

IEEE Central Texas Section

ANALOG NEWSLETTER

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Newsletter of the Central Texas Section
of the Institute of Electrical and
Electronic Engineers, Inc.

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is the 25th day of the previous month).
Dawn Roberson, Editor, (robersondj@ieee.
org). Have a question or comment? [Contact](#)
[US](#).

4. Local Conferences

**2005 Texas Regional Infrastructure
Security Conference (TRISC).** This
conference will be held in Austin on 19-21
Sept 2005 at the Austin Renaissance Hotel.
The conference website is: www.trisc.org.

**2nd International Workshop on Advanced
Gate Stack Technology.** This workshop will
be held 26-28 Sept 2005 in Austin at the
Omni Hotel Downtown. As a second of serial
workshops on the topics in advanced gate
stack technology, this workshop will provide
a rare opportunity for close interaction with
the leading experts in the field. The discussion
will be focused on the current technical
challenges for the high-k/metal gate stack
implementation in 45nm technology node.
The conference website is: [http://www.
sematech.org/meetings/
announcements/7599.htm](http://www.sematech.org/meetings/announcements/7599.htm).

**2005 IEEE/CPMT Workshop on
Accelerated Stress Testing and Reliability.**
This conference will be held 3-5 Oct 2005 at

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the Driskill Hotel in Austin, TX. The conference website is: <http://www.ewh.ieee.org/soc/cpmt/tc7/index.html>.

Local CTS member, Kirk Gray is one of the local organizers. This annual meeting is a gathering of reliability test professionals. The purpose of the AST Workshop is to share ideas on better ways of accelerating and detecting hidden defects, flaws, and weaknesses in electronic and electromechanical hardware that would result in failures during use. These techniques are focused on testing electronic hardware to operational and destruct limits and root cause investigation to determine the underlying physics-of-failure.

2005 IEEE Electrical Performance of Electronic Packaging (EPEP). This conference will be held 24 Oct - 26 Oct 2005 at the Radisson Hotel & Suites in Austin, TX. Conference website: <http://www.epep.org/>

IEEE International Symposium on Workload Characterization in Austin, TX October 6-8, 2005

6th International Workshop on Microprocessor Test & Verification (MTV 2005) in Austin, TX November 2-4, 2005

2005 IEEE International Test Conference (ITC). This conference will be held 08 Nov - 10 Nov 2005 at the Austin Convention Center in Austin, TX. Conference website: <http://www.itctestweek.org/>

2006 Region 5 Technical, Professional & Student Conference - Call for Papers: <http://www.2006ieee5conference.com> to be held in San Antonio.

2006 World Congress on Information Technology Brings Legacy to Texas. The World Congress on Information Technology (WCIT 2006) accepted the official crystal from WCIT 2004 symbolizing Austin, Texas, as the next official host of the 15th World Congress. The World Congress, which will be

- [Member Portal](#)

4. [Local Conferences](#)

2005:

- Texas Regional Infrastructure Security Conference (TRISC)
- 2nd Intl Workshop on Advanced Gate Stack Technology
- IEEE/CPMT Workshop on Accelerated Stress Testing and Reliability
- IEEE Electronic Performance of Electronic Packaging
- IEEE Int'l Symposium on Workload Characterization
- 6th Int'l Workshop on Microprocessor Test and Verification
- IEEE Int'l Test Conference

2006:

- IEEE Region 5 Technical, Professional and Student Conference
- World Congress on Information Technology

1. **Section Activities**

Chairman's Column

Section officer elections

The term of office for the current set of Section officers expires in December of this year (the bylaws were altered in 2003 to make our term of office two years). A proposed slate of officers for 2006-2007 will be presented to the Section in one of the upcoming Analogs, along with biographic material on the candidates. The election will take place in December.

CTS Forming Chapters

Life Members in the Austin-San Antonio Texas area are organizing a Life Member Chapter. Some Life Members have already been contacted to determine interest. If you have not been contacted do have an interest in the formation of a Life Member Chapter in the Central Texas Section, please forward your name, mailing address and e-mail address to:

Edwin L. Bronaugh (LF)

10210 Prism Dr.
Austin, TX 78726-1364
ed.bronaugh@ieee.org

Women in Engineering - San Antonio

If you are interested in participating in a Women in Engineering in San Antonio, please send an email to Mercy Luhanga (mluhanga@hotmail.com).

Systems, Man, and Cybernetics

Interested in participating in a CTS Chapter of the System, Man, and Cybernetic (SMC) society? If so, please contact Peter Chen (SMCS) Philip.Chen@utsa.edu.

held in Texas May 1-5, 2006, will attract an estimated 2,000 global leaders from business, government and education to discuss IT policy, direct the future of technology, and drive social and economic development. <http://click.austinxl-mail.com/sp.t.pl?id=926096:371346593>

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IEEE Activities and Links

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To contribute information to this electronic newsletter, please send it by e-mail to robersondj@ieee.org.

As always, we look to you for feedback. If you have any question or comments, please contact me at John.Purvis@ieee.org.

John R. Purvis III, P.E.

Phone: 512-823-7654, Cell: 512-626-7140

IBM Global Services

Email: jrpurvis@us.ibm.com

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IM: SameTime=jrpurvis@us.ibm.com

Austin, Texas 78758

AIM=jrpurvis3, MSN=jrpurvis3

Team Web page: <http://w3.austin.ibm.com/projects/lvkb/risc/>

New Senior Members!

CTS has 4 new Senior Members! Congratulate them when you next see them!

Jun Cheng, Derek Chiou (Computer Society), Byoung Hun Lee (Electron Devices Society), and Robert Wenzel (Components, Packaging and Manufacturing Technology and Microwave Theory and Techniques Society) are our new Senior Members!

Continuing Education

NEED CEUs? The University of Texas at Austin offers a wide array of continuing engineering education opportunities geared towards Texas engineers. All of the training awards continuing education units (CEUs) which Texas PEs are now required to submit for their annual renewal. We even boast CEU Conferences where you can get all required 1.5 CEUs – including 1 hour of engineering ethics – in just a few days! Visit www.UTclee.org for more information.

Upcoming opportunities include:

Software Project Management Certificate Program (online or onsite) • ongoing

UT Engineering Management Master's Degree Program for Working Professionals

Applications are currently being accepted for the fall start of the Engineering Management Master's Program. UT's special scheduling option enables professionals to maintain full job responsibilities while attending classes one weekend a month (8:00am-5:00pm Friday and Saturday). Application deadline is 1 July. More information at: www.executivemasters.org.

PE Exam Review

Test Masters' review course and workshops in San Antonio, TX for the April 2006 Electrical Principles and Practice Exam

Texas engineers that have inquired about the Test Masters' Electrical PE prep course have come to the realization traveling to Houston is inevitable. That is until now. The course has been offered in other cities in the past. I am currently in the process of trying to recruit electrical engineers willing to commit to taking the course and workshops in San Antonio for the April 2006 Principles and Practice exam. Anyone willing to commit to both the course and workshops, please contact me (Dana Cutter) at DCutter@CPSEnergy.com

Student Branches

St Mary's University - San Antonio ([for more information](#))

Trinity University - San Antonio

Faculty Advisor: Farzan Aminian, Email: farzan@enr.trinity.edu

Branch President: Brandi House, email: brandi.house@trinity.edu

University of Texas at Austin ([for more information](#))

University of Texas at San Antonio ([for more information](#))

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2. Chapter Activities

Multiple Chapters

Joint Meeting with Engineering Management, Women in Engineering, and the Computer Society - Austin

Topic or Presentation Title: Blogs to Books

Speaker: Don Shafer, CTO, Athens Group

Date and Time: Tuesday, Sept 20 at

6:30-7:30 presentation

7:30-8:00 Q&A

8:00-9:00 Networking

Cost:

Reservations: RSVP to: sjgillespie@ieee.org or lmartinich@ieee.org

Meeting Location: National Instruments, 11500 NOrth MoPac Expressway, Building C, Room 1S15, Austin, TX 78759.

Abstract: Computer science impacts more and more of everyone's daily life: from the code that activates your car air bags, the iPod playing 10,000 songs hanging from your belt, to the SPAM in your mail box. As professionals; scientists, engineers, academicians, programmers, managers; we have more tools available to us for research, product development and teaching than ever before. We can take graduate students into the deep recesses of Bayesian theory and formal proofs. At the stroke of a few keys we can bring the most advanced super computer to a stop with our models of the upper atmosphere. But, we are ignoring the critical areas of ethics and system correctness. We are looking to build the next, great piece of technology but pushing aside imparting the ethics of not "stealing" through copying intellectual property or developing a new "Denial of Service" attack. We are pushing slick technology but ignoring the work of pushing the process of building working systems that get requirements correct and don't fail to understand the same units of measure. In many ways we are ignoring the engineering and management of technology.

Professional societies – IEEE, ACM – seem to focus on academia, the public sector and research while commercial and private sector users need more attention. As professional technologists and technology managers, it is incumbent on us to share our knowledge, experiences and best practices. Publishing is still the best way to share that knowledge. This discussion will lead you through the publishing opportunities available today – from blogs to books. There are a wealth of paid and unpaid opportunities from your IEEE to your local business journal to the blogosphere .

Joint Signal Processing/Communications Society [\[for more information\]](#)

Topic or Presentation Title:

Speaker:

Date and Time:

Cost:

Reservations:

Meeting Location:

Directions:

Joint Circuits and Systems/Solid-State Circuits

Topic or Presentation Title:

Speaker:

Date and Time:

Cost:

Reservations:

Meeting Location:

Directions:

For further information, contact Gerald Garcia at gerald.garcia@ieee.org

Computer Society - Austin [\[for more information\]](#)

Topic or Presentation Title:

Speaker:

Date and Time:

Cost:

Reservations:

Meeting Location:

Directions: [National Instruments, 11500 North MoPac, Building C, room 1S15, Austin, TX 78759](#)

See <http://austin-cs.org/> for detailed directions and for last minute information. This presentation is open to the public.

Computer Society - San Antonio [\[for more information\]](#)

Topic or Presentation Title: Software Development - The process and requirements needed to develop software.

Speaker: Greg Hoffer, Vice President and Chief Technology Officer, GlobalSCAPE

Date and Time: Thursday, September 15, 2005

6:30 p.m. - Networking; 7:00 p.m. - Dinner; 8:00 p.m. - Program

Cost: \$10 members/ \$2 students/\$13 non-members

Reservations: Required by Monday, September 12, 2005, to Yu Zhang, yzhang@cs.trinity.edu or (210) 999-7399.

Meeting Location: Skyline Room, Coates Center, Trinity University, San Antonio, TX.

Directions: Please note that we have parking instructions on the Web site. The Alamo Stadium parking is reserved for Alamo Stadium Event parking. Please check out the instructions at http://www.ieee-cs-cts.org/meeting_details.htm for the parking by Laurie Auditorium.

More information on the program is available at our Web site <http://www.ieee-cs-cts.org>.

The meeting is open to the public.

Consultants Network [\[for more information\]](#)

Topic or Presentation Title: a free-wheeling discussion by panelists Dr. Darrell Word, Dr.Otto Friedrich and Bob Hunter.

Speaker:

Date and Time: October 13, 2005

Cost:

Reservations:

Meeting Location:

Directions:

Ethics for unlicensed Engineers as well as Licensed PEs will be discussed, including some relatively recent changes in the ethics requirements of the Texas Board of Professional Engineers. A discussion with Mr. C.W.Clark of the TBPE confirmed that participation in this program will be admitted for credit for PE renewals.

The consultants' web directory has been updated. The directory is to be found at <http://www.alesu.com/xltrap/ieecons/listzero.htm>

Electromagnetic Compatibility Society [\[for more information\]](#)

Topic or Presentation Title:**Speaker:****Date and Time:****Cost:****Reservations:****Meeting Location:****Directions:**

For more information, see the EMC website (above).

IEEE EMC Symposium Coming Back to Austin!

For the first time since 1997, the IEEE EMC Symposium will be returning to the Central Texas area. The Central Texas EMC Society was recently awarded the 2009 Symposium and the society looks forward to putting on another great event. If you are interested in assisting with this event, please see the website for contact information.

Electron Devices Society [[for more information](#)]***Notice new meeting location!*****Topic or Presentation Title:** ULK integration issues for 45nm and beyond**Speaker:** Dr Dorel Toman, Tokyo Electron Limited**Date and Time:** Thursday, September 22, 2005 6pm – 8pm**Cost:****Reservations:** Please RSVP to andrew.lin@freescale.com**Meeting Location:** Room 3-D SEMATECH

2706 Montopolis Dr., Austin, TX 78741

Directions: **Map:** <http://www.sematech.org/corporate/map.htm>

Entry Directions: The visitor lobby is open until 6pm. Anyone arriving before 6 can go there to sign in. Park in the second parking lot on the right and enter near the flag pole, north side of building in the middle. After 6pm, everyone needs to enter through the east lobby. Park in the first parking lot on the right and enter through the door with the ATDF sign over it.

The consultants' web directory has been updated. The directory is to be found at <http://www.alesu.com/xltrp/ieecons/listzero.htm>

Engineering in Medicine and Biology [[for more information](#)]**Topic or Presentation Title:** Zirconia thin-films for toughened bioceramics**Speaker:** Dr Jeff Thompson, Interim Department Chair of Biomedical Engineering, UTSA**Date and Time:** Wed, Sept 14**Cost:** \$10 members/ \$2 students/\$13 non-members**Reservations:** RSVP to [Garrett Polhamus](#)**Meeting Location:** Loeffler Room, BSB 3.03.02, UTSA Campus**Directions:** <http://www.utsa.edu/maps/1604/>

We have an exciting Fall planned.

12 Oct: Dr Mary Pat Moyer, of INCELL Corp, will talk on "Regenerative Medicine and Engineering in San Antonio"

9 Nov: We have asked Dr Jack Lancaster of the Research Imaging Center at UTHSCSA to speak

14 Dec: Dr John Clark, of Rice University, will be presenting.

For further information, please contact Dawn Roberson, 210-458-5520, robersondj@ieee.org.

Engineering Management [[for more information](#)]

Joint Meeting with Women in Engineering and the Computer Society - Austin

Topic or Presentation Title: Blogs to Books

Speaker: Don Shafer, CTO, Athens Group

Date and Time: Tuesday, Sept 20 at

6:30-7:30 presentation

7:30-8:00 Q&A

8:00-9:00 Networking

Cost:

Reservations: RSVP to: lmartinich@ieee.org

Meeting Location: National Instruments, 11500 North MoPac Expressway, Building C, Room 1S15, Austin, TX 78759.

For other information about the Engineering Management Society activities, see the the web site: http://www.ewh.ieee.org/r5/central_texas/ems/

Other Upcoming Engineering Management Events:

2005:

Sept 8-10, 2005: International Engineering Management Society Conference, St. Johns, Newfoundland

For information regarding chapter activities (and those wanting to volunteer), contact **Leslie Martinich** (leslie@competitivefocus.com) (512-423-5121).

Graduates of the Last Decade (GOLD)

Topic or Presentation Title:

Speaker:

Date and Time:

Cost:

Reservations:

Meeting Location:

Directions:

Laser and Electro Optics Society

Topic or Presentation Title:

Speaker:

Date and Time:

Cost:

Reservations:

Meeting Location:

Directions:

For more information, contact Ray Chen raychen@uts.cc.utexas.edu.

Power Engineering Society [\[for more information\]](#)

Topic or Presentation Title: Lightning

Speaker: Michael (Mike) E. Noth, P.E., Senior Electrical Engineer at Samsung Austin Semiconductor.

Date and Time: Tuesday, September 27, 2005

6:00pm Social

6:30-7:00 Dinner

7:00-7:30 Business Meeting

7:30-8:30 Program

Cost: Dinner is \$10.00 – IEEE Members

\$12.00 – Non-IEEE Members

Free for students.

Reservations: For further information, please contact Roy Matthews, P.E. or Stacy L Smith [stacy.smith@austin.utexas.edu] or go to our web site at <http://www.ewh.ieee.org/soc/pses/>

Meeting Location: El Gallo Mexican Restaurant

2910 S Congress (see below)

Austin, Texas

512-444-2205

Directions: From I –35:

Exit at Oltorf, turn west, and continue until S. Congress Avenue. At S. Congress, turn left. El Gallo is about 500 feet past the next traffic light (Cumberland), on the right. It's also directly across from the entrance to St. Edward's University.

From Ben White Blvd. (US290/SH71):

Exit at S. Congress Avenue and turn north (left from 360, right from I-35). El Gallo is about 600 feet past the next traffic light (Woodward), on the left. It's also directly across from the entrance to St. Edward's University.

Upcoming Power Engineering Society topics:

September 27 – Lightning – Mike Noth, Samsung

October 25 – Transmission System Protection and Control – Dan Smith, Austin Energy

December 6 – Ice Plant: Chilled water loop COA – Jim Collins, Austin Energy

Location: Ice Plant, downtown Austin

For further information, please contact Susan Thompson or Roy Matthews at 512-442-8085 ext 25

Product Safety Society [\[for more information\]](#)

Topic or Presentation Title: . "Flaming Oil Product Test" A discussion and film about one of the most destructive tests that can be performed on any product.

Speaker: Nathan Arldt

Date and Time: September 20

Cost:

Reservations:

Meeting Location: Dell Parmer South Campus, Building 4, in the "Victoria" conference room in Austin

Directions:

We encourage you, others in your organization, or other interested parties to participate in our meetings every month. The PSES meets every month on the third Tuesday of every month at 6:30, with the program starting at 7pm, except in November/December. A combined monthly meeting is held in early December to allow members and guests to enjoy the Thanksgiving and Christmas holidays. For further information about the PSES, please contact Dale Ritzen at (512) 651-5338.

Chapter Chair: Daniece Carpenter (daniece_carpenter@dell.com).

Women in Engineering [\[for more information\]](#)

Joint Meeting with Engineering Management and the Computer Society - Austin

Topic or Presentation Title: Blogs to Books

Speaker: Don Shafer, CTO, Athens Group

Date and Time: Tuesday, Sept 20 at

6:30-7:30 presentation

7:30-8:00 Q&A

8:00-9:00 Networking

Cost:

Reservations: RSVP to: sgillespie@ieee.org

Meeting Location: National Instruments, 11500 North MoPac Expressway, Building C, Room 1S15, Austin, TX 78759.

Directions:

The annual Texas Conference for Women will take place at the Austin Convention Center on Thursday, October 20, 2005. Detailed information on the program is available at <http://www.txconferenceforwomen.org>. The Central Texas Women in Engineering Chapter will have a booth at the conference and welcomes participants. Additional details and directions to the center are posted on the WIE website at http://ewh.ieee.org/r5/central_texas/wie.

Editor's Notes

The goal of this newsletter is to provide the more than 4700 members of the Section with up-to-date and meaningful information. We welcome contributions and suggestions that will improve the newsletter. Please contact the editor, Dawn Roberson at robersondj@ieee.org if you have any thoughts or suggestions. The deadline for submission is the 25th of the month.

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3. IEEE Info

THE INSTITUTE: can be found at <http://www.ieee.org/theinstitute>

IEEE Member Benefit:

IEEE Members access the world of technology. Search more than 1,100,000 documents in IEEE Xplore. Subscribe to IEEE Society publications at low, member-only rates. Purchase papers online for just \$13 each -- or save even more when you subscribe to the IEEE Member Digital Library.

Get the most from your IEEE membership -- find out how today: <http://boldfish.ieee.org/u/market8+/04196044>

IEEE-USA NEWS & VIEWS : IEEE Career-Building Resources: *BOOKMARK THIS SITE*: For career-building resources, including articles and product and service notices, visit IEEE-USA's CAREER NAVIGATOR at: <http://ieeusa.org/careers/>. IEEE XELL [a.k.a. Expert Now IEEE] GAINS SOCIETIES' SUPPORT

THE IEEE Virtual Museum

As mentioned last issue, The IEEE Virtual Museum (VM)—IEEE's award-winning outreach site for pre-college youth and the general public that uniquely combines engineering principles with the history and social context of technology—can be a resource for Section members, their families, and their local community. The VM has now opened its eighth exhibit, "Songs in the Key of E," about electronic music. Be sure to visit the VM at (<http://www.ieee.org/museum>).

IEEE Spectrum Hosts Online Career Forum

On 20 September, IEEE Spectrum hosts its first online Career Accelerator Forum. The forum will offer advice about going for an advanced degree, staying ahead in your field, landing your dream job, and even switching careers. You'll also be able to ask questions of an expert panel from the convenience of your desk. For more information, as well as a list of panelists, visit <http://boldfish.ieee.org/u/517/00757617>.

To sign up, go to <http://boldfish.ieee.org/u/518/00757617>.

Call for RAB Award Nominations:

The Regional Activities Board (RAB) is currently accepting nominations for a number of RAB Awards. The deadline for nominations for these awards is 15 October 2005.

- * RAB Achievement Award
- * RAB GOLD (Graduates Of the Last Decade) Achievement Award
- * RAB Innovation Award
- * RAB Leadership Award
- * RAB Larry K. Wilson Transnational Award

The RAB Awards and Recognition Program seeks to honor the outstanding efforts of some of the most invaluable IEEE Volunteers who have made substantial Regional contributions through innovative projects, exemplary leadership, service, and by fulfilling the goals as related to Transnational Activities. Each prestigious award has a unique mission and criteria, and offers the opportunity to honor distinguished colleagues, inspiring teachers and corporate leaders. These are NOT technical achievement awards. More information and nomination forms are available at the RAB Awards Website at

<http://www.ieee.org/rabawards>.

IEEE ADDS 15,000 HISTORIC ELECTRON DEVICES ARTICLES TO ARCHIVE

Continuing its plan to digitize its entire journal backfile, IEEE recently made available online versions of more than 15,000 articles from IEEE Electron Devices Society publications dating as far back as 1954. (Additional papers dating back to the 1913 first issue of the journal will be available online early next year.)

The archive now includes articles from three of the Society's most influential publications: IEEE Transactions on Electron Devices (papers from 1954 to 1987); IEEE Electron Device Letters (papers from 1980 to 1987); and the IEEE International Electron Devices Meeting (papers from 1955 to 1987).

Papers from 1988-forward were already available electronically. The IEEE online collection now contains nearly 1.2 million documents. To view abstracts of the papers in these publications, visit:

IEEE International Electron Devices Meeting:

<http://ieeexplore.ieee.org/xpl/conhome.jsp?punumber=1000245>

IEEE Transactions on Electron Devices

<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=16>

IEEE Electron Device Letters

<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=55>

IEEE membership portal

We hope all Section members are taking advantage of the new IEEE Membership Portal. The IEEE History Center is supplying interesting content which will be featured on the main page. Visit it at <http://www.ieee.org/myieee>.

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