

# **Madison Section Newsletter**

Vol. 19, No. 7 Serving IEEE Members of South Central Wisconsin

July 2016

## Upcoming Events

### August ECN Meeting



■ Thursday, August 4th, 11:45-1:00 PM

- Social/Professional Meeting
- Fee: Free
- Location: Sector67 2100 Winnebago Street Madison, WI
- Snacks and drinks are

available at Sector67

 Please Register at the IEEE-Madison event page.

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**Meeting:** This meeting will give you a chance to meet other ECN members socially and professionally. Be prepared to tell everyone what you do and are interested in.

### August IEEE Meeting "Engineers and Ethics"

- Thursday, August 4th, 5:00-7:00 PM
- Speaker: Steve Nelson, Von Briesen & Roper in Milwaukee, WI
- Fee: IEEE Member \$15, Non-Members \$25, Student Members Free.
- Location:

Pyle Center, Room 227 702 Langdon St Madison, Wisconsin United States 53706-1420

- Beverages and Appetizers are included in the Registration Fee
- Please Register at the IEEE-Madison event page.
- One Hour PDH credit toward PE certification in the Ethics Category will be given to those who attend.
- For PDH credit, be sure to include e-mail, IEEE #, and contact address on

registration.

**Meeting Talk:** "Engineers and Ethics: An Overview of Ethical Standards that Apply to Design Professionals" The talk will start with a review the ethical standards that apply to design professional and discuss their key points. It will then move on to examples of real life cases to help the attendees get a flavor of the many ethical issues that arise in the judicial system. Bring your attention and questions for an evening of learning.

**Speaker:** Steve Nelson is a Shareholder in the Litigation and Risk Management Practice Group at Von Briesen & Roper in Milwaukee, WI. Steve has extensive experience in litigation and concentrates his practice in commercial litigation including construction, professional liability defense, civil and business disputes, contracts and lease disputes, toxic tort, OSHA counseling and citation defense, personal injury defense, product liability, and Wisconsin fair dealership law. He has litigated on behalf of clients involved in complex construction matters including tunnel and sewer construction, building construction, highway construction and matters involving professional negligence.

### Section News

Review of June Events

June ECN Meeting: Ten people attended the meeting and discussed issues of importance to them.

Upcoming Meetings

August Meeting: Steve Nelson will give a talk suitable for the PE certification in the Ethics category.

The meeting is being held at the Pyle Center on Campus and is also slated for an evening time. Come at 5:00 to socialize and have appetizers. The talk begins at 5:30. Be sure to register with you correct contact information if you want PDH credit.

**August ECN Meeting:** Attend to meet other entrepreneurs and consultants in the IEEE and related organizations. The meeting is an opportunity for you to discuss your entrepreneurial ideas and to market your consultant skills. Come and hear what others are doing.

#### Volunteers Needed

**Micro Volunteers:** Do you have some time to spare to help IEEE-Madison Section? Perhaps you have a meeting topic that you would like to see us host and could find a speaker. Maybe you have time to call a few members who might have forgotten to renew their membership.

Please consider sending some time helping with the Section activities. Let me know (tjkaminski (at) ieee.org).

## Editorial by Tom Kaminski: "Cold Fusion Heats Up"

Over the past few years, we have had a joint UW-Student Branch/IEEE Section meeting and other discussions about the emerging technology abbreviated "LENR" that I like to think of as "Low Energy Nuclear Reactions", though others define it as "Lattice Enabled Nuclear Reactions". This is an emerging technology that has evolved from the work of Fleischmann and Pons. An interesting summary of the technology was presented by Louis F. DeChiaro, Ph.D, a physicist with the US Naval Sea Systems Command (NAVSEA), Dahlgren Warefare Center. The presentation was given at an IEEE Meeting on "LENR Phenomena and Potential Applications" held on Sept. 23 2015 at Teradyne in North Reading, Massachusetts. The slides can be viewed <a href="here">here</a>. The Naval group also recorded a talk discussing evidence that has been seen over 20 years and is posted in a youtube video <a href="here</a>. It is abundantly clear that there are nuclear reactions happening on a small scale. Why hasn't more US Government Research funding been applied to this area?

One of the more controversial inventors in this area is Andrea Rossi whose E-Cat (Energy Catalyzer) technology attains temperatures of over 1200C and has been reputed to exhibit coffecients of perfromance of over 50. Researchers in Russia, China, and Japan have partially duplicated the reactions. The combination of high COP and high temperatures implies that the technology could be used for electrical generation. Rossi was funded in part by Industrial Heat, an investment group out of Cherokee Investment Partners. They invested about \$10.5M dollars based in demonstration of technology by Rossi. The last demonstration, a 1-Megawatt Thermal plant producing 105 Degree Centigrade steam for one year was supposed to result in \$89M to Rossi, but IH did not pay, causing Rossi to sue in court in Florida. The suit will go to trial in June 2017. In the mean time, we must wait for details of the test. Since the suit, Rossi has demonstrated a "quark" that reached 1400C, emits blue light, and provides 100 watts of energy in a matchstick sized element, trading light, heat, and direct electrical production depending on how it is used. Is it fact or fiction? Read more about this continuing saga at the E-catworld site here.

# Regular Meetings

#### Section Meetings

The third Thursday of January through May, and September through December is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.

#### Life Member Affinity Group

The first Thursday of January, March, May, September and November is reserved for a meeting on a topic selected from a broad range including such areas as technology, science, history, culture and leisure.

#### IEEE-MSN-ECN Networking Meetings

- Purpose: Presentations, Discussions, networking
- Date: First Thursday of even-numbered months
- Time: 11:45 AM to 1:00 PM
- Location: Sector67, 2100 Winnebago Street (East Side of Madison)
- Parking: Park in lot or on Winnebago Street.
- Process: Members are encouraged to make introductions, describe endeavors, and make request for: contacts in target companies, needs, resources.
- Contact: For assistance, call Tim Chapman 2 0 6 2 5 7 0

# Membership Upgrades

Those interested in upgrading their IEEE membership level should send their resumes or other information

showing five years of significant performance in an IEEE-designated field to Charles J Gervasi via email at cj(at)cgervasi.com. Madison Section Board will attempt to find Senior IEEE members knowledgeable in the applicant's area of practice who may be able to provide references. You are invited to attend the informal networking portion of the monthly Section meetings (starting at 11:30am) to meet the Section Board members and discuss intentions.

## About IEEE



The Institute of Electrical and Electronics Engineers or IEEE (read Eye-Triple-E) is an international non-profit, professional organization dedicated to advancing technology innovation and excellence for the betterment of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities. It has the most members of any technical professional organization in the world, with more than 300,000 members in around 150 countries. The IEEE consists of 38 societies, organized around specialized technical fields, with more than 300 local organizations that hold regular meetings. Discover what IEEE

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#### IEEE.ORG.

## Madison IEEE Section

The IEEE-Madison Section of the IEEE is a section in Region 4 of the IEEE-USA organized to serve IEEE members in the Madison, WI area with over 600 members. The 2016 Officers and Board Members are Charles Gervasi - Chair, Matthew Bartlett - Vice Chair, Tom Kaminski - Treasurer, Steve Schultheis - Secretary, Timothy Chapman - Webmaster, Tom Kaminski - ECN Chair, Dennis Bahr - Engineering in Medicine and Biology Chapter Chair, Ann E. Thompson - Educational Activities Chair, Charles Cowie - Life Member Affinity Group Chair, Chuck Kime - Life Member Affinity Group Vice Chair, Scott Olsen - Membership Development Chair, Members at Large: Mitch Bradt, Clark Johnson, Craig Heilman, Dennis Bahr, Sandy Rotter.

## Job Openings

Check out <u>WIEES.com</u> for electrical engineering jobs in Madison and the surrounding region. This site is maintained as a service for electrical engineers. Jobs are displayed starting with the most recent postings first. You can filter results by location and job type. If you are hiring an electrical engineer in our area, for full-time or contract work, you can post the job in the *Contact Us* section on the WIEES.com site. Here is a sampling of the new job listings:

- Senior Electrical Engineer, Madison
- Senior Project Engineer Hardware Engineering, Milwaukee

# Sponsored Content



Michel Mardigan, principal author of Controlling Radiated Emissions by Design, will be joining Donald L. Sweeney and staff in teaching the October 4-6, 2016 EMC By Your Design seminar in Northbrook, Illinois. The instructors have more than 100 years of combined EMC experience. Michel, an IEEE Senior Member, has worked as an EMC Specialist for IBM and was the French delegate to the CISPR Working Group, which became CISPR 22, the root document for FCC 15-J and European EN55022. Michel has taught EMC seminars in the U.S. and worldwide to thousands of engineers and currently is a private consultant in France. He has written numerous books and papers on EMC. A major project he was involved with was the EMC for the English Channel Tunnel. EMC By Your Design is a practical applications seminar and workshop consisting of lectures,

discussions, a hands-on-workshop, a large notebook of slides, take-home proprietary EMC design software, and individual design evaluations of your product. You will also receive an autographed textbook, Controlling Radiated Emissions by Design by Michel, with contributions by the D.L.S. teaching team.

For more information, see <u>DLS</u> or call 847-537-6400.

## Contact Us

The IEEE-Madison Section has a number of volunteer positions open if you are interested in helping out. Please direct any questions or comments to Tom Kaminski (Newsletter Editor) via email to tjkaminski(at)ieee.org.

The IEEE Madison Section Newsletter Published 9 times per year (Jan-May, Sep-Dec) by the Madison, Wisconsin Section of the Institute of Electrical and Electronic Engineers (IEEE), for its members in South-Central Wisconsin. Online at http://ieee-msn.truenym.net/ For address changes: notify IEEE headquarters at: http://www.ieee.org/ or address-change@ieee.org. Editorial or comments contact: Tom Kaminski . Permission to copy without fee all or part of any material without copyright notice is granted provided the copies are not made or distributed for direct communication advantage, and title of the

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