EIGHTH ANNUAL ENERGY AND RESOURCES CONFERENCE

## ADVANCES IN ENGINEERING MATERIALS

MONDAY, SEPTEMBER 15TH, 2014 AT THE CON EDISON BUILDING, NEW YORK, NY

#### **WELCOME**

Welcome to the Eighth Annual
Energy & Resources
Conference at the Con Edison
Building, our venue for the
past five full-day events. These
conferences have been an
activity of the Metro New York
Section of the American
Institute of Chemical Engineers
since 2006.

We anticipate offering PDH credits for New York State Professional Engineers for this event. Please check back for the status of PDH accreditation.

Organized by the Metro New York Section, American Institute of Chemical Engineers.

Register / Pay via Credit Card at the AIChE, Metro NY webpage: <a href="https://www.aiche-metrony.org">www.aiche-metrony.org</a>

This year's conference will focus on the Advances in Engineering Materials.
Presentations will focus on such specific areas as:
Stainless Steels, Coatings for Steels and Concrete,
Nondestructive
Examination, Metal
Chemistry, HighPerformance Plastics,
Mechanical Insulation

Materials and Systems, and

Nano-Particle Surface-Modified Thin-Film Composite Membranes.

The meeting will take place at the historic Con Edison Building, 4 Irving Place, New York, NY.

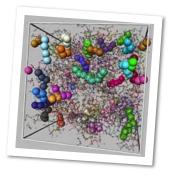


Organized by the Metro New York Section, AIChE



Co-Sponsored by the ASME, Metropolitan New York Section









## Eighth Annual Energy & Resources Conference Monday, September 15th - Con Edison Building

#### **SCHEDULE**

7:30 am - Registration / Continental Breakfast

8:15 am - Welcome and Opening Remarks

8:30 am - Richard Huza

9:15 am - Craig Cowan

10:00 am - Break

10:15 am Todd Smith and Jacque Brignac

11:00 am - Bodo Albrecht

11:45 am Lunch

12:15 pm - Harold Queen

12:45 pm Robert James

1:30 pm - Paul Hanson

2:15 pm Break

2:30 pm - Chris J. Durning and Luis Escobar-Ferrand, P.E., Ph.D.

3:15 pm Gordon H. Hart, P.E.

4:00 pm Close of Conference

Website Email

You must be pre-registered to gain access to this conference.

7:30 am Continental Breakfast

8:15 am Welcome: Mary Lynch, Chair of AlChE, Metro New York Section

8:30 am Primary Corrosion Protection. Speaker: Richard Huza, Salit Specialty Rebar, Niagara Falls, NY

9:15 am Polymer Technology – Extending Equipment Life, Reducing Downtime, and Saving Maintenance Dollars.

Speaker: Craig Cowan, ENECON Northeast APS, Farmingdale, NY

10:00 am Break

10:15 am Advanced Boiler-Material Challenges: Inspection Case Studies. Speakers: Todd Smith and Jacque Brignac, Alstom Power, Winsdor, CT

11:00 am Metal Chemistry – Exponential Developments that Shape our Future.

Speaker: Bodo Albrecht, BASIQ Corp., Westfield, NJ

11:45 am Buffett Lunch

12:15 pm <u>Keynote Address</u>: Advanced and Emerging Non-Destructive Examination Technologies. Speaker: Harold Queen, Structural Integrity Associates, San Jose, CA

12:45 pm LNG - Filtration Applications to Optimize Plant Reliability.

Speaker: Robert James, Pall Filters, Pall Corp., Port Washington, NY

1:30 pm What Would You Like Your High Performance Plastic to Do?

Speaker: Paul Hanson, AIN Plastics Division, ThyssenKrupp Materials, New York, NY

2:15 pm Break

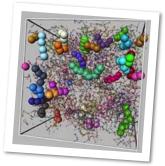
2:30 pm Fabrication and Performance of Nano-Particle Surface-Modified, Thin Film Composite Membranes.

Speakers: Christopher J. Durning, Columbia University, New York, NY and Luis Escobar-Ferrand, P.E., Ph.D., Pall Corp., Port Washington, NY

3:15 pm Recent Advances in Mechanical Insulation Materials and Systems.

Speaker: Gordon H. Hart, P.E., Artek Engineering LLC, Boston, MA

4:00 pm Closing







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## ADVANCES IN ENGINEERING MATERIALS

#### **ABOUT US**

The Metro New York
Section, AIChE aims
to serve those
chemical engineers
residing or working
within the
Metropolitan New
York region.

- Help advance the profession of chemical engineering by disseminating technical, regulatory, business and educational information related to the profession and practice of chemical engineering
  - Help its members attain their professional goals throughout their careers

Website

**Email** 

# ENERGY & RESOURCES CONFERENCES

2014: Advances in Engineering Materials

2013: Challenges & Opportunities in Climate Change

2012: Cancelled due to Super Storm Sandy



2011: Our Crucial Water Supply; ensuring its future

2010: Emerging Sources of Energy: Challenges and Opportunities



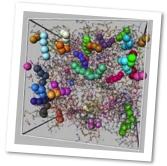
2009: From Concept to Commercialization: Funding Innovation for a New Economy 2008: Water: The Next "Oil"

2007: Reducing Carbon Dioxide Emissions

2006: Energy for a New Century: Beyond (\$50/Barrel) Petroleum



Images: U.S. Global Change Research Program (<u>www.globalchange.gov</u>).







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#### **SPONSORS**

Become a sponsor of the Seventh Annual **Energy & Resources** Conference.

This conference is organized by the Metro New York Section of the American Institute of Chemical Engineers, who needs your support to continue its outstanding technical program and its educational outreach to the chemical engineering community in the **Greater Metro New** York area.

**Download Sponsorship** Flyer for details.

The Metro New York Section, AIChE Website **Email** 



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Founded in 1969, Dynalytics provides energyrelated expertise to the private, the not-forprofit, and the government sectors. Dynalytics Corp. has earned its reputation for excellence by consistently developing creative approaches for clients as they face ever more complex economic, technical, and regulatory challenges throughout the world.

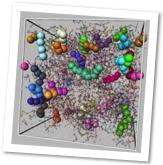
#### JVP International



http:// www.jvporcelli.com

#### Silver Level

Joe Porcelli, owner of JVP International and former CEO of Halcon/Scientific Design advises organizations in developing new catalyst and process technologies. His specialties are heterogeneous catalyst and reactor design. Recent technologies include methanol, acetic acid, ethylene oxide/glycol, biomass processing and pyrolysis. Clients include companies, investors, lawyers, and other consultants.







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#### VENUE

The historic Con
Edison Building is
located at 4 Irving
Place, between 14th
and 15th Streets, in
lower midtown
Manhattan (New York
City).



It is easily accessible
by public
transportation.
Numerous subway
lines have stops
nearby (14th
Street / Union Square
Station), including
these trains: 4, 5, 6, L,
N, Q, R, and W.

The Metro New York
Section, AIChE
Website Email

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### ASME, Metropolitan New York Section



sections.asme.org/ metropolitan\_ny/

#### Metro New York Section, AIChE



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Dues are only \$10.

### Tappan Zee Section, AIChE



www.tzaiche.org/

#### **Bronze Level**

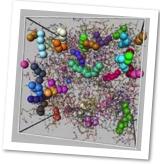
ASME (founded as the American Society of Mechanical Engineers) is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods.

Organizer of the Eighth Annual Energy and Resources Conference (September 15, 2014)

Future Meetings: • Tuesday, Oct. 21, Annual Meeting at the Ukrainian East Village Restaurant, (5:30 - 7:30 pm) • Monday, Nov. 10, Student Event • December event (date to be determined), Joint Meeting with the Metropolitan Section of the ASME at the Ukrainian East Village Restaurant • Tuesday, Jan. 20, Dinner Meeting at Pfizer Building, 219 East 42nd Street, Manhattan.

#### Bronze Level

The Tappan Zee Section of the American Institute of Chemical Engineers is based in the lower Hudson Valley of NY State, and serves chemical engineers in Rockland and Westchester Counties. They maintain ties to other area societies, including other AlChE sections, the American Chemical Society's Westchester chapter, and the Hudson Valley Council of Technical Societies.







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#### **Topics for Future Meetings**

We value your opinion as a fellow engineer.

Are the topics shown on the right of interest to you? Would you be attending a meeting if we had a top speaker on any of these topics?

A topic that was being considered via this forum (Critical Water Issues) become the focus of a previous year's Energy and Resources Conference.

Biocatalysis • Biochemical Engineering • Biodiesel from Food Wastes • Bioprocessing • Fuels and Chemicals from Cellulosics • Green Chemistry • Green Engineering • Preparing a Feasibility Study • Process Safety Metrics • Infamous Process Safety Incidents • Stem Cell Engineering Sustainability
 Nanotechnology
 Methane Harvesting from landfills/waste • Change Management • Competitive Intelligence • Critical Energy Issues • Ethics • Managing Innovation • Project Management • Strategic Planning • Triple Bottom Line • Bioterrorism • Climate change • Zero Waste manufacturing • Consulting • Continuing Education: Higher Degree, MBA, PE, Other Field? • Negotiation • Professional Licensing • ChEs and Due Diligence • Future Careers for ChEs • Post-Retirement Careers • New Materials of Construction • Where are Chemical Engineering Jobs • Strategic Minerals / Rare Earths needed for electronic devices • Pending regulations for air pollutants • Natural gas harvesting via "fracking" shale rock. What are the environmental consequences? • Estrogen mimics in the environment • Professional Excellence

2014 Energy & Resources Conference Program Committee

- Mary K. Lynch, Con Edison Joseph Porcelli, JVP International
- Christopher Bentley, Con Edison Scott J. Price, UOP LLC
- Ariel Czemerinski, AMC Engineering, PLLC Joel J. Kirman,
   Envirodactics David J. Deutsch, Vista Marketing & Financial

Metro New York Section, AIChE www.aiche-metrony.org



#### Become a Member of the Metro NY Section of AIChE

Local Section Dues for 2014-15 are only \$10. As a Member, you will save \$10 off the fees for the next local section Meeting, and all meetings during 2014-15 (including \$25 at the next Energy & Resources Conference). Pay dues at: <a href="http://www.aiche-metronv.org/Pav/Dues.html">http://www.aiche-metronv.org/Pav/Dues.html</a>