IEEE-USA



# ANNUAL REPORT

Compiled and Edited by Pender M. McCarter





Published by IEEE-USA.
Copyright © 2008 by the IEEE.
All rights reserved. Printed in the U.S.A.

Edited and compiled by Pender M. McCarter. Cover design and layout by Steve Godwin.

This IEEE-USA publication is made possible through funding provided by a special dues assessment of IEEE members residing in the United States. Copying this material in any form is not permitted without prior written approval from the IEEE.

# Letter From 2007 IEEE-USA President John W. Meredith

I witnessed first-hand many innovative activities in local IEEE Sections and Chapters. Many volunteers were involved with IEEE-USA committee work and a good number were making their concerns known to local, state and national political leaders. Still others focused on issues of interest to the public. It is very satisfying to see this focus on influencing issues that affect the public and our profession and on increasing public visibility — a very important role for engineering professional organizations.

IEEE-USA has a long list of achievements for 2007. A small sample of these includes:

- ▶ The House and Senate passed the *America Competes Act*. This landmark legislation aimed at improving the competitiveness of America, supported by our government relations staff and volunteers, is significant because it authorizes \$43.3 billion in federal spending for basic research. This spending will ultimately create jobs for scientists and engineers, but more important is the multiplication effect that will result from investment in basic research.
- ▶ IEEE-USA partnered with IEEE's New Technology Directions Committee to hold several conferences. These conferences covered homeland security, plug-in hybrid electric vehicles, RFID and bioeconomics. They covered technical aspects as well policy issues relating to newly emerging technology. This very successful effort was led by IEEE-USA's incoming 2008 President Russ Lefevre.
- The IEEE-USA Innovation Institute was launched. A web-based seminar was held in July, and our first workshop was held in Region 2 in early November. The launch was very successful. Several IEEE Sections are very interested in holding future workshops. The role of the Innovation Institute is an important part of IEEE-USA's strategic focus. Indeed, innovation drives growth of a high-tech economy. The Innovation Institute was created by 2006 IEEE-USA President Ralph Wyndrum.
- ▶ *IEEE-USA Today's Engineer Digest* won the 2007 *Apex Award* for Publication Excellence. This recognition is a significant event that resulted from the excellent work of our communications staff and volunteers over the past several years.

Needless to say, 2007 was a year of achievement. This was made possible by many IEEE-USA volunteers and staff personnel — all working together as a team to make a difference.

As I look ahead at 2008, I am confident that IEEE-USA will see even greater achievements. Our new

President, Russ Lefevre, is a proven IEEE leader. Russ has experience in many volunteer positions including service as IEEE-USA Technology Policy Vice President and as 2002 IEEE-USA Congressional Fellow. I wish him well as he leads IEEE-USA in the coming year.

As I leave the IEEE-USA in Russ' capable hands, I wish to remind all that our role as engineers is to make the world a better place tomorrow. This result will require us to influence events beyond our laboratories, offices and workbenches. We all need to innovate and we need to lead to make our world better.

Sincerely.

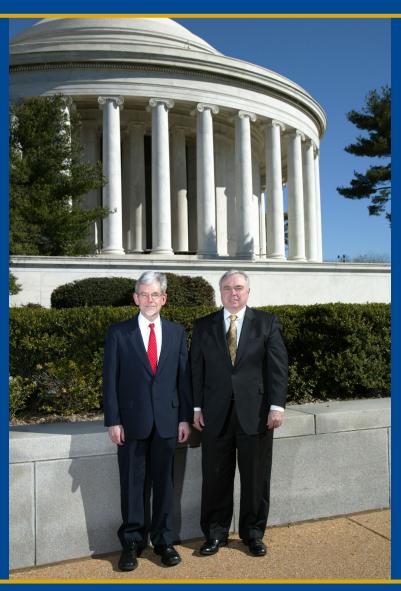
John W. Meredith, 2007 IEEE-USA President

Cover: IEEE Northern Virginia Section member Maria Rodriguez is an engineering role model for youngsters at National Engineers Week Discover Engineering Family Day, held annually at the National Building Museum in Washington, DC.

oln (7). Meredith

## INTRODUCTION

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.



IEEE-USA Congressional Fellows William Behn (left) and George Hanover addressed innovation and competitiveness issues as staffers on Capitol Hill.

**Sustaining efforts set in motion in 2006,** IEEE-USA President John W. Meredith and the IEEE-USA Board of Directors reaffirmed three broad priorities for 2007, all driven by a shared concern that globalization poses fundamental challenges for U.S. IEEE members and the engineering profession. The 2007 priorities were:

- Promoting innovation, through legislation and other means, to ensure the competitiveness of U.S. industry in our fields of interest
- Providing practicing engineers with tools and resources that support their career endeavors
- Encouraging continuing education for sustainable careers and focusing on precollege math and science education to strengthen our nation's technical literacy, and ensure that America has an ample supply of the best and brightest engineering practitioners in the future

The following highlights IEEE-USA's progress and accomplishments in each of our 2007 priority areas, as well as our related efforts to promote the public awareness and appreciation of engineering and increase organization outreach and engagement of the IEEE's U.S. membership.

### **Promoting Innovation**

Promoting innovation was a key priority for IEEE-USA in 2007. On the policy side, IEEE-USA worked with various coalitions and employed its members in dozens of grassroots visits to help advance bills designed to encourage innovation and strengthen our national research infrastructure in order to ensure America's future technological competitiveness. Among the highlights:

#### 'America Competes Act'

In the first half of 2007, IEEE-USA realized one of its long-term legislative objectives and one of its major public-policy priorities for the IIO<sup>th</sup> U.S. Congress with the enactment into law of the *America Competes Act*. The *Act* was designed to enhance U.S. competitiveness and innovation by increasing funding for basic research and improving science, technology, engineering and math (STEM) education. The legislation authorizes nearly \$45 billion in federal spending on STEM programs during Fiscal Years 2008-2010.

... to enhance U.S. competitiveness and innovation by increasing funding for basic research and improving science, technology engineering and math education.

IEEE-USA joined many other groups in seeking passage of the legislation beginning in 2004 with the release of the National Academies' report on "Rising above the Gathering Storm." In particular, IEEE-USA championed reauthorization of the National Science Foundation's Noyce Teacher Scholarship Program and inclusion of a title in the bill strengthening the federal focus on high-performance computer research and development.

On 20 September, IEEE-USA joined with 20 other organizations in hosting a Capitol Hill reception celebrating bipartisan efforts to pass the *America Competes Act*.

#### National Summit on Competitiveness

On 18 September, IEEE-USA President John Meredith and Present-Elect Russell Lefevre joined with leading industry executives, high-ranking government officials, and renowned academics and opinion leaders as participants in the inaugural National Summit on American Competitiveness, organized by the U.S. Department of Commerce. The Summit focused on strategies to improve U.S. competitiveness.



# Innovation Institute Offers Innovation Education

Under the leadership of IEEE-USA Past President Ralph Wyndrum, IEEE-USA's Innovation Institute convened its first Innovation Forum on 6-8 November in the Washington, DC metro area. Designed for mid-level managers, current and future leaders from industry, academia and government, the Forum engaged participants with an expert faculty who focused on key aspects of the innovation process, including product development and cor-

porate culture. Plans are underway to hold three Forums in 2008.

IEEE-USA also released two e-books focused on innovation. Renowned innovation authority William C. Miller authored *The Innovation Process: Energizing Values-Centered Innovation*, to help individuals understand the process of innovation and how people in any technical

job can apply the process to the challenges and opportunities they find in their day-to-day work. *The Best of* Today's Engineer *on Innovation* also captures the IEEE-USA magazine's articles on the topic.

...to help individuals understand the process of innovation and how people in any technical job can apply the process to the challenges and opportunities they find in their day-to-day work.

# Supporting Federal Investments in Research & Development

IEEE-USA contributed to the passage of budget legislation signed into law in February that provides for increases in Federal research and development during Fiscal Year (FY) 2007 at the National Science Foundation, the National Institute of Standards and Technology (NIST), and the Energy Department's Office of Energy Sciences. IEEE-USA's efforts were recognized in the

Congressional Record and praised in a letter from Speaker of the House Nancy Pelosi. Later, on 22 June in Washington, IEEE-USA joined with the Alliance for Science and Technology Research in America and others to sponsor a congressional briefing on NIST. At yearend, however, Congress failed to fund federal R&D programs at the new levels authorized in the America Competes Act for FY 2008.

Support for strong federal investments in science, engineering and technology was the focus for the annual Science, Engineering and Technology Congressional Visits Day on 1-2 May, during which more than 40 U.S. IEEE members joined several hundred engineers and scientists and met with Members of Congress and congressional staff. In the same month, IEEE-USA provided support to the IEEE Lasers and Electro-Optics Society, which sent its members to Capitol Hill to make the case for federal research in their technical specialty.



IEEE-USA President John Meredith meets with Capitol Hill staff to support increased research and development funding.

On 8 May, IEEE-USA and ASME cosponsored the Fifth Annual Engineering R&D Symposium, held in conjunction with the National Academy of Engineering's Annual Convocation of Engineering Societies.





#### **Emerging Technology Conferences**

As part of its focus on promoting innovation, IEEE-USA began partnering with IEEE U.S. Sections and technical societies in 2007 to sponsor technical conferences on critical emerging technologies.

- ▶ Radio-Frequency Identification: In partnership with IEEE Region 5 and the IEEE New Technology Directions Committee, IEEE-USA launched the first IEEE International Conference on Radio-Frequency Identification (RFID) on 26-28 March in Grapevine, Tex. In its first year, the IEEE RFID Conference emerged as the premier international technical conference series bringing together leading researchers, developers, integrators and visionaries to discuss and expand their knowledge of technologies, systems, networks, algorithms and applications that support the development and adoption of RF-based wireless communications and identification systems.
- ▶ Homeland Security: On 16-17 May in Boston, IEEE-USA cosponsored the Boston Section's IEEE Conference on Technologies for Homeland Security, which included a plenary address by the chair of the IEEE-USA Critical Infrastructure Protection Committee, Dr. Luis Kuhn of the National Defense University.
- ▶ Plug-In Electric Hybrid Vehicles (PHEVs): On 10 July, IEEE-USA cosponsored a congressional briefing on Capitol Hill to discuss the merging technology of PHEVs and the role they can play in reducing United States' gasoline usage and the country's dependence on foreign oil. This briefing was followed on 19 September by an IEEE-USA symposium in Washington on "Plug-in Hybrids: Accelerating Progress," conducted in partnership with the IEEE New Technology Directors Committee and the IEEE Power Engineering Society.

Leveraging these meetings, IEEE-USA was successful in including a PHEV program in the *Energy Independence and Security Act of 2007*. In addition, IEEE-USA facilitated technical consultation between representatives of IEEE Standard Coordinating Committee 21 and the House Science Committee leading to inclusion of language in the same legislation that calls for the National Institute of Standards and Technology to solicit input from the IEEE and other organizations in developing protocols and standards for the nascent Smart Grid technology for the nation's electricity grid.

#### Other Public-Policy Priorities

In addition to innovation, IEEE-USA public policy agenda for 2007 addressed a broad range of technology and career-related priorities, including: ... to take a more deliberative approach toward developing patent reform legislation.

▶ Patent Reform: IEEE-USA communicated its concerns to Congress over proposed patent legislation that the organization argued would create disincentives to inventiveness and stifle new businesses and job growth. As part of its advocacy effort, industry executives Steve Perlman, inventor of QuickTime, and Dean Kamen, inventor of the Segway personal transporter, joined IEEE-USA's grassroots participants in a series of Capitol Hill visits organized by the Innovation Alliance. These efforts helped influence the U.S. Senate to take a more deliberative approach toward developing patent reform legislation.



IEEE-USA Career Activity Vice President Paul Kostek (center) testifies on 6 November before a House Science Subcommittee on "The Implications of Globalization of R&D and Innovation."

► *E-health:* IEEE-USA supported the Genetic Information Non-discrimination Act and urged Congress to address e-health information systems as part of any comprehensive legislation on improving healthcare in the United States. The genetic non-discrimination bill was successfully reported by the House of Representatives and awaits consideration by the Senate in 2008.

IEEE-USA joined the IEEEchaired Biotechnology Council and the National Institute of Standards and Technology (NIST) in supporting a national conference on "Economic Strategy for Health Care through Bio and Information Standards and Technologies," held at NIST in Gaithersburg on 25-26 September.

Immigration Reform: IEEE-USA advocated for comprehensive reforms to facilitate employment-based immigration, while endorsing legislation designed to address abuses of the nonimmigrant H-IB visa program for skilled workers. In the absence of a national consensus on how to deal with illegal immigration, however, Congress was unable to come to closure on any significant immigration legislation in 2007.

Some 50 U.S. IEEE members from 17 states traveled to Washington on 13-14 March as part of the annual Careers Fly-in to discuss high-skill immigration policy with Members of Congress and their staffs, including House Speaker Nancy Pelosi (D-Calif.), Senator John Kerry (D-Mass.), and Immigration Subcommittee Chair Rep. Zoe Lofgren (D-Calif.). Participants outlined the need for reforms in the H-IB visa system and asked their legislators to consider expanding the permanent employment-based visa system.

 Globalization and the Engineering Work Force: On 1-2 November, IEEE-USA Vice President Paul Kostek addressed "Can We Compete? Trends in America's Scientific and Technical Work Force," as part of a national conference convened by the Commission on Professional in Science and Technology on "Skills and the Global Market." On 6 November, Kostek testified before the House Science Subcommittee on Technology and Innovation on "The Implications of the Globalization of R&D and Innovation for America's Science and Engineering Work Force." The hearing was the capstone of the House Science Committee's year-long investigation into globalization and its implications for American's high-tech work force.

#### More Government Relations Highlights

Congressional Briefings: Through congressional briefings, IEEE-USA works to educate Members of Congress and their staff on emerging sci-tech issues and important During 2007, IEEE-USA helped organize 10 informational briefings for Congress.

trends affecting the engineering profession. During 2007, IEEE-USA helped organize 10 informational briefings for Congress through the Congressional Research Caucus, the U.S. Senate RFID Caucus, and the Congressional Nanotechnology Caucus. Some highlights include:

- ▶ On I May in Washington, IEEE-USA and the American Electronics Association (AeA) organized a congressional briefing on "Radio Frequency ID and Innovation" for the U.S. Senate RFID Caucus in association with the RFID Technology Council.
- ▶ On II July, IEEE-USA, AeA and the RFID Business Association presented a briefing for the Senate RFID Caucus on "RFID Technology and Its Uses in Port Security."
- ▶ On 10 September, IEEE-USA coordinated a briefing to the Congressional Nanotechnology Caucus on nanotechnology applications in the fields of electronics and photonics led by Walt Trybula, the Director of the Nanomaterials Applications Center at Texas State University in San Marcos.
- ▶ On 12 December, IEEE-USA co-sponsored a congressional briefing by the Task Force on the Future of American Innovation led by Norm Augustine on the topic "America, We Have a Problem."

*Grassroots*: In 2007, the number of U.S. IEEE members participating in IEEE-USA's CARE Grassroots Network doubled to over 14,000.

IEEE-USA coordinated more than 200 face-to-face meetings between U.S.
IEEE members and their legislators on a variety of topics in 2007.

IEEE-USA also coordinated more than 200 face-to-face meetings between U.S. IEEE members and their legislators on a variety of topics in 2007, the largest annual number to date.

Government Fellowships: In 2007, U.S. IEEE members William Behn of California and

George Hanover of Virginia served as IEEE-USA Congressional Fellows. They addressed innovation and competitiveness issues as staffers for the Environment, Technology and Standards Subcommittee of the House Science Committee. Hanover also served on the personal staff of Rep. Dana Rohrabacher (R-Calif.), a member of the House Science Committee. Behn has been selected to serve as a 2008 IEEE-USA Diplomacy Fellow at the U.S. Department of State.

Washington Internships: Three U.S. IEEE student members participated in the Washington

Internships for Students of Engineering, a summer program sponsored by seven engineering societies, including the IEEE, enabling students to immerse themselves in the development of technology policy. Trinity College's David Pietrocola assessed the *Digital Millennium Act* and its impact on innovation. Case Western University's Sarah Rovito considered electronic voting issues. And the University of South Florida's Andrew Quecan researched proposals for patent reform and their implications for small business.

Multiple Events: To enhance its visibility with key decisionmakers in Washington and elsewhere, IEEE-USA hosts various events and activities to provide venues for interaction. 2007 highlights include:



U.S. IEEE student members Quecan, Rovito and Pietrocola contribure research to technology policy debate as Washington interns for students of engineering.



- ▶ As part of Congressional Visits Day, on I May, House Speaker Nancy Peolosi (D-Calif.) and Sen. Lamar Alexander (R-Tenn.) were presented with the 2007 George E. Brown Jr. Science, Engineering and Technology Leadership Award for their support of U.S. global competitiveness.
- ▶ On 8 May, IEEE-USA joined with the American Society of Mechanical Engineers and others in sponsoring a Capitol Hill



Rep. Vernon Ehlers (R-Mich.) addresses attendees at a 20 September America Competes Act reception.

- reception for first year U.S. Representative Gerald McNerney (D-Calif.), who is also an engineer and wind power entrepreneur.
- ▶ On 19-20 October, IEEE-USA joined with Georgia Tech to sponsor the Atlanta Conference on Science, Technology and Innovation Policy.
- ▶ In December, IEEE-USA presented its annual Public Service Award to former senior congressional staff members William Bonvillian and David Goldston "for outstanding support of science and technology-related legislation and policy in the U.S. Congress." IEEE-USA President-Elect Russell Lefevre presented the awards at a special reception held on Capitol Hill.

# **Providing Career Tools and Professional Resouces**

#### New Products and Services

In 2007, IEEE-USA unveiled new and enhanced products designed to serve as the technical professional's best resource for achieving life-long career vitality. These included:

- ▶ A new CareerNavigator Web site at www.careers. ieeeusa.org, developed in partnership with Jibber Jobber to provide U.S. IEEE members with enhanced networking and job search capabilities
- A new CareerNavigator Web site at www.careers.ieeeusa.org was developed in partnership with Jibber Jobber to provide U.S. IEEE members with enhanced networking and job search capabilities.
- ▶ The 2007 Salary Survey with online salary calculator
- ▶ A career and legislative workshop on 19 October with the IEEE Santa Clara Valley Section
- ▶ A 3 November workshop on employment and career satisfaction skills with the IEEE San Diego Section
- ▶ Webinars on innovation and online networking
- ▶ Special member discounts on American Electronics Association training programs for high-tech executives

IEEE-USA published 12 new e-book titles, including several career-related titles such as the 2007 IEEE Consultants Profile, the Best of Today's Engineer on Career Transitions, and Personal Positioning for Engineers. IEEE Graduates of the Last Decade were provided free access to a download of the IEEE-USA e-book on career transitions.

IEEE-USA's monthly online magazine, *Today's Engineer*, and its print companion *Today's Engineer Digest* provide career-related features and news for engineering professionals. *Today's Engineer* increased its average visitor sessions each month by 10 percent in 2007 with an average of 56,600 visitor sessions. *IEEE-USA Today's Engineer Digest* received a 2007 *Apex Award of Public Excellence* in the magapapers and newspapers print category.

#### **Networking for Success**

IEEE-USA's Employment & Career Strategies Online Community continued to grow and remains the IEEE's largest virtual community with nearly 3,000 users engaged in over 2,100 threaded discussions. The newly launched Entrepreneurs Village Online Community also increased to nearly 250 participants, who used the

On 18 May, the Entrepreneur Activities Committee produced IEEE-USA's first program for IEEE.tv, "The Art of the Start," featuring former Apple Fellow and Managing Director of Garage.com, Guy Kawasaki, discussing new business start-ups.

community to share advice on how to launch and sustain a successful entrepreneurial business.

On 18 May, the *Entrepreneur Activities Committee* produced IEEE-USA's first program for IEEE.tv, "The Art of the Start," featuring former Apple Fellow and Managing Director of Garage.com, Guy Kawasaki, discussing new business start-ups.

In 2007, IEEE-USA laid plans for its first *TechMatch event*, to be held in May 2008 in conjunction with the Minnesota MedTech Conference. The TechMatch event will provide opportunities for medical device innovators to connect with prospective investors.

The IEEE-USA's Annual Meeting brought together more than 200 professional activities leaders from U.S. IEEE sections and IEEE technology societies and included tracks on public policy, employment and career services, professional awareness and skills development. Held in Scottsdale, Ariz., on 31 August-3 September, the meeting featured keynote addresses by Intel's Gaurang Choksi on "Technology Leadership"; Silicon Valley Innovation Institute's Howard Lieberman on "Meeting the Challenges of Global Competition"; and IEEE President-Elect Lew Terman on "Capitalizing on Global Opportunities."

# **Education For Competitiveness**

Two related IEEE-USA priorities for 2007 were strengthening K-12 science, technology, engineering and math (STEM) education and promoting life-long learning for IEEE members.

IEEE-USA's provided financial support to IEEE's Educational Activities to expand the Teacher-in-Service Program to Region 2 (Eastern USA) and Region 5 (Central USA). IEEE-USA also supported teacher-engineer engagements through the IEEE-USA Precollege Education Committee Teacher Reward/Grant Program. The IEEE-USA's Teacher-Engineer Partnership Award was presented to IEEE volunteer Moises Cases and teacher Christopher Benedict for their collaboration in increasing student awareness of science, technology, engineering and mathematics at Ridgetop Elementary School in Austin, Tex.

As part of efforts to support passage of the *America Competes Act*, IEEE-USA advocated successfully for a reauthorization of the Robert Noyce Scholarships program at the National Science Foundation, which provides funding to talented STEM majors and STEM professionals who commit to become mathematics and science teachers in high-need schools.

IEEE-USA helped market the TryEngineering.org educational portal, the IEEE's Expert Now on-line course offerings, and the IEEE Educational Partners Program, which gives IEEE members access to some 6,000 courses offered through participating colleges and universities.

To complement the technical training available through IEEE and its partners, IEEE-USA offers a host of resources and activities related to soft-skills and career vitality. Through the PACE Network and IEEE-USA's Professional Development Fund, IEEE-USA supported 20 professional development seminars held by U.S. IEEE sections during 2007.

IEEE-USA's Student Professional Activities Committee partnered with U.S. IEEE student branches to sponsor 40 student professional awareness conferences and events coast-to-coast in 2007.

#### S-PAC conferences were held at the following universities:

Virginia Polytechnic and State University (26 Jan.)

University of Portland (3 Feb.)

Michigan State (19 Feb.)

Georgia Tech (21 Feb.)

Virginia State University (21 Feb.)

Rowan University (22 Feb.)

North Dakota State University (6 March)

McNeese University (8 March)

Louisiana Tech (15 March)

Rutgers University (22 March)

DeVry University (29 March)

Texas Tech University (29 March)

Capitol College (30 March)

Valparaiso University (30 March)

University of Texas, Arlington (31 March)

Embry-Riddle Aeronautical University (31 March)

University of Washington (4 April)

University of Massachusetts (April 5)

Dartmouth (5 April)

Utah State University (5 April)

University of Oklahoma (7 April)

University of California, Berkeley (10 April)

Cleveland State University (II April)

California State University, Chico (12 April)

University of California, Fresno (14 April)

University of Arkansas, Fayetteville (21 April)

Grove City College (28 April)

University of Colorado, Boulder (28 April)

California State University, Long Beach (2 May)

University of California, Los Angeles (3 May)

University of California, Irvine (17 May)

Drexel University (9-12 July)

California State University, Northridge (6 Oct.)

University of Rhode Island (26 Oct.)

University of Colorado at Boulder (26 Oct.)

University of Missouri, Rolla (3 Nov.)

Cornell University (10 Nov.)

University of South Florida (13 Nov.)

Louisiana State University (15 Nov.)

University of California, San Diego (16 Nov.)

IEEE-USA also sponsored an extended student professional awareness event (SPAVe) at the University of California, Berkeley (31 Oct-1 Nov.).

# **Promoting the Public Understanding Of Engineering**

Through a variety of initiatives, IEEE-USA works to increase the public's understanding of technology and appreciation of engineers and their contributions to society:

As a participant in the "Discoveries and Breakthrough" media series, IEEE-USA partnered with the American Institute of Physics to provide monthly TV news reports on engineering and science-related topics to 110 local TV stations that broadcast to a potential audience of over 75-million viewers.

IEEE-USA continued to play a major role as a sponsor of Engineers Week (E-Week), the

annual celebration of engineering, which was held on 18-24 February. Among the highlights:

- Over 6000 parents and children participated in the IEEE-USA sponsored Discover Engineering Family Day at the National Building Museum.
- As a co-sponsor of the E-Week Future City Competition, IEEE-USA supported the essay competition and presented the "Best Communications System" award to Turkey Valley Community School of Jackson Junction, Iowa.
- ► IEEE-USA nominated Carlos Cordeiro, Ph.D. of the Philips Research North America, as one of the 15 "New Faces of Engineering" featured in a full-page ad in USA Today.
- IEEE-USA also organized three sessions as part of the 24-hour, multimedia "Global Marathon For, By and About Women in Engineering."

In addition, IEEE-USA sponsored Sourish Basu, a Ph.D. candidate in physics at Cornell University, to spend 10 weeks at *Scientific American* reporting on sci-tech as a participant in the American Association for the Advancement of Science's Mass Media Fellow program.

IEEE-USA launched its first online video competition on "How Engineers Make a World of Difference." IEEE student members were invited to submit 90-second videos targeted at young teens to generate interest in engineering as a career option and to reinforce engineers' contributions to society. Scholarship awards will be presented to the best videos in February 2008.

IEEE-USA helped arrange for the IEEE to sponsor the new PBS series *Design Squad*, a reality show which premiered in early 2007. The show features teams of teens competing on design challenges with the aid of engineer mentors and is targeted at pre-teen audiences to generate enthusiasm about engineering.



Youngsters surround IEEE-USA display at E-Week Discover Engineering Family Day in Washington, DC.



IEEE-USA Mass Media Fellow Sourish Basu (center) describes his sci-tech reporting to IEEE-USA Communications Committee members Abby Vogel (left) and Allan Schell (right).

## **Increasing Membership Development and Outreach**

Member outreach was a priority for 2007 IEEE-USA President John Meredith, who spoke at meetings of all six U.S. IEEE Regions and to many IEEE sections, with similar support from IEEE-USA President-Elect Russell Lefevre and Past President Ralph Wyndrum.

To help engage U.S. IEEE members in IEEE-USA's government relations effort, IEEE-USA staff addressed U.S. IEEE members at section meetings and events in more than a dozen cities from Bangor, Maine to Honolulu, Hawaii.

In March, IEEE-USA recognized IEEE's Santa Clara Valley and Mid-Hudson Valley Sections with \$1,000 cash incentives for successfully increasing their respective memberships by the highest number/percentage of all the U.S. IEEE sections.

As a 2007 membership renewal incentive, more than 15,000 free e-book titles were downloaded by IEEE members worldwide.



#### IEEE-USA 2007 Board of Directors

Standing (left to right): Barry Shoop, Robert Scolli, Loretta Arellano, John Twitchell, Winnfort Myles, George McClure, Robert Dawson, Burton Loupee, Gregg Vaughn, Chris Brantley
Sitting (left to right): Clifford Lau, James Howard, Russell Lefevre, John Meredith, Ralph Wyndrum, Ron Hira, John Dentler,

Kristi Hummel