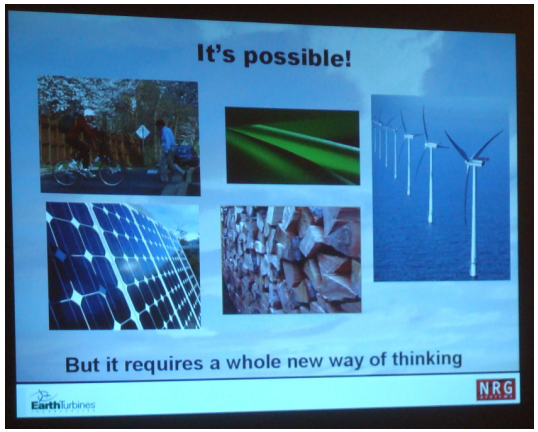
Green Mountain Section Technical Community Newsletter

In this issue, Pascal Nsame, section Vice-Chair reports on the IEEE Green Mountain section activities in 2008. Give him feedback at pnsame@us.ibm.com
http://www.ewh.ieee.org/r1/vermont/

PROFESSIONAL ACTIVITIES

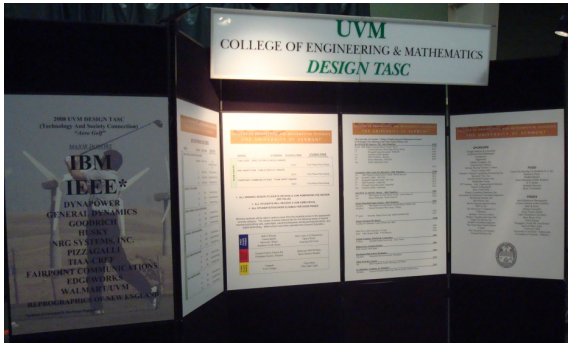
The Green Mountain section of IEEE held a general meeting on Monday, December 8th from 6:00 to 9:00pm at the Inn at Essex, VT. IEEE members and the general public were invited to attend. Topics included key electricity and natural gas issues and their role in Vermont's energy future. Specific areas of discussion included Vermont Yankee Nuclear Plant, Hydro-Quebec electricity supply options, natural gas supply and cost outlook, the role of renewable energy and energy efficiency, the state's Energy plan, legislative proposal, and the results of public meetings held in 2008 on Vermont's energy future.

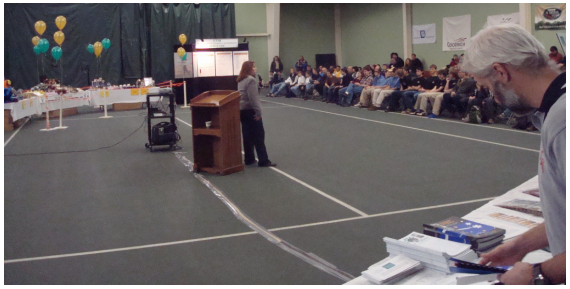


This meeting included a panel discussion of energy issues facing Vermont. Panel members will include David Blittensdorf from NRG, a major supplier of wind measurement systems from Hinesburg, VT. Other panel members included senior managers from Vermont Gas Systems and Green Mountain Power. Gene Shlatz, IEEE Green Mountain Section Chair and PE with Navigant Consulting moderated the panel discussion.

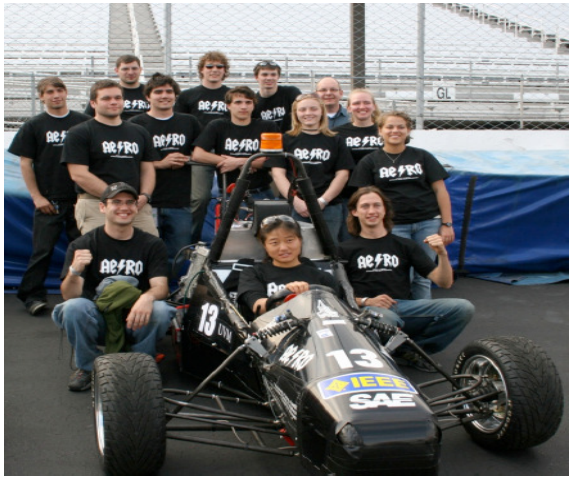
STEM ACTIVITIES

During the Fall of 2008, the Green Mountain section of IEEE sponsored an annual competition designed to give teams of high school students the challenge and satisfaction of designing, building, and testing a device to perform a specified task. The program begins in September and culminates in December with schools bringing teams (maximum of five students per team) to UVM to display created devices. This year, teams were invited to design and build a puttbot engineered to maneuver over the available courses by remote control using power drawn only from the wind. Courses included: an uphill course, a chutes & ladders course, and a driving range.





The program is designed to help teachers encourage high school students to use their knowledge of physics and mathematics in a tangible way. The competition features many different aspects that appear in the high school curricula: including physical principles such as, work, energy, efficiency, pressure, friction, and inertia; mathematical principles such as functions, minima, maxima, and logarithms; oral and written communication skills; and drawing skills. Teams who carefully consider all of these aspects of the problem, who look at possible trade-offs in the design, and who thoroughly test the apparatus have the greatest chance for success. Teamwork is a critical factor in determining success. See the following URL for additional details on the winning teams:
http://www.ewh.ieee.org/r1/vermont/2008TASCAwards.doc.pdf



During the summer of 2008, the Green Mountain section of IEEE sponsored a student chapter team to participate in the International Formula Hybrid competition to be held each spring. In this photo: Students from the University of Vermont Alternative Energy Racing Organization stand with "GreenSpeed," a formula gas-electric hybrid race car at the 2008 Formula Hybrid competition in Loudon, NH. GreenSpeed, took home four awards from the 2008 competition including: "Best Hybrid in Progress", Chrysler's "Best Hybrid Systems Engineering", Dartmouth's Thayer School of Engineering Dean's award for "Most Innovative Design", and 2nd place overall in the technical design category. Presently, the team is working on fine tuning, testing, debugging, and improving GreenSpeed to win the dynamic events in the 2009 race. Among the universities at the International Formula Hybrid Competition, May 5-7, were Tufts University, Yale University, Illinois Institute of Technology, Florida Institute of Technology, McGill University, Dartmouth College, California Polytechnic State University, and National Chiao Tung University from Taiwan.

TECHNICAL VITALITY

The Green Mountain section of IEEE organized in addition to regular technical meetings, the 17th IEEE North Atlantic Test Workshop. This event provides a forum for discussions on the latest issues relating to high quality, economical, and efficient testing methodologies and designs. With the increasing complexity in both design and test of integrated circuits and systems, the 2008 NATW featured the dual themes: *"Breaking Testing Barriers"* and *"Women in Test"* with special presentations and a panel session dedicated to Women in Test. The workshop also included a Special Session organized by the Vermont chapter of the Solid State Circuits Society. See the following URL for additional details: http://www.eng.auburn.edu/~strouce/NATW2008.html

MEMBERSHIP UPDATE

Are you interested in becoming an IEEE Member, Senior Member or Fellow? Contact **Vikram Iyengar,** Gold Chair/Membership Development, vikrami@us.ibm.com

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