

The President's Perspective

You and the IEEE Foundation have much to be proud of this year. Despite our difficult economic and political times, individuals donated more money to the IEEE Foundation in 2002 than in 2001.

In February 2002 the “doors” to the IEEE Virtual Museum were opened to visitors for the first time. Initiated and sponsored by the IEEE Foundation, this online museum would not have been possible without contributions from donors like you. The response from students, teachers, and the general public has been outstanding. If you have not already done so, please join the thousands of other visitors to this museum by logging on to www.ieee.org/museum.

The Virtual Museum is only one of many worthy projects funded by the IEEE Foundation. Emphasizing awards, education, and history, the Foundation selects projects

that it believes will contribute to making the world a better place for all people. Some of these projects are discussed in this newsletter.

As I begin my fourth year as President of the IEEE Foundation, I am grateful for, and humbled by, the support you have provided. My fellow directors and I promise to work diligently to select projects worthy of your continuing support. We join you in wanting to create a better future. As Charles F. Kettering once said, “my interest is in the future because I am going to spend the rest of my life there.”

With best wishes for a bright future,



Emerson Pugh
President, IEEE Foundation



EMERSON Pugh, IEEE Foundation President, at the Foundation's booth during IEEE Sections Congress 2002.

High School Students Get Real World Experience

By **Walter E. Myers, PE** — IEEE Life Senior Member and ASE Volunteer

Gaining real world experience while preparing for the future is the concept behind the Saturday Academy's High School Apprenticeships in Science and Engineering (ASE) Program. Since ASE's inception in 1990, 2,086 high school freshman, sophomores, and junior students from Oregon and South Western Washington have received the benefit of this eight-week long summer apprenticeship because of their potential to excel in science or engineering. Working with a practicing professional scientist or engineer mentor, the student apprentices test and refine their interests in engineering with meaningful hands-on summer experiences.

During the 2002 summer, 143 student apprentices were selected to participate from a pool of 459 applicants. The representation

reflected the program's thirteen years of success in erasing the stereotype of who can be scientists and engineers. Of the apprentices selected, 52% were male, 48% were female, and 32% of those students were from African American, Asian American, Hispanic, Native American, Pacific Islander, and multiracial backgrounds. The three to one applicant to position ratio underscores the demand for the program and need for more positions.

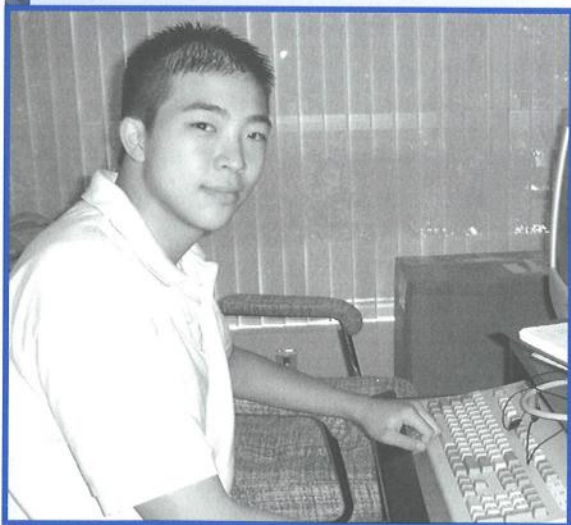
It was this demand that prompted the IEEE Foundation to support two student apprentices a year for three years beginning in 2002 working in the electrical/electronic engineering disciplines. To learn more about the ASE Program and how you can become a mentor please visit www.aseprogram.org.

2002 IEEE Foundation Funded Apprentices:

Derek Lin —

Westview High School, Portland, Oregon, USA

Derek, working with his mentor Robin Getz at Analog Devices, Northwest Labs in Beaverton, OR, characterized thermal diodes on the Pentium 4 processor using various laboratory equipment and techniques. His work included adding filters to reduce system noise during testing. Analog Devices' laboratories in Ireland and Boston plan to use this work to develop a chip that will dictate the voltage and current to regulate chip temperature. Derek is happy he had the opportunity to learn new skills and discovered that he enjoys hands-on projects.



DEREK Lin at work station on site at Analog Devices

Elizabeth Mullen —

Marist High School, Springfield, Oregon, USA

Elizabeth apprenticed with Dr. Toni Doolen in the Industrial and Manufacturing Engineering Department of Oregon State University in Corvallis, OR. She helped establish the new electronics-manufacturing laboratory and trained on three machines, which are smaller replicas of those used in major industries to create circuit boards. She set up operating specifications for each machine that included step-by-step instructions, definitions, safety guidelines and clean-up procedures. Elizabeth said, "This position has shown me that not only can I handle engineering, but I can also enjoy engineering as a career." Dr. Doolen agrees that Elizabeth "will make a good engineer."



ELIZABETH Mullen (right) with mentor Dr. Toni Doolen in new electronics manufacturing laboratory at Oregon State University.

The First IEEE Student Branch National Congress – Region 9



STUDENTS from all over Brazil came together in Juiz de Fora – Minas Gerais from 26 to 29 September 2002 for the 1st IEEE Student Branch National Congress – Region 9 (RNR_Brasil_2002) with the objective of addressing a strategy for membership enhancement. Not only was the objective met, but the event was also responsible for creating a strong union among the attendees, with a firm purpose to enhance the student membership in Brazil.



FREDERICO Bonincontro (right), IEEE Region 9 Student Activities Committee, leads the 90 attendees through the “Student Branch Goals” session with many of the other speakers ready to help. This was but one of the sessions held during this three day Congress, which was packed full of lectures, workshops and social activities. From left to right: Roberto Lacerda (Past Region 9 Director), Elson Segoshi (Chair, Conselho Section); Erick Delvizio (RNR_Brasil_2002’s Chair); Daniel Pezeta (RRR_2k1’s Responsible).

Celebrating Engineering Excellence World-Wide

By: Karen Galuchie, IEEE Development Office

On 1 November 2002 at the Shangri-la Hotel, Singapore, the first *IES/IEEE Joint Medal of Excellence*, was presented to Su Guanng, the CEO of the Defence Science and Technology Agency of Singapore, at a gala Awards banquet celebrating Singapore’s engineering community. Er. Prof. Guanng was presented the Award by Swee-Say Lim, the Guest-of-Honor and Minister of the Environment, The Republic of Singapore, in recognition of his very significant, impact making, and outstanding contributions to the development of the engineering profession; to the development of Science and Technology; to engineering education; and to the defence of Singapore.

This new Award, presented jointly by the Institute of Engineers, Singapore (IES) and the IEEE, recognizes Singapore professionals whose contributions in the fields of electricity, electronics, computer science and systems, management, and or related fields have greatly benefited society. This is the second Joint Award created and presented as part of the *IEEE Joint National Society Awards Projects* funded by the IEEE Foundation.



GUANING SU (center left) receives the first *IES/IEEE Joint Medal of Excellence* from Ser-Huan ONG, IES Past President (left); Kai-Sang LOCK, 2002 IES President (second from left); Swee-Say LIM, Minister of the Environment, Republic of Singapore (center right); Raymond FINDLAY, 2002 IEEE President (second from right); and Teck-Seng LOW, 2002 Region 10 Director (right)

The *Volunteers in Philanthropy* Pilot Takes Off in IEEE Region 3

By: **Karen Nowicki**, VIP Coordinator, IEEE Development Office

In response to meeting the challenging needs of expanding and increasing IEEE charitable support, the IEEE Foundation created the *Volunteers in Philanthropy (VIP)* Program to promote a greater awareness of philanthropy. The *VIP* Program is designed to support and train volunteers to encourage growth of the IEEE philanthropic culture by creating long-term relationships between the organization, the VIPs, and supporters of IEEE programs.

Regional training sessions will be conducted to inform volunteers about the IEEE Foundation's philanthropic efforts in Awards, Education, History and Special Initiatives. Once VIPs are trained they are ready to raise awareness about the IEEE's philanthropic "good works" by building relationships with our supporters. VIPs will increase awareness and support by educating prospective donors about the mission and the charitable opportunities for partnership with the IEEE Foundation. VIPs will also recognize prospective and current donors' philanthropic interests and expectations and match their goals with the goals of the IEEE.

VIPs will not be alone in their efforts. VIPs will receive staff support for all questions and receive updated IEEE Foundation and *VIP* materials. Staff will also help VIPs with their outreach efforts. With increased outreach efforts from VIPs and staff, we will keep our supporters engaged and informed about our charitable initiatives.

As mentioned earlier, the ultimate goal of the *VIP* Program is to create a greater awareness of philanthropy and we will do this by identifying and training volunteers in every IEEE Region. To start towards that goal, we are developing a *VIP* Pilot Program in IEEE Region 3 to monitor and manage the program in the beginning stages so that adjustments can be made before launching the program internationally. The Region 3 *VIP* Pilot Program is off to a great start and moving ahead with plans to officially train VIPs in Florida on 9th February 2003. "Region 3 is very excited about the opportunity to participate in the *VIP* Program. We feel it will create a win-win situation

for the IEEE local volunteers, our members and the general public. Everyone will now have a much better understanding of the many accomplishments of the IEEE Foundation and how their contributions can help us all," said Jim Howard, Region 3 Director.

If you are interested in becoming a part of this exciting program as a *VIP*, please contact Karen Nowicki, *VIP* Coordinator, in the IEEE Development Office by telephone: +1 732 562 3939; email: k.nowicki@ieee.org; or facsimile: +1 732 981 9515.



THE first *VIP* Planning Committee meeting was held on 8 December 2002 in Tampa, FL, USA. This Committee will help design and oversee the 2003 *VIP* Pilot Program in IEEE Region 3. The Committee includes IEEE Volunteers (left to right) Quang Tang, Florida West Coast Section Chair; Carl Hussey, Palm Beach Section Chair; Scott Haynes, Florida West Coast Section PACE Co-Chair; and Jim Howard, Region 3 Director.

IEEE FOUNDATION ANNOUNCES THE 2003 PROPOSAL DEADLINES

The IEEE Foundation, the philanthropic arm of the IEEE, is now accepting proposals for projects that:

- Improve education in mathematics, science and technology from pre-college through continuing education;
- Preserve, study, or promulgate the history of IEEE-associated technologies;
- Recognize major contributions to these technologies and their applications; or
- Show promise of making a major contribution to the worldwide communities the IEEE serves or significantly advancing the profession.

Proposal deadlines to the IEEE Foundation are as follows:

For consideration at the Foundation's June meeting, abstracts are due **14 March 2003** and proposals by **25 April 2003**.

For consideration in November, abstracts are due by **15 August 2003** and proposals by **26 September 2003**.

To learn more about the IEEE Foundation and obtain a copy of the grant guidelines, visit

<http://www.ieee.org/foundation> or call
+1 732 981-3435.

IEEE Grassroots Leaders Receive Leadership Tools

By: **Dan Benigni**, Chair, IEEE Sections Congress 2002 Steering Committee

Volunteer delegates representing 262 of IEEE's 298 Sections took time out of their busy schedules to come together in Washington D.C. for four days this past October for the seventh triennial *IEEE Sections Congress 2002*.

The purpose of Sections Congress is three-fold: leadership training; networking; and guiding the future of the Institute through the development and prioritization of recommendations for action.

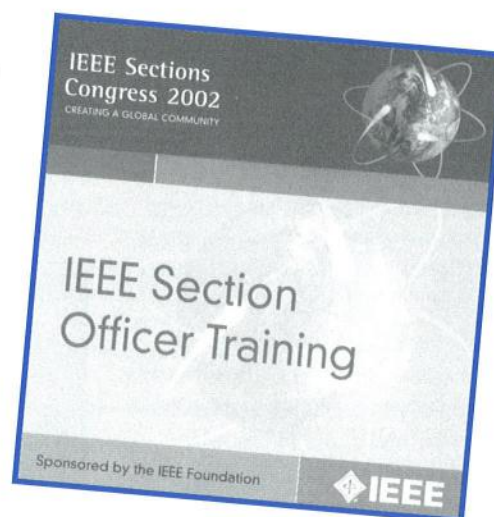
Thanks to a generous grant from the IEEE Foundation, this Congress was able to take the leadership training component in a new direction and to a new level. Through the implementation of a Core Track series of mandatory sessions that started the weekend's agenda, and the production of a CD-ROM containing key IEEE governance documents and the Core Track session presentations, IEEE Section leaders now have all the basic ingredients they need to lead their Sections into the future at their fingertips. This in-depth leadership program began with the "IEEE Policies & Procedures" session, which provided an orientation to the IEEE organization, policymaking, and the IEEE master brand. Section financial management, region & society assistance, conferences, and

donations were also covered. The session concluded by reviewing the required reporting, as well as Section bylaws and elections.

The second Core Track session, "Products & Services for Volunteers" updated the Section leaders on electronic services, including entity web hosting, SAMIEEE, the geographic roster, and functional email aliases. The session also focused on IEEE Section newsletters, awards and recognitions, and concluded with a review of Section officers' job descriptions.

This approach to leadership training provides the IEEE Section leaders with uniform, basic administrative training and a new appreciation of the increasing importance of sound Section management. Through effective Section leadership, IEEE's local members across the IEEE global community receive the services needed to continue their education, to grow professionally, as well as to mentor and support the education of students and

future IEEE members. We believe these Core Track sessions sponsored by the IEEE Foundation will go a long way toward creating the effective leadership needed to pursue those goals.



EACH delegate at *IEEE Sections Congress 2002* received this CD ROM containing key IEEE governance documents and the Core Track session presentations. Sponsored by the IEEE Foundation, this CD ROM is a useful addition to the IEEE leadership toolbox.

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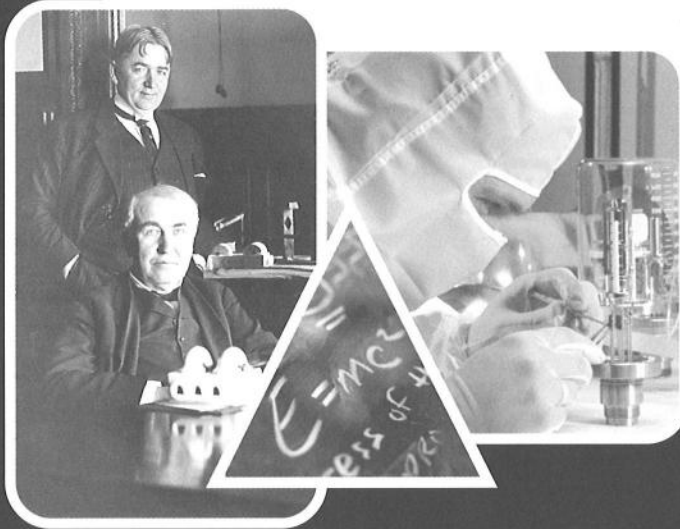
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