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Upcoming Events

For latest, see www.ieee-or.org/events

Communications & Computer Society

Topic: Cutting Through Cell's Hype
Speaker: Kevin Krewell, In-Stat
When: Thursday, September 15, 2005
Time: 6:00 PM ~ 8:30 PM
Cost: Free, open to the public (registration required).
Pizza and refreshments sponsored by AZAD
(<http://www.azad.com>)
Place: OGI, Wilson Clark Center
Registration: <http://cpd.ogi.edu/class.asp?n=06-IEEE-0915>

PortlandTech Career Fair

When: Wednesday, Sept 21, 2005
Time: 3:00pm - 7:00pm
Place: OGI Dining Room (Wilson Clark Center)
Registration required: www.portlandtech.org

EMC

Subject: Propagation and Detection of Signals Before, During, and After a Building Implosion
Speaker: Christopher L. Holloway, National Institute of Standards and Technology (NIST)
When: Wednesday September 21, 2005,

Time: 6:30pm - 8:30pm

(RSVP for food/drinks req'd by Friday, Sep 16 to Mitchell_Phillipi@logitech.com)

Meeting Place: University of Portland Franz Hall room 034 (see building #10 on Campus Map)

Map of University of Portland:

<http://www.worldaccessnet.com/~emc/UP%20Map.htm>

PACE (Professional Activities)

Topic: Creating Sustainable Business--A Tribute to Susan Hamill

Speaker: Gary Alan Spanovich, Executive Director, Wholistic Peace Institute

Date: Tuesday, September 27, 2005

Time: 6:30 PM - 8:00 PM

Location: OGI, Wilson Center Main Dining Room

Cost: FREE and open to the public

Registration: <http://cpd.ogi.edu/class.asp?n=06-IEEE-0927>

This PACE meeting of the IEEE Oregon Section is in memory of Susan Hamill, who passionately believed in the necessity of adopting sustainable design practices for electronic products. This talk is an overview of an in-depth one day forum which will be presented at Marylhurst University in the next few weeks.

3rd Annual NW Wireless and Security Summit together with

State Interoperability Executive Council Summit

Date: Wednesday October 19, 2005

Time: 8AM - 5PM

Place: Oregon Convention Center

Cost: \$49 by 5-Oct

See <http://www.wireless-securitysummit.com/>

In its third year, the NW Wireless and Security Summit & Expo is the premier educational summit and technology showcase focused on the challenges surrounding corporate wireless technologies and security.

IAS

Title: An Innovative Protection Scheme for High Resistance Grounded Systems

Presenter: David Beach, PE

Date/Time: Wednesday, September 28, 2005

6:00pm dinner, Speaker at 7:30pm
Cost: \$20.00 for dinner. No charge for presentation
Place: Red Lion Hotel Portland
Reservations: For dinner reservations please send email message to DavidDurocher@ieee.org

Courses

PSU ECE Department in Collaboration with IEEE Oregon Signal Processing Chapter present:

Intensive One-Day Course: 3G, Evolved 3G, 4G, and WiMAX: Wireless Technology Assessment and Integration

Lecture by Peter Rysavy
Date: Friday, September 16, 2005
Time: 8 AM - 5 PM
Place: Portland State University, exact location TBA
Cost: \$295 Members, \$345 non-members
Registration: (Seats limited, register early) PDF form at <http://www.ece.pdx.edu/~lvw/shortcourse/3g4g/registrati.on.pdf>

No refund will be made after September 9, 2005

Overview

In this one day course, Peter Rysavy of Rysavy Research provides a fundamental understanding of how different wide-area wireless networks function, their latest and forthcoming advances, their market realities and how best to take advantage of them. Technologies include 3G cellular systems such as EDGE, CDMA2000 (1XRTT, 1XEV-DO, 1XEV-DV), UMTS, HSDPA and emerging technologies such as evolved 3G systems and WiMAX (IEEE 802.16-2004, IEEE 802.16e).

Full Details at:
<http://www.ece.pdx.edu/~lvw/shortcourse/3g4g/index.htm>

More info: call PSU ECE Dept. 503-725-3806

Questions: Email to lvw@ece.pdx.edu

IEEE Oregon Seminars at OctoberBest 2005

- IEEE1 – Introduction to Nanotechnology**
- IEEE2 – EMI Regulations and Design Techniques**
- IEEE3 – Lean Manufacturing – What's Next**
- IEEE4 – FPGAs vs Structured ASICs (panel)**

Date: Wednesday, October 19, 2005
Time: 8:00-11:50 AM
Cost: \$50-60 for members, \$60-75 non-members
Registration: www.ieee-or.org/events
Register early - class sizes limited to 25-30
Refreshments provided
(For OctoberBest 2005 details see www.ema-oregon.org/OctBest5.html)

Marketplace

www.ieee-or.org/marketplace



CS and EE Fall 2005 Classes

For course descriptions and registration information, visit the schedule online at:

http://www.ogi.edu/graduate_edu/schedule/

September 26 – December 9, 2005

For more info, email advising@cse.ogi.edu
Registration inquiries, please call (503) 748-1382

OGI SCHOOL OF SCIENCE & ENGINEERING
20000 NW Walker Road, Beaverton, Oregon 97006

Vote in the 2005 Annual IEEE Election

You should have already received your ballot in the mail. Your vote is important to the IEEE. Learn as much as you can about the candidates and participate in the annual election.

For access to online candidate information, please visit the IEEE election Web site at:
<http://www.ieee.org/elections>.

IEEE President-Elect Candidate Statements

Three candidates are running for IEEE 2006 President-Elect:

- Leah H. Jamieson (Nominated by IEEE Board of Directors) <http://www.ece.purdue.edu/~lhj/IEEE>
- Gerald H. Peterson (Nominated by IEEE Board of Directors) <http://ghpeterson.home.att.net>
- James M. Tien (Nominated by Petition) <http://www.jimtien.com>

The BEEEP asked each candidate for president-elect for a short statement about their candidacy. Their responses are listed below.

Leah H. Jamieson

I thank the Oregon Section for this opportunity to talk about my priorities for the IEEE. I also congratulate the Section and you, the members, for taking this extra step to be informed voters.

In my position statement (<http://www.ece.purdue.edu/~lhj/IEEE>), I outline priorities in four areas:

- **Career-long support:**
 - Ensure affordable membership.
 - Provide continuity in members' careers through local and technical communities and services that bridge career transitions.
 - Become a leader in lifelong learning.
- **Nimbleness in emerging technology areas:**
 - Increase our agility through interdisciplinary communities in emerging areas.
 - Develop entry-level content for newcomers in a technical area; as we enter new areas, focus on theory and applications from the outset.
- **Agility in the information culture:**
 - Develop our understanding of how people – especially young people – access, use, organize, and share information.
 - Test new products and services through “rapid deployment” experiments. Develop an entrepreneurial culture that fosters innovation within IEEE.
- **Global profession, local needs:**
 - Build on IEEE’s transnational nature to enhance members’ success in the global profession.
 - Meet local needs in education, accreditation, professional development, information, and technology development and policy.

I will bring to the position of President a deep understanding of the IEEE and record of leadership and service. I will be guided by key principles: value of membership, appreciation for volunteers, value to the profession and to society, sound financial models. I would be honored to lead the IEEE in tackling these critical issues.

• **Gerald H. Peterson**

I am honored to be a candidate for the office of IEEE President-elect 2006, and to have this opportunity to share brief remarks on my candidacy -please see my web site: <http://ghpeterson.home.att.net> for more information. Over 37 years, I have held positions in hardware and software design and engineering management. In the past 17 years I have specialized in industry global strategic standardization and currently hold the position of Senior Manager Emeritus at Lucent Technologies Bell Labs. I am an electrical engineer and a member of the Tau Beta Pi Engineering Honor Society. In 2001 I was recognized as a "Who's Who" in its publication, THE BENT of Tau Beta Pi. Also in 2001 I received the American National Standards Institute's Finegan Standards Medal for leadership in the development and application of voluntary standards.

In addition to my leadership experience in the IEEE, I have served in elected national and international leadership positions that have delivered global technical standards and fostered increased global cooperation. Accelerating change and globalization affords the IEEE many opportunities to make fundamental changes in its demographic make-up and goals. Input from the IEEE Regions and Sections are key to decisions on strategies and resource allocations that must be made by the IEEE top leadership. I look forward to hearing from the Oregon Section directly and at Sections Congress 2005. I will give my full attention and commitment to the valuable goals provided by the IEEE Sections as we move forward together to maintain and enhance the preeminent technical and social value of the IEEE and the Section level and worldwide.

• **James M. Tien**

Let me begin by thanking those of you in the Oregon Section who collected signatures for my petition candidacy; I am now a 2006 IEEE President-Elect candidate because of your hard work!

My vision for the IEEE is based on the same reasons for why I became a member in 1974 and why I became a volunteer in 1983. I consider IEEE to be my “Global Resource of Choice” for scientific, educational and professional products and services; indeed, IEEE has played a critical role in my career – ostensibly more for my academic than for my parallel industrial career. If elected, I pledge to make IEEE more relevant and supportive of all member careers.

As examples, IEEE must offer more global and portable member benefits (to support a typical career that includes multiple employers); IEEE must meet the continuing education needs of our members (who must update their knowledge base while being on the job); and IEEE must think and act globally for the profession and think and act locally for the members (who have different cultural and professional needs).

I feel that I have the qualifications to continue to help IEEE become the global resource of choice, as I have tried to do so in all my volunteer activities, including in my recent positions as VP of Publications and as VP of Education. I have extensive leadership experience (at IEEE and in industry and academia) and demonstrated excellence (including election to the U. S. National Academy of Engineering).

I humbly ask not only for your vote, but also for your involvement: **Together, We Can Advance IEEE’s Global Value.**

Congratulations to new Senior Members

John C. Briggs
David A. Britton
Shaestagir Chowdhury
William S. Greer
Michael J. Quinn

Jim Rooks reports the IAS Industry Applications magazine, September-October issue has a recognition of IAS members elevated during the first half of 2005. Our Section shows Donald E. Best, Richard A. Palmer, Satish N. Shrestha and Michael G. Tribe.

Portland Tech Career Fair September 21

The 4th PortlandTech High Tech Career Fair will be held Wednesday, September 21 at OGI. The career fair is targeted at unemployed or under employed professionals from the high tech field. The June Portland Tech career fair had over 400 prescreened and pre-qualified job seekers attend. That translated into over 50 documented interviews, and with nearly 40 job offers extended so far as a result of the fair!

The fair showcases not only candidates with high tech job skills like engineering, programming, quality assurance, and information technology, but other professional skills like marketing, sales, business management, finance, and materials. Many companies are looking for recent graduates as well as experienced professionals

The Portland Tech Career Fair is co-sponsored by OHSU-OGI, Software Association of Oregon, Professional Resource Consortium of the NW, and the IEEE Oregon Section and is scheduled for September 21, 2005 from 3pm to 7 pm. It will be held at the Wilson Clark Center of the Oregon Graduate Institute in Beaverton. There is a map link on the web site, www.portlandtech.org.

The fair usually has 12 to 16 employers and recruiters. Here is a listing of employers and recruiters from the June Fair: Advanced Micro Devices, Apcon Inc., Corrigio Inc., Intel Corp., MathStar Inc, Micro Power, Philips Medical, Pixelworks, PMC-Sierra, PSC Inc., Tektronix, Volt Technical, and WaferTech.

The fair is free to job seekers, who must pre-register on-line at: www.portlandtech.org. It is recommended that you sign up early.

Employers and recruiters can visit the website: www.portlandtech.org to sign up or contact Robert Jenner, tel: 503-579-1631, email: robertjenner@hotmail.com

5th Annual OctoberBest Regional High-Tech Manufacturing Conference and Expo

The Electronics Manufacturing Association (EMA) and the Electronics Representatives Association (ERA) Pacific NW Chapter are presenting Oregon's only electronics and manufacturing conference and exposition, which will showcase **local Northwest suppliers, services, and resources.**

Free admission to exhibits if you sign up before October 14 online at http://www.ema-oregon.org/OctBest5_attend.html.

The OctoberBest 2005 Expo will be held

- at **Hawthorn Farm Athletic Club** in Hillsboro on Wednesday, October 19th from Noon until 6:00pm for exhibits
- **technical and educational sessions** from 8:30 AM until 5:45 PM [see below]
- free parking will be available close to event site
- **take the MAX** to the Hawthorn Farm stop by Intel at Elam Young Parkway
- all are encouraged to donate non-perishable food items to The Oregon Food Bank
- featuring our **GOLD Sponsor for 2005 - CascadeTEK**
- featuring our **SILVER Sponsors for 2005 - NW EMC and Prototron Circuits**

In addition to this being the best opportunity to see the latest products, services, and technologies, you can attend **seminars on emerging trends.**

IEEE Oregon is holding four Morning Seminars (Nanotechnology, EMI, Lean Manufacturing, FPGA/Structured ASIC) from 8:00-Noon.

See www.ieee-or.org/events for details and to register.

Afternoon seminars cover topics critical in today's manufacturing environment such as: lead-free, lean manufacturing, industry manufacturing standards, supply chain, and testing.

View and sign up for the technical and educational sessions at: http://www.ema-oregon.org/OctBest5_sessions.html.

Note: if you or your company is interested in being an exhibitor, please review the following website: http://www.ema-oregon.org/OctBest5_exhibit.html.

NOTICE CONCERNING AN IEEE SPONSORED COMPUTER USAGE CLASS

IEEE Oregon is investigating sponsoring of a class on "Helpful Computer Usage Techniques". This is NOT a class on working within any particular software such as say WORD or Adobe, but rather general usage such as downloading from the web, really neat keyboard shortcuts, setting up wireless access, and many other tips that will benefit all from the novice to even the most experienced users. Your family, parents, etc would be welcome to attend. The estimated cost of this 6 hr course will be \$20. There may also be a DVD of the course available for \$19.95, if you don't attend the class, and \$14.95 if you do.

We want your feedback in three areas:

1. What do you think of this as an IEEE project?
2. Do you have any neat computer tips, that have served you well, that you think should be taught in this class?
3. What subjects would you like to see taught?

Send your feedback and comments to Chris Jacobs,
drjacobs@drchrisjacobs.com

Bruce Angwin Memorial Scholarship Winners

The 2005 Bruce Angwin Memorial Scholarship entries have been judged and the winners announced. The total number of entries accepted was 68, from all of Region 6. Oregon had 8 entrants. Jeffrey B. ("J.B.") Feldman, of the Francis Parker School, San Diego, CA, was the first place winner, of \$5000. He plans to study Computer Technology. Nicolai Curtis Archuleta, of the La Cueva High School, Albuquerque, New Mexico, was the second place winner, of \$3000. He plans to study Bio-MEMS engineering.

IEEE-USA COMMUNIQUE TO U.S. IEEE MEMBERS ON THE KATRINA DISASTER

2 September 2005

DEAR U.S. IEEE MEMBERS,

The United States is currently facing one of the greatest natural disasters in our history. We empathize with the pain and suffering of tens of thousands of Americans in the Gulf region including Louisiana, Mississippi, Alabama and Florida. And we worry about those IEEE members in the affected areas of Region 3 (Southeastern U.S.) and Region 5 (Southwestern U.S.). They are all very much in our hearts and minds.

Now, the focus is on delivering humanitarian aid to the

affected areas, and the greatest needs are financial. On behalf of the IEEE's U.S. membership, I am pleased to announce that IEEE-USA will contribute \$5,000 to the American Red Cross to support Katrina relief efforts. IEEE President Cleon Anderson, Region 3 Director Bill Harrison, and Region 5 Director John Meredith join me in encouraging U.S. IEEE members, who want to make personal donations to relief or reconstruction organizations, to give to any of the organizations identified by the Federal Emergency Management Agency (FEMA), listed online at:
http://www.fema.gov/press/2005/resources_katrina.shtm#donate.

Further, IEEE-USA will make available Professional Activities Committee (PACE) project funds to organized groups of U.S. IEEE members in Regions 3 and 5 requesting funds to support local volunteer recovery efforts, especially to help sustain local IEEE activities and volunteer networks in the weeks and months ahead. For information on how to obtain IEEE-USA PACE Project Funds, contact Scott Grayson at s.grayson@ieee.org; or go to <http://www.ieeeusa.org/volunteers/pace/funding.asp>.

I know that many of our U.S. IEEE members are looking for opportunities to volunteer their time and skills. FEMA is currently advising that no one go to any of the affected areas unless directed by a voluntary agency. FEMA has an ongoing need for engineers, but only volunteers who have registered and completed agency training will be deployed on its disaster response teams.

The American Red Cross also has a continuing need for engineers who are trained in disaster response and who are ready for deployment. There may also be opportunities to volunteer in your community, as local personnel are dispatched to participate in the relief efforts -- and as evacuees begin to move from the affected areas to other communities. For more information, see:
<http://www.redcross.org/donate/volunteer/>.

The IEEE and IEEE-USA also support Engineers Without Borders-USA (EWB-USA) in its worldwide recovery and rebuilding efforts. EWB-USA has chapters in the Gulf Region that will be involved in rebuilding. For more information, go to:
<http://www.engineerswithoutborders.org/>.

For members in the affected areas -- or members who know those affected -- we encourage you to consult FEMA's Hurricane Katrina Resources Web page, which provides instructions for evacuees, how to apply for assistance and flood insurance, and information on returning home after a disaster. Please see
http://www.fema.gov/press/2005/resources_katrina.shtm.

In addition, on 6 September, IEEE-USA will join with representatives of the engineering, design and construction organizations, which comprise The Infrastructure Security Partnership (TISP), to share information on our respective efforts -- and to discuss possible coordinated responses to devastation caused by the hurricane. For updates on this and other IEEE-USA efforts to support Katrina relief and reconstruction, see <http://www.ieeeusa.org/about/katrina/>.

Finally, as many of our members and other engineering professionals are currently involved in the efforts to restore power, communications, water and sanitation to the affected areas, IEEE/IEEE-USA communications staff are responding to media queries on what engineers can do to alleviate pain and suffering. For an overview of the role of power engineers in addressing emergencies, see the IEEE-USA TODAY'S ENGINEER feature story issued today at <http://www.todaysengineer.org>. For a November/December 2002 article from the IEEE Industry Applications Society on "Utilizing Disaster Recovery Project Management to Improve Readiness and Response Time," go to http://www.ieee.org/portal/cms_docs/xplorefiles/xplore4005.pdf.

In closing, this human tragedy reminds us all of the fragility of life and the importance of community in rising to challenges. I know that we will rise to the challenge here, too -- as Americans, as engineers and as IEEE members. I invite your suggestions and feedback by replying directly to this message.

MOST SINCERELY,

Gerard A. Alphonse
President, IEEE-USA

IEEE Launches New Version of myIEEE Personalization Features and Resources Significantly Enhanced in Release 1.2 of Members-only portal

Piscataway, N.J., 1 Sept. 2005 -- The IEEE today launched a new version of its members-only Web portal that includes significantly improved usability and functionality.

The new features in myIEEE Release 1.2 enable IEEE members to connect with their local section, access online benefits, and manage various aspects of their membership from one location.

"Our goal with this release of myIEEE was to build on existing personalization capabilities, and provide a direct link to IEEE's 300 sections worldwide and their officers," said Marc Apter, Vice President of IEEE Regional Activities. "We have also begun to remove the barriers to

seamless integration across IEEE's online applications."

myIEEE was initially introduced in January along with a public IEEE membership site.

With Release 1.2, IEEE members who sign into myIEEE are no longer required to re-enter their Web Account name and password to access their membership account.

In addition, various tools and utilities used to access IEEE member benefits online have been grouped into "desktops" on myIEEE's left navigation.

- **The Knowledge Desktop** is a consolidated area for research and subscription-related benefits. It contains modules for personalized subscription information,, searching the IEEE online collection database , an RSS feed citing the 10 most downloaded articles from the IEEE XploreR online delivery system, and a file-cabinet link for subscribers of the IEEE Member Digital Library.

- **The Community Desktop** provides access to information on local and worldwide networking opportunities, as well as IEEE member grade elevation. This desktop also contains the "mySection" module, which connects members to information on their local section, its officers and its technical chapters. In addition, the "IEEE Worldwide" module sorts and presents global IEEE activities and contacts by country or IEEE region. A listing of upcoming IEEE conferences is updated daily, with reference links to conference sponsors and contacts.

- **The Profession Desktop** enables direct searches of the IEEE Job Site and IEEE-USA Consultants Database, as well as timely announcements on IEEE awards and scholarship opportunities.

- **The Volunteer Desktop** will appear in myIEEE for those IEEE members who also serve as an IEEE volunteer. Initial features include volunteer resource links, volunteer news and updates, and a personalized listing of the volunteer's positions.

"This first iteration of the Volunteer Desktop begins bringing together tools commonly used by IEEE volunteers," comments Ron Jensen, the midwest U.S. regional director of IEEE. "Our goal is to save time for volunteers and provide a straightforward navigation to locate contacts and resources."

According to Jensen, plans are underway to incorporate additional modules and enhance the personalization based on volunteer roles.

A context-sensitive "Help" feature is included in each module header, providing additional information on reference links and related topics.

"The development of myIEEE is evolutionary," says Apter. "We have made significant progress, and are already planning for improvements."

Apter cites the need to incorporate events sponsored by IEEE sections, and the integration of a new online member directory being developed by IEEE's membership development committee. According to Apter, these enhancements should debut in 2006, along with additional improvements to application integration.

myIEEE is an exclusive benefit of IEEE membership, and is available to all active IEEE members with an IEEE Web account. Visit myIEEE at <http://www.ieee.org/myieee>.

News from the IEEE

1. IEEE Hires New Executive Director

Jeffrey W. Raynes will be the IEEE's next executive director. He succeeds Daniel J. Senese, who retired in December. Raynes, 51, will take over the position in November. He will serve as the organization's chief operating officer and will manage the IEEE's staff of approximately 900 employees in several U.S. and overseas locations. Read more at <http://boldfish.ieee.org/u/644/05229885>

2. Pekarek Goes from Cattle to Computers

In his early years, he was a farm boy on a remote cattle ranch in South Dakota. But now IEEE Member Joseph Pekarek is running a multimillion-dollar computer software company outside Los Angeles. The IEEE Microwave Theory and Techniques Society noted Pekarek's achievements in June and named him the Outstanding Young Engineer of the Year during its annual symposium in Long Beach, Calif. Learn more about Pekarek at <http://boldfish.ieee.org/u/645/05229885>

3. Yahoo Service Searches for IEEE Articles

A new search engine, Yahoo Search Subscriptions, is now available to help members find IEEE papers in periodicals to which they subscribe. Previously, searches for IEEE papers could be done only by IEEE Xplore, the institute's document-delivery platform. Read more at <http://boldfish.ieee.org/u/646/05229885>

4. Women in Engineering Recognizes Its Outstanding Groups

IEEE Women in Engineering in June selected two of its local groups -- one in Winnipeg, Man., Canada, and the other in Kerala, India -- to receive Group of the Year Awards. The new awards recognize groups that have organized innovative programs in support of female engineers or that have developed outreach

efforts to encourage girls to pursue a science or technology career. WIE hopes the annual awards will encourage its other local groups to emulate the award-winning initiatives. Find out more at <http://boldfish.ieee.org/u/648/05229885>

5. Tell Us about Your Plant Tours

The Institute wants to interview members who have organized tours of such facilities as power plants, wind farms, planetariums, and manufacturing plants as a way to boost their section or chapter membership. Contact Editor Kathy Kowalenko by e-mail at <mailto:k.kowalenko@ieee.org> or by phone at +1 732 562 6825.

6. Accelerate Your Career at the IEEE Spectrum Online Forum

On 20 September, IEEE Spectrum will host its first online Career Accelerator Forum. The forum, which is free, will offer advice on such topics as going on for an advanced degree, staying ahead in your field, landing your dream job, and switching careers. You'll also be able to ask questions of an expert panel from the convenience of your desk. For more information, as well as a list of panelists, visit <http://boldfish.ieee.org/u/649/05229885>
To sign up for the forum, go to <http://boldfish.ieee.org/u/650/05229885>

7. Symposium Links Nuclear Science and Medical Imaging

Radiation technology and medical imaging have been linked since 1895, when Roentgen discovered X-rays. So it's no surprise that medical imaging and nuclear science would be combined in an IEEE conference, the Nuclear Science Symposium and Medical Imaging Conference, to be held from 24 to 29 October in Fajardo, Puerto Rico. Find out more at <http://boldfish.ieee.org/u/652/05229885>

8. Proceedings of Circuits and Systems Symposium Released

New medical technologies -- involving such things as biomedical circuits and systems, very-large-scale-integration systems and applications, and bionics and biomedical applications -- are addressed in the newly released proceedings of the 2005 IEEE International Symposium on Circuits and Systems. The proceedings is available through ShopIEEE at <http://boldfish.ieee.org/u/653/05229885>

IEEE-USA LEADER DEBUNKS ENGINEERING "SHORTAGE" MYTH

In an 18 August 2005 letter to the editor of "The Washington Post," IEEE-USA President Gerard A. Alphonse criticized a headline in the same day's "Post"

column, "Behind the Shortfall of U.S. Scientists." According to Dr. Alphonse, "Just because China, India and other nations are graduating large and increasing numbers of scientists and engineers does not mean that there is a shortage of science and engineering professionals in the United States."

The IEEE-USA leader added: "For a true picture, look at the rising unemployment for U.S. scientists and engineers in recent years and the percentage of individuals trained in science and engineering who are working in other fields." He concluded: "Increasingly, we see compensation that is lagging behind other employment categories, job insecurity, rapid obsolescence due to technological change, and the looming threat of offshoring."

Government Actions of Note

- **REAUTHORIZATION OF HIGHER ED ACT WOULD PROMOTE STEM CAREERS**

A bill by House Science, State, Justice and Commerce Appropriations Subcommittee Chairman Frank Wolf (R-VA) proposed to offer loan interest forgiveness to students who teach or work in STEM fields after college, as well as provisions to encourage scholarships for STEM students and to help states improve science and math education. Now, a reauthorization of the Higher Education Act incorporates ideas from that earlier bill, and adds new provisions to encourage students to pursue careers in science, technology, engineering and math (STEM). The bill, the College Access and Opportunity Act (H.R. 609) is expected to go before the full House this fall, and authorizes a \$41 million in FY 2006 and "such sums as may be necessary" over the subsequent 5 years.

- **NIST NAMES NEW DIRECTOR**

The Senate confirmed William Alan Jeffrey as the new director of the National Institute of Standards and Technology (NIST). Commerce Secretary Carlos Gutierrez declared that Jeffrey "brings a strong background in science and technology policy and the practicalities of research management to one of our nation's finest research laboratories and an institution whose work affects almost every aspect of our daily lives."

- **RESEARCHERS CARVE WITH ELECTRICITY AT THE NANOMETER SCALE**

By applying electric current through a thin film of oil molecules, engineers, with the support of a National Science Foundation grant, have developed a new method to precisely carve arrays of tiny holes only 10 nanometers wide into sheets of gold. The new system, called Electric Pen Lithography (EPL), uses a

scanning-tunneling microscope, fitted with a tip sharpened to the size of a single atom, to deliver the charge through the dielectric oil to the target surface. For additional information, see the University of Arkansas release at:
<http://dailyheadlines.uark.edu/4822.htm>

- **DEPARTMENT OF ENERGY TASK FORCE OUTLINES STEPS TO CONSOLIDATE NUCLEAR WEAPONS COMPLEX**

In response to a March 2004 request of the House Appropriations Subcommittee on Energy and Water, the 6-member Nuclear Weapons Complex Infrastructure Task Force has released a draft final report on, "Recommendations for the Nuclear Weapons Complex of the Future." Later this year, the Secretary of Energy Advisory Board will consider the recommendations. Comments will be solicited before they meet. The report can be read at
<http://www.seab.energy.gov/publications/NWCITFRpt-7-11-05.pdf>

IEEE Oregon Section 2005 Contacts

Chair	Dan Arnold	360-817-5699
Vice Chair	Bob Sparkes	503-547-2396
Treasurer	OPEN	
Secretary	Hamid Sharifnia	503-813-6935
Past Chair	Ed Perkins	503-612-9397
BEEEP Editor	Allen Taylor	503-656-0831

Editorial submissions are welcome and should be made by the 25th of the month preceeding publication. Send all items to the Editor, Allen Taylor, email: allen.taylor@ieee.org

Administrative inquiries should be directed to the Section Chair, Dan Arnold, email: Daniel.Arnold@us.ul.com

To contact us, see www.ieee-or.org/contact_us.