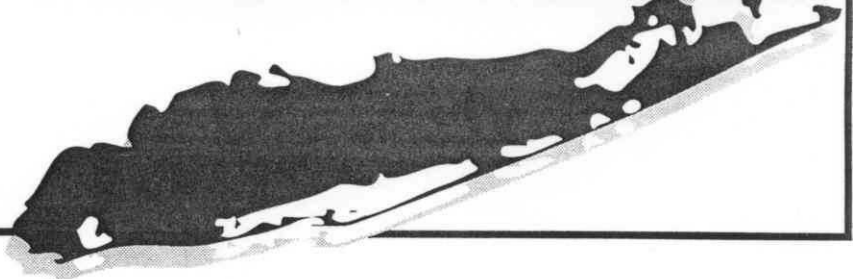




The Materials Information Society

LONG ISLAND CHAPTER

METALLAGRAM



Volume 53 Issue 2

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

Next Meeting Wednesday, October 19, 2011

Where Copper Wok, Hicksville, NY

Topic: Materials From a Mechanical Perspective

Speaker: Jon Longtin, SBU

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

Members ...\$22 Guests ...\$25 ASM 25 years ...\$20 Students ...\$12

(New and recently transferred-in members free)

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

DIRECTIONS TO THE COPPER WOK (formerly Imperial Wok) RESTAURANT

From the Long Island Expressway - take Exit 41 and go south on Route 106/107 (N. Broadway). After about 1.5 miles, stay to the left to keep on Route 107 (Route 106 forks off to the right at this point). Cross John St. and Barclay St., pass under the railroad, and after about 0.1 mile, make a right onto W. Marie Street. The restaurant will be on your right, at 1615 West Marie Street, about 100 feet after the turn. The telephone number at the restaurant is (516) 681-1947.

From the Northern State Parkway – instructions similar to those above, except that you should take Exit 35.


OUR SPEAKER

Dr. Jon P. Longtin has been a Professor in Mechanical Engineering at Stony Brook since 1996. He is the author of over one hundred research publications, six book chapters, and nine issued and pending US patents. Dr. Longtin is the recipient of the NSF CAREER and PECASE awards, Stony Brook Excellence in Teaching and Licensed Innovation awards, two Brookhaven Inventors Awards, and the R&D 100 award.

His research expertise is in the thermal sciences, with a focus on developing laser-based optical measurement techniques for temperature, concentration, and thermal properties; using ultrafast lasers for precision materials processing and micromachining, and the development of sensors for harsh environments using direct-write thermal spray technology, including thermistors and thermocouples for temperature, resistance gauges, and humidity sensors. His recent work has focused on adapting natural gas meters for the Smart Grid and developing thermoelectric devices using thermal spray for automotive applications.

HIS TOPIC

Materials are vital to the Mechanical Engineering profession. Even the most complex and grandiose designs must ultimately be manufactured from available materials. Equally important is the manufacturability of materials, i.e., how effectively can the raw materials be processed for the final product. In this regard, innovative ways to deposit, layer, and/or add materials for engineering systems are extremely attractive from a mechanical engineering point of view. This talk will focus on an innovative project currently underway at Stony Brook that includes strong contributions from both Mechanical Engineering and Materials Science. The goal is to develop low-cost, high-volume thermoelectric devices that can be integrated directly onto vehicle exhaust components for electricity production to increase vehicle fuel economy. The material deposition technology being used is thermal spray, a high-volume, versatile material deposition technology that is seeing continued growth in the engineering field. The project is challenging from both a materials and mechanical engineering perspective, but if successful would represent a dramatic enabling technology on a wide scale.




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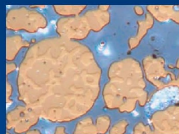
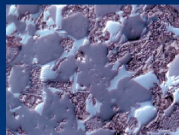
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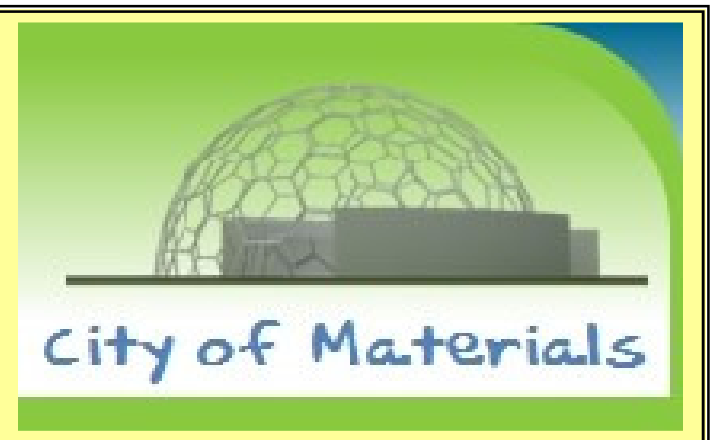
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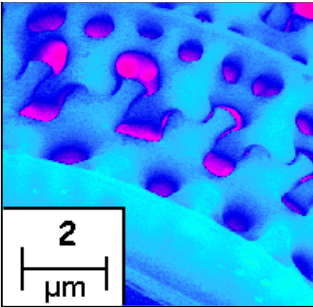
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Long Island Chapter Meeting Schedule

Nov. 16, 2011 **Place: Stony Brook University**
Speakers: Senior Students
Topic: Design Projects and Feedback

Dec. 14, 2011 **Companions Night**
Place: Pollo Rico, Centereach
Speaker: Joe Brady, BNL
Subject: Explosives

Jan. ??, 2012 **Joint meeting with LIANS**
Place, speaker, topic: tba

Metro NY-NJ Chapter
(website <http://www.asm.nynj.org/>)
(contact: Rich Lynch @ 201-891-8399)

Oct. 25, 2011 **Place: Meson Madrid, Palisades Park, NJ**
Speaker: Veljko Samardzic, NJIT
Topic: Composite Materials

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

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Peter D. Indrigo
Senior Vice President

73 Mall Drive
Commaçk, NY 11725, USA
Email: peterd@unitronusa.com

Phone: **631-589-6666**
Fax: 631-589-6975
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