



# IEEE

# MADISON SECTION NEWSLETTER

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*SERVING IEEE MEMBERS OF SOUTH CENTRAL WISCONSIN*

**NOVEMBER 2007**

## MATC Solar Collector Testing & Renewable Energy Education Programs

- Date/Time:** Thursday, November 15, 2007, 11:45 - 1:00 PM  
**Speaker:** Tom Kaminski, and Ken Walz  
**Location:** MATC Truax Campus, Room 67 at the North End of the Center Wing (see parking permit online at <[http://www.bugsoft.com/ieee/image/Solar\\_Parking\\_Map.pdf](http://www.bugsoft.com/ieee/image/Solar_Parking_Map.pdf)> for details - you must print this permit to park!)  
**Menu:** "Build your own lunch" Deluxe Deli Sandwich Bar, cookies & soft drinks catered by MATC (cost \$10.00, free for student members)  
**RSVP:** by November 12th to Les Schroeder via e-mail ([l.schroeder@ieee.org](mailto:l.schroeder@ieee.org)) or call 608.224.0664



*Non-member guests are always welcome!*

Tom Kaminski, and Ken Walz will present a short program at MATC on Solar Collector testing and Renewable Energy Education programs. Ken Walz worked with the Consortium for Education in Renewable Energy Technologies (CERET <<http://ceret.us/ceret>>) established in part by a \$500,000 National Science Foundation grant. Through CERET, MATC has developed a Renewable Energy Technology Certificate designed to give people interested in renewable energy a solid overview. All the courses are available online.

Tom Kaminski, an IEEE member since 1972, will talk about the Solar Thermal Collector testing program at MATC funded, in part, by a Wisconsin Focus on Energy grant to MATC and the Solar Lab at UW-Madison College of Engineering. The testing program developed a testing facility to test solar hot water collectors in Northern climates using ASHRAE 93 test methods in use at the Solar Ratings and Certification Corporation in Florida. In addition to testing solar collector performance, the grant developed new test methodologies that promise accelerated testing and testing in other than full sun conditions. A tour of MATC's solar test facility and other renewable energy sites (biodiesel, for example) will be available to those interested after the meeting.

## An Unfair Start in Life: Why Pollution Matters for Child Development

- Date/Time:** Thursday, December 20, 2007, 11:45 - 1:00 PM  
**Speaker:** Colleen F. Moore, Professor of Psychology at the University of Wisconsin-Madison  
**Location:** Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at Mineral Pt. Rd.), 608.829.1444  
**Menu:** Pizza buffet, salad and soft drinks (cost \$10.00, free for student members)  
**RSVP:** by December 17th to Les Schroeder via e-mail ([l.schroeder@ieee.org](mailto:l.schroeder@ieee.org)) or call 608.224.0664

*Non-member guests are always welcome!*

Pollution has negative effects on behavioral development. Most pollutants are inequitably distributed in society. I will talk about the behavioral health impacts of exposure to two pollutants: lead (Pb) and noise. There are social inequities in exposure to both of these pollutants. Because exposure to multiple risk factors yields a higher than expected chance of a child developing special needs, environmental inequities are a concern. Finally, I will briefly describe how government policies are failing to address the socio-economic and racial/ethnic disparities in exposure to both noise and lead. In addition, I will describe the risk assessment used by the Consumer Product Safety Commission to decide on cutoffs for lead in children's crayons. I will describe the judgment calls and subjective values embedded in the risk assessment.

Colleen F. Moore is Professor of Psychology at the University of Wisconsin-Madison, where she has been a member of the faculty since 1978. She received her Ph.D. from the University of Illinois at Champaign-Urbana in Psychology, with emphasis on Developmental Psychology and a minor in quantitative research methods. She currently teaches graduate courses in the design of psychological experiments and developmental psychology. She has been teaching an undergraduate course on the Psychology of Environmental Issues for 10 years. Her research currently addresses several topics including prenatal influences on later behavior (in collaboration with Prof. Mary Schneider), and how environmental attitudes are related to risk perceptions, ethical reasoning, and other aspects of judgment and decision making.



## Upcoming 2007 Short Courses for Engineers and Other Technical Professionals

- **Basic Telephony and Digital Switching**  
*November 6–9, 2007 in Madison, WI*
- **Understanding and Troubleshooting VoIP Networks**  
*November 12–13, 2007 in Madison, WI*
- **The Engineer in Transition to Management**  
*February 5–7, 2008 in Las Vegas, NV*
- **Introduction to Planning and Designing Fiber to the Premises**  
*February 6–7, 2008 in Las Vegas, NV*
- **Electrical Grounding of Communications Systems**  
*March 3–5, 2008 in Las Vegas, NV*
- **DC Power System Design for Telecommunications**  
*March 4–6, 2008 in Las Vegas, NV*

For further information...

Web: [epd.engr.wisc.edu](http://epd.engr.wisc.edu) or E-mail: [danbeck@engr.wisc.edu](mailto:danbeck@engr.wisc.edu)  
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## "How Engineers Make a World of Difference" Video Competition

WASHINGTON (11 October 2007) — IEEE-USA is launching an online engineering video competition for undergraduate engineering students on "How Engineers Make a World of Difference," and will award seven scholarship prizes totaling \$10,000 to the undergraduate students who create the most effective 90-second video clips aimed at an 11-to-13-year-old student audience. The clips should reinforce engineers' contributions to the quality of life and help debunk engineering stereotypes. In addition to the scholarship prizes, winning entries will be shown during National Engineers Week 2008 and displayed on IEEE.tv and SPECTRUM Online.

The competition is open to all U.S. undergraduate students in engineering. Entries can be provided by individuals or teams -- with at least one undergraduate participant who is an IEEE Student Member. More than one video entry is allowed. Entries must be submitted through YouTube by midnight Eastern Time on Friday, 18 January 2008. The competition will be judged by two engineering graduate students and Nate Ball, engineer-host for PBS' "Design Squad."

For more information on how to enter the IEEE-USA Online Engineering Video Scholarship Competition, and upload an entry on YouTube, go to [http://www.ieeeusa.org/communications/video\\_competition/](http://www.ieeeusa.org/communications/video_competition/)

IEEE-USA has been actively involved in promoting public awareness of engineers and engineering since 1981. Working in tandem with its sister organizations, IEEE-USA has helped to foster and maintain a positive image of engineers and engineering through a variety of programs aimed at specific audiences using targeted media.

For more information on IEEE-USA's public-awareness program, see <http://www.ieeeusa.org/communications/default.asp>

IEEE-USA advances the public good and promotes the careers and public-policy interests of more than 215,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 370,000 members in 160 countries. See <http://www.ieeeusa.org>

CONTACT: Pender M. McCarter, IEEE-USA Senior PR Counselor, +1 202 530 8353

## New 3-Meter Chamber

For immediate release

D.L.S. Electronic Systems, Inc. has added a new fully-automated, state-of-the-art, semi anechoic 3-meter chamber to its Wheeling, IL testing facility. This chamber, listed with the FCC, allows for a streamlined measurement process, at frequencies that exceed 1 GHz. More products currently have clock/crystal frequencies >108 MHz, and the FCC requires these frequencies to be tested beyond the former 1 GHz limit. D.L.S. offers global compliance programs for EMC and Product Safety, providing a one-stop shop. More information can be found at [www.dlsemc.com](http://www.dlsemc.com).



## IEEE Madison Section Elections

At the December 2007 monthly meeting, the IEEE Madison Section will conduct its annual officer elections prior to the technical presentation. The positions include chair, vice-chair, secretary, treasurer, and multiple member-at-large positions. Job descriptions can be found online at <[http://www.ieee.org/web/geo\\_activities/rab/scs/Resources/Officer\\_Training/job-desc.html](http://www.ieee.org/web/geo_activities/rab/scs/Resources/Officer_Training/job-desc.html)>. Nominations may be made by telephone or via e-mail to the Chair (263-1085, [mmbradt@ieee.org](mailto:mmbradt@ieee.org)). Additional candidate nominations are welcome and encouraged for all positions.

*Your help is needed!*

*Remember that this is a volunteer organization. Being an officer does not require a large time commitment but some of us are ready to retire after many years of service!*

The nominations to date include:

Chair: Ken Hartman  
Vice-Chair: Dennis Bahr  
Secretary: Frederick Baguhn  
Treasurer: Mitchell Bradt  
Mem. at Large: Clark Johnson  
Mem. at Large: Sandy Rotter



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