

Region 3



<http://ewh.ieee.org/reg/3>

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Message to Region 3 ...



*William Ratcliff
Region 3 Director*

Ratcliff's Ramblings...

Welcome to this version of the Region 3 Newsletter. Since this newsletter falls between Sections Congress 2008 in Quebec City, CA and SoutheastCon 2009 in Atlanta, GA the topics of the articles will contain a mixture of both.... Experiences gained at Sections Congress 2008 and pre-views of SoutheastCon 2009.

This is a summary of my experiences, impressions, observations and “take aways” from Quebec City and Section’s Congress 2008.

The climate at every section’s Congress I have attended is filled with excitement, renewal, challenges and the spirit of cooperation that does not exist anywhere else in IEEE gatherings.

SC2008 was especially noteworthy because it represented a strategic turning point in the role of the sections relative to the member. Instead of “serving the membership” the focus is on the growth and development of the member for their career, the profession and the benefit of the humanity and the common good.

This was an historic change in path relative to the definition of the member as a partner, colleague and friend as opposed to a statistic associated with a revenue stream, or a receiver of benefits, and a customer.

The IEEE Awards were presented to some of the “giants” in our profession / technical fields of interest. This allowed many who would not normally attend a Board Series to experience the festivities and ceremony.

So how does this impact you and me as members ... very simply stated it sets in motion the change to a new path for IEEE driven by the fundamental belief that humanity and technology together are needed to solve the problems in today’s modern world. It challenges all of us to get involved and engage because the solution is bigger than one person can manage.

Keeping in mind the spirit of the new paradigm for member, especially engagement, my personal story of membership follows. I became a member of IEEE in the early 1970’s because

(continued on page 2)

Inside this issue of Region 3 Newsletter

Page 2	<i>IEEE Call Home</i>	Page 6	<i>Arriving at Sections Congress 2008 Recommendations</i>
Page 3	<i>Ready, Aim, Engage</i>	Page 7-10	<i>SoutheastCon 2009</i>
Page 4-5	<i>Evolution of “Engineering Connections” in IEEE Central NC Section</i>	Page 11	<i>SoutheastCon 2010 Call for Papers</i>
Page 5	<i>Mentors and Mentoring</i>	Page 13-14	<i>Conference Summary—17th University Government Industry Micro/nano UGIM Symposium</i>
Page 5	<i>Attention Professional Members</i>	Page 15-16	<i>IEEE Region 3 Executive Committee 2008</i>

Ratcliff's Ramblings... (cont.)

several people cared enough for me to insist that the IEEE was my professional home. Their persistence and tactics of direct engagement brought me into IEEE and kept me involved thru several changes in careers and life changing experiences. For their efforts I am very grateful. Who can you help to discover their professional home in IEEE?

For Region 3 the year 2009 represents a time of building the capabilities envisioned in 2008 and articulated at Section's Congress. Help is always welcomed and you can start by contacting the Chair of your Section or Chapter and asking to get involved.

The journey has started are you on board yet?



William B. Ratcliff

IEEE Call Home

We hope you have decided to make the IEEE your professional home. Just like with your family home, you need to keep in touch. Here are a few tips.

Take time to review the information included in your personal profile each year. You can view and edit this information at any time by going to myIEEE and using the Membership Manager links. Here you make sure the IEEE communicates in your preferred medium.

You don't have to allow electronic contact, however remember as the cost of printing and postage rises, electronic communications is the cheapest way for IEEE to contact you. This helps keep your dues low and provides you with timely and relevant information.

You can identify any email address in your preferences, but consider using your IEEE alias. As you may know, this is a free mem-

bership benefit available at <http://eleccomm.ieee.org>. In addition to virus scanning and unsolicited commercial email filtering, the IEEE alias keeps you in touch with your professional family when you move from job to job and city to city. As industry and academia crack down on malware purveyors, the alias has become a victim of over zealous security departments. If your email alias has become a victim of the war on spam, you may have to use you home Internet service provider's email or one of the free or low cost web mail options. This may not be as convenient as your work email, but the long term results are worth it.

Back in the day when dial up modems were king, many of us were forced to opt out of email communications with various IEEE organizations to maintain our sanity. Things have changed. Most of us now have broadband. Most organizations have increased their use of post and link emails. So if you opted out of email communications with a particular IEEE organization, you might want to reconsider. Once you change your mind, you can go to <http://ewh.ieee.org/enotice/opt-out.php> and subscribe to enotices by organization.

If you decide to opt out of electronic communications, please contact us rather than just marking your IEEE correspondence as spam. You will not receive unsolicited email from IEEE. IEEE has worked very hard to develop a granular set of email distributions to help you get the information you want with very little noise. Every distribution should have instructions to allow you to unsubscribe and those instructions should work. If that is not the case and you want to shut a email spigot off, please contact your local section officers for assistance. As a last resort, you can opt out of all email contact from the IEEE, using

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This Region 3 Newsletter is sent to the volunteers of Region 3. The information herein may be used in section and chapter newsletters. The opinions expressed, as well as the technical accuracy of authors, advertisers, or speakers published in this newsletter are those of the individual authors, advertisers, and speakers. Therefore, no endorsement by the IEEE, its officers, or its members is made or implied.

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myIEEE communications preferences, until the matter is resolved. Every time you tell your ISP that IEEE email is spam, communications with the rest of your IEEE family becomes a little harder. Please help us keep those channels open.

MemberNet is brand new. You can look up members based on their name, interests, and other factors. This is an exciting capability that can help you connect and stay connected with your peers. However it only works if you release your information. Of the over 800 members of my section, only six have successfully released their section affiliation. I say successfully because when MemberNet was first released, the interface was very difficult to use. They have made substantial improvements. Please check MemberNet and make sure you have published all the information that you consider fit to print.

Thanks for selecting IEEE as your professional home and please keep in touch.

Bill Clayton
w.clayton@ieee.org
Region 3 Communications Chair

Ready, aim, engage

I am excited about the new focus on the member in IEEE. I have been fortunate to have had some involvement in the design process but the real excitement is to see the ideas take shape in real activities that can be carried out at the various levels of IEEE including the local level. All of these activities are directed towards engaging the IEEE member in their professional organization. As Director Ratcliff points out, a lot of effort of the "ready, aim" type has been done. At the board level, IEEE has been recast itself from "Regional Activities" to "Member and Geographic Activities" (MGA) to bring this focus. The MGA Board and many Region 3 Leaders have been involved in efforts to bring about similar focus to the Sections culminating in the core track program at the Sections Congress 2008.

As an example of such an engagement opportunity, the IEEE has opened a "Group" cleverly

named IEEE that allows members to connect with each others through the LinkedIn service (<http://www.linkedin.com>). If you have not heard of LinkedIn, it is attempting to be a professional network using Social Networking techniques. Presently on this site, one can

- **make connections** to their friends, associates and peers
- **gain introductions** to people that their connections have connections with
- **ask questions** of (and **supply answers** to) their network
- **participate in discussions** on a variety of topics with other members of IEEE in the group space

This service presently has over 3820 members of IEEE in it (a mere 1% of the membership) but already many have hooked up with their colleagues and have a solid way to both stay in touch and to grow.

On the local level, I have experienced the power of the project. Members of my home section (the Alabama Section) led by the Sections Student Activity Chair Rob Ball made a decision to participate in supporting the Best Robotics activity in Birmingham. An impressive number of members gave many hours of their time and energy to provide the infrastructure and other support for 3rd through high school senior students to work on a robotics challenge. These members were clearly giving back to the profession as they helped young people work on an engineering project. Additionally members of the UAB Student Branch and other UAB students, other students from Auburn University and others participated in this event that involved students who came from 20 local schools. In addition, to the work, I observed lots of discussions about this event and other issues of both engineering and social consequence. Old friendships were renewed and new friendships made. I urge members to consider undertaking projects such as these as a method of member engagement.

As they said in Star Trek after the direction is set... **Engage**

Dave Green

Evolution of “Engineering Connections” in IEEE Central NC

The Central NC Section has been involved with the Teacher In-Service Program (TISP) since its roll out in 2005. After the training session in Atlanta in July 2005, a series of exploratory meetings were held with various members of the IEEE Central NC Section. This evolved into the formation of a TISP steering committee with a local science teacher and section members from industry and higher education. We analyzed the SAMIEEE section membership and determined that 90% of the members live in Alamance and Guilford Counties; therefore we focused on these two counties.

The Steering Committee was very beneficial in getting the program organized and vetted. Our first session was limited in time with only a cursory introduction of the program. The Science Teacher was very helpful by inviting the TISP Team to present the pilot TISP session to his Science Club. Starting with that session we have always had from 2-5 Section Members assisting with the sessions.

IEEE Region 3 and Central NC Section partnered in providing the start-up materials for the TISP sessions. We developed a presentation around the electronic focused lesson plans from the initial 15 TISP lesson plans. The Science Teacher assisted us in aligning the initial 15 lesson plans to the NC standards. The launch of the www.TryEngineering.org was welcomed in that it provided a portal which had useful resources for use in the Education Activities outreach program; it still is a major resource for which we refer in our promoting 21st Century STEM Skill Sets in the Schools.

The NCA&T Electrical Engineering Department made available to the Team 13 Radio Shack RS-202 Electronic snap-together kits. These electronic kits have been much more effective in introducing electronics to the students than the initial box of loose electronic parts. Two session participants work with one kit therefore we can handle 26 students without any problem. The kits have a manual and a wide variety of electronic and solid state devices to

connect into working apparatuses. In most cases we include an activity which uses the kit. Another activity we have found effective in our sessions is exploring www.TryEngineering.org.

After the TISP Team conducted several TISP sessions, Teachers started inviting Engineers into the Classroom, which we called “Engineers in the Classroom”. Also, we found that by putting up the presentations on the Section Website www.ieee.org/cnc (TISP), we were able to reduce the number of handouts and provide the Teachers and Students with a place to reference the material covered online.

Our first connection with the schools was the Science Curricula Coordinator. When one of the Teachers attended from the Vocational Career area, we were invited to participate in a Middle and High School Staff Development work week for the Vocational Career Track. We have conducted sessions which have ranged from 45 minutes to 2.5 hours; a two hour session works best for the sessions we have. Sessions have been conducted on Teacher work days, at the beginning of school day and at the end of the school day. The Section has provided refreshments, Pizza and Breakfast for sessions at end or start of school day.

We have conducted TISP sessions with Middle and High School Teachers attending together and separately; also we conducted “Engineers in the Classroom” sessions in Middle and High Schools. After hearing that research indicates that students start to disengage from school between Third and Sixth grades we conducted a session with a Fifth Grade AIG class which we understand from the Teachers, Principal and Parents had the students buzzing throughout the week; they have invited us back for more sessions.

Once IEEE was not known in our schools, however, now we have recognition and are being asked to expand our work in the local schools. Our latest venture is an “Engineering Connections” Program where the IEEE Central North Carolina Section is partnered with the Guilford Education Alliance; two Middle Colleges located on the local GTCC community college campuses and Weaver Academy; and

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five Industry Partners. The pilot was launched during the 2008 fall semester with Lunch & Learn and Classroom Connections Sessions. In the 2009 spring semester, our objective is to expand that with Job Shadowing and Field Trips. The primary objective is to bring "Real Life Understanding" into the classroom. The program is documented at <http://ec.guilfordeducationalliance.org/index.htm>.

Our Section has also participated in High School Career Fairs and has been invited to participate in a Middle School Career Fair. The NCA&T IEEE Student Chapter has partnered with the CNC Section Education Activities Team in the Career Fairs and the Engineers in the classroom sessions at the Middle School. Students at NCA&T now are required to have a minimum of 50 Service Learning Hours before graduation; IEEE Central NC Section is exploring becoming a partner with the Civic and Service Education (CASE) program so they can receive credits for their work with our IEEE Engineering Connections program.

Based on the variety of Education Activities the Section has been involved with, we now refer to all the activities as "Engineering Connections" which includes Teacher In-Service Program, "Engineers in the Classroom", Career Fairs, and the Middle College Lunch & Learn and Classroom Connections.

As part of our outreach we are also involved in promoting various challenges such as Future City, Construction Challenge and FIRST Robotics et al.

Central_NC_Section_Oct2008

Mentors and Mentoring

I came to North Carolina in 1999 and decided to check out the local IEEE chapters.

Dave Ruden, who was the Eastern North Carolina Section Chair or Past Chair at the time was very friendly, open, and encouraging. So I came out to one meeting, met him and some of the other folks. Chris Seigl, who was the Computer Society Chapter Chair noticed that I started showing up a few times to his Computer Society

meetings and promptly asked if I could help him out. It took a few years for me to warm up to the idea and along the way I got elevated to Senior IEEE Member status. I received help and encouragement from Dave Ruden, Roger Lawrence (Section Chair at the time) and Jim Ray (Section Treasurer & Membership Development). When I finally decided I was ready to help Chris with the Computer Society, he had a serious family tragedy that kept him away from the million things he was volunteering for, so I took on the Computer Society Chapter Chair with absolutely no experience. All the Section Executives mentioned above and Thomas Jepson, the current Section Chair have been so helpful and encouraging. They all mentor me so that I've been able to manage quite well. Even Roger's wife, Martha offered advice and helped me by writing and sending out an announcement to the Computer Society when he was out of town. These exec's are all very busy people, but they have a contagious dedication and comparison for the IEEE. I invite all Eastern North Carolina Section members to come to a section meeting or social event and see for yourself.

John Powell

Attention Professional Members Have we got a job for you!

SouthestCon2009 wants to promote more interaction and exchange of ideas between our student members and our professional members. In order to do this, we need your help. There will be several opportunities, both during meals and throughout the conference, to engage students in conversation. Please take advantage of these opportunities, take the initiative, and spend sometime with them. At the Section level, you may want to discuss other ways to continue this interaction after the conference is over. Together, professional and students are integral to IEEE's future.

Arriving at Sections Congress 2008 Recommendations

By George McClure

More than 300 IEEE delegates convened at the triennial Sections Congress 2008 in September in Quebec City to learn from numerous sessions for volunteers, and to arrive at their own recommendations to bring forward to the IEEE Board of Directors to guide future directions.

To arrive at the final list of recommendations, each of the ten IEEE Regions submitted their top four recommendations from all the recommendations submitted to that respective region. All forty recommendations were then considered in issues caucuses on Sunday, prior to the Monday voting. Those caucuses, organized by topic, were charged with reducing the forty recommendations to twenty for voting.

The topics and number of region recommendations for each were:

Topic	Number of Recommendations
Recruitment/Retention (Membership)	4
IT Operations	4
Operations	4
Member Benefits	6
Business/Financial Operations	6
Membership	5
Member Growth and Development	6
Public Awareness and New Technology	5
	40

Delegates and other attendees participated in caucuses according to their interest (all were conducted in the same 2-hour period). In the caucuses, some recommendations were combined, while others were simply dropped in arriving at the number that would be voted on at the closing ceremony on Monday. There were 21 recommendations on the final list. The voting went quickly, with each delegate having a wireless electronic “ballot” enabling votes to be cast on each issue in less than a minute. Delegates prioritized their own votes on a scale from 1 to 10. After a break following the voting, the final ordering for all 21 recommendations was shown to the delegates.

TOP 10		
Ranking	Group	Recommendation
1	Member Benefits	Every member to have an annual entitlement to a limited number of free IEEE Xplore downloads.
2	Business/ Financial Operations	Payment Flexibility Members, especially students and those in developing countries who do not have credit cards, need flexible payment methods <ul style="list-style-type: none"> • regardless of location and banking methods • supporting aggregated payments in local currency. • minimizing transaction costs and processing overheads.
3	Member Growth & Development	Provide "Leadership Training Handbook (Text and Multimedia) for Section Officers" to include: Volunteer Recruitment, Roles & Responsibilities of Section Chair and Section Committee, Presiding at Meetings, Documentation - Websites & Forms, Time Table for Elections & other formal IEEE Required Activities, and Transfer of Responsibilities to incoming officers.
4	IT Operations	The MGA Board to assign staff to develop, a user-friendly system and support to enable Sections, Chapters and Affinity Groups to deliver, at low cost, teleconferencing, collaborative technologies, and webinars as a free member benefit.
5	Member Growth & Development	For digital libraries: develop additional, smaller tiered packages (10, 20 items, etc.) which allow members to purchase defined quantities of digital content without expiration. Provide members permanent electronic access to previously purchased content.
6	Operations	Improve the implementation of recommendations identified at Sections Congress
7	Member Benefits	There are a good number of IEEE member benefits that are relevant or accessible to Regions 1 - 6 members only. IEEE should implement similar benefits of local relevance across all Regions

(continued on next page 13)



IEEE SoutheastCon 2009

"Engineers Making the World a Better Place"

Co-hosted by:
IEEE Atlanta Section and Georgia Tech IEEE Student Branch

March 6-8, 2009
Crown Plaza Ravinia
4355 Ashford Dunwoody Road
Atlanta, GA 30346

SoutheastCon is IEEE Region 3's annual conference and consists of three concurrent programs. One part is a professional technical paper conference of general topic technical papers featuring authors from around the globe. A second part is a Region 3 administrative meeting of IEEE volunteers that will gather to discuss, develop, and implement both new and existing initiatives to better serve the region's IEEE members. The third aspect of the conference focuses on the region's IEEE student branches from universities throughout Region 3. It involves numerous competitions, including a paper competition, a software competition, a hardware robotics competition, a website design competition, and a T-shirt/Lab coat design competition. The student conference program attracts some of the best and brightest engineering, computer, and science & technology students from across the Southeast US and Jamaica.

In addition to these, SoutheastCon 2009 will also offer several tutorials as continuing education opportunities. A combined PDS (Professional Development Seminar)/SPAC (Student Professional Awareness Conference) will also be offered to support professional development for both our professionals and our students, and will offer opportunities to interact, learn, and mentor. Other programs are currently being developed. Be sure to check back with us for more information.

Space is limited for some events, so we strongly encourage you to take advantage of early registration to make sure you will be able to participate in your chosen events.

This event is entirely organized and run by volunteers. Its success is due to their dedication. If you would like to join us as a volunteer, please contact one of our co-chairs, Amy Wilson, Bill Marshall, or Mary Lynn Smith, at chair@sec09.com to learn more about the opportunities available. We would love to have you join us.

You do not have to be a member of IEEE to participate or attend SoutheastCon 2009. However, we do encourage you to investigate the benefits of [IEEE membership](#). One immediate benefit is the reduced registration fee to attend SoutheastCon 2009. Come join us in Atlanta for some good old southern hospitality with a high tech flare.

To register or for more information visit our website at: www.southeastcon.org/2009



IEEE SOUTHEASTCON 2009
March 5-8, 2009 Crowne Plaza Ravinia, Atlanta, GA
Registration Form

Registrant(s) Information (Please print clearly) *ARE REQUIRED FIELDS AND MUST BE COMPLETED

* Family Name		* Personal Name	
* Company, University, or Other Affiliation		Job Title	
* Mailing Address		* P.O. Box/Mail Stop	
* City	* State/Province	* Zip/Postal Code	* Country
* Phone Number		Fax Number	
* Email Address		IEEE # (required in order to receive member rates)	

Registration Categories	On/Before Feb 22	After Feb 22/Onsite	
Author – IEEE Member	\$475	\$550	\$ _____
Author – IEEE Non-Member	\$600	\$675	\$ _____
Region 3 Committee	\$230	\$305	\$ _____
Life Member	\$230	\$305	\$ _____
Student Member	\$75	\$100	\$ _____
PDS*– Member	\$30	\$105	\$ _____
PDS*– Non-Member	\$100	\$175	\$ _____

* Select this option to register for ONLY the Professional Development Seminar (PDS). Included in all other categories.

Do you plan to attend the Friday PDS? Yes No

Registration Subtotal \$ _____

Tutorials	On/Before Feb 22	After Feb 22/Onsite	
Member	\$300	\$375	\$ _____
Non-Member	\$400	\$475	\$ _____
Student	\$75	\$100	\$ _____

Alternative Energy Basic Radar AI Using C++ IAS Seminar

Tutorial Subtotal \$ _____

Extra Meals	On/Before Feb 22	After Feb 22/Onsite	# Meals	
Friday Social	\$30	\$105	# _____	\$ _____
Saturday Breakfast	\$25	\$100	# _____	\$ _____
Saturday Lunch	\$35	\$110	# _____	\$ _____
Saturday Banquet	\$55	\$130	# _____	\$ _____
Sunday Breakfast	\$25	\$100	# _____	\$ _____

Extra Meals Subtotal \$ _____

Total Remittance (in US Dollars) \$ _____

Conference Registration for Authors, Region 3 Committee, Life Members includes: Friday Social, Saturday Breakfast, Saturday Lunch, Saturday Banquet, Sunday Breakfast, and Proceedings on CD-ROM.

Author and PDS registration (with no extra fee if registering for the conference too) also includes Friday lunch.

Student Registration includes: Friday Social, Saturday Breakfast, Saturday Lunch, Saturday Banquet, and Sunday Breakfast.

Tutorial Registration includes: Thursday Lunch.

Meal Choices Non-Vegetarian Vegetarian

Miscellaneous Items (Optional)

Expected Arrival Day/Time _____

Expected Departure Day/Time _____

Are you interested in childcare options during the conference? Yes No

Are you interested in a spouse program? Yes No

Are you a Student Branch Advisor/Counselor/Mentor? Yes No

Accepted author paper reference number(s): _____

Will you be presenting your paper at the conference? (authors only) Yes No

Will you be attending the Sunday morning Student Leadership Training (students only)? Yes No

THERE WILL BE NO REFUNDS FOR CANCELLATIONS

Method of Payment

Check (Payable to IEEE SOUTHEASTCON 2009)

American Express Discover Diners Club MasterCard Visa

Card Number:

Expiration Date (MM/YYYY): _____ Card Security Code (3-digit code on back of Card): _____

Name on Card (please print): _____

Authorized Signature _____

Credit Card Billing Address Same As Above

* Billing Address

* P.O. Box/Mail Stop

* City

* State/Province

* Zip/Postal Code

* Country

Mail Completed Form and Fees to:

SEC09 Registration / Gostin

3996 Watkins Glen Drive, Woodstock, GA 30189

Phone: 678-873-6217

Fax: 404-407-7883

Email: registration@sec09.com



IEEE SoutheastCon 2009
"Engineers Making the World a Better Place"

Co-hosted by:
IEEE Atlanta Section and Georgia Tech IEEE Student Branch

March 6-8, 2009
Crown Plaza Ravinia
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**SoutheastCon 2009 Tutorials -- Earn PDH Credits
towards your PE requirements!**

The tutorials presented at SoutheastCon 2009 will offer a wide selection of continuing education opportunities for engineers in several different disciplines/specialty areas. Certificates will be presented to attendees, identifying the course, number of classroom hours and PDHs earned.

Tutorials will be offered on Thursday, March 5, 2009, from 8 am until 5 pm. Lunch and snacks will be provided.

Tutorials include **Alternative Energy: Exploring the Possibilities and the Overall Global Impact; Basic Radar; Artificial Intelligence Programming Using C++;** and **Industrial Power System Protection** (an Industrial Applications Society Seminar). In addition, a tutorial by the editors of IEEE Spectrum is being planned.

Space is limited for some events, so we strongly encourage you to take advantage of early registration to make sure you will be able to participate in your chosen events.

For more details on the courses and instructors or to register for a tutorial, please visit our website at: www.southeastcon.org/2009. Contact Jill Gostin (jgostin@ieee.org), Tutorials Chair, if you have any questions.



SoutheastCon 2010

March 18-21, 2010, Charlotte-Concord, North Carolina

<http://www.southeastcon.com/2010/>

SoutheastCon is the annual IEEE Region 3 Technical, Professional, and Student Conference. It brings together electrical, computer and other engineering and science professionals, faculty and students to share the latest information through technical sessions, tutorials, and exhibits. Attendance and technical program participation from areas outside IEEE Region 3 are also cordially encouraged and welcomed.

Scope of the Technical Program: SoutheastCon 2010 invites prospective authors to submit their technical work on all aspects of engineering, science, and technology of current interest, to the conference. The conference technical program includes, but is not limited to, the following technical categories

- **Power and Energy**
- **Computer and Software Engineering**
- **Communications and Networking**
- **Embedded Systems**
- **Control and Automation**
- **Electromagnetics and Microwaves**
- **Nuclear Science and Engineering**
- **Circuits, Devices and Semiconductors**
- **Robotics and Computer Vision**
- **Optics and Optoelectronics**
- **Nanotechnology and Materials**
- **Bioengineering and Informatics**
- **Signal Processing and Image Processing**
- **Instrumentation, Measurement and Testing**
- **Geoscience and Ocean Technology**
- **Remote Sensing and Sensor Networks**
- **Military and Security Applications**
- **Topics on Sustainability**
- **Application and Interdisciplinary Topics**
- **General Interest**

SoutheastCon 2010 will feature presentations of technical papers, as well as tutorial sessions and workshops. Theoretical and applied topics are encouraged for all sessions. Program questions of a general nature should be directed to the Technical Program Chair, at sec10tc@gmail.com.

Technical Paper Timeline: All papers (up to 6 pages) will be reviewed. Authors should indicate a preference for either an approximate 20 minute presentation format or a poster-session presentation format. All accepted papers with registration will appear in the conference proceedings and IEEE Xplore.

- Submission of full-length papers for review (in .pdf) is due by December 1, 2009 (firm).
- Review of submitted full-length papers will be completed by January 11, 2010.
- Paper certificate and copyright forms will be available to authors by January 18, 2010.
- Final submission of the accepted full-length reviewed papers is due in electronic form (.pdf) by February 1, 2010.

TOP 10 (cont.)		
Ranking	Group	Recommendation
8	Business/ Financial Operations	Sections and chapters need a web-based payment solution for small local events that is: <ul style="list-style-type: none"> • Low cost • Secure and immediate • Capable of depositing into a concentration banking account or international equivalent with event and payer identification
9	IT Operations	Provide support and tools for the creation and maintenance of easy to update Section web sites with “single sign-on” authentication via IEEE web accounts featuring at least blogs, meeting calendars and member surveys. Use commonly available, best practice technologies not requiring programmer support for day to day use.
10	Membership	Implement Sustained Membership options for all membership grades exclusive of student grade: <ul style="list-style-type: none"> • Single dues payment for multiple years/life-long membership • Increasing benefits in proportion to the length of renewal • Lowers IEEE administrative expenses related to “annual” membership cycles

Here are the top 10 recommendations, which will be presented to the IEEE Board of Directors in November for assignment and action.

Following are the bottom 11 recommendations, as agreed upon at SC '08.

Recommendations 11-20		
	Group	Recommendation
11	Public Awareness and New Technology	Develop IEEE Brand awareness globally through marketing and communicating the value of IEEE and its professions to industry, schools, and the public.
12	Business/Financial Operations	IEEE should provide tools that interface with Concentration Banking to enable: <ul style="list-style-type: none"> Electronic bill payment Electronic funds transfer Budget tracking with common financial programs L-50 interface
13	Recruitment/ Retention (Membership)	Research, implement, and communicate IEEE benefits and engagement opportunities across the member life cycle, with emphasis on the needs of young members (in collaboration with Student Activities and GOLD).

Recommendations 11-20 (cont.)		
	Group	Recommendation
14	Recruitment/ Retention (Membership)	To improve support from member employers: <ul style="list-style-type: none"> * Develop technical and professional tutorials and training (e.g., Expert Now) to match member employer needs. Survey membership to prioritize content. *Content should be made free or at reduced cost to OUs. Highlight employer while increasing publicity of member's IEEE contributions. Initial report 1Q2009 and review annually to ensure currency with members technical needs.
15	Membership	Create a volunteer recognition program to acknowledge volunteer service by having MGA send a service pin and certificate to volunteers at five year milestone intervals, allowing members to display their IEEE service. Each milestone item shall be uniquely designed to display length of service.
16	Membership	Present new members with modular, online/computer-based training upon completion of application process. Training shall introduce all aspects of IEEE, particularly a member's role within MGA model. Training resources should show how to leverage IEEE membership for the benefit of the member, IEEE, and society.
17	Operations	The MGA Board and the Technical Activities Board to review the issues among Sections, Societies and Chapters associated with conference planning and management. In particular this would include early information exchange, shared knowledge, cooperation and resources to clarify the expectations of any of these units in conducting conferences.
18	Member Benefits	To promote involvement in accordance with the core goals of the IEEE, provide free membership in one Technical Society for a limited number of years after first paying full dues.
19	Membership Growth & Development	Gather and supplement the best resources of all appropriate entities (including IEEE-USA, Technical Management Council, Region/Society LD Committees, and EA) to establish a curriculum of standardized leadership training with appropriate metrics to empower IEEE leadership with skills needed to foster the engagement, life cycle support, and growth of the Member

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Recommendations 11-20 (cont.)		
	Group	Recommendation
20	Public Awareness and New Technology	Be a leader in sustainable development, i.e., development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
21	Public Awareness and New Technology	Create a program that addresses problems and issues of a global nature by improving collaboration between IEEE and stakeholders.

Presentations from Sections Congress 2008 are archived at <http://ewh.ieee.org/ieee/sc/presentations/>.

The recommendations from Sections Congress 2005, and action status on them, are found at www.ieee.org/portal/cms_docs/iportals/iportals/volunteers/sections-congress/2005/sc05-rec-final.pdf.

George McClure is Technology Policy editor for IEEE-USA Today's Engineer and a member of IEEE-USA's Committee on Transportation and Aerospace policy.

Comments may be submitted to todaysengineer@ieee.org.

Article reprinted with permission from the November 2008 issue of IEEE-USA Today's Engineer Online [www.todaysengineer.org].

Conference Summary

17th Biennial University Government Industry Micro/nano (UGIM) Symposium Louisville, KY July 13 – July 16, 2008

The 17th Biennial IEEE UGIM (University/Industry/Government Micro-nano) Symposium was successfully held in Louisville, Kentucky on July 13-16, 2008. The international conference attracted over 130 attendees from all around the world, making it the second largest UGIM event in conference history. The University of Louisville served as the official host for the conference and Prof. Kevin Walsh of the UofL Electrical and Computer Engineering Department served as General Chair. The historic downtown Brown Hotel, along with its rich tradition of hosting several US presidents, functioned as the official site for UGIM08. The conference included talks by 4 internationally-renown keynote speakers, over 40 oral presentations, and over 30 poster presentations by industry, government and university representatives. The keynote speakers included Dr. Rajinder Khosla (Director of the NSF Electronics, Photonics, and Device Technology (EPDT) and

Integrative Systems (IS) Programs in the Electrical and Communications Systems (ECS) Division), Dr. Mark Lundstrom (Professor of ECE, Purdue University and founding director of the national NSF-funded Network for Computational Nanotechnology), Dr. Stephen Campbell, (Professor of ECE, University of Minnesota and Director of the Minnesota Nano Fabrication Center), and Abbie Gregg (President of AGI Inc., one of the leading cleanroom consulting firms in the world). The papers for UGIM08 were organized into 11 sessions, ranging from research specific topics such as electrowetting, MEMS, material processing, lab-on-a-chip and microelectronics to infrastructure topics about cleanroom facilities to academic issues involving micro-nano curriculum development. For the 1st time in symposium history, a Flash Nano Session was included in which poster authors orally presented to the entire symposium audience one-minute summaries of their work. The Flash Nano Session was very lively and popular. UGIM08 also included organized campus tours of UofL's new \$20M 10,000 sq. ft. class 100 micro/nano cleanroom facility which recently received top 10 recognition in Small Times Magazine.

On an historical note, to better reflect the recent infiltration of the microelectronics revolution into other interdisciplinary fields of study, the UGIM Steering Committee decided to modify the "M" in our UGIM symposium name to represent "micro-nanotechnology" as opposed to solely "microelectronics" which it originally did.

The Organizing and Steering Committees wish to thank the many patrons who made UGIM08 possible (JST, Wright Brothers, KY EPSCoR, Signatone, and UofL Research Office) and extend special appreciation to the IEEE Electron Device Society for their continual support of this symposium and the University of Louisville for their special involvement in 2008. We thank all those who participated in UGIM08 and hope they enjoyed networking with their colleagues in the ever-changing and ever-evolving field of *micro-nanotechnology*.

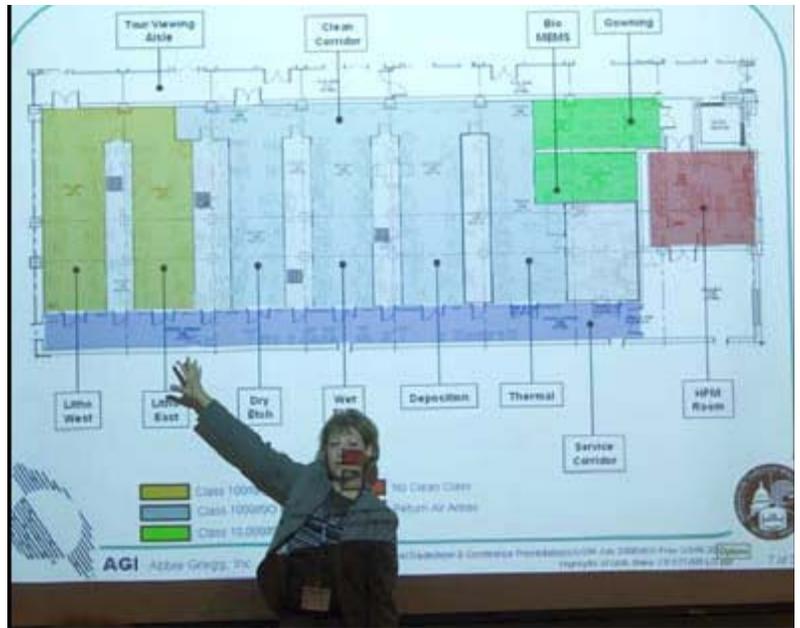
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Pictures from the 17th Biennial IEEE UGIM



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