

technical activities

# NEWSBRIEFS

**SUPPLEMENT**

◆ The Institute of Electrical and Electronics Engineers, Inc. • 345 East 47th Street, New York, New York, 10017

MARCH/APRIL 1979

## INTRODUCTION

This Supplement to the March issue of NEWSBRIEFS is being provided on an experimental basis in response to suggestions from our volunteer officers. We have included the most up-to-date listing of IEEE (co)sponsored conferences to assist you in the planning of your AdCom meetings and your own personal plans to attend a conference. Also enclosed is the January edition of the IEEE Publications Bulletin, a quarterly, normally sent to our nonmember customers worldwide. In order to keep you abreast of new publications arriving in the warehouse, we will include updated reports from time to time. The Supplement will also serve as a catch-all for documents attached to NEWSBRIEFS. This month you will find the Doublet Matrix and the 1979 IEEE Budget as discussed in the column entitled "Headlines from the IEEE Executive Committee and Board of Directors Meetings."

Your feedback on additional material for publication in the Supplement would be most appreciated.

1979 IEEE BUDGET  
(000 OMITTED)

Page No.	PROGRAM	INCOME	EXPENSE	NET
2	Publishing	2967.2	2627.4	339.8
3	Spectrum	1890.3	2957.3	(1067.0)
4	Accounting	161.0	584.2	( 423.2)
5	Education	1082.9	1363.3	( 280.4)
6	Standards	1081.0	1116.0	( 35.0)
7	Technical Activities	853.0	1450.0	( 597.0)
8	Field Services	-0-	1185.3	(1185.3)
9	Administrative Services	790.8	1266.7	( 475.9)
10	Data Processing	368.0	535.0	( 167.0)
11	Corporate Activities	33.0	1460.0	(1427.0)
--	Membership Dues	5150.0	132.0	5018.0
	SUB TOTAL	14377.2	14677.2	( 300.0)
--	Special Projects & Contingency Fund	-0-	600.0	( 600.0)
	TOTAL	14377.2	15277.2	( 900.0)
12	USAB	1240.0	1260.0	( 20.0)
--	Canadian Region 7	47.5	47.5	-0-
13	Societies/Councils	8971.2	8783.1	188.1
	GRAND TOTAL	\$24635.9	\$25367.8	\$( 731.9)

Adopted by Board of Directors, February 18-19, 1979

IEEE SPONSORED, COSPONSORED & LIMITED INTEREST CONFERENCES

1979	CONFERENCE	LOCATION	INFORMATION CONTACT	PUBLICATION
APR. 1-4	EDISON CENTENNIAL SYMPOSIUM ON SCIENCE, TECH., & THE HUMAN PROSPECT  SPONSORS: IEEE ENERGY COMM., ELEC. POWER INST., EDISON FOUND. EXHIBIT: NO EST. ATTENDEES: 1000	SAN FRANCISCO HILTON SAN FRANCISCO, CA	GOVERNMENT INSTITUTES, INC. 4733 BETHESDA AVENUE, N.W. WASHINGTON, D.C. 20014 (301) 656-1090 RICHARD J. JERRIL IEEE (212) 644-7546	LIMITED INTEREST
APR. 1-4	SOUTHEASTCON  SPONSORS: REG. 3 IEEE VIRGINIA MOUNTAIN SECT. EXHIBIT: YES EST. ATTENDEES: 500	HOTEL ROANOKE ROANOKE, VIRGINIA	K. REED THOMPSON ROOM 244 GENERAL ELECTRIC CORP. 1501 ROANOKE BOULEVARD, SALEM, VIRGINIA 24153 (703) 387-7370	RECORD
APR. 1-6	TRANSMISSION & DISTRIBUTION CONF. & EXPOSITION  SPONSORS: PE EXHIBIT: YES EST. ATTENDEES: 9000	WORLD CONGRESS ATLANTA, GEORGIA	KEN CORMANY GEORGIA POWER CO. 270 PEACHTREE STREET N.E. ATLANTA, GEORGIA 30303	RECORD 79CH1399-5 PWR
APR. 2-4	ACOUSTICS, SPEECH & SIGNAL PROCESSING  SPONSORS: ASSP EXHIBIT: YES EST. ATTENDEES: 600	INTERNATIONAL INN WASHINGTON, D.C.	ANTHONY ELLER NAVAL RESEARCH LABORATORY CODE 8120 WASHINGTON, D.C. 20375 (202) 767-3210	RECORD 79CH1379-7 ASSP
APR. 3-5	SPACE INSTRUMENTATION FOR ATMOSPHERIC OBSERVATION (REG.5)  SPONSORS: REG. 5, UNIV. OF TEXAS AT EL PASO, AIAA EXHIBIT: YES EST. ATTENDEES: 300	EL PASO CIVIC CENTER EL PASO, TEXAS	DR. JOSEPH H. PIERLUISSI DEPT. OF ELECT. ENGR. UNIV. OF TEXAS AT EL PASO EL PASO, TEXAS 79968 (915) 747-5470	RECORD 79CH1380-5 REG. 5
APR. 3-5	VERY LARGE SCALE INTEGRATED CIRCUITS, TECHNOLOGIES, SYSTEMS, APPLICATIONS  SPONSORS: IEEE WEST GERMAN SECTION NTG IN COOPERATION EST. ATTENDEES: 500	BADEN-BADEN, GERMANY (FEDERAL REPUBLIC OF GERMANY)	DR. ING. F. COERS STRESEMANNALLEE 21 VDE-HAUS D-6000 FRANKFURT 70 WEST GERMANY	LIMITED INTEREST
APR. 3-5	SPECIFICATIONS OF RELIABLE SOFTWARE  SPONSORS: C	HYATT REGENCY CAMBRIDGE, MASS.	HARRY HAYMAN P.O. BOX 639 SILVER SPRING, MD. 20901 (301) 439-7007	79CH1401-9 C
APR. 5-6	WORKSHOP ON COMPUTER ANALYSIS OF TIME-VARYING IMAGERY  SPONSORS: C	UNIVERSITY OF PENNSYLVANIA PHILADELPHIA, PENNSYLVANIA	PROF. NORMAN BADLER DEPT. COMPUTER & INFORMATION SCIENCE MOORE SCHOOL OF ELEC. ENGR./D2 UNIVERSITY OF PENNSYLVANIA PHILADELPHIA, PA. 19104	RECORD
APR. 5-6	COMPUTERS IN OPHTHALMOLOGY  SPONSORS: C	ST. LOUIS, MO	ROBERT H. GREENFIELD, D.S.C. BIOMEDICAL COMPUTER LABORATORY 700 S. EUCLID AVE. ST. LOUIS, MO 63110	RECORD

IEEE SPONSORED, COSPONSORED & LIMITED INTEREST CONFERENCES

1979	CONFERENCE	LOCATION	INFORMATION CONTACT	PUBLICATION
APR. 9-10	1979 TECHNICAL CONFERENCE ON RUBBER & PLASTICS	HOLIDAY INN-EXCHANGE STREET AKRON, OH	C.P. ROBINSON, JR. THE BF GOODRICH COMPANY 500 SOUTH MAIN STREET AKRON, OH 44318 (216) 379-3972	RECORD
	SPONSORS: IA EXHIBIT: NO			
APR. 10-11	MICROCOMPUTERS I/O, PERIPHERALS, & SOFTWARE WORKSHOP	APPLIED PHYSICS LAB., LAUREL, MD	MR. PAUL L. HAZAN JOHN HOPKINS UNIVERSITY/APL JOHN HOPKINS ROAD LAUREL, MD 20810 (301) 953-7100 EXT. 449	LIMITED INTEREST
	SPONSORS: C EST. ATTENDEES: 100			
APR. 19-20	6TH ANNUAL RELIABILITY ENGINEERING CONFERENCE FOR THE ELECTRIC POWER INDUSTRY	THE CARILLON HOTEL MIAMI BEACH, FL	G.B. FERNANDEZ P.O. BOX 529 100 MGG MIAMI, FL 33152 (305) 552-4486	LIMITED INTEREST
	SPONSORS: IEEE MIAMI SECTION EXHIBIT: NO EST. ATTENDEES: 450			
APR. 22-24	RURAL ELECTRIC POWER CONFERENCE	SHERATON WEST INDIANAPOLIS, IN	MR. DONALD L. HINKLE FINLEY ENGINEERING COMPANY P.O. BOX 1278 BISMARCK, ND 58501 (701) 222-1500	RECORD 79CH1453-0 IA
	SPONSORS: IA			
APR. 23-25	INT'L SYMPOSIUM ON COMPUTER ARCHITECTURE	MARRIOTT HOTEL PHILADELPHIA, PA.	DR. BARRY BORGERSON SPERRY UNIVAC P.O. BOX 500 BLUE BELL, PA. 19424 (215) 542-2013	RECORD 79CH1394-6 C
	SPONSORS: C, SIGARCH, ACM EST. ATTENDEES: 300			
APR. 23-25	AMERICAN POWER CONFERENCE	PALMER HOUSE CHICAGO, ILLINOIS	R.A. BUDENHOLZER 246 E-1, IIT CHICAGO, ILLINOIS 60616 (312) 567-3196	AP COPYRIGHT
	SPONSORS: ILL. INST. TECH., PES & 8 OTHER ENGR. SOCIETIES EXHIBIT: NO EST. ATTENDEES: 3800			
APR. 23-25	16TH ANNUAL ROCKY MOUNTAIN BIOENGINEERING SYMPOSIUM	FITZSIMONS ARMY MEDICAL CENTER-DENVER, COLORADO	DR. NEAL KENDIG PULMONARY FUNCTION LAB. FITZSIMONS ARMY MED. CENTER DENVER, CO. 80240 (303) 341-3834	RECORD
	SPONSORS: EMB (CO-SPONSOR), REG. 5			
APR. 23-26	PHOTOVOLTAIC SOLAR ENERGY CONFERENCE	KONGRESSHALLE BERLIN (WEST)	DR. A. STRAUB COMMISSION OF EUROPEAN COMMUNITIES 200, RUE DE LA LOI B-1049 BRUSSELS BELGIUM	LIMITED INTEREST
	SPONSORS: IEEE, WEST GERMAN SECTION			
APR. 24-26	ELECTRO	COLISEUM NEW YORK, N.Y.	DALE LITHERLAND ELECTRO 999 N. SEPULVEDA BLVD. EL SEGUNDO, CA. 90245 (213) 772-2965	RECORD
	SPONSORS: REG. 1 EXHIBIT: YES			

IEEE SPONSORED, COSPONSORED & LIMITED INTEREST CONFERENCES

1979	CONFERENCE	LOCATION	INFORMATION CONTACT	PUBLICATION
APR. 24-26	RELIABILITY PHYSICS SYMPOSIUM	SAN FRANCISCO AIRPORT HILTON SAN FRANCISCO, CALIF.	DR. FRANK B. MICHELETTI ROCKWELL INTERNATIONAL 3370 MIRALOMA AVENUE ANAHEIM, CA 92803 (714) 632-4380	RECORD 79CH1425-8 PHY
	SPONSORS: R, ED EXHIBIT: NO EST. ATTENDEES: 600			
APR. 24-26	JOINT RAILROAD TECHNICAL CONFERENCE	ANTLERS PLAZA COLORADO SPRINGS, CO	JAMES WIDGER ENSCO 2345 N. ACADEMY PL. SUITE 120 COLORADO SPRINGS, CO 80909 (303) 597-4950	RECORD
	SPONSORS: IA, ASME EXHIBIT: NO EST. ATTENDEES: 300			
APR. 25-27	1979 REGION 6 CONFERENCE	RED LION INN 2001 POINT WEST WAY SACRAMENTO, CA 95815	R.J. PAUL P.O. BOX 60714 SACRAMENTO, CA 95860 (916) 648-5551	79CH1420-9 REG. 6
	SPONSORS: IEEE SACRAMENTO SECTION, REG. 6 EXHIBIT: NO EST. ATTENDEES: 350			
APR. 30 MAY 3	OFFSHORE TECHNOLOGY CONFERENCE	ASTROHALL HOUSTON, TEXAS	DAVID RILEY, EXEC. MNGR. OFFSHORE TECHNOLOGY CONF. 6200 NORTH CENTRAL EXPRESSWAY DALLAS, TEXAS 75206 (214) 361-6604	OTC COPYRIGHT
	SPONSORS: OEC EXHIBIT: YES			
APR. 30 MAY 4	INTL MICROWAVE SYMPOSIUM & WORKSHOPS	SHERATON TWIN TOWERS ORLANDO, FLORIDA	R.E. HENNING COLLEGE OF ENGR. UNIVERSITY OF SOUTH FLORIDA TAMPA, FLA. 33620 (813) 974-2581	RECORD
	SPONSORS: MTT EXHIBIT: YES EST. ATTENDEES: 950			
MAY 1-3	EMC (ELECTROMAGNETIC COMPATIBILITY SYMPOSIUM AND EXHIBITION)	ROTTERDMAN, HOLLAND	MR. J. HILL 6706 DELAND DRIVE SPRINGFIELD, VA 22152 (703) 451-4619	LIMITED INTEREST
	SPONSORS: EMC			
MAY 1-3	U.S. TECHNOLOGICAL POLICY 'STIMULATING INNOVATION THROUGH U.S. POLICY'	SHERATON NATIONAL MOTOR HOTEL ARLINGTON, VA	MR. LEO C. FANNING IEEE USAB OFFICE 2029 K STREET, N.W. WASHINGTON, DC 20006 (202) 785-0017	COMPLIMENTARY RECORD
	SPONSORS: IEEE TAB/USAB			
MAY 2-3	1979 TEXTILE INDUSTRY TECHNICAL CONFERENCE	RADISSON PLAZA HOTEL CHARLOTTE, NC	MR. ROBERT G. DANIELS BADISCHE CORPORATION P.O. DRAWER 3025 ANDERSON, SC 29621 (803) 226-7261 EXT. 252	RECORD 79CH1451-4 IA
	SPONSORS: IA EXHIBIT: NO EST. ATTENDEES: 150			
MAY 3-4	SPECIALTY CONF. ON GIGABIT LOGIC FOR MICROWAVE SYSTEMS	ORLANDO, FLORIDA	DR. PAUL T. GREILING HUGHES RESEARCH LABORATORY 3011 MALIBU CANYON ROAD MALIBU, CA. 90265 (213) 456-6411	MTT TRANSACTION
	SPONSORS: MTT, ED EXHIBIT: NO EST. ATTENDEES: 150			

IEEE SPONSORED, COSPONSORED & LIMITED INTEREST CONFERENCES

1979	CONFERENCE	LOCATION	INFORMATION CONTACT	PUBLICATION
MAY 14-16	29TH ELECTRONIC COMPONENTS CONFERENCE  SPONSORS: CHMT, EIA EXHIBIT: NO EST. ATTENDEES: 500	HYATT HOUSE CHERRY HILL, N.J.	MR. CHARLES TAPP SANDIA LABORATORIES DEPT. 8460 LIVERMORE, CA. 94550 (415) 422-2851	RECORD
MAY 14-17	INDUSTRIAL AND COMMERCIAL POWER SYSTEMS CONFERENCE  SPONSORS: IA EXHIBIT: NO	WASHINGTON PLAZA SEATTLE, WASHINGTON	T.E. SPARLING T.E. SPARLING & ASSOC. 1920 EASTLAKE AVE. SEATTLE, WASHINGTON 98102 (206) 325-7770	RECORD
MAY 14-17	SYMPOSIUM ON COMPUTERIZED DATA ACQUISITION IN NUCLEAR AND PARTICLE PHYSICS SPONSORS: NPS	SANTA FE HILTON SANTA FE, NM	D.G. PERRY, MS-828 LOS ALAMOS SCIENTIFIC LAB LOS ALAMOS, NM 87545	RECORD
MAY 15-17	NATIONAL AEROSPACE & ELECTRONICS CONF. (NAECON)  SPONSORS: AES, DAYTON SECTION EXHIBIT: YES EST. ATTENDEES: 3000	DAYTON CONVENTION CTR. DAYTON, OHIO	MARTIN BRUNNER 635 HULMAN BLDG. DAYTON, OH 45459 (513) 228-4121	RECORD 79CH1449-8 AES
MAY 15-17	THE 1979 ELECTRICAL & ELECTRONIC MEASUREMENT & TEST INSTRUMENT. CONFERENCE (EEMTIC '79)  SPONSORS: OTTAWA SEC., IM IM EXHIBIT: YES EST. ATTENDEES: 1000	SKYLINE HOTEL OTTAWA, ONTARIO CANADA	HARRY ASHWORTH BELL NORTHERN RESEARCH P.O. BOX 3511 STATION C, OTTAWA, ONTARIO KLY 2H7 (613) 596-4271	IM TRANSACTION
MAY 15-18	POWER INDUSTRY COMPUTER APPLICATION CONFERENCE (PICA)  SPONSORS: IEEE POWER ENGR. SOCIETY, IEEE CLEVEL SECTION EXHIBIT: YES EST. ATTENDEES: 500	BOND COURT HOTEL CLEVELAND, OHIO	JAMES R SMERCINA CLEVELAND ELECTRIC ILLUMINATION P.O. BOX 5000 CLEVELAND, OHIO 44101 (216) 623-1350	RECORD 79CH1381-3 PWR
MAY 16-18	PULP AND PAPER INDUSTRY TECHNICAL CONFERENCE  SPONSORS: IA EXHIBIT: YES	PITTSBURGH HILTON PITTSBURGH, PA.	MR. M.E. KUNSMAN WESTINGHOUSE ELECTRIC CORP. INDUSTRY SALES DIVISION 875 GREENTREE ROAD BUILDING 8, 4TH FLOOR PITTSBURGH, PA 15220 (412) 928-4794	RECORD
MAY 16-18	CARNAHAN CONFERENCE ON CRIME COUNTERMEASURES  SPONSORS: AES, UNIVERSITY OF KENTUCKY EXHIBIT: NO EST. ATTENDEES: 125	CARNAHAN HOUSE	SUE MCWAIN, CONF. COORD. OFFICE OF CONTINUING EDUCATION COLLEGE OF ENGINEERING UNIVERSITY OF KENTUCKY LEXINGTON, KY 40506 (606) 257-3971	RECORD

IEEE SPONSORED, COSPONSORED & LIMITED INTEREST CONFERENCES

1979	CONFERENCE	LOCATION	INFORMATION CONTACT	PUBLICATION
MAY 17	TRENDS & APPLICATIONS: ADVANCES IN SYSTEMS TECHNOLOGY  SPONSORS: C, IEEE WASHINGTON SECTION, NBS, ICST, MIDEASTERN AREA COMM. EXHIBIT: NO	NATIONAL BUREAU OF STANDARDS GAITHERSBURG, MARYLAND	SHIRLEY WATKINS NBS BLDG. 225 B226 WASHINGTON, D.C. 20234 (301) 921-3517	79CH1402-7 C
MAY 20-24	CEMENT INDUSTRY TECHNICAL CONFERENCE  SPONSORS: IA EXHIBIT: NO EST. ATTENDEES: 700	INNISBROOK HOTEL TARPON SPRING, FLA.	F.W. COHRS FLORIDA MINING AND MATERIALS CORP., CEMENT DIVISION P.O. BOX 6 BROOKSVILLE, FLORIDA 33512 (904) 796-7241	RECORD 79CH1442-3 IA
MAY 21-23	TELEVISION MEASUREMENT  SPONSORS: IERE, IEEE UKRI SECTION, IEE	COMMONWEALTH INSTITUTE LONDON, ENGLAND	P.M. ELLIOTT CONFERENCE DEPT. IERE. 99 GOWER STREET LONDON, WC1E 6AZ, ENGLAND	LIMITED INTEREST
MAY 21-23	UNIVERSITY/INDUSTRY/GOVERNMENT MICROELECTRONICS SYMPOSIUM  SPONSORS: REG. 5. CHMT, AES, & ED EXHIBIT: NO EST. ATTENDEES: 150	TEXAS TECH. UNIVERSITY LUBBOCK, TX	WILLIAM M. PORTNOY TEXAS TECH. UNIVERSITY BOX 4439 LUBBOCK, TX 79409 (806) 742-3532	79CH1385-4 REG. 5
MAY 22-25	THE 3RD CHILEAN CONGRESS OF ELECTRICAL ENGINEERING  SPONSORS: IEEE CHILEAN SECTION & UNIVERSITY OF CONCEPCION	CHILE, SOUTH AMERICA	DR. E. KRUMM PRESIDENT COMISION ORGANIZADOR UNIVERSIDAD DE CONCEPCION DEPARTAMENTO INGENIERIA ELEC. CASILLA 53-C CONCEPCION CHILE TEL. 24985 A. 142	LIMITED INTEREST
MAY 23-25	1979 CUSTOM INTEGRATED CIRCUITS CONFERENCE SPONSORS: ED, ROCHESTER SECTION	ROCHESTER, NY	DAVID LEWIS RESEARCH LABS BUILDING 81 ROCHESTER, NY 14650 (716) 458-1000 EXT. 77558	RECORD
MAY 29-31	INT'L SYMPOSIUM ON MULTIPLE-VALUED LOGIC  SPONSORS: C	BEAUFORT HOTEL BATH, ENGLAND	T.C. WESSELKAMPER DEPT. OF COMP. SCI. VPI & SU BLACKSBURG, VA. (703) 961-6931	79CH1408-4 C
MAY 30 JUNE 1	LASER ENGINEERING AND APPLICATIONS  SPONSORS: QEA, OSA	WASHINGTON HILTON HOTEL	SARAH COOPER COURTESY ASSOCIATES 1629 K. STREET N.W. SUITE 700 WASHINGTON, D.C. 20006 (202) 296-8100	RECORD
MAY 30 JUNE 1	ELECTRON, ION, AND PHOTON BEAM TECHNOLOGY (15TH SYMPOSIUM)  SPONSORS: ED EXHIBIT: NO EST. ATTENDEES: 400	SHERATON BOSTON HOTEL BOSTON, MA	DR. HENRY I. SMITH, CHAIRMAN M.I.T. LINCOLN LABORATORY ROOM E-118-E P.O. BOX 73 LEXINGTON, MA 02173 862-5500 EXT. 456	RECORD



# IEEE publications bulletin

This Bulletin is the official announcement vehicle for IEEE publications, and information and educational services. Its purpose is to list, as they become available, all conference records, standards, special issues of Transactions and Journals, and other nonperiodic publications that may be purchased from IEEE Service Center.

## Conference Publications

The publications listed below have become available since the last issue of this bulletin and, except as noted, were sent automatically to present subscribers to the appropriate option and suboption of the IEEE Open Order Plan (OOP). All conference publications are identified by appropriate OOP suboption codes. For completeness, the listing includes special issues or sections of IEEE periodicals that are devoted to IEEE conferences, as well as Conference Publications in the strict sense. Out-of-Stock items may be found in the Engineering Societies Library in New York City and in all libraries that subscribe to OOP.

**Canadian Communications and Power Conference—Conférence Canadienne sur les Communications and l'Energie**, held Oct 18–20, 1978 in Montreal, Canada; sponsored by IEEE Canadian Region (7) and IEEE Montreal Section. *Conf. Digest* 545p. \$25.00 **78CH1373-0 REG 7 OOP 1H**

**Sessions on:** Digital and analog transmission techniques; coding and synchronization techniques; reliability and performance in communication systems; multiplexing and switching systems; satellite technology; microwave and radio systems propagation; coding and modulation techniques; transmission; corona and field effects; industrial applications; system planning, operation, analysis and controls; insulation coordination; HVDC; protection; electrical apparatus.

**Computer Applications in Medical Care, 2nd Symposium on**, held Nov 5–9, 1978 in Washington, DC; sponsored by IEEE C, IEEE Northern Virginia Section, IEEE EMB, et al. *Proceedings* 667p. \$25.00 **78CH1413-4 C OOP 1E**

**Coverage:** Radiology; mental health; computer-patient dialog; representation, storage and use of medical knowledge; clinical laboratory testing; medical office practice; medical information systems.

**Computer Arithmetic, 4th Symposium on**, held Oct 25–27, 1978 in Santa Monica, CA; sponsored by IEEE C. *Proceedings* 274p. **LC 78-70857 \$22.00 78CH1412-6 C OOP 1E**

**Coverage:** Theoretical foundations, software and hardware implementation, and applications of computer arithmetic with an emphasis on new number representation systems and algorithms.

**Computer Science, 19th Symposium on Foundations of**, held Oct 16–18, 1978 in Ann Arbor, MI; sponsored by IEEE C and ACM. *Conf. Record* 290p. **LC 78-70467 \$22.00 78CH1397-9 C OOP 1E**

**Coverage:** Analysis of algorithms, computational complexity, formal languages, mathematical theory of computation, switching and automata theory, and theory of programming, compiling, and formal semantics.

**Computer Society International Conference, 17th IEEE (COMPCON FALL '78)**, held Sep 5–8, 1978 in Washington, DC; sponsored by IEEE C. *Proceedings—Computer Communications Networks*. 434p. **LC 68-1628 \$25.00 78CH1388-8 C OOP 1E**

**Sessions on:** Voice storage systems; flow control analysis; validation tools; networked information services; routing and addressing techniques; packet bus structures; technology; standard interfaces and protocols for distributed systems and data communications; analysis of network performance; micro networks; network architectures, management, operating system and performance trends; virtual systems; performance metrics; computer cryptography; satellite communications; hardware; information accessing; the network design process—an integrated approach.

**Computer Software and Applications Conference (COMPSAC 77), Tutorial [on] Program Testing Techniques**, see Program Testing Techniques, Tutorial

**Consumer Electronics, 19th Chicago Spring Conference on**, held Jun 5–6, 1978 in Chicago, IL; sponsored by IEEE BCCES and IEEE Chicago Section. *IEEE Transactions on Consumer Electronics* Vol. CE-24 Nos. 3 and 4 Aug and Nov 1978 \$10.00 each **JH42903** and **JH42911**. (Not distributed under OOP)

**Coverage:** Citizens' Band radio; electronic/video games; projection TV; watches; calculators; television; audio; semiconductors for consumer products; passive components; design for reliability/producibility.

**Crime Countermeasures, 1978 Carnahan Conference on**, held May 17–19, 1978 in Lexington, KY; sponsored by U. of Kentucky, IEEE AES and IEEE Lexington Section. U. of Kentucky, Office of Research and Engineering Services (ORES) Bulletin Series No. 115. *Proceedings* 175p. **LC 76-636339 \$30.00 78CH1374-8 AES OOP 1C**

**Scope:** State-of-the-art papers on communications, systems, research and development in crime countermeasures.

**Electrical and Electronics Engineers in Israel, 10th [IEEE] Convention of**, held Oct 10–13, 1977 in Tel-Aviv, Israel; sponsored by IEEE Israel Section. *Proceedings* 301p. **LC 78-54882 \$30.00 77CH1356-5 ISRAEL OOP 1H**

**Sessions on:** Digital communication and telecommunication networks; audio and speech processing; energy; automatic control; broadcasting and reception; computers; electronic devices; antennas and wave propagation; computer aided design; biomedical instruments; microwaves and radar; digital data processing; quantitative models in bioengineering; electronic instrumentation; lasers and electrooptics.

**Electrical/Electronics Conference and Exposition, 25th Cleveland, (CECON 78)**, held May 9–11, 1978 in Cleveland, OH; sponsored by IEEE Region 2, IEEE Cleveland Section, E.R.A., et al. *Conf. Record* 142p. **LC 77-93419 \$15.00 78CH1300-3 OOP 1H**

**Scope:** State-of-the-art of the electrical/electronics industry; reports of new devices and products; shortened versions of student thesis or tutorials. No previous conference records for CECON have been published.

**Energy Conversion Engineering Conference, 13th Intersociety**, held Aug 20–25, 1978 in San Diego, CA; sponsored by SAE, IEEE AES, IEEE ED, et al. *Proceedings* 3v. 2193p. + 270p. of abstracts of 1975–1978 Conference Papers; 1974–1978 Author and Subject Index. **LC 78-66386 \$95.00 78CH1372-2 ENERGY OOP 1C, 1D**

**Coverage:** Conference reflects the concerns of the world energy community and identifies the current centers of energy conversion activity and engineering applications. Program is truly international in scope. Examples of highlighted topics include: aerospace, coal, conservation, nuclear fission and fusion, electrochemical power, and the Stirling cycle. Abstracts of 1974–1978 Conference papers and author and subject index for 1974–1978 conferences makes the Proceedings also a valuable reference tool.

**Engineering in Medicine and Biology, 31st Conference on**, held Oct 21–25, 1978 in Atlanta, GA; sponsored by AEMB and IEEE EMB. *Proceedings* 394p. **LC 61-24788 \$24.00 78CH1398-7 EMB OOP 1F**

**Scope:** Technical achievements and innovations of the year in the areas of medicine and biomedical engineering, e.g., medical information systems; hemodynamics; implantable telemetry; hearing; microprocessor applications; ultrasound; orthopedics, cardiac assist devices.

**Engineering Management Conference, 26th Joint**, held Oct 16–18, 1978 in Denver, CO; sponsored by IEEE C, IEEE EM, ASCE, et al. [*Conf. Record*—*Engineering Management in the Computer Age* 173p. **LC 74-99882 \$16.00 78CH1359-9 EM OOP 1E, 1F**

**Coverage:** Project management; office automation; information systems; computer aids; communications; management of software generation.

**Frontiers in Education Conference, 8th**, held Oct 23-25, 1978 in Lake Buena Vista, FL; sponsored by IEEE E and ASEE; edited by Lawrence P. Grayson and Joseph M. Biedenbach. *Proceedings* 495p. LC 74-82573 \$25.00 78CH1368-0 E OOP 1F  
**Coverage:** Curriculum development, innovation and job performance, computers in education; engineering education teaching techniques; interactive computer graphics; communications.

**Industry Applications Society, 13th Meeting of the IEEE-IAS**, held Oct 1-5, 1978 in Toronto, Canada; sponsored by IEEE IA and IEEE Toronto Section. *Conf. Record* 1345p. LC 79-4444 \$45.00 78CH1346-6 IA OOP 1A

**Scope:** Technical presentations and discussion of electrical applications to industry in the interests of: safety, reliability and economic performance and development of standards and practices for: process industries, general industries, industrial power and utilization systems.

**Microcomputers: Systems, Software, Architecture, 2nd Rocky Mountain Symposium on**, held Aug 27-30, 1978 in Pingree Park, CO; sponsored by IEEE C, NSF, and Colorado State U. *Proceedings* 418p. \$16.00 78CH1387-0 C OOP 1E

**Sessions on:** Military applications; social impact; numerical computation; microcomputer software; microprocessor architecture; multiprocessor systems.

**Ocean Instrumentation, International Workshop on**, held May 1-3, 1978 in Washington, DC; sponsored by the ECOR and NOAA. *Proceedings in IEEE Journal of Oceanic Engineering* Vol. OE-3 No. 4 Oct 1978 \$10.00 JH43976. (Not distributed under OOP)

**Coverage:** Coastal and offshore structures; ocean floor engineering; urban and industrial waste disposal; mining and dredging.

**Oceans '78 Conference, 4th**, held Sep 6-8, 1978 in Washington, DC; sponsored by MTS, IEEE OEC and IEEE Washington Section. *Conf. Record—The Ocean Challenge* 743p. LC 74-76790 \$60.00 78CH1356-6 OOP 1C

**Scope:** Topics range from methods to tap the vast resources of the oceans to how to maintain the ocean's ecology for the benefit of mankind; e.g., buoy technology; acoustic systems; instrumentation; electromechanical cables/connectors and their components; ocean energy resources; remote sensing from satellites and aircraft; marine pollution analysis and monitoring; financing ocean development.

**Power Electronics Specialists Conference (PESC), 9th IEEE**, held Jun 13-15, 1978 in Syracuse, NY; sponsored by IEEE AES, IEEE ED, IEEE IECEI, et al. *Conf. Record* 354p. LC 76-21448 \$15.00 78CH1337-5 AES OOP 1C

**Sessions on:** Modern control theory applications; high power systems; devices and components; design-oriented circuit modeling and analysis; innovative concepts and development; power circuit applications.

**Power Engineering Society Discussions and Closures of Abstracted Papers from the Summer Meeting, 1977 IEEE**, held Jul 17-22, 1977 in Mexico City; sponsored by IEEE PE. Approx. 155p. \$16.00 77CH1194-0 PWR OOP 1G. See Apr 1978 bulletin for Conf. Record.

**Precision Electromagnetic Measurements (CPEM '78), Conference on—Conference sur les Mesures Electromagnetiques de Precision**, held Jun 26-29, 1978 in Ottawa, Canada; sponsored by IEEE IM, National Research Council of Canada, US NBS, et al. *Digest* 168p. \$20.00 78CH1320-1 IM OOP 1B

**Coverage:** Measuring systems from direct current to microwave; advantages of automation; absolute measurements and basic standards and techniques needed to support sophisticated systems; developments in primary frequency standards; new advances in laser techniques.

**Program Testing Techniques, Tutorial**, held at the IEEE Computer Society's 1st International Computer Software and Applications Conference (COMPSAC 77), Nov. 8-11, 1977 in Chicago, IL. *Tutorial* 289p. LC 77-92046 \$16.00 EH01305 OOP 8 See Jan 1978 bulletin for Conf. Proceedings.

**Sessions on:** Philosophy of testing; theoretical foundations; tools and techniques; measurement and planning; management and control; research and development.

**Pulse Power Modulator Symposium, 13th**, held Jun 20-22, 1978 in Buffalo, NY; sponsored by IEEE ED and the State U. of New York at Buffalo. *Conf. Record* 308p. LC 78-66972 \$30.00 78CH1371-4 ED OOP 1D  
**Sessions on:** Modulator techniques; power conditioning; regulation and charging; pulse circuits; closing switches; thyatron switches; solid-state and general switching; switches with an interrupt capability; RF systems; high power/high energy.

**Semiconductor Test Conference, 9th** (formerly Semiconductor Test Symposium), held Oct 31-Nov. 2, 1978 in Cherry Hill, NJ; sponsored by IEEE C and IEEE Philadelphia Section. *Digest of Papers—LSI & Boards* 301p. \$20.00 78CH1409-2 C OOP 1E

**Sessions on:** Test strategies; production board testing; LSI device testing; memory testing; design for testability at the component and board level; microprocessor board level testing; system architecture; software; memory board testing; test room management; simulation and verification; printed circuit board assemblies.

**Software Engineering, 3rd International Conference on**, held May 10-12, 1978 in Atlanta, GA; sponsored by IEEE C, ACM and US NBS. Selected papers in *IEEE Transactions on Software Engineering* Vol. SE-4 No. 4 Jul 1978 \$10.00 JH44420. See Jul 1978 bulletin for Proceedings. (Not distributed under OOP)

**Telephone Energy Conference (INTELEC), 1st International**, held Oct 25-27, 1978 in Washington, DC; sponsored by IEEE COM. 414p. LC 78-58158 \$20.00 78CH1353-2 COMM OOP 1C

**Sessions on:** Uninterruptible power—using triports; prime power; solar energy for telecommunications; rectifiers; converters; batteries and fuel cells; energy management and conservation; signalling, devices and instrumentation, battery plants and distribution.

**Very Large Data Bases, 4th International Conference on**, held Sep 13-15, 1978 in West Berlin, Germany; sponsored by ACM, IEEE C, US NBS, et al.; edited by S. Bing Yao. *Proceedings* 555p. LC 78-67197 \$25.00 78CH1389-6 C OOP 1E

**Coverage:** Technical sessions include: semantics and modeling; "very small" data bases; interfaces and architecture; data base machines; relational views; high level user interfaces; data base software; distributed data base systems; physical design techniques; equivalence and transformation; reality, user requirements and logical data base design.

## Special Issues

The special issues listed below have become available since the last issue of this Bulletin. Special issues devoted entirely to conferences are listed in the Conference Publications section.

**Audiovisual Communication; IEEE Transactions on Professional Communication** Vol. PC-21 No. 3 Sep 1978 \$10.00 JH44065  
**Coverage:** Non-textual aspects of communicating technical information, including slides, graphs, multimedia.

**Electric Power Engineering Education; IEEE Transactions on Education** Vol. E-21 No. 3 Aug 1978 \$10.00 JH43125  
**Coverage:** Evaluations of survey data; industrial and educational perspectives of power education; specific pedagogical techniques; broad sampling of power programs at various institutions.

**Emerging 900-MHz Technologies; IEEE Transactions on Vehicular Technology** Vol. VT-27 No. 4 \$10.00 JH44669  
**Coverage:** Propagation, diversity, antenna characterization; energy deposition; traffic theory; digital signaling; vehicle location; cellular FM and spread-spectrum systems; mobile control unit design.

**Instrumentation for the International Sun-Earth Explorer Spacecraft; IEEE Transactions on Geoscience Electronics** Vol. GE-16 No. 3 Jul 1978 \$10.00 JH43448  
**Scope:** Descriptions of experimental investigations and instruments for the ISEE spacecraft.

**Microwaves in Medicine, with Accent on the Application of Electromagnetics to Cancer Treatment; IEEE Transactions on Microwave Theory and Techniques** Vol. MTT-26 No. 8 Aug 1978 \$10.00 JH43836  
**Coverage:** Biological experiments that relate to treatment of tumors by electromagnetic fields; development of suitable applicators for producing hyperthermia in tissues; recent work on measurements and analysis in relation to the cancer problem. Includes papers from the special sessions on Applications to Cancer Treatment presented at the 1977 International Microwave Symposium held Jun 21-23, 1977 in San Diego, CA. See Oct 1977 bulletin for Digest.

**Productivity; IEEE Spectrum** Vol. 15 No. 10 Oct 1978 \$8.00 JH42150  
**Scope:** Productivity and electrotechnology, management and government.

**Quantum-Electronic Devices for Optical-Fiber Communications; (special section, p. 789-862) IEEE Journal of Quantum Electronics** Vol. QE-14 No. 11 Nov 1978 \$10.00 JH44263  
**Coverage:** Systems experiments at  $\lambda = 1.3 \mu\text{m}$  and devices (detectors and receivers) operating near this wavelength; AlGaAs sources; nonlinearity of LED's, degradation of lasers and far-field approximation of lasers; fiber Raman lasers.

**Semiconductor Materials, Processing, and Process Modeling for IC Technology; IEEE Journal of Solid-State Circuits** Vol. SC-13 No. 4 Aug 1978 \$10.00 JH44362

**Coverage:** Advances in silicon MOS and bipolar technology; gallium-arsenide process and device technology; individual process steps and process-control factors; silicon technologies. The majority of these papers were presented at the International Electron Devices Meeting (IEDM) held Dec 5-7, 1977 in Washington, DC. See Jan 1978 bulletin for Technical Digest.

**Semiconductor Memory and Logic; IEEE Journal of Solid-State Circuits** Vol. SC-13 No. 5 Oct 1978 \$10.00 JH44370

**Coverage:** New and improved device technologies; innovative circuit techniques; Josephson junction RAM; MOS dynamic RAM; static RAM design; CCD serial memories.

**Software Management; (special section, pp. 309-361) IEEE Transactions on Software Engineering** Vol. SE-4 No. 4 Jul 1978 \$10.00 JH44420

**Coverage:** Software life cycle; corporate level software management; macro software sizing and estimating problem.

**SOS Technology and Nonvolatile Memory Technology; IEEE Transactions on Electron Devices** Vol. ED-25 No. 8 Aug 1978 \$10.00 JH43216

**Scope:** Comprehensive review of the work in silicon on sapphire (SOS) technology from 1975 to the present, including papers presented at the Third SOS Workshop, held Sep 28-30, 1977 in Vail, CO; MNOS structures, including papers from the Second IEEE Workshop on Nonvolatile Semiconductor Memories (NVSM), held Aug, 1977 in Vail, CO.

**Three-Dimensional Semiconductor Device Structures; IEEE Transactions on Electron Devices** Vol. ED-25 No. 10 Oct 1978 \$10.00 JH43232

**Coverage:** Three-dimensional fabrication technology; vertical field-effect transistor technology; novel three-dimensional devices structures.

## IEEE Standards

**ANSI N323-1978 Radiation Protection Instrumentation Test and Calibration**, American National Standard; May 26, 1978. 23p. \$5.00 SH07179

**ANSI N449-1-1978 Procedures for Periodic Inspection of Cobalt-60 and Cesium-137 Teletherapy Equipment**, American National Standard; Mar 30, 1978. 18p. \$5.00 SH07138

**ANSI/IEEE Std C37.90-1978 Relays and Relay Systems Associated with Electric Power Apparatus**; (Revision of ANSI C37.90-1971) Aug 15, 1978. 26p. \$5.00 SH06551

**ANSI/IEEE Std C57.12.90a-1978 Distribution and Power Transformer Short-Circuit Test Code**; (Revision of ANSI/IEEE C57.12.90a-1974) Oct 12, 1978. 11p. \$4.00 SH06981

**ANSI/IEEE Std C57.104-1978 Guide for the Detection and Determination of Generated Gases in Oil-Immersed Transformers and their Relation to the Serviceability of the Equipment**; Oct 25, 1978. 31p. \$6.00 SH07054

**ANSI/IEEE Std C57.105-1978 Guide for Application of Transformer Connections in Three-Phase Distribution Systems**; Oct 20, 1978. 34p. \$6.50 SH06924

**IEEE Std 58-1978 IEEE Standard Induction Motor Letter Symbols**; (Revision of IEEE Std 58-1956) Jun 30, 1978. 20p. \$6.00 SH06221

**IEEE Std 118-1978 IEEE Standard Test Code for Resistance Measurement**; (Revision of IEEE Std 118-1949) May 29, 1978. 31p. \$6.00 SH07187

**IEEE Std 176-1978 IEEE Standard on Piezoelectricity**; Sep 29, 1978. 55p. \$9.00 SH06973

**IEEE Std 308-1978 IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations**; (Revision of IEEE Std 308-1974) Aug. 14, 1978. 18p. \$5.00 SH07278

**IEEE Std 421A-1978 IEEE Guide for Identification, Testing, and Evaluation of the Dynamic Performance of Excitation Control Systems**; Jun 29, 1978. 50p. \$7.00 SH07047

**IEEE Std 485-1978 IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations**; Jul 12, 1978. 20p. \$5.00 SH07195

**IEEE Std 488-1978 IEEE Standard Digital Interface for Programmable Instrumentation**; (Revision of IEEE Std 488-1975) Nov 30, 1978. 83p. \$10.00 SH07260

**IEEE Std 501-1978 IEEE Standard Seismic Testing of Relays**; Apr 28, 1978. 20p. \$5.00 SH07161

**IEEE Std 503-1978 IEEE Standard for Measurement and Characterization of Diode-Type Camera Tubes**; May 17, 1978. 50p. \$7.50 SH07062

**IEEE Std 525-1978 IEEE Guide for Selection and Installation of Control and Low-Voltage Cable Systems in Substations**; Oct 6, 1978. 15p. \$5.00 SH07211

**IEEE Std 563-1978 IEEE Guide on Conductor Self-Damping Measurements**; May 26, 1978. 15p. \$4.00 SH06908

**IEEE Std 581-1978 IEEE Standard Definitions, Symbols, and Characterization of Metal-Nitride-Oxide Field-Effect Transistors**; Apr 28, 1978. 44p. \$7.00 SH06718

**IEEE Std 634-1978 IEEE Standard Cable Penetration Fire Stop Qualification Test**; Apr 19, 1978. 18p. \$6.00 SH07146

## IEEE Press

**Analog Integrated Circuits**, edited by Alan B. Grebene, Exar Integrated Systems. © 1978 439p. ISBN 0-87942-113-4 LC 78-059636 \$28.95 PC01081. A Book of Selected Reprints.

**Contents:** Fundamentals of Analog IC Design; Operational Amplifiers; Voltage Regulators and References; Wideband Amplifiers; Multipliers and Modulators; Data Conversion Circuits; Communication Circuits; Precision Linear Circuits; Trimming Techniques. A total of 57 reprinted papers.

**Digital Image Processing for Remote Sensing**, edited by Ralph Bernstein, IBM et al. © 1978 473p. ISBN 0-87942-105-3 LC 77-94520 \$35.95 PC01024. A Book of Selected Reprints.

**Contents:** Image Restoration; Image Processing and Correction; Image Registration; Image Enhancement for Manual Interpretation; Information Extraction by Machine Processing; Image Data Compression/Compaction. A total of 34 reprinted papers.

**Integrated-Circuit Operational Amplifiers**, edited by Robert G. Meyer, University of California, Berkeley. © 1978 311p. ISBN 0-87942-115-0 LC 78-059635 \$23.95 PC01065. A Book of Selected Reprints.

**Contents:** Monolithic Op Amp Design Techniques; High Speed Op Amps; Instrumentation Op Amps; Precision Op Amps; High Power/Voltage Op Amps; FET-Input Op Amps; Special Op Amps; Modeling Op Amps. A total of 38 reprinted papers.

**Modern Spectrum Analysis**, edited by Donald G. Childers, University of Florida. © 1978 334p. ISBN 0-87942-107-X LC 78-055097 \$29.95 PC01040. A Book of Selected Reprints.

**Contents:** Spectral Estimation by Maximum Entropy, Autoregression, Linear Prediction, and Maximum Likelihood; Statistics, Extensions, and Adaptive Techniques; Algorithms and Model Order Selection; Applications. A total of 39 reprinted papers.

## Miscellaneous Publications

**Energy Development IV; IEEE Power Engineering Society Papers.** © 1978 214p. \$12.00 78TH0050-5 PWR

**Scope:** Developments in the fields of unconventional electric energy production in the broadest sense. This includes chemoelectric energy, thermoelectric devices, thermionics, nuclear fission, nuclear fusion, solar radiation, magnetohydrodynamics, wind energy, tidal power, ocean thermal gradients, fuel cells, and other developing sources.

**IEEE U.S. Member Opinion Survey**; prepared by Dr. Robert A. Hitlin for the IEEE United States Activities Board (USAB). 1977 58p. \$10.00 UH01339 OOP 3

**Coverage:** This publication analyzes the results of the 1977 Member Opinion Survey: Why do members belong; entry into the profession; future dues; employment guidelines and ethics; collective bargaining; affirmative action and age discrimination; career maintenance and Institute management. Included are tables which cross-tabulate the above with member profile categories.

## Changes in IEEE Periodicals for 1979

**New Publication:** *IEEE Transactions on Pattern Analysis and Machine Intelligence*, published quarterly, commencing with Vol. PAMI-1, No. 1, Jan 1979. Subscription price: \$32.00.

**Coverage:** Intended for scientists and engineers in the fields of computer science, computer engineering, and biomedicine, this journal will cover the research and development of techniques for pattern analysis and machine intelligence.

Topics include: statistical pattern recognition, linguistic pattern recognition, image coding and processing, shape and texture analysis, biomedical pattern analysis and information systems, remote sensing, speech recognition, industrial and military applications of pattern recognition and image processing, character and text recognition, theorem proving, natural language analysis, robotics.

**Title Change:** from *IEEE Communications Society Magazine* to *IEEE Communications Magazine*, commencing with Vol. 17, No. 1, Jan 1979.

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**Available in June, 1978:** Microfilmed 1977 issues of all IEEE periodicals.

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