The
Product Safety Engineering Newsletter

Vol. 7, No. 1 March 2011

IEEE PSES
Product Safety Engineering Society

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President's Message

Once again, greetings! My theme this issue is OPPORTUNITIES for PSES and our members. Now that we are an "established" IEEE society, I see many opportunities for building a professional society that provide a rich experience for product safety and compliance engineers, managers, and administrators. It's taken us nearly twenty-five years to reach this level; I hope our members can make the modest efforts to put us on a solid footing. There are so many opportunities! It bothers me to miss a single one! I am doing my best to get the word out about these opportunities. It's up to our membership to share the required efforts to pick up on them, so we all can benefit. Our board of directors (see http://ewh.ieee.org/soc/pses/bod.html) is working on nurturing development, but the implementation will be up to you.

Here are some of the opportunities.

Chapters – We have chapters in several levels of development; some are up and running, some are forming, and some are trying to form. We have a working template for chapters. Each chapter needs a cadre of leaders to work as an executive committee that sets meetings well in advance, gets the word out and builds attendance, and has a process for building more leadership through committee assignments and regular elections. It's nice, but not essential, to have a host or sponsor for meetings. Being part of IEEE (and paying those IEEE dues), there is a process for getting modest financial resources from the IEEE section for chapter meetings.

So what are the opportunities for chapters? Beyond establishing a meeting calendar and building attendance, we can offer members exposure to other societies and organizations through joint meetings. There are opportunities for field trips and tours to places of particular interest to those involved with product safety and compliance engineering. There are opportunities to judge at local and regional science fairs, and mentor student projects. There are opportunities to build relation-

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The
Product Safety Engineering Newsletter

Newsletter Committee

IEEE PSES Officers

IEEE PSES Web Sites

http://www.ieee-pses.org/
http://psessymposium.org/
http://product-compliance.oc.ieee.org/
http://www.ieee-pses.org/emc-pstc.html
http://www.ieee-pses.org/newsletters.html
http://www.ieee-pses.org/pses.html

ships with engineering programs at universities.

One opportunity for chapters this year is the IEEE Sections Congress in August in San Francisco (http://ewh.ieee.org/reg/8/cms/index.php?option=com_content&view=article&id=65&Itemid=88) Like a huge Las Vegas buffet, the Congress is an opportunity to see what IEEE can offer in terms of geographies and technologies, as well as opportunities to get more involved as a volunteer within IEEE.

Chapters can hold workshops to raise funds, do outreach, and build the chapter. I think that holding a one-day workshop every couple of years is probably the apex of achievement for a chapter. Workshop steering committees build leadership and networking skills that serve individuals and industry.

Thomas Ha is our VP of membership, and responsible for chapter development. Doug Kealey is our coordinator for chapters. Our board is developing a "best practice" guide for chapters, and trying to establish chapter "angels" to support each chapter. Other IEEE societies have used chapter angel programs to facilitate the chapter function and to report back to the board regarding chapter needs. Our board is working on a speaker bureau of qualified, experienced speakers with identified topics for presentations. Our society exists to provide these and expanding resources for chapters.

A last word on chapters for those members in areas where there aren't enough members to have a PSES chapter. Does the IEEE section offer joint chapter opportunities with other societies? IEEE is such a large organization that we should be able to build something, even if it takes a few years to set up and get running. What it takes is a few people willing to work together to build a program that serves the local situation.

Conferences – Many members have enjoyed our annual Symposium. Our eighth conference will be held this year in San Diego (www.pses-symposium.org). In following years our annual event will be in Austin, Portland, San José (Santa Clara/Silicon Valley). For this year, Bansi Patel is putting together a great event in a great location. Over the years, we have built a growing group of attendees and exhibitors who speak highly of the social and technical experience of our symposium. For 2015 and beyond, there are opportunities for other locations to host a symposium.

The most crucial element of any conference is a good program of presentations. Our conference technical committee, made up of Gary Tornquist and Bob Griffin, has done the job of putting the technical program together. Our reputation depends on the authors and the stimulating program tracks at our conferences. There are many opportunities to build this program, both for this conference and for others we might present as standalone events and as joint conferences.

We are actively working on a joint relationship with the Consumer Electronics Society. The opportunity with this society as well as others (e.g. National Academy of Forensic Engineers and System Safety Society) depends primarily on our ability to generate product safety/compliance engineering papers/presentations in the overlapping areas of interest. The opportunity is there to write papers, of course, but also to get the word out about the need, and to help with the coordination. There is tremendous potential value to our members to being exposed to product safety/compliance areas that are outside their present experience, but well within the expertise of other members—you!

Doug Nix, our Conference VP, has done a masterful job of building a conference template and trying to put workshops together. He needs one or more assistants who can work on specific projects and build the experience to succeed Doug, when he moves on from this position. Doug needs local leaders willing to take charge of specific conferences and workshops. We have the opportunity to have such events; we have to put programs together that will get the needed participation.

Another opportunity that comes with successful conferences and workshops is to generate surpluses that support local and society activities beyond the conference or workshop. The most immediate opportunity is our speakers' bureau aka Distinguished Lecturers Program. We have an exclusive group of experienced speakers who are experts in certain areas of product safety/compliance engineering. In a perfect world, these people would make presentations at regular chapter meetings. It's only fair to cover their out

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Chapter Safety Probes

To see current chapter information please go to the chapter page at: http://www.ieee-pses.org/Chapters/index.html

People Looking To Start Chapters

Dallas Texas

Jonathan Jordan
jonathan@goodsonengineering.com

Denver Colorodo

Richard Georgerian
richardg@ieee.org

China

Paul Wang
paulwang@gmcompliance.com.cn

Japan

Hiroshi Sasaki
hiroshi_sasaki@jema-net.or.jp

North Carolina

Warren Fields
ncps@bellsouth.net

Ohio

Jim Bacher
j.bacher@ieee.org

Southern California

Charles Bayhi
bayhi@cpsm-corp.com

Central New England Chapter:

The CNEC Product Safety Engineering Society held a meeting on Wednesday, March 23rd, at the Holiday Inn, Boxborough MA. A social hour with light refreshments began at 7:00 PM and the technical meeting started at 7:30 PM. Jeff Goldsmith, Principal Electrical Engineer at Water & Process Technologies division of GE, presented this month's topic concerning the meaning of Short Circuit Current Ratings (SCCR) to meet the requirements of the NFPA 70 National Electrical Code.

Jeff Goldsmith has been the principal electrical engineer for the Water & Process Technologies division of GE since 2005. Previously, he was a senior electrical engineer designing water treatment equipment for Ionics from 1989 until its acquisition by GE. He is a registered professional engineer in Massachusetts. He is an NFPA technical committee member, and is also active in the ISA and IAEI.

Jeff discussed the NFPA 70 National Electrical Code SCCR ratings on industrial control panels, motor controllers, and other power equipment. The principal design method for determining SCCR is Supplement SB of the UL 508A Standard. The presentation covered the meaning of SCCR, and selection of electrical components to achieve a suitable SCCR for an electrical assembly.

India Chapter:

TECHNICAL LECTURE PROGRAMME ON 22ND FEBRUARY 2011.

Dr.G.V.Rao, Chairman, India Chapter, IEEE-Product Safety Engineering Society, Chennai gave a Video Presentation on ` Safety Precautions on Elevators & Escalators" at Probus Club, Russian Cultural Academy, Chennai on 22nd February 2011.

The total number of participants were 200 and before the meeting a High Break Fast was arranged.

During the talk, Dr.G.V.Rao mentioned about the recent and past accidents that took place in the elevators/escalators. He also explained that an Annual Certificate should be obtained by the building owners for the safe operation. To sum up, the whole presentation was very useful with the added advantage of the Video presentation on Maintenance of the Elevators.

News and Notes

TAC Reports

Telecom Safety Technical Committee:

- Continuing to developing a proposal to modify IEC/CSA/UL 60950-22 to address field problems associated with explosive atmospheres in lead-acid battery compartments of cell-site base station equipment. Ultimately will be proposed to IEC TC 108 MT2 through the Canadian National Subcommittee and the US TAG.
- Continue to monitor IEEE Smart Grid activities.
- Reviewing new Article 840 from 2011 edition of NFPA 70 (Premises-Powered Broadband Communications Systems).
- Membership includes engineers from the UK, Canada and US

ITE Safety Technical Committee:

- The TAC for ITE/Computers has a monthly teleconference held every third Wednesday at 3PM CST. Topics for discussion at recent meetings have included requirements for inductive chargers, status of IEC 62368, dc distribution systems and dc powered products, and halogen free power cords. To join, please send an email to Gary_Schrempp@dell.com.

Forensic and Failure Analysis Technical Committee:

- The IEEE PSES FFATC is looking into augmenting our monthly conference calls attended by our leadership group with the new IEEE Social Networking tool. The TC is looking at forming a group under this networking tool so that ideas, planning, and action items can be addressed as ongoing discussions. This should help move our agenda forward.
- Our current agenda includes reaching out to other Forensics and Failure Analysis organizations such as the National Academy of Forensic Engineers and other LinkedIn groups with common interests in order to build interest in the PSES as well as our TC. Another

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Risk Management and the Truth of Murphy's Law

by Keith Armstrong

Risk Management is a necessary methodology to deal with safety of complex devices, equipment and systems. This article discusses its relationship to—and the engineering reality behind—Murphy's Law.

Of course, Murphy's Law applies in many other fields besides safety risk management. It applies to everything that we do (or try to do) in our lives. Wikipedia[1] (at the time of writing), describes Murphy's Law as follows:

> Murphy's Law is an adage in Western culture that broadly states, "If anything can go wrong, it will." It is also cited as: "If there's more than one possible outcome of a job or task, and one of those outcomes will result in disaster or an undesirable consequence, then somebody will do it that way;" "Anything that can go wrong, will;" the similar "Whatever can go wrong, will go wrong;" or, "Whatever can go wrong will go wrong, and at the worst possible time, in the worst possible way." In a less dramatic fashion, the law can be expressed as "Anything that has a probability greater than zero of happening can and will happen. No exceptions." The saying is sometimes referred to as Sod's law or Finagle's law.

Some think that this is just an engineer's "in joke" that helps us make light of the fact that we don't know as much as we like to think we do, so reality sometimes catches us out. I hope to show in this little article that it is actually an important way of describing a very important and fundamental principle in all engineering (and science, for that matter)—the lack of absolute precision, which leads to quantifiable probabilities that what we are doing will give us a different result from that which we intend.

In metrology, a lack of absolute precision results in measurement uncertainty. We can never perfectly know the quantity of any measurand, to any arbitrary level of precision. Accredited EMC test laboratories have in recent years been made to become very familiar with this fact, because their Accreditation Bodies (such as UKAS[2]) have insisted that they calculate their measurement uncertainty and ensure that it is not excessive.

To take this issue to the extremes of quantum physics, Heisenberg's Uncertainty Principle places limits on how well we can measure (know) anything in this reality. According to Wikipedia[3] (at the time of writing):

> In quantum physics, the Heisenberg uncertainty principle states that the values of certain pairs of conjugate variables (for instance position and momentum) cannot both be known with arbitrary precision. That is, the more precisely one variable is known, the less precisely the other is known. This is not a statement about the limitations of a researcher's ability to measure particular quantities of a system, but rather about the nature of the system itself.

In safety engineering, we do what is called "risk analysis." Having determined what types of harm could possibly arise from whatever it is we are planning to make or do, we then establish their likelihoods, or probabilities, of occurrence. By multiplying the severity of the harms (e.g. bruise, broken bone, amputation, etc.) with the probability of their occurrences we end up with what we call "Risk."

If the Risk is great enough (usually determined with the aid of a "risk graph" such as shown in Figure 1, from the medical equipment Risk Management standard ISO 14971), we can then apply a monetary value to it, and determine how much time

and money we should spend to reduce the risk to "tolerable" levels. The "monetary value" we use is typically the amount that a court might award in damages to the person or organization that has suffered from the harm in question, multiplied by the number of times such damages might be awarded against us.

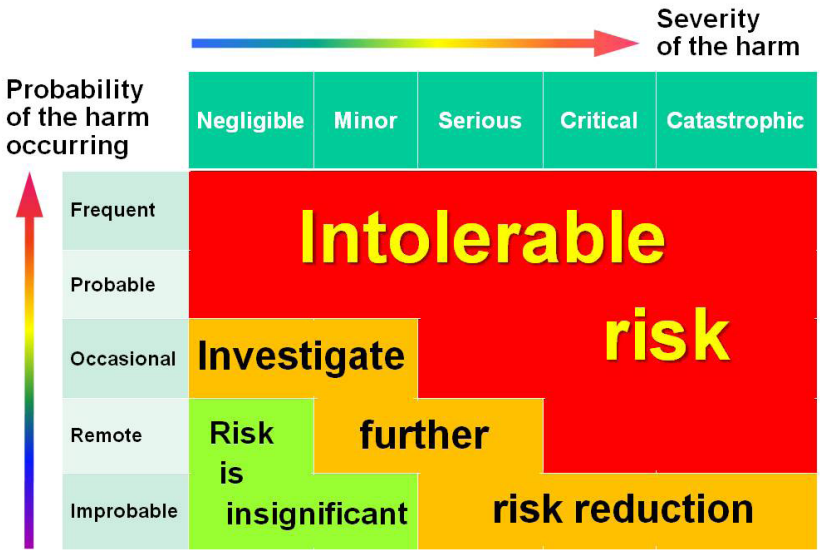

Figure 1: Example of a Risk Graph

The above is my interpretation of the general approach adopted by the UK's Health and Safety Executive in their guidance documents on controlling hazards and risks in the workplace.[4] (I apologize in advance to any safety experts who find my summary just a little bit over-simplified!)

It seems that some large organizations use a similar approach, but instead of using it to decide how much time and money to spend reducing the risk, they instead use it to estimate how much to allow for the expected legal costs of defending themselves against claims that what they made or did caused some harm. It appears that, for them, maintaining the impression that they never cause any harm is more important than protecting people from the harm that they do in fact cause. This is an ethical or moral issue on which I could not possibly comment, other than to point out that it seems to me to be completely at variance with how Professional Institutions such as the IET and IEEE require their members to behave.

Anyway, to get back to the subject of this article, there are many ways of assessing the probability of occurrence of a harm. The IET's new (free) guide on how to do EMC for Functional Safety[5] includes a good summary of such methods and how to use them, in its sections 3 and 4.

It is impossible to make anything totally safe. Anything can cause harm, for example a small number of injuries or deaths in the UK each year are officially attributed to being caused by a "tea cozy" (a cloth or knitted insulating cover for a teapot).[6] And each possibility for harm has an associated probability of occurring.

It helps no-one if we try to pretend that risks do not exist in the real world. It does not protect the people or organisations who suffer from the harm, and neither does it protect the people or organisations who caused it to happen, whether or not they understood that they were causing such risks.

To communicate the fact that risks are real, and need to be dealt with to avoid unpleasant consequences, we might say: "**If anything can go wrong, it will**"—*which is exactly the statement of Murphy's Law expressed in* [1].

So we can see that as far as safety risk management is concerned, Murphy's Law is simply a statement that if we have conducted our risk analysis correctly, then we must expect that the consequences it predicts will come to pass.

In an earlier article, "Absence of Proof is Not Proof of Absence," (*PSEN*, 3Q-2010) I showed that just because a risk has not yet manifested itself in real life, does not mean that it never will. That article's example of the space shuttle and the foam chunks falling off its booster and hitting its thermal tiles is a case in point. A proper risk analysis would have shown that some of the shuttle missions would result in the deaths of the crew during re-entry, due to damage to the tiles during launch. Instead, NASA chose to believe that because they had not seen any such problems so far, they would continue not to see them.

I have discussed safety risk management issues, but of course risk management can be applied to any non-safety risk outcome, for example timescale or financial risks. Where engineering is concerned, the same methods that are used for

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safety risk management can often be adapted for use in controlling any types of risks.

So I hope I have shown that Murphy's Law always applies in real life. It is simply an expression of the fact that if there is a real risk (probability) of something occurring, then it will occur, sooner or later.

We now need to discuss the extended version of Murphy's Law, which is included in my earlier quote from [1]:

"Whatever can go wrong will go wrong, and at the worst possible time, in the worst possible way."

The addition of the phrases "at the worst possible time, in the worst possible way" is sometimes expressed as "and at the most embarrassing moment." If we accept that the inanimate universe is not *intrinsically* malevolent to us, then we must also accept that this addition to the basic Murphy's Law *cannot be true*.

Of course, it *feels* like it is true, for the same reason that we feel that the weather is always worse on our days off. What is going on here is that it is human nature to remember bad events more strongly than good ones. This could in fact be some sort of survival mechanism that has been a feature of humankind since we first started banging rocks together and discovered tools—good things are nice when you can get them, but bad things can be deadly. So we have learned to remember bad things more clearly than good.

So, even though the probability distribution of bad weather, or of failures in our designs, might be perfectly random, over time we remember the events that caused us the most aggravation more than the ones that caused less. Hence there is a *sort of* "truth," in terms of the persistence of human memory, in the above addition to the basic Murphy's Law. It does seem to us, looking back on our experiences, that when things go wrong, they do so at the worst possible time, and in the worst possible way.

However, this is just our perception, and it should not distract us from the fact that if anything can go wrong, it will, sooner or later.

Keith Armstrong is with Cherry Clough Consultants (www.cherryclough.com). This article is adapted from a previous version published in the November 2008 edition of The EMC Journal.

References:

[1] http://en.wikipedia.org/wiki/Murphy's_law

[2] UKAS: the United Kingdom's Accreditation Service, www.ukas.org.uk

[3] http://en.wikipedia.org/wiki/Uncertainty_principle

[4] "Reducing risks, Protecting people" (the HSE's decision-making process): http://www.hse.gov.uk/risk/theory/r2p2.pdf

[5] www.theiet.org/factfiles/emc/index.cfm, see especially subsections 3.4, 3.5, 3.7 and 4.2

[6] http://en.wikipedia.org/wiki/Tea_cosy

[7] "Absence of proof is not proof of absence (and the "proven in use" fallacy)", Keith Armstrong, The EMC Journal (www.theemcjournal.com), Sept/Oct 2008 Edition.

2011 IEEE SYMPOSIUM ON PRODUCT COMPLIANCE ENGINEERING

SPONSORED BY THE IEEE PRODUCT SAFETY ENGINEERING SOCIETY

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Product Safety Engineering Society

Call for Papers, Workshops, and Tutorials

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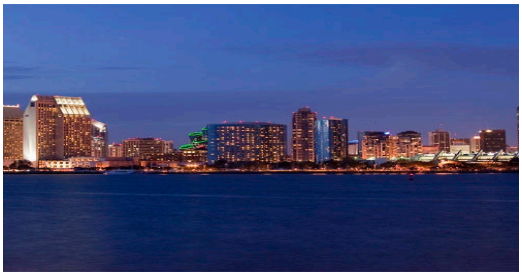


The IEEE Product Safety Engineering Society seeks original, unpublished papers and tutorials on all aspects of product safety and compliance engineering including, but not limited to:

Product Specific:	Consumer, medical, computer (IT), test and measurement, power supplies, telecommunication, industrial control, electric tools, home appliances, cellular and wireless, etc.
Hazard Specific:	Electrical, mechanical, fire, thermal, chemical, optical, software, functional, reliability, risk assessment, etc.
EMC / RF:	Electromagnetic emissions, electromagnetic immunity, regulatory, Introduction to EMC/RF for the safety engineer and compliance engineer.
Components:	Grounding, insulation, opto-couplers, cables, capacitors, connectors, current-limiters, transformers, current-limiters, fuses, lasers, ferrites, environmental, electromagnetic suppression & protection, surge protectors, printed wiring boards, etc.
Certification:	Electromagnetic emissions & immunity, Environmental, Product safety, Processes, safety testing, regulatory, product liability etc.
Standards Activities:	Development, status, interpretations, country specific requirements, Laboratory Accreditation, etc.
Research:	Body physiological responses to various hazardous energy sources, unique safeguard schemes, electrically-caused fire, forensic methods etc.
Environmental:	RoHS, WEEE, EuP (Energy-using Products), Energy Star, Packaging Directives, REACH (Chemical), CeC, etc.
Demonstration Papers:	Demonstrations of product safety testing techniques including mechanical, electrical, fire, etc.

Author's Schedule **All dates require that the associated documents be loaded into EDAS by the due date**

Abstract submission	May 15, 2011
Notification of Abstract Acceptance	June 1, 2011
Draft formal paper / presentation	July 15, 2011
Formal Final Paper	August 15, 2011
All Final Papers and Presentations	September 1, 2011

Prospective authors should submit e-papers using the on-line EDAS submission system. Please go to the Author's Kit page of the PSES web for comprehensive submission instructions including paper templates on the author tab at:

www.psessymposium.org

of pocket expenses. Having just a few successful conferences/workshops each year will enable us to put together a solid program.

Technical Activities – This naturally brings me to the next area of opportunities. Technical activities provide focus and resources for the technical foundation of our society. Ivan VandeWege is our Technical Activities VP. See http://ewh.ieee.org/soc/pses/technical.html for our current structure. We need technical papers, Newsletter articles, topics and speakers for chapters and general outreach to our members, to the technical community, and general public. The society has built a framework offering many opportunities to build the existing TCs, develop new ones and to identify other technical opportunities.

There are opportunities for new technologies into the future. Given the current, dramatic safety concerns with nuclear power, other new technologies will be getting more attention. Product safety and compliance engineering will overlap with green initiative. IEEE Smart Grid is just one area that will affect us. Many of these issues will develop into new careers for many engineers, managers and administrators. We can be at the leading edge for needed evolution in technology.

Communications – Dan Roman, our Communications VP, has done a masterful job with our website, our LinkedIn network, and Newsletter oversight. There are opportunities to provide him support—he needs assistants, one of whom can pick up his role when he moves on. Our website and LinkedIn need continuous support and development. Gary Weidner, our Newsletter editor can use assistance. We would like to build our Newsletter into a Magazine, having many more articles, news and ads than we currently have. We need technical and non-technical authors. We need editors and other support. This all ties into our need for society marketing. Lots of opportunities.

Our society can be a forum for developing communication skills. If you've never written a paper or article or made a chapter or conference presentation, you can build confidence and skill. It takes that first step. And we need you. Our profession is made up mostly of people in industry rather than academia. The academic career path mandates papers and presentations; industry is concerned with output and profit. Using your professional society to gain writing and speaking skills is an opportunity to add depth to your career. We also serve a global community, with opportunity to observe approaches from other regions as well as to represent your own culture and perspective.

We can probably continue to exist functioning as we have in the past. But this is mere survival. As PSES president, I want much more. I see my job as to provide you with the opportunities to make this a great IEEE society. I have spent a considerable amount of my time setting up and offering those opportunities, but that's all they are—opportunities. Member involvement and support is needed or many of the opportunities will go poof; simply missed opportunities that evaporate with time. Other opportunities will not benefit from your talents, and conversely you will not benefit from the missed achievement. Our society needs your abilities. To paraphrase, "Ask what your society can do for you, and also ask what you can do for your society." That's the opportunity. Don't let it go by.

Murlin Marks
President IEEE PSES

PSES Jobs Web Page

PSES has a web page for employers and job seeks at http://www.ieee-pses.org/jobs.html. Employers may post jobs seeking regulatory or compliance-related personnel free of charge. Job postings will remain on this web site for a period of 6 months but may be removed earlier by request of the employer.

Society members who are seeking jobs may list a description of the position they are seeking free of charge. A resume in PDF format may also be posted if desired. The listing will remain on this web site for 6 months, but the owner may submit a request to renew the listing every six months, indefinitely. It may be removed earlier by request.

See http://www.ieee-pses.org/jobs.html for posting policy and how to submit requests.

Advantages of Membership in the IEEE PSES

Makes you part of a community where you will:

- Network with technical experts at local events and industry conferences.
- Receive discounts on Society conferences and symposiums registration fees.
- Participate in education and career development.
- Address product safety engineering as an applied science.
- Have access to a virtual community forum for safety engineers and technical professionals.
- Promotion and coordination of Product Safety Engineering activities with multiple IEEE Societies.
- Provide outreach to interested engineers, students and professionals.
- Have access to Society Publications.

IEEE | PSES Product Safety Engineering Society

E-Mail List: http://www.ieee-pses.org/emc-pstc.html
Virtual Community: http://product-compliance.oc.ieee.org/
Symposium: http://psessymposium.org/

potential item the TC is pursuing is setting up instructional sessions for fire investigators to help educate them on product failure modes and how they may or may not contribute to fires. We are also working up ideas for using links and PSES paper abstracts to generate interest and contributions for the PSES and to elevate the FFATC's profile as a resource for forensics and failure analysis engineers.

- We welcome Jim Small of Kodiak Fire & Safety Consulting to our leadership group. Jim will be taking over the secretary role for our TC. We are looking for a few additional individuals to join our leadership group for this technical committee. Please contact Daren Slee at dslee@exponent.com if you are interested in contributing.

Past President's Report

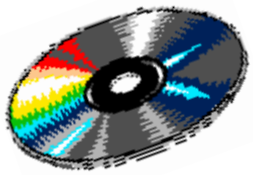
As required by the PSES Bylaws, we have formed an election committee consisting of Patricia Knudsen, Daniel Arnold, Jim Knighten, and Thomas Shefchick. Those interested in running for the PSES Board of Directors (BoD) need to let the committee know and provide all the required information by June 11, 2011. See page 15 for more details.

The IEEE has required all societies to rewrite their Field of Interest, also referred to as FOI, so that they are less than 75 words in length. Our FOI has been rewritten and approved by the PSES BoD. It now goes to the Technical Activities Board, where it will be voted on at the IEEE TAB (Techinical Activities Board) meeting in June. If they approve it, we will then post it in the newsletter for members to review and comment on.

The PSES had an Executive Committee planning meeting on Saturday February 26. On Sunday February 27 we had the first of three yearly BoD meetings. Once the meeting minutes are approved they will be posted on the society website.

Jim Bacher
Past President, IEEE PSES

Past IEEE-PSES Symposium Records



CD Purchasing Information

SYMPOSIUM PAPERS ON CD:

The Product Safety Engineering Society continues to offer past symposium records for sale on CDs. The cost for the CD is $35 plus shipping and handling for IEEE members; $50 plus shipping and handling for non-IEEE members. At this time, check or money orders are the means for payment. Please provide the following information:

CDs to be shipped to- (Please print or type.)

Name:_____

Mailing address::_____

_____

_____

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IEEE member number:_____

Shipping and handling: $5 per CD

Payment: Check or money order.

Make Check or money order to: “IEEE Product Safety Society”

Quantity: ____ x $35 = _____ for IEEE members
Quantity: ____ x $50 = _____ for non-IEEE members
Specify what years you would like (2004 through 2008 are currently avalible):

_____

S&H: QTY_____ x $5 = _____

Total = _____

Send payment to:

IEEE Product Safety Engineering Society
c/o Richard Georgerian, PSES Board of Directors
7103 Sioux Court
Longmont, CO 80504
U.S.A.

Depending on stock availability allow 2 to 3 weeks for delivery.

New PSES Members from 28 December 2010 Through 26 March 2011

Our new members are located in the following countries: Australia, Canada, China, Egypt, France, Germany, India, Iran, Iraq, Hong Kong, Italy, Nigeria, Pakistan, Singapore, Spain, USA and Vietnam.

A Sivathanu Pillai
Alain Thomas
Alan J Campbell
Ali Motakef
Ananth Narayana Pasupuleti
Aurelie Ann Worrell
Balasubramanian Pinnangudi
Bogdan M Wilamowski
Chi Fung Ho
Clement Hiel
David T Wong
Dean Busch
Dennis Chen
Devanathan V
Dieter Fasol
Eric Theriault
Eyefe Jimmy Palmer
Fatai Fashola
Fawzy M Elberembaly
Francisco J Belmonte
Franco Milan
Gary A Eldridge
Hossein Ravanbod
Jose A Corugedo
Ken Kapur
Larry Doriott
Lou Madjarov
Manju V
Maqbool Ahmad
Matthew Raia
Maurizio Orlandi
May Abdul Monem Salih
Nathaniel Salisbury Osborn
Nilesh Desai
Peerasan Supavatanakul
Philip Lemay
Raghav R Batni
Ray Kui-Jui Huang
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Rick Rogers
Robert J Vermillion
Roberto C Pasos
Ron Birrell
Ron Pickard
Safvan Madathil
Sean Vallieu
Shankar Muthukrishnan
Sheryl Ahlstrom Goodson
Srinivasan Iyer
Taorid Adedeji Ashiru
Terry T Osterbauer
Thomas J Kelly
Thomas M Dunavan
Vincent Obiajulu Ogwuagwu

Call for nominations for Directors-At-Large of the IEEE Product Safety Engineering Society

If you are looking to be recognized by your peers and want to make a difference in your profession, consider running for the Product Safety Engineering Society Board of directors.

This is a Call for Nominations for election to a position as Director-At-Large IEEE PSES (BoD) for the term of 2012 through 2014. We are specifically looking for PSES members in your IEEE Region to run for the IEEE PSES Board of Directors.

If you know of a good candidate, including yourself, who possesses leadership qualities, can get things done, and is looking for a challenge, please send an Intention to Nominate to a Nominations Committee member listed below. The Intention should list the candidate's name, contact information and a brief description of their abilities.

Directors-At-Large are your representatives to the Board of Directors of IEEE PSES. Terms of office are 3 years and the nominee must

- be a member of the IEEE and a member of the Society
- possess technical and professional stature in the Product Safety Engineering field
- have adequate financial resources, time to attend meetings, teleconferences and actively contribute in committee activities

If you are interested in applying for nomination for any of these positions, please contact the Nominations Committee with a three paragraph biographical summary by June 11, 2011.

First paragraph: Name, title, place of employment, educational background
Second paragraph: Technical and professional experience
Third paragraph: IEEE service and activities including officer, committees, etc.

Nominations Committee:

Dan Arnold at Daniel.Arnold@us.ul.com, or
Patricia Knudsen at Patricia.Knudsen@Teradata.com or
Jim Knighten at Jim.Knighten@Teradata.com or
Thomas Shefchick shefchick@att.net, or
Jim Bacher at j.bacher@ieee.org

For more details please review the society bylaws on our home page or contact anyone on the nominations committee.

The Product Safety Engineering Newsletter is published quarterly during the last month of each calendar quarter. The following deadlines are necessary in order to meet that schedule.

Closing dates for submitted articles:

1Q issue: February 1
2Q issue: May 1
3Q issue: August 1
4Q issue: November 1

Closing dates for news items:

1Q issue: February 15
2Q issue: May 15
3Q issue: August 15
4Q issue: November 15

Closing dates for advertising:

1Q issue: February 15
2Q issue: May 15
3Q issue: August 15
4Q issue: November 15

Have you finished your article for the newsletter yet?

Institutional Listings

We invite applications for Institutional Listings from firms interested in the product safety field. An Institutional Listing recognizes contributions to support publication of the IEEE Product Safety Engineering Newsletter. To place ad with us, please contact Jim Bacher at j.bacher@ieee.org

Tthe Product Safety Engineering Society will accept advertisements for employment and place looking for work ads on our web page. Please contact Dan Roman for details at dan.roman@ieee.org .

The
Product Safety Engineering Newsletter

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CHANGE SERVICE REQUESTED