

*September 2012***Table of Contents**

Opportunities for IEEE Members and Officers to Talk to US Government . . .	2
OCS History Committee Report	2
Receive i\$50 by volunteering in IEEE OC Section or Chapters	3
IEEE OCS Volunteers in the Last 50 Years	3
Upcoming Events	4
Call for Nominations for Orange County Section 2013	4
Planning to Celebrate OC Section History and Formation of Life Member Chapter	4
Patent Litigation in the Wake of Apple v. Samsung: An Analysis.	5
Being an Engineering Consultant: What Does it Take?	6
2012 IEEE-CPMT/IMAPS Advanced Technology Workshop	7
Newsletter Inputs	7
Bistatic/Multistatic Radar	8
Cloud Computing and Big Data	9
Design of High-Speed Wireline Transceivers for Backplane Communications in 28nm CMOS	10
Advanced Technology Workshop on Optoelectronic Packaging and Assembly	11
Advertising Section in the Newsletter	12
Ask-A-Scientist Night	13
IEEE OC Student Design Contest (SDC)*	14
IEEE Fellow Profile: Dr. Mehdi Hatamian	15
Sponsors	15
National Network for Manufacturing Innovation.	16
CLASTECH Symposium and Exhibition Antenna and Microwave Technology (v3).	17
IEEE GLOBECOM 2012: The Magic of Global Connectivity.	18
Welcome New Members	18
Executive Officers.	19

The Chair's Corner:

Greetings IEEE Families!

I hope that you had a refreshing and affordable Summer. While we did not say goodbye to Summer, we kicked off the second session of the year with a Summer BBQ. It was great to meet so many of our members, young engineers and their families from all over Orange County at the William Mason Regional Park.

We are back to our regular schedule with several programs lined up. I appreciate the strong team of volunteers who have contributed unselfishly their time and talent to achieve high-quality programs at the Section and Chapters. Again, I want to reiterate to everyone to take the opportunity to become active within the Section to realize high return of your investment with the IEEE.

In this issue, we list several programs- seminars, conferences, and a student design contest, that are already scheduled for the benefit to the members. Please browse through the pages of this very informative newsletter and participate in the programs. Let us know if you think a seminar or an event in a certain area is consistently missing for several years. Please, give serious consideration to becoming involved in our broad and challenging goals in whatever way you can.

If you have ever thought you might be interested in running for Section Officer to lead the IEEE-OC Section Executive Committee please, do not hesitate to contact me. I am looking forward to assisting those interested in being nominated to run for the year 2013.

Enjoy the issue and keep in touch. Appreciate your emails or phone calls.

Best,

Dr. John Collins
2012 IEEE Orange County Section Chairman
collins.AT.ieee.org

Opportunities for IEEE Members and Officers to Talk to US Government

Mr. Sampath, recently, had the opportunity to meet with the IEEE Orange County Section Executive Committee and talk about IEEE's ability to influence public policy, at the federal, state & local levels, relating to technology and the practice of engineering. Mr. Sampath is the Chairman for IEEE Public Policy & Government Activities – California and Region 6. With over 60,000 IEEE members in Region 6, IEEE has a significant voice in influencing Government policy.

The IEEE's Orange County Government Relations Committee (GRC) key initiatives are:

- Educate our Members on Govt. Relations & Public Policy
- Identify & Address Member Issues (e.g. Unemployment, R&D)
- Coordinate with IEEE-USA (and other sections in Southern California)
- Influence Policy Makers (Congressional Visits, Town Hall Meetings, etc.)
- Ensure Effective Media & Public Relations Strategy

The committee's main purpose is to help with getting resources and support for our IEEE members and assist and advise on public policies related to the IEEE. The committee is currently assessing the best ways of addressing the unemployment among engineers and increasing the competitiveness of the American IT worker. The committee welcomes IEEE member participation in these discussions to help formulate a solid direction from a public policy perspective.

An example of how this works is a recent California initiative. There are two main issues in California.

- Unemployed, Underemployed, & Retired Engineers
- Poor STEM (Science Technology Engineering Math) Education & US Competitiveness

By combining this under one initiative, California is bringing Retired Engineers and others together as STEM Teachers & Mentors in California High Schools.

The vision of the California initiative:

- Start with an initial proof of concept in Orange County & California
- Cooperative effort between industry, associations, government agencies, teachers' unions & high schools
- An internet-based remote teaching component
- Fast track teacher certification & training
- A database of technology experts that teachers can use
- Compensation for new IEEE teachers & mentors
- Leverage resources & efforts of partner organizations
- Roll out working model to other cities & states

Most recently, GRC has been increasing its visibility, and providing education on IEEE member's primary concerns, with legislators in Orange County. The committee reaches out to all levels of government – local, regional, state, and nationwide. Initial contact can start as simply as reaching out to local government agencies, or to a local congressional representative. The OC Entrepreneurs Network and Tech America are also other ways that the committee can reach out. The committee also advises on policies that help Small Business Associations (SBA) and Small Business Innovation and Research (SBIR) projects.

If you have ideas that would help the committee or IEEE members with Government Policy, please feel free to contact Mr. Sampath at rsampath.at.ieee.org. And, if you want to get more involved with OC local Government activities, the Orange County Section has a vacant 'Government Activities Chair' that you could volunteer for – contact John Collins at collins@ieee.org

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

Receive i\$50 by volunteering in IEEE OC Section or Chapters

We introduce iDollar as an incentive to all volunteers for their involvement in Section's programs. The iDollar can be used towards registration, food and other fees at Section's events. The iDollar will serve as a motivator for volunteer involvement, their professional development and extending benefits to all IEEE Members.

The iDollar will bankroll the cost of a volunteer attending Chapter or Section events. As an incentive, we propose to issue ten \$5 iDollars (\$50 total) to each new volunteer. We will have a registry of all their names and IEEE Member numbers from those who were issued these iDollars, signed by the volunteer. The issued iDollars will have the volunteers' name and member number on the back of the bill. When the volunteer attends a Chapter (or Section) event, s/he shall put the event name and date on the back of the

bills and hand them to the Chapter (or Section) Treasurer/ Event Coordinator. In the following Section meeting the Chapter Treasurer will sign the back of the iDollars collected and redeem them as chapter funds from the Section. The Section will verify the bills against the registry before transferring funds to the Chapter. The volunteer does not get cash, the Chapter Treasurer redeems the funds to the Chapter. To add security, a wet stamp will be used on all iDollars issued to a volunteer.

We are confident that the iDollar program is simple and secure to attract and involve new volunteers at the Orange County Section.

Mario Manansala
manansala@ieee.org

IEEE OCS Volunteers in the Last 50 Years

As we celebrate the 50th anniversary of IEEE/OCS next 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 me, 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 me and I 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.

Lin Crampton
lin.crampton.at@gmail.com

The IEEE Orange County Upcoming Events

Sept 6

The 2012 IEEE-CPMT / IMAPS
Advanced Technology Workshop on
Optoelectronic Packaging and Assembly

Sept 6 & 7

2012 IEEE-CPMT/IMAPS Advanced
Technology Workshop

Sept 11

IEEE Orange County Consultants
Network (OCCN) joins with the Los
Angeles Area Consultants Network
(LAACN) present: Being an Engineering
Consultant: What Does it Take?

Sept 11

IEEE Orange County Section and IEEE
EDS/MTT Joint Chapter are Pleased to
Present: Tim Hsieh is an Associate in the
Intellectual Property Group of Foley &
Lardner LLP in Los Angeles

Sept 12

Bistatic/Multistatic Radar

Sept 15

IEEE's Orange County Solid-State
Circuits Society (SSCS)
Present: Design of High-Speed Wireline
Transceivers for Backplane Communi-
cations in 28nm CMOS

Sept 22

2012 IEEE-CPMT/IMAPS Advanced
Technology Workshop

Sept 24

Cloud Computing and Big Data

Oct 9

IEEE OC Section Meeting on "Project
Management for Engineers" at
Brandman University, Irvine

Oct 24

IEEE OC Tech Job Fair

Oct 24

IEEE OC Student Design Contest

Call for Nominations for Orange County Section 2013

Nominations are open for Orange County Section members to apply for Section Officers. The officers will lead the IEEE-OC Section Executive Committee (ExCom) for a 1 year period starting January 2013. Nominate another IEEE member or nominate yourself.

THE SLATE:

- **Chairman:** The Section Chair shall serve as Chair for all meetings of the Section, and the Section ExCom.
- **Vice Chairman:** The Section Vice Chair shall assist the Chair in the coordination of all Section activities. At the request of the Section Chair or in the absence of the Section Chair, the Section Vice Chair shall chair meetings of the Section and the Section ExCom.
- **Treasurer:** The duties of the Section Treasurer shall include the development of a Section budget for approval by the Section, accounting of all Section funds, keeping financial records, and submitting the Section Financial Report to IEEE Headquarters.
- **Secretary:** The duties of the Section Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting and officer reports at the end of each year, and other duties as are assigned to him/her by the Chair.

A basic requirement for all roles is to be an IEEE member of Graduate Student Member, Member, Senior Member or Fellow grade. Other requirements include regular attendance at Section ExCom Meetings, professionalism, a minimum 1 year commitment, and interest in fostering our community – all in a positive and productive setting.

NOTE: According to the IEEE-OC Section Bylaws, the open nomination period ends 30 days from September 1st, at which point no further nominations shall be accepted.

The Section Nominations Committee (comprising of past Section Chairs) will review all nominations to ensure that the right candidate slate is presented for elections, to ensure strong leadership for our community in the coming years.

Details on our current officers and ExCom are at www.ieee.org/ocs.

Please email me directly with nominations.

Russell Hunter

RussellH@Computer.org, Past-Chair, IEEE Orange County Section

Planning of OC Section Golden Anniversary Celebration and Formation of Life Member Chapter

Those of you who are Life Members, or who have received the newly issued pins to those who have been IEEE members continuously (50 years) since the Society's formation, or legacy members (whose 10-digit member numbers begin with 4 or more zeros) are invited to attend a dinner meeting. We'll renew old friendships and work our collective memory to reconstruct the early days of the Section which will celebrate its Golden Anniversary in April 2013, just 2 months following the formation of the IEEE. How time flies.

Date: Saturday, Oct 6th 2012. 6:30-8:30 PM

Venue: DoubleTree Club by Hilton hotel Orange County Airport
7 Hutton Centre Drive, Santa Ana, CA 92707
(714) 751-2400 • dtcluborangeco.com

RSVP to Stan.White@ieee.org before Oct 4th 2012.

See you there!

Stan White, Ph.D., PE, LF; Chair, History Committee



IEEE Orange County Section and IEEE EDS/MTT Joint Chapter are Pleased to Present:

Patent Litigation in the Wake of Apple v. Samsung: An Analysis

Date:	September 11, 2012
Topic:	Patent Litigation in the wake of Apple v. Samsung: An Analysis
Speaker Name and Affiliation:	Name and Affiliation: Tim Hsieh, Associate in the Intellectual Property Group at Foley & Lardner LLP, Los Angeles
Abstract:	As you no doubt might have heard by now from a number of major news outlets, the Apple v. Samsung case is the largest patent litigation case in recent memory, and the court there recently ruled that Samsung had to pay over \$1 billion dollars in damages, the largest patent award of all time. What does this mean for the future of patent litigation? And what led courts to this case, and the jury to decide on that award amount? Presented is an in-depth look at the Apple v. Samsung case and its potential ramifications and repercussions for not just future patent cases but for the future of patent law in general.
Biography:	<p>Mr. Hsieh focuses his practice on a variety of intellectual property matters, in particular intellectual property and patent litigation. He has represented clients in patent litigation cases involving complex wireless standards (W-CDMA, cdma2000) as well as mouse and trackball technologies, semiconductor microfabrication processes, sophisticated integrated circuits for use with global positioning system (GPS) devices, and high-speed optical communication technologies. He also has extensive experience in drafting, prosecuting and procuring patents in a wide array of technical fields as diverse as, for example, semiconductor manufacturing, light-emitting diode (LED) fabrication, liquid crystal display (LCD) technology, photolithography, analog and integrated circuit design, flash memories, bio-medical devices, microelectromechanical systems (MEMS), e-commerce software, mobile phone applications, advertisement management software, carbon emission management processes, wind turbine and photovoltaic cell technology, data mining algorithms, signal processing and network-based communications. Mr. Hsieh also has experience in areas such as technology licensing, patent portfolio management strategies, trademark protection and litigation, validity and infringement analysis, general commercial litigation, and start-up counseling. He also aids writers, musicians and independent filmmakers with a variety of intellectual property, copyright, business and entertainment law issues. Mr. Hsieh is a registered patent attorney admitted to practice before the United States Patent & Trademark Office and is a member of the State Bar of California, and before all state courts in California. He is also admitted to practice before the U.S. District Courts for the Northern, Southern, Central and Eastern Districts of California, the U.S. Court of Appeals for the Ninth Circuit, and the U.S. Court of Appeals for the Federal Circuit.</p> <p>Mr. Hsieh received a Bachelor of Science in Electrical Engineering and Computer Science from the University of California, Berkeley and a Master of Science in Electrical Engineering from the University of California, Los Angeles, with an emphasis in integrated circuit design and implementation. He is a graduate of the University of California Hastings College of the Law (2007), where he served as Technology Editor and as a Staff Editor on the law review, the Hastings Law Journal. During law school, he also received accolades for his academic legal writing (Grand Prize Winner in both the Foley & Lardner IP Law Writing Competition and the IDEA: Intellectual Property Law Review Writing Competition) and competed in both the Giles S. Rich Moot Court Competition in Patent Law and the John Marshall Moot Court Competition in Information Technology & Privacy Law, in which he garnered Best Brief honors.</p>
Time:	6 PM Networking; 7 PM Talk
Location:	Brandman University , Room Number 111, 16355 Laguna Canyon Road, Irvine, CA 92618
Cost:	Free
RSVP:	http://iptalk.eventbrite.com/

IEEE Orange County Consultants Network (OCCN) joins with the Los Angeles Area Consultants Network (LAACN) present:

Being an Engineering Consultant: What Does it Take?

Date:	Saturday, September 22nd, 2012
Topic:	Being an Engineering Consultant: What Does it Take?
Speaker Name and Affiliation:	Kip Haggerty, Ph.D., P.E. kip@ieee.org
Abstract:	The transition from being an employee to running your own consulting practice is challenging, Business and personal life choices will impact your ability to succeed. This talk will present the basics of successfully entering engineering consulting highlighted with personal experiences and observations from eighteen years in private practice. Included will be a discussion of business and personal life choices that help prepare an engineer to make the transition to private practice.
Biography:	<p>Kip Haggerty, Ph.D., P.E. has over 32 years of experience in control, communication, and sensor systems engineering. He received the Ph.D. degree in electrical engineering from the University of California, Los Angeles in 1988.</p> <p>Since 1994, he has been the principal systems engineer of H&A Systems Engineering, where he leads the control, communication, and sensor systems engineering consulting portion of the business. His consulting work has covered systems issues in advanced airborne radar, electronic warfare, power electronics, active RFID location, and breathalyzer sobriety monitoring.</p> <p>From 1980 to 1994, he was an engineer at Hughes Aircraft Company, El Segundo, CA. His systems engineering experience at Hughes covered a broad range of sensor and communication technologies as well as control and signal processing algorithms. He developed, simulated, and analyzed avionic system concepts that included spread spectrum data communications, radar, and air traffic control communications. He also led a cooperative engagement system concept study. For radar systems, he participated in a demonstration of the first high resolution radar range profiles from a new waveform and he designed, simulated, analyzed, and verified radar signal processing, tracking, and calibration algorithms.</p> <p>Dr. Haggerty is a senior member of IEEE and a member of Tau Beta Pi. He is a licensed electrical and control systems engineer in the state of California. He has five published papers, taught two short courses on Kalman Filtering, and has given numerous presentations..</p>
Time:	10:00 AM Introductions & Presentation 12:00 PM Lunch & Networking
Location:	Cal State Fullerton on Nutwood and 57 in Fullerton. Meeting is in the Engineering and Computer Science (ECS) Building. Room TBD.
Parking:	Saturday parking is free. Enter from Nutwood and take Folino Drive north to Parking Lot E. See maps at http://parking.fullerton.edu/parking/Maps.asp for more detail.
Note:	Lunch is free with reservation. Send reservations or questions to r.gauger@ieee.org .
Contact:	Check out the IEEE-USA consultant's website, database, and resources at www.ieeeusa.org/business .

2012 IEEE-CPMT/IMAPS Advanced Technology Workshop

Our IEEE Components, Packaging and Manufacturing Technology (CPMT) Society - Orange County Chapter will be hosting the 2012 IEEE-CPMT/IMAPS Advanced Technology Workshop on Opto-electronic Packaging and Assembly. This workshop will feature an International Technology Roadmap for Semiconductors (ITRS) working session as well.

Dates: September 6 & 7, 2012

Location: Embassy Suites, 3100 East Frontera Street, Anaheim, CA 92806

Twelve industry experts will be giving invited talks on topics such as High Brightness LED, CMOS Image Sensors, Optical Interconnects & Silicon Photonics and Optical Transceivers & Networks, on Thursday, Sep 6, 2012. This industry session will also feature vendor exhibits.

On Friday, Sep 7, 2012, ITRS experts will be conducting a half-day working session, with a presentation on the ITRS working process and an interactive discussion about their optoelectronic packaging activities.

Please mark your calendars and plan on attending this important event for the Optoelectronics and related industry in our region. More details on the speakers, agenda and registration will be sent in the coming months.

For more information, please contact the General Co-Chairs of this workshop:

Robert Warren, Conexant Systems, Inc.
robert.warren@conexant.com

John Mazurowski, Penn State Electro-Optics Center,
jmazurowski@eoc.psu.edu

If you are interested in sponsorships and/or table-top exhibits, please contact:

Lawrence Williams, AnsysCorporation,
larry.williams@ansys.com

Jaydutt Joshi, Skyworks Solutions, Inc.,
jaydutt@gmail.com

Sam Karikalan
Chairman, IEEE CPMT Orange County Chapter
samkarikalan@ieee.org

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.:

+++++

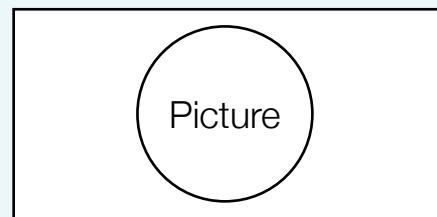
News Item Title

Newsletter content Newsletter content, Newsletter content Newsletter content
Newsletter content Newsletter content, Newsletter content Newsletter content

+++++

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 Aerospace & Electronics Systems Society Orange County Chapter (OC-AESS) is pleased to present:

Bistatic/Multistatic Radar



Date:	Wednesday, September 12, 2012
Topic:	Bistatic/Multistatic Radar
Speaker Name and Affiliation:	Professor Hugh Griffiths, University College London (UCL) President, IEEE AESS
Abstract:	<p>Bistatic and multistatic radar systems have been studied and built since the earliest days of radar. As an early example, the Germans used the British Chain Home radars as illuminators for their Klein Heidelberg bistatic system. Bistatic radars have some obvious advantages. The receiving systems are passive, and hence undetectable. The receiving systems are also potentially simple and cheap. Bistatic radar may also have a counter-stealth capability, since target shaping to reduce target monostatic RCS will in general not reduce the bistatic RCS.</p> <p>Furthermore, bistatic radar systems can utilize VHF and UHF broadcast and communications signals as 'illuminators of opportunity', at which frequencies target stealth treatment is likely to be less effective. Bistatic systems have some disadvantages. The geometry is more complicated than that of monostatic systems. It is necessary to provide some form of synchronization between transmitter and receiver, in respect of transmitter azimuth angle, instant of pulse transmission, and (for coherent processing) transmit signal phase. Receivers which use transmitters which scan in azimuth will probably have to utilize 'pulse chasing' processing.</p> <p>Over the years a number of bistatic and multistatic radar systems have been built and evaluated. However, rather few have progressed beyond the 'technology demonstrator' phase. Willis, in his book Bistatic Radar, has remarked that interest in bistatic radar tends to vary on a period of approximately fifteen years, and that currently we are at a peak of that cycle. The purpose of this lecture is therefore to present a subjective review of the properties and current developments in the subject, with particular emphasis on 'passive coherent location' and to consider whether or not the present interest is just another peak in the cycle. It draws on material in the book Advances in Bistatic Radar, edited by Willis and Griffiths, and recently published by SciTech.</p>
Biography:	<p>Hugh Griffiths was born in Bournemouth, UK, in 1956. He was educated at Hardye's School, Dorchester, and Keble College, Oxford University, where he received the MA degree in Physics. He also received the PhD (1986) and DSc(Eng) (2000) degrees from the University of London.</p> <p>In 2006 he was appointed Principal of the Defence College of Management and Technology, Shrivenham (part of Cranfield University). From 1982 to 2006 he was with University College London, serving as Head of the Department of Electronic and Electrical Engineering from 2001 to 2006. His research interests include radar sensor systems and signal processing (particularly synthetic aperture radar and bistatic and multistatic radar and sonar) as well as antennas and antenna measurement techniques. He has published over 300 papers and technical articles on these subjects.</p> <p>He received the IERE Lord Brabazon Premium in 1984, the IEE Mountbatten and Maxwell Premiums in 1996, and the IEEE Nathanson Award in 1996. He serves on the IEEE AESS Board of Governors and as Chairman of the IEEE AESS Radar Systems Panel, and as Editor-in-Chief of IEE Proceedings on Radar, Sonar and Navigation. Also, he was Chairman of the IEE International Radar Conference RADAR 2002 in Edinburgh, UK. He is also a member of the Defence Scientific Advisory Council for the UK Ministry of Defence, and of the Supervisory Board for the UK Ministry of Defence's Defence Technology Centre in ElectroMagnetic Remote Sensing.</p> <p>He is a Fellow of the IEE, Fellow of the IEEE, and in 1997 he was elected to Fellowship of the Royal Academy of Engineering.</p>
Time:	Social and Networking: 6:00 PM – 7:00 PM, Dinner starts at 6:30 PM, Meeting and talk start at 7:00 PM
Location:	Doubletree Club Hotel: - 7 Hutton Centre Drive, Santa Ana, CA 92707
Cost:	Dinner: \$30 Dinner (Student/Unemployed): \$20 Presentation Only: Free
RSVP:	email: kyu@ieee.org by Wednesday, September 5, 2012
Contact:	Dr. Kai-Bor Yu, Vice-Chair of IEEE OC-AESS, kyu@ieee.org for event questions.

IEEE Orange County Computer Society (OCCS) Is Pleased to Present:

Cloud Computing and Big Data

Date:	Monday, September 24th, 2012 (4th Monday of the month)
Topic:	Cloud Computing and Big Data
Speaker Name and Affiliation:	Dr. Gayn B. Winters
Abstract:	You have a "big data" problem if standard servers cannot handle your data volume, the speed with which you accumulate data, or the diversity of your data's data types. The industry is responding to big data problems by introducing infrastructure of server farms, virtual machines, virtual storage, and even virtual networks. Applications are being ported to this environment with varying degrees of success and performance. This infrastructure is bundled into "cloud systems" that offer customers the use of these ported applications and virtual capabilities "on demand" via an hourly rental model. Big vendors such as Amazon and Microsoft are now offering proprietary clouds. Other vendors offer "private clouds" where a customer can use their own equipment locally or at a data center, and can use alternative cloud infrastructure. There are mixtures of these approaches, sometimes called "hybrid clouds" that provide a more complex, but more flexible system. This talk will analyze these offerings and will discuss how to use them to address big data problems.
Biography:	Ph.D. from MIT with considerable post-doctoral and academic work. Did foundational work using distributed workstations in the Financial Analysis industry. At Digital Equipment built the industry's first PC with integral Ethernet, won a Computerworld award for best micro/mainframe integration software (that became Digital's highest volume software product), promoted to Digital's corporate strategy board and to Corporate Consultant, corporate internationalization architect, oversaw multiple worldwide programs with many F1000 clients. Board of Directors for Unicode Inc. At Phoenix Technology as CTO, VP Engineering, and GM, ran worldwide engineering and program management for systems; clients were manufactures of PCs, boards, chips, and peripherals, PDAs, and laptops. Started Bristol Systems to do engineering and application development. Expert in high availability networking and security, embedded systems, GPS, and cloud computing. Currently working on Big Data problems for public and private clouds.
Time:	6:00 p.m.-7:00 p.m. Come and network with your colleagues for free
Location:	Brandman University , 16355 Laguna Canyon Road, Irvine, CA 92618
Cost:	Regular Admissions: \$10 Student: Free Presentation Only: Free Unemployed IEEE Members: Free

IEEE's Orange County Solid-State Circuits Society (SSCS) Present:

Design of High-Speed Wireline Transceivers for Backplane Communications in 28nm CMOS

By Dr. Jafar Savoj
Xilinx, Inc.

Day: Saturday, September 15, 2012

Time: Registration & Networking 10:00 a.m. – 10:30 a.m.

Presentation 10:30 a.m. – 11:45 a.m.

Q&A and Networking 11:45 a.m. – 12:00 p.m.

Fee: Free for all the IEEE members, students, engineers in transition, technologists, as well as those who are exploring to join IEEE & SSCS in the future.

Space is limited, please RSVP:

IEEE.OC.SSCS.RSVP@Gmail.com

Send questions to Farhad Mafie, IEEE-OC SSCS Chairman:
FarhadMafie@Gmail.com

Abstract: This presentation describes the design of the architecture and circuit blocks for backplane communication transceivers. A channel study investigates the major challenges in the design of high-speed reconfigurable transceivers. Architectural solutions resolving channel-induced signal distortions are proposed and their effectiveness on various channels is investigated. Subsequently, the presentation describes the design of two fully-adaptive backplane transceivers embedded in state-of-the-art low-leakage 28nm CMOS FPGAs operating up to 12.5Gb/s and 13.1Gb/s. The receive AFE utilizes a three-stage CTLE to provide selective frequency boost for long-tail ISI cancellation. A speculative DFE removes the immediate post-cursor ISI. The second transceiver also uses a 4-tap sliding DFE to remove the post-cursor ISI up to 64 taps. Both CTLE and DFE are fully adaptive using sign-sign LMS algorithm. A novel clocking technique uses wideband LC and ring oscillators for reliable clocking for 0.6-12.5Gb/s and 0.6-13.1Gb/s operation. The transmitter utilizes a 3-tap FIR and provides flexibility for supply and ground referenced operation. The two transceivers achieve BER < 10⁻¹⁵ over a 33dB-loss backplane at 12.5Gb/s, and over a 31dB-loss backplane at 13.1Gb/s. Both transceivers achieve BER < 10⁻¹⁵ over channels with 10G-KR characteristics at 10.3125Gb/s.

Dr. Jafar Savoj received the B.Sc. degree in electrical engineering from Sharif University of Technology, Tehran, Iran, in 1996, and the M.Sc. and Ph.D. degrees in electrical engineering from the University of California, Los Angeles, in 1998 and 2001, respectively. Dr. Savoj's areas of expertise

include technology and product development for wireless, wireline, and analog systems. He is currently an Engineering Director with the Serdes Technology Group at Xilinx, San Jose, CA, and leads high-speed, low-power wireline transceiver development for FPGA applications. From 2008 to 2010, he was with Qualcomm, Santa Clara, CA, and led the advanced technology development group for wireless connectivity. He was responsible for development of WLAN and Near Field Communication (NFC) transceivers, and low power chip-to-chip interfaces for mobile platforms. From 2005 to 2008, he was a principal engineer at Rambus, where he developed ultra-high-speed data converters for software programmable wireline transceivers. Prior to that, he held design engineering positions at Marvell Semiconductor, Santa Clara, CA, focusing on fiber channel and Gigabit Ethernet transceivers; and at Transpectrum, Los Angeles, CA, architecting 10-Gb/s and 40-Gb/s optical transceivers in CMOS technology. He held a lecturing position at Stanford University in 2004. He is the author of High-Speed CMOS Circuits for Optical Receivers (Kluwer, 2001). Dr. Savoj was a recipient of the IEEE Solid-State Circuits Society Predoctoral Fellowship for 2000–2001, and the Beatrice Winner Award for Editorial Excellence at the 2001 ISSCC, and the Design Contest Award of the 2001 Design Automation Conference. He serves as a technical program committee member of ISSCC (Analog Subcommittee). He served as a technical program committee member of the IEEE Custom Integrated Circuits Conference (CICC) from 2001 to 2007 and the IEEE Symposium on VLSI Circuits from 2007 to 2011. He was an Associate Editor for the IEEE JOURNAL OF SOLID-STATE CIRCUITS from 2008 to 2011 and a Guest Editor for the Journal in 2005, 2006 and 2011.

Address & Information: Knobbe Martens, 2040 Main St., Irvine, CA. (Free parking on Saturday)

SPECIAL THANKS TO FOR SPONSORING & HOSTING THIS EVENT!

Knobbe Martens Building, 2040 Main St., Irvine 92614, Knobbe Conference Center on the second floor. For Directions and Maps see the KMOB web site at http://www.kmob.com/offices_irvine_map.htm#map. The building entrance and parking structure are on the back side of the building. Follow signs to the 2040 entrance (there is no parking on Main St.). For GPS or Google coordinates are 33.682383, -117.852565.

The 2012 IEEE-CPMT / IMAPS

Advanced Technology Workshop on Optoelectronic Packaging and Assembly

The Institute of Electrical and Electronics Engineers - Components, Packaging and Manufacturing Technology Society (IEEE-CPMT) and the International Microelectronics and Packaging Society (IMAPS) are jointly organizing the 2012 Advanced Technology Workshop on Opto-electronic Packaging and Assembly. This workshop will feature an ITRS Assembly and Packaging Roadmap working session as well.

Dates: September 6 & 7, 2012

Location: Embassy Suites, 3100 East Frontera Street, Anaheim, CA 92806

Program Agenda

Thursday, September 6, 2012

07:00 – 08:00am Breakfast

08:00 – 08:05am Welcome Address

- Robert Warren, General Co-Chair of the Organizing Committee

08:05 – 08:15am Workshop Introduction

- John Mazurowski, General Co-Chair of the Organizing Committee

Session – 1 Optical Interconnects and Semiconductor Photonics

Session Chair: Dr. Kannan Raj, Oracle

08:15 – 08:45am “Integration Technologies and Packaging for Efficient Si Photonics Links”

- Dr. Jack Cunningham, Consulting Hardware Engineer, Oracle Labs

08:45 – 09:15am “Si Photonics for Integrating High-Speed Optical I/Os with ASICs”

- Dr. Peter De Dobbelaere, Sr. Director, Luxtera

09:15 – 09:45am “The End of Transceiver as we know it”

- Dr. Mehdi Asghari, Chief Technology Officer, Kotura

09:45 – 10:15am “Photonic Integration and Terabit/s Transmitters and Receivers”

- Dr. Radha Nagarajan, Fellow, Optical Component Technology, Infinera

10:15 – 10:30am Refreshment Break

Session-2 High Brightness LED

Session Chair: Dr. Bill Bottoms, Third Millennium Test Services

10:30 – 11:00am “Comparison of Various Conformal Phosphor Deposition Methods for White Light Illumination of LED”

- Keynote Address by Prof. Ricky Lee, President, IEEE CPMT Society

11:00 – 11:30am “Reliability of Illumination Grade LEDs”

- Ron Bonne, Team Leader Technical Solutions – Americas, Philips Lumileds

Session-3 CMOS Image Sensors

Session Chair: Dr. Wei Koh, Pacrim Technologies

11:30 – 12:00pm “Packaging challenges of high-performance CMOS image sensors”

- Dr. Daniel Van Blerkom - Chief Technology Officer, Ramy Tantawy – Sr. Analog Design Engineer, Forza Silicon Corp

12:00 – 12:30pm “Image Sensor Market Trends”

- Jeffrey Perkins, President - Yole, Inc., Yole Developpement

12:30 – 01:30pm Lunch

Early-Bird Registration at

<http://www.eventbrite.com/event/2573756174>

Session-4 Optical Transceivers and networks

Session Chair: Dick Otte, Promex Industries

01:30 – 02:00pm “Evolution of Optical Engine Technology for Active Optical Cables and Computer Optical Interconnects”

- Dr. Marc Verdiell, Business Dev., Samtec

02:00 – 02:30pm “Building a house for 25G and beyond: bringing high density silicon photonics to a connectorized world”

- Dr. Adit Narasimha, Manager – New Product Dev, Molex

02:30 – 03:00pm “On-Chip Photonic Integration for Large Data Warehouse Switches”

- Dr. Ali Ghiasi, Associate Technical Director, Broadcom Corporation

03:00 – 03:30pm “Optical Circuit Switching within Large-Scale Datacenters”

- Prof. George Papen, University of California – San Diego

03:30 – 03:45pm Refreshment Break

Continued on next page...



Advanced Technology Workshop on Optoelectronic Packaging and Assembly Continued...

03:45 – 04:45pm Product Innovation Hour

- Conducted by Prof. Mark Bachmann, UCI

04:45 – 04:50pm Note of Thanks - Sam Karikalan, Chair,
IEEE CPMT Orange County Chapter

Friday, September 7, 2012

ITRS Optical Roadmap Working Session on Sep 7, 2012

Conducted by: Dr. Bill Bottoms, Third Millennium Test Services, and Dick Otte, Promex Industries

07:00 – 08:00am Breakfast

08:00 – 08:10am Welcome & Introduction to ITRS and Workshop

08:10 – 08:30am Presentation on Packaging of High Brightness LEDs and Discussions to identify Key Challenges for HB-LED

08:30 – 08:50am Presentation on CMOS image sensors and Discussions to identify Key Challenges for Image Sensors

08:50 – 09:10am Presentation on Optical interconnects and Discussions to identify Key Challenges for Assembly & Packaging of Optical Interconnects

09:10 – 09:30am Presentation on Optical Transceivers and Discussions to identify Key Challenges for Assembly and Packaging of Optical Transceivers

09:30 – 09:40am Refreshment Break

09:40 – 11:00am Four Break-out sessions to address defined questions regarding the 15 year outlook for challenges and potential solutions for topics covered above.

11:00 – 11:45am Reports from each of the breakout session groups with discussion

11:45 – 12:00pm Summary and closing remarks

Early-Bird Registration at

<http://www.eventbrite.com/event/2573756174>

Workshop Organizing Committee

General Chairs

Robert Warren, Conexant Systems, Inc.
robert.warren@conexant.com

John Mazurowski, Penn State Electro-Optics Center,
jmazurowski@eoc.psu.edu

Technical Program

Wei Koh, Pacrim Technologies, wkoh2003@hotmail.com

Dick Otte, Promex Industries, Inc., otte@promex-ind.com

Bill Bottoms, Third Millennium Test Solutions,
bill_bottoms@3mts.com

Kannan Raj, Oracle, kannan.raj@oracle.com

Chuck Tabbert, Ultracomm, ctabbert@ultracomm-inc.com

Mark Bachman, Univ. of California – Irvine, mbachman@uci.edu

Sam Karikalan, Broadcom Corporation,
samkarikalan@ieee.org

Ivan Shubin, Oracle, ivan.shubin@oracle.com

Registration & Finances:

Melissa Lau, Broadcom Corporation, melissa@broadcom.com

Publicity:

Michael Alderete, DRS Sensors and Targeting Systems,
alderetm@gmail.com

Paul Wesling, Communications Director - IEEE,
p.wesling@ieee.org

Vendor Exhibits & Sponsorships:

Lawrence Williams, Ansys Corporation,
larry.williams@ansys.com

Jaydutt Joshi, Skyworks Solutions, Inc., jaydutt@gmail.com

Local Arrangements:

Hossein Ahmad, Boeing, hossein.ahmad@boeing.com

University Relations:

Mark Bachman, Univ. of California – Irvine,
mbachman@uci.edu

Workshop Website: <http://www.cpmt.org/opto2012>

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@nanomemms-research.com

Advertising Rates

\$1000/full page

\$500/half page

\$250/ quarter page

Hector J. De Los Santos

IEEE Orange County Section Newsletter Editor



Ask-A-Scientist Night

Greetings!

Whether you are a new addition to our exciting events, or returning to help us for another successful year, we thank you in advance for your generous contributions of time and expertise to our students!

We are planning this year's Ask-A-Scientist Night, which will be held at Rancho San Joaquin Middle School on Wednesday, October 17, 2012, from 6:00 until 7:30p.m.

I am writing to ask for your assistance in helping students with their projects at Ask-A-Scientist Night this year. Annually, students in Grades 6 - 12 have the opportunity to develop a Science Fair Project. Volunteer scientists advise students on their project ideas, designs, and investigative questions.

**Please contact Jocelyn at (949) 936-5057 to confirm your participation
or e-mail your confirmation to jocelynjazwiec@iusd.org**

If you are aware of colleagues of yours, either engineers, scientists or science/engineering professionals who also may be willing to assist that evening, please have them contact me by either telephone or e-mail so that I can provide them with any details about the program that they may need. This is a unique and fun event for graduate students as well!

Thank you for your willingness to work with the students in Irvine! We look forward to working with you this year! If you have any questions, or I can be of any assistance, please do not hesitate to contact me by telephone or e-mail.

****SAVE THE DATE!** The District Science Fair will be held at Woodbridge High School on February 26, 2013. Those interested in judging would participate from 8:00am to 12:00pm that day. We will send invitations in January.

IEEE Orange County Section Presents:

IEEE OC Student Design Contest (SDC)*

10th International System-on-Chip (SoC) Conference & Exhibit

Engineering & Computer Science Students. . .

IEEE Orange County Section cordially invites you to participate in its 2012 Student Design Contest (SDC)! The Contest will be held on Wednesday, October 24, 2012, at the 10th International System-on-Chip (SoC) Conference Exhibit, at the Irvine Hilton.

The SDC provides an outstanding forum in which graduate and undergraduate students' efforts can be shared with an audience of academic and industrial technical experts. SDC

Project Proposal

The Student Design Contest is designed to encourage engineering and computer science undergraduates and graduates students to work on a new project and present their work at the 10th International System-on-Chip (SoC) Conference Exhibit to a group of judges from industry and academia.

Each project will be judged based on its overall complexity, originality, and completion of the work.

The Design Projects Could Be In . . .

- Hardware Design
- Robotics
- Software Design
- Analog Design
- Digital Design
- EDA Tools
- Chip Design / SoC
- MEMS
- SOI vs. CMOS
- Optics
- Embedded platforms
- Graphics Sub-system
- Instrumentation
- Software Algorithms
- FPGA-Based Design
- Microcontroller-Based
- Embedded Systems
- Design Methodologies
- Detailed Technology Analysis/Research
- Bio-Engineering
- CPUs & DSPs
- Memory Design
- SSD
- I/O Sub-systems
- Web-Related Projects
- And Similar Topics . . .

“Wild & crazy” design projects are also welcomed!

We look forward to hearing from you.

Don't miss out!

**An excellent opportunity to network & promote
Your engineering talent & expertise!**

Dates to Remember

- (1) **Monday, October 1, 2012:** Deadline for submission of Design Contest Proposal/Abstract (i.e., 1-2 paragraphs in MS Word) and your short biography.
Submit to: SoC@SoCconference.com
- (2) **Monday, October 22, 2012:** Deadline for submission of Final Report (in MS Word or PowerPoint).
Submit to: SoC@SoCconference.com
- (3) **Wednesday, October 24, 2012:** Projects will be reviewed and winners will be announced at the 10th International SoC Conference Exhibit reception starting at 5:00 PM, at the Irvine Hilton.

Prizes

- (1) **The first 40 students who submit their FINAL report/papers will receive a Western Digital Passport Hard Drive!** You must be at the event on Wed, Oct. 24, to receive your WD Hard Drive. No Exceptions!
- (2) First Prize: \$500.00
Second Prize: \$300.00
Third Prize: \$200.00
- (3) All participating students (who have submitted their Final Report) will receive a “2-Day Conference package.”
- (4) Names and pictures of the winners will be displayed on the SoC Conference and IEEE OC Section websites.

Contest Rules

- Final Report format must be in MS Word or PowerPoint.
- Poster size: 24x36 (or slightly larger).
- Poster presentation date: Wed, Oct. 24.
- Students must be at the SoC Conference Exhibit Room for poster setup & to discuss their projects with the judges at 5:00 pm on Wed, Oct 24.
- Check the SoC Conference website for updates.

* SDC Program is subject to change. Savant Company Inc. and the SoC Conference Organizing Committee reserve the right to revise or modify the above program at its sole discretion. Please visit the SoC Conference website for updates and changes.

Questions

Please send your questions to: SoC@SoCconference.com or Visit the following websites:
www.SoCconference.com/students.htm
www.ieee.org/ocs



Sponsors

We thank the sponsors:



INTELLECTUAL 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

IEEE Fellow Profile: Dr. Mehdi Hatamian

Mehdi Hatamian received his B.S. degree in Electrical Engineering from Sharif University of Technology in 1977, and M.S. and Ph.D. degrees in Electrical Engineering from the University of Michigan in Ann Arbor, in 1978 and 1982 respectively. From 1978 to 1982, he worked for NASA's Space Shuttle program, developing hardware and software designs to support in-flight biomedical experiments. From 1982 to 1991, he was a member of the Visual Communications Research and the VLSI



Systems Research departments of Bell Laboratories, where he was named Distinguished Member of the Technical Staff in 1988. From 1991 to 1996, he was Vice President of Technology at Silicon Design Experts (SDE), Inc., a company he co-founded. SDE was acquired by Level One Corp. in 1996 which was later acquired by Intel Corp. Since 1996, he has been with Broadcom Corporation where he is currently the Vice President of Engineering for Micro-electronics. Broadcom Corporation employs close to 11,000 people worldwide and is one of the largest fab-less semiconductor companies in the world. Dr. Hatamian's areas of expertise are high-speed VLSI signal processing, full-custom and low power circuit and architecture design, image processing and compression, adaptive filtering, Ethernet transceiver design, high-density and high-speed CMOS design, high temperature superconductors, and biomedical electronics. He has published 50 papers in his areas of expertise and holds 83 issued patents with several patents pending. Dr. Hatamian received the "#1 Patent Holder" award from Broadcom Corp. for 2005-06 and 2006-07, and the Broadcom Fellow award in 2011. He received the University of Michigan's ECE Division Alumni Merit Award for 2008. He has served on the Engineering Advisory Council of the University of Michigan from 2006 to 2012. He has participated in numerous national and international conferences and other professional activities in his field as keynote speaker, organizer, session chair, panelist, invited lecturer, and moderator. He is on the board of directors of Panacea Pharmaceuticals, Inc. and Pharmacokinetics, Inc.

Dr. Hatamian received his IEEE Fellow award for his contribution to the design of high-performance digital signal processors.

Sept. 27 California Workshop to Explore Plans for

National Network for Manufacturing Innovation

The Advanced Manufacturing National Program Office (AMNPO), in partnership with state and national organizations, is inviting interested parties to the third in a series of regional workshops to introduce and encourage public discussion of a planned National Network for Manufacturing Innovation (NNMI). “Designing for Impact III: Workshop on Building the National Network for Manufacturing Innovation” (http://manufacturing.gov/amp/event_092712.html) will be held on September 27, 2012, at the Arnold and Mabel Beckman Center of the National Academies of Sciences and Engineering at the University of California (UC) Irvine.

Local hosts and co-organizers for this workshop event include the National Academy of Engineering (NAE), the National Academies’ Government-University-Industry Research Roundtable (GUIRR) and University-Industry Demonstration Partnership (UIDP), NASA’s Jet Propulsion Laboratory (JPL), and UC Irvine.

The AMNPO was established to coordinate federal resources and programs across agencies to enhance technology transfer to U.S. manufacturers. The office is hosted by the National Institute of Standards and Technology (NIST) in partnership with the Department of Defense, the Department of Education, the Department of Energy, NASA and the National Science Foundation.

The NNMI is a planned network of up to 15 regional “Institutes for Manufacturing Innovation” (IMI) proposed in the President’s FY 2013 budget. Operated as public-private collaborations, the institutes would address current gaps in manufacturing innovation by connecting research advances at academic institutions and federal laboratories with the nation’s manufacturing community. Each institute will serve as a regional hub of manufacturing excellence, with programs tailored to regional needs.

Workshop participants will learn about the principles and concepts behind the NNMI and participate in interactive sessions designed to solicit ideas on how to best structure the network and the institutes. Workshop sessions will focus on:

- technologies with broad impact,
- institute structure and governance,
- strategies for sustainable institute operations, and
- workforce education and development.



The Beckman Center of the National Academies at the UC Irvine

Additional information on times, fees, the venue and local accommodations is available at http://manufacturing.gov/amp/event_092712.html, and in today’s notice in the Federal Register at www.gpo.gov/fdsys/pkg/FR-2012-08-21/pdf/2012-20535.pdf.

On-line registration for the workshop will close at 11:59 p.m. Pacific time on Tuesday, Sept. 18, 2012.

To register for this event, go to www.calit2.uci.edu/calit2-events/EventOrderRegistration.aspx?eid=552.

For additional information—

- On the National Network for Manufacturing Innovation: www.manufacturing.gov/amp/overview.html
- On the Advanced Manufacturing National Program Office: www.manufacturing.gov/amp/ampnpo.html
- On previous Designing for Impact workshop reports:
- Rensselaer Polytechnic Institute, April 25, 2012, <http://manufacturing.gov/amp/rpi-summary-of-results.pdf>
- Cuyahoga Community College, July 9, 2012, http://manufacturing.gov/docs/FINAL_Summary-AMNPO-Workshop-Ohio_2012-07-09.pdf
- On the May 4, 2012, Request for Information on the NNMI: <http://manufacturing.gov/amp/nnmi-rfi20120427.pdf>

Coastal LA Section Presents

CLASTECH Symposium and Exhibition Antenna and Microwave Technology [v3]

October 12, 2012
Hacienda Hotel • El Segundo, CA
Exhibition & Poster Sessions

There will be an exhibition with local and national vendors.

10 AM to 3:30 PM

There will also be a student poster session during lunch

ROOM A- Microwaves

8:30 AM (Order TBD)

Session A1 Topic

“High Linearity, High Efficiency Ka-Band GaN Power Amplifier”, by Paul Blount, CustomMMIC

“Active Integrated Circuits for Terahertz Communication” by Ingmar Kallfass, Karlsruher Institut für Technologie (KIT)

10:10 - 10:40 AM Break

(Exhibit Opens at 7:30 AM)

10:40 AM

Session A2 Topic

“RFIC for Microwave Applications (TBD)”, by Prof. Gabriel Rebeiz, UCSD

11:30 AM – 1:00 PM Lunch

Lunch and the Student Poster Competition

1:00 PM – 3:00 PM 3rd Session

Session A3 Topic

“Implantable Wireless Medical Devices and Systems” by J.C. Chiao, Univ. of Texas at Arlington

“Commercial Applications for RF MEMS” by Stepan Lucyszyn, Imperial College

London

3:00 – 3:30 PM Break

(Exhibition Closes at 3:30 PM)

Student Poster Competition

Phil Arnold

Terry Cisco

Register Online: <http://clastech2012.eventbrite.com>

Download this flyer

<http://home.earthlink.net/~clastech/clastech.pdf>

ROOM B- Antennas

8:30 AM (Order TBD)

Session B1 Topic

“Detectors, and Sources for Terahertz Science and Technology”, by Dr. Goutam Chattopadhyay, JPL

“Development of Compact High Performance Antenna Feeds for Space Application”, by Dr. Clency Lee-Yow, CMI

10:10 - 10:40 AM Break

(Exhibit Opens at 7:30 AM)

10:40 AM

Session B2 Topic

“Recent Advances in Leaky-Wave Antennas”, by Dr. David Jackson, Univ. of Houston

11:30 AM – 1:00 PM Lunch

Lunch and the Student Poster Competition

1:00 PM – 3:00 PM 3rD Session

Session B3 Topic

“Low-Profile High-Efficiency Planar Antennas for Aeronautical, Mobile, and Fixed SATCOM Applications” by William Milroy, Chairman and CTO, ThinKom Solutions, Inc.

“Modeling the F-16 Phased Array” by Dane Thompson, Ansys

3:00 – 3:30 PM Break

(Exhibition Closes at 3:30 PM)

For More Information Contact

Charlie Jackson c.jackson@ieee.org

Steering Committee

Chair: Charlie Jackson

TPC Chair: Arvind Sharma

Antennas: Arun Bhattacharyya, Sudhakar Rao, John Gianvittorio, Frank Villegas

Microwaves: Vesna Radisi, Kevin Leong

Student Posters: Phil Arnold- TBD

Terry Cisco- TBD

Local Arrangements: Bryan Takamiya, Brian Welles, Manny Olemedo, Alan Reynolds, Sharon Fletcher, Steve Swift

IEEE GLOBECOM 2012 The Magic of Global Connectivity

The 2012 IEEE Global Communications Conference (GLOBECOM) will be held December 3 – 7, 2012 at the Disneyland Hotel Conference Center in Anaheim, CA.

It will feature a comprehensive technical program including 12 Symposia and a number of Tutorials and Workshops. GLOBECOM 2012 will also include an attractive industrial and forum program including keynote speakers, various Business, Technology and Industry fora, and vendor exhibits.

Prospective authors are invited to submit original technical papers for presentation at the conference and publication in the Proceedings. Proposals for Tutorials, Workshops, and Fora are also invited. Please visit the GLOBECOM 2012 website: <http://www.ieee-globecom.org/2012> for details about the conference and submission information;

If you are interested in volunteering for the conference, please contact Shelley-Grace Herman, Conference Operations Chair at s.g.herman@ieee.org.

Welcome New Members

Full Name	IEEE Current Grade Description
Hanchel Cheng	Student Member
Grant Edward Moe	Student Member
Chou Gech Lov	Student Member
Kyle Pan Feng Shiue	Student Member
Jason Tan	Student Member
Camille B Macalinao	Student Member
Eli Uc	Student Member
Jared Leung	Student Member
Archibold Jude Acquah	Student Member
Sahar Amirazodi	Graduate Student Member
David Broeckelman-Post	Member
Steven Bui	Student Member
Angela Burgess	Associate Member
Gary Campbell	Member
Lucia Diaz	Student Member
Marcus p Escobosa	Member
Chantal Fry	Student Member
Joseph Fudali	Member
Theodore Gamester	Member
Brandon Gutierrez	Student Member
Jimmy He	Graduate Student Member
Chris Healy	Member
Mohammad Esmaeil Heidari	Member
Sehwan Kim	Graduate Student Member
Kelvin Lee	Student Member
Jun Luan	Graduate Student Member
shilpa Marti	Member
Ximena Milla	Student Member
Edwin Mora	Student Member
Mona Morrow	Member
Roozbeh Naderi	Graduate Student Member
Brian Nederlof	Member
Carol Peterson	Member
Justin B Rowe	Graduate Student Member
Evan Seigler	Student Member
Sahil Shah	Student Member
Tej Shiwakoti	Student Member
Martin Shotzberger	Member
Brenton Ross Simon	Graduate Student Member
Jaime Sorto	Student Member
Shane Philip Stahlheber	Student Member
Mirwais Wardak	Graduate Student Member
Sabra Domeika	Graduate Student Member
Donjon Baclig	Student Member
Cliff Huang	Student Member
Catherine Pittman	Graduate Student Member
Sandra Hom	Student Member
Daniel J Whiting	Graduate Student Member
Faraz Milani	Student Member

2012 IEEE Orange County Section — Executive Committee

Section Officers:

Chair

Dr. John Collins
(949) 419-7652
collins.at.ieee.org

Vice-Chair

Mr. Alvin Joseph
(714) 552-2489
alvin.at.ieee.org

Treasurer

Mr. Mario Manansala
(714) 906-9025
manansala.at.ieee.org

Secretary

Dr. Shireesh Verma
(949) 258-3243
shireesh.at.gmail.com

Past Chair

Mr. Russell Hunter
(714) 248-5440
RussellH.at.Computer.org

IEEE-OC Technical Society Chapters:

Communications / Signal Processing Joint Society (COMSIG)

Mr. Glenn Fogarty
(714) 701-1031
gfogarty.at.earthlink.net

Components, Packaging and Manufacturing Technology Society (CPMT)

Mr. Sam Karikalan
(949) 413-0029
samkarikalan.at.ieee.org

Computer Society (OCCS)

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

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
(310) 259-0767
hector.delossantos.at.ieee.org

Power & Energy / Industry Applications Society (PES/IAS)

Mr. John Briones
(714) 593-5100
jbriones.atcarollo.com

Product Safety Engineering Society (PSES)

Mr. Scott Smith
(714) 223-3624
Scott.Smith.at.ul.com

Robotics & Automation Society (RAS)

Mr. Kumar Ramajayam
(949) 422 5497
rkumar.at.mathobotix.com

Solid-State Circuits Society (SSCS)

Mr. Farhad Mafie
(949) 851-1714
FarhadMafie.at.Gmail.com

GameSIG

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

Orange County Entrepreneurs Network (OCEN) SIG

Mr. Farhad Mafie
(949) 851-1714
FarhadMafie.at.Gmail.com

Student Chapter Chairs:

Student Sponsor

Dr. David Cheng
(714) 278-3734
dcheng.at.exchange.fullerton.edu

CSUF Student Chapter

Mr. Mathew Poole
matthewpoole87.at.yahoo.com

EMBS Student Chapter

Wesley Moy

UCI Student Chapter

Mr. Derrick Lo
ieee.ucirvine.at.gmail.com

UCI Students Chapter Faculty Advisor

Dr. Pai Chou
(949) 824-3229
phchou.at.uci.edu

Committee Chairs:

Advisory Board

Dr. Raman M. Unnikrishnan, IEEE Fellow
(657) 278-3362
runnikrishnan.at.exchange.fullerton.edu

Awards/Recognition

Mr. Russell Hunter
(714) 697-5540
RussellH.at.Computer.org

AutoTestCon Liaison

Mr. Phil Wheeler
plwheeler.at.ieee.org

Community Partnerships

Dr. Goran Matijasevic
goran.at.uci.edu

Conference

Mr. Farhad Mafie
(949) 851-1714
FarhadMafie.at.Gmail.com

Corporate Relations

Mr. Abdi Ahmed
(949) 752-6788
abdi.at.netserverssystems.net

CTO

Ms. Naveen Reddy
naveen.reddy.at.ieee.org

Engineers-in-Transition (EIT)

Dr. Shireesh Verma
(949) 258-3243
shireesh.at.gmail.com

Government Activities

Vacant

Humanitarian Technology Initiative

Mr. R Sampath
(323) 908-4306
rsampath.at.ieee.org

Listserve/Email Manager

Ms. Christine Ruther
c.ruther.at.ieee.org

Membership Development

Vacant

Newsletter Coordinator

Mr. Hooman Kankashour
(949) 202-7677
hkankashour.at.gmail.com

Newsletter Editor

Dr. Héctor De Los Santos, IEEE Fellow
(949) 682-7702
hector.delossantos.at.ieee.org

OCS History committee

Dr. Stanley White, IEEE Fellow
(949) 498-5519
sawhite.at.aol.com

PACE & Student Activities

Dr. David Cheng
(714) 278-3734
dcheng.at.exchange.fullerton.edu

Programs

Dr. Ciaran O'Donnell
ciar.an.at.josephmediatools.com
(949) 200-2111

Project Engineers-2-Educators, OC

Mr. Brian Hagerty
bjhagerty.at.gmail.com
(949) 257-2381

Social Media Chair

Mr. Noah Flaum
nflaum.at.gmail.com

Tutorial Chair

Mr. Raymond Koosha
858-401-9688
raymondkoosha.at.yahoo.com

vTools Coordinator

Ms. Lin Crampton
562-243-4574
lin.crampton.at.gmail.com

Volunteer Coordinator

Vacant

Webmaster

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