

ORANGE COUNTY SECTION

THE UNIX

January 2013

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IEEE/Orange County Website: www.ieee.org/ocs

The Chair's Corner:

Think globally, act locally. VOLUNTEER.

Fellow Engineers and Engineers-To-Be -

We have big challenges facing us in 2013. But we can and will overcome them. Among these are 1) a yet-to-be-balanced budget, 2) helping our children get ready for college, 3) The Economy, and 4) under-employment. These national issues are reflected here in Orange County and in its IEEE. The IEEE-OC is well positioned to address these issues, and with your help, this year's IEEE-OC can do so.

Firstly, we shall balance the Orange County Section budget by cutting superfluous expense, and encouraging our generous local industry to contribute back to the Engineering Community. Our exceptional IEEE Volunteers and Friends can make this happen by engaging their fellow engineers and corporate leadership.

Secondly, we shall extend our STEM out-reach to promote college preparation at the Elementary School through Middle School levels as well as High School. The college preparation skills that we envision shall also be the very same skills that will be required by the 21st Century workforce, hence these skills will enhance the students success whether or not they elect the college experience. We shall also restore America's traditional appreciation for STEM in our children.

Thirdly, we intend to address Economic Issues via the promotion of technological innovation with symposia and colloquia, networking, and support for high tech incubators. We will help to create an environment in the High Tech Coast conducive to building new businesses and new industries.

Finally, we shall aggressively help our unemployed members with their job searches via multi-disciplinary networking across professional societies, and training for the skill sets required in the 21st Century workplace, and a local jobs database.

But we can do nothing without your help. We are all volunteers. You must volunteer to do your part to:

1) Balance the budget by finding grants, e.g. via your employer's foundation;

2) Share your STEM expertise with teachers and students in and out of the classroom, or take a class to work with you;

3) Support innovation in your workplace, be novel, open new markets, or start a new company or a new industry;

4) Let the IEEE know of openings in your company, what skill sets are and will be required, on what training should we focus, provide us with speakers & trainers, manage a Jobs mail list and web site.

Its all available to you when we help each other. Volunteer. We can do great things together. We do really need you. Let us continue this dialog, and reflect it in action, with your help.

Read the following Forbes article entitled

"Volunteering - A Great Way To Learn Real Executive Leadership".

http://www.forbes.com/sites/karlmoore/2011/12/21/volunteering-a-great-way-to-learn-real-executive-leadership/

All My Best,

Dr. Don V Black, Chairman IEEE Orange County Section, CA



OCS History Committee Report:

I am seeking any history source of information regarding the early OC IEEE. I had lived and worked in LA County and was active in the LA Section in the IRE Professional Group on Automatic Control, didn't move to OC 'till '65 and wasn't really active in the OC section 'till the early 70's ... so my ignorance runs deep. I really need your help in reconstructing the "early days" of our OC Section.

If I've already impulse you, please respond. If I haven't please take the initiative and shout, "Yes, I remember something ...!" I'll bet you do.

Thanks. Stan.White@ieee.org

IEEE OCS Volunteers in the last 50 years

As we celebrate the 50th anniversary of IEEE/OCS this year, we would like to post biographies of all of our volunteers (section level and chapters level) on our website – both to give visibility and kudos to the volunteers, and to motivate new members to join the efforts.

Many of you already have a biography that we can post, and if you send your biography to lin.crampton.at.gmail.com, we can get it posted.

For those of you who do not have a biography handy, some of the things that are good to include are:

- Name
- Current IEEE position
- Picture
- Contact (email address, linked-in, twitter)
- Education
- Career highlights and achievements
- Publications (papers, books websites, blogs)
- IEEE membership history and past positions
- Other professional organizations or associations
- Personal information optional

A biography on the IEEE site carries a lot of Internet authority, so we encourage you to take this opportunity to highlight your achievements. If you are uncomfortable writing about how wonderful you are, send an email answering the bullet points above to lin.crampton.at.gmail.com and she will do a rough draft that you can use as a starting point. You will have final approval on the biography we post. Included below are some links to IEEE biographies to give you an idea what an IEEE biography looks like.

http://www.ieee.org/about/awards/bios/emberson_recipients.html http://ewh.ieee.org/r1/princeton-centraljersey/bios.html http://cpmt.ieee.org/about-cpmt/61-cpmt-member-at-large-bios http://www.usfirst.org/community/volunteers/senior-mentor-bios https://www.csunalumni.com/default.aspx?Page=VolunteerServiceEmeritiBios http://minesonline.net/s/840/NHindex.aspx?sid=840&gid=1&pgid=496

Contact: lin.crampton@.at.gmail.com





Manufacturing Technology Society



CALL FOR PAPERS

NEWS FROM THE SECTION

15th IEEE International Symposium and Exhibition on

Advanced Packaging Materials Time

February 27 to March 1, 2013 Location: Atrium Hotel, Irvine, California, USA

Sponsor: IEEE Components, Packaging and Manufacturing Technology (CPMT) Society

Abstracts are solicited in the following topical areas:

Adhesives and underfills

 materials & applications, advanced processes, and reliability

Circuit boards, substrates, and dielectrics

advanced circuit boards and substrates, properties, and processing

Encapsulants, thin films, and coatings

• materials & applications, new processes, and reliability

Flip-chip interconnect materials and processing

bumping materials, bumping methods, and reliability evaluations

Manufacturing and Reliability

New manufacturing techniques and testing

Materials and processes for 3-D integration

• thru-silicon-via formation, stacking, plating and bonding

Optoelectronic and microwave materials

 New materials and processes for optoelectronic and microwave packaging

Solders and soldering operations

 lead-free solders, new bonding and soldering processes, reliability

Posters

Who should attend:

Attendees of this symposium have been researchers, developers, producers and users of materials and processes for packaging the whole range of electronic and optoelectronic products.

Abstract submission:

For presenting a paper in this symposium, please send an abstract (~ 150 words) via e-mail to cclee@uci.edu and copy myim@broadcom.com. Please include your affiliation, mailing address, phone number, and e-mail address in your submission.

Important dates:

Abstract submission deadline: December 15, 2012.

Acceptance notice: within 4 weeks of abstract receipt or Dec 31, 2012, whichever is earlier.

Full manuscript submission deadline: January 15, 2013

For more information, please contact:

General Chair: Tom Gregorich, Broadcom, Irvine, California, tomg@broadcom.com Program Chair: Chin C. Lee, University of California, Irvine, California, cclee@uci.edu Publicity Chair: Sam Karikalan, Broadcom, Irvine, California, samk@broadcom.com

California State Polytechnic University, Pomona

Electrical and Computer Engineering Department

The Electrical and Computer Engineering Department in the College of Engineering at California State Polytechnic University, Pomona (Cal Poly Pomona) invites applications for two tenure-track positions in power systems at the rank of Assistant Professor to begin Fall 2013.

The Position: Responsibilities include teaching undergraduate and graduate courses, advising students, conducting research, and providing services to the department, college and university. Candidates must be able to effectively teach theory as well as develop innovative lab projects. Successful candidates will help with the establishment of the Power Center, and the Smart Grid and Power Engineering program.

Minimum Qualifications:

- Ph.D. in Electrical and/or Computer Engineering or related area from an accredited university by June 2013
- Demonstrated commitment to undergraduate and graduate teaching
- Professional engineering work experience
- Strong oral and written communication skills
- Demonstrated commitment to work with diverse students and community populations

Preferred/Desired Qualifications:

- Demonstrated ability to establish industrial collaborations
- Demonstrated ability in developing electrical and computer engineering laboratories especially in power systems
- Expertise in energy, renewable, power systems, smart grid and network security
- Demonstrated ability in applied research and grants in smart grid and network security
- Demonstrated ability to teach power classes in both undergraduate and graduate level
- Demonstrated ability to be responsive to the educational equity goals of the university and its increasing ethnic diversity and international character

Application Procedure: A completed application will consist of:

- A cover letter that describes the candidate's teaching and research experience and interests, and addresses the duties and qualifications articulated in the position description;
- A curriculum vitae comprised of elements specified on the application form, including the names, titles,

addresses, and telephone numbers of at least five individuals who can speak to the candidate's potential for success in this position;

- A completed application form (available at http://www. csupomona.edu/~engineering/faculty/index.htm);
- A transcript showing the highest degree earned (an official transcript will be required of finalists); and
- Finalists for the position will be required to provide three recent letters of reference.

The position is open until filled. To be included in the first review, completed applications must be received by Dec. 31, 2012. Please address all nominations, inquiries, requests, and application materials to:

Faculty Search Committee c/o Dr. Meng-Lai Yin Electrical and Computer Engineering Department California State Polytechnic University, Pomona Pomona, CA 91768 Phone: 909.869.2535 FAX: 909.869.4687 Email: ece@csupomona.edu

The University: Cal Poly Pomona, one of two polytechnic universities in California, is a member of the 23-campus California State University system. Our ethnically diverse student population of approximately 21,000 enrolls in 60 baccalaureate, 26 master's degree programs and a doctorate in Educational Leadership, presented by 1,000 faculty. We recruit students increasingly from throughout California and beyond. The students are success and career focused and extremely diverse. We are proud of our status as a Hispanic Serving Institution. We have a strong commitment to supporting scholarship, research, and student achievement. Our scenic and historic 1,400acre campus, once the winter ranch of cereal magnate W. K. Kellogg, is located about 30 miles east of downtown Los Angeles in one of the most dynamic economic and cultural regions in the country, and within an hour's drive of beaches, mountains, and desert. The university is committed to diversifying its faculty and staff and has made educational equity one of its highest priorities. The mission of the university is to advance learning and knowledge by linking theory and practice in all disciplines, and to prepare students for lifelong learning, leadership, and careers in a changing, multicultural world.



The IEEE Orange County Upcoming Events

Feb 27-Mar 1, 2013 15th IEEE International Symposium and Exhibition: Advanced Packaging Materials

Oct 6-11, 2013 European Microwave Week Nuremberg Convention Center Nuremberg, Germany

http://sites.ieee.org/ocs/

Electrical and Computer Engineering Department continued...

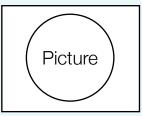
California State Polytechnic University, Pomona is an Equal Opportunity, Affirmative Action Employer. The University seeks to recruit and retain a diverse workforce as a reflection of our commitment to serve the people of California, to maintain the excellence of the University, and to offer our students richly varied disciplines, perspectives and ways of knowing and learning.Cal Poly Pomona subscribesto all state and federal regulations and prohibits discrimination based on race, color, religion, national origin, sex, gender identity/gender expression, sexual orientation, marital status, pregnancy, age, disability, genetic information, medical condition, and covered veteran status. **The University hires only individuals lawfully authorized to work in the United States. As required by the Clery Disclosure Act, the university's annual security report is available at http://dsa.csupomona.edu/police/securityreport.asp.**

Newsletter Inputs

We will publish IEEE Orange County Section Newsletter in the beginning of every month. Please provide any Orange County news, engineering conference details, expert view on engineering in Orange County, engineering article or engineering success story to info@nanomems-research.com no later than the 15th of a month. We'll publish the items in the following month. In your e-mail, please, enclose your news item between two lines of "+" characters, i.e.:

News Item Title

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We will be transitioning to a website-only submission model in which your news inputs may be submitted at any time. Information on the website address and logistics, will be provided soon. Please, stay tuned.

Thank you,

Hector J. De Los Santos, IEEE Orange County Section, Newsletter Editor

IEEE CPMT Orange County Chapter presents:

15th IEEE International Symposium and Exhibition on Advanced Packaging Materials

Greetings!

The IEEE CPMT Orange County Chapter will be hosting the 15th IEEE International Symposium and Exhibition on Advanced Packaging Materials. Following are the details:

15th IEEE International Symposium and Exhibition on Advanced Packaging Materials

Dates: February 27 to March 1, 2013

IEEE

Venue: Atrium Hotel, Irvine, California, USA

Sponsor: IEEE Components, Packaging and Manufacturing Technology (CPMT) Society

The program committee of this symposium solicits abstracts of papers for presentation at the symposium, in the following topical areas:

- Adhesives and Underfills
- Circuit boards, substrates, and dielectrics
- Encapsulants, thin films, and coatings
- Flip-chip interconnect materials and processing
- Manufacturing and Reliability
- Materials and processes for 3-D integration
- · Optoelectronic and microwave materials
- Solders and soldering operations

The deadline for submitting the abstracts is December 15, 2012. For more details, please see the attached first call for papers document. For more details on the symposium, please contact any of the following organizing committee members:

General Chair: Tom Gregorich, Broadcom Corporation, tomg@broadcom.com

Program Chair: Chin C. Lee, University of California - Irvine, cclee@uci.edu

Asst. Program Chair: MJ Yim, Broadcom Corporation, myim@broadcom.com

Publications: Wayne Koh, Pacrim Technologies, wkoh2003@hotmail.com

Registration & Finances: Melissa Lau, Broadcom Corporation, melissa@broadcom.com

Local Arrangements: Larry Williams, Ansys Corporation, larry.williams@ansys.com and Mehdi Saeidi, Qualcomm, saeidi@ieee.org

Sponsorships: Chris Zumba, Amkor Technology, chris.zumba@amkor.com

Exhibits: Raj Peddi, Henkel, Raj.Peddi@us.henkel.com

Publicity: Sam Karikalan, Broadcom Corporation, samk@broadcom.com

Webmaster: Arpit Mittal, Broadcom Corporation, arpit.mittal@broadcom.com

Best Regards, Sam Karikalan Publicity Chair, APM2013 Organizing Committee Chair, IEEE CPMT OC Chapter samkarikalan@ieee.org

IEEE

Advertising Section in the Newsletter

Our Newsletter now includes an advertising section. For details on how to place your ad please send us e-mail at: info@nanomemsresearch.com

Advertising Rates

\$1000/full page \$500/half page \$250/ quarter page

Hector J. De Los Santos, IEEE Orange County Section Newsletter Editor

Marketing Your Services — Advice From A Headhunter

Synopsis of Consultants Network Meeting - all invited.

As an engineer, selling ourselves to a client or employer is one of the hardest jobs that we have to do. As an alternative, headhunters can do it for us. Should we use their services? What can we learn from them? Most of us would much rather "engineer" than we would market ourselves or our services.

For our January 26th meeting, we have arranged for Mr. Ray Ybarra to share his headhunting perspective and expertise with us. He has had experience in hiring consultants and placing them both in temporary and full-time positions. He will be backed up by a panel of our own members who have consulted as employees, temporary employees, job shoppers, entrepreneurs, as well as independent consultants. This will provide us with an opportunity to compare fees, techniques, and both business and marketing practice for working with headhunters vs. working on your own.

Bio: Mr. Ray Ybarra has an extensive experience in the placement industry, including a position at Robert Half Technology, where he placed many consultants in temporary assignments. He will be supported by a panel of our members. If you would like to be on this panel, please contact Bill Grist at bill.grist@ieee.org.

Meeting Details:

Date: Saturday, January 26th, 2013

Time: 10:00 AM Introductions & Presentation 12:00 PM Lunch & Networking

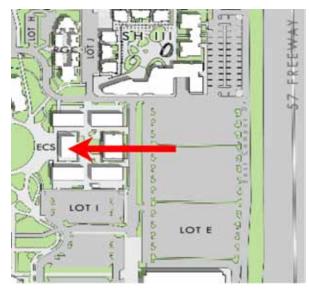
Location: Cal State Fullerton on Nutwood at Route 57 in Fullerton, in the Engineering and Computer Science (ECS) Building, Room 321.

Parking: Saturday parking is free. Enter from Nutwood and take Folino Drive north to Parking Lot E. See maps at parking.fullerton.edu.maps for more detail.

Future meeting: Saturday February 23rd.

Lunch is free with reservation. Send reservations or questions to r.gauger@ieee.org.

Check out the IEEE-USA consultant's website at www.ieeeusa.org/business.









EXHIBITION HOURS:

Updates

The Premier Microwave, RF, Wireless and Radar Event in Europe Nuremberg Convention Center, Nuremberg, Germany 6th October - 11th October 2013

Call for Papers

- Visit Munich Oktoberfest
- Online submission possible from 15th December 2012
- Deadline for submission of papers: 17th February 2013

Visit Munich Oktoberfest

The Munich Oktoberfest, the world famous Bavarian beer festival, will take place in 2013 from September 21st to October 6th, and thus will overlap with the beginning of EuMW 2013. You may easily combine your stay in Nuremberg with a visit to the Oktoberfest since the ICE high speed trains run frequently from Nuremberg to Munich, taking just one hour. During Oktoberfest time, the hotels in Munich will be pretty expensive whereas the hotels in Nuremberg will have normal rates. So commuting from your Nuremberg hotel to Munich and back from Munich might be an excellent idea.

For a limited number of people, on Sunday, 6th October, 2013, 11 to 16 hrs, a special lounge has been reserved at the famous Schottenhamel beer hall for those visiting the EuMW 2013 and who like to experience the spectacle of Oktoberfest in this famous beer tent. The Schottenhamel beer hall is the oldest and most traditional tent, with the Schottenhamel family being represented at the Oktoberfest since 1867. Annually at noon of the first day of the Oktoberfest, the mayor of Munich traditionally taps the first Oktoberfest-barrel. According to his skills, he mostly only needs three hits, before he can call out the famous words "O'zapft is".

We have pre-booked all the hotels for the EuMW 2013 in or very near to Nuremberg's lovely Old Town. All the hotels are within comfortable walking distance to the

main railway station, so you may conveniently visit the Oktoberfest by public transportation. The online registration for Oktoberfest will be available on a first-come/firstserved base together with the conference registration from June 2013.

Online registration will be available from June 2013

The Conference

European Microwave Week is truly the premier event of its kind in Europe and its conferences are set to be even more cutting edge and ground breaking in 2013 than in previous years. The European Microwave Week consists of three conferences:

- The European Microwave Conference (EuMC)
- The European Radar Conference (EuRAD)
- The European Microwave Integrated Circuits Conference (EuMIC)

The conferences encompass a wide range of subject areas including:

Microwave components • systems and subsystems for telecommunications • satellite and aerospace • defence/ homeland security • radar • automotive • high frequency applications • emerging technologies

This year's event will also see a special event on Defence, Security and Space.

Visit us at www.eumweek.com

The City Of Nuremberg

Located in the south of Germany, Nuremberg boasts a unique mixture of tradition and modern times. Its 500,000 inhabitants appreciate the extraordinary quality of life that this modern city offers. Nuremberg is the centre of a pros-



Sponsors

We thank the sponsors:

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NTELLECTUAL PROPERTY LAW

Knobbe Martin Olson Bear www.knobbe.com Hosts IEEE OCEN and SSCS Chapter meetings



Western Digital www.wdc.com Sponsors IEEE Orange County Section Student Design Contest



Netserve Systems www.netservesystems.net Hosts IEEE ExCom Meetings



CHAPMAN UNIVERSITY SYSTEM

Brandman University http://www.brandman.edu Hosts IEEE Section and Chapter Meetings



ETAP Facility www.etap.com



Mathobotix www.mathobotix.com Promotes Engineering among children during IEEE Special Events



International System-on-Chip (SoC) Conference

www.socconference.com Hosts IEEE OC Section Student Design Competition and Job Fair



European Microwave Week continued...

pering European metropolitan region with 2.5 million inhabitants incorporating cities like Fuerth, Erlangen, Bamberg, Bayreuth, and Wuerzburg. Today in the Nuremberg cityscape its nearly 1000 year history is reflected.

Nuremberg Airport offers numerous direct flights from nearly all major European cities; more than 50 European direct connections are available. From overseas, Nuremberg Airport is easily reached by international flights via Frankfurt or Munich. Within Germany, Nuremberg is excellently connected by national flights as well as through the high speed train network. E.g, the ICE trains from Frankfurt to Nuremberg take 2 hours, from Munich to Nuremberg only 1 hour.



The 8th European Microwave Integrated Circuits Conference



The 10th European Radar Conference

For detailed information please visit www.eumweek.com where you can also submit your paper on-line.

Submissions by hard copy, fax or email cannot be accepted.

The deadline for the submission of preliminary papers is 17th February 2013.

Late submissions will not be considered.

2013 IEEE Orange County Section — Executive Committee

Section Officers:

Chair

Dr. Don V Black (949) 548-1969 dblack.at.ieee.org

Vice-Chair

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Consultants' Network(OCCN)

Mr. Bob Gauger (949) 559-9148 rhgauger.at.cox.net

Engineering in Medicine and Biology Society (EMBS)

Dr. Bill Tang (949) 824-9892 wctang.at.uci.edu

Electromagnetic Compatibility Society (EMC)

Mr. Jeff Klinger (714) 579-0500 jeff.at.celectronics.com

Microwave Theory Techniques / Electron Devices Joint Society(MTT/ED) Dr. Héctor J. De Los Santos, IEEE Fellow (949) 682-7702

hector.delossantos.at.ieee.org

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Community Partnerships Dr. Goran Matijasevic goran.at.uci.edu

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Volunteer Coordinator

Vacant Webmaster

Ms. Sharon Forsberg (714) 315-8178 me.at.sharonforsberg.com

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