



# IEEE BUENAVENTURA SECTION

## January 2012 Newsletter

## SECTION SPONSORS

9 Jan	Section	<b>Section Operating Committee Meeting</b> Section and Chapter Officers 6:30pm TBD, Thousand Oaks
11 Jan	Computer	<b>2012 Calendar Planning Mtg</b> Computer Society Officers and Members Nygreen 106, California Lutheran University
17 Jan	ComSoc	<b>DISTINGUISHED LECTURE TALK</b> <b>Autonomous Aero-Visual and Sensor Based Inspection Network for Power Grid and Asset Monitoring</b> Dr. Arun K. Somani 6pm dinner, 7pm meeting and presentation \$15 (non-members), \$10 (members) Zen Buffet, 21610 Victory Blvd Woodland Hills, CA 91367 <b>Web:</b> <a href="http://comsoc.ieee-bv.org/">http://comsoc.ieee-bv.org/</a> <b>More info/RSVP:</b> <a href="https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843">https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843</a>
	JOINT MTG WITH	
	SFV SECTION CCC Chapter	
18 Jan	MTTS	<b>InP based Broadband Linear Amplifiers</b> Zach Griffith, RFIC/MW Design Engineer, Teledyne Scientific Company 6:30pm pizza, networking; 7pm presentation Ciao Wireless, 4000 Via Pescador, Camarillo, CA 93012 <b>Info:</b> Momin Quddus, mominq7@yahoo.com
25 Jan	EMBS	<b>How to land your first job...or your next job</b> Panel Discussion 6pm dinner (\$10 at door, no RSVP), 7pm discussion California Lutheran University Ahmanson Hall (ASC 100) <b>More info/RSVP:</b> Pat Jacobs <a href="mailto:pat.jacobs@advancedpersonnelprofiles.com">pat.jacobs@advancedpersonnelprofiles.com</a>
30 Jan	Section	<b>Section Awards Banquet</b> Section Officers and Volunteers 7pm Octavio's, Camarillo
Jan	AES LMAG PES RAS	<b>No events this month.</b>



Ciao Wireless, Inc.



The IEEE

## **Membership Development**

### **Please Welcome Our New Members**

Please join me in welcoming our newest Section members:

- Brian Platt

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**

Remember to renew for 2012!

**If you are an IEEE member and are currently between positions, select the “unemployed” option on the renewal to receive a 50% discount.**

To apply to join, see

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

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

### **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](mailto: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**

## **Job Opportunities**

**Advertise Your Open Positions**

**Reach Over 900 IEEE Members**

**And Over 1,600 Others**

**Contact**

**Zak Cohen [zcohen@ieee.org](mailto:zcohen@ieee.org)**



**FROM BV SECTION**

## **Section and Chapter News**

### **Power and Energy Society**

#### **Elections for 2012 Officers**

For PES members: We will not be having a meeting however we will have virtual balloting for election of PES 2012 Officers. This will be coming to you in December!

Interested in being a 2012 Officer with IEEE-BV PES? We will be electing:

- PES Chair
- PES Vice-Chair
- PES Treasurer
- PES Secretary

If you are interested please send a brief bio (that we can use for the ballot) and which position you are interested in and we'll put you on the ballot. Send them to [bcarney@ieee-bv.org](mailto:bcarney@ieee-bv.org) soon or lose your spot on the ballot!



### **Section Volunteer Positions**

**BV Section is seeking volunteers for the following Section Positions**

#### **Awards Chair**

The Awards Chair works to ensure deserving IEEE members receive recognition for their career and technical achievements. The Awards chair coordinates with other officers to nominate members for local, regional, global awards.

#### **PACE Chair**

The PACE (Professional Activities Committees for Engineers) Chair oversees and coordinates events that aid IEEE members to develop and further their careers. The PACE Chair works with local and regional resources

**These positions require approximately 4 to 8 hours per month plus attendance at a monthly 90 minute Operating Committee meeting (dinner included). The current officers and outgoing chairs will bring new volunteers up to speed.**

Interested members: please contact Karl Geiger ([karl@ieee-bv.org](mailto:karl@ieee-bv.org)).

## JOINT MEETING NOTICE

## BV-COMSOC & SFV-CCC Chapters

**Date and Time:** Tuesday, Jan 17th, 2012

**Location** : Zen Buffet, 21610 Victory Blvd Woodland Hills, CA 91367

<http://maps.yahoo.com/#t=&q=21610+Victory+Blvd%2C+Woodland+Hills%2C+CA++91367-2401&conf=1&start=1&lat=34.18763&lon=-118.601219&zoom=16&mvt=m&trf=0>

**Agenda:** 6:00 p.m. Reception, Dinner, & Networking

7:00 p.m. Meeting & Presentation

**Cost:** \$15 (non-members), \$10 (members) **[Pre-paid preferred. Also payable at the event]**

**RSVP Requested:** [https://meetings.vtools.ieee.org/meeting\\_view/list\\_meeting/9843](https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843)

## Distinguished Lecturer Tour Talk: Autonomous Aero-Visual and Sensor Based Inspection Network for Power Grid and Asset Monitoring

**Speaker: Prof. Arun K. Somani**

**Overview:** We describe a theoretical and experimental program to develop the inspection and monitoring functions using various sensors along with development and usage of needed visual sensor and MAV technology for persistent intelligence, reconnaissance, maintenance and surveillance for obscured or logistically challenging assets in non-urban environments such as US Power Grid. The system is self-monitoring. This sophisticated mechanism requires a real-time operation to sustain the quality-of-service. We discuss issues in design and information propagation in such sensor clustered topology, optimization for power-aware networking, and link and node capacity assignment to achieve the desired goals.



**Bio:** Arun K. Somani is currently Anson Marston Distinguished Professor of Electrical and Computer Engineering at Iowa State University, Ames, IA. He earned his MSEE and PhD degrees in electrical engineering from the McGill University, Montreal, Canada, in 1983 and 1985, respectively. He has worked as Scientific Officer for Govt. of India, New Delhi from 1974 to 1982 and as a faculty member at the University of Washington, Seattle, WA from 1985 to 1997. Professor Somani's research interests are in the area of computer system design and architecture, dependable computing and networking, WDM-based optical networking, and reconfigurable and parallel computer systems and use of information technology for infrastructure applications. He has ~300 technical papers, several book chapters, one book, and has supervised more than 60 MS and more than 25 PhD students. He has served on several program committees in various capacities, IEEE distinguished visitor and IEEE distinguished tutorial speaker. He has delivered several key note speeches, tutorials and distinguished and invited talks all over the world. In 1999, he was elected a Fellow of IEEE for his contributions to "theory and applications of computer networks." He has been awarded a Distinguished Scientist member grade of ACM in 2006.



# MICROWAVE THEORY AND TECHNIQUES SOCIETY BUENA VENTURA SECTION



**You are invited**

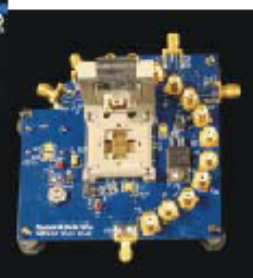
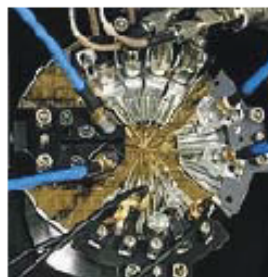


**TELEDYNE  
SCIENTIFIC & IMAGING, LLC**  
A Teledyne Technologies Company

**Date/ Time:** Wed January 18<sup>th</sup>, 2012  
6:30 PM Pizza &  
networking  
7:00 PM Presentation

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

**Speaker:** Zach Griffith  
RFIC/MW Design Engineer  
Teledyne Scientific Company



Highly linear InP amps with  
low power dissipation

**Title:** InP based Broadband Linear Amplifiers

## **Abstract:**

Next generation radar receivers and multi-carrier communication systems require further reductions to intermodulation distortion. In simple reactively tuned amplifiers, this is often accomplished by increasing the operating current, and in-turn the power dissipation  $P_{DC}$ . As an alternative, strong global negative feedback (using circuit techniques similar to classic operational amplifiers) may be used to suppress the amplifier non-linearities.

Zach will review the feedback design challenges and recent advances with InP based broadband linear amplifiers. Using InP IC technologies having cut-off frequencies of ~350GHz, mm-wave op-amps can have very high loop transmission at low-GHz operation. This results in proportionally strong distortion suppression, where highly linear (>55dBm OIP3), low-GHz amplifiers have been demonstrated with low 1.0-1.5W power dissipation. Obtaining high OIP3 at low GHz operation requires novel designs and detailed attention to residual sources of distortion.

Zach Griffith is an RFIC/Microwave Design Engineer with the Teledyne Scientific Company, Thousand Oaks, CA. He received the Ph.D. in electrical engineering from UC Santa Barbara in 2005. Since joining Teledyne in 2008, his efforts are focused on designing mm-wave op-amps for highly linear (>55dBm OIP3), low-GHz amplification with low power consumption, as well as high mm-, sub-mm wave amplifier and digital circuit design. He has authored and co-authors over 70 publications in these fields.

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.





# 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:

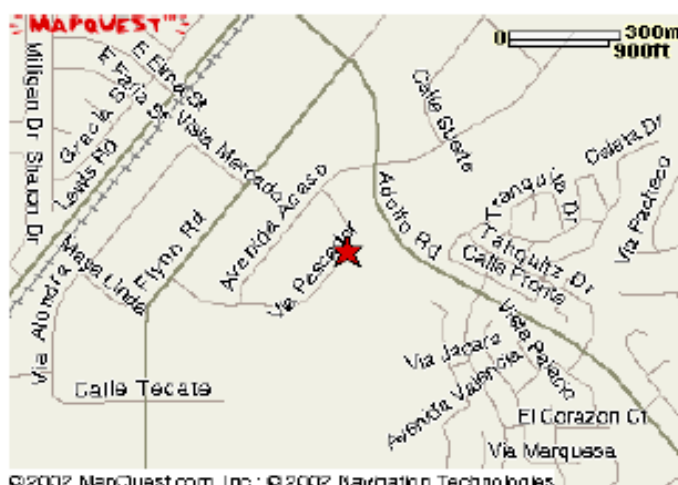
Take the US-101S/VENTURA FWY  
towards LOS ANGELES.

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)



## **Neighboring Section News and Special Announcements**

### **IEEE Foothill Section**

*Serving to Enhance the Community*

#### **ENTREPRENEUR FORUM II FOR Foothill IEEE ENGINEERS**

##### **A SPECIAL PACE MEETING OF THE FOOTHILL SECTION OF THE IEEE**

**Saturday, January 28, 2012, 9:00 AM to 1:00 PM,  
California Polytechnic State University, Pomona; Bronco Student Center  
Second Floor, Room - Orion AB**

The Foothill IEEE Section and the IEEE Student Branch at Cal Poly Pomona are hosting this special meeting in order to provide additional principles of Entrepreneurship to our Foothill IEEE members, our student IEEE branch members, and fellow resident engineers in the Foothill / Inland Empire area. Many of our engineers are aware that we need to grow and develop our own NEW jobs if we are to sustain and grow our Foothill communities. This is the second in a planned IEEE series of seminars on Entrepreneurship that will focus on the Foothill Engineers' perspective.

We have arranged for four distinguished speakers to come and share their extensive experience with many critical components of entrepreneurship, including start-up companies, governmental contracting, and legal formation and intellectual property issues. In addition, we would welcome IEEE engineers from throughout Southern California to join us for this event. Ample time for attending group Q&A with our featured speakers will be allotted.

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#### **TOPIC 1: SUMMARY OF SBIR PROGRAM WITH RECENT CHANGES**

This presentation will give an overview of the current Small Business Innovation Research (SBIR) program; how proposed US Congress changes would affect your planning efforts; and describe why concept / product commercialization end use of your SBIR funding is the key to your success.

##### **OUR SPEAKER ---DENNIS WONICA**



Dennis Wonica is a physicist by education, a systems engineer and program manager by experience, and an entrepreneur by choice. He has four degrees in physics, including a Ph. D. from the City University of New York. His experience includes 30 years in advanced technology development working for large prime aerospace contractors as technologist and program manager, as a SETA to DOD agencies, as independent consultant, for an FFRDC, but mostly as an entrepreneur, who started four technology companies. Currently he provides consulting services to high technology small firms and start-ups in strategy, marketing, new product development, and in Federal Government contracting, including the SBIR Program. He practices in the greater Los Angeles region.



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## **TOPIC 2: OVERVIEW OF REQUIREMENTS FOR ESTABLISHING A TECHNICAL BUSINESS: SBIR AND OTHER TECHNICAL STARTUPS**

This presentation will consider the issues of corporate law, negotiating for investor financing, license agreements, and some of the other nuts-and-bolts issues that are part of every startup company.



### **OUR SPEAKER --- BRIAN FRASER**

Brian Fraser has an M.B.A. from California State University at Long Beach, and a J.D. degree from University of California, Davis School of Law. He is also a Certified Public Accountant. Brian is an experienced corporate attorney offering a wide range of cost-effective legal services to both start-up and established companies. Brian has spent over twenty years working as outside counsel to various companies in and around Silicon Valley. On the start-up side, Brian typically will form the business entity, prepare all formation documents, and to the extent the start-up is funded by outside angels or VC's, Brian will assist in the negotiation and preparation of all investor financing documents. Brian also has considerable experience in negotiating patent and software license agreements, development agreements, reseller and OEM agreements, and strategic partnering arrangements. More often than not,

Brian's clients are acquired which has provided Brian with extensive experience in the area of mergers and acquisitions.

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## **TOPIC 3: OVERVIEW OF INTELLECTUAL PROPERTY ISSUES, AS APPLICABLE TO SBIR EFFORTS AND STARTUPS, INCLUDING THE RECENT US PATENT LAW CHANGES**

This presentation will explore Intellectual Property (IP) law considerations specific to SBIR and STTR, with emphasis on the major changes in U.S. patent law under the recently enacted Leahy-Smith America Invents Act.



### **OUR SPEAKER --- RAYMOND ROBERTS**

Raymond Roberts has a B.A. in Mathematics and Computer Science from California State University at Fresno, and a J.D. degree from Santa Clara University, School of Law in California. As an industrial engineer he worked in electronic control and robotics systems for heavy industry. In 1989 he changed careers to become a specialist in intellectual property law. As a member of the California Bar who is registered to practice before the U.S. Patent and Trademark Office, he has helped Fortune-500 companies build substantial patent and trademark portfolios, and has helped individuals sell rights in their own inventions for five-figure sums. He has been a member of IEEE for 23 years and currently practices in the greater Los Angeles region, as well as maintaining a substantial commuter practice in Silicon Valley and the greater San Francisco bay area.



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## TOPIC 4: HANDS ON WITH SBIR AND POTENTIAL PROGRAMMATIC LANDMINES

This presentation will share our speaker's active experiences with the US Government SBIR process. He will explain why he compactly summarizes these as "The SBIR -- the Good, the Bad, and the Ugly."



### OUR SPEAKER --- NAHUM GAT

Education: MS, and PhD in aerospace engineering, U. of Cincinnati 1975, 1978 respectively; and BSc, in aeronautical engineering, Technion, Israel Institute of Technology 1969. Prior to graduate school, Nahum served as an active duty officer in the Armored Corp of the Israeli Army.

Founded Opto-Knowledge Systems, Inc. (OKSI) January 1991. Over these 21 years OKSI received over 60 Phase-I awards, and over 30 Phase-II awards. A number of the SBIRs transitioned into operational systems that are in use (e.g., by the Missile Defense Agency, MDA), and into various commercial products. For the work OKSI was awarded the 2011 Tibbetts Award for success in SBIR commercialization; this award included a White House reception for these elite Science & Technology leaders. We also received the Army SBIR Quality Award at the Pentagon in 2006.

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For additional information, and if you and your fellow engineer Guests wish to attend, please RSVP to either our Foothill IEEE Section PACE Chair, Cash Sutton III at [csutton@teamglobalnet.com](mailto:csutton@teamglobalnet.com) ; or our Foothill IEEE Section Chair, Frank G Freyne at [fgfreyne@ieee.org](mailto:fgfreyne@ieee.org) . We need to plan for both the necessary amount of refreshments and the room setup size. Please park in the main visitor lot at Cal Poly Pomona (\$3.00) charge; the meeting building is a short walk away from this parking lot.

See more IEEE Foothill Section announcements at <http://ieee-foothill.org/>

## Buenaventura Section and Chapter Info

Section Office 2012	Name	E-Mail
Chair	Karl Geiger	<a href="mailto:karl@ieee-bv-cs.org">karl@ieee-bv-cs.org</a>
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Treasurer	Albert Wolfkiel	<a href="mailto:awolfkiel@ieee-bv.org">awolfkiel@ieee-bv.org</a>
Secretary	Zak Cohen	<a href="mailto:zcohen@ieee.org">zcohen@ieee.org</a>
Programs and Events	Ross Kocen	<a href="mailto:ross@first-on-scene.com">ross@first-on-scene.com</a>
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PACE Events Chair		
Historian	Doug Askegard	<a href="mailto:dougaskegard@ieee.org">dougaskegard@ieee.org</a>
Past Chair	Steve Johnson	<a href="mailto:sfjohnso@ieee.org">sfjohnso@ieee.org</a>
Sr. Representative, LA Council	Bridgeman Carney	<a href="mailto:bcarney@ieee-bv.org">bcarney@ieee-bv.org</a>
Jr. Representative, LA Council	Karl Geiger Momin Quddus	<a href="mailto:karl@ieee-bv-cs.org">karl@ieee-bv-cs.org</a> <a href="mailto:moming7@yahoo.com">moming7@yahoo.com</a>
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Newsletter	Karl Geiger Zak Cohen	<a href="mailto:karl@ieee-bv-cs.org">karl@ieee-bv-cs.org</a> <a href="mailto:zcohen@ieee.org">zcohen@ieee.org</a>

Chapter	2012 Chair	E-Mail
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Life Members Affinity Group	Jerry Knotts	<a href="mailto:jeknotts@ccvf.org">jeknotts@ccvf.org</a>
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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>

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

<a href="http://www.ieee-bv.org/">http://www.ieee-bv.org/</a>	Aerospace, Life Members, Microwave, Power and Energy, Robotics, Section
<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
<a href="http://www.ieee-bv-embs.org/">http://www.ieee-bv-embs.org/</a>	Engineering in Medicine and Biology



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