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### Vol. 14, No. 2 Serving IEEE Members of South Central Wisconsin February 2011 Tesla Coil Design and Construction ... live demo!! Date: February17, 2011 12:00pm to 02:00pm Time: Speaker: Dennis E. Bahr, P.E. Agenda: Informal networking will begin at 11:30am. Mr. Bahr's presentation will begin at 12:00 noon. WISCONSIN Location: University of Wisconsin, Madison Мар 1610 Engineering Hall (Take North Randall Street to Engineering Drive to Parking Lot 17) Menu: Pizza buffet, salad, and pop will be available: \$5 for IEEE members, \$10 for non-members. RSVP: by February 14 to Charles Gervasi (cj@cgervasi.com). Register online at: http://meetings.vtools.ieee.org/meeting view/list meeting/5145 Non-member guests are always welcome! Abstract We will explore the history, theory and practice of Tesla coils, and experience emissions from a relatively good-sized coil. Come review, or learn about: Mr. Tesla, capacitance/inductance curves/relationships, basic coil theory and its inductance/resonance properties, tuned circuits and frequency splitting. You'll also see: scope outputs, an interactive Tesla coil circuit diagram, and a look at all the major the coil components. Of course, we'll review safety guidelines before we give the live demo on Dennis' hand-built unit. Fun, food, and learning for all. Biography Dennis Bahr is the founder and president of Bahr Management, Inc., a company that develops and helps bring to market innovative medical devices for use in the cardiovascular, trauma, life support, and surgical markets. He also spends time doing research, such as designing new technologies, developing new mathematical algorithms, and doing computer based modeling. Dennis enjoys being involved with Science, especially developing new ideas and theories. One great enjoyment is developing new mathematical methods and algorithms to solve complex problems that people have said couldn't be solved. In fact, he enjoys science so much that he built a laboratory in his home. Mr. Bahr is also currently a doctoral candidate at the University. IEEE Entrepreneurs & Consultants Network (ECN), Madison Section - Networking Meeting Date: February 3, 2011 Time: 11:30am to 1:00pm Purpose: Special Topic: iPhone and iPad Development Experiences. Agenda: Informal networking will begin at 11:30am. Lunch provided by the IEEE. The presentation will begin at 12:00 noon. Location: Madison Area Technical College (MATC West Campus) 302 S. Gammon Road (Across from West Towne Mall) Madison Area Technical College Madison, WI 53717 ... Telephone: 608-246-6100 Parking: TBD. Process: Members are encouraged to make introductions, describe endeavors, and make request for: contacts in target companies, needs, resources. Bring your elevator speech and rolodex! RSVP: Tim Chapman (PrettyGoodGUIs@TrueNym.NET)



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### Monthly Section Meetings

The third Thursday of Jan.-May and Sep.-Dec. is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.

### Section Meeting Schedule for 2011 (schedule subject to change)



(*past*) **January 19**, Wind Turbine Generators.

*(past)* **January 20,** Capitol Heat & Power Plant Rebuild Project.

**February 17**, Tesla Coil Design and Construction ... live demo!!

March 17, TBD

April 21, TBD

May 19, TBD

August 18, TBD

September 15, TBD

October 20, TBD

November 17, TBD

December 15, TBD

## Monthly Networking Meetings

The first Thursday of every month is reserved for a meeting to provide networking opportunities for members who are consultants or entrepreneurs. Bring your elevator speech and rolodex!

### **Networking Meeting Schedule for 2011**

(schedule subject to change)

**February 3**, iPhone and iPad Development Experiences.

April 7, IEEE Tools for Self Promotion.

June 2, SBIR Process and Panel.

August 4, Working on the Network.

October 6, Telepresence.

December 1, TBD.



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### Section Notes

We encourage our Section members to bring guests to our monthly meetings. We also ask that Section members to consider suggesting becoming a member of the IEEE to their colleagues. Our section is one of roughly a dozen who have celebrated 100 years of continued service to IEEE members. We are proud of our service to the Engineering community of Southern Wisconsin, and invite engineering professionals in our area to any and all of our events!

Our Section runs on the generosity of our members in the donation of their time, skills and efforts. We invite anyone in our Section to consider becoming a Section Officer in 2012. Please send your thoughts and considerations about possibly serving on the Board of Directors for our section to this year's chairman: David Marca, <u>dmarca@openprocess.com</u>. Thank you!









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## **IEEE Membership Level 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 (ci@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.

### **Board Members**

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### 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/

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For more information, contact Mitch Bradt at 608-263-1085 or bradt@wisc.edu.

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