

# 2019 ENGINEERING SYMPOSIUM IN ROCHESTER

[www.engineeringsymposiumrochester.com](http://www.engineeringsymposiumrochester.com)

April 23, 2019

PDH hours will be acceptable in New York State. Schedule subject to change.


7:30 to 8:15	Registration and Continental Breakfast						
8:15 to 8:30	Welcoming Remarks: Chris Devries, Chair of the 2019 ESR Committee						
8:30 to 9:30	Civil Engineering Sponsored by ASCE  <b>NY2655</b> <b>Continuous Flow Intersection</b>  Lorenzo Rotoli, P.E., Tom Miller, P.E.	Civil Engineering Sponsored by ASCE/NYSATE  <b>NY2554</b> <b>Cold Weather Concreting</b>  William J. Lyons III, FACI (The Euclid Chemical Co.)	Mechanical Engineering Sponsored by ASME  <b>NY2667</b> <b>Net Zero – Reducing Energy and Carbon in New York State Building Stock</b>  Bill Bishop, PE	Electrical Sponsored by IEEE  <b>NY2670</b> <b>State of the Art Static Control for Flexible Packaging</b>  Dr. Kelly Robinson	Mechanical, Plumbing, & Fire Protection Sponsored by ASHRAE and  <b>NY2676</b> <b>Domestic Hot Water Recirculation System Design Considerations-Self Balancing Valves and Problems with Flow Devices</b>  Tom Ruggiero	Lighting and Power Sponsored by IES  <b>NY2682</b> <b>Generator fuel systems</b>  William Schneeloch	Civil and Ethics Sponsored By ASCE  <b>NY2688</b> <b>Acoustic Testing Of Structure Borne Noise Generated By Cross Fit Activity</b>  Angela Waters
9:30 to 9:45	Break						
9:45 to 10:45	<b>NY2656</b> <b>Best practices for safe excavating in New York including NYS Law 16-Code Rule 753</b>  Chris Flaherty	<b>NY2578</b> <b>What's Wrong with My Concrete? Fix It! Using Concrete Petrography to Determine Cause &amp; Extent of Concrete Deterioration</b>  Aimee Pergalsky, FACI (The Euclid Chemical Co.)	<b>NY2665</b> <b>The Uniform Fire Prevention &amp; Building Code- Incorporating Innovative Building Construction Products &amp; Performance-Based Design Alternatives</b>  Brian Scot Tollisen, P.E.	<b>NY2673</b> <b>Innovation &amp; Inventions: Intellectual Property</b>  Dr. William Fowlkes	<b>NY2677</b> <b>Seneca Park Zoo Design and Construction Challenges</b>  Maria Mazurek, Jennifer Wengender, Norm Gardener	<b>NY2683</b> <b>AC Drives - Operation and Application Considerations</b>  Kevin Diehl	<b>NY2689</b> <b>Utility Mapping: An Overview of Tools and Processes</b>  Mark Saunders and Martin Derby
10:45 to 11:00	Break						
11:00 to 12:00	<b>NY2657</b> <b>Reimagine RTS: A Total Redesign of the Transit System in Monroe County</b>  Julie Tolar	<b>NY2660</b> <b>Innovative Slope Stabilization Methods</b>  Shana Carroll, Gestructures	<b>NY2664</b> <b>Weld Fatigue Analysis</b>  Ron Gagnon, PE	<b>NY2675</b> <b>Remote Sensing, Spectral Target Detection, and Unmanned Aerial Systems (UAS)</b>  Dr. Emmett J. Ientilucci	<b>NY2678</b> <b>Delegated vs Detailed Design of Fire Protection Systems</b>  Andy Taylor	<b>NY2684</b> <b>Smart Growth: High-Efficiency CHP and Climate Control for Indoor Agriculture</b>  Brent Voelker	<b>NY2690</b> <b>Use of Engineering Seals and Stamps in New York Avoiding Professional Misconduct</b>  Sean Jensen, Esq.

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12:00 to 1:30	<b>NY2694</b> <b>Lunch and Keynote Program: What Is And How Will Machine Learning Change Our Lives</b> <b>Dr. Raymond W. Ptucha</b> <b>Assistant Professor in Computer Engineering and Director of the Machine Intelligence Laboratory, Rochester Institute of Technology</b>						
	Civil Engineering Sponsored by ASCE	Civil Engineering Sponsored by ASCE	Mechanical Engineering Sponsored by ASME	Electrical Sponsored by IEEE	Mechanical, Plumbing, & Fire Protection Sponsored by ASHRAE and NY2679	Lighting and Power Sponsored by EAWNY	Energy Sponsored by AEE
1:30 to 2:30	<b>NY2552</b> <b>The Portageville High Bridge Replacement Project</b>  Carmen Garozzo, Bergmann	<b>NY2661</b> <b>Part 212: Ignorance is bliss, But What You Don't Know Could Cost You</b>  Tracey Karatas, ERM	<b>NY2666</b> <b>Industrial Liquid Filtration Technology for Sustainable Manufacturing</b>  Lawrence El-Hindi, PE	<b>NY2671</b> <b>Distributed Generation, Reactive Power and Grid Stability</b>  Rick Church, P.E.	<b>NY2679</b> <b>Indoor Pool Design</b>  Victor Yeramian	<b>NY2685</b> <b>Voice Evacuation/Mass Notification Systems</b>  Michael Baker	<b>NY2691</b> <b>Building Efficiency Drivers – Energy Code &amp; Incentive Updates</b>  Rachel Stuckey, PE
2:30 to 2:45	Break						
2:45 to 3:45	<b>NY2658</b> <b>21st Century Revitalization of the Greater Rochester International Airport</b>  Greg Topping and Fabio Bendana	<b>NY2662</b> <b>New York State Environmental Permitting</b>  Scott Sheely, NYSDEC	<b>NY2668</b> <b>Ball and Roller Bearings- Design, Operation and some Failure Analysis</b>  Neville W. Sachs, P.E., PLLC	<b>NY2674</b> <b>Understanding and Guiding Color Quality With TM-30-18</b>  Mark Schrader	<b>NY2680</b> <b>Design Envelope Sensorless Pumping</b>  Ron Sloane	<b>NY2686</b> <b>Evolution and Emerging Technologies of Fire Alarm Systems</b>  John Sendrowski	<b>NY2692</b> <b>Renewable Natural Gas</b>  Jerry Leone
3:45 to 4:00	Break						
4:00 to 5:00	<b>NY2659</b> <b>John Street Pump Station: Design Intent Through Construction Phase</b>  Andy Fraser & Matt Skuse (GHD)	<b>NY2663</b> <b>Article 7: Certificate of Environmental Compatability and Public Need of Large Utility Projects</b>  Jonathan Geldard and Shelby Sova	<b>NY2669</b> <b>Lessons-Learned from the Design-Build of an Underwater Saw for Spent Nuclear Fuel</b>  Jeff Gardiner, P.E.	<b>NY2672</b> <b>Engineering Your Job Lessons from Software Engineering</b>  Christine Frayda, PE	<b>NY2681</b> <b>Smart HVAC Decision for an Indoor Grow</b>  Geoff Brown	<b>NY2687</b> <b>Uninterruptible Power Supply Design For Data Centers</b>  Erik Monisera □	<b>NY2693</b> <b>Energy Recovery Technology Choices; Ways to Reduce Costs</b>  Russ Elkins
5:00 to 7:00	<b>Cocktails and Conversation - Riverside Court</b> <b>Sponsored by</b>						 <b>SQUARE D</b> by Schneider Electric