Welcome to the 2006-2007 Year
First Meeting: Wednesday, September 13, 2006
Where: Lupton Hall, Farmingdale State University, NY
Topic: New Metallic Bipolar Plates Technology
  plus Tour of IRTT Laboratory
Speaker: Professor Hazem Tawfik, Farmingdale State University
Meeting Start … 6 pm    Refreshments (pizza & soda)  6-7 pm
Speaker … 7-7:45 pm; Tour of Laboratory … 8-9 pm
Members & Guests … $10    Students … $5
(New and recently transferred-in members free!)
Reservations appreciated - call Peter Indrigo (631-589-6666, ext. 2617)
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The Topic

Fuel cells are the main pillar of the hydrogen economy as they provide a clean and reliable energy source and maintain a healthy environment. Metallic bipolar plates and membrane electrode assembly are the two most repeated components in the construction of a proton exchange membrane (PEM) power stack, and their durability and fabrication cost must be optimized to allow fuel cells to penetrate the commercial market and compete with other energy sources. The bipolar plates perform as the current conductors between cells, provide conduits for reactant gas flow, and constitute the backbone of the power stack. They are commonly made of graphite for high corrosion resistance and good surface contact resistance. However, their manufacturability, permeability, and durability under conditions of shock and vibration are unfavorable in comparison to metals. Our speaker will describe the development at IRTT of light-weight, durable, high corrosion-resistant metallic bipolar plates for fuel cell power stack, their various applications, and the demonstration for this new technology.

Our Speaker

Dr. Hazem Tawfik obtained his Bachelor’s and Master’s degrees in Mechanical Engineering from the University of Alexandria, Egypt, in 1968 and 1974, respectively. In 1980 he received his Doctoral degree in Mechanical Engineering from the University of Waterloo, Canada. Since his graduation he has held numerous positions in industry and academia that included Farmingdale and Stony Brook universities, Rensselaer Polytechnic Institute and Massachusetts Institute of Technology, Atomic Energy of Canada, Ontario Hydro, NASA Kennedy and Marshall Space Centers, US Naval Surface Warfare Center. Dr. Tawfik also holds a number of research awards and shares the rights to three patents. Currently he is a Distinguished Professor in Mechanical Engineering Technology is the Director of the Institute for Research and Technology Transfer (IRTT) at Farmingdale State University.
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Directions to Farmingdale State University and Lupton Hall
From the north shore, take the Long Island Expressway to Exit 49 and go south on Route 110. After about 2 miles, on the right hand side you will see the Broad Hollow Bioscience Park. Turn right into the campus at the College sign and follow the road around the campus for about 1 mile, at which point Lupton Hall should be on your left and a parking lot on your right.
From the south shore, take the Southern State Parkway to Exit 32 and go north on Route 110 for about 3 miles. Turn left into the campus at the College sign and follow instructions above.
A pdf map of the campus can be found at: http://www.ewh.ieee.org/reg/1/lisat/images/FSUNY_Map.pdf . Lupton Hall is Bldg. #63, in quadrant B/C-5.
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WELCOME TO THE CHAPTER!

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Nikhil Gupta, Polytechnic University
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Sanjeev Rivera, Lee Spring Company
Atin Sharma, Stony Brook University
Yang Tan, Stony Brook University
Brian Taub, Unitron Ltd.
Gregg Welsh, Northrop Grumman

All new members, including those who have transferred in from another Chapter, are invited to dine free at a regular meeting of their choice. Please take us up on this offer - come along to the meeting and introduce yourself. This is an excellent way to meet with other Chapter members and to establish new business and social relationships in the area.

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CHAPTER MEETING SCHEDULE

Long Island Chapter

Oct. 25, 2006  Tour: Cradle of Aviation
Nov. 15, 2006  Place: Wang Center, Stony Brook Univ.
               Speakers: SBU Senior Students
               Topic: Initial design projects, concepts, etc.
Dec. 13, 2006  Place: TBD
               Speaker: Fan Tao
               Topic: The Violins of the Future
Jan. 17, 2007  Place: Brickhouse Brewery, Patchogue
               Joint meeting with LIANS
Feb. 15, 2007  Place: Sitar Restaurant, Huntington
               Speaker: Gary Elgort, Con-Ed
               Topic: The Metallurgy of Steam Pipes
Mar. 14, 2007  Place: Mauricio’s, St. James
               Speaker: Jeff Brogan, Mesoscribe
               Topic: The Materials of Mesoscale Sensors
Apr. 11, 2007  Place: TBD
               Speakers: SBU Senior Students
               Topic: Final design projects, concepts, etc.
May 22, 2007  Wine tasting and buffet dinner at Martha
               Clara Vineyards, Riverhead

Metro NY-NJ Chapter

(contact Rich Lynch @ 201-891-8399)

Sep. 12, 2006  Place: L’Affaire, Mountainside, NJ
               Speaker: Dianne Chong, Boeing Co.
               Topic: TBD
Oct. 17, 2006  Place: L’Affaire, Mountainside, NJ
               Speaker: James McHenry, CTC
               Topic: Friction Stir Welding
Nov. 14, 2006  Place: SBU Manhattan
               Speaker: Jerry Croopnick
               Topic: Liquid Metal Technologies

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