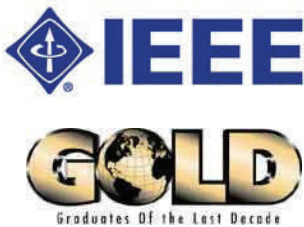


# IEEE GOLDRush

## Special theme edition: Serving humanitarian needs

March 2008



## Message from 2008 MGA GOLD Committee Chair, Soon Wan

Dear GOLD members,

The IEEE GOLD (Graduates of the Last Decade) program was launched institute wide at the IEEE Sections Congress in late 1996. Since then, the program has provided significant benefits to many GOLD members including leadership development, young career mentoring, and professional networking. GOLD members are IEEE Full Members or GSMs (Graduate Student Members) who have graduated with their first professional degree in the past ten years. The main objective of GOLD is to facilitate the transition from Student to Higher Grade members. In addition, GOLD strives to enhance the membership retention rate of recent graduates and their participation in the IEEE.

The 2008 Member and Geographic Activities (MGA) GOLD Committee has an excellent composition of volunteers. They are all filled with positive energy, enthusiasm and passion. Their vision is to increase the value and worth of IEEE services and programs to young professionals and recent graduates. Additionally, their mission is to develop programs and foster relationships to provide tangible value to members, pro-



*Greetings from the 2008 MGA GOLD Committee*

mote the GOLD program to students, and to recruit, develop and nurture volunteers.

This year, as part of the IEEE's activities relating to humanitarian causes, MGA GOLD worked with the IEEE Committee on Earth Observation (ICEO), and sponsored an online seminar on February 28, 2008. ICEO facilitates broad-based IEEE participation in the Group on Earth Observations (GEO) and its international effort to create a Global Earth Observation System of Systems (GEOSS) for applying Earth observation data and information for societal benefits. The focus of GEO and ICEO is to help improve living conditions, particularly in

developing countries, through the development of GEOSS, a realizable global resource for decision makers at all levels. For more information or to get involved, please visit <http://www.ieee-earth.org/>.

Another GOLD project is to collaborate with Engineers Without Borders (EWB) and other Non-Governmental Organizations (NGOs) to pilot a workshop in Boston, Massachusetts, USA in August 2008. Speakers from EWB and IEEE will be at the workshop to share their experiences on humanitarian projects. The main objective of this one-day workshop

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- Injecting Sustainability into the Engineering Design Process (Page 13).
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## Message from GOLDRush Editor

### Food for thought: Idealists and Pragmatists – serving humanitarian needs

By Adrian Pais  
(IEEE GOLDRush Editor)

During my time volunteering in rural Zambia and working in the wireless industry in New Zealand and the Netherlands, I have come across a wide variety of people ranging from *idealists* to *pragmatists*.

Idealists are those that are visionary – they view the world, or a part of the world, in a way that usually challenges people around them. They often do not accept the norms of society and ‘push the boundaries’ beyond what many consider as being achievable at the particular time or situation. They encourage others to believe that great things are possible.

At the other end of the spectrum are the pragmatists. Pragmatists usually question what’s actually possible, and examine the various factors that influence a solution. In doing this, they restrict the solution to what they consider as being practical and achievable, based on the various influencing factors.

I believe that idealists and pragmatists have roles that complement each other perfectly in the quest of *serving humanitarian needs* – the focus of this edition of *IEEE GOLDRush*. In rural areas of developing countries, where there might be little or no hope of hav-

ing basics such as clean water and electricity, the idealists make people believe that such things are actually possible, and in doing so lift up their spirits, encouraging them to ‘keep pressing forward’ despite the difficulties and inherent restrictions of the environment. They ‘stretch out’ what can be achieved despite any bounding limits such as limited budget, limited resources and logistical complexities. The pragmatists meanwhile examine the limitations of the environment more carefully. They consider the various influencing factors, ranging from technical to financial ones, and on that basis try to come up with meaningful, practical, and sustainable solutions.

The optimal ‘meeting point’ between the idealist and the pragmatist occurs when the maximum benefit is achieved towards the common cause; without the idealist, it would not have been possible to achieve great things because the goals would not have been so audacious in the first place, and without the pragmatist the solution to the problem at hand would not have been restricted to what was actually achievable, practical and sustainable.

Of course, as individuals each of us lies somewhere in the spectrum between being an *absolute* idealist and an *absolute* pragmatist.

Wherever this may be, we all have significant contributions to make, and it is only through combined, concerted efforts that significant strides will be made in the quest for us as engineers and scientists to serve humanity better.

As part of its “[Envisioned Future](#)”, the IEEE has a big audacious goal to “be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.” As young people, it is our duty to turn this goal into tangible actions. These actions range from raising awareness amongst our peers about the necessity to develop technologies suitable for rural areas, to organising workshops on developmental issues, and implementing solutions that change the lives of underprivileged people ‘on the ground’. The four invited articles in this newsletter written by distinguished colleagues are intended to stimulate your thought on this matter.

*IEEE GOLDRush* is intended to serve young engineers throughout the world by being a forum for the exchange of ideas, thus giving them an opportunity to express themselves within and beyond the IEEE. Since the publication of the last edition of *IEEE GOLDRush* in

December 2007, we have two more volunteers in our team – Dr Alex Wong from New Zealand as the Graphic Designer and Timothy Wong from Australia as an Editorial Assistant. We welcome and thank them for their valuable contributions! We now have nine dedicated people in our team, and are on the way to making this publication even bigger and better.

This edition contains a brand new section with three peer-reviewed articles submitted by GOLD members. We judged these as having the highest quality and relevance of the many articles submitted for review. Congratulations to the authors whose papers are published here.

In February 2008, the MGA GOLD Committee had their annual meeting in Louisville, Kentucky, USA. At the meeting we discussed the idea of having a brand new, professionally published magazine to cater specifically for young engineers. The intention this year is to develop a concept and timeline for doing this, and eventually to present this to relevant boards and leadership within the IEEE to make this happen. I urge you to e-mail me at [a.pais@ieee.org](mailto:a.pais@ieee.org) if you have any ideas related to this or if you would like to contribute to the development of the concept.

## GOLDRush Invited Articles

### GOLD and the IEEE Foundation

By Richard J. Gowen  
(President, IEEE Foundation)

The IEEE Foundation cultivates relationships and resources to advance IEEE's core purposes to foster technological innovation and excellence to benefit humanity. As the philanthropic arm of the IEEE, the IEEE Foundation fulfills this role in two ways. First, it awards project grants to new and innovative projects that seek to improve the worldwide technological literacy of society from childhood through adulthood. Second, it serves as the fund administrator for over 120 restricted funds that support a variety of educational, historical preservation, and peer recognition programs of IEEE Units.

During 2007, the IEEE Foundation was pleased to be able to support the efforts of the IEEE GOLD Committee by funding an US\$8,500 project grant entitled "IEEE GOLD Conference Tracks." The goal for this project grant was to add a technical and educative focus to GOLD activities at IEEE Society conferences. The plan was to run two pilot GOLD tracks at selected IEEE Society flagship conferences. The benefit to GOLD

attendees would be the ability to interact with their peers, publicize thesis research, discuss industry practices, interact with established researchers and much more.

All reports indicate this was indeed a successful investment of IEEE Foundation resources. The two conferences selected were:

- 2007 IEEE International Engineering Management Conference held in Austin, Texas, USA from 29 July to 1 August, 2007
- 2007 IEEE Global Communications Conference, Exhibition & Industry Forum (GLOBECOM 2007) held in Washington DC, USA from 26 to 30 November, 2007.

The group that organized these pilot events, led by Dr Irena Atov, has developed a manual / template for other GOLD Society coordinators or members to use in the future to run their own GOLD tracks or sessions within their own IEEE Society. Additional information about the event during GLOBECOM 2007 is included in this issue of *IEEE GOLDRush*.

The IEEE Foundation is delighted to have played a part in helping the IEEE GOLD Committee extend its reach among its

members to benefit society as a whole. I encourage each IEEE GOLD member to consider other ways you can each use your skills and abilities to benefit society. This can be done in many different ways depending upon your individual values and objectives.

One project that may be of interest to GOLD members that the IEEE Foundation is helping to fund is the Humanitarian Technology Challenge (HTC). The HTC is a partnership between the IEEE and the United Nations Foundation. The goal of the partnership is to identify relevant technological challenges that humanitarian aid workers face in the field and then tap into the innovation and solution-building capacity of IEEE's members to provide focused solutions to all or some of the challenges.

IEEE Foundation is participating by sponsoring the Humanitarian Technology Challenge 2008 Kick-Off Conference. This conference will bring together representatives from non-governmental organizations (NGOs), IEEE members and volunteers, corporations, philanthropic foundations and user gateway NGO's (organizations that can help implement the solu-



*Dr Richard Gowen is the President of the IEEE Foundation. He is the 1984 Centennial President of the IEEE, and has served in IEEE Section, Chapter, Society, Region, Division, and Board positions.*

tions) to begin to identify challenges and approaches to solving them. The conference is planned for late 2008, with a location to be announced soon. I am confident that GOLD members will and should play an important role in helping to develop the solutions to the challenges identified through the Conference – the future may depend upon it.

To learn more about IEEE Foundation and how you can help support its important work visit <http://www.ieeefoundation.org>.

## An Inclusive World

By Gertjan van Stam

In rural Africa one learns to appreciate the inclusive nature of the local African culture. Where I live and work, one is instantly regarded as an integral part of the social environment and interactions proceed with people as if one has been always present. For true progress, co-operation is imperative between engineers and applied scientists all over the world in a multi-disciplinary way. Africa has contributions to make, especially since working inclusively and holistically is enshrined in the African philosophical framework of a cultural reality based upon relationship-based economics.

Fostering and including electrical engineers worldwide is a challenge that the IEEE wants to tackle. At least, that is what I interpret from the article *New Initiative Looks Far Into the Future*. It states that the IEEE wishes "to be essential to the global technical community and to technical professionals everywhere, and to be universally recognized for the contributions of technology and of technical professionals in improving global conditions."

In order to realize sustainable progress it is imperative that everybody in the world has access to information and to communication facilities, including the Internet. Connecting people to the information highway contributes tangibly to improvement of the quality of

life. This is especially true for those who live in the developing world. Experience in rural Africa suggests that Internet connectivity has a huge impact in the rural societies that are connected. I have witnessed Internet connectivity to support health care development significantly. For instance all Zambian doctors in my rural area study online, as do many professionals in health and education. I could imagine that mitigation of natural disasters needs to be supported by data gathering, for which a communications channel is imperative. I experience that connectivity strongly supports rural health, rural education, rural community building, agriculture, and the progress of business.

Thus we are pursuing to provide Internet access and services to rural areas in Africa. The vehicle is called 'LinkNet', the first Information and Communications Technology Co-operative organization of its kind in Zambia. Almost all LinkNet electrical engineers are trained and grown from within Zambian rural areas. Rural-to-rural exchange of engineers and expertise is taking place. There is a comprehensive master plan, augmented with daring and innovative ideas. Supporting alliances are sought and found, and now relationships exist with applied partners in South Africa and world wide. Even the University of Zambia has joined forces and now we aim to establish new academic and research activities in Zambia, with

focus on rural African development. All this is empowered by a growing base of unique documentation, reports, and studies on various aspects of the rural development of technology and technical professionals. All documentation and ideas are freely shared and available on LinkNet's website <http://www.link.net.zm>. All work is initiated and managed from grassroots level in LinkNet's Center of Experience in Macha, at the heart of the rural areas of Zambia.

The challenges are real: do we have ideas and understanding of how engineers in rural Africa can have productive and rewarding careers? How should governments of developing African nations seek the input from a body like the IEEE as an unbiased source of technical information? How can industry in rural Africa recognize and value of an organization like the IEEE and how can employees of African industry participate in a professional society like the IEEE? How could the IEEE shape - or even participate - in research in rural Africa? How can technology be commercialized in an African setting? How can curricula of a university like the University of Zambia be developed and accredited? How can continuing education in fields of engineering be implemented in rural Africa?

Engineers in Africa have contributions to make. Thus we should aim for tangible outcomes from IEEE's goal 'to be essential to all professionals'. It must become



*Gertjan van Stam is a communications strategist who has lived in rural southern Africa since 2000. Previously he was strategist at KPN, the incumbent telecommunications operator of the Netherlands, and started his own internet innovations company. Among other activities, since 2004 he has been working on building a networked ICT co-operative at the grassroots level in rural Africa.*

real for us living and working in rural Africa as we are also trying to develop and implement ICT in our home markets. Engineers need each other worldwide. Inclusion of African brain power and expertise is urgently needed. Science and technology are facing a huge challenge and through its quest to include all engineers worldwide, the IEEE can play a major role in fostering the needed co-operation between and among scientists and engineers for the benefit of all people of the world.



## One More Reason to Follow Your Heart

By Thomas Curtis

Unlike most of the contributors here I am not incredibly brilliant, nor advanced in my profession. Nevertheless I managed to do something remarkable. After I graduated from Rensselaer Polytechnic Institute (RPI) with a Masters in Operations Research, I joined the Peace Corps and spent two years teaching mathematics in Africa. I taught high school students basic math skills (adding negative numbers), advanced topics (linear programming) and problem solving skills fundamental to engineering. The *IEEE Spectrum* was a great educational resource. The magazines were used to reward students, who were fascinated by the pictures and possibilities of technology, and provided me the opportunity to encourage students to study hard and become engineers. Living at the school, I was able to work with students on the school's many minor engineering projects, such as building new classrooms and installing Internet at the school.

What did I get in return for all this work? Hint: millions of dollars is not the answer. Things much more important than money: gratitude, joy and a lot of knowledge. Gratitude and joy were expected but knowledge needs explanation. Some of the things I learned were teaching skills: how to read students' faces and keep them interested. Other things I learned were life skills: how to live simply, self education (by developing a joy of reading non-fiction), and negotia-

tion skills. Finally, I learned the confidence to do things, e.g. fix clogged pipes, repair house wiring, and climb Mount Kilimanjaro.

The case for doing humanitarian work is compelling. You improve the lives of others and make yourself happy. A recent book "Why Good Things Happen to Good People" by Steven Post provides lots of support for how giving leads to long term mental health benefits. The benefits typically include reduced anxiety and depression, and if you think just a little bit, I am sure you can imagine why. There are a couple of ways to get involved abroad and locally.

Volunteering abroad provides the excuse to go where you always wanted to go, and a chance to do a project interesting to you. Long term volunteer abroad stints often last for a year or two, and typically will pay some if not most of the costs. The Peace Corps pays the cost of living (around \$200 a month), plus travel expenses to and from the country, and a transition payment to come home. More

important than paid travel, the extended time allows you to learn the culture, build relationships and develop projects that fit your strengths to the community's needs. While you may be too entrenched in your school or work now to consider such a commitment, the odds that it may be feasible in your future are high. Any career transition can be time to explore.

Volunteering is especially reasonable for new college grads, people about to change careers (which statistically happens every five years) and retirees.

But you don't have to spend two years of your life. Short term projects can be done within a couple of weeks or months. You could spend your vacation (weeks), or, if your employer allows it, take a more extended leave (months). The shorter time span is a more intense experience. For those looking for organizations to help facili-



*Thomas Curtis and some of his Form IV students. Thomas recently received a RAB GOLD Achievement Award for his work in Tanzania. You can read more about his experience at <http://tintanzania.blogspot.com>.*

tate, "Alternatives to the Peace Corps: A Guide of Global Volunteer Opportunities" by Paul Blackhurst is good place to start.

Getting involved locally may not be as exotic but it is easy. You don't have to travel and the time commitment is flexible. A simple way to find local opportunities is through Volunteer Match at [www.VolunteerMatch.org](http://www.VolunteerMatch.org). So make a choice, make a difference and be happy.

## Young Adults, Engineering, and Humanitarian Causes

*"When we extend our hearts, we receive many folds in return"*

By Darrel Chong

I returned to Singapore from a community service expedition in December 2002, pondering over lessons I had unexpectedly gathered from interacting and liv-

ing alongside a community in Hainan, China. The most vivid reflection I had, with my team of 35 undergraduates from the National University of Singapore, could be summed up as 'we gave the little we had and gained in ways that we didn't imagine possible'.

We started the expedition with a mindset that it was a mission that mainly involved us giving. As engineers, we looked at all the practical dimensions and devised programs that would add value to the village. We achieved our goals successfully. However, it was only near the end of the expedition, after several sessions of

team reflections and discussions, that we realized that what we had experienced over the weeks was going to challenge and possibly change our mental frameworks and belief system. In a nutshell, the team gained two important insights from the expedition: (a) the value of living with the basics (material-wise) and be content with it, and (b) what it means to live with humility, putting others before ourselves. One of the participants mentioned, *"I used to think to myself that I will earn big bucks after I graduate with an MBA. But now I can't even hold my 'chan co' ('spade' in a Chinese dialect) properly. The old lady, probably thrice my age, could dig the soil faster and endure further than I could. How proud I was in the past. This is truly a humbling experience for me."* The insights we gained are some character-building principles that have been repeatedly emphasized over the centuries by teachers, such as Confucius, Mahatma Gandhi, and Mother



*Developing a more efficient irrigation system.*

Teresa. These principles, however, in my opinion, have become increasingly difficult to integrate in young people's value system because of the affluence that most city dwellers, like me, have been living with. Amazingly, the expedition, which may be considered simple in scale and technical complexity compared to those by UN or related to Tsunami Rescue projects, was sufficient to create an environment where my team was able to learn such principles in a very personal manner. To me, the expedition demonstrated the tre-

IEEE GOLD with established humanitarian organizations to explore avenues for our young members to participate in humanitarian projects. As a start, GOLD will partner with humanitarian organizations, like EWB (Engineers Without Borders) to host a 'Engineers and Humanitarian causes' work-



*A reflection & facilitation session.*

through a process of solving technological challenges from the field.

*"I used to think to myself that I will earn big bucks after I graduate with an MBA. But now I can't even hold my 'chan co' ('spade' in a Chinese dialect) properly. The old lady, probably thrice my age, could dig the soil faster and endure further than I could. How proud I was in the past. This is truly a humbling experience for me."*

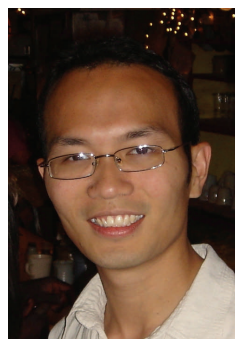
mendous advantages of creating opportunities for young people to be involved in humanitarian projects - because they not only allow willing individuals to contribute to the community, but also offer opportunities for participants to bring home perspectives that have the power to change the way they live.

I see a special relationship between young adults, engineering, and humanitarian projects. Youth from 20s to 30s with an engineering education possess the right ingredients: energy, time, and technical skills, to improve living conditions of the less privileged. At the same time, young adults' propensity to adapt and learn through experience allows them to gain tremendously through humanitarian involvement. As a result, work is currently in progress to connect

shop in Boston (Region 1) in August 2008<sup>1</sup>. Through this workshop, GOLD aims (1) to create awareness on how engineers can extend and transfer their expertise to help the less privileged and (2) to offer some avenues through which our members can proactively participate in humanitarian works. To do that, we are inviting speakers to share their stories and reflections on humanitarian projects, and conduct a short hands-on session where participants go

I hope this article inspires you to think further as to how you can actively use your talents for humanitarian causes. As individuals, we do not have the power to change the world. But, the combination of all individual efforts are more than able to create a huge impact on people around us.

<sup>1</sup>Please feel free to register your interest for the workshop or ask a question by sending an email to [dchong@ieee.org](mailto:dchong@ieee.org).



*Darrel graduated with a Ph.D in organizational behavior from the National University of Singapore and Eindhoven University of Technology. He specializes in business development and human resource management with Keppel Telecommunications in Singapore. He was also a Past Chair of MGA GOLD Committee, and is currently a member of MGA Strategic Planning Committee and MGA Nomination & Appointment Committee.*

## GOLD News

### Joint Benelux and Germany GOLD Weekend

By Ralph Wijshoff  
(IEEE Benelux Section Secretary)

From October 19 to 21, 2007, the first IEEE Benelux GOLD Weekend - organized in cooperation with GOLD Germany, Student Branch Leuven and Women In Engineering (WIE) Leuven - took place in Leuven, Belgium. During this event, entitled "Finding your Career Path", a mixture of presentations about design management, career development and technical subjects were offered.

Five companies participated in this event. After an introduction about IEEE and GOLD by the Benelux Section GOLD and Professional Activities Chairman, Emre Ayranci, and the Germany Section GOLD Chairman, Michael Schoen, *Man-*

*power Professional* explained which aspects should be taken into account when searching for a job, how to choose the career that suits one best, and what can be expected during a career in engineering. An engineer from *ASML* illustrated this by explaining the choices he made during his career path and describing the daily work of his current job. Representatives from *Google* and *Septentrio* gave a presentation on a technical subject related to our GPS (fun!) activity. Lastly, Prof. Dr. Michael Wahl of the University of Siegen gave a three-hour workshop about controlling costs in digital system design.

Social and cultural activities were part of the program as well. We visited the



*Participants of the joint Benelux and Germany GOLD Weekend.*

beautiful old Leuven city center, tasted famous Belgian beers and played an interactive GPS City Game in Antwerp, Belgium. The event was a great success. The 53 participants were all happy with the quality of the meeting as it had good technical content, a lot of networking opportunities, and sufficient social activities.

### IEEE GOLD Phoenix Chapter Host Student Reception

By Suzanna Cottrell  
(IEEE GOLD Phoenix Affinity Group  
Treasurer )

On November 17, 2007 at the well known bar & restaurant "Dave and Buster's" in Tempe, the Phoenix Chapter of IEEE GOLD hosted a reception for students from the nearby engineering colleges. The student reception was to welcome them to the professional world and inform them of the benefits of staying with or joining the IEEE. This exciting event was also an opportunity for students to network with HR representatives and professionals in a fun and relaxed environment. The invita-

tion extended to all the Phoenix IEEE student chapters and included all the senior, junior and graduate members as well as their Electrical, Electronic and Computer Science/Engineering peers. IEEE GOLD officers and industry representatives also attended the event.

The event started off with a welcome speech delivered by the IEEE GOLD Phoenix Chapter Chair Mike Poggie. This was followed by a half hour of networking for students to meet professionals, HR representatives, alumni, and other guests. The students talked about their studies and job searching while the professionals gave them advice about their careers. After net-

working, a delicious lunch of Chicken Monte Crisco was served, during which Mike Poggie gave a keynote speech on the transition from a student member to a GOLD member. Mike touched upon the general benefits of IEEE and IEEE GOLD which included publications, networking, technical societies, members' portal, volunteering, conferences, standard developments, corporate promotions, and the activities of the GOLD section. For more about his presentation see: <http://www.ewh.ieee.org/r6/phoenix/gold/about.php>

After the keynote address, there was more networking, with many students ap-





*Students enjoying games at Dave and Buster's.*

proaching Mike to thank him for sharing the information on IEEE and IEEE GOLD. Contact information was exchanged, and future events and interests in volunteering for IEEE GOLD were discussed. As the student reception was winding down, all the attendees were invited to stick around

and enjoy some games at the ever entertaining "Dave and Buster's", strengthening the camaraderie between the professionals and students.

Overall, about 20 people attended the first IEEE GOLD Phoenix Chapter student reception, and there was positive feedback on how much they enjoyed the event and also how much more they learned about IEEE. Some key things to consider for having a fun and successful student reception include location, invited guests, and keynote presentation. The location should be somewhere fun, where college students would like to go. Our section was lucky enough to book "Dave and Buster's", which has a large appeal to college student as well as provide us with a conference center. Who you invite, besides the stu-

dents, is also important. Consider inviting HR and industry representatives—these attendees give the students more opportunities to find their first professional job. It is also important to invite GOLD officers and members who can share their experiences with work and IEEE. The final key to success at your student reception event is a good keynote speech. Make sure to highlight the great benefits of IEEE and touch upon the fun activities and interesting technology workshops that your local GOLD section does. Now go host your own IEEE GOLD student reception and have a good time planning and attending it!

## GOLD session at Globecom 2007

**By Irena Atov**  
(Chair, GOLD Conference Projects 2007  
and TAB Representative to GOLD 2007)

In December 2007, the GOLD Conference project team led by Irena Atov, the TAB representative on the GOLD Committee, ran a second successful [GOLD technical session](#) at ComSoc's flagship conference GLOBECOM 2007. The session was a great success and GOLD has been commended by the conference organizers and presenters.

The GOLD session was chaired by Celia Desmond and was the last session before the conference dinner. It was attended by 40 people. The [program](#) was made up of invited talks by Prof. Ted Rappaport from the University of Texas who spoke on starting a company from research and Dr Tao Zhang from Telcordia who looked at the challenges of working in an industry based research laboratory.

These were followed by a panel session on entrepreneurship. The panel was made up of speakers who had wide and valuable experience in this area. The moderator was Mike Chester, the Chairman of the Boston Entrepreneurial Network. He spoke about raising money for a start-up. Another panellist was Dr Ralph Wyndrum (past President of IEEE-USA and head of the Innovation Institute) who talked about the invaluable services offered by the Institute to new entrepreneurs. Dr Bob Miller spoke on how to survive and stay financially solvent while your entrepreneurial venture was getting off the ground. Dr Tao Peng gave an interesting talk on his personal experiences in starting a security solutions company by turning his university research into commercial company with offices in Australia, China and beyond. Finally, Dr Anthony Soong from Huawei Technologies took the corporate view of innovation and explained how companies

can encourage this through proper mentoring of young engineers.

In summary, the two GOLD conference track and session projects in 2007 (the first at IEMC 2007 and the second at GLOBECOM 2007) have both been judged to be outstanding successes. They have established GOLD's reputation for adding value to both GOLD and Society membership.

And what about the future? These were run as pilot projects by a small team of volunteers and with the support of an IEEE Foundation Grant. GOLD society co-ordinators or Societies may wish to run a GOLD technical track or session at the society flagship conferences for themselves. To assist these people the GOLD team has written up the two pilots as a template for others to follow. We hope you have just as much fun as we did.

If you have any queries please e-mail us at [GOLDconference@ieee.org](mailto:GOLDconference@ieee.org).



## IEEE Boston GOLD & PACE – Climb to a New Height!

By Robert Vice

(IEEE Boston GOLD Affinity Group  
Vice-Chair and IEEE Boston PACE  
Chair)

The first IEEE Boston GOLD and PACE (Professional Activities Committee for Engineers) rock climbing event took place at MetroRock Indoor Climbing Center in Everett, MA with an impressive turnout. Twenty-two IEEE members and guests attended the event after battling the bitter cold and wind. Everyone was eager to get on the rock wall and start their beginner lesson where they would learn all of the basics required to climb safely in a gym.

The energetic staff at MetroRock helped everyone with their equipment and staging before the climbing lesson began. To help reinforce the lesson, the group split into smaller groups of approximately six people. The small groups worked closely as a team to help in the tricky spots and offer

suggestions for ways to remember the techniques taught in the lesson. It was exciting to see everyone working together at something many had not tried. At the end of the lesson, everyone passed the test and was allowed to climb in the gym without the need of the staff.

Pizza was delivered just before the completion of the lesson, which provided valuable time for members to network with each other. After finishing the pizza, everyone was eager to start climbing for real. Many in the group were trying very difficult routes, largely because they did not understand the rating system used for the routes. Once the ratings were explained, there much laughter.

The day ended when all of the IEEE members and guests were thrown out of the gym because it was closing. A five hour event, inclusive of the two hour lesson, made this as an extremely successful event



*Boston GOLD and PACE members at the Rock Climbing Event.*

and one the IEEE Boston GOLD will hold again. The attendees all gave positive feedback on the event, and many inquired about the plans for the next IEEE event. The general survey of this group suggested more outdoor types of events (hiking, skiing, etc.).

The success of this event brought awareness of the IEEE to all guests of the IEEE members and the members of the MetroRock Indoor Climbing Center.

## Report on First EDS GOLD Event

By Ravi Todi

(IEEE Representative on Electron De-  
vices Society )

On Sunday, December 9, 2007, the IEEE Electron Device Society (EDS) hosted its first ever GOLD event, in conjunction with the International Electron Device Meeting (IEDM) at the Washington Hilton and Towers Hotel. The theme of the event was "Career Development and Networking". The event was well attended by many GOLD members, students, and EDS Ad-Com (Advisory Committee) members.

The event began with an invited seminar by Mary Ann Boop, manager for career

development at IBM. She presented a seminar entitled *Career Development: Imagine the Possibilities*. She talked about how to approach career development at different points in your career. Whether you are tenured in your profession and want to continue to grow in your field of expertise; or you want to change your career path but do not know how to start; or you are fresh out of college and are just beginning your career journey, Ms. Boop offered valuable advice. The discussions included how to use mentoring as a means to develop your career, regardless of whether you work in a small company or large corporation. She pointed out how

leveraging many relationships throughout your career is instrumental in helping you progress along a career path, be it to develop new expertise and skills or just using a network to "socialize" within the company.

The seminar was followed by a panel discussion. The panel included the following EDS Ad-Com members, which represented a good mixture of different career options:

- Paul Yu – Vice President for Education Activities. Paul is a professor at the University of California at San Diego and was department chair for several years.

- Renuka Jindal – Vice President for Publications. Renuka is a professor at University of Louisiana at Lafayette and had spent the majority of his career at Bell Labs.
- Rebecca Nikolic – Elected Ad-Com Member. Rebecca is with Lawrence Livermore National Laboratory.
- Douglas Verret – Editor in Chief, *Transactions on Electron Devices*. Doug is employed with Texas Instru-

ments.

- Jon Canddalaria – Vice President for Meeting. Jon is employed with Motorola.

Each of the panelists talked about the changes in their career and gave advice about the pros and cons of career options from their experience. They also answered questions from the audience. The event was followed by a networking reception and dinner. At the networking reception young

engineers and students had an opportunity to interact with EDS Ad-Com members.

The initial feedback received during and after the event showed that it was a great success. We intend to enhance this program for the coming year. If you attended this program and have any suggestions or comments please do not hesitate to contact me at [rtodi@ieee.org](mailto:rtodi@ieee.org).

## An Unexpected Ride of Surprises – The 2008 R10 Student/GOLD/WIE Congress

By Helene Hoi-Ying Fung  
(Region 10 GOLD Coordinator)

For the first time in Region 10 history, we held a joint congress between students, Graduates Of the Last Decade, and Women In Engineering. This was held 28-30 January in Chennai (formerly called Madras), India.

Before the trip, I read a warning in a travel book that going to India will be a life-changing experience. I was initially sceptical; but did come back looking at things differently...

The moment which set the scene was when I arrived from the Chennai airport to the hotel, only to find that my booking's been bumped and I had to move to a different hotel for one night. Little did I know

more surprises were to come!

Fast forward to the "informal" pre-opening dinner (at least that's what the program said). I sat in my t-shirt and cargo pants, increasingly self-conscious as the men showed up in crisply ironed shirts and women in their sparkling sarees. A quick costume change was in order! I wasn't alone in taking the program too literally though; a few American guests and a Kiwi were also in casual gear. Classic case of different cultural interpretations!

All three groups shared a joint program on the first day. An advanced notice of record student turnout this year didn't fully prepare me for the adrenalin rush of giving a talk to approximately 250 people, and the "rock star treatment" given to myself and other guests – we got inundated with delegates wanting a chat and requests for autographs and photos!

The next day, GOLD and WIE had a separate track. I was in for another surprise – I was to join a panel of distinguished guests including IEEE President Lew Terman, President-Elect John Vig, TAB VP Roberto de Marca, WIE Chair Karen Panetta, Staff Director Matt Loeb and Region 10 Director Janina Mazierska. We were grilled by the

delegates' questions ranging from the practical "how to attract more people to my GOLD group's activities?" to the more strategic "are the current IEEE Regional boundaries appropriate?" As it turns out, I may actually have a hidden talent in panel discussions!

Behind the scenes, I lost count of how many times local GOLD Chair Sampathkumar Veeraraghavan came saying "Helene, we have a little problem..." These ranged from the hotel's power supply being insufficient to power the ieee.tv film crew's lighting, to the bus booked to take the delegates sight-seeing being cancelled for no apparent reason.

By now I realised that things in India are in a constant state of flux, in contrast to the planning and controlled uncertainty I'm accustomed to (a planning engineer father is a strong influence). But Sampath saved me from a heart attack by announcing "problem solved", within minutes and after much running around. It is to his credit, and Region 10 WIE chair Ramalatha Marimuthu's, that the congress went smoothly. Even a slight control-freak like me eventually gave up worrying, knowing that if there's a problem that they can't fix, it probably isn't fixable!

After delegates shared the experience of



*Innocent smiles.*

their affinity groups, we had a cultural program with a difference: yoga and dance performances by differently-abled children from the Madhuram Naraynan Centre for Exceptional Children, which the Madras section GOLD and WIE groups have been assisting. In fact, Sampath founded a research group developing technological aids for the physically challenged.

This emphasis on social responsibility ties in perfectly with IEEE's core value of *service to humanity – leveraging technology and engineering to benefit human welfare*. Some guests and myself were invited to present the children with gifts. Their innocent smiles reminded me of the reason

I started volunteering: *I want to make a difference, and to make this world a better place*. Sometimes, when focusing on budget discussions or word-smithing By-law changes, it's easy to momentarily forget that. But this experience has deeply touched and re-energised us.

There were more touching moments too, as delegates shared cultural aspects that transcend geographical barriers. Songs from different countries were sung during the bus rides; I taught a local GOLD committee member basic salsa moves and we did a performance after the closing dinner; a Hong Kong delegate also showed some Chinese martial arts moves.



*Leaders of today meet leaders of tomorrow.*

I hope that the friendships formed during the Congress will be maintained, and we can work together through IEEE to better serve humanity.

## Bridging the Gap: Student/GOLD Interaction at the 2008 R10 Student/GOLD/WIE Congress

**By George Gordon**  
(Chair, IEEE Student Branch, The University of Auckland, New Zealand)

On the outskirts of Chennai, India, away from the din of the city traffic, students and young professionals from across the globe converged for the IEEE Region 10 Student/GOLD/WIE Congress 2008. The first day of the congress, 29 January, was a joint session between student, GOLD and WIE delegates. The primary purpose of this day was to foster much needed relationships between these groups. There were two main modes of interaction between GOLD and student delegates throughout the day: the first was through seminars and discussions and the second was through informal social interaction. It was through the latter of these two modes that the real networking occurred and strong bonds between the students and GOLD were forged.

Over the course of the day the congress was addressed by a whole host of IEEE dignitaries, including current IEEE President, Lewis Terman, and IEEE Presi-

dent-Elect John Vig. While there were many issues discussed, there was an emphasis on the need for stronger links between student branches and GOLD. The alarming discrepancy between numbers of IEEE student members and IEEE GOLD members was cited numerous times.

The main solution proposed to address this severe drop-off in membership was more frequent and effective networking between students and GOLD. The joint congress itself was indeed an example of such an initiative. Sampathkumar Veeraghavan elaborated on this point by outlining student initiatives that the Madras Section GOLD had arranged to encourage such interaction. These included career and leadership guidance, technical workshops, interview and job techniques training and a branch counsellor congress.

Finally, the floor was opened for discussion on the issue of student member retention by the Region 10 Director, Janina Mazierska. There was much debate on ways to encourage student transition into GOLD, and among the main suggestions

were increased networking opportunities and reduced membership dues.

All this talk of networking left both student and GOLD delegates eager to put these wise words into practice. Meal times proved an excellent time to network, as students and young professionals exchanged ideas and business cards over roti and hot sambar. The evening saw these social links blossom as mixed teams of GOLD and student delegates put their intellects to the test in the Quiz Night. By the close of day, I, a student delegate, had met and exchanged details with GOLD delegates from Hong Kong, Bangladesh, India and Australia.

After the first day of the congress, students and young professionals alike had gained a wealth of new ideas and new friends. It was the first step towards greater interaction between the two groups and in the long term, greater retention of graduating students. The responsibility for maintaining these ties and encouraging these new initiatives now rests in the hands of the delegates at the congress, and indeed every student and GOLD member of IEEE.

## IEEE Circuits and Systems Society

**By Elvis (Pui-In) Mak**  
(Region 10 GOLD Representative on  
IEEE Circuits and Systems Society)

I was selected as the Region 10 GOLD Representative on the Circuits and Systems Society (CASS) in 2007. I am one of four CASS Regional GOLD Representatives; as a group, we have discussed with the CASS Board of Governors (BoG) some possible activities and ideas that may help improve the services offered to members by CASS.

The summary below was prepared by the CASS Regional GOLD Representatives, and is meant to identify and categorize the different needs of CASS members at different stages of their careers:

The CASS BoG and GOLD Representatives are currently finding ways to fill at least some of these needs. IEEE CASS is open to different ideas to improve its membership services. Any comments can be

directed to the members of the CASS BoG or the CASS Regional GOLD representatives:

- Sunil Pai (Regions 1-7)  
<[sunilp@vitesse.com](mailto:sunilp@vitesse.com)>
- Delia Rodriguez (Region 8)

<[delia@imit.kth.se](mailto:delia@imit.kth.se)>

- Martin Di Federico (Region 9)  
<[mdife@ieee.org](mailto:mdife@ieee.org)>
- Elvis (Pui-In) Mak (Region 10)  
<[pimak@umac.mo](mailto:pimak@umac.mo)>

Student Member	Member in Academia	Member in Industry	New grad (or Job seeker)
Promoting CASS in student branch meetings	Travel Funding (Conferences)	Recognition Award	Job Site, Resume seminars
Mentorship	Help to attend congresses	On-line Courses, Chats, Webinars, BIOGs	
Scholarship			
Public relations			
Membership discount			
Google bar look search engine			
Media to get updates on technical issues			

... continued from page 1: Message from 2008 MGA GOLD Committee Chair, Soon Wan

is to enable our young professionals (GOLD members) to learn how to use the available technologies, and their skills to help less privileged people to make a better living. The workshop will also introduce several open humanitarian projects, and recruit for volunteers.

We hope the above programs will engage our GOLD members, and guide them to meet one of the IEEE's core values: Service to humanity - leveraging technology and engineering to benefit human welfare; promoting public awareness and understanding of the engineering profession.

Last month, the 2008 MGA GOLD Committee held its annual meeting, for the first time, in conjunction with the IEEE Board series meeting, in Louisville, Kentucky. The GOLD committee members had the opportunity to meet face to face, and discussed GOLD activities and innovative programs for our GOLD members. In addition, they had the wonderful time networking with the IEEE Board members, and the IEEE leaders from around the world. In summary, the GOLD meeting was very productive and effective.

As of now, we have 130 GOLD Affinity Groups worldwide. All of these Affinity

Groups have the common goal to enhance benefits to our valued members, who are the future leaders of the IEEE and the profession at large. I encourage you to consider volunteering in the IEEE, which will give you the opportunity to nurture your leadership, communication, management, and decision-making skills. Please ride with us to foster technological innovation and excellence for the benefits of humanity.

Best regards,

Soon Wan

2008 MGA GOLD Committee Chair



## Peer-reviewed GOLD member contributions

### Injecting Sustainability Into the Engineering Design Process

By Daniel Johnson

It's time to incorporate sustainability into engineering. For many, 'sustainability' is just the latest in marketing buzzwords used in glossy advertisements to help market new products. It's easy to get caught up in so many competing environmental, economic, and social interests, and not know which ones are most important.

Fortunately, there is a much more concrete view of sustainability, and one with a rigorous scientific foundation. The basic tenets of sustainability stem from the 1987 report, *Our Common Future*<sup>1</sup>, by the United Nations World Commission on Environment and Development (WCED). They defined sustainable development as meeting "the needs of the present, without compromising the ability of future generations to meet their own needs."

As a society, we are becoming continually more aware that our world is finite, and we are definitely capable of affecting it. Everywhere we look, natural sys-

tems are in decline while the resources we consume are increasing.

So how is this relevant to engineering? Because engineers are the designers of new ideas, products, and services. We can often have the most impact on consumption habits. The products we develop and produce are far from benign. We therefore need to consider the implications of everything we design, and incorporate sustainability from the get-go.

The definition by the WCED was a great start, and much more work has since been done to understand what must be done to achieve this goal. There is a Framework for Strategic Sustainable Development, also known as the Natural Step Framework that helps bridge this gap to work strategically towards sustainability. The framework includes four principles that define what we cannot do. For the sake of brevity, they say we can't let substances that we mine (like carbon from coal, oil, or natural gas) or produce (such as pesticides) systematically accumulate in the environment, or con-

tinue activities that systematically degrade natural systems or prevent people from meeting their human needs<sup>2</sup>.

We must switch from a linear design → sell → consume → throw-away system to one that takes into account the full lifecycle of products. Some questions to add to the design process include:

Where will the product components/materials come from? Are they abundant in nature or scarce and toxic? Will fair labor be used? Will the production create hazardous byproducts, and how long will they take to decompose? Can the components be recovered at the end of life, and who is responsible for that—the producer, consumer, or a government agency? How much fossil fuel will be consumed to produce, transport, and use the product throughout its lifetime? Is a physical product required at all or could a service be marketed instead? Will the product be designed for longevity or planned obsolescence?

All these and many more issues should become a part of the engineering design process as we



*Daniel Johnson has a BS degree in Computer Science from the University of Nevada, Reno, and a Masters in Strategic Leadership towards Sustainability degree from Blekinge Institute of Technology in Sweden.*

*He is now helping companies develop more sustainable products and services and apply technology to help move society to a more sustainable future.*

work toward a sustainable future. The time has never been more urgent. How about getting an early start by incorporating the issues in engineering courses?

<sup>1</sup>[Our Common Future, Report of the World Commission on Environment and Development](#), World Commission on Environment and Development, 1987. Published as Annex to General Assembly document A/42/427, Development and International Co-operation: Environment August 2, 1987. Retrieved, 2008.01.31

<sup>2</sup>K. -H. Robèrt, B. Schmidt-Bleek, J. Aloisi de Lardèrel, G. Basile, J. L. Jansen, R. Kuehr, P. Price Thomas, M. Suzuki, P. Hawken and M. Wackernagel, "Strategic sustainable development — selection, design and synergies of applied tools", *Journal of Cleaner Production*, Volume 10, Issue 3, June 2002, pp. 197-214

## Information & Communications Technology Professionals Can Save the World Too!

By Glenn Platt

As the world focuses on large-scale crises such as climate change, water preservation and so on, it might be thought that computer engineers and scientists, software developers, telecommunications researchers and others have little to contribute to these worldwide challenges. Having ridden the rollercoaster ride of the dot-com and telecommunications frenzy of the early 2000's, these professions are now working in fairly stable environments, thought of as supporting actors surrounded by more important challenges.

Thankfully, this view is far from reality - not only will state of the art telecommunications provide a critical supporting role for society, the absolute latest in information & communications technology (ICT) research is finding application as key components of the solutions to our energy and resource challenges. As we develop more intelligent, reliable and secure resource management systems, the incumbent practitioners are turning more and more to advanced ICT techniques for support and guidance.

Take for example demand-management, a widely regarded essential step to improving the

reliability and utilisation of our electricity systems. Basically, demand management is about better-coordinating the variety of loads in an electricity network to avoid costly electricity consumption peaks, thereby reducing greenhouse gas emissions, improving network utilisation and minimising the need for new infrastructure investment. Fundamentally, this is an ICT problem: a large, geographically separated complex system, needing some form of control overlaid. It is a dynamic network, with components appearing in an ad-hoc manner. Security and reliability are key considerations. With these characteristics in mind, whilst early products were based on one-way control using radio broadcast, recent research has looked at using multi-agent systems science to address the challenging demands involved in implementing future-proof, reliable demand management systems<sup>1</sup>.

Considering a localised example, there is much interest around the world in so-called "minigrids", where small renewable energy supplies operate in conjunction



*Having completed a PhD in telecommunications and worked for a variety of companies from engineering consultancies to Nokia Mobile Phones, Glenn now works as a group leader for CSIRO's Division of Energy Technology, Australia. There, he runs a research programme focusing on applying innovative information and communications technology to improving the way we distribute and utilise energy.*

with advanced load controllers to manage the energy consumption of, say, a small commercial site. There are many challenges involved in the control systems here, from being able to predict the renewable energy available at any one time, to ascertain the cost of a particular action (e.g. determining how the temperature will vary if some refrigeration plant is shut down for a small time), to ensuring the reliability of response needed by the wider network. Again, state of the art ICT techniques are being used here, from machine learning based systems for real-time predictions of the future output of a renewable energy generator, through to software systems for remote re-deployment of control system code.

These control systems operate on state of the art computing and communications platforms, e.g. CSIRO uses wireless sensor network technology as an affordable,

robust and easily deployed sensing and control platform in our energy work. Similarly, advanced telecommunications infrastructure is needed to support these geographically disparate control systems, and we have deployed all manner of communications systems, from Bluetooth or Zigbee based radio systems, to power line carrier wide-area networks, all for realising improved energy management. Almost all our work takes advantage of pervasive, reliable and secure IP based communications protocols.

Investigating the opportunities here, one of Australia's largest telecommunications companies recently released a report identifying how advanced telecommunications systems can be used to reduce greenhouse gas emissions<sup>2</sup>. The report identified that telecommunications methods alone could facilitate a reduction of almost 5% in Australia's greenhouse gas emissions.

<sup>1</sup>G. James, D. Cohen, R. Dodier, G. Platt, D. Palmer, "A deployed multi-agent framework for distributed energy applications", Proc. Fifth International Joint Conference on Autonomous Agents and Multiagent Systems, May 2006, pp. 160-164.

<sup>2</sup>"Towards a High-Bandwidth, Low Carbon Future", [http://www.telstra.com.au/abouttelstra/csr/docs/climate\\_full\\_report.pdf](http://www.telstra.com.au/abouttelstra/csr/docs/climate_full_report.pdf)

Two of the key words used when considering the future of the world's energy systems are "intelligence" and "interoperability"- our energy systems are changing from simple, standalone, highly hierarchical networks, to pervasive, dynamic interconnected systems. State of the art information, telecommunications and computer science technology is becoming a critical component of these systems. This is brought about by talented ICT practitioners who have developed an understanding of the wider energy issues, and are applying their art to a new domain.

## Applying Six Sigma to Your Personal Mode of Operation

By Robbie Gosine

As engineers, there are many instances where we work as part of a team and are expected to shoulder our fair share of work. Regardless of your standing on the team, you need to be ready for what comes at you. In light of this, you can utilize Six Sigma theory to improve your personal mode of operation and as such, deliver greater impact on your projects. If you develop a better process for personal management, then you not only take charge of your career and create the opportunity for advancement, but also enable yourself to enjoy your life – remember, we are humans and we need to sustain a work-life balance, as even a machine needs down-time.

Six Sigma's DMAIC process – Define, Measure, Analyze, Improve and Control – is ideal for personal process improvement. Consider what is required from you – This is not Six Sigma on a process but Six Sigma on you, and is a means to improve yourself using the Six Sigma Steps. This is a method to take the initiative to become a more efficient and effective engineer. Think about your method of working and try to conceptualize the processes you use to complete your tasks; this will enable you to find out where you need to improve. Human beings learn from positive feedback and therefore a well-defined process will provide you with feedback that you can use.

DEFINE how you work. Are you a morning person, or an evening person? Do you get work done in quick bursts or do you need the entire day to get it done? We all work differently and it is by defining our methods that we can effectively apply them to solve the problem. Once we define the way we work then we can delve into the process to begin corrections.

MEASURE how much work you get done in the day and how much work is given to you. Can you do more and can you do it efficiently and effectively? You need to tune yourself for optimum results. It is necessary to look ahead and get an idea of what you need to do, look at schedules, see who is dependent on your work and vice versa; we cannot fix all the processes in the entire operation, but we can come close.

ANALYZE the situation, survey how effective you are in getting your job done and where you need to correct your behavior to enable yourself to perform at a higher level. Think about the way you approach the problem. Have you done something similar before? Begin creating a tool kit of your techniques – do not re-invent the wheel. If you consistently find yourself working overtime to get work done, ask yourself what is the root cause of this problem. You are an engineer and solving problems is your bread and butter.

Once you have performed this analysis, you IMPROVE the process. Remember, we can all create process flows for what we do, but you may not necessarily have to. If you take the time to properly analyze your work function and your work ethic, you may find that you have to do minor tweaking, but remember, the engineer in the cubicle next to you is not you and you do not work the same way. That engineer may work in bursts and you may work in a steady fashion – do not copy that engineer and do not worry about his/her rate of work; focus on yourself. However learn from others; borrow their good points and share yours; this is important as it not only improves you but also improves your team and your company.

This is the CONTROL part - you have to know yourself and be honest; we are not perfect and have flaws, but it is by knowing our weaknesses and accepting them that we can begin improving ourselves while utilizing our strengths. Taking control is also taking ownership and this is essential. When you take ownership of something, you will develop it totally. Total development of your self-improvement process is the key to becoming a more efficient and effective engineer.

Robbie Gosine is an Electrical and Bioengineer (BSEE, MSEE, MsBioE) and works in the Power Industry as an Engineer for Consolidated Edison (ConEd) of New York, and is also a US Navy Engineering Duty Officer. In both cases Six Sigma is utilized for process



Robbie Gosine is an Electrical and Bioengineer (BSEE, MSEE, MsBioE) and works in the Power Industry as an Engineer for Consolidated Edison (ConEd) of New York, and is also a US Navy Engineering Duty Officer. In both cases Six Sigma is utilized for process

## Notices

### IGARSS08 seeks to connect current and future GOLD members

The IEEE Geoscience & Remote Sensing Society (GRSS) is organizing a “Young Professionals” luncheon as part of IGARSS 2008. The luncheon will be open by registration to students and GOLD members and will provide a forum of discussion on career paths, skill sets beneficial to secure employment in the geosciences and remote sensing industries, as well as professional development opportunities. Organized for the first time as part of IGARSS, the event will allow current and future GOLD members to network in an informal setting.

2008 International Geoscience & Remote Sensing Symposium

(IGARSS) is the 28th annual symposium for GRSS, gathering world-class scientists, engineers and educators engaged in the fields of geoscience and remote sensing to meet and present their latest activities. The conference will take place in Boston on July 6-11, 2008. Detailed information on the luncheon and how to register will be posted on the conference’s website ([www.igarss08.org](http://www.igarss08.org)). For additional information or for offers to contribute to the success of this event, please contact the organizers: Stefan Robila - [robilas@mail.montclair.edu](mailto:robilas@mail.montclair.edu) and Shannon Brown - [Shannon.T.Brown@jpl.nasa.gov](mailto:Shannon.T.Brown@jpl.nasa.gov).

### Region 9 Student Branches and GOLD Congress in Bogota City

The Colombia Section will organize the Region 9 Student Branches and GOLD Congress RRR-RRGOLD 2008 (Reunión Regional de Ramas - Reunión Regional GOLD) in Bogota City. The organizing committee is preparing the exact dates, but this important congress will be held next October or November (approximately). For further information and updates about this event, please visit <http://www.ieee.org.co>

### IEEE GOLDRush Call for Articles on Hot Technologies

IEEE GOLDRush is calling for articles on the hot new technologies inspiring GOLD members like you! The article topic(s) shall be of interest to young professionals. Send your article(s) of **no more** than 700 words to the IEEE GOLDRush Editor, Adrian Pais, at [a.pais@ieee.org](mailto:a.pais@ieee.org) **on or before** 1 May, 2008. Please note that all articles and photo(s) will be peer reviewed, edited if necessary and reviewed for appropriate content. If your article is accepted, it will appear in a future theme edition of IEEE GOLDRush on “hot new technologies”.

### The Institute Wants to Hear From You

The editors of The Institute, the IEEE's member publication, are always on the lookout for members to profile. If you know of a member who was recently honored with an award or other recognition, or featured in the media for his or her interesting work, let us know about it. Send us the who, what, why, where, and when, and we'll do the rest. We're also looking to feature members who recently graduated and have started their own company. E-mail the editors at [institute@ieee.org](mailto:institute@ieee.org).



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