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(Publication number)
(ISSN 0018-9227)

SCANFAX, 125 S. CLARK ST., CHICAGO, IL 60603

Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • May 1980

CALENDAR OF EVENTS

For reservations call the IEEE office at 236-4609 (unless otherwise indicated)

MAY	3	Tutorial - "Ada"	Computer Soc.	Kent College of Law 77 S. Wacker Dr. Chicago	9:30 AM--4:00 PM
	3	MAC '80 (Midwest Acoustics Conference)		Ill. Inst. of Tech. Hermann Hall, 3241 S. Federal, Chicago	9:00 AM--5:30 PM (For infor. call T.Tutins, 455-3600)
	7	"Acoustic Design for Electronic & Sound Reprodctn."	Fox Valley Sub.	The Tally-Ho Rest. 27W103 North Ave. Rt. 64, West Chicago	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 PM
	10	Seminar - "Automatic Process Control"	Indus. Appls. Soc. & Indusl. Electns. Control Instrumen.	Fermilab Kirk Rd. & Pine Batavia	Registra. 8:00 AM (For infor. call J.Anich, 269-6012)
	13	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	Brown & Root Offices 2001 Spring Rd. Oak Brook	Meeting 7:30 PM
	14	"SF ₆ Gas Insula. Equipment - U.S. & Europe"	Power Engrng. Soc.	Stouffer's Rest. 32 E. Randolph St. 2nd Fl., Chicago	Social 11:15 AM Lunch 11:45 AM Meeting 12:30 PM
	14	"Radio Naviga. Vehic. Monitoring & Loca. Schemes"	Vehicular Tech. Grp.	Lancer Rest. 1450 E. Algonquin Rd. Schaumburg	Social 6:30 PM Dinner 7:00 PM Meeting 8:00 PM
	17	Recognition Dinner	IEEE Chicago Sec.	Ramada-O'Hare Inn 6600 Mannheim Rd. Rosemont	Social 6:00 PM Dinner 7:00 PM Enter. 8:30 PM
	19	"Impact of Solar & Geomagnetic Dist.on Elec.Pwr.Trans. ..."	Antennas & Prop./ Microwave Theory & Techniques Soc.	Louis' Place 351 E. Lake Addison	Social 5:30 PM Dinner 6:30 PM Meeting 7:30 PM
	20	"New FCC Regulations for RFI"	Northwest Sub.	Mr. Peters Rest. Rand Rd. (Shop. Mall) Mount Prospect	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 PM
	28	"CODEC Integr. Circuit Tech."	Electron Devices Soc.	Mr. Peters Rest. Rand Rd. (Shop. Mall) Mount Prospect	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 PM
JUNE	10	Monthly Meeting	IEEE Executive Cte.	Brown & Root Offices	Meeting 7:30 PM
	11	Product Fair & Technical Presenta.	Vehicular Tech. Grp. (Call Sue Hendriksen 255-9800, ext. 372)	Hewlett Packard 5201 Tollview Dr. Rolling Meadows	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 PM
	18-19	21st Annual Chgo. Spring Conf. on Consumer Electncs.	BCCES & IEEE Chicago Section	Arlington Pk. Hilton Euclid Av/Rohlwing Rd Arlington Heights	(Call Conf. Chmn., Wayne Bretl, 391-7000, ext. 8386)

CHICAGO SECTION ELECTS OFFICERS AND EXECUTIVE COMMITTEE

The Chicago Section of IEEE has elected their officers and members of the Executive Committee for the 1980-81 term. Voting was by ballot printed in the April issue of Scanfax. Officers elected are:

- Chairman - Paul Geiger
Allen-Bradley Company
- Vice Chairman - Howard Wolfman
Teletype Corporation
- Treasurer - Dennis Lamont
Weldy/Lamont Associates, Inc.
- Secretary - William Everson
Commonwealth Edison Company

Members of the Executive Committee elected by mail ballot are:

- Michael Barnes - Motorola, Inc.
- Charles Borchert - Bell Telephone Laboratories
- Bert Orszula - Brown & Root, Inc.
- Robert Scheman - A T & T Long Lines
- John Tyner - Cleworth Publications
- Robert Waghorne - Teletype Corporation
- John Waters - Bussmann Manufacturing

The Executive Committee also includes the chairmen of both the Fox Valley and Northwest Subsections and the chairmen of each of the active group or society chapters. According to the Chicago Section Bylaws, they are automatically members of the Executive Committee and do not have to be voted upon by the membership.

KIRKEGAARD TO PRESENT OVERVIEW OF ARCHITECTURAL ACOUSTICS

Have you ever been at a play or concert and strained to hear what was being said because the sound was muffled? Do you remember leaving the theater and commenting on how bad the acoustics were and wondering what could be done to make the sound better? The answers to your questions will be the topic of the next meeting of the Fox Valley Subsection on Wednesday - May 7.

Mr. R. Lawrence Kirkegaard of Kirkegaard & Associates, consultants in architectural acoustics, will be the featured speaker. Mr. Kirkegaard will present an overview of architectural acoustics and, in particular, will discuss the remodeling of Orchestra Hall. Other current projects include Regenstein Hall at Northwestern University in Evanston, the Illinois Senate Chamber Sound System in Springfield, and the remodeling of the Criminal Courts Building, Cook County Department of Corrections, to just name a few. See Calendar of Events for location and time. For reservations call the IEEE office before May 6.

"NEW FCC RULES ON EMI" TOPIC AT NORTHWEST MEETING

Mr. Michael Head, Vice President of Engineering at Corcom, Inc. will discuss FCC Docket 20780, Part 15 that defines new rules governing restricted radiation devices and low power communications devices. This regulation, originally scheduled to be imposed July 1, 1980 has been extended to January 1, 1981, but may have far reaching effects on manufacturers of electronic games, pocket calculators, digital volt meters, switching power supplies, and microprocessor systems.

If you are concerned with almost any electronic device, you need to know more about this FCC rule. Join the Northwest Subsection on Tuesday - May 20 for this informative meeting. See Calendar of Events for location and time.

SCANFAX, (Publication number) (ISSN 0018-9227), May 1980 Volume 32, Number 9, SCANFAX is published monthly, except July and August by the Chicago Section, Institute of Electrical and Electronics Engineers for the information of its members. Business Office is at 125 S. Clark St., Chicago, Illinois 60603, telephone number (312) 236-4609. Subscription rate for IEEE members collected in dues, \$1.50; for others, \$3.00 per year. Second-class postage paid at Chicago, Illinois.

Unless otherwise specified, Chicago Section IEEE neither endorses nor sanctions any positions or actions espoused in SCANFAX.

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Change of Address

A change of address form is included in each issue of SPECTRUM. Your local post office will also supply you with cards; mail to Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.

Professional Activity
UPDATE

DID YOU KNOW THAT THE ILLINOIS GENERAL ASSEMBLY HAS A SCIENCE STAFF?

The Illinois General Assembly's science staff exists in the Illinois Legislative Council, a twenty-member legislative commission. Here is how it happened. The first staff scientist and legislative science intern both began their work with modest National Science Foundation support in 1973. Beginning in July 1974, the activities of the council's science unit, comprised of a staff scientist, science intern, and secretary, were fully supported by the General Assembly through annual appropriations to the Legislative Council. The science staff still serves the members of the General Assembly and has one of the longest continuous operating history of any state legislative science office in operation today.

In 1978, the Legislative Council was awarded a grant under the National Science Foundation's State Science, Engineering and Technology Program. The grant permitted the science staff to catalog its activities over a five-year period and propose how science services to the General Assembly might be improved. To see our copy of the report from that project, or if you have any questions or comments, write to PAC UPDATE, c/o Scanfax.

STUDENTS TO BE RECOGNIZED AT DINNER ON MAY 17

At the IEEE Chicago Section Recognition Dinner on Saturday - May 17 at Ramada-The O'Hare Inn in Rosemont, the following students will be recognized:

Student Scholarship Awards (\$500.00 scholarship):

- Sam Levi - Northwestern University
- Douglas Stahl - University of Illinois at Chicago Circle
- John Swan - Illinois Institute of Technology

Outstanding Student Member Awards:

- Chung-Yee Chan - University of Illinois at Chicago Circle
- Mark F. Sauder - DeVry Technical Institute
- Thomas Sepka - Illinois Institute of Technology
- Douglas Seter - Northwestern University
- Michael Zaniolo - Illinois Institute of Technology

Chicago Public High School Award (\$100.00):

- Peter Sahn - Mather High School

This year's annual event will feature Paul Lennon, Comedian, Nani's Polynesian Review, and the Ravenswood Orchestra. Fellow Award recipient will be James W. Schwartz, "for contributions to the theory and development of color television picture tubes and single-sideband aircraft radio equipment." For reservations, call Frank Voltaggio, Jr. at Northrop Corporation, 259-9600, extension 5409. Tickets are \$18.00 each.

HEWLETT PACKARD TO HOST JUNE MEETING OF VEHICULAR TECHNOLOGY GROUP

On Wednesday - June 11, Hewlett Packard will host the meeting of the Vehicular Technology Group with a product fair and technical presentation at their Midwest Regional Headquarters located at 5201 Tollview Drive in Rolling Meadows.

Social hour will be at 6:00 PM and dinner at 7:00 PM. There will be a technical presentation at 8:00 PM on Logic Development Systems. Various types of test and measurement equipment will be available for "hands on" operation during the evening. A nominal charge of \$4.00 for dinner will be payable at the door. Reservations are required. Call Susan Hendriksen at 255-9800, extension 372 no later than June 3.

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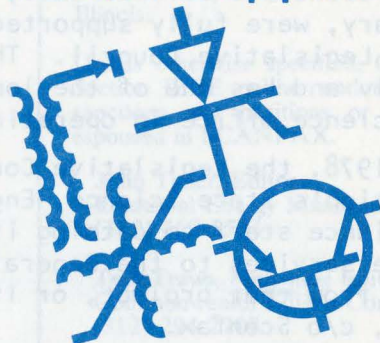


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**21ST ANNUAL CHICAGO SPRING CONFERENCE ON CONSUMER ELECTRONICS
WEDNESDAY, JUNE 18, 1980**

ROOM A

IA AUTOMOTIVE ELECTRONICS

- 9:00 1. *The Computer That Will Be In Your Car*
J. Farrell
Motorola, Inc.
- 9:25 2. *Microcomputer Control of Ford's PROCO Engine*
(invited paper)
E. Swanson
Bell Research Laboratories
- 9:50 3. *The Impact of Semi-Custom IC's on Automotive Applications*
D. Bray
Interdesign Inc.
- 10:15 COFFEE BREAK
- 10:30 4. *A New Voltage Regulator Protects Automotive Electronics*
P. Menniti, F. Pellegrini, G. Seragnoli
SGS-ATES
- 10:55 5. *Distributorless Electronic Advance Ignition*
A. Petrie
Motorola, Inc.
- 11:20 6. *A Piezo Powered IC Transmitter*
G. Ledenbach
National Semiconductor
- 11:45 Meet the Authors

ROOM B

IB TV TUNERS/TUNER CONTROL

- 9:00 1. *A Single ECL/I²L Chip PLL IC for a Frequency Synthesized TV Tuning System*
K. Torii, T. Shima, S. Shimizu, K. Kanzaki,
H. Iwasaki, S. Kameyama, Y. Ooida, J. Sano
Toshiba Corporation
- 9:25 2. *Frequency Synthesizing Tuning System with SAW Device*
S. Matsuura, T. Murata, I. Yuki, K. Hazama
Hitachi Ltd.
- 9:50 3. *A 1 GHz Low Power 2 Modulus Frequency Divider*
K. Yamada, T. Takahashi, K. Kimura
Nippon Electric Company
- 10:15 COFFEE BREAK
- 10:30 4. *A High Performance VHF Varactor Tuner with a Dual Gate GaAs MES-FET and GaAs Varactor Diodes*
T. Satoh, A. Hashima, Y. Kawai
Matsushita Electric Industrial Co. Ltd.
- 10:55 5. *Design for Reliability - Design for Litigations*
R. Rhoten
Oklahoma State University
- 11:20 Meet the Authors

ROOM C

IC LOCAL PROGRAM SOURCES

- 9:00 1. *New Chrominance Signal Processing LSI for Home VCR*
I. Nakagawa, A. Shibata, N. Horie
Hitachi Ltd.
- 9:25 2. *Color Signal Processing with New Bandwidth Compression Technique for a VCR*
M. Kobayashi, A. Takeuchi, K. Fujisawa
Matsushita Electric Industrial Co. Ltd.
- 9:50 3. *VCR Signal Dropout Counter*
Y. Kosaka, A. Hirota, Y. Shiraishi
Victor Company of Japan
- 10:15 COFFEE BREAK
- 10:30 4. *A CCD Digital Color Camera*
F. Nagumo, T. Asaida, H. Yasui, S. Ochi
Sony Corporation
- 10:55 5. *High Quality PARCOR Speech Synthesizer*
T. Sampei, A. Asada, K. Nakata
Hitachi Ltd.
- 11:20 Meet the Authors



Twenty-First Annual
Chicago Spring Conference
On Consumer Electronics

12:30 AWARD LUNCHEON

Guest Speaker: Mr. Jack Wayman
Sr. VP Consumer Electronics Group,
EIA
The Link Between Us

**6:00 INDUSTRY COCKTAIL PARTY
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PICTURE TUBE & COMPONENTS DIV.,
ZENITH RADIO CORP.**



IIA SIGNAL PROCESSING

- 2:00 1. *Control IC for Switch Mode Power Supplies*
M. Huber
Siemens
- 2:25 2. *A Novel IC Structure for 150V High Voltage Consumer IC*
I. Imaizumi, M. Kimura, M. Yashimura,
F. Inoue
Hitachi Ltd.
- 2:50 3. *A Delay-Line-Less Video Signal Processing Circuit Using a New Surface Acoustic Wave Filter for Television Receivers*
I. Nishimura, K. Tanmatsu, Y. Ogawa,
Y. Kuwano, M. Ohnishi, H. Nishiwaki,
T. Toyofuku
Sanyo Electric Co. Ltd.
- 3:15 COFFEE BREAK
- 3:30 4. *Integrated NTSC Chrominance Luminance Processor*
L. Harwood, J. Hettinger, R. Shanley,
E. Wittmann
RCA
- 3:55 5. *A Sound Field Effector for Car Stereo*
K. Shima, M. Hibino, Y. Iwamoto
Mitsubishi Electric Corp.
- 4:20 Meet the Authors

IIB TELETEXT

- Session Chairman:* Dr. Walter Ciciora
Zenith Radio
- 2:00 1. *A Quality Scaling Factor for Integrated Communications*
E. J. Smura
Xerox Corp.
- 2:25 2. *Library Services Via Teletext*
M. W. Bendig
OCLC
- 2:50 3. *Extensibility of UK Teletext*
B. Rogers
ITT UK
- 3:15 COFFEE BREAK
- 3:30 4. *PRESTEL New Developments*
J. Darkin
British Post Office
- 3:55 5. *LSI Developments for Viewdata*
G. O. Crowther
Mullard Ltd.
- 4:20 Meet the Authors

IIC SUBSCRIPTION TV

- Session Chairman & Organizer:* Robert Bilodeau
Suburban Cablevision
- 2:00 1. *Extended Bandwidth Cable Communication Systems*
I. Switzer
Switzer Engineering
- 2:25 2. *TIERED Services Delivery and Control*
C. Eissler
Oak Industries
- 2:50 3. *Home and Business Information Services for Cable*
M. Blair
Reuters
- 3:15 COFFEE BREAK
- 3:30 4. *Games Computers Can Play on Cable*
M. Jeffers
Jerrold Electronics
- 3:55 5. *Direct Broadcast Satellite Communications*
T. Humphries
Gardiner Communications Corp.
- 4:20 Meet the Authors



**CSC80 21ST ANNUAL
CHICAGO SPRING CONFERENCE
ON CONSUMER ELECTRONICS
JUNE 18 & 19, 1980**

At the Arlington Park Hilton Hotel
Arlington Heights, Ill.

TENTATIVE PROGRAM

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**21ST ANNUAL CHICAGO SPRING CONFERENCE ON CONSUMER ELECTRONICS
THURSDAY, JUNE 19, 1980**

ROOM A

IIIA DISPLAY

- Session Chairman:** Ron Stetz
Motorola
- 9:00 1. *Creeping Discharge in Color Picture Tube*
H. Nakanishi, W. Imanishi
Mitsubishi Electric Corp.
- 9:25 2. *A Novel Arc Suppression Technique for Cathode Ray Tubes*
Y. Kobori, Y. Katagiri, T. Kaji, N. Hasegawa
Sony Corporation
- 9:50 3. *A New Approach to a High Performance Electron Gun Design for Color Picture Tubes*
K. Hosokoshi, S. Ashizaki, H. Suzuki
Matsushita Electronics Corp.
- 10:15 COFFEE BREAK
- 10:30 4. *A High Performance Color CRT Gun with an Asymmetrical Beam Forming Region*
H. Chen, R. Hughes
RCA
- 10:55 5. *A New High Resolution Trinitron Color Picture Tube for Display Application*
Y. Yamada, R. Ashiya, M. Kikuchi, K. Saita
Sony Corporation
- 11:20 6. *A New Monochrome Data/Graphics Video Projector*
T. Schmidt
Electrohome Electronics Division
- 11:45 Meet the Authors

ROOM B

IIIB TELETEXT

- Session Chairman:** Dr. Walter Ciciora
Zenith Radio Corp.
- 9:00 1. *A Description of the Broadcast Telidon System*
J. R. Storey, A. Vincent, R. Fitzgerald
Department of Communications, Canada
- 9:25 2. *Data Analysis Procedures and Presentation Formats for Broadcast Teletext*
S. J. Lippoff
Arthur D. Little Inc.
- 9:50 3. *Adaptation of Improvements to Teletext Systems for 525 Line NTSC Applications*
G. O. Crowther
Mullard Ltd.
- 10:15 COFFEE BREAK
- 10:30 4. *Antiope Teletext and the DRCS**
O. Lambert, R. Brusq, B. Marti, A. Poignet
CCET, Rennes
- 10:55 5. *Implementation of DRCS* in United Kingdom Teletext*
B. Rogers
ITT UK
- 11:20 Meet the Authors
- *Dynamically Redefinable Character Set

ROOM C

IIIC SPECIAL RADIO

- 9:00 1. *The uP: The Key to an Advanced Frequency Synthesized Amateur Radio HF Transceiver*
R. Groh
Heath Co.
- 9:25 2. *A Video Surveillance System for Public Transportation Using 2-Way Land-Mobile Radio*
D. Brown
Motorola
- 9:50 3. *Efficient Small Size Antenna for FM Radio Reception*
J. Kane, K. Fukui, M. Okamoto
Matsushita Industrial Co. Ltd.
- 10:15 COFFEE BREAK
- 10:30 4. *FM Multipath Distortion in Automobile Receivers Has Been Significantly Reduced by A New Antenna System*
S. Takeda, J. Shibata, M. Shimakata, K. Aizawa
Pioneer Electronic Corp.
- 10:55 5. *Development of VHF/FM Radio/Front End Integrated Circuit*
K. Tanabe, M. Kanno, J. Suzuki, M. Okamoto, D. Murakami, T. Okubo, M. Idesawa
Matsushita Industrial Co. Ltd.
- 11:20 Meet the Authors



Twenty-First Annual
Chicago Spring Conference
On Consumer Electronics

Sponsored by BCCES and the Chicago Section of IEEE
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Arlington Hts., Ill.

Remember, this is a tentative program and changes may be made in light of the rapid evolution of these systems.

Hotel Reservations: Use enclosed card
Registration: (at door)
\$15 IEEE Members, \$20 Non-members



IVC RADIO TUNING

- 2:00 1. *AM-FM Car Radio for Tomorrow*
R. Grazadei, G. Seragnoli
SGS-ATES
- 2:25 2. *A One Chip FM/AM Digital Tuning System*
K. Ichinose, K. Kanzaki, K. Aoki, Y. Sasaki, M. Tokumaru, J. Sano, T. Ikeda
Toshiba Corporation
- 2:50 3. *A High Speed NMOS PLL Synthesizer LSI with an On Chip Prescaler for AM-FM Receivers*
T. Yamada, Y. Tsuda, T. Ohtsu, T. Shimada, Y. Osakabe, T. Kurita
Sony Corporation
- 3:15 COFFEE BREAK
- 3:30 4. *A Portable All Band Radio Receiver Using Microcomputer Controlled PLL Synthesizer*
K. Fukui, S. Ninomiya, T. Danno, K. Nakamura, K. Okamura
Matsushita Electric Co.
- 3:55 5. *Phase Locked Loops and Surface-Wave Filters - An Ideal Combination*
J. Grosjean
Engineering Consultant
- 4:20 Meet the Authors

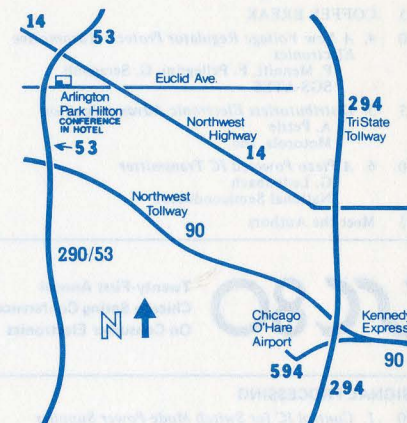
IVB TELETEXT (Con't.)

- 2:00 6. *Teletext Captioning Systems*
C. Sechet
CCET - Rennes
- TELETEXT/TV RECEIVERS**
- Session Chairman:** Dr. Walter Ciciora, Zenith Radio Corp.
- 2:25 1. *Television Receiver Design Aspect for Better Teletext Reception*
Y. Ishigaki, Y. Okada, T. Hashimoto, T. Ishikawa
Sony Corporation
- 2:50 2. *A Novel Automatic Ghost Canceller*
S. Makino, J. Murakami, M. Sakurai, S. Ohnishi, M. Obara
Toshiba Ltd.
- 3:15 COFFEE BREAK
- 3:30 3. *An Automatic TV Signal Equalization System - "Picture Clinic"*
Y. Ishigaki, K. Oouchi, K. Utsunomiya, H. Yamada, C. Kuriki, J. Saitoh
Sony Corporation
- 3:55 4. *Teletext Receiver - A Circuit Design of the Sampling Clock Regeneration*
M. Hirashima, K. Uno, S. Fukuda, T. Kawakami
Matsushita Electric Industrial Co. Ltd.



**21ST ANNUAL
CHICAGO SPRING CONFERENCE
ON CONSUMER ELECTRONICS**

**1980 Spring Conference
AT THE ARLINGTON PARK HILTON**



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