

Qi Zhang <qizh@umn.edu>

## **CAST 2025 Spring Newsletter**

**Qi Zhang** <0000045fc6e2630c-dmarc-request@listserv.umd.edu> Reply-To: Qi Zhang <qizh@umn.edu> To: CAST10@listserv.umd.edu Fri, Jan 24, 2025 at 2:43 PM



We hope everyone had a great start into the new year! Please see below an overview of the CAST activities that took place since our last newsletter in 2024.

## **CAST 2024 Division Awards**

We were all excited to see each other again at the CAST 2024 Awards Banquet. The event was held on Tuesday, October 29, 2024 in San Diego. Awards were presented to all recipients listed below.



Professors <u>Rakesh Agrawal</u> and <u>Mohit Tawarmalani</u> from Purdue University were the joint recipients of the 2024 Computing in Chemical Engineering Award. They gave their award lecture at the CAST Banquet.

Other awardees that were recognized are:

- Computing Practice Award: <u>liro Harjunkoski</u>, Aalto University / Hitachi Energy
- David Himmelblau Award for Innovations in Computer-Based Chemical Engineering Education: <u>Fani Boukouvala</u>, <u>Martha Grover</u>, <u>Andrew Medford</u>, <u>Carson Meredith</u>, <u>David Sholl</u>, Georgia Institute of Technology
- Outstanding Young Researcher Award: Qi Zhang, University of Minnesota
- W. David Smith Jr. Graduate Publication Award: <u>Artur Schweidtmann</u>, Delft University of Technology
- Directors' Best Poster Award (from 2023): <u>Nicholas Glover</u>, University at Buffalo
- Directors' Best Student Presentation Award (from 2023): <u>Ilias Mitrai</u>, University of Texas at Austin
- Award for Excellence and Service to the CAST Division: <u>Prodromos</u>
  <u>Daoutidis</u>, University of Minnesota

## **CAST 2024 Poster and Presentation Awards**

### **Directors' Best Poster Award**

**Lucy Todd**, University College London - *Constructing 3D Voronoi Structures: A Toolkit with Biomedical Case Studies* 



#### **Directors' Student Presentation Awards**

The following students were invited to present their work in the Directors' Session for Student Presentation Finalists:

- Akhil Ahmed, Imperial College London
- Bernard Ageyman, University of Alberta
- Seolhee Cho, Carnegie Mellon University
- Myisha Chowdhury, Texas Tech University
- Akshay Kudva, Ohio State University
- Silabrata Pahari, Texas A&M University
- Asha Ramanujan, Purdue University
- Jan Rittig, RWTH Aachen University

#### The Student Presentation Award winners were:

- 1st Place: **Jan Rittig**, RWTH Aachen University *Thermodynamics-Informed Graph Neural Networks for Predicting Molecular and Mixture Properties*
- 2nd Place: Seolhee Cho, Carnegie Mellon University Two-Stage Stochastic Generalized Disjunctive Programming (GDP) Model and Algorithm for Proactive Planning and Operations of Resilient Power Systems under Disruptions
- 3rd Place (jointly): **Akhil Ahmed**, Imperial College London *Adversarially Robust Real-Time Optimization and Control with Adaptive Gaussian Process Learning*; **Asha Ramanujan**, Purdue University *PAMSO: Parametric*

# **CAST Young Professionals Events**

Several CAST YP events took place in 2024.

### **CAST Virtual Academic Career Panel**

We hosted a virtual panel aimed at students interested in an academic career. The panel consisted of Prof. Mona Bavarian from the University of Nebraska, Prof. Andrew Medford from Georgia Tech, Prof. Victor Zavala from the University of Wisconsin-Madison, and Prof. Carl Laird from Carnegie Mellon University. A big thanks to all panelists!

#### ECC x CAST Webinar: Statistical Software in Chemical R&D

Dr. Micol Tresoldi from Dow Chemical gave a webinar on the use of statistical software in chemical R&D projects on October 7. The event was co-hosted by CAST and the AIChE Early Career Community (ECC) and attracted ~60 attendees.

### AICHE 2024: ECC x CAST Session on AI in the Workplace

CAST and ECC co-hosted a session on AI in the workplace on October 26. It involved a panel discussion with panelists Dr. Aycan Hacioglu from MathWorks and Prof. Kirti Yenkie from Rowan University.

#### **AICHE 2024: Undergraduate Student Poster Competition**

We were excited to see numerous undergraduate research contributions in the Computing and Process Control topic area on October 28. Warmest congratulations to the CAST Division award winners: **Juhee Park** from Carnegie Mellon University, **Theodore Malencia** from West Virginia University, and **Nga "Neri" Vu** from Bucknell University! Also big thanks to all volunteers who helped with judging!

#### **AIChE 2024: Meet the Industry Candidates Poster Session**

CAST again hosted the Meet the Industry Candidates session on October 29. This session received considerable interest, featuring ~40 poster presentations.

## **CAST 2024 Election Results**

Thanks to everyone who participated in the elections. The CAST community elected the following **Programming Coordinators** for 2027:

- Area 10A: Emre Demirel, Dow Chemical; Jaffer Ghouse, Woodside Energy (2028, voting tie)
- Area 10B: Devin Griffith, Aspen Technology
- Area 10C: **Andrew Allman**, University of Michigan (from previous election)
- Area 10D: David Bernal, Purdue University
- Area 10E: Can Li, Purdue University

The following Executive Committee members were also elected for the following positions:

- 2025 Chair: Selen Cremaschi, Auburn University
- 2025 1st Vice Chair: Rahul Bindlish, Dow Chemical
- 2025 2nd Vice Chair: Ashley Ford Versypt, University at Buffalo
- 2025-2027 Director: Alexander Dowling, University of Notre Dame
- 2025-2027 Director: **Sophie Kim**, Dow Chemical
- 2025-2027 Secretary/Treasurer: Juergen Hahn, Rensselaer Polytechnic Institute

# **Upcoming Conferences**

- ESCAPE35: July 6-9, 2025; Ghent, Belgium
- 2025 American Control Conference (ACC): July 8-10, 2025; Denver, CO
- 2025 AIChE Annual Meeting: November 2-6, 2025; Boston, MA

# **Process Systems Engineering Webinars**

Visit <u>this website</u> to find many great webinars on topics in the broad area of process systems engineering, including modeling, control, optimization, machine learning, and more. You can also find a link for future speaker nominations.

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