

RockIEEE Overlook



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

Denver Section

November, 1989

Chairman's Message

by Keith Henderson

What is the Denver Section? Good question!! The Denver Section, IEEE, which was founded on May 15, 1918, consists of all IEEE members in the geographical areas of northern Colorado, eastern Wyoming, western Nebraska, and western South Dakota. Within the Section there are two Subsections, the Black Hills Subsection, and the Centennial Subsection. The Black Hills Subsection covers western South Dakota. The Centennial Subsection covers northern Colorado, eastern Wyoming, and western Nebraska.

Based on 1988 data, of the 300,000 total IEEE membership, 4068 members live in the Denver Section. Our members consist of 55 Fellow Members, 313 Senior Members, 2789 Members, 190 Associate Members, and 721 Student Members.

Membership at our Student Branches is as follows:

| | | | |
|--------------------------------|-----|----------------------------|-----|
| South Dakota School of Mines | 128 | University of Wyoming | 102 |
| University of Denver | 27 | Colorado State University | 121 |
| University of Colorado Denver | 106 | Colorado School of Mines | 54 |
| University of Colorado Boulder | 133 | Metropolitan State College | 54 |

Membership in our Society/Chapter groups is as follows:

| | | | | | |
|---------------------|-------------------------|-----|----------------------|-----------------------------------|------|
| Joint Chapter (399) | Antenna & Propagation | 181 | Joint Chapter (1055) | Information Theory | 50 |
| | Microwave Theory | 143 | | Computer | 1005 |
| | Geoscience/Remote Sens. | 75 | | Engineering in Medicine & Biology | 85 |
| Joint Chapter (373) | Vehicular Technology | 33 | | Reliability | 42 |
| | Communications | 340 | | | |
| Joint Chapter (172) | Instrumentation & Meas. | 104 | Joint Chapter (455) | Power Engineering | 319 |
| | Electromagnetics | 68 | | Industry Applications | 136 |

Where are you participating? Our Societies generally have from two to nine meetings per year. Black Hills and Centennial Subsections have meetings. Of course, there are also the great Denver Section Meetings. We'll see you at the next meeting!

The IEEE Denver Section expresses its sincere appreciation to John Tierney at Public Service Company of Colorado for his effort in working with the Denver Section membership database.

Society Chapter Meetings and Information

Joint PES/IAS

Power Engineering/Industry Applications

Thursday, November 16, 1989

Western Area Power Administration
1667 Cole Blvd., Building 19
Golden, Colorado

6:00 p.m. - Meet in Lobby
6:30 p.m. - Tour of Electric Power Training Center

We will tour the Generation and Transmission Training Simulator room and the Miniature Power System Training Room. The simulator room trains power system dispatchers on the remote operation of a G & T system, including automatic generator control and operation during major system disturbances. The Miniature Power system is modeled after a substation control room and is used for analog training of system operation, including generator operation, relaying, fault isolation, breaker operation, system reconfiguration, and system restoration. The tour will be about 45 minutes.

Please contact Barbara at Peterson Company, 388-6322, by Monday, November 13.

EMC

Electromagnetic Compatibility

Wednesday, December 6, 1989

Ball Aerospace
7:00 p.m.

Speaker

Presentation and Demonstration by Wally Moffett

"Radiated Emissions"

Reservations are required.

Please contact Andy Anderson, 971-6422, or Bill Bryant, 977-6578, for further information and reservations.

Joint AP/MTT/GRS

Antennas and Propagation, Microwave Theory and Techniques, Geoscience and Remote Sensing

Thursday, November 16, 1989

National Institute of Standards and Technology
325 Broadway, Boulder, Room 1103
4:00 - 5:00 p.m.

Speaker

Dr. Sam Stein
Ball Aerospace
Communications System Division

"The Development of a Compact Passive Hydrogen Maser"

Ball Aerospace has developed a very compact hydrogen maser with frequency, stability, and drift characteristics which exceed those of any other commercially available frequency standard. Frequency stability of 2×10^{-12} , and frequency drift of less than one part in 10^{15} per day distinguish this new generation of frequency standards. Dr. Stein will discuss the development of this rack mounted maser which functions well in non-laboratory, depot, or ground station environments.

Reservations are not required
For further information call John Dunn at 492-5487.

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RockIEEE Overlook Editor

Our Newsletter Editor, Jim Gale, has recently accepted a position in Houston and will no longer be able to fill this position. Anyone interested in participating in the RockIEEE Overlook production, please call Gary Petersen, 329-1506.

Barbara Linton

The membership of the PES/IAS send their best wishes to Barbara A. Linton for a speedy recovery from her recent health problems.

We do miss her valuable contribution to the PES/IAS.

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Fort Collins Office:
1 Old Town Sq., Suite 300, 80522
(303) 490-2824

University of Colorado at Denver

The Division of Extended Studies and the Department of Electrical Engineering present

Power Systems & Machines Short Courses

Dr. Pankaj K. Sen, P.E.
Associate Professor

We are offering a series of one day, eight-hour short courses on topics in power systems and machines. The first two courses are as follows:

Fundamentals of Power Systems Design

Session One Friday, Nov. 3 - Denver
Session Two Friday, Nov. 10 - Fort Collins

Protection Coordination Design in Power Distribution Systems

Session One Friday, Dec. 15 - Denver
Session Two Friday, Jan. 5 - Fort Collins

Program cost: \$225 per participant per program. For two or more employees from same job site: \$200 per participant. The cost includes registration, refreshments, lunch, and the course manual.

To receive a the program brochure and registration form, contact **Arne Arnesen, CU-Denver Director of Corporate Programs** at 893-8521.

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

Schedule of Conferences and Meetings

| | | | | |
|------------------------|---------------|--|--------------|----------------|
| June 17 - 21, 1990 | Colorado Spgs | Utilities Communications | George Stoll | (303) 571-2677 |
| March - April, 1991 | Fort Collins | Region 5 Conference | Tom Mills | (303) 229-3737 |
| April 28 - May 2, 1991 | Boulder | PES Substation Com. Mtg. | George Flaig | (303) 452-6111 |
| June 23 - 27, 1991 | Denver | International Communi- cations Conference | Russ Johnson | (303) 796-9100 |
| May 11 - 13, 1992 | Denver | Vehicular Technology Conf. (VTC '92) | Don Cottrell | (303) 871-3752 |

Proposed Conferences and Meetings

IAS 1994
ACM/IEEE Design Automation 1994
PES Joint Power Generation 1994
PES Summer Meeting 1995
Petroleum & Chemical 1995
MTT 1997
Transmission & Distribution 1997
ITC 1997-2000

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Business card ads must be actual business cards. All other ads must be provided in camera-ready format or additional set-up charges may apply.

Deadlines

| | |
|--------------------------|------------------|
| December 1989 newsletter | November 3, 1989 |
| January 1990 newsletter | December 1, 1989 |
| February 1990 newsletter | January 5, 1990 |
| March 1990 newsletter | February 2, 1990 |
| April 1990 newsletter | March 2, 1990 |
| May 1990 newsletter | April 4, 1990 |

Enclosed is my check in the amount of \$_____ made payable to Denver Section IEEE. Send business card or ad copy and check to: Anita Wanberg, dba Trade Services, P.O. Box 4056, Englewood CO 80155-4056. Call Anita at (303) 220-8042 for more information.

Mini-Symposium on Bioelectromagnetics

Sponsored by

IEEE Denver Section Denver IEEE Chapter on Engineering in Medicine and Biology and The University of Colorado at Denver

Saturday, November 19, 1989
9:00 a.m. to 1:00 p.m.

University of Colorado at Denver
1200 Larimer St., Denver
North Classroom Bldg. 1204
Refreshments will be served

The half-day mini-symposium will present recent developments and clinical applications of bioelectromagnetics covering the frequency range from dc over microwaves to the infrared. One session deals with passive and diagnostic applications. Topics include recent work in the areas of electro- and magnetoencephalography, electrocardiography, magnetic resonance imaging, microwave thermography, and optical blood platelet diagnostics. A second session on active interactions and therapeutics covers magnetic separation of blood components, health effects of low-frequency and microwave power, electrosurgery, and hyperthermia.

Over one dozen physicists, engineers, physiologists, and physicians from various biomedical companies and regional academic institutions will give illustrated presentations and be available for discussions and questions. The meeting is intended to stimulate professional interactions between specialists, but it will also have a tutorial component.

Reservations are not required. Parking in Lot R (North of North Classroom Bldg.) is free if (free) registration is made in advance by calling 556-2872, or writing to the Program Chair, Jochen Edrich, Ph.D., M.D., Department of Electrical Engineering and Computer Science, Box 110, 1200 Larimer St., Denver CO 80204.

Infoshare Document 1989 Edition Available

The Colorado Institute for Artificial Intelligence (CIAI) has just published the 1989 edition of **InfoShare**, a compendium of artificial intelligence (AI) activity in the state of Colorado. CIAI is a consortium of Colorado businesses and universities established as a program of the Colorado Advanced Technology Institute that promotes economic development in the state of Colorado through research in artificial intelligence.

InfoShare is unique as a reference tool: it details the activities of faculty at Colorado research universities, identifies AI curricula and AI expertise on each campus, and lists AI computing facilities, AI projects, AI graduates and the AI interests of the business members of CIAI. The compendium will be available at the libraries of CIAI university members and is also available for purchase from CIAI for \$30.00.

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by Pankaj K. Sen

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The Month at a Glance

November 3, 1989
RockIEEE Overlook deadline

November 16, 1989
AP/MT/GRS Meeting
PES/IAS Meeting

November 19, 1989
IEEE/EMBS Mini-Symposium

December 6, 1989
EMC meeting

RockIEEE Overlook
Official Publication of the
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