



Chapter Historian Richard R. Sanguinito  
Twin Ties Chapter # 129

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## CHAPTER TIME LINE 2018-2019

### AUGUST 16, 2018 to AUGUST 18, 2018

Region 1 Chapter Regional Conference CRC

- |                          |                            |
|--------------------------|----------------------------|
| - Petros Papathomopoulos | Chapter Delegate           |
| - Michael McGinnis       | Chapter President          |
| - Richard Sanguinito     | Chapter Historian          |
| - Jason Gilbert          | Chapter Student Activity   |
| - Robert Vanskiver       | Chapter Refrigeration      |
| - Christopher Wolak      | Chapter Membership         |
| - Glenn Roberts          | Chapter Research Promotion |

Awards

- Twin Tiers Chapter has maintained its Premier status with Star award and Special Citation
- Petros Papathomopoulos: President Award Of Excellent (PAOE) 2017-2018 - PREMIER Awards
- Petros Papathomopoulos: Twin Tiers Chapter President Award of Excellent Community Sustainability Project
- Kyle Nedlik: Outstanding Performance Chapter Program Honorable Mention
- Michael McGinnis: Chapter Technology Transfer Award of Excellence Honorable Mention
- Christopher Wolak: Thomas S. Brown Membership Award Honorable Mention

### SEPTEMBER 18, 2018 CHAPTER MEETING

Social Event – Beer Tree Brewing Co. Tour

Time 5:15 PM

Location Beer Tree Brewing Co. 197 NY-369 Port Crane, NY 13833

Activity Beer Tree Brewing Co. Facility Tour

Speaker Brendan Harder, Beer Tree Brewing Co.

Description Beer Tree Brewing Company is a craft brewery founded in Port Crane, NY, in October of 2017 by Brendan Harder and Chris Rhoades. Brendan and Chris previously worked as managers at Amphenol Aero-space in Sidney, NY. The brewery includes an 1,800 square foot taproom, an indoor brewing area, two outdoor patios, and 15 acres of surrounding land.

Beer Tree staff will provide our group a tour of the facility, where they will highlight the building's mechanical/HVAC systems, give us an in depth overview of their brewing equipment and their standard brewing processes, and talk about the history of the brewery, from how it got started to where they are today.

## **OCTOBER 02, 2018 CHAPTER MEETING**

Southern Tier Professional Development Symposium

Time 8:00 am

Location Holiday Inn, Binghamton

Activity

- 8:00 Back to the Basics on Corrosion of Metals, Focusing on Steel in Concrete
- 9:15 Advances with Cured in Place Pipeline Technology- Mike Ralbovsky (2 PDH Must attend both sessions)
- 9:15 What Does an Open BAS Really Mean? Joseph Klotz
- 9:15 Introduction to Geometric Dimensioning and Tolerancing (GD&T)- Michael Brown
- 10:30 Advances with Cured in Place Pipeline Technology- Mike Ralbovsky (2 PDH Must attend both sessions)
- 10:30 Sustainability and Resilience – Examples of Community and Campus Energy Assessments- Chonghui "CL" Liu
- 10:30 Equipment Failures and the Lessons they can Teach Us - Neville Sachs, P.E.
- 11:30 Engineering Ethics - Ethical Decisions " - Beth Ann Smith (11:30 - 1:00)
- 1:15 Addressing Large Diameter Infrastructure Needs Utilizing CCCP and CCFRMP Technologies- Tom Perry
- 1:15 Air Management and System Pressurization- Steve Krisko
- 1:15 Ball and Roller Bearing Design and Installation Pitfalls- Neville Sachs
- 2:30 BMP for Disturbed Areas- Steve Zwilling (2PDH)
- 2:30 Fire Safety with Concrete Masonry Products, Nick Carparelli
- 2:30 Properly Applying & Specifying VRF

## **NOVEMBER 13, 2018 CHAPTER MEETING**

Presentations on VFD Drive Basics & Mitigating Drive Harmonic Effects

Time 5:00

Location DoubleTree by Hilton 225 Water St. Binghamton NY

Speaker Kevin Diehl - Yaskawa America, Inc.

*YEA Networking Event Following Meeting at Galaxy Brewing Co.*

## **DECEMBER 18, 2018 CHAPTER MEETING**

Creating a World of Zero Energy Buildings

Time 5:00

Location Ithaca Marriot on the Commons, 120 S Aurora St., Ithaca, NY 14850

Activity Past Presidents Month, History Month

Speaker Paul Torcellini

Description With the advancement of energy efficiency and the rapid decrease in cost of solar electric systems, the concept of creating a building that produces as much energy as it consumes is becoming a reality. This presentation will look the definition of a zero energy buildings, communities, and cities, how to achieve this goal including the process for achieving success, and some of the technologies that can be used. The lecture will dive into the decision-making process that was used for actual zero energy building including data and lessons learned from these early adopters. Our ASHRAE DL presenter, Paul Torcellini, has 30 years of experience examining how energy is used in buildings - including delivery mechanisms, design, system integration, and operations. His focus is on creating buildings that have minimal environmental impact because of their operations, including very low energy

buildings and zero energy buildings. Paul is a 25-year ASHRAE member and has received two ASHRAE Technology Awards for his energy-efficient buildings work and has been a key contributor to the Advanced Energy Design Guide Series, published by ASHRAE as a collaborative effort of AIA, ASHRAE, IES, and USGBC. He and his family live in a zero-energy home in northeastern Connecticut and run a sustainable farm focused on soil restoration growing a variety of farm products.

This month's meeting will also be our chapter's 2018-2019 Past Presidents month, as well as History month.

### **JANUARY 15, 2019 CHAPTER MEETING**

Tour & Presentation - Recent Production Suite Fit-Outs, Pharma Technologies  
Time 5:00  
Location Norwich Pharma Services, 6826 NY-12 Norwich, NY 13815  
Activity Tour & Presentation  
Speaker Dennis Hoover, Plant Engineer  
Description The tour will showcase some of the recent production suite upgrades at the Norwich Pharma Services facility, and the presentation will include both an overview of these fit-outs as well as an overview of the new and developing pharma HVAC&R technologies included in these fit-outs.

### **FEBRUARY 19, 2019 CHAPTER MEETING**

Tour & Presentation - B.U. Pharmacy School Tour, Basement Renovations Overview  
Time 5:00  
Location B.U. School of Pharmacy & Pharmaceutical Sciences, 96 Corliss Ave. Johnson City, NY 13790 - Room PB-114  
Activity Tour & Presentation  
Speaker Jason Gilbert, P.E. – Senior Mechanical Engineer - B.U. Physical Facilities  
Michael Eckhardt, P.E. – Project Engineer - McFarland Johnson  
Description The School of Pharmacy and Pharmaceutical Sciences, the newest school at Binghamton, offers doctoral degrees in pharmacy and pharmacology. The school has been granted Precandidate status and enrolled its first students in fall 2017, and is on a new health sciences campus in Johnson City, near UHS-Wilson Medical Center. Jason Gilbert from the university's physical facilities team will describe some of the mechanical systems that can be found throughout the newly constructed building.

The Binghamton University's Pharmacy School's basement renovation project involved incorporating four independent BU Departments (University Police – UPD, Environmental Health and Safety – EF&S, Information Technology - IT, and Physical Facilities) into a shell space constructed before programming for the project even began. Specific challenges were faced by Mike Eckhardt and his team during the design phase related to the introduction of ventilation air to the spaces, relief of exhaust air (particularly from the UPD), dehumidification of locker rooms and the UPD armory, redundant heating and cooling systems for UPD and IT, and

in-rack cooling for the IT equipment. If that wasn't enough, there was an additional wrinkle that complicated the project before it even started plan layouts. To find out what it was, you'll have to attend the presentation.

### **MARCH 19, 2019 CHAPTER MEETING**

Tour & Presentation - Cornell Hydroelectric Power Plant Tour, Meeting at Statler Hotel to follow	
Time	5:00
Location	Meeting Place for Tour: Martin Y. Tang Welcome Center, 616 Thurston Ave. Ithaca, NY 14853
Activity	Tour & Presentation
Speaker	Frank Perry – Cornell University, Energy and Sustainability Group
Description	The first electrical generation facility in Fall Creek gorge was built in the early 1880's. That plant was powered by water from a dam just above the present dam, with a water wheel just above the present plant with a cable to a generator located near the Foundry. In 1904, the present plant was brought on line. Construction was preceded by replacing Triphammer Dam slightly west of its original location in 1896. Water is supplied to the plant from Beebe Lake by a five-foot diameter underground penstock, 1700 feet long. The existing intake dates to 1953 and was upgraded in 1981.

The original plant capacity was 300 kW with 2 Pelton Wheel turbines and two 30kW DC exciters. This was increased in 1913 by adding a 360 kW Francis turbine. The facility was overhauled in 1935 after being completely flooded. In 1957, No. 2 generator was replaced with a 175 kW unit. The plant capacity then stood at 850 kW @ 2,400 volts. In this configuration, the plant last operated in 1970. It was vandalized in 1972. In 1981, the plant was completely renovated, and all the original machinery removed. Two Ossberger crossflow turbines were installed with a total rated capacity of 1,840 kW. The plant, however, is limited to about 1,400 kW output because of the size of the penstock. This hydroelectric plant is "run of river", which means that no water is stored. At all times, 10 cfs must continue to pass over the dam. The average production for this plant is 5.0kWh to 6.2kWh.

This month's meeting will consist of a walking tour of the Cornell University hydroelectric dam described above and it's supporting facilities and will be followed by an overview of the major equipment, facilities, and technologies used to generate Cornell's hydroelectric power. Additionally, the theory and calculations used to determine many of the key parameters and inputs that govern the amount of energy generated from the plant will be discussed.

### **APRIL 16, 2019 CHAPTER MEETING**

Annual Spring Symposium and Professional Development Seminar

Time 8:30 A.M. – 5:00 P.M.

Location Holiday Inn Binghamton – Downtown, 2-8 Hawley St, Binghamton, NY 13901

Activity Professional Development Class

Speaker and Description

- “Innovative HVAC Systems”, 1.5 PDH, Daniel Nall P.E., ASHRAE DL
- “Steam and Condensate Systems”, 1.5 PDH, Christopher Bove & Matt Davidson
- “Evolution and Emerging Technologies of Fire Alarm Systems”, 1.5 PDH , John Sendrowski, Johnson Controls
- “Pressure Control Solutions for Potable Water” , 1.5 PDH. Chris Wolak, Victaulic
- Lecturer: Stephanie Taylor MD, ASHRAE DL, Presentation: “The Healing Power of Indoor Air” 1.5 PDH
- “Vibration Isolation of HVAC Systems”, 1.5 PDH , James Tauby P.E., ASHRAE DL
- A Holistic Look at Condensing Systems and Optimization”, 1.5 PDH , Jacob Hall, ProAir Plus

### **MAY 21, 2019 CHAPTER MEETING**

Facility Tour & Overview of Visitor Center Renovations

Time 5:30

Location Cooperstown, NY,

Activity Facility Tour & Overview

Speaker Mike & Dan O'Reilly – Principle Design

Description Brewery Ommegang is a brewery located near Cooperstown, NY, that specializes in Belgian-style ales. Ommegang, a 20-year-old brewery, is one of Upstate New York's top beer destinations. In addition to its year-round offerings of beer and food, it hosts several festivals and a summer concert series.

In 2018, Ommegang underwent a \$2 million renovation to its facilities. The renovations included a new main entrance, new indoor seating along a windowed wall with unobstructed views of surrounding fields and hills, a new 4,000-square-foot covered patio, and expanded retail space to accommodate the brewery's growing number of small batch limited releases. The renovations doubled the size of the visitor's center.

The meeting will begin with a tour of Ommegang's facility, with Mike and Dan O'Reilly from Principle Design giving a tour of the newly renovated Visitor Center's mechanical systems. After the tour, the group may participate in a complimentary tasting in Ommegang's Tasting Room. Following the tasting, dinner will begin, and after dinner and a brief Chapter Meeting an open bar social/networking hour will commence. The tasting, dinner, and open bar is sponsored by Meier Supply and LG. Bus service will be provided from Binghamton University and Chenango Bridge to and from the meeting.

**JUNE 18, 2019 CHAPTER MEETING**

2019 Golf Tournament & Clambake

Time Golf shotgun start at 10:30 AM & Clambake at approx. 4:00 PM

Location The Links at Hiawatha Landing; 2350 Marshland Rd, Apalachin, NY 13732

Activity Golf Tournament & Clambake

Speaker Captain & Crew

Very Respectfully,

Richard Sanguinito  
Chapter Historian 2018-2019