

IEEE BUENAVENTURA SECTION

Welcome to the Buenaventura IEEE Section for January, 2010

Jan 20 *MTTS* **Relativity – The First Hundred Years**

Adrien Popa
6:30 reception and networking,
presentation at 7 p.m.
At Ciao Wireless, Camarillo

Jan 27 *EMBS* **Can the Flu Become a Pandemic**

Barbara Spraktes-Wilkins,
Ventura County Public Health
6:00 dinner and networking,
presentation at 7 p.m.
At CLU Ahmanson Science Center



Welcome to the new year! The officers and volunteers of the Buenaventura Section and our Chapters have already begun planning speaker events and activities for 2010, which promises to be another challenging and fulfilling year.

In addition to this month's speaker events, we're also hard at work on our participation in National Engineering Week events in February. If you have suggestions for IEEE Project of the Year or Engineer of the Year from Ventura or Santa Barbara counties, please let me know. Scholarships will again be awarded to students in engineering-related fields, and we'll notify area schools of the application process. Please alert your students to watch for these announcements at their schools. Also, if you'd like information about joining your electrical engineering colleagues at the National Engineering Week Celebration awards banquet at the Reagan Library, please see the flyer here or drop Doug Askegard a line.

Most of our events are free and open to the public, and often have dinner available. All of our events are posted on the Section calendar, available here on our site.

Our neighbor sections also have events this month, including a talk on Reflectarray Antennas by Dr John Huang, formerly of JPL in Pasadena, on Saturday January 9, 2010, at Cal Poly Pomona. IEEE-USA is focusing on legislation to improve STEM ("Science, Technology, Engineering, Mathematics") education in another event, the 2010 Career Fly-In, on February 8th and 9th.

We look forward to seeing you at our events this year!

Steve Johnson, 2010 Section Chair



MEETING NOTICE

IEEE Buenaventura MTT-S Chapter

Date: Wednesday, January 20th, 2010

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

Agenda: 6:30PM Reception & Networking;
7:00PM Presentation

RELATIVITY - THE FIRST 100 YEARS

Mr. Adrien Popa

Many of the esoteric concepts originally proposed by Albert Einstein in his Special and General Theories on Relativity and several other papers published during the first two decades of the 20th Century are of growing importance in the development of 21st Century technology. In this talk he will review the developments in quantum electrodynamics (QED) that have led to the MASER and the LASER, and countless other technologies that impact our daily lives.

Mr. Popa is currently a consulting engineer on radio frequency, microwave, maser, laser and photonics technology for automotive, airborne, space and terrestrial applications. In August 2000 he retired from the position as Director, Corporate Technology at HRL Laboratories LLC, formerly the Hughes Research Laboratories, in Malibu, CA. He has a total of 55 years experience in the aerospace and automotive industries including his 39 years at HRL. Prior to joining Hughes in 1961, for 7 years Mr. Popa was with the Electromagnetics Testing Division of the Douglas Aircraft Company. During the Korean conflict he served 2 years as an aviator in the U.S. Army and also operated NIKE anti-aircraft missile fire control radar systems.

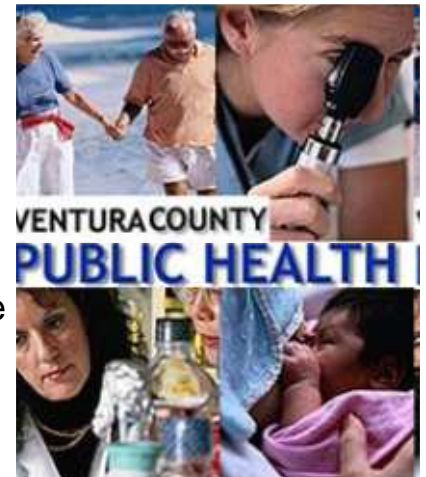
Mr. Popa received his BSEE with honors from UCLA and graduated from the USC Executive Management Institute. He is a Life Member of the Institute of Electrical & Electronic Engineers and Tau Beta Pi. He has 9 issued patents and more than 20 publications and is a co-author of the 1980 and 1991 editions of the CRC/McGraw-Hill Handbook of Laser Science and Technology. Mr. Popa has published his work in leading journals and periodicals including the Scientific American Magazine. He currently answers Physics and Engineering related questions on the Washington University award-winning Mad Science Web site www.madsci.org.

Can the Flu Become a Pandemic?

Wednesday, January 27 2010 - 7 PM

CLU - Richter Hall Ahmanson Science Building

Barbara Spraktes-Wilkins, MPH, DrPHc
Chief Epidemiologist, Ventura County
Department of Health
Pandemic Influenza Preparedness Coordinator



The Ventura County Public Health Department tracks a wide variety of health indicators for Ventura County including communicable/infectious diseases, injuries, and chronic diseases.

Dr. Spraktes-Wilkins is involved in extensive planning for the emergence of public health crises. These include public outreach efforts on behalf of the County. She will share her insights and concerns with us.

Meeting Site: California Lutheran University
100 Ahmanson Science Building,
60 West Olson Road,
Thousand Oaks
Meetings are free, open to the public

Dinner: Available at 6 p.m. for \$10 payable at the door, no RSVP needed. Visitor Parking is no longer permitted before 7 p.m. on Memorial Pkwy and adjacent street without a pass. Download a Parking Pass from the EMBS web site.



Contact: Harry Croner, croner@earthlink.net

Our Sponsors: California Lutheran University, IEEE EMB Society, Alfred Mann Institute, MicroJoining Solutions, IEEE Buenaventura Section, Amgen Foundation



Celebrating 125 Years
of Engineering the Future

Buenaventura Section Profile

The Buenaventura Section is one of the most active in the western United States, with over 100 speaker events in the last two years, and global recognition for our Chapters and Affinity Groups. We welcome your attendance and participation in Section events!

EMBS: Chapter of the Year 2006 and 2008

LMAG: Life Member Affinity Group of the Year 2009

Buenaventura Section Chapters

Aerospace Chapter provides speaker events to members interested in the design, integration, test, and analysis of large, complex systems consisting of major subsystems that contain dissimilar electronic devices. Most of our members work on sensor systems (radar, Sonar, optics, and navigation), communications systems, command and control centers, avionics, space systems, military systems, digital signal processing simulators, and software development. Some members work on robotics, energy, and transportation systems

Communication Society Chapter a community comprised of a diverse group of industry professionals with a common interest in advancing all communications technologies.

Computer Society Chapter chapter's vision is to be the leading provider of technical information, community services, and personalized services to the ventura county's computing professionals.

Electronic Devices Circuits and Systems chapter places its interest in all aspects of the physics, engineering, theory and phenomena of electron and ion devices as well as looks at the theory, the analysis, the design (computer aided design), the practical implementation of circuits, and the application of circuit theoretic techniques to systems and to signal processing.

Engineering in Medicine and Biology Society chapter serving the needs of biomedical engineers in ventura county. Its leadership is striving to develop new ways to serve its members with modern information from remarkable speakers.

Life Member Affinity Group IEEE "Life" status is an automatic process which is based on an individual's membership record and age. The member must be at least 65 years of age and has been a member of IEEE or one of its predecessor societies such that the sum of age and years of membership equals or exceeds 100. The Buenaventura Section has the only Life Member Affinity Group in Southern California.

Microwave Theory and Techniques Society chapter promotes the theory and applications of RF, Microwave, Millimeter-wave, and Terahertz technologies.

Robotics chapter interested in both applied and theoretical issues in robotics and automation, including intelligent machines and systems used, for example, in space exploration, human services, or manufacturing, and the use of automated methods in factory, office, home, laboratory automation, transportation, and other systems to improve performance and productivity.



Engineers Week / February 14-20, 2010

2010 Engineers Week Committee

APWA

Lori Prentice
(805) 650-7000
EoY/PoY Chair

ASNE

Al Joseph
(805) 488-1919 x11 ; (805) 469-5361
Documentation - Webmaster

Treasurer

Bette Joseph
(805) 444-8560

Facilities

Doug McAvoy
(805) 644-4805

IEEE - Ventura

Doug Askegard
(408) 425-3060

NEWC Chair

Albert Wolfkiel
(805) 228-7378

Scholarship Chair

Sunil Pai
Speaker

IEEE - Santa Barbara

George Konstantinow
NEWC Vice-Chair

ASCE

Paul Callaway
Speaker

APICS

Jean Peters
(805) 402-3166
Scholarship Committee

ACEC California

Pat Reeves
(805) 981-0706 x104
Door Prizes

CACI

Lawana Godwin
(805) 278-6644 x 147
Publicity Chair

CSPE

Craig Hodson
(805) 642-2394

ITEA

Marilyn Newstrom
(703) 601-0567
Member-at-Large

SWE

Janet Holt
(805) 982-4396
Scholarship Committee

ASQ

Allen Grizzard-Paul
(805) 482-6279
Secretary

Other Participating Societies

AFE, AIAA, AIP, AIPE
ASHRAE, ASME, ASPE, ASQ,
ITEA, NACE SEC, SAME, SHPE,
SME, SOLE, SPE

**National Engineers Week Dinner
Ventura and Santa Barbara Counties**

Thursday, February 18, 2010

5:30 -9:00 PM

The Ronald Reagan Presidential Library

Alan C. Cummings

Caltech, Senior Scientist

Member of the Professional Staff

*“The Voyager Mission to the Outer
Planets and Interstellar Space”*



Evening Program Also Includes:

**The Ronald Reagan Presidential Library Tour
Dinner**

**Employee and Project of the Year Awards
Scholarship Awards to Local Engineering Students
Teacher Recognition Award**

How to contribute and show your support:

Reserve a Table Now for \$650 (seats 10)

Contribute to the Scholarship Fund

Place an Advertisement in the Banquet Program

Look for More Details on our Website:

<http://www.newc-vsrb.org>



MEETING NOTICE: FOOTHILL IEEE SECTION

Saturday January 9, 2010 at 9:30AM

Reflectarray Antennas

Presented by Dr John Huang

The concept of reflectarray antennas has been investigated in the IEEE antenna and electromagnetic propagation technical community for several decades. However, the introduction of the low profile printed microstrip as a key reflectarray component is a new concept. This combines some of the best features of microstrip array technology with the traditional high directivity parabolic reflector antenna. The resulting reflectarray antenna can be designed to have very high gain with relatively good efficiency, as well as to incorporate electronic beam scanning to large offset angles. In addition, the printed reflectarray surface can be manufactured using simple and low-cost etching processes, especially when produced in large quantities. These developments have spurred the use of reflectarray antennas for many potential commercial, including automotive radar collision avoidance radars, and well as critical spaceborne applications.

Dr John Huang has achieved many career milestones in the development of multiple spacecraft antennas at the Jet Propulsion Laboratory, Pasadena. He is the co-author of the book, "Reflectarray Antennas", published in 2008 by John Wiley. This volume is an acknowledged in-depth treatment of the multitude of design and development issues associated with these antennas. Prior to this, John supported the development of electromagnetic techniques for short range fusing radars at China Lake Naval Weapons Center. John received his PhD from The Ohio State University.

Meeting Site: Bronco Student Center, Building 35, Ursa Major Room, campus of Cal Poly Pomona (California State Polytechnic University, Pomona)

Meeting Date and Time: Saturday, January 9, 2010

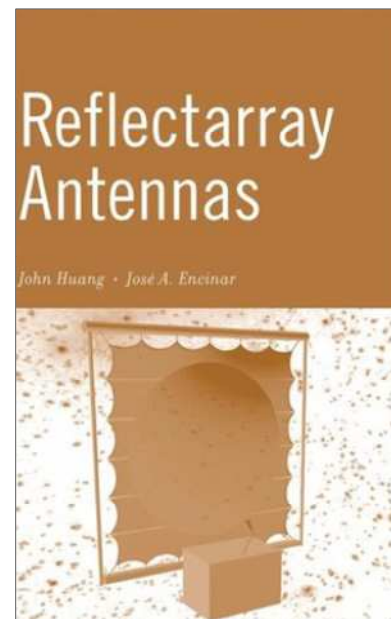
Breakfast Buffet beginning at 9:30 AM

Talk to begin at 10:15 AM, Question Period to Follow

Please park in main lot on campus

Sponsored by the Foothill IEEE Section and the IEEE Student Section of California State Polytechnic University. Open to all IEEE members, all professionals working in EE and related engineering areas, and all EE students.

For further information, and directions if needed, please contact Frank G Freyne, Chair Foothill IEEE Section at fgfreyne@ieee.org or at 951-781-6798





January 5, 2010

IEEE Members:

IEEE has an unique opportunity to change the way science, engineering and technology are taught in the United States - if we act quickly.

A bill will soon be introduced into Congress that would help states add engineering to their basic science curriculums at the K-12 level. If passed, the bill would be a significant reform to our STEM education system. The bill will introduce all students to engineering and technology much earlier in their academic careers than we do currently. It will also encourage students to continue their science educations through high-school, a time when many American students abandon the hard sciences.

While the bill has support in Congress, it needs more. We need to explain to our elected officials exactly what the bill is and what it does. Most importantly, we need to convince Congress that this issue is important enough for them to focus on it.

To do this, IEEE-USA is inviting all IEEE members to come to Washington on February 8 and 9 to discuss the bill with your elected leaders.

Full details are here: <http://www.ieeeusa.org/policy/careerflyin/default.asp>

If you are interested in education reform, concerned about how America is educating our future engineers and technologists, or worried about the declining number of American students who are majoring in STEM fields, this is your opportunity to make a difference. Please join IEEE-USA on February 8 and 9 to explain this problem, and this solution, with Congress.

Register today!

Russell T. Harrison
Senior Legislative Representative - Grassroots Affairs
IEEE-USA
(202) 530-8326

++++
IEEE-USA
2001 L Street, NW
Washington, DC 20036

++++
IEEE - Fostering technological Innovation and Excellence for the Benefit of Humanity.



IEEE

San Fernando Valley Section



**Computer &
Communications
Chapter**

SFV-CCC Software Seminar

Announcing Request for Information & Participation

IEEE-XXX Software Seminar Event Chairs: Leonard J. Reder & Dr. Narisa Chu

Submission Deadline: March 15, 2010

IEEE-SFV CCC Software Seminar Event: September 18, 2010 or TBD

(Note: this date is subject to change depending on results of this solicitation)

The IEEE San Fernando Valley Section Computer and Communications Chapter (IEEECCC) in conjunction with many local IEEE Sections in Southern California and the IEEE SFV Professional Activities Committees for Engineers (PACE) are planning one-day software seminar events to be held once a year in September. The first such event was held at the Jet Propulsion Laboratory on June 13, 2009 and show-cased JPL's flight/instrument software research work and the facility. The IEEE-CCC is spear-heading similar events for 2010, 2011 and 2012, and is seeking input and ideas for contributions from interested parties.

The motivation for these seminars is envisioned as follows:

1. To present and explore new and exciting software practices and technologies
2. To bridge the gap between commercial, government, aerospace and academia use of software techniques and tools to gain productivity, lower development costs and enhance capability.

Common software challenges exist in the commercial and aerospace/military software engineering domains. The IEEE-CCC is interested in organizations willing to share knowledge of state-of-the-art software engineering topics as a means to infuse new software practices into local industries. We are seeking, with our software seminar event, to present innovative ideas that, via repurposing of processes, techniques, and implementations from one industry area to another can make software development more productive, cost effective and efficient for a wide variety of industries. The intent of the event is to present both tutorial and implementation talks that will have a broad appeal to most of the Southern California IEEE membership. Demonstrations to support the program talks are encouraged. The most important goal for these events is to share software techniques and technology information in a technically correct and responsible way that will benefit the local IEEE membership and their employers.

Our focus is local, however, the software subject matter we will endorse will be topnotch practice and technology delivered from industry, academia and research organizations. We are interested in hearing from a wide variety of organizations located at various Southern California venues. These events will carry the name "IEEE-XXX Software Seminar" where the XXX will be replaced by the organization name (or names) as appropriate. For example, the first Seminar is named IEEE-JPL Software Seminar.

SFV-CCC Software Seminar RFI (Continued)

We are seeking information from companies or organizations interested in presenting a program and possibly hosting the event at their facility. We would like to hear from small, medium or large technology companies or research organizations about ideas for presenting your work at these events. This event is a great way to gain visibility with tens of thousands of IEEE professional members in Southern California and it can attract potential clients or new employees to your operation. The academic research community will find this to be an opportunity to share your results and achievements with local IEEE membership from industry and academia. Local university research groups interested in presenting informative technology briefings are encouraged to submit and perhaps collaborate with private industry.

Areas of Interest

The seminar topics of interest are diverse and intended to attract academic and industry practitioners as well as government experts. Half day and whole day session tracts are solicited in the following topic areas, but are not limited to those listed below:

1. Open source software projects (share your applications or usage)
2. Data management and workflow practices and technologies
3. Science software applications and analysis technologies
4. Software modeling and abstraction
5. Parallel Distributed Programming
6. State of the Art Digital Signal Processing and Software Defined Radio
7. State of the Art Digital Signal Processing applied to Image Analysis (Military, Biomedical and Commercial Applications)
8. Simulation and Virtual Worlds
9. The Semantic Web and Web 2.0 Technologies
10. Cloud Computing
11. Virtualization
12. Embedded software issues, solutions and techniques
13. Reliable software formal methods (verification and testing)
14. Computer Graphics Software for Animation, Games, Special Effects and Military Scientific Simulation
15. Security, Privacy and Digital Rights Management
16. Digital Forensics and Cybercrime
17. Media compression and workflow solutions
18. Internet wired and wireless protocols
19. Software architectures and frameworks
20. Formal methods applied to test generation and improved software reliability
21. Software modeling and analysis utilizing UML
22. Technological innovations



SFV-CCC Software Seminar RFI (Continued)

Interested parties are asked to submit a short abstract describing their topic area and a description of the organization. Please indicate if your organization is interested in presenting a whole day or half day event. Are you willing to present with other similar organizations? Do you have a facility where this event can be held? Will there be any kind of tour of the facility or demonstration you are interested to conduct?

Please email submission as plain text, Microsoft Word or PDF document file to Leonard J. Reder ([reder@ieee.org](mailto:red@ieee.org)) by 15 March 2010. Please provide name of organization, a contact to represent the organization with their email and phone number. If you are offering a facility, please provide the full address. The subject line of your message should read "IEEE-SW-Seminar-Submit". Expect a confirmation reply within 7 business days. The form on page 4 of this solicitation is provided for ease of submission.

You are all welcome to work with our Program Review Committee that is in place to facilitate technical selection and prioritization of submitted materials. Our local sections will provide logistical support for this event. The event will be advertised a few months in advance via IEEE local email lists, the SFV IEEE local events web page, and posters. The SFV Section will help with developing a printed program, making a DVD of event materials, arranging and providing catering; and if as needed, it can also provide some venues to use for the event. Interested organizations that submit will be advised of our plans no later than May 1, 2010 for the 2010 IEEE-XXX Software Seminar scheduled for September 2010. We treasure the potential opportunity to work together and welcome your responses.

Questions concerning this request or participation on our Program Review Committee, should be sent to Leonard J. Reder ([reder@ieee.org](mailto:red@ieee.org)), Narisa Chu (narisa.chu@ieee.org), and Irena Kageorgis (irenakageorgis@ieee.org).



IEEE-CCC Software Symposium

Call for Sponsorship for the Seminar Event

IEEE-XXX Software Seminar Event Chairs: Leonard J. Reder & Dr. Narisa Chu

Submission Deadline: March 15, 2010 Event Date (tentative): Sept 18, 2010

(Note: this date is subject to change depending on results of this solicitation)

Please use the submission form below to sponsor IEEE-XXX 2010 Software Seminar. Deadline: March 15, 2010.

E-mail the submission form to Leonard J. Reder (reder@ieee.org) with subject line: "IEEE-SW-Seminar-Submit". Cut and paste into a blank document and complete.

Please make sure to include the following information at a minimum as outlined in the attachment form:

1. Company information
 - a. Company or Organization Name: _____
 - b. Contact Name: _____
 - c. Contact Telephone: _____
 - d. Contact Email: _____
 - e. Brief Description of Company or Organization: _____
2. Presentation information
 - a. Topic(s) for Presentation: _____
 - b. Abstract (please attach ½ to 1 full page)
3. Venue
 - a. Can your location be used to host an event (yes, no, maybe): _____
 - b. Location Street, City and Zip Code Address: _____
 - c. Will there be a facility tour given, simple description: _____
 - d. Any Joint Sponsorship – other Company Name(s): _____
4. Any security requirements (e.g. U.S. Citizenship, etc., list them): _____
5. Sponsorship Status Tracking (Program Review Committee Use Only)

Sponsor's Signature: _____ Date: _____

CCC Chair Concurrence: _____ Date: _____

Review Committee Approval: _____ Date: _____

Notification to Selected Sponsor: _____ Date: _____

Buenaventura Section IEEE Officers

We welcome your involvement –We have several positions open!

Section Office –2010

	Name	E-Mail
Chair	Steve Johnson	sfjohnso@ieee.org
Vice-Chair	Momin Quddus	mominq7@yahoo.com
Treasurer	Zak Cohen	zack99@aol.com
Secretary	Jerry Knotts	jeknotts@roadrunner.com
Award Officer	Doug Askegard	dougaskegard@ieee.org
Past Chair	Nathalie Gosset	gosset@usc.edu
Sr. Representative, LA Council	Steve Johnson*	glengator2004@yahoo.com
Jr. Representative, LA Council	Albert Wolfkiel	awolfkiel@ieee.org
Section Webmasters	Alex Lancaster Steve Johnson	alexlancaster@ieee.org sfjohnso@ieee.org

Chapter Office - 2010

	Chair	E-Mail
Aerospace	Sunil Pai	paisunils@ieee.org
ComSoc	Mihai Pucchiu	MPucchiu@ixiacom.com
Computer	Craig Reinhart	reinhart@callutheran.edu
EDCAS	David Viveiros	david.viveiros@ieee.org
EMBS	Harry Croner Pat Jacobs	croner@earthlink.net pat.jacobs.advancedpersonnelprofiles.com
LMAG	Jerry Knotts	jeknotts@roadrunner.com
MTTS	Chuck Seabury	cseabury@pacbell.net
Robotics	Karl Meier	karlmeier@ieee.org

* acting



ADVERTISE IN OUR NEWSLETTER

This Monthly Newsletter is distributed electronically to 2200+ IEEE members and friends of IEEE and then posted on our website:

WWW.IEEE-BUENAVENTURA.ORG

If you need to reach individuals or companies with a technical background in Ventura County and beyond, this newsletter is an ideal vehicle. We can advertise your job openings, consulting services, or conferences and events.

Please contact Steve Johnson, sfjohnso@ieee.org

OUR MONTHLY RATES

\$250 for a full page

\$125 for ½ page

\$62.50 for ¼ page

\$20 for business card

Our Sponsors



Advanced Personal Profiles,
Inc.



Alfred Mann Institute at
University of Southern
California



Amgen – Pioneering Science
Delivers Vital Medicines



California Lutheran
University



California State University
Channel Islands



Ciao Wireless, Inc.



Institute for Electrical and
Electronics Engineers



IEEE Communications
Society



IEEE Engineering in Medicine
and Biology Society



ITT – Engineered for Life



MicroJoining Solutions



IEEE Microwave Theory and
Techniques Society



Skyworks – high performance
analog and mixed signal
semiconductors enabling
mobile connectivity



Vitesse - Making Next-
Generation Networks a
Reality



Sheldon Mak Rose &
Anderson Intellectual Property
Attorneys