CAST 2023 Summer Newsletter

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To: CAST <CAST10@listserv.umd.edu>

2023 FOCAPO/CPC Conference

The Foundations of Computer-Aided Process Operations (FOCAPO) and Chemical Process Control (CPC) have been the premier conferences in their respective areas of process operations and process control. Recognizing that, particularly from an industrial perspective, these areas have a tremendous overlap and synergy, the motivation of holding joint FOCAPO/CPC meetings has been to bring the process operations and process control research and practitioner communities together, thereby fostering interesting interactions and collaborations. FOCAPO/CPC 2023 was held during January 8-12, 2023 in San Antonio, TX to further strengthen collaboration between the communities.

The conference was very well attended with 181 participants from industry,

government, and academia who shared their perspective for synergizing academic research and industrial development to tackle pressing challenges. It was extremely well supported by sponsors (AIChE, CACHE, Corning, Dow, Eastman, Emerson, ExxonMobil, Gurobi Optimization, Hitachi Energy, Johnson Controls, NSF, Procter & Gamble, Siemens) to enable participation for both practitioners and students in the field of process systems engineering (PSE). There were plenary talks, keynote addresses and complementary presentations from leaders in the field at the conference around the grand challenges of Digitalization, Sustainability & Globalization, Innovation Speed and PSE in 2050. The conference agenda also included evening receptions, banquet dinner with informal funny awards and an outdoor excursion to facilitate community building and interactions.

2023 FOPAM Conference

AI and analytics-aided decision-making are becoming well established in the process industries, new tools and applications are appearing, and savvy users are a key to advancing them. Those were themes of the keynote message from Cenk Undey of Roche/Genentech, as well as the broad message of CACHE's second FOPAM conference on Foundations of Process/product Analytics and Machine learning. The conference was held July 30 to August 3, 2023, at the University of California Davis.

Building on the successful FOPAM 2019 in Raleigh, NC, 85 participants heard talks and panel discussions from science/technology leaders, studied posters from other community members, and enjoyed many chances for one-to-one discussions with each other. A focused workshop preceded the conference, and a culminating session addressed education of students, educators, and the workforce on these topics. The participants were from process industries and software companies, plus

university faculty members, post-docs, and graduate students. Partial financial aid for junior participants and general support was provided by the National Science Foundation, Aspen Technology, AVEVA, Dow, and Genentech. AIChE's CAST and CoMSEF divisions were also co-sponsors. Organized lunchtime discussions allowed examination of companies' and organizations' commitments to professional diversity, equity and inclusion (DEI). Employer expectations of new graduates was another lunch-table topic.

2023 CAST Division Awards

We congratulate the recipients of the 2023 CAST Division Awards!

- Computing in Chemical Engineering Award: **Bhavik R. Bakshi**, The Ohio State University
- Computing Practice Award: **Jose M. Pinto**, Linde plc
- David Himmelblau Award for Innovations in Computer-Based Chemical Engineering Education: **Daniel Anastasio**, Rose-Hulman Institute of Technology; **Cheryl Bodnar**, Rowan University; **Daniel Burkey**, University of Connecticut; **Matthew Cooper**, North Carolina State University
- Distinguished Service Award: **Efstratios N. Pistikopoulos**, Texas A&M University
- Outstanding Young Researcher Award: **Fani Boukouvala**, Georgia Institute of Technology
- W. David Smith, Jr. Graduate Publication Award: **Sungho Shin**, Argonne National Laboratory

The awardees will be recognized at the CAST Awards Banquet during the upcoming AIChE Annual Meeting in Orlando.

2023 AIChE Annual Meeting

The 2023 AIChE Annual Meeting will take place Nov 5-10 in Orlando, Florida. As usual, attendees can look forward to a strong line-up of technical sessions from the CAST Division. In addition, CAST is organizing the following special sessions and events.

Special Technical Sessions

- [CAST Division Plenary](#)**:** Monday, Nov 6, 8:00-10:30 AM
- [CAST Director's Student Presentation Award Finalists](#)**:** Monday, Nov 6, 12:30-3:00 PM
- [Invited Session In Honor of Prof. Babatunde A. Ogunnaike](#)**:** Monday, Nov 6, 3:30-6:00 PM

Meet the Industry Candidates Poster Session

For the first time, CAST is hosting a [Meet the Industry Candidates Poster Session](#). An analog to the Meet the Faculty Candidates Poster Session, the Meet the Industry Candidates Poster Session and Reception will provide an excellent opportunity for graduate students to showcase their research to industrial attendees, talent scouts, and recruiters who regularly attend the AIChE Annual Meeting.

There has been a lot of interest in this new opportunity, with **~40 abstracts** submitted to the session and **11 companies and national labs** that have already confirmed their attendance.

Other CAST Young Professionals Activities

- [Undergraduate Student Poster Competition](#)**:** CAST is hosting contributions in the Computing and Process Control topic area.
- **Young Professionals Networking Lunch:** Look out for an announcement via the CAST10 mailing list shortly before the AIChE Meeting. You can then RSVP if you're interested in participating.

Other Upcoming Conferences

- [ESCAPE34-PSE24](#)**:** June 2-6, 2024; Florence, Italy
- [2024 American Control Conference (ACC)](#)**:** July 8-12, 2024; Toronto, Canada
- [12th IFAC Symposium on Advanced Control of Chemical Processes (ADCHEM)](#)**:** July 14-17, 2024; Toronto, Canada
- [2024 Foundations of Computer Aided Process Design (FOCAPD)](#)**:** July 14-18, 2024; Breckenridge, CO

Process Systems Engineering Webinars

Visit this website to find many great webinars on topics in the broad area of process systems engineering, including modeling, control, optimization, machine learning, and more. Recent entries include talks from last year's CAST Award winners. You can also find a link for future speaker nominations.