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Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • DECEMBER 1989

TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations call the IEEE office 649-2800
(unless otherwise indicated)

Copy Deadline for January Scanfax is November 28, 1989

Dec. 4 Monday	APS/MTT Society	Quasioptical System Design for Millimeter Wavelengths	Atrium Restaurant 3223 Algonquin Rd. Rolling Meadows, IL	Social: 5:30 PM Dinner: 6:30 PM Talk: 7:30 PM
Dec. 6 Wednesday	Fox Valley/ Joint Meeting with ASSP/CES	Motorola Cellular Hand Held Portable Telephone	Wilton Manor 2200 N. Main St. Wheaton	Social: 6:00 PM Dinner: 7:00 PM Talk: 8:00 PM
Dec. 6 Wednesday	Industrial App. Soc. & Industrial Electronics Soc.	Panel Discussion of Interface between IPP, and Electric Utility	S&C Electric 6601 N. Ridge Blvd. Chicago	Social: 5:30 PM Dinner: 6:30 PM Talk: 7:30 PM
Dec. 7 Thursday	Laser & Electro-Optics Society	Advances in High Power Short Wavelength Lasers	U of I Chicago Cornucopia Room 710 S. Halsted	Tour: 4:30 PM Social: 5:30 PM Talk: 6:30 PM Dinner: 7:30 PM
Dec. 12 Tuesday	Chicago Section	Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting: 7:15 PM
Dec. 13 Wednesday	Power Engineering Society	PowerLogic-Integration of Protection, Instrumentation & Control	Carson Pirie Scott Corporate level Monroe & Wabash	Social: 11:30 PM Lunch: 12:00 PM Talk: 12:30 PM
Jan. 25 Thursday	Arrow/Intel	i860 - High Performance RISC Processor	Oakbrook Marriott 1401 W. 22nd St. Oakbrook, IL	Registration: 8:30 AM Talk: 9:00 AM Call: 708-250-0500 Ask for Lyn

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ISSUE	COPY DUE	MAILED ON
JAN-90	NOV 28	DEC 15
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MAR	JAN 30-90	FEB 15
APR	FEB 27	MAR 15
MAY	MAR 27	APR 15
JUNE	APR 24	MAY 15

**THESE ARE FIRM DEADLINES
FOR ADS AND COPY!!!**

IEEE POWER ENGINEERING SOCIETY

IEEE



SPEAKER:

Mr. Gary Anderson
Commercial Marketing Manager
PowerLogic Power Monitor and Control Group
Square-D Company

TOPIC:

PowerLogic - Industrial Power System Automation
The Integration of Protection, Instrumentation, & Control

ABSTRACT:

Advancements in microprocessor technology have resulted in greater performance at decreasing cost. This technology is being successfully applied to protection, instrumentation, and control of industrial power systems. Integrating these functions through data communications results in a synergism, such that the collective benefits exceed those which are achievable individually.

This presentation explores the various ways on which industrial power users may benefit through reduced energy costs, more efficient utilization of power distribution equipment, and improved power system reliability. It is anticipated that creative users will use these examples as catalysts for discovering additional innovative applications.

BACKGROUND:

As Commercial Marketing Manager, Mr. Anderson is responsible for overseeing the promotion of the PowerLogic power monitoring and control system.

Mr. Anderson began his career with Square D as a Field Sales Engineer in St. Louis, Missouri, where he then became Automation Products Field Sales Engineer. He subsequently served as a Marketing Manager for the Automation Products Business Unit in Milwaukee, Wisconsin for three years. Mr. Anderson received his Bachelor's of Science in Electrical Engineering from the Milwaukee School of Engineering in 1973.

PLACE:

Carson Pirie Scott - Chicago (Monroe and Wabash)
Corporate (lower) Level

DATE:

December 13, 1989

TIME:

11:30 Cocktails
12:00 Lunch
12:30 Presentation

Reservations may be made by calling the IEEE Chicago message center at 649-2800. Please leave name(s) and company name(s) for those wishing to attend.

Power and Life



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INDUSTRY APPLICATIONS SOCIETY INDUSTRIAL ELECTRONICS SOCIETY CHICAGO CHAPTER

JOINT MEETING WITH POWER ENGINEERING SOCIETY

Wednesday December 6, 1989

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PANEL DISCUSSION: ELECTRICAL INTERFACE REQUIREMENTS BETWEEN INDEPENDENT POWER PRODUCERS (IPPs) AND THE ELECTRIC UTILITY

About the Panelists

Steve Freitas of Russelectric has over 14 years experience as a Project Engineer for power systems control design of utility paralleling schemes on cogeneration, peak shaving and closed transition applications. Mr. Freitas received his B. S. in Electrical Engineering from Northeastern University.

Suheil Haddad of Sargent & Lundy Engineers has over 28 years experience in protective relay protection, generating and transmission system planning. Mr. Haddad received his Masters of Science in Electrical Engineering degree from IIT. He has served on many IEEE technical subcommittees and authored many papers in this area of expertise.

Thomas Wiedman, as a Section Engineer for Commonwealth Edison, has responsibility for the protective relay requirements for the cogeneration/utility interface. Mr. Wiedman received his BSEE from the U. of I. at Chicago and holds a PE License in Illinois. He is the Chairman of the IEEE Power System Relay Standards Subcommittee and the Network Transformer Protection Working Group.

Meeting Topic

An informed forum to review those factors which should be considered in designing the electrical interconnection between the industrial cogenerator (or IPP) system and the Electric Utility. Areas to be discussed include (1) Primary/Backup System Protection; (2) Automatic Reclosing Practices and (3) Standards Development Update.

Location

S & C Electric Co.
6601 N. Ridge Blvd.
(1800 W. Devon Ave. After 5:30 PM)
Chicago, IL.

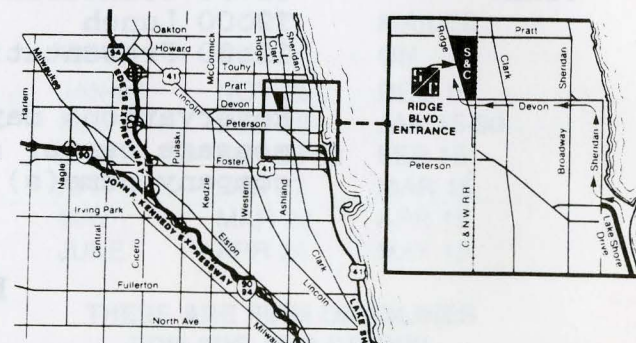
Time

5:30 PM Social
6:30 Dinner (Bldg. 3 Cafeteria via Main Lobby
of N. J. Conrad Laboratory Bldg.)
7:30 Program (Bldg. 14 - Product Demonstration Center)

Reservations

Please call the IEEE Message Center at 649-2800 as soon as possible to ensure Dinner seating. The cost of dinner is \$14.

Directions



Joint Meeting IEEE Lasers and Electro-Optics Society CHICAGO CHAPTER



UIC – IEEE Student Chapter and Optical Society of Chicago

Date: Thursday December 7, 1989
Topic: Recent Advances in High Power Short Wavelength Lasers
Speaker: Professor Charles K. Rhodes,
Dept. of Physics, University of Illinois at Chicago.

(Prof. Rhodes is the 1989 recipient of the Individual Achievement Award from the Chicago Chapter of IEEE – LEOS)

ABSTRACT: Amplification in the x-ray region requires a prodigious energy deposition rate spatially organized in a high-aspect-ratio volume of material. The fundamental question, therefore, centers on the controlled deposition of energy at very high specific powers. A discussion of current research activity on this matter will be presented.

Laboratory Tours: 4:30 PM (Prof. Rhodes' Laser Lab.)
Social/Business Meeting: 5:30 PM (or additional lab tours)
Technical Presentation: 6:30 PM (No Charge)
Dinner: 7:30 PM (\$13 per person, \$7 for students)

Location: University of Illinois at Chicago
Cornucopia Room, Chicago Circle Center
710 S. Halsted, Chicago

(Lab tours will depart from the Cornucopia room on the 3rd floor of CCC)

Directions: Exit at Taylor from I 90/94 (Dan Ryan Expressway)
West on Taylor (1 Block) to Halsted
Right (North) onto Halsted

Entree choices are "Garden of Plenty" Vegetarian Buffet, or Sauteed Tenderloin Tips of Beef. Advance dinner reservations should be made by calling the IEEE Chicago Message Center at (312) 649-2800 by 5:00 PM on Monday, December 4 , 1989. For additional information, contact David Naylor at UIC, (312) 996-6010.



IEEE

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

DECEMBER MEETING OF THE APS/MTT SOCIETY MONDAY DECEMBER 4, 1989

DR. PAUL F. GOLDSMITH

QUASIOPTICAL SYSTEM DESIGN FOR MILLIMETER WAVELENGTHS

Quasioptical propagation is gaining increasing acceptance as a valuable transmission medium for millimeter wavelengths. The reasons for this include the low loss, broad bandwidth, multiple polarization handling and the large range of circuit functions that can be obtained. A wide variety of radar and radiometric systems and subsystems have been developed using quasioptical techniques. Quasioptical systems depend on availability of building blocks or components for carrying out particular functions. Some of these are similar to waveguide approaches used at longer wavelengths, and some derive from infrared and optical technology.

Dr. Goldsmith is presently Professor of Physics and Astronomy at the University of Massachusetts, and Associate Director of the Five College Radio Astronomy Observatory. In 1982 he was one of the founders of the Millitech corporation, a company dedicated to design and production of millimeter and sub millimeter components and systems, where he is Vice President for Research and Development. Dr. Goldsmith received his undergraduate and graduate training at the University of California, Berkeley. He is a member of the American Astronomical Society, Sigma Xi, URSI, SPIE, and a senior Member of the IEEE.

LOCATION: The Atrium Restaurant
3223 Algonquin Rd.
Rolling Meadows, Illinois
1st exit north of I90 off Rt. 53. 1/4 mile east
on Rt. 62, Algonquin Rd.

Time:	Cocktails	5:30
	Dinner	6:30
	Speaker	7:30

RESERVATIONS: 312-649-2800 by December 1.
Non-members welcome. Dinner cost \$20, student members dinners are subsidized.

COMPSAC 90 CALL FOR PAPERS

The IEEE Computer Society will be holding the Computer Software & Applications Conference, COMPSAC 90, on October 31 - November 2, 1990 at the Holiday Inn Mart Plaza in Chicago. This COMPSAC will emphasize **applications of computer science and software engineering** to business and industrial system solutions. Since this is one of the few conferences that does emphasize applications, the program committee is attempting to attract good papers from business and industry, especially those in the Chicago area.

Papers related to, but not limited to, the following areas are invited:

- Software Quality and Productivity
- Software Engineering Management
- Development and Maintenance Environments
- Object-Oriented Computing
- Expert/Knowledge Based Systems
- Ultra-Reliable Real-Time Systems
- Emerging Technologies

Applications software and experience in the areas of:

- Integrated Office Automation Systems
- Distributed Network Applications
- Image Applications
- Engineering Workstations, CAD/CAM/CIM
- Optical Storage Based Information Systems

If you will be submitting a paper, you need to do the following:

Submit 5 copies of the full paper (double-spaced) 1000-5000 words before the deadline
date of **February 15, 1990**

Papers should include: title/authors/affiliations and 150-word abstract

Identify the author responsible for correspondence, including
title/affiliation/address/telephone number and fax number

Submit the paper to:

Dr. Ifay F. Chang
Room 1B28
IBM T.J. Watson Research Center
P.O. Box 714
Yorktown Heights, New York 10595
Telephone: 1-914-789-7825/7081
Telefax: 1-914-789-7455

If you think you have a potential paper and you are not sure how it would be accepted, please feel free to call

John R. North
Track Chairman - Applications
AT&T Network Systems - NFNW230600
2600 Warrenville Road
Lisle, Illinois 60532
Telephone: 1-312(708)-510-4692

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Fiber Optic Attenuators	Power Limited Fire Protective Signaling Cable
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High & Low Temperature Cables	Robotic Cables
Instrumentation Cables	RS-232 Interconnect Cables
Intercom Cables	Special Impedance Cable (10 to 150 OHMS)
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Local Area Network (LAN) Cables	Twinaxial Cable
	Twisted Pairs (US/CSA)

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CALL FOR PAPERS

Paper Topics in All Areas of Consumer Electronics Including:

VIDEO

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AUDIO

Digital Audio, Surround Sound, TV Audio (including multi-channel), Home & Mobile Radio/Audio, Loudspeaker Systems, 2-Way Radio, Music Electronics.

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Home Bus Control/Security Systems, Videotext & Teletext, Telephones & Accessories, Appliance Electronics, Personal Computing Hardware, Software & Peripherals, Electronic Games.

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Image Sensors, Integrated Circuits, Batteries and Solar Cells, Hybrid and Surface Mount Technologies.

DESIGN & MANUFACTURING

CAD/CAM Techniques, Robotic Assembly, Packaging & Interconnections, EMI/EMC Compliance, Human Factors

EMERGING TECHNOLOGIES

Electronic Photography, Smart Cards, Home Health Care Electronics, Personal Electronics, Automotive, Marine & Aviation Electronics, Voice Input/Output, Hard Copy Devices, Artificial Intelligence.

CONFERENCE INFORMATION

DATE: June 6-8, 1990

PLACE: The Westin Hotel - O'Hare
Rosemont, IL
Convenient Rapid Transit to Downtown Chicago and EIA Consumer Electronics Show (June 2-5)

HIGHLIGHTS:

- Digest of Technical Papers
- Evening Panel Discussions
- Educational Sessions (June 5)
- Prizes for two best papers

TECHNICAL EXHIBITS: Gene Frantz
Texas Instruments
P.O. Box 1443 M/S 701
Houston, TX 77251-1443
713-274-2254/Fax 713-274-2279

HOSPITALITY SUITES: Annmarie Mahallak
M. Gottlieb Associates
6009 N. Milwaukee Avenue
Chicago, IL 60646
312-775-1151/Fax 312-775-8620

INSTRUCTIONS:

- Authors are requested to submit ten copies of a 500-to 700-word summary and brief (35-word) abstract for paper selection purposes by January 17, 1990. Authors' names, affiliation, complete mailing address, telephone and fax numbers should appear on the first page of the summary.

Send U.S. Papers to:
DIANE D. WILLIAMS
Conference Coordinator
131 LedgeWood Drive
Rochester, NY 14615
tel 716-865-2938
fax 716-663-8269

Send European papers to:
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Philips Components
BAE-2
Eindhoven, The Netherlands
tel 31-40-722497
fax 31-40-722861

Send Far East papers to:
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Matsushita Electric Ind. Co. Ltd.
Central Research Lab
3-15 Yagumo-Nakamachi
Moriguchi City, Osaka, 570 Japan
tel 06-909-1121/fax 06-906-4591

- Authors of accepted papers will be notified by February 2, 1990 and will be supplied an "Author Kit" including special mats and instructions for preparing camera-ready copy of a summary, not to exceed two pages including figures, for the Conference *DIGEST OF TECHNICAL PAPERS*. This material must be submitted by March 16, 1990. Presentation should be planned to fit a 20-minute time interval.

- Full-length versions of each paper are desired for publication in the *TRANSACTIONS ON CONSUMER ELECTRONICS*. Camera-ready papers received at the time of the conference will receive priority attention. Papers should be limited to approximately 2500 words.

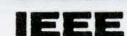
DEADLINES: January 17, 1990 for receipt of paper summaries; March 16, 1990 for receipt of DIGEST material.

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FOX VALLEY SUBSECTION

in a Joint Meeting with the

ACOUSTICS SPEECH AND SIGNALING PROCESSING/CONSUMER ELECTRONICS SOCIETY

TOPIC: Motorola Cellular Hand Held Portable Telephone

DATE: Wednesday, December 6, 1989

SPEAKER: Ray Millington

PLACE: Wilton Manor, Schmale Rd., Wheaton

TIME/COST: Social: 6:00 p.m. - Cash Bar

Dinner: 7:00 p.m. - \$12.00

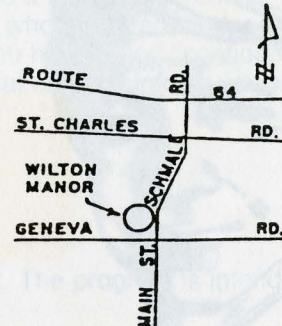
Speaker: 8:00 p.m. - Free

RESERVATIONS: Call (312) 649-2800 to make reservations for Dinner and/or Meeting, by Monday, December 4th, 1989.

TECHNICAL QUESTIONS: Direct questions about our topic or speaker to Marty Lake at (312) 510-6626.

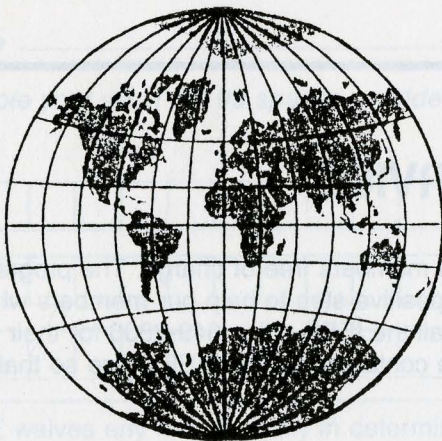
ABSTRACT: Ray will discuss Motorola's hand held portable cellular telephone under the Micro TAC product line which is one of the world's smallest cellular telephones. He will cover engineering aspects of the design and development of this product.

ABOUT OUR SPEAKER: Mr. Millington works at Motorola in Schaumburg, IL.



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