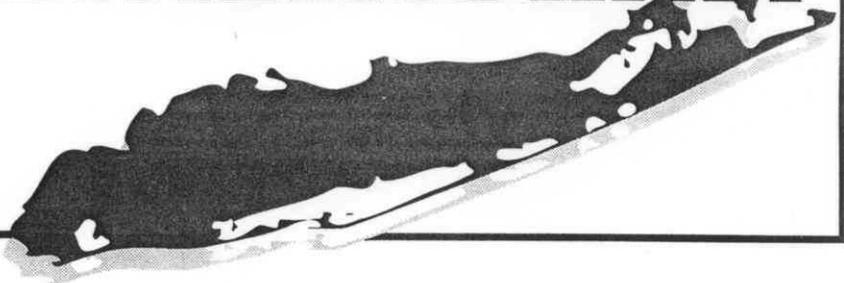




METALLAGRAM



LONG ISLAND CHAPTER

Volume 50 Issue 3

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

Next Meeting Wednesday, November 19, 2008

**Where Charles B. Wang Center, Stony Brook University,
Stony Brook, NY**

******* Student Night *******

**Oral and poster presentations by Stony Brook University Seniors
Joint Meeting with WISE (Women in Science and Engineering)
and ESG/ESM Programs**

Meeting Start ... 6 pm Buffet Dinner ... 7:00 pm Speakers ... 8:00 pm

Members ... FREE! Guests ... FREE! ASM 25 years ... FREE! Students ... FREE!

*(Note: there will also be a free (within a limited budget) happy hour for ASM members
from 5 pm to 6 pm in the University Cafe, located on the first floor of the Stony Brook
Student Union, just a short walk from the Charles B. Wang Center).*

HELP!

HELP!

The Long Island Chapter is looking for new members for the Executive Committee in order to lighten the load on current members. Specific areas needing help include: (1) liaison with Metallagram subscribers; (2) tracking membership; (3) embezzling the treasury (well, not literally, but our Treasurer would like some assistance in managing the funds). Please call the Chair, Biays Bowerman, at (631) 344-2946 for details or drop him an email (bowerman@bnl.gov).

The Topics and Presenters

Solar Water Agitation Device to Reduce Mosquito Breeding Grounds (*Muhammed Hussain, Kevin Li, Jawad Rana*)

Past efforts to help farmers in third world countries raise fish has resulted in large, fully stocked ponds that are now stagnant. These ponds are acting as breeding grounds for insects such as mosquitoes, promoting the spread of malaria. This project would be a water-agitation device run on solar power that can be built with local sustainable materials.

Carbon Fiber Matrix Horseshoes (*Christopher Berghorn*)

This project will examine the applicability and functionality of carbon fiber/polymer matrix composites for high performance horseshoes. Wear capabilities, durability, biocompatibility, and processing techniques will be examined and compared against current metallic models, to develop an improvement over existing designs.

Piezoelectric Materials Testing Platform (*Mukta Sundaresh, Nancy Shum*)

A materials testing apparatus will be designed to explore the electrostriction effect in piezoelectric materials where deformation will be observed as a result of an applied electric field or source. The platform will become a universal platform for the nanoindenter in order to measure nanoscale deformation in piezoelectric and smart materials when electric signals are provided.

Electricity Generating Shock Absorber (*Thierry Lamour, Josh Landecker, Alex Roertgen*)

A device to harness the energy lost in shock absorption will be designed. The goal is to harness the kinetic energy of the up and down movement of vehicles and produce usable electric energy .

Rising Net Pool Safety System (*Giancarlo Alaimo, Christopher Del Gatto, Kaleb Burnett*)

Six people drown in pools in the United States every day. In order to help save lives by reducing drowning deaths, this project will involve designing a rising net pool safety system that can sense a drowning victim in a pool and automatically lift them out of the water.

Liquid Nitrogen Level Detector (*Jake Roanneklev, Jason Shank, Dustin Tovar*)

A level detecting device will be designed in order to sense the height of liquid nitrogen in a Dewar connected to the energy dispersive spectroscopy system on a scanning electron microscope. The device will also sound a warning alarm when liquid nitrogen levels are very low.

Wheelchair for the Blind (*Mustafa Arzomand, Marc Laroque, Jude Safo, Gary Williams*)

Mobility for disabled persons is important for improving their quality of life. For visually impaired people who also have mobility difficulties, self-sufficiency can be very difficult. This project will design a wheelchair that can sense surroundings and be able to move through areas with obstructions with minimal guidance from the user.

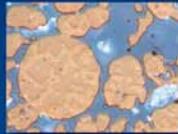
Apparatus for Biofluidic Study (*Jason Hamilton, Joanna Sisalima*)

In patients with inflammatory disease, such as diabetes, decreased oxygen levels in the blood are related to the pathways and flow rate of red blood cells. A device will be designed for the in situ observation of blood flow in microchannels. This experiment simulates blood flow in the body's microvascular system and will investigate cell function as a function of flow rate.

The Electronic Metallagram

If you don't already receive the Metallagram via email and would like to do so (it's in full color!), contact Biays Bowerman at bowerman@bnl.gov and he'll add your name to the distribution list.

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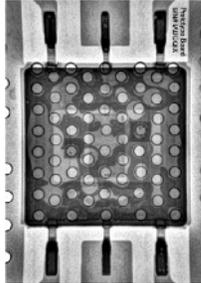
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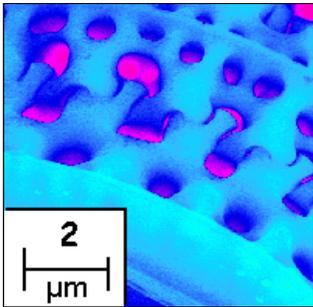
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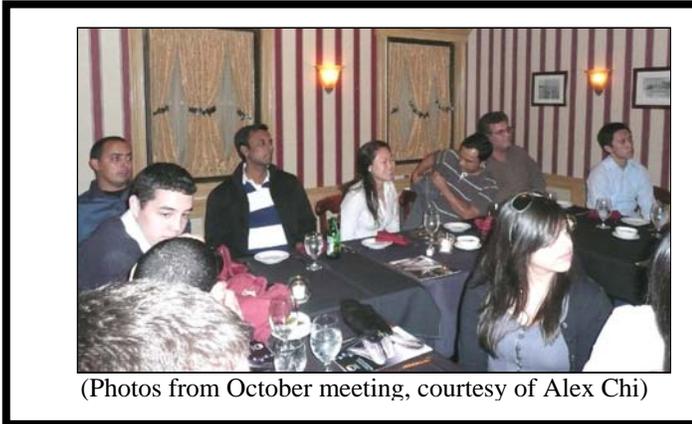
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Dr. Jim Quinn
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james.quinn@stonybrook.edu

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Directions to Stony Brook University and the Charles B. Wang Center

Take the Long Island Expressway (LIE, I-495) to Exit 62, and follow Nicolls Road (Route 97) north for 9 miles. The main entrance to the University is on the left (do not take the south entrance, which occurs about ¾ of a mile before the main entrance). Turn left into the campus. Proceed to the parking garage to the left of the Administration Building. The Wang Center, located directly across from the parking garage, is the large gray building with red entryway fencing, and is also noted for the modern representation of a Pagoda on the rooftop. The telephone number at the Wang Center is 631-632-6320.



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CHAPTER MEETING SCHEDULE

Long Island Chapter

Dec. 10, 2008 Place: Union Station, Smithtown
Speaker: George Hart, SBU
Subject: Art and Materials

Jan. ??, 2009 Place: South Shore, Patchogue
Joint meeting with ANS
Speaker, subject: TBD

Feb. 18, 2009 Place: Maine Maid Inn
Speaker: Ahmed Ibrahim, Farmingdale SC
Subject: Extending Fatigue Life via Coatings

Mar. 18, 2009 Place: Sitar Restaurant, Huntington, NY
Speaker: Gary Elgort, ConEd
Topic: Steam Disasters

Apr. 15, 2009 Annual General Meeting
Place: Union Station, Smithtown
Speakers: SBU Senior Students
Topic: Research posters

May ??, 2009 Wine tasting at Martha Clara vineyard

Metro NY-NJ Chapter

(contact Rich Lynch @ 201-891-8399)

2007-2008 CHAPTER OFFICERS

[() – term expires]

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