

North Jersey Section AIChE Newsletter

Mid Year 2023 Edition

Volume 47 July 2023

We are a Professional Association of Chemical and Biochemical Engineers devoted to the advancement and growth of our members and the promotion of Chemical and Biochemical Engineering as a career.

The North Jersey Local Section represents chemical and biochemical engineering professionals residing or working in Bergen, Essex, Hudson, Morris, Passaic, and Sussex counties in New Jersey, and Rockland County in New York.

A MESSAGE FROM THE CHAIR-ELECT:

The North Jersey Section has conducted formal meetings and social events in the first half of 2023 and plans to continue doing so in the second half. The Fall program season will begin in Sept. 2023.

The events held so far in 2023 include:

1. Nine Scholarship Awards were given to NJIT and Stevens Institute students last Feb 2023.
2. Three social events:
 - a. Post Holiday Party at Make Wine with Us, Wallington, NJ
 - b. Chair's Picnic at Turtle Back Zoo, West Orange, NJ
 - c. Young Professionals event at Zeppelin Hall, Jersey City
3. Four technical dinner meetings, and the awarding of 12 PDH's of continuing education
 - a. Cybersecurity in Process Safety
 - b. Processing of Propellant
 - c. Hazardous Materials Train Derailments – a Closer Look
 - d. Institutionalizing Lessons Learned from PSE's and PSF's
4. Plant Tour for NJIT students to ALZO International, Inc. in Sayreville, NJ

Peter Sibilski, FAIChE, P.E., CEM

2022 Chair-Elect, North Jersey Section AIChE

Did You Know?

Venmo:

The North Jersey Section, AIChE now has **Venmo!** Monthly meeting and continuing education credit fees can be paid directly to the Section using **@aichenoj**

2023 OFFICERS:

Chair: Thelma Manning, FAIChE, PhD, P.E.

Chair Elect: Peter Sibilski, FAIChE, P.E., CEM

Treasurer: Larry Rotter, FAIChE, P.E.

Secretary: Bob Rossi, FAIChE

2023 DIRECTORS:

Ara Barsamian, FAIChE

Sonali Bhatnagar

Wayne Fieldhouse, P.E.

Gary Prager, FAIChE

We are always looking for volunteers to help organize meetings, identify speakers, or even be a speaker. If you are interested in being part of or assisting the Executive Committee, please contact Peter Sibilski at psibilski@alzousa.com for more information.

Meetings Update:

The North Jersey Section continued to conduct virtual monthly meetings this past year. (*Please see the meeting summaries below*). The Section did re-implemented occasional live Executive Committee meetings at Jim Johnston's Steakhouse in Roseland, NJ, as well as three live social events. The Executive Committee has decided that we will continue utilizing the virtual ZOOM® meeting format when appropriate. Please refer to the emailed monthly meeting notices for details.

2023 Meeting and Event Summaries:**January 2023****Post-Holiday Holiday Party****Make Wine With Us – Wallington, NJ**

After the hustle and bustle of the Holiday Season, it was time to take a break from our busy schedules, relax and reconnect with our friends and associates, and recognize those members who have worked so hard to keep the Section operating.

Arrangements were made for a private tour of this local winery/wine school, with a close look given to the ages-old process of making wine. Tastings of the various types of wines produced at ***Make Wine With Us*** were included, and all attendees got to take home a souvenir bottle of wine that they labeled and sealed themselves. Refreshments were served.

Election results for the 2023 Officers and Directors of the North Jersey Section, AIChE were announced at this event.

February 2023

Annual Student Scholarship Presentations

Speaker: **Peter Sibilski. FAIChE, P.E., CEM – Plant Manager**

Pharmetics Manufacturing Co., LLC

New Jersey Institute of Technology - Eberhardt Hall

At some point in your career, you will embark on a job search. The job search will entail identifying, pursuing, and securing a position that fulfills your goals and priorities. Three steps that are critical in the preparation and planning for a successful job search include: defining your career goals, identifying priority companies or organizations, and developing key references. This presentation discussed some best practices and strategies for each of these three steps.

Highlighting this evening's event was the annual presentation of scholarships to chemical engineering students from N.J. Institute of Technology and Steven's Institute of Technology. A light dinner was also served

Congratulations to the scholarship awardees:

AIChE North Jersey Section 2023 Award Recipients

Stevens Institute of Technology (SIT)

- **Russel Sangalang** - Lee Parker Memorial Scholarship
- **Ahmed Ghani** - John Anderson Memorial Scholarship
- **Ryan Schubert** - Herb Fried Memorial Scholarship
- **Ilina Prentoska** - Walter Schnyder Memorial Scholarship

New Jersey Institute of Technology (NJIT)

- **Stephany M. Cabrejos** - Ralph Cohen / Oden Knight Memorial Scholarship
- **Madison Cosgrove** - Otto York Memorial Scholarship
- **Arjun Venkatesh** - Stanley S. Grossel Memorial Scholarship
- **Ryan Nollstadt** - Outstanding Chemical Engineering Senior

Refinery Automation Institute (RAI) Scholarships

- **Egor Demidov (NJIT)** - RAI Imaginative ChE Junior or Senior

March 2023

"Cybersecurity in Process Safety"

Speaker: **Peter Sibilski, FAChE, P.E., CEM – Plant Manager**

Pharmetics Manufacturing Co., LLC

One of today's most popular buzz-words - Cybersecurity - can be heard in everyday discussions about the internet, corporate networks, crypto-currency, global affairs and other topics. However, there is one place where cybersecurity is not often discussed: the plant floor.

Process safety professionals have an especially important part to play in protecting the chemical process industries from cybersecurity threats. Presented at this meeting were five things to know about cybersecurity in process safety. **One (1) Professional Development Hour (PDH) of continuing education was awarded for this meeting.**

April 2023

"Propellant Processing"

Speaker: **Thelma G. Manning, PhD, P.E., FAChE**

Research Chemical Engineer Picatinny Arsenal

The Army Futures Command integrates the Future Force Modernization Enterprise to develop concepts, force designs, requirements, technology, and ensures timely delivery of materiel solutions required by our Army to deter and, when necessary, decisively defeat any adversary. To achieve this goal, the US Army had been producing propellant using several types of processing methods. What is a propellant? A propellant is any gas, liquid, or solid the expansion of which can be used to impart motion to another substance or object. A solid propellant consists of several chemical ingredients such as oxidizer, fuel, binder, plasticizer, curing agent, stabilizer, and cross-linking agent. The specific chemical composition depends on the desired combustion characteristics for a particular mission.

This presentation discussed the different types of manufacturing processes for propellants, all standard chemical engineering unit operations. **One (1) Professional Development Hour (PDH) of continuing education was awarded for this meeting.**

April 2023

"YP Social at Zeppelin Hall"

Section Director Sonali Bhatnagar organized a Young Professionals (YP) social event at Zeppelin Hall in Jersey City. Attendees were a combination of students as well as young professionals. The Section received great feedback on the location, timing, attendees, and the flow and format of the program, as well as the ease of networking. Future YP events being considered include DIY types of events such as pasta making, other workshops; wine and sip; speed networking; as well as networking events similar to this one. The next event is being targeted for September.

May 2023

"Hazardous Material Train Derailments - a Closer Look"

Speaker: **Peter Sibilski, FAIChE, P.E., CEM – Plant Manager**

Pharmetics Manufacturing Co., LLC

Although train derailments involving hazardous chemicals are relatively rare, the recent derailment in East Palestine, Ohio, and the occurrence of another derailment in Minnesota soon after, has raised questions about train safety and whether new regulations are needed to prevent more of these dangerous incidents from happening in the future. According to the Washington Post, there were 1,049 train derailments last year, and 10 train incidents that involved the spillage of hazardous materials. Although fewer than in years past, the incidents invite scrutiny by Federal regulators as well as railway and safety experts.

This presentation reviewed several significant hazardous material train derailments, including the response to the incident, and the aftermath of it. **One (1) Professional Development Hour (PDH) of continuing education was awarded for this meeting.**

Tuesday - June 20, 2023

“Institutionalizing Lessons Learned from Process Safety Events and Process Safety Fundamentals”

Speaker: **Noel Misa, P.E. - Leader of Process Safety**

Performance Materials and Technology, Honeywell International

Honeywell's Performance Materials and Technologies division has implemented various risk and process safety event reduction measures. These include implementing lessons learned, executing top risk projects, addressing process hazard analysis recommendations, and implementing corrective actions to compliance audit findings and incident investigation root causes.

Despite all these good process safety management practices, facilities can still experience process safety events that could harm people and the environment. A deep dive of Honeywell's process safety events revealed root causes associated with process safety fundamentals. This presentation looked at how Honeywell incorporated these root cause analyses into their standards, processes, and procedures. **One (1) Professional Development Hour (PDH) of continuing education was awarded for this meeting.**

June 2023

“The Chair's Picnic”

The spring programming season ended with another social event, the Chair's Picnic. The Chair of the North Jersey Section, AIChE, Dr. Thelma Manning, invited Section members and their family to an event at the Essex County Turtle Back Zoo. Free admission to the zoo and a pizza lunch were provided.