



METALLAGRAM

LONG ISLAND CHAPTER



Volume 55 Issue 7

Chapter website: <http://www.matscieng.sunysb.edu/asm/>

******* SUSTAINING MEMBERS NIGHT *******

Next Meeting Wednesday, March 19, 2014

Where Cotillion Restaurant, Jericho, NY

Topic: Bridge Inspection, Evaluation, Monitoring and Corrosion Protection

Speaker: Philip Waldvogel, Ammann & Whitney Consulting Engineers

Social Hour ... 6 pm Dinner ... 7:00 pm Meeting ... 8:00 pm

Members ...\$25 Guests ...\$27 Students ...\$15

(New and recently transferred-in members free)

Reservations appreciated – call Peter Indrigo (631-589-6666)

Directions to the Cotillion Restaurant

The Cotillion Restaurant is located at 440 Jericho Turnpike (Rte 25), Jericho, NY. Their telephone number is 631-471-0585. Website: <http://www.thecotillionjericho.com/>

From the east: take the LIE to Exit 43A, towards Robbins Lane. Merge onto the service road (Miller Pl) and after ¼ mile turn right onto Robbins Lane. Continue for ~1 mile to the junction with Jericho Tpk. (Rte 25) and turn left (onto Rte 25W). The restaurant is on the right after a ~½ mile.

From the west: take the LIE to Exit 41N and go north on Rtes 106/107. After ~0.7 mile, keep right to stay on Rte 106N, and after ~0.2 mile, make a sharp right onto **Old Jericho Tpk. (DON'T take Rte 25E)**. You will pass behind the restaurant after about ¼ mile – you can turn into the parking lot there. **Or**, continue another 0.1 mile, hang in a right and then another right to join Rte 25W. Cotillion is on the right after about 150 yards.

The Topic

Most long-span bridges throughout the world are cable-supported structures. The need to protect and maintain the cable system is an ongoing challenge faced by bridge engineers and owners. Since long-span bridges are usually situated over waterways, the main cables are subjected to environmental conditions that promote corrosion of steel. Left unchecked, corrosion of steel cables can lead to localized failures of individual wires and the eventual failure of the cable-supported system.

In this presentation we will give an overview of the corrosion mechanisms that attack bridge wires and methods of protection that have been employed by bridge engineers. We will also discuss inspection methodology of main cables, evaluation of strength based on corrosion stages and physical testing, and technological applications for real-time monitoring of wire breaks. The presentation will also include a discussion of utilizing a dry-air injection system (dehumidification system) as a key component in the protection/preservation of suspension bridge main cables.

Our Speaker

Philip J. Waldvogel, PE is a Senior Associate at Ammann & Whitney Consulting Engineers. Phil received both his Bachelors and Masters degrees from Cooper Union in New York City. His entire 28-year professional career has focused on the analysis, inspection, design and construction of bridges. He is a long-span, cable-supported and complex bridge specialist. Phil has additional expertise with vulnerability assessment, analysis and protective design for bridge structures. This includes the design and installation of dehumidification systems to protect and extend the service life of cable suspension systems as well as protective hardening for suspender cables, anchorages and towers.



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11733-4063, USA

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brian.choi@reliacoat.com
www.reliacoat.com



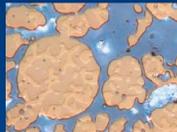
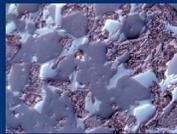
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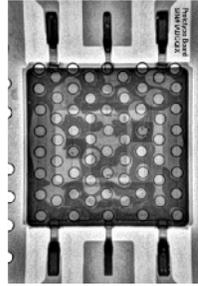
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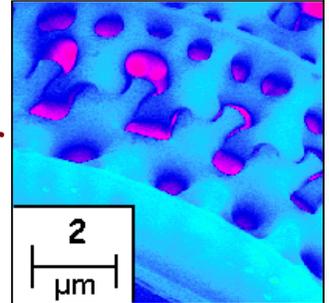
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Long Island Chapter Meeting Schedule

Apr. 16, 2014 Students Night
Place: Old Field Club, near West Meadow
Speaker: various Engineering students
Topic: Final Senior Design Results

Metro NY-NJ Chapter
(<http://metronynj.asminternational.org/portal/site/metronynj>)
(contact: Rich Lynch @ 201-891-8399)

Long Island Metal Workers Society
(website <http://www.limws.org>)

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