

IEEE BULLETIN

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IEEE Los Angeles Council Chair Report

by Scott E. Miller

We are sponsoring an All-Council Conference called "The Power of IEEE" at The Gas Company Energy Resource Center in Downey on Saturday, June 5, 1999. The details are presented in this issue of the Bulletin. This is a very important event for IEEE. The main topics include Distributed Energy/Green Power, Power Quality, Improving Software Development and Short Circuit Calculations.

In addition to the sessions and tutorials, there will be opportunities to listen to new IEEE Fellows speak about recent technological advances in the Electrical Engineering profession. There will also be exhibitors displaying their latest products and services.

This conference will benefit all Electrical Engineers. There will be a variety of tutorials that will teach the new technologies that will effect everyone in the new millennium. There will be plenty of opportunities to network with peers and colleagues.

As an active member of IEEE, participating in meetings and conferences has given me the opportunity to network with a variety of engineers in different specialties. This has benefited me in my business as well as my consulting ventures.

I look forward to seeing all of you at this conference.

The Power of IEEE Conference

There is space available for you to attend "The Power of IEEE" Conference and Table Top Exposition, June 5th, 1999. (See Page 7 for details)

Exhibitors Include Southern California Edison, Mitsubishi Electric MA Hanson & Associates, Arga Controls and others.

POWER QUALITY Power Quality (PQ) is one of the hot topics being presented. PQ Session Chair, Don Laird reports that both local and nationally know speakers will be included in this session. This full day session has Mr. Paul Ortman Manager of PQ for Southern California Edison Company speaking on PQ in an Office Environment. Dr. Luke Yu of Harmonics Control/PTS will speak on Controlling Harmonics. From Mitsubishi's Energy Systems Department in Warrendale, PA Dr. Gregory Reed will discus some of the basics of PQ as well as solutions using advanced solid state switch-

ing. Two speakers from ABBs Raleigh, NC operation have agreed to make presentations. Mr. Eric John will speak on economics and PQ Solutions and Mr. Dong Dang will discuss use of smart revenue meters to monitor power quality. A portion of the afternoon will be devoted to a panel session to answer your questions.

IMPROVING SOFTWARE DEVELOPMENT

The half day technical session on software presently has three presentation followed by a panel discussion. The session chair is Karen Owens

- 1) "Determining Fault Insertion Rates for Evolving Software Systems," by Allen P. Nikora (Jet Propulsion Laboratory) and John C. Munson (University of Idaho). Presented by Allen Nikora.
- (2) "Software Process in a Small Business

Region 6 Southern Area Spring Meeting and Student Competitions

Kip Haggerty, Region 6 Southern Area Chair

Business. The Region 6 Southern Area Spring Meeting was held on Saturday April 17 at UCLA. During the business portions of the meeting, we learned about upcoming plans for Wescon when it returns to the Los Angeles Area in September 2000. Convention Director Fernando Calderon gave an overview of the plans and progress to date to collocate a global IEEE Standards Association Conference at Wescon 2000. The Standards Association is very interested in the opportunity it presents to them and the Wescon Board believes this will reverse the drop in attendance we had at Wescon 1998.

Continued on page 3

Environment," by Mark Ross (Intelligent Vehicle Systems).

(3) "Improving the Software Development Lifecycle," by Gary Reissman (Elite) and Katalin Czukor (NCR). Presented by Katalin Czukor.

WORKSHOP ON TECHNIQUES FOR BETTER FASTER SOFTWARE REVIEWS

The workshop will cover the importance of making reviews better and faster and elementary ways of accomplishing this. Attendees will be asked to participate extensively by working examples. Attendees should have some software development experience. This full day workshop will be presented by George Huling.

TUTORIAL ON SHORT CIRCUIT CAL-CULATIONS

The instructor for this popular full day tutorial is Doug Dawson Consulting Continued on page 3 June 1999

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Los Angeles Council Officers

Scott E. Miller,

CHAIR s.e.miller@ieee.org

Kip Haggerty, VICE/PAST CHAIR *k.haggerty@ieee.org*

John Armstrong, LAC SECRETARY & CC REP. *j.t.armstrong@ieee.org*

Art Sutton

LAC Treasurer & FH Rep. awsutton@CSUPomona.edu

Larry Dalton,

CHAPTERS REPRESENTATIVE *l.dalton@ieee.org*

Frank Stankis,

EDITORIAL COMMITTEE CHAIR lac-bulletin@ieee.org

Bulletin Inquiries and Submitals lac-bulletin@ieee.org

GENERAL INQUIRIES

coun.lac@ieee.org

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Section Chairs

Buenaventura Section (BV)

Frank Stankis (805) 498 8114 fjstest@ieee.org

Central Coast Section (CC)

(formerly San Luis Obispo, Santa Barbara, and Vandenberg) Martin Kaliski, (805) 756-2781

China Lake Section (CL)

Jeff Fisher jfisher@ridgecrest.ca.us

m.kaliski@ieee.org

Foothill Section (FH)

David Perry, (626) 332-8068 dperry2@ix.netcom.com

Metropolitan Los Angeles/San Gabriel Valley Section (MLA/SGV)

Phil Save, (626) 302-8208 SAVEP@sce.com

San Fernando Valley Section (SFV)

Chris Maddox, (805) 273-7881 cjmadd@qnet.com

South Bay Harbor/Santa Monica Section

(SBH)

Mary M. Eshagian, (562) 985-1595 eshaghia@engr.csulb.edu

Affinity Group Contacts

Los Angeles Area Consultants' Network (LAACN) Curtis Barrett, (818) 887-0249 c.barrett@ieee.org

Chapter Contacts

Antennas and Propagation (AP-03)

Bill Milroy, (310) 334-8761 wwmilroy@ccgate.hac.com

Antennas and Propagation/Microwave Theory and Techniques

Joint FH Section Chapter (AP-03.1/MTT-17.2) Bela B. Szendrenyi, (909) 987-4715 ext. 238

Circuits and Systems/Electronic Devices

LAC Chapter (ČAS-04/ED-15) Dr. Lyle McCurdy (909) 869-2525 lbmccurdy@csupomona.edu

Circuits and Systems/Electron Devices

Joint BV Section Chapter (CAS-04.1/ED-15.1) Jon V. Osborn, (310) 336-5453 Jon.V.Osborn@aero.org

Communications/Signal Processing/ Vehicular Technology

LAC Chapter (COM-19/SP-01/VT-06) Dr. Martin S. Roden (323) 343-4485 mroden@calstatela.edu

Components, Packaging and Manufacturing Technology (CPMT-21)

Roy Currence, (310) 333-9632 currence@cax.es.xerox.com

Computer (C-16.1)

Dave Franklin, (818) 586-9683 franklindl@aol.com

Computer, CL Section Chapter (C-16.3)

Ed Fink, (805) 258-2007 efink@xavier.dfrc.nasa.gov

Computer, CC Section Chapter (C-16.4)

Ken Sayers (805) 961-0262 Kens@acm.org

Computer, BV Section Chapter (C-16.5)

Michael Ramey, (805) 486-8881 m.ramey@ieee.org

Electromagnetic Compatibility (EMC-27.1)

Ray Adams, (310) 662-7878 r.k.adams@ieee.org

Engineering in Medicine and Biology

(EMB-18) Chris Druzgalski, (562) 985-8054 druz@csulb.edu

Engineering Management/Education/Professional Communication (EM-14/E-25/PC-26)

Deb Mukherjee, (310) 813-2351 deb.mukherjee@trw.com

Industry Applications (IA-34)

Mr. Bill Brownell (909) 444-5242 bill.brownell@ieee.org

Lasers and Electro-Optics (LEO-36)

Dr. Harold Fetterman , (310) 825 3431 fetter@ee.ucla.edu

Magnetics (MAG-33)

Bob Hill, (818) 249-8524

rehill@hercules.rdyne.bna.boeing.com

Microwave Theory and Techniques (MTT-17)

Jim Verkade, (310) 416-4955 j.verkade@ieee.org

Microwave Theory and Techniques

SFV Section Chapter (MTT-17.1) Jim Weiler, j.c.weiler@ieee.org

Power Electronics (PEL-35)

F. Dong Tan, (310) 814-5250 dong.tan@trw.com

Power Engineering (PE-31.1)

Larry Dalton, (213) 367-0802 l.dalton@ieee.org

Reliability (R-07)

Irv Doshay, (310) 334-4240 shaydo@msn.com

Social Implications of Technology (SIT-30)

Paul A. Willis, (818) 354-1714 p.willis@ieee.org

A NEW LAC Chapter is forming!! Solid State Circuits chapter

Dr. Asad Abidi, (310) 825-9490 adibi@ICSL.UCLA.EDU

Region 6 and Southern Area News

IEEE Region Six Web Contest

IEEE Region Six Web Contest was conducted on April 29, 1999.

The winners are

First Place: Arizona State University http://www.eas.asu.edu/~ieee/

Second Place: San Jose State University

http://ieee.engr.sjsu.edu/

Third Place: Portland State University

http://www.ee.pdx.edu/~ieee

Honor Mention:Embry-Riddle Aeronautical University http://www.pr.erau.edu/~ieee

Navy Postgraduate School http://web.nps.navy.mil/~ieee_stu

Cal State Northridge http://www.csun.edu/~ec29009

Southern Area Student Paper **Contest**

At the Southern Area spring meetings the winning student papers for firstpalce awards are:

SouthWest Area Contest:

John Koenig (Arizona State University) "Toward the Development of an Interac tive Modeling, Simulation, Animation, and Real-Time Control (MoSART) Hardware/Software Testbed for a Tilt-Wing Rotorcraft"

NorthWest Area Contest:

Eric E. Erickson (University of Alaska Fairbanks)

"Microwave Video Surveillance Link"

Southern Area Contest:

Baldwin Chan (Cal State Polytech University)

NorthEast Area Contest:

Brock LaMeres (Montana State University)

Central Area Contest:

Hee Soo Paeng (CSU Sacramento) "An Opamp Integrated Circuit Design."

These area first-place winners will compete at the WESCON Regional Contest

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You need to reserve your space one month before publication date. For example, ad reservations are due April 1 for the May issue.

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IEEE Conference

Continued from page 1

Engineer. There is limited seating and we expect a sell out.

DISTRIBUTED ENERGY/ GREEN POWER

The session chair for this full day session of heightened interest is Cash Sutton. Speakers will cover the latest developments in distributed energy and green power.

- 1.) There will be an overview of Distributed Energy by Stephanie Hamilton of
- 2.) Randy Brown will give an update on the Gas Company's Fuel Cell program.
- 3.) Henry Mak, of the Gas Company will

give a presentation on advanced engines in conjunction with distributed energy.

- 4.) The micro turbine capability in distributed energy will be provided by Mike Landou of the Gas Company.
- 5.) Bill Hedderich will tie it all together in a discussion on Distributed Energy Applications

NEW IEEE FELLOWS TO SPEAK

Larry Dalton will chair this full day session. Come and learn of the various technical contributions made by recent IEEE Fellows to the world of Electrical Engineering.

IEEE CONSULTANTS NETWORK

Session is under development by session chair Ralph Hileman.

Spring Meeting *Continued from page 1*

During the Forum on Chapter, Section, and Council Issues in the afternoon. there was a lively discussion of the value of IEEE membership, a few miscellaneous questions, and a heated discussion of last year's Region 6 Bylaws changes. The concern raised was that the Region 6 Bylaws changes eliminated a stream of money from Wescon that went through Region 6 and was supposed to be for the Council Sections. There are several misconceptions expressed about how these changes were enacted.

To clarify, there was a quorum at last year's Region 6 Committee meeting, although only 4 of 10 Southern Area Sections were represented. The Bylaws changes passed with the required twothirds vote. Last year's Region Director chose not to appoint the two Council Chairs as voting representatives on the Region Committee. This is significant because there was also a provision in the previous Bylaws giving the two Council Representatives veto power over any changes to the Section of the Bylaws relating to Wescon. Because the Region Director chose not to appoint the Coun-

Continued on page 8

ANTENNAS AND PROPAGATION, LAC CHAPTER MEETING ANNOUNCEMENT

Who: Professor Fritz Arndt

What: CAD and Optimization of Waveguide Components, Networks and Antennas with Fast EM Methods

When: Tuesday, June 15, 1999

Social: 6:15 PM., Dinner: 6:30 PM. Meeting: 7:15 PM Where: The Lakes at El Segundo, 400 S. Sepulveda Blvd. (inside the golf course, between El Segundo and Rosecrans Blvd.) * (Please note the change of venue)

Details: Dinner cost is \$17.00. Dinner is optional.

Reserve by June 14 with Midwin & Olifson at (800) 275-8765 or Parthasarathy Ramanujam at (310) 416-5572 or Allen Wang at (310) 334-7219

ANTENNAS AND PROPAGATION/MICROWAVE THEORY AND TECHNIQUES, FOOTHILL CHAPTER

NO JUNE MEETING ANNOUCEMENT

BUENAVENTURA SECTION AND BUENAVENTURA CIRCUITS AND SYSTEMS/ELECTRONIC DEVICES CHAPTER

JOINT MEETING ANNOUCEMENT

Who: Aerospace Corporation Representative

What: Mini and Micro Satellites When: June 17, 1999 at 7:30 pm

Where: The Board Room of the Thousand Oaks Civics Art Plaza, Thousand Oaks Blvd. between Rancho Road and Hampshire Road. Parking free when telling parking

attendant attending IEEE meeting there.

Details: Jon Osborn, osborn@aero.org or Section web site

http://www.vc.net/~bvs_ieee

CERNTRAL COAST SECTION

NO JUNE MEETING ANNOUCEMENT

CHINA LAKE SECTION

No June meeting annoucement

CIRCUITS AND SYSTEMS/ELECTRONIC DEVICES, LAC CHAPTER

No June meeting annoucement

COASTAL LOS ANGELES SECTION

A JOINT MEETING WITH LASERS AND ELECTRO-OPTICS SOCIETY, LAC CHAPTER (SEE BELOW)

COMPONENTS, PACKAGING AND MANUFACTURING TECHNOLOGY (CP&MT), COMPUTER, AND RELIABILITY SOCIETIES, LAC CHAPTERS

COMPUTER SOCIETY, ORANGE COUNTY CHAPTER

NO JUNE MEETING ANNOUCEMENT

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ENGINEERING MANAGEMENT/EDUCATION/PROFESSIONAL COMMUNICATIONS, LAC CHAPTER

JOINT MEETING WITH METROPOLITAN SECTION AND SOCIETY OF SOCIAL IMPLICATIONS OF TECHNOLOGY LAC CHAPTER

(See Metropolitan Section for information)

FOOTHILL SECTION

MEETING ANNOUCEMENT

Who: Kyle Schulte, California Steel

What: Plant Tour - California Steel, Fontana, Southern California's only steel processing plant.

When: Thursday June 24, 1999, 7:00 p.m.

Where: California Steel. Exit I-10 at Cherry Avenue in Fontana. Go north approximately one-half mile. Just after second traffic light on west side of Cherry is the entrance to California Steel.

Details: Information, Art Sutton 909-869-2524, Everyone must be teenage or older. Wear everyday clothing and comfortable sturdy shoes. Do not wear shorts or dresses.

INDUSTRIAL APPLICATION SOCIETY, LAC CHAPTER

No June meeting annoucement

LASERS AND ELECTRO-OPTICS (LEO-36), LAC CHAPTER JOINT MEETING WITH "COASTAL LA SECTION" (NEWLY COMBINED SOUTH BAY HARBOR/SANTA MONICA SECTION)

Who: Dr. Charles H. Cox, III - MIT Research Laboratory of Electronics

What: "Techniques and Performance of Analog Optical Links"

When: Monday, June 14, 1999 Social: 6:00 PM Dinner: 6:30 PM Meeting: 7:30 PM

Where: The Lakes at El Segundo, 400 S. Sepulveda Blvd. (inside the golf course, between El Segundo and Rosecrans Blvd.)

Details: Dinner cost is \$10.00. Reserve by June 13 so there is an accurate meal count, early reservations appreciated and a limited number of walk in's for dinner may be available. For meeting information or reservations contact

James E. Leight at (310) 813-1133, FAX (310)812-8983, or email james.leight@trw.com.

MAGNETICS, LAC CHAPTER

MAG 33 SOCIETY, MEETING ANNOUNCEMENT

Who: Dr. Edward Price, Coremaster International Inc.

What: Nanocrystalline Alloy Materials For Magnetic Component Applications

When: Wednesday, June 16, 1999 Dinner 6:00 PM, Meeting 8:00 PM

Where: Dinner at Green Street Restaurant, 146 Shoppers Lane, Pasadena, Ca. (One block East of Lake at Cordova), PHONE: (626) 577-7170 Meeting at CALTECH, Moore Hall Room 080 (subbasement lecture hall)

Details: Call Bob Hill (818) 249-8524 or ED Sherwood, (626) 568-8443

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METROPOLITAN SECTION, (Los Angeles/ SAN GABRIEL VALLEY)

JOINT MEETING WITH ENGINEERING MANAGEMENT LAC CHAPTER AND SOCIETY OF SOCIAL IMPLICATIONS OF TECHNOLOGY LAC CHAPTER

Who: Martin Ledwitz, Environmental Affairs Air Quality Section, Southern California Edison

What: Understanding Electric Power Deregulation - Mr Ledwitz will explain the effects on producers, deliverers, and users of Electric Power of current Deregulation activities.

When: Tuesday 29 June 1999, 1130 Social, 1145 Lunch, 1245 Program

Where: CalTech Athenaeum, Hill and California, Pasadena; free

parking

Details: Lunch \$25.00. Reservations required: Send checks payable to "IEEE-SSIT" by Tuesday 15 June to P.A.Willis, PO Box 456, Altadena, CA 91003-0456, 626 791 0809

MICROWAVE THEORY AND TECHNIQUES, LAC CHAPTER NO JUNE MEETING ANNOUCEMENT

MICROWAVE THEORY AND TECHNIQUES, SFV CHAPTER NO JUNE MEETING ANNOUCEMENT

POWER ELECTRONICS, LAC CHAPTER

MEETING NOTICE

Who: Dr. Steve Freeland, The Boeing Company

What: Stop the Circuit, I Want to Get Off! Fun and Educational Electrical Paradoxes

When: Wednesday, June 23, 7:30 Meeting

Where: TRW, 2200 Marine Ave., Redondo Beach, Building E2

Details: See the LAC PELS website at

http://www.cyberg8t.com/smpstech/pels_lac/ or call Steve Freeland at (714) 762-2009. NON-US CITIZENS PLEASE NOTE: TRW's security requires that non-US citizens provide your Name, Title, Firm or Agency, and Citizenship to Craig Elderb at (310) 813-5252 or FAX (310)813-4469, no later than 5 p.m., the Friday before the meeting.

POWER ENGINEERING SOCIETY, LAC CHAPTER

Who: Everyone

What: The Power of the IEEE conference When: June 5, 1999, 7:45am to 4:00 pm

Where: The Gas Company Energy Resource Center, 9240 E.

Firestone Blvd, Downey

\$45.00 at door includes BBQ lunch

Details: Larry Dalton (213) 367-0802 or Don Laird (626) 302-8616

SAN FERNANDO VALLEY SECTION

NO JUNE MEETING ANNOUCEMENT

SOCIETY OF SOCIAL IMPLICATIONS OF TECHNOLOGY, LAC CHAPTER

JOINT MEETING WITH ENGINEERING MANAGEMENT LAC CHAPTER AND METROPOLITAN SECTION

(See Metropolitan Section for information)



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Calendar Articles

Nanocrystalline Alloy Materials for Magnetic Component Applications

Nanocrystalline alloys are a class of soft magnetic materials used in a wide variety of magnetic component applications. Examples include gapped and ungapped filter inductors, power transformers for use in AC-DC and DC-DC converters, current sense transformers, and common-mode inductors for use in SMPS. frequency converters, and UPS units. The particular alloy to be discussed has a structure Fe73.5Cu1Nb3Si5.5B7 and is the most prominent representative of the new nanocrystalline alloys. The characteristic feature of the materials is a twophase structure in which fine-crystalline grain with an average diameter of 10 to 20 nm is embedded in an amorphous residual phase. This struc-

ture is responsible for the fact that these materials can reach can reach the highest permeabilities and the lowest coercivities. In addition, their small strip thickness (about 20um) and relatively high electrical resistivity result in extremely low eddy current losses, excellent frequency behavior, thermal stability, permeability, and high saturation induction (1.2Tesla).

Nanocrystalline alloys are produced by using special rapid quenching methods as ultra-thin amorphous tape in a first step. After winding the tape on a circular mandrel the next step is a heat treatment during which the alloy changes from the meta-stable amorphous to the crystalline structure.

Many specific applications will be discussed,

but particularly the excellent property of permeability retention versus field strength at various gaps. The drop to 90% of the non-DC value occurs at a flux density of 1Tesla

Speaker: Dr. Edward Price, Coremaster International Inc. Dr. Price is director of the Power Technology Division of Core master International. He received his Bachelor and Masters Degrees in Electrical Engineering from the University of Utah and completed his Doctorate at the Univer sity of Wales at Swansea. For over 35 years he has been heavily involved in research, development and teaching, in integrated circuitry, power products and antennas for both private industry and for the US Military. His most recent work is in the development of new levels of throughput power efficiency in magnetics and dc-dc power conversion

Calendar Articles

Stop the Circuit, I Want to Get Off! Fun and Educational Electrical Paradoxes

Picture yourself as a sweating graduate student in your qualifying oral exam. A committee of distainful professors asks you what happens when two capacitors charged to different voltages are connected together with an ideal switch. You calculate the final voltages based on energy conservation (after all, there are no resistances). Hah! That was easy. To check, you do the calculation conserving charge. Argghh! The answer is different. What gives?

This is just one example of a paradoxical electrical circuit problem. It's fairly easy to explain—at least, once you've seen the explanation. But with many such problems, the first time you encounter them they can drive you nuts. These kinds of problems are fun to attack (as long as you aren't in the middle of an oral exam!), and solving them can build a more solid understanding of basic electrical principles. The capacitor-to-capacitor transfer problem, for instance, underlies some very fundamental limitations on high-efficiency power conversion. . At the June 23 meeting of the LAC Power Electronics Society Chapter, Dr. Steve Freeland of the Boeing Company will share some of his favorite electrical paradoxes. Attendees are encouraged to bring their own puzzlers and paradoxes to share

Speaker: Dr. Steve Freeland is an Associate Technical Fellow with the Boeing Company (formerly Rockwell International) in Anaheim, California. He was honored as a 1994 Rockwell Engineer of the Year. Dr. Freeland holds a BS from Harvey Mudd College and a MSEE and Ph.D. (Power Electronics) from Caltech. Dr. Freeland is a registered professional engineer in California.

CAD and Optimization of Waveguide Components, Networks and Antennas with Fast EM Methods

The advanced design of waveguide components, networks and antennas for which accuracy, performance and development time are critical design parameters, requires reliable and fast electromagnetic (EM) CAD tools. This allows the direct utilization of modern fabrication techniques, such as computer-controlled milling, die casting, electro-forming, or metalized plastic methods, without the need for cumbersome post-assembly adjustments. The advantages are reduced manufacturing costs and development time, as well as improved performance.

With the steadily growing requirements and increased specifications, the desirable goal is to go beyond the traditional use of EM simulators for mere validation and analysis purposes. It is to develop and utilize accurate CAD methods which are fast enough to allow the direct application of matured optimizers, also for waveguide components of more general shape.

For components composed of rectangular and circular waveguide structures, efficient mode-matching building blocks have already been developed more than ten years ago. As has been successfully demonstrated in the past, these allow the rigorous and fast CAD of the large class of waveguide components, which are compatible with the Cartesian or cylindrical coordinate system, such as transformers, filters, multiplexers, couplers, phase shifters, polarizers etc.

For the analysis of more complicated structures, such as cavities with finite radii or irises of more general shape, space discretization methods are typically used, such as the three-dimensional finite element or finite difference time domain methods. Because of the rather high requirements concerning storage capacity and CPU time, however, these methods are not appropriate for direct optimization.

For the optimization oriented CAD, adequate hybrid methods are desirable which combine the advantages of both the flexibility of the space discretization methods with the efficiency of the mode-matching method.

In this presentation, fast hybrid modematching/boundary-contour, mode-matching/finite-element, and mode-matching finite-element-moment methods are described which allow the direct CAD and optimization of more complex waveguide networks and antenna structures. The versatility of these CAD techniques is demonstrated at typical design examples, such as diplexers, multiplexers, and couplers. Waveguide component examples of higher complexity such as waffle-iron filters, dual-mode filters with arbitrarily shaped irises, broadband OMTs with ridged waveguide horn sections, and antenna examples, like corrugated horns, finite horn clusters, slot antennas, will illustrate the flexibility of the presented CAD methods. Their efficiency will be demonstrated by running CAD software package examples on a 233 MHz Pentium II PC. The accuracy of the design theory is verified by comparison with measurements.

Speaker: Dr. Fritz Arndt received the Dipl.Ing., Dr.Ing., and Habilitation degrees from the Technical University of Darm stadt, Darmstadt, Germany, in 1963, 1968, and 1972, respectively.

From 1963 to 1972, he worked on directional couplers and microstrip techniques at the Technical University of Darmstadt. Since 1972, he has been a Professor and Head of the Microwave Department, University of Bremen, Germany. Since 1972, he has published over 190 technical papers, mainly in the field of electromagnetic CAD of microwave and antenna components. His research interests include numerical methods for the rigorous and fast CAD of wave guide, millimeter-wave and opto-electronic circuits as well as of horn and microstrip antennas. He is also interested in the simulation of mobile communication channels.

Dr. Arndt is a member of the VDE and NTG, Germany. From 1993 to 1996 he Continued on page 8

R.C. HANSEN, Ph.D., D.Eng.
Consulting Engineer in
Antennas, phased arrays, conformal
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THE COUNTED COME LIVERING

The Power of IEEE

Saturday, June 5, 1999, 7:45 am to 4:00 pm



The Gas Company Energy Resource Center, 9240 E. Firestone Blvd., Downey (Across from Stonewood Mall)

Planning continues on the all councils BIG EVENT FOR 1999. On Saturday June 5, 1999 the local chapters and sections join together to sponsor a technical conference and exposition. Your comments and participation is solicited. Events will be taking place in six or seven different rooms. <u>Admission to Conference includes BBQ lunch.</u> The major topics and contacts are listed below.

New IEEE Award Winning Fellows will Speak Contact: Larry Dalton (213) 367-0802 IEEE Sections Plan to meet with us. Contact: Eremita Miranda (626) 302-8206 Contact: Larry Dalton (213) 367-0802 IEEE Chapters Plan to meet with us. Professional Activities PACE Employment Asst. Contact: Paul Willis (818) 354-1714 Power Quality, Contact: Don Laird (626) 302-8616 Distributed Energy/ Green Power Contact: Cash Sutton (562) 497-2999 **Tutorial on Short Circuit Calculations** Contact: Matthew Collins (818) 238-3652 Software in Tech Applications and Reliabilty Contact: George Huling (805) 381-4936 **IEEE Student Branch Activities** Contact: Marty Roden (mroden@calstatela.edu) Exhibitors/ Exposition Contact: Larry Dalton or Don Laird **IEEE Consultants Network** Contact: Ralph Hileman (909) 780-3947

Vendors are encouraged to support this event by purchasing an exhibit table at \$250 and advertising in various newsletters. For more information please contact Larry Dalton at (213) 367-0802, l.dalton@ieee.org or Donald Laird (626)302-8616, Don.Laird@ieee.org

CUT

Advance Registration Form

Registration Includes Lunch

Last Name	First Name		Middle Initial	
Firm or other Affiliation				
Address, Number & Street				
City State Postal Code				
IEEE/ASME/AEE Member No.	Phone Number		Fax Number	
E-mail				
REGISTRATION CATEGORIES	Advance (By 5/22/99)	On-Site	Fee	
IEEE/ASME/AEE Member		\$45	\$	
Non-Member	\$45	\$55	\$	
Student		\$20	\$	
Additional fee for Short Circuit Tutorial .	\$ 5	\$ 5	\$	
Please note this is an informal Event. No n	eck ties - Snip Snip	7	Total \$	

Please send checks payable to IEEE/PES and mail to Donald Laird, 1481 E. Glenoaks Blvd. Glendale, CA, 91206-2707

Calendar Articles

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was Chairman of the German IEEE joint MTT and AP chapter. He received the NTG award in 1970, the A.F. Bulgin Award (together with three co-authors) from the Institution of Radio and Elec tronic Engineers in 1983, and the Best Paper Award of the Antenna Conference JINA 1986, France.

Plant Tour - California Steel -Fontana

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LA COUNCII KEVISES DYIAWS

At the April meeting, the Los Angeles Council passed a series of Bylaws revisions. The changes included:

- 1. General publications formatting clean-
- 2. Updated Section list to reflect latest mergers and name changes
- 3. Changed to four Officers elected at
- 4. Added requiring ratification by the Council Committee of revisions to the ECI and ECM Bylaws and Articles of Incorporation
- 5. Changed Editorial Committee to Publications Committee headed by the elected Vice Chair - Publications
- 6. Created Wescon Support Committee to help foster participation in Wescon by the Chapters and Sections of the Council

We anticipate that the changes will be approved by the Region 6 Director and then approved by the Regional Activities Board at their June meeting. If so, the next Council election will be for the four Officers covering the following four critical tasks of the Council:

1. Wescon - Chair (ECI Class A Member

Spring Meeting continued from page 3

cil Chairs, there were no Council Representatives on the Region Committee to veto the changes. The people who set up the original structure and wanted the two Councils to have such veto power had left a gaping loop hole. Lastly, the Region 6 Bylaws changes were approved by the IEEE Board of Directors.

The small amount of money from Wescon that used to flow through Region 6 and come to the Councils (for their Sections) was eliminated. The two Councils are entitled to their 80 percent of the distribution available to IEEE and Region 6 is entitled to its 20 percent without a requirement to pass a significant chunk of it to the two Councils. Previously, the two Councils received around 89 percent of the IEEE distribution. The loss for LA Council is just under 3 percent of the distribution available to IEEE.

Student Activities. The Student Paper Contest was a success in that we are sending a very qualified winner to the Region 6 contest at Wescon 99 next October in San Jose to represent the Southern Area, however, we only had one entry. We discussed the low turnout to determine what steps we could take to increase participation. The constraints on the contest are that the winner must submit the final paper in IEEE publication format to Wescon by early July to be published in the Wescon Proceedings and participate in the Region 6 contest. The consensus reason for low turnout was that our contest (April 17) was before many students completed their senior design projects and was too close to finals at the Semester Universities. It was decided to try a later date in mid May in 2000 to see if greater participation would occur.

The micromouse contest was not held. It will be held at the Fall Area Meeting on November 6. Quite a number of schools are reactivating their micromouse teams and we are in the process of building 5 new tracks, but the new tracks are still in work and so are the new micromouses. We look forward to a lively contest next November.

- representative and wescon support Committee Chair)
- 2. Bulletin, web, etc. Vice Chair Publi-
- 3. Finance Treasurer (Finance Chair)
- 4. Chapter Management Vice Chair -Chapters (Represents Chapters, oversees Chapter reporting, and serves as Council Secretary)

The purpose of the changes is to ensure that these four critical tasks of Council administration are covered before the new year starts. The Section Representatives have stated that they prefer these positions be elected at large rather than elected from among the Section Representatives. The Publications Chair should have officer status as he does in the Bay Area Council. Lastly, Council Chapter reporting is an on-going problem that we must fix or eventually have fixed for us. We need a specific volunteer officer to take on the reporting task and ensure that we will continue to have Council Chapters and that we will once again report all Council Chapters so that they will receive their IEEE rebate funds.

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