dormancy, Professor Carol Steiner helped revitalize the Omega Chi Epsilon (OXE) Chapter. The OXE E-Board members reflect, “Prof. Steiner reached out to the seven of us in November 2022 to inspire us to bring the Chapter back to life. We held an informal election amongst us to establish an acting Executive Board to start rebuilding the club – which was not even registered with CCNY anymore. In February 2023, Iftekhhar Chowdhury, acting president and the E-Board laid out a plan to reinstate the club.

The E-Board submitted the necessary documents for club registration in late March. Meanwhile, we discovered that we had to settle a debt with the National OXE Organization for member registration fees from previous years. We also found unsent certificates for OXE members that allowed us to connect to alumni. And most challenging, we discovered that our access to the financial accounts of the club and funding from Undergraduate Student Government had been revoked because our club was “unregistered.” At the same time, the E-Board recognized the need to attract new members to ensure that the OXE Chapter will thrive in the coming academic years. The E-Board rallied together and garnered their resources to put together a special invitation and Induction Ceremony for new members. We decided to send a formal invitation letter, in addition to the standard invite by email. We were able to offer membership with a reduced fee, so that students would not be immediately burdened with the additional costs of graduation stoles and cords. Next, we put together a memorable induction ceremony with a sit-down catered lunch to allow connections to be made between the incoming and outgoing members. And finally, to support a transition to the incoming E-Board, we prepared a document of E-Board position summaries – descriptions written by each member of the Board that included their own reflections and recommendations for the coming year. An election of the new E-Board was held in early April, and the E-Board documentation was handed over to the newly elected members.

All in all, we revived the OXE Chapter, reconnected with alumni, got overdue members officially registered, started to send members their certificates, and updated the alumni database to gauge interest in future events. New members experienced a fresh start with new traditions to make the induction to our Chapter feel as special as we believe it is. In the process, we learned a lot – how to work as a team, how to listen and appreciate diverse perspectives on an issue, how listening makes for a better outcome, how to lead, how to follow, and just how much work it takes to make a little change, but also, how much can be done when you work together.



**Spring 2023 Induction Ceremony. In the front row left of center - Prof. Carol Steiner, OXE faculty advisor.**

# PhD Students Collaborate with NASA Labs

## International Space Station (ISS) Experiments

**Nicole Donovan** (ChE PhD candidate) and Shuaijun Li (ME PhD candidate) traveled to Leidos Operations Center in Houston to watch and direct astronauts as they replicated microfluidic experiments on board the International Space Station (ISS). These experiments were planned under the supervision of Professor Jing Fan (ME) and Professor Charles Maldarelli (ChE) and had two main objectives. The first objective was to study foams and emulsions in 3D by exploiting the microgravity environment of the ISS to suppress foam/emulsion drainage. The study aims to understand foam/emulsion coarsening in 2D and 3D by generating monodispersed foams using microfluidic techniques and imaging them in 3D. The second objective was to understand the packing structure of these monodispersed foams and emulsions, especially at the dry limit, where bubbles and drops become faceted.



**Left & Middle: Shuaijun Li and Nicole Donovan at Leidos Operations Center control room; Right: Image of the microscope stage transmitted from ISS with a monodispersed foam flowing through the observation chamber of a microfluidic device**

## NASA Jet Propulsion Laboratory (JPL) Internships



**L-R: Javier O. Rivera Reyes (University of Puerto Rico), Harrison Asare & Brian Chen**

"The NASA-CCNY Center for Advanced Batteries for Space (CABS) is a joint research and education center between CCNY, NASA's Jet Propulsion Lab, Northeastern University, CUNY and regional colleges, established to create a highly collaborative research network in electrochemical energy storage and train a diverse STEM workforce through a multifaceted student internship program." On a continuing basis, CABS sends Chemical Engineering PhD students to JPL for doctoral internships working side-by-side with the Electrochemical Research, Technology & Engineering Group.

The Center's first three PhD students to intern at JPL, **Brendan Hawkins (ChE PhD '23)**, Harrison Asare (Chemistry PhD Candidate), and **Brian Chen (ChE PhD candidate)**, worked on a project for the Venus Aerobot Mission (VAM). Working under the supervision of JPL scientists Dr. John-Paul Jones and Dr. William

West, they focused on developing wide-temperature (-30 to 100 °C) operating electrolytes for lithium (Li)-ion batteries. The VAM is a concept in proposal by NASA to develop a variable-altitude probe powered by Li-ion batteries for studying the atmosphere of Venus. The battery for the VAM initially used a baseline carbonate-based electrolyte that exhibits rapid capacity fade and does not meet mission requirements at 100°C. The CABS interns and JPL scientists systematically optimized the baseline electrolyte with additives to enhance its ability to deliver energy at high temperatures. The improved batteries retained their discharge capacity with less than 1% capacity loss for at least 60 cycles compared to >80 % capacity loss for the baseline electrolyte. The discovery of the novel Li-ion electrolyte composition prompted JPL to select it for larger-scale testing in collaboration with a leading battery manufacturer to manufacture flight-like cells infused with the new Li-ion battery electrolytes for further testing at JPL.

## 2022 Conference Travel Awards

### Leo Gordon (ChE PhD '23)

- Experimental Nuclear Magnetic Resonance Conference
- Rocky Mountain Conference on Magnetic Resonance
- Electrochemical Society Conference

### Andrew May

- Catalysis and Reaction Engineering Division Travel Award (AIChE)
- Electrochemical Society Conference
- North American Catalysis Society Meeting

### Luis Ortuno Macias

- SACNAS Travel Scholarship

### Baseemah Rucker

- National Organization for the Professional Advancement of Black Chemist and Chemical Engineers
- Gordon Research Conference (Colloidal, Macromolecular and Polyelectrolyte Solutions)

### Debayon Dutta

- Electrochemical Society Conference

# Faculty Highlights

## **Morris** (Continued from Page 1)

in 2005 after teaching at Georgia Tech and then spending two very productive years with Halliburton, which is reflected in his deep understanding of the practical issues associated with the processing of particulate systems. He chaired the Chemical Engineering Department from 2013 to 2016, and he has been Director of the Levich Institute since 2015. Professor Morris has had active collaborations and visiting positions in France, including continuous appointments in the French national laboratory system, CNRS, from 1999 to 2010 and was research leader of a major research program funded by the FERMAT Foundation from 2016 to 2020. He has been named as an inaugural 'Ambassador-Fellow' for 2023-2026 by CNRS. Professor Morris has excelled in service to the rheology and complex fluids community. His publications include many well-written reviews as well as seminal research papers, and as co-author with Élisabeth Guazzelli of the textbook "A Physical Introduction to Suspension Dynamics."

## **Professor Elizabeth J. Biddinger**

**Associate Professor Elizabeth J. Biddinger** was among 15 alumni from The Ohio State University who were honored at the 25<sup>th</sup> Annual Excellence in Engineering and Architecture Awards on September 30<sup>th</sup>, 2022. More specifically, she was one of five alumni honored with a "Texnikoi Outstanding Alumni Award" for outstanding alumni under 40 who have had rapid rises in their careers. According to The Ohio State University's website, "The Texnikoi Award was first presented in 1955 and has been awarded annually since then. The requirements of the recipient are as follows: An alumna/alumnus who is age 40 or under; an alumna/alumnus who has risen rapidly in their chosen field; or an alumna/alumnus who has made outstanding contributions through civic and social activities. Texnikoi is an organization of undergraduate students in the College of Engineering that recognizes qualities of leadership, integrity and personality as exemplified by active participation and leadership in extracurricular activities. Each year the active membership of Texnikoi selects one of the younger alumni of the College of Engineering as a recipient of the Texnikoi Outstanding Alumni Award. This award is based upon their achievements since graduation, evaluated in light of the objectives of Texnikoi."

Professor Biddinger will also be honored at a special AIChE Catalysis and Reaction Engineering (CRE) Division symposium during the Mid-career Researchers in Catalysis and Reaction Engineering Symposium, which will feature her at the November 2023 AIChE annual meeting in Orlando, Florida. The AIChE honorary symposium series was created to recognize mid-career researchers within catalysis and reaction engineering or an adjacent community for high-quality independent contributions in research, teaching, and/or service. The November symposium recognizes Professor Biddinger for her contributions to the fields of electrocatalysis and decarbonization.



**Prof. Ayanna Howard (left), Dean of The Ohio State University's College of Engineering & Prof. Elizabeth J. Biddinger**



**Prof. Marco J. Castaldi (left) & Prof. Bob Hall (Chairman of the Research Committee on Energy, Environment and Waste at ASME)**

## **Professor Marco J. Castaldi**

**Professor Marco J. Castaldi** was recently honored with the American Society of Mechanical Engineers (ASME) Dedicated Service Award for a minimum of 10 years of service to ASME. In 1983, the ASME Board of Governors approved the establishment of the ASME Dedicated Service Award (DSA). The DSA honors unusual dedicated voluntary service to the Society marked by outstanding performance, demonstrated effective leadership, prolonged and committed service, devotion, enthusiasm, and faithfulness. The award may be presented to selected individuals who have served the Society for at least ten years in one or more of the following areas: Standards and Certification; Public Affairs & Outreach; Membership Development and Engagement; Technical & Engineering Communities; Student & Early Career Development; Board of Governors; ASME Foundation; and The ASME Auxiliary, Inc.

# Connect, Engage, & Contribute

## Connect

There are many ways to connect with your alma mater. Please check the boxes that interest you.

- I would like to visit the campus.
- I would like to speak about my experience to students.
- I would like to attend departmental seminars on technical & research topics (Zoom, Mondays 2-3 PM).
- I would like to connect via LinkedIn group "CCNY ChemEng Alumni."
- I would like to mentor students.

You can always email us with updates or questions at: [chealumni@ccny.cuny.edu](mailto:chealumni@ccny.cuny.edu)

## Engage



Jacob Weber, ChE BE '18

Jacob supports ChE-BE students and the ChE Department by providing internships and setting up donations of laboratory supplies. He earned a ChE-BE degree from CCNY in Fall 2018 and joined Regeneron after graduation. At Regeneron he moved up to his current position as a Process Development Engineer, where he designs and executes pilot-scale bioreactor experiments. He also develops, onboards, and tests new automation technologies to reduce employee workload, increase process consistency, and enable advanced process control systems.

Jacob states that, "ChE courses including Bioprocess Engineering, Senior Design, and Honor's Research were extremely useful in helping me get started as an engineer in the biopharmaceutical industry." Jacob is working to establish greater interaction between Regeneron and GSOE-CCNY to decrease waste by donating excess supplies and equipment to labs in need. Furthermore, he reports that Regeneron is hiring for R&D science and engineering roles in Tarrytown, NY now through 2025. He encourages any interested students to apply to internships, co-ops, and full-time positions. Open positions can be found at <https://careers.regeneron.com/>.

If you are interested in contacting Jacob, he can be reached via LinkedIn at <https://www.linkedin.com/in/jacobaugustweber/>.

## Contribute

Please fill out this form to provide an information update and/or to make a donation to the Department of Chemical Engineering at CCNY.

Name \_\_\_\_\_

Graduation Year & Degree from CCNY (if applicable) \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone \_\_\_\_\_

Contact email \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

\$ \_\_\_\_\_ towards Fund for Excellence

\$ \_\_\_\_\_ towards Undergraduate Student Activities

\$ \_\_\_\_\_ towards Graduate Student Development

\_\_\_\_\_ A Gift in Kind

- My employer makes matching gifts.

Employer name: \_\_\_\_\_

To leave a gift in your will, simply share this sentence with your attorney or financial planner:

"I bequeath \$ \_\_\_\_\_ or \_\_\_\_\_ % of my estate to the Department of Chemical Engineering, CCNY, Steinman Hall, T322, 140th Street & Convent Avenue, New York, NY 10031."

- I have included the Department of Chemical Engineering (CCNY) in my will.

Checks may be made out to: **The Foundation for City College (Chemical Engineering)**

Gifts to the Department of Chemical Engineering (CCNY) are tax-deductible as permitted by law.

Please return information/pledge card and checks to: **Department of Chemical Engineering Office, City College of New York, Steinman Hall Room 322, 140<sup>th</sup> Street & Convent Avenue, New York, NY 10031**

Information-only updates may be sent to: [chealumni@ccny.cuny.edu](mailto:chealumni@ccny.cuny.edu)