



## Year Two Already?

**W**ow! It just does not seem like it has been a year since I first wrote in this column as the new chair of the IEEE Industry Applications Society (IAS) Standards Department. That just goes to show you that time really does fly when you are having fun.

This year, I would like to approach the contents of this column based on my contact with the committees and working groups throughout the Society engaged in the standards-making process. I hope to visit several of the meetings and share some information about the activities of the particular committee or working group. Let me apologize in advance if I cannot include all of the standards-making groups within IAS because of my inability to travel to all meetings or conferences every year. Over the course of two years, I should be able to cover all of our standards-making groups with a personal report. Albeit belated as far as late-breaking news is concerned, at least you can get the flavor within a few months of the activity and with enough lead time to participate in the next meeting of the respective body. I'm sure that all groups would welcome additional volunteers to assist in the development process.

Speaking of the standards development process, it might be good to share with you just how you can get involved. It first requires you to set up an IEEE Web account. Visit the IEEE Web site at <http://www.ieee.org/portal/site> and click on the link on the right set up IEEE Web account to get you started. Then, when that takes you to the next page, click on the link create an IEEE Web account to begin entering your information. You may need to follow more than one link to get there, but you will see an online form to

establish your personal account and information. Once armed with your user name and password, you can access the many benefits of IEEE, including, you guessed it, standards development. If you already have a Web account, simply go to <https://development.standards.ieee.org/my-site> and type in your user name and password to log into myProject and access the system.

To do this from the IEEE home page, first click on the standards tab at the top of the IEEE home page, which takes you to the IEEE Standards Association (IEEE-SA) page. Once there, on the right side of the page, click on the learn more about standards development link. The next page will welcome you to IEEE standards online, and you will see three different colored arrows indicating sets of activities associated with standards. In the yellow arrow, there is a line that reads develop the working group, and clicking on this will display a page that will contain the link myProject technical activity area. Click on that link and log in with your IEEE Web account user name and password. This opens up the myProject page, where you can develop a profile of the areas in which you are interested, including the IAS. Please read the information on this page and follow the process outlined, and you should have no trouble creating your profile and volunteering for specific standards development activities, including interest in a particular working group.

For the first round of my reports, I would like to share some of the observations about the standards being developed under the Petroleum and Chemical Industry Committee (PCIC) after visiting the PCIC Standards Subcommittee meeting in Cincinnati last September. There were no less than 30 standards projects in some state of development as reported by the working groups, including the sought after recently published

status. I hope I can do them justice in my reflections here.

Several standards reported as recently published with no reported revision activity include the following:

- IEEE Standard 303: *Recommended Practice (RP) for Auxiliary Devices for Rotating Electrical Machines in Class 1, Division 2, and Zone 2 Locations*
- IEEE Standard 463: *Standard for Electrical Safety Practices in Electrolytic Cell-Line Working Zones*
- IEEE Standard 1017: *RP for Field Testing Electric Submersible Pump Cable*
- IEEE Standard 1018: *RP for Specifying Electric Submersible Pump Cable; Ethylene Propylene Rubber Insulation*
- IEEE Standard 1019: *RP for Specifying Electric Submersible Pump Cable; Propylene Insulation*
- IEEE Standard 1458: *RP for the Selection, Application, Field Testing, and Life Expectancy of Molded Case Circuit Breakers for Industrial Applications*
- IEEE Standard 1584a: *Guide for Performing Arc Flash Hazard Calculations Amendment 1.*

Several standards reported as recently published and with an active project authorization request (PAR) for revision include the following:

- IEEE Standard 45: *RP for Electric Installations on Shipboard*
- IEEE Standard 515: *Standard for the Testing, Design, Installation, and Maintenance of Electrical Resistance Heat Tracing for Industrial Applications*
- IEEE Standard 515.1: *Standard for the Testing, Design, Installation, and Maintenance of Electrical Resistance Heat Tracing for Commercial Applications*
- IEEE Standard 576: *RP for Installation, Termination, and*

*Testing of Insulated Power Cable as Used in Industrial and Commercial Applications*

- IEEE Standard 841: *Standard for Petroleum and Chemical Industry Severe Duty Totally Enclosed Fan-Cooled (TEFC) Squirrel Cage Induction Motors: Up to and Including 370 kW (500 hp)*
- IEEE Standard 1349: *Guide for Application of Electric Motors in Class I Division 2 and Class I Zone 2 Hazardous Locations*
- IEEE Standard 1566: *Standard for Performance of Adjustable Frequency Drives Rated at 375 kW and Larger*
- IEEE Standard 1584: *Guide for Performing Arc Flash Hazard Calculations*
- IEEE Standard 1584b: *Guide for Performing Arc Flash Hazard Calculations Amendment 2*
- IEEE Standard 1673: *Standard for Requirements for Conduit and Cable Seals for Field Connected Wiring to Equipment in Petroleum and Chemical Industry Exposed to Pressures Above 1.5 kPa (0.22 psi)*
- IEEE Standard 1683: *Standard for Motor Control Centers Rated up to and Including 600 V ac or 1,000 V dc with Requirements Intended to Reduce Electrical Hazards While Performing Defined Operations*
- IEEE Standard 1709: *RP for 1–35 kV Medium-Voltage dc Power Systems on Ships*

- IEEE Standard 1713: *RP for Electrical Shore-to-Ship Connections*
- IEEE Standard 1714: *RP for Industrial Uninterruptible (UPS) Systems*
- IEEE Standard 1716: *RP for Managing Natural Disaster Impact on Key Electrical Systems and Installation in Petroleum and Chemical Facilities.*

Standards recently reaffirmed include the following:

- IEEE Standard 844: *RP for Electrical Impedance, Induction, and Skin Effect Heating of Pipelines and Vessels*
- IEEE Standard 1242: *Guide for Specifying and Selecting Power, Control, and Special-Purpose Cable for Petrochemical Plants.*

Standards in some stage of the balloting process include the following:

- IEEE Standard 1068: *Standard for the Repair and Rewinding of ac Electric Motors in the Petroleum, Chemical, and Process Industries*
- IEEE Standard 1580: *Draft RP for Marine Cable for Use on Shipboard and Fixed or Floating Platforms*
- IEEE Standard 1662: *Guide for the Design and Application of Power Electronics in Electrical Power Systems on Ships.*

Potential new standards projects include the following:

- IEEE Standard P1584.1: *Guide for Writing a Specification for Performing Arc Flash Hazard Analysis*

- IEEE Standard TBD: *Electrical Power System Design to Improve Electrical Safety*
- IEEE Standard TBD: *Guide or RP for Installing Fire Safe Circuit Integrity Cables for Safety Shutdown Systems in Petrochemical Plants and Refineries*
- IEEE Standard TBD: *Guide to Safety Practices on Ships*
- IEEE Standard TBD: *Guide for the Installation of Integrated Bus Pipe on Ships.*

All in all, the numerous groups developing standards within the PCIC are very active and working hard to develop the standards needed for the petroleum and chemical industry.

The standards subcommittee also had guest speaker Chuck Adams, president-elect of the IEEE-SA, who spoke to the group about the future of standards development. Of particular note is the IEEE-SA corporate program where the IEEE-SA provides a forum for corporate entities to share IEEE resources and develop industry-wide standards on a fast track basis. That may be the subject of a future “Standards” column.

If you would like to participate in any of the standards projects mentioned earlier, follow the steps outlined before to get involved. To attend the next PCIC meeting, go to <http://www.ieee-pcic.org/index.html> and check for the updated information about the meeting in Anaheim, California, 14–16 September 2009.

Thank you for your interest. **IAS**

## society news

(continued from p. 77)

world about the use of impact factor. Impact factor is a proprietary metric, published annually by Thompson-Reuters in its annual *Journal of Citation Reports (JCR)*. JCR provides a number of metrics and quantitative tools for ranking, evaluating, and categorizing and comparing scientific journals.

The journal impact factor is a measure of the frequency with which the average article in a journal has been cited in a particular year or period. A journal's impact factor is calculated by dividing the number of citations in a calendar year by the total number of articles published in the previous two years. An impact factor of 5.0 means that, on average, the articles published in that journal within the past three years have been cited five times.

Recently, in response to a request from IEEE, Thomson issued a statement clarifying their intention behind publishing impact factor statistics. In particular, this statement offered two very significant cautions.

- 1) Impact factor should only be considered in context. There are inherent differences among fields of intellectual inquiry that result in natural differences in impact factor. Impact factor should only be used to compare journals within the same field of scientific specialization. For example, impact factor should never be used to compare electrical engineering journals with journals addressing research in biology and medicine.

- 2) Impact factor as a metric applies only to journals. Impact factor should never be used to assess the work done by individual researchers.

For the complete Thomson statement, see <http://forums.thomson-scientific.com/ts/blog/article?message.uid=1218>.

## Whoops

We made a mistake! The caption in the figure at the bottom of page 78 of the September/October issue of *IEEE Industry Applications Magazine* indicated that Bruce Lee received the I&CPS Department Achievement Award. Several readers observed that the recipient looked a lot more like Bruce McClung. Sorry, Bruce. **IAS**