



THE INSTITUTE OF  
ELECTRICAL AND  
ELECTRONICS  
ENGINEERS, INC.

# RockIEEE Overlook

DENVER SECTION

JANUARY 1989

## IEEE Denver Section Meeting

### JANUARY DENVER SECTION MEETING AND INSTALLATION OF 1989 OFFICERS

The IEEE Denver Section will take this opportunity to recognize the 1988 officers and to welcome the 1989 officers. A short program will follow.

Date: Wednesday, January 18, 1989

Place: Brooklyn's, 2644 W. Colfax Ave.

Time: 6:00 - cocktails 6:30 - dinner (\$15.00) 7:30 - meeting and program

Contact: RSVP by Monday January 16, 1989, Anita Wanberg, 220-8042.

## Society Chapter Meetings

### CS/ITS - Computer/Information Theory Societies

Date: Thursday, January 19, 1988

Place: AT&T Bell Laboratories, 11900 N. Pecos St. (I-25 to 120th, W to Pecos, S on Pecos, turn left into circular driveway). Meet in lobby.

Time: 6:00 - 7:30 pm

Speaker: Bruce Rebmman, Bill Pierce

Topic: "CASE Tools Latest Development"  
We will see a demonstration of PECBASE, the only fully integrated CASE tool, and we will discuss its cogenerating and reverse engineering capabilities.

Contact: David Ho, 722-0111, or Bruce Rebmman, (214) 991-8926 for more information.

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

Date: Thursday, January 19, 1989

Place: Brooklyn's, 2644 W. Colfax Ave.

Time: 6:00 pm Social  
7:00 pm Dinner (optional @ \$10.00)  
8:00 pm Meeting

Speaker: Reliance

Topic: Variable Frequency Motors

Contact: Barbara, Peterson Company, 388-6322, by Monday, January 16, 1989.

Date: Thursday, January 19, 1989

Place: National Bureau of Standards,  
325 Broadway, Boulder, Room 1103

Time: 4:00 - 5:00 pm

Speaker: Dr. David A. Hill, IEEE Fellow  
Electromagnetic Fields Division  
National Institute of Standards &  
Technology.

Professor Adjoint, Dept. of Elect.  
Engineering, University of Colorado -  
Boulder, Colorado

Associate Editor for IEEE Trans-  
actions on Antennas and Propagation.

Topic: "Applications of Plane-Wave,  
Scattering-Matrix Theory"  
The plane-wave, scattering-matrix  
theory has been used extensively in  
near-field antenna measurements.  
More recently it has been found  
useful for scattering problems where  
the scatterer is located in the near  
field of the transmitting and  
receiving antennas. This talk will  
cover applications of the theory to  
detection of objects buried at  
shallow depths.

Contact: Bob Seeley, 986-6790.

Joint VTS/COMSOC - Vehicular Technology/  
Communications Societies

Date: Second week in February

Place: Mission Trujillo, 181 Ridge Road,  
Littleton (at Broadway, 794-5364)

Time: 6:30 Dinner (order from the menu)  
Program follows.

Speaker: Bob Lovisone, State of Colorado  
Department of Telecommunications.

Contact: John Hardzinski, 977-2224, or see the  
February Overlook for more informa-  
tion.

EMC - Electro-magnetic Compatibility

The next meeting of EMC will be February 21.  
Please see the February issue of the RockIEEE  
Overlook for more information.

Chairman's Message

by Keith Henderson

January 18th will be a fine opportunity  
to make the "move" by attending the Section  
Meeting. Make it a point to shake hands with  
John martin, and congratulate him for being  
voted in as the 1989, Region 5 Director.

At the meeting we will also recognize the  
outgoing Chairman, Mike Foley and his  
Executive Board and Committee for their fine  
work over the past year.

The Colorado Engineering council assists  
engineers, scientists, and technical people in  
Colorado. At a recent meeting, representa-  
tives from about fifteen of the constituent  
institutes and societies spoke briefly about  
their volunteer organizations, some of their  
achievements, and some of their problems.  
With each speaker, the energy level in the  
room seemed to grow. Experiencing that energy  
buildup, the kindred spirit, made you feel  
glad you were part of the larger community.

Experience the energy of the IEEE this  
year. Be different, go to a meeting, and get  
acquainted. A meeting a month is all we ask!

The Best of Holiday Greetings to you and  
yours.

News Release

IEEE Headquarters has advised me that I  
have won the election for Region 5 DIRECTOR-  
ELECT, 1989. I offer my sincere thanks to  
each Denver Section member who supported my  
candidacy and who voted for me. Many of you  
actively campaigned on my behalf which I  
appreciate very much. I know I could not have  
won against a well qualified candidate from  
Texas without the very strong support of the  
Denver Section members. I am looking forward  
to serving as your Region 5 DIRECTOR-ELECT,  
1989, and DIRECTOR, 1990-91. When I assume  
office, I hope that each of you will give me  
your suggestions and comments in order that we  
can do our share toward keeping IEEE the  
Institute we desire.

Thank you again for your support and your  
vote!

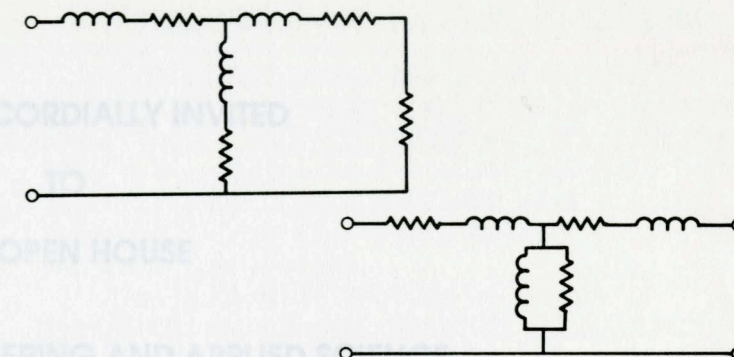
John E. Martin

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



DENVER SECTION

THE INSTITUTE OF  
ELECTRICAL AND  
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ENGINEERS, INC.



## Tutorial on Transformer & Induction Motor Theory and Application

Sponsored by the Denver Power Engineering/Industrial Applications Society Joint  
Chapter

Instructor: Pankaj K. Sen, PhD — Associate Professor of Electrical Engineering  
University of Colorado - Denver

Dates & time: Transformer, Friday, February 10, 1989

12:30 p.m. - 4:30 p.m.

Saturday, February 11, 1989

8:00 a.m. - 12:00 p.m.

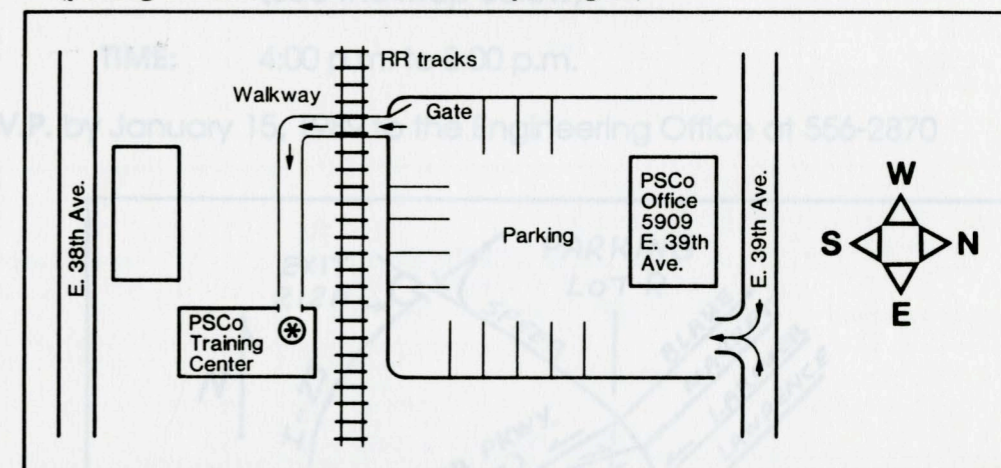
Induction Motor, Friday, February 17, 1989

12:30 p.m. - 4:30 p.m.

Saturday, February 18, 1989

8:00 a.m. - 12:00 p.m.

Location: Public Service Company of Colorado  
38th Avenue Training Center  
(parking available in 5900 E. 39th Ave. parking lot)



Enrollment is limited, 15 minimum - 45 maximum  
For further information, contact Bob Saint 659-0551 ext. 206

### Registration form

Name \_\_\_\_\_

Address \_\_\_\_\_

Company affiliation \_\_\_\_\_

Work phone \_\_\_\_\_

Home phone \_\_\_\_\_

Transformer Session:	Motor Session:
_____ Friday	_____ Friday
_____ Saturday	_____ Saturday

Cost of Tutorial:  
each session \$45.00  
both sessions \$85.00

Check payable to:  
I.E.E.E. PES/IAS  
Send checks with registration form to:  
John Barnick  
Westinghouse Electric  
3900 S. Wadsworth Blvd.  
Lakewood, CO 80235

Registration deadline is January 20, 1989



Joint Boulder Section Meeting  
Antennas and Propagation, Microwave Theory  
and Techniques, Geospatial and Remote Sensing  
Date: Thursday, January 19, 1989  
Place: National Bureau of Standards,  
325 Broadway, Boulder, Room 1103  
Time: 4:00-5:00 pm

Speaker: Dr. David A. Hill, IEEE Fellow  
Electromagnetic Fields Division  
National Institute of Standards and Technology  
Professor, Virginia Polytechnic Institute

Topic: Applications of Scattering Theory  
The plane-wave scattering theory has been used to  
analyze the radiation from a half-space dielectric  
medium. More recently, it has been used to analyze  
the radiation from a half-space dielectric medium  
with a surface impedance boundary condition.

Location: Public Service Company of Colorado  
28th Avenue Training Center  
(parking available in 3900 E. 39th Ave. parking lot)

Contact: Bob Seeley, 986-6870

Date: Second week of February  
Place: Mission Trail, 181  
(at Broadway, 794-5364)

Time: 5:30-7:00 pm

Speaker: Bob Seeley, 986-6870

Contact: John Hardzinski, 979-2224, or see the  
Registration form

The next meeting will be February 21.  
Please see the Registration form for more information.

Registration deadline is January 20, 1989

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# YOU ARE CORDIALLY INVITED TO THE OPEN HOUSE

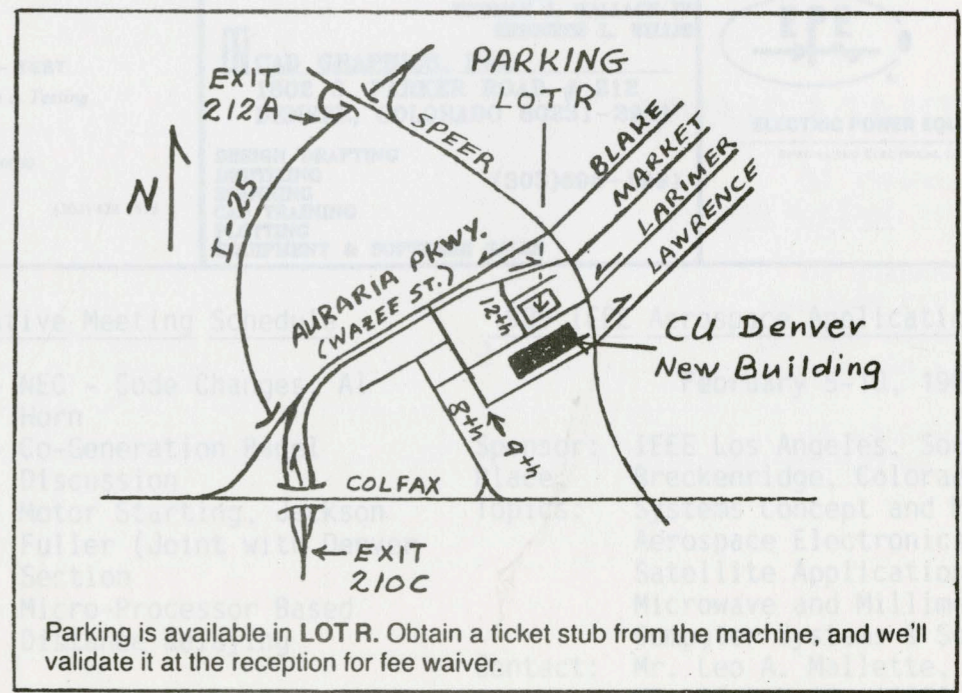
## COLLEGE OF ENGINEERING AND APPLIED SCIENCE UNIVERSITY OF COLORADO AT DENVER

Dear Friends of CU-Denver Engineering College:

You are cordially invited to the **Open House** at the **College of Engineering and Applied Science** to celebrate the relocation of the **College** into the new building and to get acquainted with our students, staff, and faculty and with the excellent engineering programs. Activities include a brief introduction of engineering programs, touring the facilities, and observing some equipment demonstrations. Complimentary refreshments, beer, and light wine will be served during the **Open House**.

**DATE:** Friday, January 27, 1989  
**PLACE:** North Classroom Atrium, 1200 Larimer Street, Denver  
(See the Map Below)  
**TIME:** 4:00 p.m. to 8:00 p.m.

**R.S.V.P.** by January 15, 1989 to the Engineering Office at 556-2870



**WIN  
CON 89**WINTER CONVENTION ON AEROSPACE  
AND ELECTRONIC SYSTEMS**EXPLORES  
TECHNOLOGY IN THE  
21st. CENTURY****FEATURING...**

- Mr. Anthony Battista (Keynote Speaker)**, Formerly House Armed Services Committee Staff
- Mr. Donald N. Frederickson**, Deputy Undersecretary of Defense, Tactical Warfare Programs
- Mr. George T. Singley**, Director for Army Research and Technology, Assistant Secretary of the Army
- Dr. Thomas P. Quinn**, Principal Deputy Assistant Secretary of Defense, C<sup>3</sup>I, Office of the Secretary of Defense
- Mr. Ivan Bekey**, Special Assistant for System Engineering and Planning Integration, Office of Exploration, NASA Hdqrs.
- Dr. Robert D. Diebold**, Director, Superconducting, Super Collider Division, U.S. Department of Energy
- Dr. Stephen Squires**, Computer Systems, Information Science and Technology Office, DARPA (Invited)
- Mr. Chester L. Whitehair (Session Chairman)**, General Manager, Architecture, Planning and Technology Division, The Aerospace Corporation
- Mr. Everett D. Greinke (Session Chairman)**, Deputy Undersecretary of Defense, International Programs and Technology

**JANUARY 31 - FEBRUARY 2, 1989**WESTIN SOUTH COAST PLAZA HOTEL  
COSTA MESA, CALIFORNIA**FOR MORE INFORMATION AND REGISTRATION PACKET**PHONE (818) 717-6989 OR WRITE WINCON 89  
P.O. BOX 344, NORTHRIDGE, CA. 91328-0344  
SPONSORED BY IEEE/AESS

Again this year, the Joint PES/IAS Chapter is sponsoring a tutorial on Electrical Power Theory and Applications. Dr. Pankaj K. Sen, P.E., Associate Professor, EE & CS Dept., University of Colorado-Denver will present the tutorial. This year's topics are Transformers and Induction Motors.

Sessions will include 1) Theory of Operation and Construction; 2) Equivalent Circuit and Performance Evaluation; 3) IEEE Methods of Testing; 4) Specification writing and 5) Fundamentals of Design.

Each topic will be covered in a four hour session held on consecutive Friday afternoons and Saturday mornings.

**Transformers**

Friday, February 10, 1989, 12:30-4:30 pm  
Saturday, February 11, 1989, 8:00-12:00 noon

**Induction Motors**

Friday, February 17, 1989, 12:30-4:30 pm  
Saturday, February 19, 1989, 8:00-12:00 noon

All sessions will be held at the Public Service company 38th Avenue Training Center. Cost for the tutorial will be \$45 for individual sessions and \$85 for both sessions. Please register as soon as possible on the form provided in this issue. Enrollment will be limited to 15 minimum and 45 maximum participants.

For further information, call Bob Saint at 659-0551.

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Electrical Information &amp; Testing

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Westminster, CO 80030

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FAX # (303) 288-5003PES/IAS Tentative Meeting Schedule

- February 16, 1989 - NEC - Code Changes, Al Horn
- March 16, 1989 - Co-Generation Panel Discussion
- April 12, 1989 - Motor Starting, Jackson Fuller (Joint with Denver Section)
- May 18, 1989 - Micro-Processor Based Distance Relaying

Tutorial, February 11 & 18

Transformer/Induction Motors, Pankaj Sen

1989 IEEE Aerospace Applications Conference

February 5-10, 1989

Sponsor: IEEE Los Angeles, South Bay Section

Place: Breckenridge, Colorado

Topics: Systems Concept and Management  
Aerospace Electronics  
Satellite Applications  
Microwave and Millimeter Technology  
Computer Systems & Software

Contact: Mr. Leo A. Mallette, Hughes Aircraft  
MS: Bldg R-10, A9026  
P.O. Box 92919, Los Angeles CA 90009  
(213) 334-2909

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

## RockIEEE Overlook

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## THE INSTITUTE OF ELECTRICAL and ELECTRONICS ENGINEERS

### DENVER SECTION



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## THE MONTH AT A GLANCE

January 18  
IEEE Denver Section Meeting

January 19  
CS/ITS Meeting  
PES/IAS Meeting  
AP/MTT/GRS Meeting

January 31  
WINCON 89 Convention

**RockIEEE Overlook**  
Official Publication of the  
IEEE Denver Section