

## TC-1 News from 2007

### **TC-1: Technical Committee on Electrical Contacts, Connectors, and Cable**

The scope of this Committee is to be the focal point within the IEEE CPMT Society for electrical contacts, electrical connectors, and interconnecting cable. Its membership consists of individuals having an interest in the research, development, manufacture, and utilization of electrical contacts and devices that contain them. The Committee holds regularly scheduled meetings and functions through the Holm Organization and through task forces having specific objectives. The Committee sponsors or supports conferences, publications, educational, standardization, and other activities.

The 2007 IEEE Holm Conference on Electrical Contacts was held in Pittsburgh, September 17-19.. This was the 53rd Annual conference in North America where professionals presented and discussed the latest developments in the field of electric contacts. This year, we had 130 attendees and resulted in a very successful conference.

The technical program has 35 presented papers in 9 sessions, the Ragnar Holm Award Lecture and the Mort Antler Invited Lecture. Papers were presented on electric contacts in switches, relays and connectors, new contact materials and coatings, arc fundamentals, thermal models, finite element analysis and corrosion. A special session was organized on Arc Fault Circuit Interrupter (AFCI). This is a new NEC standard to be implemented in all new residential house constructions in 2008. More details of the program and abstracts can be found in our web site.

On Monday night (9/17), we also had a successful social event at the Pittsburgh Grand Concourse, a restored train station with perfect atmosphere for friendly discussions while dining. The annual Monday social event is becoming a tradition when the conference attendees get to chat more freely with their conference friends. We had 96 attending the dinner social.

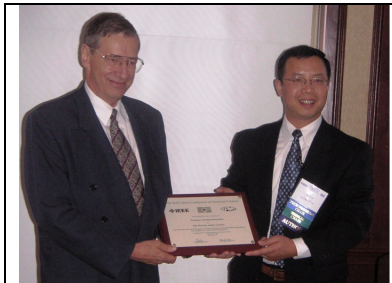
This year, the conference presented 3 awards:

- a. The 2007 Ragnar Holm Scientific Achievement Award to Professor Ji Gao Zhang, Beijing University of Posts & Telecommunication, for his life time work on dust and electrical contact reliability, as well as his teaching contributions in China. He gave an award lecture “Effect of Dust Contamination on Electrical Contact Failure”.
- b. The 2007 Mort Antler Lecture Award to Professor Joachim Heberlein, University of Minnesota, who was the invited speaker to stimulate work on hot topics. His lecture was titled “The Characterization of the Dynamic Arc-Anode Interaction and Using Plasma Deposition of nanocomposites to Tailor Material Properties.
- c. The 2006 IEEE Erle Shobert Prize Paper to Dr. John Shea, Eaton Corporation, for his paper “Glowing Contact Physics” being selected as the best out of 43 papers presented in the 2006 conference in Montreal.

TC-1 also runs a 3 days intensive course on electrical contacts bi-annually. The course has been very successful in teaching engineers the physics and practice of contact designs and selections. It is a favorite for switch, relay, circuit breaker, contactor, and connector engineers from automotive, power distribution and telecommunication fields. The 2006 course was held in Montreal and the 2008 course will be held in Orlando just before the Holm Conference.

The 2008 IEEE Holm Conference will be October 27-29 in Orlando. For more information on many special events organized by this committee such as annual IEEE Holm conference, conference presentation downloads, intensive course, international conference, CD-ROM library and link to other societies, please visit our web site at [www.ewh.ieee.org/soc/cpmt/tc1](http://www.ewh.ieee.org/soc/cpmt/tc1).

Photo Gallery from 2007 IEEE Holm Conference



Mort Antler Lecturer Prof. Heberlein (L) and Tech. Comm. Chair Dr. Zhou (R)



2007 Holm Award Prof. Zhang (L) & Conference Chair Dr. Shea (R)



2006 Prize paper Dr. Shea (L) & Prize Paper Chair Dr. Taylor (R)



2007.09.18



2007.09.16



2007.09.17



2007.09.17

