



## ASME LONG ISLAND PRESENTATION

Wednesday, April 16, 2014

### “Engineering a Novel Bedbug Trapping Mechanism through Nanotechnology”

Presented By:

**Harry Shan He, Materials Scientist at Garcia Polymer Center at Stony Brook**

**Location:** Bethpage Public Library  
47 Powell Ave  
Bethpage, NY 11714

**Time:** 6:00 PM Refreshments/Social  
6:30 PM Presentation

**Cost:** Free, Students and Guests not requiring PDH's  
\$35, Members requiring PDH's.

**RESERVATIONS REQUESTED  
PLEASE RSVP BY April 11, 2014**

**To: Matthew Ross at  
mrmatteoross@gmail.com  
Or (631) 403-0070**

**PDH's:** 2.0 Professional Development Hours (PDH) approved for this presentation. Please bring your payment; make \$35 check payable to “ASME Long Island Section.”

**Program Description:** As of 2008, it is estimated that over 800 manufacturer-identified nanotech products are publicly available, with new ones hitting the market at a pace of 3–4 per week. Nanotechnology is the building and use of materials, devices and machines at the nanometer (atomic/molecular) scale, making use of unique properties that occur for structures at those small dimensions. Harry Shan He will explain why ‘small’ is beneficial and why properties of materials/structures might be different at the nanoscale. He is also going to introduce his new bedbug trapping invention utilizing electrospinning—a nanotechnology utilized to fabricate polymer nanofibers. The use of electrospun polymer fibers as a bed bug trap represents a novel and effective approach to a century-old problem, which sheds light on how we can take advantage of nanotechnology in our everyday lives.

**About the Speaker:** Dr. Harry Shan He is a materials scientist from the Garcia Polymer Center at Stony Brook University. He specializes in polymer composites engineering and flame retardant biodegradable nanocomposites from natural resources. His expertise is engineering micro/nano-scale plastic fiber through nanotechnology for various eco-friendly applications. His research work for insect eliminating technology gained considerable recognition from numerous media organizations including Newsday, Channel 12, Toronto Star, and others. He holds a PHD from Stony Brook University, as well as multiple publications ranging from materials science to polymer engineering, along with a patent on electrospun fiber made through nanotechnology. He is a lecturer at Stony Brook University in the Materials Science Department, and readily volunteers his time as the President of the Global Chinese Connection, an international organization dedicated to help develop student's professional abilities.

**Directions:** From Long Island Expressway, take Exit 44 to merge onto NY-135 South toward Seaford. Take exit 8 for Powell Ave toward Bethpage. Turn right onto Powell Ave. The destination will be on right.