

November 2011 Newsletter

- 8 Nov** **ComSoc** **No meeting this month.**
- 9 Nov** **Computer** **Analysis of the Stuxnet Worm**
Mr. Liam O Murchu
Nygreen 106, Cal Lutheran Univ., Thousand Oaks
6:30pm – pizza, networking
7:00pm – presentation and discussion
Web: <http://www.ieee-bv-cs.org/>
RSVP/Register to Attend:
http://meetings.vtools.ieee.org/meeting_view/list_meeting/9129
More Info:
events@ieee-bv-cs.org
- 16 Nov** **AES** **Development of Low Loss, Temp Stable Coaxial**
LMAG **Cables for Various Test Applications**
MTTS Mr. Jay Lokken, W.L. Gore & Associates
6:30-8pm, Ciao Wireless, Camarillo
RSVP: Momin Quddus, moming7@yahoo.com
Web:
- 16 Nov** **EMBS** **Nanocomposites in Dentistry**
Dr. Janet Olkad
6:00 dinner and networking in California
Lutheran University 's Ahmanson Hall (ASC 100)
(\$10 at door, no reservation)
7:00 presentation (no charge)
Web: <http://www.ieee-bv-embs.org/?p=337>
More info/RSVP: Pat Jacobs
pat.jacobs@advancedpersonnelprofiles.com
- 28 Nov** **Section** **Section Operating Committee Meeting**
Section and Chapter Officers
6:30pm TBD, Thousand Oaks
Register to attend:
http://meetings.vtools.ieee.org/meeting_view/list_meeting/9139

SECTION SPONSORS

BV Section Fall Event

Energy Efficiency Symposium



The Fall Event had a terrific turnout. Approximately 80 members, guests, and exhibitors attended and discussed new technologies and engineering opportunities. We had great coverage in the Ventura County Star both [before](#) and [after](#) the Symposium.

The keynote discussion from [UCSB IEE's Dr. David Auston](#) showed a gamut of new technologies for more efficient power technologies, from batteries powered by microstructures adapted from sea life to fast GaN converters. Presentations by SCE's **David Angel** (SmartConnect™), **Neal Roche** (Grid Test), **Tyson Salewske** (SEL), **Jeff Lebow** (SCE EDS), and **Dan Roberts** (Maverick Angels) covered new technologies for testing and controlling power and how SCE is moving business and residential service into the 21st century.

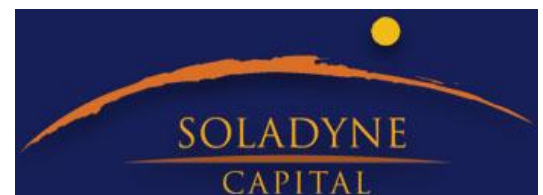
Photos and presentation info will be online later this month at the event website, <http://ees.ieee-bv.org/>.

SCE's [community forum](#) held immediately after the event was a great way to get exposure with the general public. Concerned members of the public aired their views about smart meters and had their questions answered by SCE experts and Dr. Auston.

Special thanks go to all the volunteers who put together the event and especially to those who worked the event: **Doug Askegard** (video), **Zak Cohen** (recruitment/PACE), **Yesenia Illescas** (gate registration, web site), **Mike Markowitz**, and especially event coordinator **Ross Kocen** and Emcee/SCE moderator **Bridge Carney**.

- Karl Geiger, Section Chair

Event Sponsors



Membership Development

Please Welcome Our New Members

Please join me in welcoming our newest Section members:

- Alex Mumau, Student Member
- Carolyn Collins, Student Member
- Gordon Weeks, Student Member
- Jacob Anderson, Student Member
- James Garnett, Member
- Joel Dick, Student Member
- Noe Vargas, Student Member
- Scott O'Connor, Student Member, Oceanic Engineering



Members can find and make contacts by [searching MemberNet](#) at the [IEEE Member Portal](#). For new members, please

- update and share your information at the portal to help connect you to everyone, and
- remember to set up your new IEEE email forwarding address.

– **Karl Geiger, Section Chair**

Newsletters

If you have an event or news, IEEE or otherwise, that is of interest to IEEE members please send it to Zak Cohen, zcohen@ieee.org, so it can appear in the newsletter and the website. If you wish to write for the newsletter or website, please contact Zak or a Chapter chair.

--**Zak Cohen, Section Secretary**

2012 Membership

Qualified engineers and students are invited to join the IEEE and its Societies. Applications for enrollment start 16 August. New members may enroll now to have their memberships immediately active, good through December 2012. This means up to 16 months of membership and member benefits for the price of 12 months.

To apply to join, see

- <http://www.ieee.org/join> or
- <http://www.computer.org/join>

– **Bridge Carney, Section Vice Chair/Membership Development**

Section and Chapter News

Computer Society

Analysis of the Stuxnet Virus

9 November

Stuxnet has gained a lot of attention from researchers and media recently. There is good reason for this. Stuxnet is one of the most complex computer threats that have been discovered.

Stuxnet is a threat that was primarily written to target an industrial control system or set of similar systems. Industrial control systems are used in gas pipelines and power plants. Its final goal is to reprogram industrial control systems (ICS) by modifying code on programmable logic controllers (PLCs) to make them work in a manner the attacker intended and to hide those changes from the operator of the equipment. In order to achieve this goal the creators amassed a vast array of components to increase their chances of success. This includes zero-day exploits, a Windows rootkit, the first ever PLC rootkit, antivirus evasion.

The Symantec Stuxnet Dossier is available at:

<http://www.symantec.com/connect/blogs/updated-w32stuxnet-dossier-available>

About the Speaker

Liam O Murchu is the manager of Security Response Operations for North America with Symantec. In this role he leads the team of malware reverse engineers and is constantly combating the latest malware attacks and dealing with cutting edge threats of all sorts. Liam has analyzed the majority of the high profile threats that have emerged in the last number of years, both documenting their actions and working with both private parties and law enforcement agencies to counter these threats. His research has been presented before the US congress and the British and EU Parliaments. As part of his research he has been credited with discovering several zero day vulnerabilities. Recently Liam has analyzed the Stuxnet worm which targeted Uranium enrichment plants in Iran.

Term	Transition	Ship	Start	End
סִטְקֵטְנֵט	STUXNET	-120048	Genesis Ch 50 V 17 Letter 11	Exodus Ch 7 V 11 Letter 37
וִירֻס	Virus	-30013	Deuteronomy Ch 29 V 27 Letter 33	Leviticus Ch 23 V 16 Letter 19
אִירָן	Iran	30009	Exodus Ch 26 V 33 Letter 41	Numbers Ch 11 V 6 Letter 8
מְחַשְׁבִּים	Computer	30010	Numbers Ch 26 V 28 Letter 24	Genesis Ch 15 V 4 Letter 6
תְּשֻׁבָּה	(5)771/2010	-30010	-Deuteronomy Ch 6 V 22 Letter 3	Leviticus Ch 20 V 6 Letter 56
חֶסֶד	electric	30013	Numbers Ch 7 V 88 Letter 9	Genesis Ch 15 V 4 Letter 8
אָטוֹם	Atom	-60027	Leviticus Ch 5 V 11 Letter 51	Deuteronomy Ch 12 V 18 Letter 4
חֲסִי	Secret Arts	1	Exodus Ch 7 V 11 Letter 35	Exodus Ch 7 V 11 Letter 39

The ELS reference is 30012 characters between rows.
The matrix starts at Deuteronomy Ch 12 V 17 Letter 70 and ends at Genesis Ch 50 V 17 Letter 20.
The matrix spans 720318 characters of the surface text.
The matrix has 25 rows, is 30 columns wide and contains a total of 750 characters.



MICROWAVE THEORY AND
TECHNIQUES SOCIETY
BUENA VENTURA SECTION



You are invited

Date/ Time: Wed November 16th, 2011
6:30 PM Pizza &
networking
7:00 PM Presentation

Location: Ciao Wireless
4000 via Pescador
Camarillo, CA 93012

Speaker: Jay Lokken
RF Connector/Cable
Application Engineer
W.L.Gore & Associates

Title: Development of Low Loss, Temp
Stable Coaxial Cables for
Various Test Applications



Abstract: Gore works to develop the lowest loss tangent, lowest coefficient of thermal expansion, and lowest dielectric constant available with ePTFE dielectrics. Jay will review cable performance over temperature and present data showing GORE™ Assemblies are up to five times more stable than cables using full-density PTFE. Stability and repeatability equate to increased measurement accuracy and precision in all test and measurement applications. Jay would like to field questions on particular test applications that have proven challenging, and where his experience might provide solutions.

Jay Lokken – Received his initial experience as a cable user with 8 years as a Test/Repair Technician working on F-15 Fighters. He followed that stint with an accumulated 21 years of RF connector and cable Applications Engineering spread between Gilbert Engineering, Micro Mode Products, and for the last 11 years with W. L. Gore & Associates.



MICROWAVE THEORY AND TECHNIQUES SOCIETY BUENA VENTURA SECTION



Directions to Ciao Wireless:

4000 Via Pescador
Camarillo Ca.
Phone: 805-389-3224

From LA and South

Take the I-405N.

Take the US-101/VENTURA FWY
North

Exit FLYNN RD and go straight.

Turn **RIGHT** onto **VIA PESCADOR**.
(2nd Road on **RIGHT**)

From Santa Barbara and North:

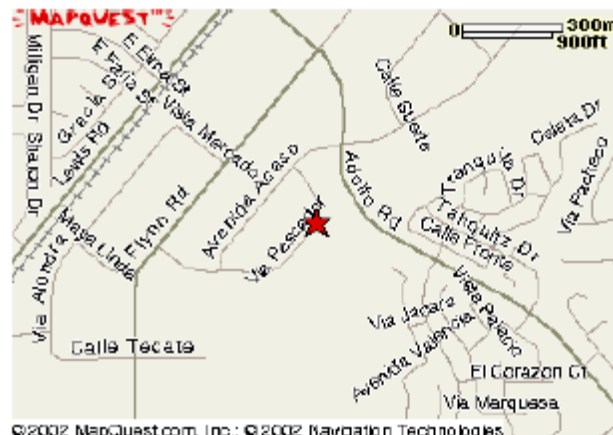
Take the US-101S/VENTURA FWY
towards LOS ANGELES.

Take the **DAWSON DRIVE** exit and
turn **RIGHT** from the ramp.

Turn **RIGHT** at the light onto
DAWSON DRIVE.

Turn **LEFT** at the light onto **FLYNN
ROAD**.

Turn **RIGHT** onto **VIA PESCADOR**.
(2nd Road on **RIGHT**)



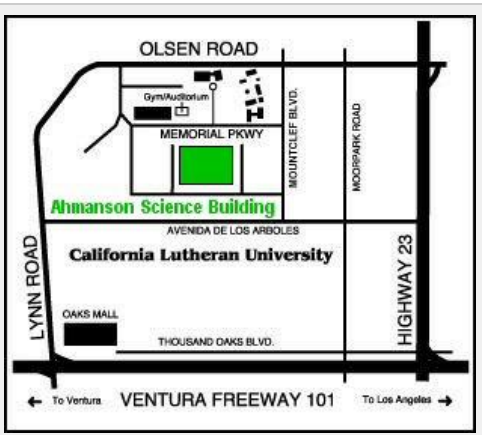
Nov 16: Nanocomposites in Dentistry – Dr. Janet Oldak, USC



Tooth enamel has remarkable resistance to wear and tear that isn't quite matched by materials currently used for dental repair and restoration, but researchers at the USC School of Dentistry's Center for Craniofacial Molecular Biology have taken a promising step toward one day recreating natural enamel on tooth surfaces. The goal of reconstructing enamel on teeth surface is an especially unique challenge, as enamel mineralization is an extracellular process that can't simply be bioengineered with specialized cell lines or other common biological approaches. This is particularly because the development of enamel-making cells is intimately related to the development of underlying dentin tissue. Synthetic enamel would be an attractive option compared to amalgam or composite for patients looking to repair tooth decay or damage and regain the original strength of their teeth.

Janet Moradian-Oldak is an expert on tooth enamel formation and structural biology, with a focus on protein/crystal interactions, enamel proteins and proteinases, apatite crystal growth, enamel formation and biomineralization, the molecular biology of amelogenin, and structural biology. She is an Associate professor at USC's Ostrow School of Dentistry. She received her PhD in Structural Biology from the Weizmann Institute of Science, Israel.

Location:	California Lutheran University 60 West Olson Road, Thousand Oaks
Dinner:	In the Atrium of the Ahmanson Science Building, available at 6 p.m. for \$10 payable at the door, no RSVP needed.
Lecture:	Nearby, at 7 p.m. Come to Ahmanson beforehand for directions. Meetings are free, open to the public
Parking:	In general, visitor Parking is no longer permitted before 7 p.m. on Memorial Parkway and adjacent streets. However, CLU Public Safety has provided us with parking passes to download and use.
Contact:	Abigail Corrin, acorrin@clunet.edu



Neighboring Section News and Special Announcements

Region 6 Southern Area Meeting
Student Leadership Training event
GOLD members welcome

Saturday, November 5, 2011

Breakfast at 8:30 a.m. Meeting starts at 9:00 a.m.

Held on the CSU-LA Campus.

3rd floor of Golden Eagle Bldg.

- Lunch included for attendees.
- Networking
- Meet your Section officers.
- Compare notes with other Student Branches on activities & events.

NO Cost – but we need your reservation for meal planning.

Please RSVP your headcount to dougaskegard@ieee.org

Bring your Branch Counselor!

Bonus: We will have both Ed Perkins, R6 Director, and Mike Andrews, R6 Director-Elect, on hand and presenting part of the program!

The meeting will be held in the CSULA Golden Eagle Ballroom 1, which is located on the 3rd floor of Golden Eagle Building. Please refer to the campus map for the location of Golden Eagle building (Building #6):

http://www.calstatela.edu/univ/ppa/campus_map.pdf

Driving direction can be found here: <http://www.calstatela.edu/misc/trans/index.php>

We recommend the participants to park at Parking Structure C, top level. Daily parking permit can be purchased via the yellow ATM on the parking structure for \$6.

All student officers & members are welcome to attend -- gas mileage + parking expense will be reimbursed per IEEE expense policy **for 1 car from each participating college/university Student Branch so you are strongly encouraged carpool to the event.**

Looking forward to your RSVP and participation in the event!

Best regards,
Doug

Doug Askegard
IEEE Region 6 Professional Activities Coordinator
dougaskegard@ieee.org
cell phone: 408-425-3060



Society of Women Engineers, San Buenaventura Section

SWE Mixer

Monday, November 7, 2011

5:30—7:30 PM

Yolanda's Mexican Café Patio
86 East Daily Drive, Camarillo

Join us for an Engineering Society mixer.
Meet with the Society of Women Engineers as well as
other professional Engineering societies.

No Host Bar. Appetizers provided.

Cost \$5



For RSVP or Questions, contact Lori Mahoney
805-218-1235 or mahoney_unique@yahoo.com
Website: swe-sbv.org

Association for Information Systems Student Chapter at California Lutheran University Presents



Mobile Money on Three Continents

November 14, 2011

6:30-8:00 PM

Lundring Events Center

Chris Njunge, recent CLU MS-IST graduate and now Ph.D. student at Claremont University, will introduce M-Pesa, a service that enables its users to complete basic banking transactions via mobile devices in Kenya and Nigeria without visiting a bank.

Xavier Marin, current MS-IST student at CLU, will introduce a similar service via mobile devices used to transfer money to Latin America from the United States.

Following the presentations, there will be time for the audience to ask questions.

Food and refreshments will be served prior to the presentations. There will be time for networking following the presentations.

We look forward to seeing you there. Non-members are welcome – invite a friend!

RSVP and notification management: cluaisc@gmail.com

Join our LinkedIn Group! Find it on LinkedIn by searching for [CLU AIS Student Chapter](#)

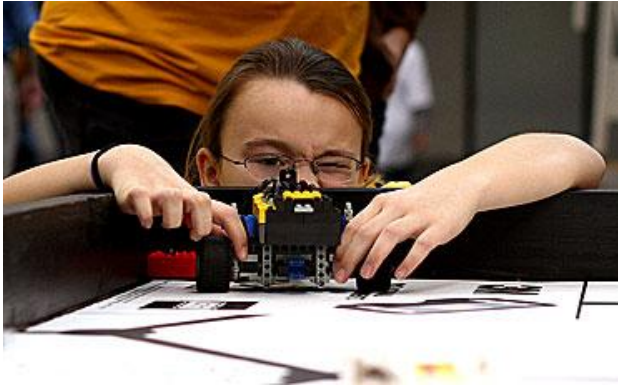
CLU AIS SC involves a diverse mix of students at all levels interested in technology as well as Information Systems and Computer Science. Our goal is to promote networking among peers, both for current students and alumni, as well as members of the professional community.

The Association for Information Systems (AIS) serves society through the advancement of knowledge and the promotion of excellence in the practice and study of information systems.



FIRST Robotics Tournament at California Lutheran

Come join us for the First LEGO League's Qualifying Tournament, a fun and crazy day of robotics featuring 9-14 years old students from local schools in their first competition of year. It should be noisy! See them make robots accomplish amazing feats having a Food Safety theme. Just stop by and see what's going on!



We are seeking volunteers to help during all or part of the day with various tasks from registration, setup, coordination, judging and refereeing. No experience with robotics is necessary! We will train you.

If you are also interested in being a mentor to a robotics team at a local elementary or middle school, please contact Bob Rumer (above). Mentoring involves attending practices and maybe team tournaments. Times would vary for each team as would your duties. You may be helping the students on hardware, software, or their research in Engineering.

Where:

Gilbert Sports and Fitness Center, California Lutheran University, 60 W. Olsen Rd., Thousand Oaks

When:

9am-5pm, Sunday, 20 November 2011

Contact:

Bob Rumer, Robotics and Automation Society Chapter Chair, rumer@callutheran.edu, 805-377-8369



NOMINATIONS ARE BEING SOUGHT FOR Region 6 Director/Delegate Elect Candidates

In early 2012 the Region will need to select candidates for Director-elect to go forward to the IEEE Ballot.

The Region N&A committee is seeking nominations (including self-nominations) for prospective candidates for the posts of Region Director-elect and who will also be a Delegate to and serve on the IEEE Board of Directors, the MGA Board and IEEE-USA Board for two years.

The potential candidates will be those who will become Director/Delegate – elect 2013-14 and then serve on the Boards in 2015-16, with a further two year term as past-Director. This position in leading the Region and being a part of the IEEE Leadership is a significant opportunity, and responsibility. The individual who is nominated must be at least a Senior Member and reside in Region 6. Given the time commitment although not formerly required it is also highly desirable that a candidate have the support of their employer. The position descriptions for both the Region and Board responsibilities are found at the URL: http://www.ieee.org/about/corporate/position_descriptions.html Details of the activities for the IEEE Board, MGA Board and IEEE-USA Boards are to be found on the IEEE web site.

To nominate an individual or to be considered as a candidate, please send a **SHORT** (one-page) resume, that includes IEEE experience, and a 150 word position statement to Leonard Bond (Chair N&A Committee) no later than **NOVEMBER 15, 2011**.

The candidates selected by the N&A committee will have the opportunity to speak at the February 2012 Region meeting, which will make the final selection for candidates to go forward to the IEEE ballot. These candidates will then the opportunity to speak at each of the five Region 6 Area meetings.

If you have questions or require additional information please send me an e-mail, I will be happy to set up a time to talk.

Regards

Leonard J. Bond

Chair Region 6 N&A Committee

Past-Director IEEE Region 6

e-mail lj.bond@ieee.org

Buenaventura Section and Chapter Info

Section Office 2011	Name	E-Mail
Chair	Karl Geiger	karl@ieee-bv-cs.org
Vice-Chair	Bridgeman Carney	bcarney@ieee-bv.org
Treasurer	Albert Wolfkiel	awolfkiel@ieee-bv.org
Secretary	Zak Cohen	zcohen@ieee.org
Program / Award Officer	Doug Askegard	dougaskegard@ieee.org
PACE Events Chair	Jim Leatham	jleatham@alum.mit.edu
Past Chair	Steve Johnson	sfjohnso@ieee.org
Sr. Representative, LA Council	Bridgeman Carney	bcarney@ieee-bv.org
Jr. Representative, LA Council	Karl Geiger Momin Quddus	karl@ieee-bv-cs.org moming7@yahoo.com
Section Webmaster	Yesenia Illescas	yillescas@pes.ieee-bv.org

Chapter	2011 Chair	E-Mail
Aerospace	Sunil Pai	paisunils@ieee.org
Communications	Victor Lin	Victor.S.Lin@aero.org
Computer	Craig Reinhart	reinhart@callutheran.edu
Engineering in Medicine and Biology	Abigail Corrin	abigailacorrin@hotmail.com
Life Members Affinity Group	Jerry Knotts	jeknotts@ccvf.org
Microwave Technology and Techniques	Momin Quddus	moming7@yahoo.com
Power and Energy	Bridge Carney	bcarney@ieee-bv.org
Robotics	Bob Rumer	rrumer@callutheran.edu

Be sure to check the Section's websites for the latest updates, meeting flyers, and newsletters. Some event details may change. Sites:

http://www.ieee-bv.org/	Aerospace, Life Members, Microwave, Power and Energy, Robotics, Section
http://comsoc.ieee-bv.org/	Communications
http://www.ieee-bv-cs.org/	Computer
http://www.ieee-bv-embs.org/	Engineering in Medicine and Biology