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Membership Renewal Time

It's time to renew your IEEE membership for 2005, visit <http://iee.org/renewal>

IEEE Election Results

Michael Lightner Wins President-Elect Race

IEEE Fellow Michael Lightner is the 2005 IEEE President-Elect. He will succeed 2005 President W. Cleon Anderson on 1 January 2006. Lightner is a professor at the University of Colorado, Boulder, USA, the current IEEE Vice President of Publication Services and Products, and a member of the IEEE Board of Directors.

Loretta J. Arellano won election for Region 6 (our region) Director-elect.

For more information, and complete results of the IEEE annual election, please visit: <http://www.ieee.org/newsinfo/elections04.xml>

IEEE-USA Election Results

The results of the IEEE's 2004 annual election have been tallied, and U.S. IEEE members have elected Ralph W.

Wyndrum, Jr., to serve as IEEE-USA President in 2006. Wyndrum, who enjoyed a successful 36-year career at AT&T and Bell Labs, currently leads Wyndrum Associates-Executive Consultants, consulting in the areas of R&D resource allocation and decision sciences targeted at new product service development. He also serves as business development director for SmartOrg, Inc., a start-up firm based in Menlo Park, Calif.; and he teaches a seminar on leadership, decision quality and strategic planning at Rutgers University. Wyndrum is a long-time IEEE volunteer and has held numerous IEEE-USA offices. For the past two years he has served as IEEE-USA's vice president for Technology Policy Activities. For more information on Wyndrum, visit: <http://www.wyndrum.com/election/>

Wyndrum will assume the role of president-elect on 1 January 2005, and will work with 2005 President Gerard A. Alphonse and current President John W. Steadman.

The IEEE's U.S. members also selected James M. Howard to serve as IEEE-USA Member-at-Large, 2005-2006. Howard, an electrical engineer with Lakeland Electric, a municipal electric company in Lakeland, Fla., will also take office on 1 January 2005.

Congratulations and good luck to our new officers! And thanks to our outgoing officers for their dedicated service to IEEE-USA!

Please note that these election results, as certified by the IEEE Tellers Committee, are unofficial until the IEEE Board of Directors accepts the Report of the IEEE Tellers Committee at its 21 Nov. meeting.

Oregon Section November/December Meetings

For latest meeting details see <http://www.ieee-or.org/events/>

- **Power Engineering (PES) Chapter**

PGE's 400 MW West ward Gas fired power plant
Mr. Jaison Mody, Manager, Engineer & Construction
Tuesday, November 16, 2004
12:30-1:30PM (bring your lunch)
Lloyd 700 Building, 700 NE Multnomah
Third floor meeting Rooms A&B

- **Electromagnetic Compatibility (EMC) Chapter**

Electrophobia, or Why are People Really Scared of Electromagnetic Fields

Elya B. Joffe, VP for Engineering in K.T.M. Project Engineering, Kfar-Sava, Israel.
Wednesday November 17, 2004

6:00pm - 8:30pm

University of Portland Engineering Hall 301 (see building #22 on the Campus Map), 5000 Willamette Blvd. Portland, OR.

- **Professional Activities Committee (PACE)**

Nanoscience and Microtechnologies in Oregon
Robert D. "Skip" Rung, Executive Director
Oregon Nanoscience and Microtechnologies Institute (ONAMI)

Tuesday, November 23, 2004

6:30 PM - 8:00 PM

Doors open 6:00PM

Oregon Graduate Institute(OGI), Wilson Center Main Dining Room

- **Components, Packaging, and Manufacturing Technology (CPMT) Chapter**

Planting the Seeds of the Silicon Forest
Industry pioneer, Doug Strain
Thursday, 2nd December, 2004.

6.30 p.m. Pizza and Refreshments

7:00 p.m. talk.

Room FAB-150, Fourth Avenue Building, Portland State University*

- **Engineering in Medicine & Biology (EMBS) Chapter**

"Wireless Technology for Implantable Devices"
Volker Lang, PhD, Senior Director at Micro Systems Engineering Inc., Lake Oswego, OR
Tuesday, December 7, 2004

6:00 PM - Social. Pizza & soft drinks provided.

6:30 PM – Meeting begins

Room 329 in the Smith Memorial Student Union on the campus of Portland State University.

John Vinson Receives IEEE 2004 Community Service Award

By Ed Perkins

John Vinson, Oregon Section Pre-College Activities and Education Chair, has received the 2004 Community Service Award from the IEEE Region 6 Northwest Area. John was nominated by the Section for his exceptional dedication to IEEE Pre-College activities and the recognition of talented students in science and engineering.

John Vinson has been active in Pre-college events for approximately 15 years. He has served as the Oregon Section's Pre-college Affairs Chair for over 10 years. He represents the Section at many of the science fair events in the area, and also participates in Engineer's Week as time permits.

John has volunteered his time as a judge for Science Olympics, Mathcounts, Odyssey of the Mind, and the Northwest Science and Engineering Fair (NWSE) and several of its feeder contests, notably the Oregon Episcopal School (OES) science fair. At NWSE each year, John represents the Oregon Section as a special awards participant. He recruits the team of IEEE volunteer judges, specifies the set of IEEE awards, organizes and manages the judging process, creates certificates, plaques, t-shirts as needed for the award winners, and attends the awards ceremony to present the awards.

John became involved in the 1990's when his son was a student at OES and they needed volunteers to help. He has been involved with Portland State University's Engineering Day program which showcases science projects for high school students, such as the egg drop and micromouse. He participates in these activities with great enthusiasm, and tireless dedication. He also maintains contact with science teachers in the Portland and Scappoose public schools.

In 2002 Oregon was selected as the host for the 2004 International Intel Science and Engineering Fair (ISEF). IEEE is a Special Awards sponsor of ISEF and John was appointed by the Section as IEEE Head Judge. He traveled to Cleveland in 2003 for ISEF to participate as an IEEE special awards judge. This year he organized and managed the judging process at ISEF for the IEEE President's Award, the second and third awards, and honorable mention, plus 10 Regional IEEE awards. He declared that the \$500 second prize typically given out was too tiny and challenged the Section to raise funds to provide a real second prize equal to \$5000, half the IEEE

President's Award \$10,000 prize, plus a \$2500 third prize. The Section agreed to put up \$2500 and we sent a call out to the Section, the Region and the NW Area. Seattle answered with a match of \$2500 and we received \$2500 from Sharp Labs, and \$250 from Meridian Group.

The award money we raised was the largest amount by a Section for ISEF. In addition our Region 6 Director, Evelyn Hirt, raised \$500 for 10 Regional Awards. The Section supported John's efforts by volunteering judges and contacting the Region and other IEEE contacts for volunteer judges. We ended up with 8 local judges and 4 Region judges for the ISEF last May. IEEE President-elect W. Cleon Anderson presented the IEEE awards at the ISEF ceremony May 13.

"Magazine Journey" IEEE Program under Development

The Oregon Section is investigating ways for members to donate their old technical magazine(s) to your favorite school or library during hard economical budget cuts. More information will be coming soon. Contact John Vinson if you have any questions or comments.

Electronics Recycling Day at Intel

On Saturday, Dec. 4 from 10 AM to 2 PM, Intel will be collecting e-waste at its Hawthorn Farm site, located at 5200 Elam Young Parkway. A \$10 fee will be charged per monitor/TV to cover the cost of safely recycling. All material collected will be safely recycled through the Oregon StRUT program, or through Intel Corp.'s recycling vendor Onyx. Contact Perry L. Gruber at Intel if you have any questions - perry.l.gruber@intel.com.

Improving Exports Could Help EE Employment, IEEE-USA Webzine Says

The U.S. Department of Commerce (DOC) is working to help technology companies increase their exports, which could in turn open more employment doors for engineers and other workers, according to a recent article in the IEEE-USA Today's Engineer monthly Webzine.

"There's really a huge untapped market," said Neal Burnham, deputy assistant secretary of U.S. Commercial Services. "We estimate that 95 percent of the market for small companies is outside the United States."

The DOC's Commercial Services program includes exhibits by 39 government agencies that attend nearly three dozen major trade shows around the country. The agencies are putting a significant focus on China, where significant growth is expected. "It's a very dynamic place where they need a lot of things," Burnham said.

DOC officials note that companies increasing their exports usually increase their employee counts. That's a big positive in electronics, which continues to see shrinkage in employment despite signs of an economic up tick. A key benefit of the government efforts is that many services are free, while others have lower costs than similar services provided by companies in foreign countries, according to IEEE-USA Today's Engineer.

The entire article is available at <http://www.todaysengineer.org/July04/exports.asp>.

IEEE Organizing Global Pre-College Technology Education Program

Continuing in its tradition of innovation, IEEE is taking the lead in developing a new non-discriminatory global pre-college technology education program. The program titled, emeritbadges.org, will be directed globally towards pre-college boys and girls.

[Emeritbadges.org](http://emeritbadges.org) has developed hands-on electricity and electronics instructional material based on the Boy Scouts merit badge requirements. Instructional material for computer education is being developed. Any student, boy or girl can use the program to enhance technical literacy and learn more about viable engineering and other technical career options.

[Emeritbadges.org](http://emeritbadges.org) Project Director Ralph W. Russell, II from the IEEE Richmond, VA Section said that this non-discriminatory program would be promoted globally through IEEE and youth programs such as World Organization of the Scout Movement and The World Association of Girl Guides and Girl Scouts. The next use of the new global pre-college electronics education material and hands-on kit will be at the 2005 National Scout Jamboree in Caroline County, VA, USA. Over 35,000 scouts will attend the Jamboree from the USA and several other countries.

Project leaders have started discussions with national and regional Girl Scout leaders to develop a method of incorporating the emeritbadges.org program into the Girl Scout program. The next step will be to start discussions with the global World Organization of the Scout

Movement and The World Association of Girl Guides and Girl Scouts.

The 2005 Jamboree will be held at Fort A. P. Hill in Caroline, Virginia. The Jamboree will start on Monday, 25 July 2002 and end on Wednesday, 3 August 2005. Hundreds of volunteers that can serve as Assistant Instructors at the Jamboree Electronics Merit Badge booth for at least two days are needed. Additional project and volunteer information can be found at <http://www.emeritbadges.org>.

IEEE News Briefs

- **NEURAL NETWORKS SOCIETY CHANGES NAME TO COMPUTATIONAL INTELLIGENCE SOCIETY**

The IEEE Computational Intelligence Society is the new name for the former IEEE Neural Networks Society. The new name will be listed on the 2005 membership renewals.

For complete information on the IEEE Computational Intelligence Society, visit their website at <http://www.ieee-cis.org>.

- **IEEE FOUNDATION GRANTS SUPPORT ENGINEERS AROUND THE WORLD**

Some of the important functions of the IEEE Foundation are to bring the exhilaration of scientific discovery to young students, foster technological innovation, preserve history, and promote public awareness of the long-reaching effects of engineering.

At its June 2004 meeting, the IEEE Foundation Board of Directors awarded US\$36,950 in new grants to projects that will

- * develop a continuing education resource kit in bioinformatics for engineers worldwide;
- * provide resources and learning tools to Student Branch leaders in Latin America; and
- * bring Internet access to engineers and engineering students in Nigeria.

To learn more about these and the other grants the IEEE Foundation awarded in 2004, go to <http://www.ieee.org/organizations/foundation/html/2004grants.html>

- **CALL FOR FELLOW NOMINATIONS**

Nominations are being accepted for the 2006 class of IEEE Fellows. For the second year, nominations, references and endorsements may be submitted electronically. The deadline is 1 March 2005.

At its June 2003 meeting, the IEEE Board of Directors approved changes to the process for nominating and electing IEEE members to Fellow grade. The change established a new nomination category for individual contributions, with the goal of increasing nominations for members in industry and encouraging nominations of application engineers or engineering practitioners who have made contributions of unusual distinction to the profession.

The board also established a Fellow Nomination Resource Center to help nominators locate the required number of references to support a nomination.

To nominate an IEEE senior member or to learn more about the Fellow program, visit www.ieee.org/fellows

Note: The Oregon Section Member Upgrade Chair, Jim Rooks, is available to assist anyone with the process.

- **Standard Unveiled for Motor Vehicle Black Box**

So-called black boxes have been so reliable at gathering critical data from plane crashes that the devices have found their way, with little or no fanfare, into millions of cars and trucks. And in September, IEEE Standard 1616 was completed for black boxes or, as they are known more formally, motor vehicle event data recorders. This is the equipment that collects, records, stores, and has ready for readout data about a vehicle's operation. Find out more at

<<http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.fblackbox.html>>

- **Vijay Bhargava Recognized by Royal Society of Canada**

When IEEE Fellow Vijay Bhargava journeyed from his native India to Canada as an 18-year-old to study engineering at Queens University in Kingston, Ont., he had no intention of staying in North America. But 38 years later, he's still there. He's become a renowned educator and wireless technology pioneer. Recently, Bhargava's adopted country recognized his contributions to wireless technology by presenting him with the Royal

Society of Canada's Thomas W. Eadie Medal. Read more at
<<http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.profilebhargava.html>>

- **IEEE Upgrades E-Mail Alias Spam Filter**

Members who use the IEEE's personal e-mail alias service now have a tighter filter against spam. The filter allows users to create lists of e-mail addresses and domains from which they never want to receive mail (the black list), and addresses from friends and business associates (the white list) whose mail will always come through. Read more at
<<http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.prodspam.html>>

- **Marketplace of Ideas: A Technology Crystal Ball**

For its 40th-anniversary issue in November, IEEE Spectrum editors looked at 10 soon-to-be-hot start-ups, analyzed electrical engineering's identity crisis, and sized up the magazine's past technology predictions to see which hit the bull's-eye and which missed the mark. In addition, a host of engineering pioneers, executives, and other luminaries were asked what new technologies they expected to see play important roles in the next 40 years. What important innovations do you think we'll see in the next four decades? Weigh in at
<<mailto:institute@ieee.org>>

Read the luminaries' answers at
<<http://www.spectrum.ieee.org/WEBONLY/publicfeature/nov04/1104lumi.html>>

- **Member Digital Library Offers Incentive to New Subscribers**

IEEE members who become new subscribers to the IEEE Member Digital Library during the member renewal period ending 31 December will receive their first month of service free. The monthly fee is US\$35. To start your IEEE Member Digital Library subscription or to renew your IEEE membership for 2005, visit
<<http://ieee.org/renewal>> All memberships renewed online by 15 November will be entered into a drawing for a Dell notebook computer.

IEEE-USA News Briefs

- **IEEE-USA LEADS EFFORTS FOR SENATE APPROVAL OF L-1 VISA REFORM BILL**

On 30 September, the Senate unanimously approved the "L-1 Visa (Intra-company Transferee) Reform Act of 2003," S. 1635, which prohibits the placement of L-1 (intra-company transfer) visas at work sites owned, operated and controlled by unaffiliated employers. IEEE-USA opposed the exemption and hundreds of U.S. IEEE members sent letters to their Senators to help achieve Senate approval for this bill.

To learn more about this immigration issue, go to:
<<http://www.ieeeusa.org/policy/issues/>>.

- **APPLICATIONS OPEN FOR ENGINEERING/SCIENCE E-MENTORS**

MentorNet, an e-mail-based mentoring network, is currently accepting applications from U.S. engineering and science faculty members interested in mentoring some of the best and brightest women college students in the country. These students benefit from online advice and insight often unavailable to women students in these fields.

To find out more or apply, visit:
<<http://www.mentornet.net/>>.

FOR THE LATEST NEWS STORIES WRITTEN ABOUT IEEE-USA, VISIT:

<http://www.ieeeusa.org/communications/inthenews.asp>

IEEE-USA Today's Engineer November Highlights

IEEE-USA Today's Engineer has been updated with new content, including:

- **Backscatter: The Hat Trick -- Having It Both Ways**

Unless we have the latest version of an Internet Service Provider (ISP) program, we're considered technically disadvantaged..."My iPod can do more than yours" is an acceptable boast...As agents of change, engineers lay the foundations for disenchantment with the old, while helping popularize the new...
<http://www.todaysengineer.org/2004/Nov/backscatter.asp>

- **Fundamentals of Intellectual Property**

Many employers and business managers today expect their engineers, designers and scientists to be sources of

innovation that can be protected as a valuable asset. As an engineer, how can you obtain and maintain intellectual property rights?

<http://www.todaysengineer.org/2004/Nov/IPfundamentals.asp>

- **Self-Assessment: A Required Skill for Lifelong Learners**

When you were in school, you had teachers to guide your learning. Even after graduation, we must consider pursuing learning for the rest of our professional lives. Now, though, we must be both teacher and student. Here's how.

<http://www.todaysengineer.org/2004/Nov/self-assessment.asp>

- **Tissue Engineering, Regenerative Medicine and Stem Cell Research: The Benefits and Controversies**

Ethical debate, research restrictions, a lack of research funding, migration abroad of experts and the absence of a clear strategic plan continue to constrain the full scientific potential of stem cell research and tissue engineering. These constraints have contributed to the loss of jobs for U.S. scientists, engineers and physicians, as well as to a loss of leadership in this health care field. http://www.todaysengineer.org/2004/Nov/tissue_engineering.asp

- **Voice over Internet Protocol and the Changing Face of Communications**

Voice over Internet Protocol is expected to ramp up quickly, possibly claiming more than 10 percent of worldwide telephony revenues in just five years. And while the government doesn't expect to be involved significantly in the transition, it will almost certainly have to get involved with the tax, law enforcement and regulatory issues that accompany the change. <http://www.todaysengineer.org/2004/Nov/voIP.asp>

- **Also in this issue:**

- + Your Engineering Heritage: The Voting Technology Evolution
- + World Bytes: Golden Handcuffs
- + Student Corner: On IEEE-USA Media Fellows
- + Capitol Shavings: In My View -- On High-Tech Visas
- + Member Opinion: On Defense Budget Waste
- + Book Review: The Introvert Advantage
- + Reader Feedback

To read TE, go to: <http://www.todaysengineer.org>

OGI SEMINARS

(in evening unless noted otherwise)

Follow links for details <http://cpd.ogi.edu/>

Nov 16 (Tuesday)

High Tech and Health Care: Nano-Imaging for the Life Sciences

Vahe A. Sarkissian, FEI (no charge)

Tuesday, Nov. 16 6:15 PM pizza, soft drinks, networking 7:00 PM presentation

This is part of the OGI High Tech and Health Care seminar series that is exploring the intersection between high technology and health care.

<http://cpd.ogi.edu/class.asp?n=05-CPD-1116>

Nov 16 (Tuesday)

Management in Science & Technology: Information Session for Prospective Students

(no charge)

Nov 18 (Thursday, 12:00pm-1:30pm)

HR & OD Forum: Succession Planning and the Tektronix Leadership Pipeline Model

Rebecca Lynch-Wilmot, Tektronix

(15 includes lunch buffet and seminar)

Nov 23 (Tuesday)

IEEE PACE: Nanoscience and Microtechnologies in Oregon

Skip Rung, ONAMI (no charge)

Dec 2 (Thursday)

Information Management at Your Fingertips: 6 Techniques That Will Save You Time, Money, & Stress

Roger Parish, PMP (no charge)

Dec 7 (Tuesday)

Product Lifecycle Management: Improving Your Innovative Effectiveness

Laila Hirr, Axian (no charge)

Dec 9 (Thursday)

SPIN Seminar: Agile Product Development
Greg Patrick, TechMeth, Inc. (no charge)

Jan 27 (Thursday)

PortlandTech Career Fair (no charge)

OGI INFO

For more information on our programs please visit our website, <http://cpd.ogi.edu/>.