IEEE

the LYNX

July 2012

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

ORANGE COUNTY SECTION

The Chair's Corner:

Greetings!

Hope you are all enjoying a great Summer. As we pass the halfway point in the year, I want to reiterate all current and future members to take the opportunity this year to become active within the Section. You will learn IEEE is so much more than just standards, magazines and meetings.

For those of you who are still in Orange County in this Summer we have a few programs that we list in this Newsletter. We wish a safe travel for those of you who take the Summer opportunity to travel.

We invite you all to join the Section activities with a kick off BBQ in early Fall (Aug 25th Saturday) at the William Mason Park, Irvine.

If you have a topic, and you think you might be interested in presenting at a seminar format, please contact me or one of the executive officers in our website. The mark of a true professional is not just what they know, but also what they give back to their profession. We can together help our members.

Lastly, we always have positions open for the young and the old who can complement with visions and dreams. Please mail me a note.

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

Upcoming Section BBQ Event

IEEE Orange County Section (IEEE-OCS) is joining with the local society chapters and their families in hosting the 2012 annual IEEE Orange County family picnic. Come one, come all.

William R. Mason Regional Park
18712 University Drive, Irvine CA 92612, Shelter #: 5

August 25, 2012, 10 a.m. – 4 p.m.

Food provided, parking $5/vehicle, tickets are $5 per family on Eventbrite or at the event

Children and pets are most welcome as are non IEEE friends

IEEE Orange County section family picnic in Irvine

This is an excellent opportunity to meet fellow IEEE members and their families in a relaxed outdoor setting as a new school year begins, and to know each other better.

The IEEE Orange County Section picnic will be held from 10 a.m. to 4 p.m. on Saturday August 25th at Mason Regional Park in Irvine. There will be fun activities including volleyball matches, fun activities for children, and a science program. Please contact the host via the right side of the page if you are interested in volunteering for these activities.

To register for this event, please use Eventbrite with the following link: ieeeocspicnic.eventbrite.com

- Location: It will be at Shelter 5. William R. Mason Regional Park is located inside the city of Irvine. To reach the park take the San Diego Freeway (405) to the Culver Avenue turnoff. Head south on Culver to University Drive, then west (right) to the park entrance. To access Shelter 5 drive all the way down the entrance road till you reach the lake and turn left. The parking fo shelter 5 will be on your left in about two hundred yards.
- Food: IEEE Orange County Section will provide hamburgers and hotdogs cooked on the on site grills by volunteers. If you are interested in bringing a special dish that reflects your tastes or culture, please let us know. We need to know if it is a sampler, a fruit dish, a main dish, or a dessert and how many servings you expect as well as if you need any facilities.
- Drinks: Soft drinks and water provided by IEEE Orange County Section.
- Amenities: A sink, electricity, and grills are available. IEEE Orange County section will provide charcoal.
- Activities: Science activities, children's fun, volleyball will be announced. A playground is nearby

Pets/Children: Dogs are permitted only on a leash and must be kept away from food. No skateboarding, please. A playground is available next to the camp spot. Parents are responsible for supervising their children and pets.

For more information: In case of any questions please contact the Volunteer Program Chair via email at c.odonnell@ieee.org or by telephone to 949-205-8117.

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

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 level, 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 Mtgs, 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 sampath@quantaco.com. 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

- Reported by Mr. Glenn Fogarty, Chair ComSIG

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 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

IEEE

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

Proposal for IEEE Member Professional Advancement at the OC Section

Overview

Today, engineering professionals are competing for jobs at a World-level scale and this forces such professionals to endeavor for keeping themselves at the forefront of technology.

The majority of high tech companies are solely interested in candidates who possess new subject knowledge and have gained fresh experience of particular disciplines.

In the wake of such imminent changes in technology, most engineers who have lost their jobs need to improve themselves to succeed in developing a promising career. This applies to, even, those talents who have jobs but not sure how long more they can cling to their jobs.

Proposal

1. To assemble a panel of experts, including hiring managers of some well-established companies in Orange County, directors and lead engineers to discuss corporations' expectations from engineers (HW & SW).

2. The above panel may suggest quick and efficient ways for improvement for those engineers who need to enhance with new knowledge and skill sets.

3. This plan to be kept alive by presentation of various technical tutorials, seminars, and the like on new advancements in the field of electrical engineering and computer science. This includes introducing good textbooks, papers, websites and other useful resources by experts.

4. IEEE OC Section will also help the engineers at the Section to get recruited in the companies through corporate relation.

Note: The above efforts can be shared or coordinated with all Region 6 Chapters for better implementation.

Contact: Raymond Koosha
raymondkoosha@yahoo.com

Friends of IEEE OCS Event

SBA/SCORE Workshop

Date:	Saturday July 14, 2012
Topic:	Advanced QuickBooks Training Lab
Requirements	1. Working knowledge of QuickBooks 2. Attendees must bring a laptop computer loaded with their company's QuickBooks files
Abstract:	An in-depth, hands-on lab that addresses concerns beyond standard operational issues. Using your individual QuickBooks company file, a step-by-step action plan will be developed to answer your concerns. We will use QuickBooks as a tool to address concerns of taxation, incorporation, government grants, DCAA audits, loan underwriting, and much more. This is a working lab limited to a few attendees only. You will get one-on-one attention from experts to address real and specific concerns on your existing company file. The lab is not a typical instructional workshop, but one that allows each attendee to solve their own company's issues. This is a unique class. Most classes only teach, never fix problems, and rarely give an action plan, but more of a broad based approach. This lab does it all. Each attendee will receive "QuickBooks Advanced Techniques" handout.
Speaker:	This lab will be presented by C. P. Krishnan and other industry experts. CP has extensive experience and advanced certifications in the field of Accounting, Auditing, Finance, and Governmental Contracting. He also holds an MBA and is an expert in FISMA & the DCMA Special Programs division. He has participated in numerous audits and successfully achieved multiple quick contract closeouts. CP is a senior partner of CAK, a consulting firm providing training, accounting, business development, and governmental contracting services throughout the entire country since 1996. The speaker C.P.Krishnan was the kick of speaker in 2012 IEEE Section events and his talk on Account for Engineers was well received by the audience.
Time:	9:00 AM to 3:00 PM
Location:	CAK International, LLC 18 Technology Drive, Ste 129 Irvine, CA 92618
Cost:	Online only - No Walk-ins – $180 One additional registrant from same company – $90
Note:	Lunch Included
Contact:	http://www.eventbrite.com/event/3786425300

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

James Webb Space Telescope: Engineering Challenges

Date:	**Monday, July 23, 2012**
Topic:	**James Webb Space Telescope: Engineering Challenges**
Speaker Name and Affiliation:	**Dr. Jonathan Arenberg**
Abstract:	The James Webb Space Telescope (JWST) is the successor to the Hubble Space Telescope, and presents one of humanity's greatest opportunities to learn about deep space. This talk, sponsored by the Orange County IEEE Computer Society (OCCS), the IEEE Aerospace and Electronics Systems Society (AESS), and the American Institute of Aeronautics and Astronautics (AIAA) will feature Jon Arenberg, the Chief Engineer at Northrop-Grumman working on the JWST project.
	All projects that involve putting high quality optics into space have unique engineering challenges. Jon will focus on these challenges presented by the JWST, and explain how it improves over the Hubble Space Telescope. He will also explain the background of the project, including what we have learned from Hubble, and the new knowledge we expect to get from the JWST.
	Our James Webb Flagship Astrophysics mission has passed its mission critical design review, with a number of subsystems and components having completed flight manufacture and test. This talk will visit the main features of the JWST Observatory design; the telescope, sunshield, spacecraft bus and integrated science instrument module. The status of the design and where appropriate, the manufacturing status of the flight hardware will be reviewed. This talk will share the current expectations of critical areas and the challenges that lay ahead on the path to assembly integration and test and finally flight.
	Highlights of the software engineering challenges encountered as this project pushed the applied physics envelope in optics, engineering and software implementation will also be discussed.
Biography:	Dr. Jonathan Arenberg has been with Northrop Grumman Aerospace Systems since 1989, having started with Hughes Aircraft Company. His work experience includes optical, space and laser systems. Dr. Arenberg has worked on such astronomical programs as the Chandra X-ray Observatory, James Webb Space Telescope and helped conceive and develop the New Worlds Observer concept for the imaging of extra-solar planets. He has worked on major high-energy and tactical laser systems, laser component engineering, metrology and optical inspection issues. He is a member of the ISO sub-committee charged with writing standards for laser and electro-optic systems and components, SPIE, American Astronomical Society, AIAA and Sigma Xi.
	Dr. Arenberg holds a BS in physics ('83) and both an MS ('85) and PhD ('87) in engineering, all from the University of California, Los Angeles. He is the author of over 100 conference presentations and publications, and holds 11 U.S. Patents in a wide variety of areas of technology with US and foreign patents pending. He is currently the Chief Engineer for the James Webb Space Telescope Program at Northrop Grumman.
Time:	6:00 PM to 9:00 PM
Location:	Doubletree Club Hotel 7 Hutton Centre Drive Santa Ana, CA 92707
Cost:	Dinner (IEEE or AIAA Members) – $30 Dinner (Student/Unemployed IEEE Member) – $20 Dinner (non-members) – $40 Presentation Only (Free) – Free
Contact:	Don V Black, OCCS Chair

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IEEE Orange County Consultants Network (OCCN) joins with the Los Angeles Area Consultants Network (LAACN) and the IEEE Foothill Section PACE in hosting:

Dr. Gary L. Blank

**IEEE-USA Vice-President
Career and Member Services and Candidate
for IEEE-USA
President-Elect 2013**

New IEEE Tools, Services, Programs, and Networks for Consultants, Entrepreneurs, the Employed and the Unemployed

Abstract: What can the IEEE-USA do for you? Dr. Gary L. Blank, IEEE-USA Vice-President, Career and Member Services, will describe new tools, new services, and new programs, and updates on older ones, at this special meeting. These are all designed to advance the careers, practices, and networking of consultants, entrepreneurs, those who are employed, and those who are unemployed.

During his talk, Dr. Blank will explain how the Consultants Networks function, and how they interface and work with other IEEE organizations including the Sections, PACE, Chapters and Societies, WIE Women in Engineering, GOLD, and Life Members. He will describe the powerful IEEE-USA Consultants Database website and how it helps consultants find clients. He will also talk about the newly-formed IEEE-USA Entrepreneurs Networks and how effective they are in helping members to start new businesses, the new IEEE-USA Employment Networks that are rapidly growing and how they are helping our unemployed members to find jobs, and some of the new career advancement tools and services.

Biographical: Dr. Blank earned his Ph.D. in Electrical Engineering at the University of Wisconsin in Madison. He has been a full-time technical consultant for many years having provided consulting services for more than 40 major corporations and government agencies. He is the founder of the IEEE Chicago/Rockford Consultants Network which has over 200 members, and is the past chair of the AICN (Alliance of IEEE Consultants Networks). He has been a full-time professor of Electrical and Computer Engineering at Illinois Institute of Technology, Northern Illinois University, and Marquette University. He also taught at UCLA, and the University of Florida. He has worked with and consulted with many companies in Southern California. He is currently consulting with the U.S. Department of Energy in the areas of Smart Grid, Electric Vehicles, and Renewable Energy, and with the United Technologies Corporation (Hamilton Sundstrand) in the areas of Control Systems and Power Electronics.

His current IEEE-USA VP responsibilities include over 40 IEEE Consultants Networks in the USA, many of which he has founded for their sponsoring Sections. He also provides a 6-hour workshop/training for the members of the Networks on how to start and how to rapidly expand a successful consulting practice. In addition to the AICN (Alliance of IEEE Consultants Networks) Dr. Blank, as IEEE-USA Vice President, is also responsible for the start-up and management of the IEEE-USA Employment Networks, the IEEE-USA Entrepreneur Networks, the IEEE-USA K-12 STEM Literacy Activities, and the IEEE-USA Professional Engineering Licensure and Registration programs. He is a candidate for IEEE-USA President-Elect 2013, nominated and endorsed by the IEEE-USA Board of Directors.

Date: Wednesday, August 8th, 2012
(Note that this is a change from the time and date announced earlier)

Sponsorship: This meeting is being hosted by the PACE Actiities of the IEEE Foothill Section, in cooperation with the Orange County Consultants Network and the Los Angeles Area Consultants Network. All IEEE members are invited. No charge for food or parking.

Time: 6:30 PM Networking.and food.
7:00 – 9:30 PM Presentation and Q&A.

Location: Diamond Bar community Center, 1600 Grand Avenue, Diamond Bar,CA

The Community Center is located near the intersection of the Freeways 57 and 60, with the Freeways 10 and 210 fairly nearby. This was selected in order to allow many IEEE members from the LA Metropolitan Area, as well as the Inland Empire and Orange County to attend. Free parking on site, but car pooling is recommended. Use your travel time to network.

Future Meeting: A meeting is being planned for the fourth Saturday in September, with the meeting again in the Engineering Buildig at Cal State Fullerton at 10:00 AM. Mark your calendar and watch for the announcement.

r.gauger@ieee.org

IEEE Orange County Computer Society (OCCS) and the American Institute of Aeronautics & Astronautics (OC-AIAA) are Pleased to Present:

Advanced Propulsion Systems, Beyond Rocket Science – An Overview

Date:	Aug 27, 2012 (the 4th Monday of the month)
Topic:	Advanced Propulsion Systems, Beyond Rocket Science - An Overview
Speaker Name and Affiliation:	Dr. Don V Black, Director • Digital Choreographic
Abstract:	We have been using the same method to fight gravity and to propel ourselves into space as was devised by the Chinese nearly 800 years ago. Maybe it is time to consider alternative more efficacious approaches. There are many novel ideas for advanced propulsion systems. Some are proposed in Science Fiction, others are mere wishful thinking. But a surprising number are derived from sound principles of contemporary theoretical physics. We will discuss here those that are popper falsifiable, but not yet falsified. There are two major classes of problems for the future of space travel: 1) Escape from this Gravity Well. We can consider the escape from Earth, the Earth-Moon System, the Solar System, and ultimately this Local Group. We are currently spending $10,000 - $18,000 per pound to launch a human into Low Earth Orbit (LEO). That is about $2M per adult passenger. Still a bit pricey for extra-terrestrial colonists. 2) Reasonable Transit Times to other Celestial Bodies. Contemporary Relativity provides us a minimum transit time to the next star of more than four years (4.37 ly). This is unacceptable for commercial human transport. In this presentation I will explore solutions offered by theoretical physicists that have not yet been proven impossible. I will then offer you a list of potential solutions to these two challenges as areas requiring further research. Then, as they say, the minor engineering details of implementation will be left as an exercise for the student.
Time:	6:00 PM to 9:00 PM
Biography:	Don V Black studied Aerospace Engineering at NC State University and Physics at UCI. He has worked in the Aerospace Industry for most of a quarter of a century. He is Director of R&D for Digital ChoreoGraphics, providing research & development services for Fortune 500 Companies such as Ford Aeronutronic, Rockwell Aerospace, and Jet Propulsion Laboratories. At the end of last century, Dr. Black took a sabbatical to earn his MS in the Information and Computer Sciences and his PhD in Electrical Engineering, both from UCI. Dr. Black is a founding member of the Orange County Chapter of the IEEE Aerospace & Electronics Systems Society (AESS), and is an academic member of the American Institute of Aeronautics and Astronautics (AIAA). He also founded the IEEE Game Engineers Special Interest Group (GameSIG) to interest children and students in careers in science and engineering, and currently serves as Chairman of the Orange County Chapter of the IEEE Computer Society. Having built a toy flight simulator at 12 and his first computer at 14, Dr. Black recognizes the importance of children being allowed to pursue their arcane interests early. Don is a private pilot, an amateur musician, a member of the American Physical Society (APS),Sigma Xi - The Scientific Research Society, the UC SC Philosophy of Physics Group, and is conducting research for his new work on the Engineering of Spacetime.
Location:	Doubletree Club Hotel : 7 Hutton Centre Drive, Santa Ana, CA 92707
Cost:	Dinner (IEEE or AIAA Members) – $30 Dinner (Student/Unemployed IEEE Member) – $20 Dinner (non-members) & (no RSVP) – $40 Presentation Only (Free)
RSVP:	Link: http://occs-120827.eventbrite.com/ Email : occs-rsvp@ieee.org
Contact:	Don V Black, OCCS Chair

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, Ansys Corporation
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.:

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News Item Title

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

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Picture

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 PES / IAS Chapter of Orange County Meeting Notification

Designing Power Quality Filtering Systems for VFD Applications

Date and Time:
July 19, 2012 6:00 PM

Presentation Topic:
esigning Power Quality Filtering Systems for
VFD Applications

Speaker:
Wayne Walcott, MTE Application Engineer

The presentation will include a brief discussion of IEEE-519 guidelines from a manufacturer's perspective followed by the various methods of mitigating harmonics to IEEE-519 standards. The advantages and disadvantages of the three most popular methods of harmonic mitigation, active filters, passive filters and multi-pulse drives will be discussed and from an engineering viewpoint when to use one vs. another. Included will be comparisons of each filtering method under various operating conditions and varying utility supply and the effect each has on the overall electrical system.

Wayne Walcott is MTE's application engineering department manager and an IEEE member.

Thursday July 19, 2012

Location: The Doubletree Club Orange County Airport

7 Hutton Centre Dr. Santa Ana, Ca. 92707
Phone: 714-751-2400

Time: 6:00 PM Social - 6:30 PM.
No Host Bar/Dinner - 7:30 PM Presentation

Reservations:
Steve Schinko, Eaton Corp.
25692 Patterson Place, Laguna Hills, Ca. 92653

Tel: 909-869-8250 Fax: 800-884-5804
E-mail: steveschinko@eaton.com

Reservations for dinner should be made by the 16th and checks must be received by the 18th

Meal Cost: $25.00 if reservation received by deadline: $30.00 at the door.

Student members are FREE! program Only attendees (no cost) are also welcome.

Make checks payable to IEEE/PES and mail to:
Steve Schinko (IEEE)

Please specify a dinner entree:
Chicken, Fish, or Vegetarian
A prize drawing will be made at the end of the meeting for those who have prepaid their reservation. The prize will be a free dinner at a future meeting.

Chairman: John Briones: Carollo Engineers, 714-593-5100, JBriones@carollo.com

Vice Chairman: Ian Varley: Parsons Brinckerhoff, 213-304-6140, varleyi1@pbworld.com

Secretary: Khalil Shafiee: QPS, 562-463-6058, kshafiee@quinnpower.com

Treasurer: Steve Schinko: Eaton Corp, 909-869-8250, steveschinko@eaton.com

Publicity: Robert Ryan: GE Energy, 714-572-7117, Robert.Ryan@ge.com

Past Chairman: Mario Manansala: CDM, 949-930-9870, manansalamu@cdm.com

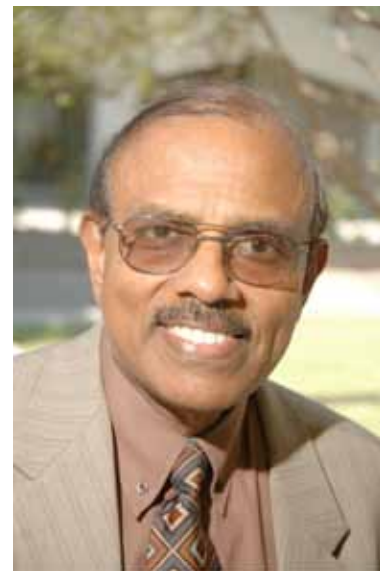PACE: Randy Denton: CH2M Hill 714.435.6120, Randy.Denton@CH2M.com

IEEE Fellow Profile:
Dr. Raman Menon Unnikrishnan

Dr. Raman Menon Unnikrishnan is the Dean of the College of Engineering and Computer Science as well as a professor of Electrical Engineering and Computer Engineering at California State University, Fullerton. He has also been a consultant to several industries and governmental agencies, and has been involved in technical and professional education for industries. He is active nationally and internationally in the field of engineering education and engineering accreditation.

Prior to joining Cal State Fullerton in 2001, Dr. Unnikrishnan was on the faculty of the Rochester Institute of Technology in Rochester, New York where he also served as Associate Dean for Graduate Studies and Research for the College of Engineering from 1989 to 1991 and as the Head of the Electrical Engineering Department from 1991 to 2001. He received his doctorate degree in electrical engineering from the University of Missouri.

Dr. Unnikrishnan is a past Chairman for the Rochester Section of the Institute of Electrical and Electronic Engineers (IEEE) and has chaired many governing committees of the section. Among the many honors and recognitions he has received include the Eisenhart Award for Excellence in Teaching at RIT, a special Professionalism Award from the Xerox Corporation and an IEEE Region 1 Award for Leadership on advancing the continuing education needs of the engineering community. In 2000, he received the IEEE Third Millennium Award for Outstanding Achievements and Contributions. In 2006 he received the Missouri Honor Award for being an outstanding alumnus. In April 2009, he was bestowed the "Distinguished Engineer" by South Dakota State University. Since 2008 he has been a Commissioner of the Engineering Accreditation Commission of ABET. Also, since 2008 he has also been an ABET-designated mentor representing US to the National Board of Accreditation in India.

Dr. Unnikrishnan is a Fellow of IEEE, a recognition that was accorded to him for contributions to automatic control systems and power electronics education.

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.

Coming to Santa Clara, CA 28-29 September
Santa Clara Convention Center

Don't miss out -
Register by 3 August to receive Early Bird rates!

Immerse yourself in full-day workshops on some of the most in demand technology areas in the Santa Clara area:

- Embedded Software: iPhone, Android and Embedded Linux
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Individual registration is $300 per person and there are a limited number of seats available. The day's outing begins at 1:00 p.m. with a shotgun start followed by reception.

Visit the registration page for more information and make your reservation NOW.
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We're Looking Forward to Seeing You There!

If you have any questions, please send us an email via pes-gm-golf@ieee.org

Thank you and we look forward to seeing you at Torrey Pines!!

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