

RockIEEE Overlook

APRIL 1988

JOINT DENVER SECTION/SOCIETY CHAPTERS MEETING

Wednesday, April 13, 1988

This annual event, sponsored by the Denver Section of IEEE and its Society Chapters, will again take place at the Radisson Hotel, 1550 Court Place, Denver. Planned as a dinner meeting there will be a short speech given immediately following dinner. After the talk, participating Society Chapters will hold their own technical meetings is a pleasant atmosphere and challenging forum.

Dr. Scott Gilles, Chief Scientist at Martin Marietta, National Test Bed Segment, will be the featured speaker at the dinner meeting, and he will be speaking to us about the National Test Bed.

ALL IEEE members, please plan on attending this event. The Social Hour will begin at 6:00 pm in the Silver Room on the mezzanine, Dinner will be at 7:00 and the technical programs at 8:00. Dinner is optional at a cost of \$16.00, which includes parking in the building. For information and reservations, please call Anita Wanberg at 220-8042 by Monday, April 11.

Technical Meetings April 13, 1988

Joint PES/IAS - Power Engineering Society/ Industry Applications Society

Speaker: Eugene D'Aquanno, Chief Engineer

The Rockbestos Company, New Haven, CT

Topic: Mini-Seminar on Power, Control & Instrument

Cable.

DENVER SECTION

The selection of wire and cable for an electrical design project deserves more technical consideration than it often gets. This program will address basic design and testing aspects of power, control and instrumentation cable to provide a better understanding of cable specification and application fundamentals.

Mr. D'Aquanno will discuss cable insulation, shielding and jacketing systems, including EPR, XLPE, and PVC. He will discuss factory test procedures and the implications of thest tests. There will also be discussion of high temperature alternatives to asbestos and new legislation regarding cable insulation toxicity.

Contact: Barbara, Peterson Company, 388-6322 by Friday April 8.

Reliablilty

Topic: A Seminar on the Weibull Distribution and Its

applications.

Contact: Lee Andrews, 971-2377

Joint ECS/IMS - Electro-magnetic Compatibility Society

<u>/Instrumentation Measurement Society</u>

Speaker: Dick Groves

Topic: "Are Instruments & Electromagnetics Really

Compatible?"

Contact: Dick Groves, 273-3677

<u>LEO - Laser & Electro-Optics Society of Denver</u>

Speaker: Professor Arun K Majumdar, Dept. of Electical Engineering & Computer Science, University of

Colorado, Denver, 1200 Larimer St., Den 80204

pic: Prof. Majumdar will report on the formation of this new society, and the enthusiastic and

welcome response he has received.

Joint Boulder-Denver APS/MTTS/GRS - Antennas and Propagation, Micowave Theory and Techniques, and Geoscience and Remote Sensing

Date: Friday, April 8, 1988

Place: University of Colorado, Business School, Room

216, Boulder, CO

12:00 noon until 1:00 pm

Speaker: Rolf H. Jansen, Industrial Microwave and RF

Techniques, Inc., West Germany

Topic: "CAD of Hybrid and Monolithic Microwave and

Millimeter-Wave MICS"

The electrical phenomena which complicate the design of MICs into the mm-wave range will be discussed in relation to technological and economic requirements. Also an overview on existing CAD packages and their specific features will be given.

Contact: Hussain Haddad, 460-2114.

EMC - Electromagnetic Compatibility

Date: Tuesday, May 3, 1988
Place: Westland Mall meeting room

Time: 7:00 pm

Topic: A presentation of several of the papers which will be presented at the IEEE-EMC Symposium in

Seattle in August.

Contact: Andy Anderson, 971-6422 or Bill Bryant, 977-6578.

Please cancel your reservations if you are unable to attend a meeting. No-shows will be responsible for the cost (if any) of dinner.

Chairman's Message by Mike Foley

Recent activities of the Denver Section have included participation in the Engineers Week (February 22-26 Legislative Breadfast and the Colorado Engineering Council dinner which concluded the week long recognition of engineers contribution to society with the theme "Engineers: Construction... Not Destruction".

The Region 5 Area "A" student paper contest was also conducted in February at Metropolitan State College Auraria campus. Excellent papers were presented and the difficult task was performed of selecting the individuals to represent Area A at the Region 5 contest. More information on the student paper contest can be found in the article by Charlie Wright in this issue.

The busy pace continued thru March with the Region 5 Conference and CEECON held in Colorado Springs. More information will follow next month.

This month the Joint Section/All Chapters meeting will be held on April 13th. Information on the meeting is found on the front page. The dinner speaker will be presenting a most interesting topic - don't miss it! Also attend the chapter technical meeting of your choice, or sit in on a meeting which would broaden your understanding of what other E.E.'s are doing.

To conclude the first half of the year's activities, the Section Awards Banquet will be held on Wednesday, May 11th. As always, the evening will be a social event with time set aside to recognize and honor those who have contributed to the growth of the Section.

As some of you may know, our Treasurer, Henry Rackley is recovering from injuries from an auto accident. As of this writing, Tony Thomas has accepted to serve as Treasurer. His appointment is subject to the Executive Committee ratification which is to be completed in April. Our best wishes to Tony in his new duties with the Section, and join me in wishing Henry a speedy and full recovery.

If you should ever have any questions regarding Section activities, please look at the back page of this newsletter for the Section Officer or Committee Chairman who would be able to assist you. If you don't know who to call, my number is 789-0078.

APOLOGIES

We apologize for not publicizing the Area A Student Paper Contest. We have now learned that there are engineers that would have attended the Contest if they had known about it. We are sorry, and promise to do something about it next year.

However, we have held the Area A Contest and it proved to be, without doubt, one of the best. Fourteen papers were presented and the all were of top quality.

Metropolitan State College of Denver was the host this year, and they did an excellent job of providing facilities and refreshments. We owe them a vote of thanks.

The papers and presenters are listed as follows:

- "Protector Relay for Small Single-Phase AC Motors" by Charlie W.D. Dunham, South Dakota School of Mines & Technology.

- "Biological Signal Processing System" by Frank Sagan and Brad Jacobe, University of Denver.

- "Stereo Speech Compression Via Fourier Description" by Gregory Louis Ranson, Colorado State University.

- "A Fishing System for Quadriplegic Rehabilitation" by Scott T. Smith, U.S. Air Force Academy.

- "Preliminary Design of Experiments Using Taguchi Methods" by Pamela Thomas, University of Colorado, Colorado Springs.

- "Ion-Sensitive Capacitor" by Cheryl A. Hippen, Colorado State University.

- "PCM Data Transmission Over Optical Waveguides" by Chuck V. Svatos, Metropolitan State College.

- "Broadband Antenna Modelling Using the Method of Moments" by Woods J. Allee, University of Denver.

- "An Investigation into the Tanlock Loop and Its Application to Phase Shift Keying" by Paul T. Kitaj, University of Colorado, Colorado Springs.

- "Dual Input Printer Buffer Project" by James Hunkins,

South Dakota School of Mines & Technology.

- "Building a MIDI Patcher" by Ralph R. Galetti, U.S. Air Force Academy.

- "Electronic Darts Scorekeeper" by Mike Smith, University of Southern Colorado.

- "An Optical Precipitation Sensor" by George W. Twitchell, University of Wyoming.

- "An Ultrasonic Densitometer for Use in Improving Aircraft Fuel Measurement Systems" by Colleen Neal, University of Wyoming.

The winners were:

* First Place - James Hunkins, South Dakota School of Mines & Technology.

* Second Place - Ralph R. Galetti, U.S.A.F. Academy. * Third Place - Cheryl A. Hippen, Colorado State Univ.

The first and second place winners will attend the Regional Paper contest at Colorado Springs on March 21st.

After the contest, we were treated to a dinner at The Mission in the Student Center, and a talk on "Update on the Super Collider" by Dr. George W. Morgenthaler, Chairman, Aerospace Department and Associate Dean, College of Engineering, University of Colorado, Boulder.

I'm sure we all agree. It was a very exciting day, not only for the contestants and judges, but all of those attending the contest. Charles Wright

1989 Executive Board Nominees

The election of the 1989 IEEE Denver Section will take place at the May Section Meeting/Awards Banquet. The nominating committee has selected the following candidates:

Section Chairman - Keith Henderson Senior Vice Chairman - Gordon Lee Vice Chairman Members Services - Gary Petersen Vice Chairman Student Activities - Don Cottrell Secretary - John Reesy Treasurer - Tony Thomas

SENIOR ANALYST in critical financial markets application. Requires self motivated high energy aggressive bright person, with Tandem Cobol experience preferred but not necessary. Demonstrated track record of leadership and success. Recruiter, Securities Industry Software, 25178 Genesee Trail Road, Golden Co 80401

University of Colorado at Boulder Post Doctoral Position Optoelectronic Materials

A post-doctoral research position is available in the Materials and Devices Program of the Center for Optoelectronic Computing Systems. The work consists of plasma assisted CVD of advanced materials for novel devices intended for use as optical and optoelectronic computing elements. The applicant is expected to have completed the PhD in Physics, Electrical Engineering, or Materials Science. The candidate should submit a resume, transcripts, and names, addresses, and current phone numbers of three references to:

Professor Jacques Pankove
Center for Optoelectronic Computing Systems
Dept. of Electrical and Computer Engineering
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University of Colorado
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RockIEEE Overlook

Gary A. Petersen - Editor

Stearns-Roger Division

Denver, CO 80217 692-2680

dba Trade Services

P.O. Box 4056

220-8042

700 S. Ash St., P.O. Box 5888

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TREASURER J. A. (Tony) Thomas Automatic Switch Co. 7200 E. Dry Creek Rd. Suite F-102 Englewood, CO 80112 779-6990

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Pre-College Student Activities - Dan Michaels, Ball Aerospace, 939-5139

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Start-up Chapter, Laser & Electro Optics Society - Arun K. Majumdar, University of Colorado Denver, 556-2715

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P.O. Box 4056 Englewood, CO 80155-4056 Phone: 220-8042

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THE MONTH AT A GLANCE

April 8 APS/MTTS/GRS Meeting

April 13 Joint Denver Section/Society Chapters Meeting PES/IAS Meeting Reliability Meeting ECS/IMS Meeting LEO Meeting

> April 27 Section Executive Committee Meeting

> > May 3 EMC Meeting

> > > TIME DATED MATERIAL

Published Monthly to inform members of local meetings, conferences workshops and social, technical, educational and professional activities

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