### May 2012 Newsletter

#### Tuesday, May 8
- **ComSoc**: Antenna Roadmap for Satellite Communications Systems  
  *Fayez Nima, TECOM Industries Inc.*  
  6:30 pizza, networking, 7pm presentation  
  Skyworks, 2440 West Hillcrest Drive Newbury Park, CA 91320  
  Register: [https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843](https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843)

#### Wednesday, May 9
- **Computer**: FIRST Robotics, High Velocity Engineering Training for High School  
  *Sam Rice, George Randal, Alice Zeilinski, Eric Lu*  
  Richter Auditorium, California Lutheran University  
  6:30 pizza, networking, 7pm presentation  
  Registration: [https://meetings.vtools.ieee.org/meeting_view/list_meeting/12317](https://meetings.vtools.ieee.org/meeting_view/list_meeting/12317)

#### Monday, May 21
- **Section**: Operating Committee Meeting (tentative)

#### Wednesday, May 30
- **EMBS**: Novel Developments for Reducing Cerebral Edema after Severe Traumatic Injury  
  *Prof. Victor G. J. Rodgers, UCR*  
  6pm dinner ($10 at door, no RSVP), 7pm discussion  
  California Lutheran University Ahmanson Hall (ASC 100)  
  Contact: Abigail Corrin, acorrin@clunet.edu

#### May
- **ED/CAS MTTS PES RAS**: No events planned this month.
Membership Development

2012 Membership

Remember to renew for 2012!

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

To apply to join, see

http://www.ieee.org/join or http://www.computer.org/join

– Christian Ziegler, Membership Development

Please Welcome Our Newest Members to the IEEE

Please join us in welcoming our newest members:

- Jennifer Branstetter
- Charles Gay
- James Goff
- David Gulbransen
- David Marx
- Dieter Sauer
- Thord Setsaas
- Anthony Tomlinson

Members can find and make contacts by searching MemberNet at the IEEE Member Portal. For new members, please update and share your information at the portal to help connect you to everyone, and remember to set up your new IEEE email.

Job Opportunities

Are you an EE?

Second Sight (www.2-sight.com) in Sylmar is searching for a QUALITY ENGINEER who is an EE. Great company, stock options, excellent opportunity.

Contact Pat Jacobs
805-579-0630
pat.jacobs@advancedpersonnelprofiles.com

Sr. Electrical Engineer

Alfred Mann Foundation (www.aemf.org) in Valencia is searching for a Sr. Electrical Engineer who can design, analyze & perform PCB layouts for analog, power supply, RD & embedded digital designs. This is a premier medical device research organization!

Contact Pat Jacobs
805-579-0630
pat.jacobs@advancedpersonnelprofiles.com

Electrical Engineer

Pasadena medical device company searching for EE with 3-5 yrs experience. Need analog and digital circuit design experience. Able to write basic code for device control and Labview.

Contact Pat Jacobs
805-579-0630
pat.jacobs@advancedpersonnelprofiles.com
Power and Energy Society

BV PES is looking to rejuvenate its meeting schedule for 2012. If you are interested in energy (renewable, clean, dirty, nuclear, green, etc.), smart grid, distribution, smart meters, switching stations, home grid, electric cars and so forth, please contact contact Bridge Carney at bcarney@ieee-bv.org.

-- Bridge Carney, PES Chair, Section Vice Chair

Have an Announcement?

If you have an event or news, IEEE or otherwise, that is of interest to IEEE members please send it to Zak Cohen, newsletter@ieee-bv.org, so it can appear in the newsletter and the website. If you wish to write for the newsletter or website, please contact Zak or a Chapter chair.

--Zak Cohen, Section Secretary

Product Manager

Bioness (www.bioness.com) in Valencia is searching for a senior product manager who has experience in the OR. This position responsible for new implantable product line & will interact with surgeons, commercial executives & be a key member of the marketing team.

Contact Pat Jacobs

805-579-0630
pat.jacobs@advancedpersonnelprofiles.com
Does Buenaventura Section have history?

Does it ever! Nearly 50 years of it!!

In 2013 we will be celebrating BV Section’s 50th anniversary.

We need your stories, pictures, officer names, activities, memorable outings, Engineers Week participation, and anything else that will tell BV Section’s story. If you have any of these, or any memorabilia you can loan or donate, please contact:

Doug Askegard, Section Historian
dougaskegard@ieee.org
Phone: 408-425-3060

Thank you!
Antenna Road Map for Satellite Communication System

Abstract: Satellite communications is one of the vital solutions to the increasing demands for global and high data rate communications. In satellite communications, the RF signal is often low power, therefore, the Effective Isotropic radiated power (EIRP) and the Gain over Temperature (G/T) are extremely important parameters for any satellite communication system. An antenna system is a crucial part of any communication system and a key factor to achieve a compliant satellite communication system. This presentation will address a practical road map to design a compliant antenna to be used on a satellite communication system.

Speaker: Mr. Fayez Nima

Biography: Mr. Fayez Nima is a RF and Antenna Section Manager for TECOM Industries, Inc. His education and experience background include:

- BSEE from Damascus University, 1990
- MSEE/Microwave and Antenna Engineering from Cal. State University, Northridge (CSUN), 1997.
- TECOM Industries, Inc. 2005 to present. Currently working on airborne antenna systems used for satellite communications.

Date and Time: Tuesday, May 8th, 2012

Location: Skyworks, 2440 West Hillcrest Drive Newbury Park, CA 91320

Agenda: 6:30 p.m. Dinner, & Networking

RSVP Requested: https://meetings.vtools.ieee.org/meeting_view/list_meeting/9843
FIRST Robotics, High Velocity Engineering Training for High School

Sam Rice, George Randal, Alice Zeilinski, Eric Lu

The Newbury Park High School Pantherbots team recently competed in the Los Angeles Regional FIRST Robotics Competition. This is a unique competitive engineering challenge wherein students are given 6 weeks to design, build, program, test, and debug a robot to play a prescribed game against other robots. This year the game involved collecting and shooting basketballs into regulation size hoops as well as balancing with other robots on unstable bridges. Students from the team will discuss their experience including the project management process as well as technical details of the robot they developed. Critical design issues were; the mechanical design and its relation to the physics of basketball; the electrical system including power management and a distributed control system; control and driver interface; a vision system providing real time video as well as image processing and data extraction for targeting.

Where:
Richter Auditorium, California Lutheran University, 60 W. Olsen Rd, Thousand Oaks

When:
Wed 9 May, 6:30pm Networking, 7:00pm Presentation

More Info:
http://www.ieee-bv-cs.org/2012/04/30/first-robotics-high-velocity-engineering-training-for-high-school/
May 30 – Novel Developments for Reducing Cerebral Edema after Severe Traumatic Brain Injury

Prof. Victor G. J. Rodgers, UC Riverside

Traumatic brain injuries contribute to a third of all injury-related deaths in the United States. While the primary damage occurs at the time of injury, doctors also have to mitigate the secondary disease processes — including brain swelling — that occur after a traumatic brain injury. Cerebral edema, an increase in the water content of brain tissue, can be caused by brain injury, stroke, infections and brain tumors. That swelling can lead to pressure that reduces blood flow to the brain, even to the point of death. To prevent this, Professor Rodgers’ group is developing a treatment to remove water from the brain, an osmotic water extraction device. This work could have broad implications not only for shooting victims like Rep. Gabrielle Giffords, but for veterans and anyone with traumatic brain injuries.

Professor Victor G. J. Rodgers

Dr. Rodgers is Professor of Bioengineering at University of California, Riverside. Over his long and distinguished career, Dr. Rodgers has attained numerous honors, including Fellow, American Association for the Advancement of Science (AAAS), Fellow, American Institute for Medical and Biological Engineering (AIMBE), Graduate Faculty Member, Biomedical Sciences Graduate Program, and Adjunct Professor, Department of Biomedical Engineering, University of Iowa.

Dr. Rodgers’ research group at UC Riverside uses the fundamental principles of transport phenomena, reaction engineering kinetics and thermodynamics to investigate and develop exciting areas in biomedical engineering and bioseparations. The group’s research focuses on five broad areas; artificial organs, bioreaction kinetics, drug delivery, bioseparations, and thermodynamics of crowded proteins.

Because of the interdisciplinary elements of this work, Dr. Rodgers’ graduates develop their talents in both mathematical and experimental analysis and enhance their communication skills to successfully work with colleagues in the life-sciences.

Where
Ahmanson Science Center, California Lutheran University

When
Wednesday 30 May, 6pm dinner, 7pm presentation. No RSVP; dinner is $10 at the door.

Contact
Abigail Corrin, acorrin@clunet.edu

More Info
http://www.ieee-bv-embs.org/?p=476
Neighboring Sections Events

Upcoming Events - May 2012

Power and Energy Society & Consumer Electronics Society Chapters
Present

Electric Vehicle Integration into the Power System
By: Mr. Marvin Moon

To register and for more information, visit
www.pes-moon.eventbrite.com

Date, Time, and Location
Thursday, May 3, 2012
6:00 PM - 8:30 PM
ITT Technical Institute - Sylmar Campus

Abstract
The impact of Electric Vehicles (EV) on today's power grid provide both challenges and opportunities for today's utility as more automotive manufacturers bring cars to the market. The presentation will provide a technical discussion revolving around considerations and modeling of EV integration and what it means from a power system perspective. Included in the presentation will be strategies on home, public, workplace, and fleet charging. The presentation will wrap up discussing strategies to encourage EV adoption as well as Date: barriers to overcome.

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Professional Activities Committee
Presents

Project Management Seminar

To register and for more information, visit
www.pace-pms.eventbrite.com

Date, Time, and Location
Saturday, May 5, 2012
10:00 AM - 12:30 PM
California State University, Northridge

Abstract
The engineer must learn how to be an effective project manager in order to achieve company and personal goals within the pre-determined constraints. This seminar brings together a few speakers that will share their knowledge of project management. The objective is to expose engineers with the topic while highlighting key information.

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### Buenaventura Section and Chapter Info

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<tr>
<th><strong>Section Office 2012</strong></th>
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Be sure to check the Section’s websites for the latest updates, meeting flyers, and newsletters. Some event details may change. Sites: