



IEEE BUENAVENTURA SECTION

October 2011 Newsletter



3pm-8pm Thursday 27 October
Westlake Village Inn, Westlake, California

Featuring

Dr. David Auston, UCSB Institute for Energy Efficiency
Southern California Edison EDS
Schweitzer Engineering
Maverick Angels Investments



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More October Events

- | | | |
|--------|-------------------------------|---|
| 11 Oct | ComSoc | <p>Space Telecommunication Radio System (STRS) Architecture -- Software Defined Radios for Future NASA Missions</p> <p>James Lux, Co-Principal Investigator, JPL, Pasadena</p> <p>6:30 p.m., ITT-Force Protection Systems, Thousand Oaks</p> <p>Identification required; non-U.S. citizens must show INS documentation, i.e., H1B, 151, or passport</p> <p>Web: http://comsoc.ieee-bv.org/</p> <p>More info: xwang97@yahoo.com</p> <p>RSVP/Register to Attend:</p> <p>http://meetings.vtools.ieee.org/meeting_view/list_meeting/8553</p> |
| 12 Oct | Computer | <p>E Pluribus, Unum: The Evolution of the Personal Computer's Architecture</p> <p>Mr. Bill Gervasi</p> <p>6:30pm, Nygreen 106, Cal Lutheran Univ., Thousand Oaks</p> <p>7pm – presentation and discussion</p> <p>Web: http://www.ieee-bv-cs.org/</p> <p>More Info: events@ieee-bv-cs.org</p> <p>RSVP/Register to Attend:</p> <p>http://meetings.vtools.ieee.org/meeting_view/list_meeting/8499</p> |
| 19 Oct | Aerospace LMAG MTTS | <p>An Instrument to Detect Prebiotic Molecules in Astrobiological Planets</p> <p>Dr. Valerie Scott, JPL/Caltech</p> <p>6:30-8pm, Ciao Wireless, Camarillo</p> <p>RSVP: Sunil Pai, pasisunils@ieee.org</p> <p>Web: http://aes.ieee-bv.org/</p> |
| 26 Oct | EMBS | <p>Taking a Device or Pharmaceutical to Market — The Basics of Getting Approved and Getting Paid</p> <p>Ira D. Moskatel</p> <p>6:00 dinner and networking in California Lutheran University 's Ahmanson Hall (ASC 100) (\$10 at door, no reservation)</p> <p>7:00 presentation (no charge)</p> <p>Web: http://www.ieee-bv-embs.org/?p=327</p> <p>More info/RSVP: Pat Jacobs</p> <p>pat.jacobs@advancedpersonnelprofiles.com</p> |
| 24 Oct | Section | <p>Section Operating Committee Meeting</p> <p>Section and Chapter Officers</p> <p>6:30pm Mimi's Café, Thousand Oaks</p> <p>Register:</p> <p>http://meetings.vtools.ieee.org/meeting_view/list_meeting/8515</p> |
| 27 Oct | Everyone and the Public | <p>Energy Efficiency Symposium</p> <p>Web: http://ees.ieee-bv.org</p> <p>Register: https://www.123signup.com/register?id=cjcdv</p> |

SECTION SPONSORS



BV Section Fall Event

Energy Efficiency Symposium



Our featured speaker will be Dave Auston, Executive Director of the Institute for Energy Efficiency at the University of Santa Barbara! The IEE at UCSB is a leader in the in the direction, research and technology of energy efficiency in the world. Dr. Auston will show where it's coming from (research) and going to (end users) and how it is getting there (delivery) with a whole bunch in the middle that will require engineers, engineers and more engineers.



Also speaking:

- Jeff Lebow from SCE's Economic Development Services
- SCE's Smart Meter Team
- Schweitzer Engineering Laboratories
- Maverick Angels Venture Capital

Information and tickets

<http://ees.ieee-bv.org/>

Sponsorships and tables are still available. If you have a company or know one that would be interested in sponsorship or in setting up a display area, please contact Bridge Carney at bcarney@ieee-bv.org or see the exhibitor registration at <https://www.123signup.com/register?id=cmqjc>

- Bridge Carney, PES Chair, Section Vice Chair



Event Sponsors



Membership Development

Please Welcome Our New Members

Please join me in welcoming our newest Section members:

- Jacob Aldridge, Student Member
- Amy Chen, Student Member
- Jonathon Fewkes, Member
- Nicole Hay, Student Member
- Aaron Miller, Student Member
- Tara Leach, Student Member
- Jessica wu, Student Member



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**

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**

Job Opportunities

Job Opening in CA – Principal Quality Engineer & Manufacturing Engineer

Second Sight (www.2-sight.com) in Sylmar, is searching for a principal or senior Quality Engineer and for a Manufacturing Engineer. Both positions require a minimum of 5 years experience and an EE for this implantable medical device company.

Contact Pat Jacobs --

pat.jacobs@advancedpersonnelprofiles.com

IEEE 2011 Elections **Remember to Vote!**

Please be sure to cast your ballot in the 2011 IEEE Election and your Societies. The polling period closes **3 October 2011**.



This year's President-elect candidates, Roger Pollard and Peter Staecker, are both very strong candidates with distinct visions for the IEEE's future. This year's election comes at a critical time in the evolution of the IEEE.

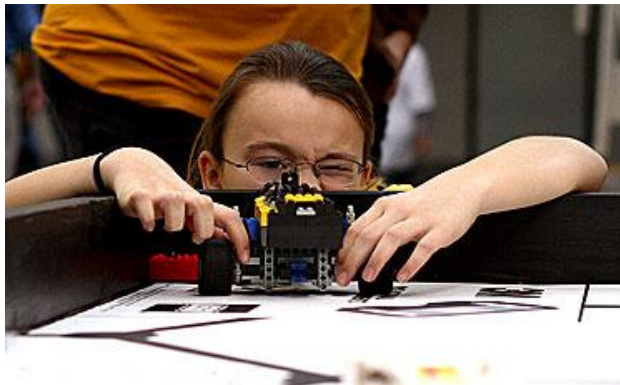
See the [voting general information](#) page; on that web page sign into your web account to cast your ballot.

– **Karl Geiger, Section Chair**

Section and Chapter News

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 the 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, rrumer@callutheran.edu, 805-377-8369



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

September Section Event Flyers

Space Telecommunication Radio System (STRS) Architecture -- Software Defined Radios for Future NASA Missions

James Lux, Co-Principal Investigator, JPL, Pasadena

Software Defined Radio (SDR) will be the mainstay of communications for spacecraft of the future. The ability to change the radio's function with a software upload is extremely useful. When telecom requirements change during different mission phases due to unforeseen events or changes in mission plans, the characteristics of the primary transceiver on-board the spacecraft can be rapidly changed. SDR enables more science because the telecom system doesn't have to accommodate all possible modes of operation all the time within limited resources.

NASA has used JPL's experience developing the Electra SDR (for Mars heritage deep space mission), as well as industry and DoD experience to develop an Architecture Standard for future space SDR. The Standard doesn't specify a particular implementation, but does describe capabilities and features that a ³radio platform² should provide, as well as a layered conceptual model, from the hardware at the bottom, up through the Operating System and Operating Environment, to the waveforms and applications. In this talk, an overview of the STRS architecture is presented, with an emphasis on the challenges faced in the first flight implementation of a game changing, paradigm shifting technology.

About the Speaker



James Lux is currently a Co-Principal Investigator for the Communications Navigation and Networking Re-Configurable Testbed (CoNNeCT) project. He is the Task Manager responsible for delivering a NASA STRS Operating Environment (the software infrastructure) for the JPL-SDR to the CoNNeCT project. Previous work at JPL has included an adaptive phased array antenna with distributed processing and metrology, a ground station for on-orbit calibration of radar, and a variety of other radio and communications projects.

Before joining JPL in 1999, he provided engineering consulting services to a variety of clients, including development of Electronic Warfare systems for broadband signals analysis and identification, jamming, and other countermeasures, large scale software database systems, and motion picture special effects. He attended UCSD and UCLA from 1976 through 1979 before leaving to run a software development consulting company.

Where

ITT-Force Protection Systems, Thousand Oaks

NOTE: Identification required; non-U.S. citizens must show INS documentation, i.e., H1B, 151, or passport

When

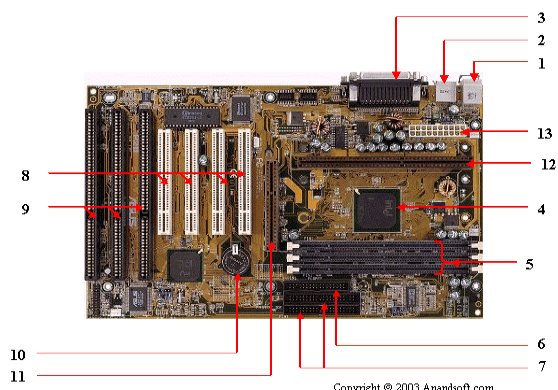
Tuesday, 11 October. 6:30pm networking; 7pm presentation

Contact/RSVP:

xwang97@yahoo.com , http://meetings.vtools.ieee.org/meeting_view/list_meeting/8553

E Pluribus, Unum: The Evolution of the Personal Computer's Architecture

Mr. Bill Gervasi



The evolution of the architecture of the personal computer began with a centralized processing capability surrounded by an array of specialized intelligent agents. The data processed by each subsystem contributed to a greater whole, and the CPU made sense of the aggregated hardware. Over time, more work migrated into the central processor which lowered part counts but increased power consumption. This presentation takes a detailed look at the history of the personal computer, the development of real and de facto standards, and assesses the benefits and mistakes made along the way.

About the Speaker

Mr. Bill Gervasi has been involved in the definition of Double Data Rate SDRAM since its earliest inception. His background is in computer sciences and career highlights include 19 years at Intel where over the years he was systems hardware designer, software designer, and major accounts manager. Mr. Gervasi subsequently was with S3 where he was a graphics architecture specialist and at Transmeta as memory technology analyst. Most recently he has been with Netlist, SimpleTech, and US Modular driving unique memory module configurations. He has served on the JEDEC Board of Directors and chaired committees for DRAM parametrics and memory modules throughout the development of DDR1 through DDR4. Mr. Gervasi holds numerous patents in memory and packaging design, and has performed expert witness testimony in major intellectual property cases.



When:

Wed, 12 Oct 2011, 6:30 pm pizza/networking, 7pm presentation, Q&A

Where:

Nygreen Hall Room 106, California Lutheran University, 60 W. Olsen Road, Thousand Oaks

Web:

<http://www.ieee-bv-cs.org/2011/09/22/e-pluribus-unum-the-evolution-of-the-personal-computer%E2%80%99s-architecture/>

Contact/RSVP/Register:

http://meetings.vtools.ieee.org/meeting_view/list_meeting/8499
events@ieee-bv-cs.org



MEETING NOTICE Buenaventura MTT-S Chapter

Date and Time: Wednesday, October 19th, 2011 (6:30PM)

Location : Ciao Wireless

4000 Via Pescador, Camarillo, CA 93012

Agenda: 6:30PM Reception & Networking

7PM Presentation

**An Instrument to Detect
Prebiotic Molecules in
Astrobiological Planets**

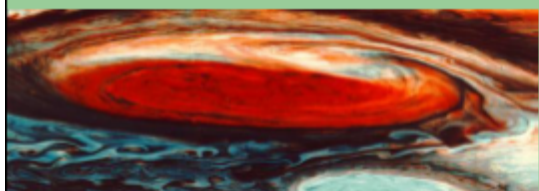
Dr. Valerie Scott
JPL/Caltech



Abstract: Major goals of space exploration are to look for extant or extinct life (I.e. chemical biomarker molecules) and to determine the factors that make an environment habitable; an extension of this goal is to better understand prebiotic chemistry and the features that allow life to occur. In Situ detection remains the most widely used method in missions that address these questions. Missions to astobiological or geochemical planetary targets will require an efficient and non-altering extraction technique for efficient detection and characterization of biomarkers-bonds between polymeric structures or those between the target and regolith will need to be broken while maintaining the chemical integrity of the molecule. A new instrument is described that has been developed for use in the exploration of Mars; however it will be applicable to any mission requiring in situ analysis of planetary regolith and ice. The instrument is a micro extractor (uEX) that exploits the unique property of water to modify its dielectric constant when effected by radio frequency(RF) radiation. The instrument design will be summarized and initial experiments on the utility of uEX towards breaking specific chemical bonds will be described.

BIOGRAPHY

Dr. Valerie Scott is a recent graduate from Caltech Chemistry Department where she studied reaction mechanisms and species relevant to small molecule activation and conversion for the development of chemistry for alternate energy feedstocks. Prior to her time at Caltech, she did research at Brandies University on C-F bond activation and conversion of CFCs. She also spent time at Yale University in the Breaker Laboratory studying the biochemical interactions of metabolites with riboswitches and gene expression. She is now a part of the NASA Postdoctoral Program and is starting with new projects related to sample processing for space exploration.



October 26: Taking a Device or Pharmaceutical to Market — The Basics of Getting Approved and Getting Paid – Ira D. Moskatel

Taking a human therapeutic product to market involves a lot of technical, legal and business challenges, whether it is a pharmaceutical, a biological or a medical device. Everyone in the life sciences is aware at some level that a new product must obtain the approval of the Federal Food and Drug Administration, but not everyone is aware of the challenges that can arise in securing approvals for payment by Medicare and insurance companies and in complying with regulatory requirements for manufacturing and distribution of products. This session will provide a very broad overview of the regulatory process involved in taking a potential therapeutic product from the development laboratory to a commercial product, with a focus on identifying the planning, timetables, and decisions necessary for a successful life sciences business.



Ira D. Moskatel's law practice focuses on the transactional representation of organizations that either do science and technology or buy science and technology, for clients ranging from technology startups to companies at the top of the Fortune 100. His work for the pharmaceutical industry focuses primarily on licensing, strategic alliances, contract manufacturing, and clinical research outsourcing arrangements. He practices in the Los Angeles office of Arnold & Porter LLP. Arnold & Porter's FDA and healthcare regulatory practice group, based in the firm's Washington, D.C. headquarters, includes attorneys and regulatory advisors who have decades of experience in the regulatory process, often bringing prior experience within the FDA and/or the Centers for Medicare and Medicaid Services, as well as the perspective of practicing scientists and physicians. Ira received his B.S. in Engineering & Applied Science from Caltech and J.D. from the University of Southern California, where he was elected to Order of the Coif. He has been a member of IEEE for more than 30 years.

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| 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 Corin, acorin@clunet.edu |



Neighboring Section News and Special Announcements

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

Section and Chapter Info

| Section Office 2011 | Name | E-Mail |
|--------------------------------|-----------------------------|--|
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| 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 |
|--|--|----------------|--|
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| | Communications | Victor Lin | Victor.S.Lin@aero.org |
| | Computer | Craig Reinhart | reinhart@callutheran.edu |
| | Electronic Devices, Circuits and Systems | David Viveiros | david.viveiros@ieee.org |
| | 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:

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| http://comsoc.ieee-bv.org/ | Communications |
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