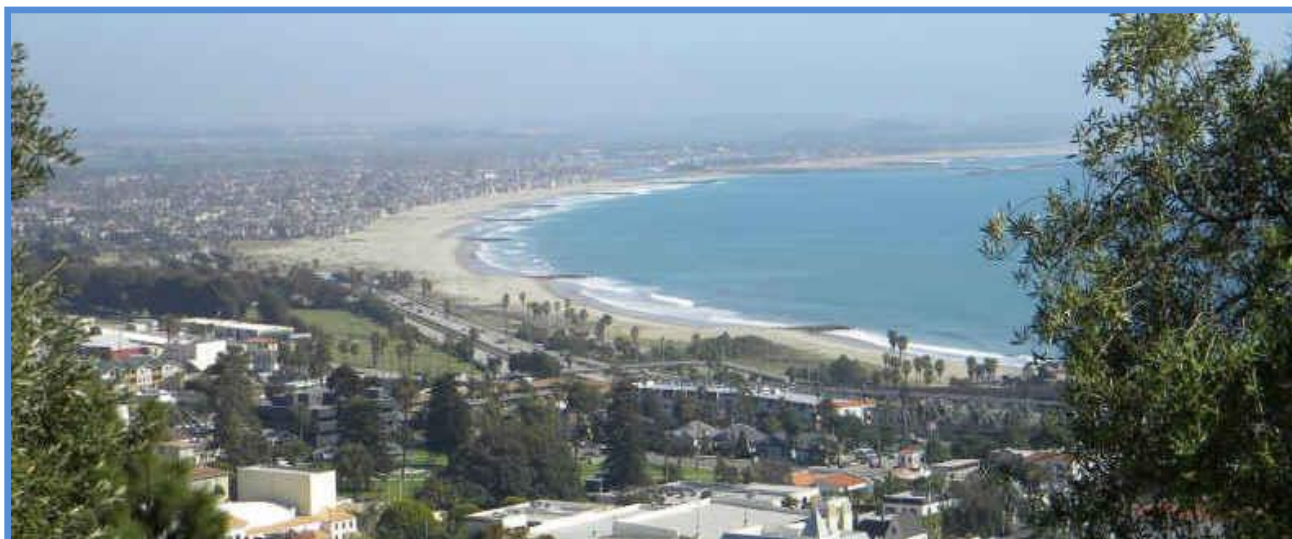




# IEEE BUENAVENTURA SECTION

## JANUARY 2014 NEWSLETTER



### SECTION SPONSORS



Ciao Wireless, Inc.



Find more about us online!!

**Main Site** - [ieee-bv.org](http://ieee-bv.org)

**Computer** - [ieee-bv-cs.org](http://ieee-bv-cs.org) aka [computer.ieee-bv.org](http://computer.ieee-bv.org)

**EMBS** - [ieee-bv-embs.org](http://ieee-bv-embs.org) aka [embs.ieee-bv.org](http://embs.ieee-bv.org)

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Join Our **Facebook Page!** - [facebook.com/IEEEofVenturaCounty](https://facebook.com/IEEEofVenturaCounty)

# **EVENTS HIGHLIGHTS!**

<b>Mon 6 Jan.</b>	<b>OpCom</b>	<b>Operating Committee Meeting</b> 6:30 pm China Buffet, Thousand Oaks
<b>Wed 15 Jan.</b>	<b>MTT-S/ AESS/EDC AS/LMAG</b>	<b>Buoyant Rover for Under-Ice Exploration</b> <i>Presenter : Daniel F. Berisford, Jet Propulsion Laboratory</i> Date and Time: Wednesday, January 15th, 2014 (6:30PM) Location: Ciao Wireless, 4000 Via Pescador, Camarillo, CA 93012 Agenda: 6:30PM Reception & Networking; 7 PM Presentation
<b>Sat 18 Jan.</b>	<b>BV Officer Training</b>	<b>BV Officer Training</b> Newbury Park, 10:00 AM – 1:00 PM <i>John Wright will present training for BV section.</i> Open to All IEEE members , refreshments will be provided. Please RSVP to <a href="mailto:j.wright@ieee.org">j.wright@ieee.org</a>
<b>Mon. 27<sup>th</sup> Jan.</b>	<b>IEEE-BV Section Award Banquet</b>	<b>IEEE-BV Section Award Banquet</b> Venue: Los Robles Greens
<b>Wed 29 Jan.</b>	<b>EMC</b>	<b>Using Current Probes for Laboratory EMC measurements By David Fischer</b> Date & Time: January 29 2014 6:00PM Location: Thousand Oaks Library, Newbury Park Branch, 2231 Borchard Rd Newbury Park, CA 91320
<b>Wed 29 Jan.</b>	<b>EMB</b>	<b>Crowdfunding for Medical Solutions – Nathalie Gosset, USC</b> Location: CLU, 60 West Olson Road, Thousand Oaks Dinner: Available for \$10 by 6 P.M. Lecture: Starts at 7 P.M. Contact: Steve Johnson, <a href="mailto:sfjohnso@ieee.org">sfjohnso@ieee.org</a>
<b>And more!</b>		

## Membership News

### **A Very Happy New Year 2014 to Everyone!**

Please join me in welcoming our newest members to the IEEE:

- ✚ Iradj Shahriary
- ✚ John Maxwell
- ✚ Michael Lavery
- ✚ Sami Alharthi
- ✚ Sandra Suttiratana
- ✚ Sarah Suttiratana
- ✚ Sultan Alenezi
- ✚ Zoe Hay



Members: please be sure to update and share your information at the IEEE Member Portal and set up your IEEE email alias. Please also introduce yourselves at meetings; networking starts here in the IEEE.

**--- Bridge Carney**  
**IEEE Buenaventura Section Chair 2013**

## Section News





### Computer Society

The Computer Society Chapter is seeking new volunteers for officers and presentations. Please contact Craig Reinhart, CS Chapter Chair to volunteer or to speak at an upcoming meeting.



**-- Craig Reinhart**  
**CS Chair**  
**[craig@ieee-bv-cs.org](mailto:craig@ieee-bv-cs.org)**

## **JOB OPPORTUNITIES**

**Contact Pat Jacobs -- 805-579-0630 [pat.jacobs@advancedpersonnelprofiles.com](mailto:pat.jacobs@advancedpersonnelprofiles.com)**

-  **Electrical Engineer, Alfred Mann Foundation ([www.aemf.org](http://www.aemf.org)), Valencia**  
BSEE, 3-5 years experience with analog and digital design and development of prototypes. Inductive power & communication experience a plus.
-  **Quality Engineer at Second Sight, Sylmar**  
Two position for experienced Quality Engineers with medical device experience. One position focused on quality systems and the other for a CAPA and EtQ Administrator.
-  **Field Clinical, Clinical Research Associate & Clinical Project Manager**  
Job openings at Alfred Mann Foundation and Second Sight. Must have device experience.
-  **Interns: Mechanical Engineer & Industrial Design at Second Sight, Sylmar**  
Must be able to work a minimum of 16 hours per week through May 2014. These are paid internships.

**Contact: Abby Hairabedian , 805-388-1711 ext. 332 [ahairabedian@dex.com](mailto:ahairabedian@dex.com)**

-  **Senior Electrical Engineer**  
Camarillo company is looking for a Sr. Electrical Engineer to design/develop test processes for electronic assemblies such as wind turbine control systems and computer networks used in the medical equipment industry. 10+ years experience. Knowledge of high-power RF, Visual Basic, Lab View. More info at [dex.com](http://dex.com)
-  **Engineering Technician**  
Camarillo company looking for Technician to build electronic test setups for electronics systems, assemblies, and circuit boards in wind energy and healthcare devices. 5+ years electronic troubleshooting, testing and repairs at the component level. Electro-mechanical experience. Ability to read mechanical and electrical drawings. Good communication skills. More info at [dex.com](http://dex.com)



**Looking for Academic, Scientific, or Engineering Talent?**

**Advertise with the IEEE Buenaventura Section** Placement ads are \$25/month and appear in both newsletter and online. Sponsorships available for website and Section. Contact [newsletter@ieee-bv.org](mailto:newsletter@ieee-bv.org) or see our [Ad Placement information](#) to advertise or sponsor the Section.



## MEETING NOTICE Buenaventura MTT-S/ AESS/EDCAS/LMAG Chapters

### Buoyant Rover for Under-Ice Exploration

*Presenter : Daniel F. Berisford*

*Jet Propulsion Laboratory*

**Date and Time:** Wednesday, January 15th, 2014 (6:30PM)

**Location :** Ciao Wireless , 4000 Via Pescador, Camarillo, CA 93012

**Agenda:** 6:30PM Reception & Networking; 7 PM Presentation



**Abstract :** The Buoyant Rover for Under-Ice Exploration (BRUIE) is an experimental two-wheeled robot capable of roving in two-dimensional space in the under-ice environment. The rover has positive buoyancy, allowing it to stick to the ice underside and operate using similar control principles as those used for traditional above-ground rovers. The rover is an early-stage technology development/demonstration effort to provide a simple and inexpensive alternative to “swimming” submersibles. Recently added capability allows the rover to operate without a tether, communicating with a nearby above-ice ground station, which can relay data to a remote command center for remote operation. Additional upgrades include a dissolved methane sensor and improved capability for escape from entrapment in soft ice pockets. The system has been tested in frozen thermokarst lakes in the tundra region near Barrow, Alaska, and data from onboard video and methane sensors gives scientific insight to the formation and distribution of trapped methane pockets in the lake ice.

**Bio:** Daniel F. Berisford received the B.S. degree in aerospace engineering from the Georgia Institute of Technology in 2002, and the M.S. and PhD degrees in aerospace engineering from The University of Texas at Austin in 2004 and 2009. His graduate research included the development of optical and thermal diagnostic instruments for electromagnetic railguns and plasma thrusters. Dr. Berisford is currently a Technologist at the Jet Propulsion Laboratory in Pasadena, CA, where he performs research and development work for advanced thermal technologies and instruments for the study of snow and ice. He manages the Technology for Energy and Extreme Environments Lab, which specializes in rapid experiment development to address fundamental engineering challenges of emerging (low TRL) technology in thermal, fluid, and robotic systems.



Presents

**OFFICER TRAINING**

**Newbury Park Library, 1/18/14, 10:00AM - 1:00PM**

**John Wright** will present the Officer Training for the Buena Ventura Section. John has conducted similar training sessions for the BV Section, Santa Clara Valley Section, Region 6 and was the Core Track Chair for Sections Congress in Tampa, Florida.

Leading the local activities is much easier once you know the ropes.

Whether you are an experienced officer or just considering helping out, there will be value in this training. This meeting is **open to any IEEE member and refreshments will be provided.**

Please **RSVP** to [\*\*j.wright@ieee.org\*\*](mailto:j.wright@ieee.org) so we know how many people to prepare for.



**IEEE BUENAVENTURA SECTION**

Monday, January 27th, 2014



**IEEE**

Buenaventura Section

## Year End Banquet & Awards Ceremony

This year we are celebrating our section's **50th Anniversary** and taking the time to appreciate  
"Why Engineers Do Amazing Things"

Venue: Los Robles Greens  
299 S Moorpark Rd,  
Thousand Oaks, CA 91361

*You are cordially  
Invited*

Dinner: Buffet style

More Details Coming very soon!



## **The IEEE Buena Ventura EMC Society**

*is pleased to present*

### **Using Current Probes for Laboratory EMC measurements**

**By David Fischer**

**David Fischer** of Fischer Custom Communication will give a presentation on the use of current and near field probes for troubleshooting and measuring EMC levels without the use of an EMC test chamber.

Questions? Please forward them to [mnicholls@a-m-c.com](mailto:mnicholls@a-m-c.com).

**Date & Time:** January 29 2014 6:00PM

**Location:** Thousand Oaks Library  
Newbury Park Branch  
2231 Borchard Rd  
Newbury Park, Ca 91320

Since 1971, **Fischer Custom Communications, Inc.** has pioneered the development of state of the art EMC equipment.

Fischer Communications specialize in electric and magnetic field sensors, generators, and instrumentation to insure that appliances, tools, and instrumentation meet FCC, FAA, Military, European and Asian regulations for electromagnetic emissions and immunity.

Fischer Communications develop application focused transient protection devices for sensitive electronic systems from lightning, EMP and HPM threats.

## January 29: Crowdfunding for Medical Solutions – Nathalie Gosset, USC

Although crowd sourcing is no longer a novel concept, 2013 was the first year that crowdfunding campaigns were launched for medical devices, therapeutics, or medical research, including several just completed by the Alfred E. Mann Institute for Biomedical Engineering at USC, spearheaded by our speaker, Nathalie Gosset.

Ms. Gosset will describe the projects, including the first-ever crowdfunding campaign for a cancer drug; how crowdfunding was adapted for life science; the work that took place during the campaigns; the results; and the lessons learned during the journey. She will discuss how to fuel public interest, the obstacles that surfaced and how to address them. The talk will wrap up with key recommendations for integrating crowdfunding into product development strategy.



**Nathalie Gosset** is Senior Director, Marketing and Technology Innovation Evaluation, at the Alfred E. Mann Institute for Biomedical Engineering at USC. She is responsible for investigating and establishing the commercial value of the medical innovations presented to that organization. Ms. Gosset has become a sought-after keynote speaker on matters of the Future, reporting on new technologies, new job categories, or new ways of doing business.

Ms. Gosset is a member of several medical advisory and boards of directors. She holds a BSEE from ISEP (Paris, France); MS in Telecommunications (Boulder, CO); MBA (University of St. Thomas, St. Paul, MN). Ms. Gosset is an IEEE/EMBS member who received several prestigious awards for her volunteer work for the technical and biomedical global community – among them, the 2007 Career Service award for creating more than 50 EMBS chapters worldwide, and the 2009 IEEE Engineer of the Year presented by the Buenaventura Section. She is a past Chair of the Buenaventura IEEE/EMBS Chapter and the Buenaventura Section.

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 <a href="#">parking passes</a> to download and use.
Contact:	Steve Johnson, <a href="mailto:sfjohnso@ieee.org">sfjohnso@ieee.org</a>





## **60th Annual Ventura County Science Fair**

### **Volunteer as Judges**

#### **Science Fair Judges**

Approximately 275 science, engineering, and industry professionals from throughout Ventura County volunteer their time to serve as judges for the Science Fair.

### **Participate as Students**

#### **Science Fair Participants**

Each year thousands of Ventura County student's, in grades 6-12, complete science research projects at their schools, and nearly 1,000 of those students earn the right to compete at the Ventura County Science Fair. Approximately 75 of our top students are invited to the State Science Fair to compete with their peers from across California where many of our past students have placed in the top three for their category and some have been awarded Project of the Year.

### **Schedule**

***Project Application Deadline: Feb. 13, 2014***

***Project Set-up: March 18, 2014***

***Project Judging: March 19, 2014***

***Awards: March 20, 2014***

**For more information, Please visit <http://www.vcoe.org/sc/ScienceFair.aspx>**

## OTHER IEEE SECTION EVENTS

### IEEE Coastal Los Angeles Section (CLAS) Events



## IEEE Radio and Wireless Symposium



19 - 22 JANUARY 2014, NEWPORT BEACH, CA, USA

<http://www.radiowirelessweek.org/>

### **Radio and Wireless Symposium Presents the 2014 Industrial Forum**



### **Tutorial Workshop on RF and Microwave Filter Design**

**Monday Jan. 20, 9:00-17:00**

**Organizer and Speaker: H. Clark Bell**

This course will present design basics for passive RF and microwave filters. Included will be discussions of performance parameters, types of filter responses, estimating filter performance, characteristics of various filter technologies, specifying filters realistically to avoid surprises, and use of filter design software. Specific topics will include two-port parameters; lowpass and highpass ladders; Chebyshev filter; immittance inverters and narrow-band design; resonator Q, delay and loss, and lossy coupling; TEM bandpass filters and bandstop filters; waveguide bandpass filters; general coupled-resonator prototype; loss approximation, the elliptic function filter; realization polynomials and immittances; bandpass filters with cross couplings; dual mode filters; environmental effects on filter performance.

Registration for the Filter Tutorial Workshop

<http://rww2014filter.eventbrite.com>

Contact [c.jackson@ieee.org](mailto:c.jackson@ieee.org) for more information

The Industrial Forum includes an exhibit, Wireless Apps (similar to uApps) and special hardware demonstrations given by researchers

<http://www.radiowirelessweek.org/>



# IEEE Radio and Wireless Symposium



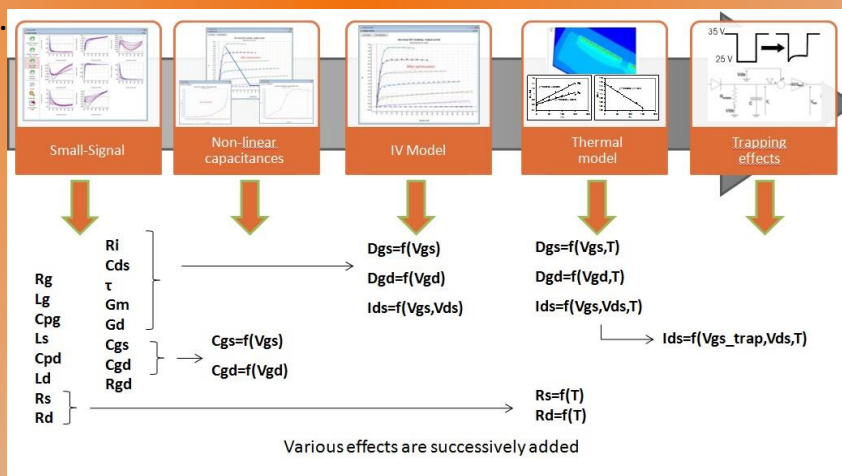
19 - 22 JANUARY 2014, NEWPORT BEACH, CA, USA

<http://www.radiowirelessweek.org/>

## Radio and Wireless Symposium Presents the 2014 Industrial Forum

### Characterization of High Power Devices Wednesday Jan. 22, 9:00-17:00

Device characterization is an essential process in many aspects of research, development and testing of RF and microwave devices. To the inexperienced, this might seem intimidating or even scary. In this course, we will explore various interconnected topics of device characterization that form the amplifier design flow. Topics include pulsed IV and S-parameters for compact model extraction, load pull for model validation and measurement, amplifier design and IC stability analysis, X-parameter modeling and system-level simulations.



Registration for the Device Characterization Workshop

<http://rww2014device.eventbrite.com>

Contact [c.jackson@ieee.org](mailto:c.jackson@ieee.org) for more information

The Industrial Forum will include an Exhibit, Wireless Apps (similar to uApps) and special hardware demonstrations given by researchers

<http://www.radiowirelessweek.org/>



### Buena Ventura Section and Chapter Info

<u>Section Office 2012</u>	<u>Name</u>	<u>E-Mail</u>
Chair	Bridgeman Carney	<a href="mailto:bcarney@ieee-bv.org">bcarney@ieee-bv.org</a>
Vice-Chair	Albert Wolfkiel	<a href="mailto:awolfkiel@ieee-bv.org">awolfkiel@ieee-bv.org</a>
Treasurer	Zak Cohen	<a href="mailto:zcohen@ieee.org">zcohen@ieee.org</a>
Secretary	Karl Geiger	<a href="mailto:karl@ieee-bv.org">karl@ieee-bv.org</a>
Programs and Events	Ross Kocen	<a href="mailto:events@ieee-bv.org">events@ieee-bv.org</a>
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Historian	Doug Askegard	<a href="mailto:dougaskegard@ieee.org">dougaskegard@ieee.org</a>
Past Chair	Karl Geiger	<a href="mailto:karl@ieee-bv.org">karl@ieee-bv.org</a>
Sr. Representative, LA Council	Bridgeman Carney	<a href="mailto:bcarney@ieee-bv.org">bcarney@ieee-bv.org</a>
Representative, LA Council	John Wright	<a href="mailto:j.wright@ieee.org">j.wright@ieee.org</a>
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<u>Chapter</u>	<u>2013 Chair</u>	<u>E-Mail</u>
Aerospace	Momin Quddus	<a href="mailto:mominq7@yahoo.com">mominq7@yahoo.com</a>
Communications	David Pehlke	<a href="mailto:chair@comsoc.ieee-bv.org">chair@comsoc.ieee-bv.org</a>
Computer	Craig Reinhart	<a href="mailto:reinhardt@callutheran.edu">reinhardt@callutheran.edu</a>
Electron Dev./Circuits and Systems	Sunil Pai	<a href="mailto:chair@edcas.ieee-bv.org">chair@edcas.ieee-bv.org</a>
Engineering in Medicine and Biology	Bob Rumer	<a href="mailto:chair@embs.ieee-bv.org">chair@embs.ieee-bv.org</a>
Life Members Affinity Group	Jerry Knotts	<a href="mailto:chair@lmag.ieee-bv.org">chair@lmag.ieee-bv.org</a>
Microwave Technology and Techniques	Tom Campbell	<a href="mailto:chair@mtts.ieee-bv.org">chair@mtts.ieee-bv.org</a>
Power and Energy	Bridge Carney	<a href="mailto:bcarney@ieee-bv.org">bcarney@ieee-bv.org</a>
Robotics	Bob Rumer	<a href="mailto:rrumer@callutheran.edu">rrumer@callutheran.edu</a>

### Also be sure to check the Section's websites for the latest updates:

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<a href="http://comsoc.ieee-bv.org/">http://comsoc.ieee-bv.org/</a>	Communications
<a href="http://www.ieee-bv-cs.org/">http://www.ieee-bv-cs.org/</a>	Computer