

The Electrochemical Society – Detroit Section
Seminar Notice, Wednesday, May 23, 2007

**Electrochemistry and Application of Carbonaceous and Graphitic Materials for Batteries,
Supercapacitors and Fuel Cells**

Dr. Igor V. Barsukov, Superior Graphite Company, Chicago, IL

This presentation includes the important aspects of carbon and graphite electrochemistry relevant to advance batteries, fuel cells, and electronic conductive composites. The following major applications of will be discussed. 1) Graphite and graphitized carbon as electrode active material used in the Lithium-Ion, Lithium-Ion Polymer technologies. 2) Carbonaceous materials as catalyst support for electrochemical reactions in fuel cells. 3) Carbon additives, which enhance electrical conductivity of various battery active materials, including lithium battery, alkaline and lead-acid batteries. Electrochemical properties of purified natural crystalline graphite, highly graphitized synthetic graphite (IGC series), purified expanded types of graphite (ABG series), engineered products (EBG) and a newly developed partially graphitized carbon black (PUREBLACK® Carbon), and expanded graphite flakes for battery and fuel cell applications will be discussed.

Dr. Igor V Barsukov is the leader of the electrochemical group and manager of high temperature technology at the Superior Graphite in Chicago Illinois. He has developed and commercialized several forms of graphite and carbon, which complement performance of the several well-known batteries, fuel cells and supercapacitors. Dr. Barsukov has managed the development of advanced carbon materials (powders, nano-materials, liquid coatings and shapes for portable and stationary lithium-ion, Nickel-Iron, Lead Acid and Nickel Metal Hydride batteries, stationary phosphoric acid, alkaline, PEM and portable Borohydride fuel cells, portable electrochemical ultracapacitors with KOH electrolyte, etc. Dr. Barsukov has organized many international conferences on batteries, supercapacitors, and fuel cells and published widely in these areas.

Date: **Wednesday, May 23, 2007**

Location: Lawrence Technological University
21000 West Ten Mile Road
Southfield Michigan, 48705
Building # 5, Tauman Welcome Center, 4th Floor, Room C-406
Use Parking Lot A, C or D (Parking Lot C and D are accessed of NW Highway)

Time: 5:30 pm Reception / 6:30 pm Dinner / 7:30 pm Speaker

Price: \$20 Members / \$22 Guests / \$15 Students

RVSP by: Monday May 20, 2007 to G. Abbas Nazri
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For Directions

Area Map: <http://www.ltu.edu/contacts/directions.asp>

Campus Map: <http://www.ltu.edu/contacts/campusmap.asp>