



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. The IEEE Publications Order Number is shown in boldface near the end of every entry.

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.

For your convenience, the LC catalog card number is printed inside IEEE publications; all pre-assigned LC numbers are announced in the entries below. The standard availability of LC cards for pre-assigned numbers is approximately six months after publication date.

Acoustics, Speech and Signal Processing (ICASSP 80), 5th IEEE International Conference on, held Apr 9-11, 1980 in Denver, CO; sponsored by IEEE ASSP. *Proceedings*, 3v., 1062 p., LC 80-80718 (preassigned), \$45.00. **80CH1559-4** (OOP 1A)

Antennas and Propagation Society (AP-S) International Symposium, 1979 IEEE, [and] USNC/URSI Meeting, and Bioelectromagnetics Symposium, held Jun 18-22, 1979 in Seattle, WA; sponsored by IEEE AP, U.S. National Committee of the Int'l Union of Radio Science, and Bioelectromagnetics Society. *AP-S Digest* (Contains only AP-S papers except for one plenary session with five contributions from Joint USNC/URSI-AP-S-BEMS) 2v., 845p., LC 79-87504 (preassigned), \$18.00. **79CH1456-3 AP** (OOP 1D). The abstracts of papers from USNC/URSI and the Bioelectromagnetics Symposium are only available from the National Academy of Sciences.

Arizona Technical Symposium see Microprocessor Applications in the 80's, Arizona Technical Symposium

Asilomar Conference on Circuits, Systems, & Computers see Circuits, Systems, and Computers, 13th Asilomar Conference on

Cardiology, Computers in see Computers in Cardiology

Circuits and Systems, [13th] IEEE International Symposium on, held Apr 28-30, 1980 in Houston, TX; sponsored by IEEE CAS. *Proceedings*, 3v., 1162p., LC 80-81119 (preassigned), \$50.00. **80CH1564-4** (OOP 1A)

Circuits, Systems, and Computers, 13th Asilomar Conference on, held Nov 5-7, 1979 in Pacific Grove, CA; sponsored by the Naval Postgraduate School, University of Santa Clara, and IEEE C; edited by Shu-Park Chan. *Conf. Record*, 615p., LC 79-88185 (preassigned), \$25.00. **79CH1468-8 C** (OOP 1E)

Computer Architecture (ISCA-7), 7th Symposium on, held May 6-8, 1980 in La Baule, France; sponsored by IEEE C and ACM. *Conf. Proceedings*, 333p., LC 76-351667 (serials entry; not printed in the volume), \$25.00. **80CH1494-4C** (OOP 1E). Also available through ACM as Order No. 4158000

Computer Networking Symposium, held Dec 12, 1979 in Gaithersburg, MD; sponsored by IEEE C, US Nat'l Bureau of Standards, and US Dept. of Commerce. *Proceedings*, 223p., \$16.00. **79CH1467-0 C** (OOP 1E)

Computer Society International Conference, 20th IEEE (COMPCON Spring 80), held Feb 25-28, 1980 in San Francisco, CA; sponsored by IEEE C. *Digest of Papers—VLSI: New Architectural Horizons*, 504 p., LC 79-90588 (preassigned), \$25.00. **80CH1491-0 C** (OOP 1E)

NOTE: Three tutorials were held in conjunction with COMPCON Spring 80, all of which feature publications: 1) VLSI: The Coming Revolution in Applications and Design (EH0158-6)—listed in this issue of the Bulletin in the "Tutorials" section. 2) Interactive Computer Graphics (EH0156-0)—listed in this issue of the Bulletin in the "Tutorials" section. 3) Distributed Processor Communication Architecture (EH0152-9)—listed in the Apr 1980 issue of the Bulletin under "Miscellaneous Publications."

Computer Society Technical Committee on Packaging 1979 Spring Workshop, IEEE, held [May 30-Jun 1] 1979 in San Diego; sponsored by IEEE C. Selected papers in *IEEE Transactions on Components, Hybrids, and Manufacturing Technology*, Vol. CHMT-3, No. 1, Mar 1980, \$10.00. **JH 51219** (not distributed under OOP). This *Transactions* issue also contains contributions from the 25th Holm Conference on Electrical Contacts listed in this issue of the Bulletin.

Computer Software & Applications Conference (COMPSAC 78), 2nd IEEE Computer Society International, held Nov 13-16, 1978 in Chicago, IL; sponsored by IEEE C. Special collection of papers in *IEEE Transactions on Software Engineering*, Vol. SE-6, No. 2, Mar 1980, \$10.00. **JH 52480** (not distributed under OOP). The *Proceedings* (78CH1338-3C) from this Conference was listed in the Apr 1979 issue of the Bulletin.

Computers in Cardiology Conference, 6th, held Sept 26-28, 1979 in Geneva, Switzerland; sponsored by IEEE C, University of Geneva, National Institutes of Health, et al.; edited by Kenneth L. Ripley and Harold G. Ostrow. *Proceedings*, 488 p., LC 79-87724 (preassigned), \$30.00. **79CH1462-1 C**. OOP 1E.

Consumer Electronics, 9th Chicago Fall Conference on, held Nov 12-13, 1979 in Chicago, IL; sponsored by IEEE BCCE and IEEE Chicago Section. *IEEE Transactions on Consumer Electronics*, Vol. CE-26, Nos. 1 and 2, Feb and May 1980, \$10.00 each. **JH 51177** and **JH 51185** (not distributed under OOP)

Control of Power Systems Conference and Exposition, held Mar 17-18, 1980 in Oklahoma City, OK; sponsored by IEEE Oklahoma City Section and the University of Oklahoma. *Conf. Record—Energy Management... The Challenge of the 80's*, 114 p., \$22.50. **80CH1540-4 REG 5** (OOP 1H).

Data Communications Symposium, 6th, held Nov 27-29, 1979 in Pacific Grove, CA; sponsored by ACM, IEEE C, and IEEE COM. *Proceedings—Network User Services*, 232 p., LC 79-87922 (preassigned; the "0" preceding the "87922" was printed in error), \$20.00. **79CH1405-0 CSCB/C** (OOP 1C,E). Also available through ACM as Order No. 533790.

Delaware Bay Microcomputer Conference see Microcomputer Conference (MICRO-DELCON '80), 3rd Delaware Bay

Digital Avionics Systems Conference, 3rd, held Nov 6-8, 1979 in Fort Worth, TX; sponsored by IEEE AES, AIAA, and IEEE Fort Worth Section. *Conf. Record*, 341p., LC 79-91191 (preassigned), \$35.00. **79CH1518-0 AES** (OOP 1C)

Digital Communications, 6th International Zurich Seminar on, held Mar 4-6, 1980 in Zurich, Switzerland; sponsored by IEEE COM and IEEE Switzerland Section. *Proceedings—Digital Transmission in Wireless Systems*, approx. 325p., LC 79-91765 (preassigned), \$40.00. **80CH1521-4 COM** (OOP 1C)

Edison Centennial Symposium, held Apr 1-4, 1979 in San Francisco, CA; sponsored by IEEE Energy Committee, the Electric Power Research Institute (EPRI), and the Thomas Alva Edison Foundation; edited by Chauncey Starr and Philip C. Ritterbush. *Proceedings—Science, Technology, and the Human Prospect*, 228 p., ©1980 Pergamon Press, Inc. (Pergamon Policy Studies on Science and Technology series), ISBN Clothbound 0-08-024650-8, LC 79-18181 (LC Cataloging in Publication Data on the verso of the title page), \$60.00. **79CH1507-3** (OOP 1 A11)

Electrical Contacts, 25th Holm Conference on, held Sept [10-12], 1979 in Chicago, IL; sponsored by IEEE CHMT and the Illinois Institute of Technology. Selected papers in *IEEE Transactions on Components, Hybrids, and Manufacturing Technology*, Vol. CHMT-3, No. 1, Mar 1980, \$10.00. **JH 51219** (not distributed under OOP). This issue of the Transactions also contains contributions from the Computer Society Technical Committee on Packaging 1979 Spring Workshop which is listed in this issue of the Bulletin.

Electrical/Electronics Insulation Conference, 14th (E/EIC), held Oct 8-11, 1979 in Boston, MA; sponsored by IEEE and NEMA. *Proceedings*, 367p., LC 76-641188 (serials entry; LC 73-80284 printed in error on the verso of the title page), ISSN 0362-2479, \$16.00. **79CH1510-7 EI** (OOP 1B)

Electrical Insulation, 3rd IEEE International Symposium on, held Jun 9-11, 1980 in Boston, MA; sponsored by the IEEE EI. *IEEE Conf. Record*, 252p., \$32.00. **80CH1496-9** (OOP 1B)

Electron Devices Meeting, 25th International, held Dec 3-5, 1979 in Washington, DC; sponsored by IEEE ED. *Technical Digest*, 697p., LC 78-20188 (serials entry), \$27.00. **79CH1504-0 ED** (OOP 1D)

Electronic Components Conference, 30th, held Apr 28-30, 1980 in San Francisco, CA; sponsored by IEEE CHMT and Electronic Industries Association. *Proceedings*, 554p., LC 78-647174 (serials entry), \$40.00. **80CH1568-5** (OOP 1D)

Engineering Management Conference, 1st IEEE, held Nov 5-7, 1979 in Arlington, VA; sponsored by IEEE EM and IEEE Washington Section. *Conference Digest*, 264p., LC 79-89823 (preassigned), \$20.00. **79CH1485-2 EM** (OOP 1F)

Holm Conference on Electrical Contacts see Electrical Contacts, 25th Holm Conference on

IEEE Region V Conference, 1980, held Apr 21-23, 1980 in San Antonio, TX; sponsored by IEEE Region 5 and IEEE Central Texas Section; edited by Baxter F. Womack. *Conference Digest—Engineering & Society Interfaces*, approx. 125p., LC 80-80452 (preassigned), \$20.00. **80CH1547-9 REG 5** (OOP 1H)

IEEE Region 6 (Western USA) Conference, held Feb [20-22] 1980 in San Diego, CA; sponsored by IEEE Region 6 and IEEE San Diego Section. *Proceedings—The 1980's—A Forest of Energy Decision Trees*, 186p., LC 79-89827 (preassigned), \$30.00. **80CH1487-8** (OOP 1H)

Industrial Electronics and Control Instrumentation Society (IECI 80), 6th Meeting, held Mar 17-20, 1980 in Philadelphia, PA; sponsored by IEEE IECI and IEEE C. *Proceedings—Applications of Mini and Microcomputers*, 428p., LC 80-80717 (preassigned), \$25.00. **80CH1551-1** (OOP 1B)

Industry Applications Society, 14th Meeting of the IEEE—IAS, held Sep 30-Oct 4, 1979 in Cleveland, OH; sponsored by IEEE IA and IEEE Cleveland Section. *Conf. Record*, 1336p., LC 73-647500 (serials entry), \$66.00. **79CH1484-5 IA** (OOP 1B)

Inertial Confinement Fusion (ICF '80), Conference on (Title varies on the cover—Topical Meeting on Inertial Confinement Fusion), held Feb 26-28, 1980 in San Diego, CA; sponsored by IEEE QEA and the Optical Society of America (OSA). *Digest of Technical Papers*, (Technical Digest on the cover), 144p., LC 79-92900 (preassigned), \$25.00. **80CH1536-2 QEA** (OOP 1D)

Integrated and Guided-Wave Optics, [5th] Topical Meeting on, held Jan 28-30, 1980 in Incline Village, NV; sponsored by IEEE QEA and OSA. *Digest of Technical Papers*, approx. 325p., LC 79-90228 (preassigned), \$25.00. **80CH1489-4 QEA** (OOP 1D)

Interconnection Networks for Parallel and Distributed Processing, Workshop on, held Apr 21-22, 1980 in West Lafayette, IN; sponsored by ACM, IEEE C, and Purdue University; edited by Howard Jay Siegel. *Proceedings*, 124p., LC 80-80924 (preassigned), \$16.00. **80CH1560-2** (OOP 1E)

Large Scale Networks and Systems, Workshop on, held at the IEEE International Symposium on Circuits and Systems, Apr 28-30, 1980 in Houston, TX. *Workshop Papers*, 48p., LC 80-81303 (preassigned), \$15.00. **TH0074-5** (OOP 6). The Proceedings (80CH1564-4) from the IEEE Int'l Symposium on Circuits and Systems are listed in this issue of the Bulletin.

Laser and Electrooptical Systems (CLEOS), 3rd Conference on, held Feb 26-28, 1980 in San Diego, CA; sponsored by the IEEE QEA and the Optical Society of America. *Digest of Technical Papers*, 120p., LC 79-92899 (preassigned). \$25.00. **80CH1535-4 QEA** (OOP 1D)

NOTE: This is the last year that CLEOS will be held. In 1981, CLEOS and CLEA (IEEE/OSA Conference on Laser Engineering and Applications) will be combined to form the Conference on Lasers and Electrooptics (CLEO).

Laser Engineering and Applications (CLEA), 7th IEEE/OSA Conference on, held May 30-Jun 1, 1979 in Washington, DC; sponsored by IEEE QEA and the Optical Society of America. Selected papers in the *IEEE Journal of Quantum Electronics*, Vol. QE-16, No. 2, Feb 1980, \$10.00. **JH52803** (not distributed under OOP). The Digest of Technical Papers and the Abstracts of the Post-Deadline Papers (79CH1469-6 QEA; JH 49155) from this Conference were listed in the Oct 1979 Bulletin. Additional selected papers from CLEA can be found in the March 15, 1980 issue of *Applied Optics* published by the Optical Society of America.

Magnetic Fluids, 2nd International Conference on, (formerly International Advanced Course on the Thermomechanics of Magnetic Fluids), held Mar 24-27, 1980 in Orlando, FL; sponsored by IEEE MAG. *Proceedings in IEEE Transactions on Magnetism*, Vol. MAG-16, No. 2, Mar 1980, \$20.00. **JH 52027** (not distributed under OOP)

Magnetic Recording on Particulate Media, International Meeting on (MPRM '79), held Sep 10-11, 1979 in Gardone Riviera (BS), Italy; sponsored by the Division of Magnetism, Gruppo Nazionale di Struttura della Materia (CNR—Italy) and IEEE MAG. Papers in *IEEE Transactions on Magnetism*, Vol. MAG-16, No. 1, Jan 1980, \$10.00. **JH 52019** (not distributed under OOP)

Magnetism Conference, IEEE International (INTERMAG 80), held Apr 21-24, 1980 in Boston, MA; sponsored by IEEE MAG. *Digests of the INTERMAG Conference*, approx. 300p., LC 72-649866 (serials entry), \$22.00. **80CH1541-2 MAG** (OOP 1D). The full papers will be published in the Sep 1980 issue of the *IEEE Transactions on Magnetism*, Vol. MAG-16, No. 5, \$10.00. **JH 52050** (not distributed under OOP).

Microcomputer Conference (MICRON-DELCON '80), 3rd Delaware Bay, held Mar 11, 1980 in Newark, DE; sponsored by IEEE C and the IEEE Delaware Bay Section. *Proceedings*, 141p., LC 79-92265 (preassigned), \$16.00. **80CH1528-9 C** (OOP 1E)

Microprocessor Applications in the 80's, Arizona Technical Symposium, held Mar 12-14, 1980 in Tempe, AZ; sponsored by IEEE Phoenix Section, IEEE Tucson Section, and Arizona State University. *Proceedings*, 105 p., LC 79-91750 (preassigned), \$16.00. **80CH1525-5 C** (OOP 1E)

Microprogramming Workshop (MICRO-12), 12th, held Nov 18-21, 1979 in Hershey, PA; sponsored by ACM and IEEE C. *Proceedings*, 113 p., LC 79-643852 (serials entry), \$16.00. **79CH1516-4 C** (OOP 1E). Also available through ACM as Order No. 520790.

Microwave Symposium, 1979 IEEE MTT-S International, held Apr. 30-May 2, 1979 in Orlando, FL; sponsored by IEEE MTT. Highlights of the Symposium and Selected Papers in *IEEE Transactions on Microwave Theory and Techniques*, Vol. MTT-27, No. 12, Dec 1979, \$10.00. **JH 48827** (not distributed under OOP). The Digest (79CH1439-9 MTT) from this Symposium is listed in the July 1979 issue of the Bulletin.

Military Avionics Systems Architecture (SIMASA '79)—1st Standardization in, held Nov 28, 1979 in Dayton, OH; sponsored by IEEE AES and IEEE Dayton Section. *Record*, 49 p., LC 80-81406 (preassigned), \$16.00. **TH0076-0** (OOP 6)

Mini and Microcomputers, Applications of, see Industrial Electronics and Control Instrumentation Society (IECI 80), 6th Meeting

National Telecommunications Conference (NTC), held Nov 27-29, 1979 in Washington, DC; sponsored by IEEE CSCB, IEEE Washington Section, IEEE COM, et al. *Conf. Record*, 3v., approx. 1200 p., LC 79-90965 (preassigned), \$50.00. **79CH1514-9 CSCB** (OOP 1C)

Nuclear Science Symposium (NSS), 26th [and] 11th Symposium on Nuclear Power Systems (SNPS), held Oct 17-19, 1979 in San Francisco, CA; sponsored by IEEE NPS, IEEE PE, U.S. Dept. of Energy, et al. *Proceedings in IEEE Transactions on Nuclear Science*, Vol. NS-27, No. 1, Feb 1980, \$20.00. **JH 52183** (not distributed under OOP)

Packaging, see Computer Society Technical Committee on Packaging 1979 Spring Workshop, IEEE

Photovoltaic Specialists Conference (PVSC 80), 14th IEEE, held Jan 7-10, 1980 in San Diego, CA; sponsored by the IEEE ED. *Conf. Record*, 1411 p., \$100.00. **80CH1508-1** (OOP 1D)

Power Electronics Specialist Conference (PESC '79), 10th IEEE, held Jun 18-22, 1979 in San Diego, CA; sponsored by IEEE AES, IEEE ED, IEEE MAG, et al. *Record*, 481 p., \$28.00. **79CH1461-3 AES** (OOP 1C)

Power Engineering Society Summer Meeting, 1978 IEEE, held Jul 16-21, 1978 in Los Angeles, CA; sponsored by IEEE PE. *Discussions and Closures of Abstracted Papers*, approx. 140p., LC 77-353944 (serials entry; LC 76-4401 printed in error on the verso of the title page), ISSN 0160-0141, \$16.00. **78CH1362-3 PWR** (OOP 1G). The Conf. Record (78CH1361-5 PWR) and the Abstracts (JH 48934) from this meeting were listed in the Apr 1979 issue of the Bulletin.

Power Engineering Society Summer Meeting, 1979 IEEE, held Jul 15-20, 1979 in Vancouver, British Columbia, Canada; sponsored by IEEE PE. Abstracts in *IEEE Transactions on Power Apparatus and Systems*, Vol. PAS-99, No. 1, Jan/Feb 1980, \$10.00. **JH 52282** (not distributed under OOP). The text of "A" Papers from this meeting (79CH1458-9 PWR) was listed in the Apr 1980 issue of the Bulletin.

Power Engineering Society Winter Meeting, 1979 IEEE, held Feb 4-9, 1979 in New York, NY; sponsored by IEEE PE. *Discussions and Closures of Abstracted Papers*, approx. 130p. (LC 76-4401 was printed in error in this publication. There is no LC number for this volume.) \$16.00. **79CH1418-3 PWR** (OOP 1G). The Text of "A" Papers (79CH1417-5 PWR) and the Abstracts (JH 48967) from this Meeting were listed in the Oct 1979 issue of the Bulletin.

Product Liability Prevention Conference (PLP-79), 10th, held Oct 22-24, 1979 in New York, NY; sponsored by IEEE R. *Proceedings*, 210p., LC 78-641548 (serials entry), ISSN 0162-2919, \$15.00. **79CH1512-3 R** (OOP 1F)

Program Testing, see Software Testing and Test Documentation IEEE Computer Society Workshop on

Railroad Conference, [23rd] Joint ASME/IEEE/AAR, held Apr 9-10, 1980 in Montreal, Canada; sponsored by IEEE IA, ASME, and CSME. *IEEE Technical Papers*, 52p., \$15.00. **80CH1567-7 IA** (OOP 1B)

Reliability and Maintainability Symposium, 26th, held Jan 22-24, 1980 in San Francisco, CA; sponsored by IEEE R, AIAA, ASME, et al. *Proceedings*, 478p., LC 78-132873 (serials entry), ISSN 0149-144X, \$32.00. **80CH1513-1 R** (OOP 1F)

Rural Electric Power Conference, 24th, held Apr 27-29, 1980 in Rapid City, SD; sponsored by IEEE IA, IEEE Black Hills Subsection, and IEEE Denver Section. *Papers*, approx. 200p., LC 79-93123 (preassigned), \$25.00. **80CH1532-1 IA** (OOP 1B)

Science, Technology, and the Human Prospect, see Edison Centennial Symposium

Simulation Conference, 11th Winter, held Dec 3-5, 1979 in San Diego, CA; sponsored by ACM, IEEE SMC, et al.; edited by Harold J. Highland, Mitchell G. Spiegel, and Robert Shannon. *Proceedings*, 2v., 662p., LC 79-88000 (preassigned), \$54.00. **79CH1437-3 SMC** (OOP 1E, F)

Simulation Symposium, 13th, held Mar 19-21, 1980 in Tampa, FL; sponsored by ACM, IEEE C, and SCS; edited by Victor P. Boyd, Richard G. Cumings, Carl Hammer, and William Malamphy. *Record of Proceedings*, 337p., \$22.00, LC 71-149514 (serials entry), **80CH1492-8 C** (OOP 1E). Also available from ACM as Order No. 577800.

Software Testing and Test Documentation, IEEE Computer Society Workshop on, held Dec 18-20, 1978 in Fort Lauderdale, FL; sponsored by IEEE C. Special collection of papers on program testing in *IEEE Transactions on Software Engineering*, Vol SE-6, No. 3, May 1980, \$10.00. **JH 52498** (not distributed under OOP)

Solid-State Circuits Conference, [27th] IEEE International, held Feb 13-15, 1980 in San Francisco, CA; sponsored by IEEE SSC, IEEE San Francisco Section, and the University of Pennsylvania; edited by Lewis Winner. *Digest of Technical Papers—Vol. 23*, 284p., LC 59-44023 (serials entry), \$40.00. **80CH1490-2 SSC** (OOP 1A)

SOUTHEASTCON '80 (IEEE Region 3 Conference), held Apr 13–16, 1980 in Nashville, TN; sponsored by IEEE Region 3 and IEEE Nashville Section. *Proceedings*, 363p., LC 80-80719 (preassigned), \$25.00. **80CH1558-6** (OOP 1H)

Telecommunications, see National Telecommunications Conference (NTC)

Ultrasonics Symposium, 1979, held Sep 26–28, 1979 in New Orleans, LA; sponsored by IEEE SU; edited by J. deKlerk and B. R. McAvoy. *Proceedings*, 950p., LC 73-641406 (serials entry; LC 74-77824 was printed in error on the verso of the title page), ISSN 0090-5607, \$32.00. **79CH1482-9** (OOP 1D). The *IEEE Transactions on Sonics and Ultrasonics* contains an updated and corrected version of the Contents in Vol. SU-27, No. 2, Mar 1980. Abstracts in *IEEE Transactions on Sonics and Ultrasonics*, Vol. SU-27, No. 3, May 1980, \$10.00, **JH 52670** (not distributed under OOP)

Zurich Seminar on Digital Communications, see Digital Communications, 6th International Zurich Seminar on

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.

Automated Vehicle Propulsion and Suspension; IEEE Transactions on Vehicular Technology, Vol. VT-29, No. 1, Feb 1980. \$10.00. **JH 52712**

Coverage: This issue is devoted to maglev—the magnetic levitation and propulsion of vehicles. While this is not a new concept, only the last ten years have shown any real practical applications. Two facts emerge from a review of maglev: 1) Its application will be influenced by the needs of the particular location that adapts it; and 2) The majority of the research and development in this area is carried out in the Federal Republic of Germany and in Japan. The papers in the issue reflect these facts. They also point to further practical applications of this technology.

Electromagnetic Energy, Biological Effects and Medical Applications of; Proceedings of the IEEE, Vol. 68, No. 1, Jan 1980. \$10.00. **JH 50237**

Coverage: This special issue devoted to electromagnetic (EM) energy, it biological effects and medical applications is especially timely because of interest in the possible detrimental biological effects of EM. The technical papers are generally state-of-the-art but do define areas that require further attention. Topics of the technical papers: environmental and professionally encountered EM fields; dosimetry; microwaves biological effects; ELF (extremely low frequencies) effects; mechanisms; medical applications; general.

Europe '80—A Review of Electrotechnology; IEEE Spectrum, Vol. 17, No. 3, Mar 1980. \$8.00. **JH 50138**

Coverage: This review of electrotechnology in Europe is divided into these areas: 1) Home communications—teletext and viewdata; creating a market for Prestel; videotext standards. 2) Consumer telephone—switch to electronics; France goes digital; mixing new with old. 3) Optical fiber systems—low-loss links. 4) Satellite communications—ESA (European Space Agency) at the crossroads; television for everyone. 5) Solid-state—thyristors on the move. 6) Transportation—the promise of Maglev. 7) Computers—data privacy.

Infrared Materials Devices and Applications; IEEE Transactions on Electron Devices, Vol. ED-27, No. 1, Jan 1980. \$10.00. **JH 51474**

Coverage: This special issue, concentrating on the field of infrared (IR), has three parts. The first, Materials, discusses IR-sensitive materials. The second section, Devices, deals with the devices that detect IR radiation. The last section, Integration and Arrays, concerns IRCCD, a new research area in IR—the application of the charged transfer concept and related devices to readout integration.

Microprocessors and Microcomputers; Joint Special Issue published simultaneously as IEEE Transactions on Computers, Vol. C-29, No. 2, Feb 1980 (\$10.00. **JH 50740**) and *IEEE Journal of Solid-State Circuits*, Vol. SC-15, No. 1, Feb. 1980. (\$10.00. **JH 53249**)

Coverage: This special issue presents contributions that examine all levels of microcomputer and microprocessor technology. The papers cover three major areas: circuits, especially special-purpose processing and support chips; architecture; and applications.

Optics Education; IEEE Transactions on Education, Vol. E-23, No. 2, May 1980. \$10.00. **JH 51441**

Coverage: The technical papers in this issue cover the field of optics education from different viewpoints. Major topics: the low profile of optics educational programs and correctives for the situation; optics education from a national standpoint; specific courses and teaching methods; the state of optics education at some specific institutions such as the Air Force Institute of Technology, M.I.T., and Carnegie-Mellon University.

Pioneer Venus Spacecraft, Instrumentation for; IEEE Transactions on Geoscience and Remote Sensing (formerly IEEE Transactions on Geoscience Electronics), Vol. GE-18, No. 1, Jan. 1980. \$10.00. **JH 51771**

Coverage: The purpose of this special issue is to present short descriptions of the instrumentation for the Pioneer Venus which consists of two independently launched spacecraft: Orbiter and Multiprobe. The technical reports present a general overview of the Pioneer Venus spacecraft's design and operation, a paper each devoted to the Orbiter and Multiprobe, a paper on the data handling and distribution system, and separate papers on individual instruments. The scientific objective or results of the Pioneer Venus Program in general are not discussed in detail.

Power MOS Devices; IEEE Transactions on Electron Devices, Vol. ED-27, No. 2, Feb 1980. \$10.00. **JH 51482**

Coverage: This special issue concentrates on new developments in the field of high-power MOS (metal-oxide-semiconductor) field-effect transistors. Special attention is given to these transistor technologies: lateral, planar double-diffused MOS (LDMOS); vertical, planar double-diffused MOS (VDMOS); and vertical, V-groove MOS (VVMOS). It is noted that the new technologies seem to be developing for specific applications as opposed to general use, and that their success will probably depend on manufacturability, cost, and reliability.

Practical Salinity Scale 1978; IEEE Journal of Oceanic Engineering, Vol. OE-5, No. 1, Jan 1980. \$10.00. **JH 52753**

Coverage: Contributions in this issue present the information used to formulate the new Practical Salinity Scale 1978. This scale, now being examined for acceptance by major oceanographic societies, will be used in oceanographic data reports if adopted. The first paper, which functions as an introduction, outlines the process involved in the formulation of the scale. Several different laboratories with dissimilar measuring equipment were involved, but a high degree of inter-laboratory agreement on the data was realized even with this condition.

Public Speaking for Engineers and Scientists; IEEE Transactions on Professional Communication, Vol. PC-23, No. 1, Mar 1980. \$10.00. **JH 52340**

Coverage: The papers in this issue reflect the two aspects of speech-making—preparation and delivery. There is a bibliography of 178 publications and organizations that will aid communicators. Some of the topics covered in the papers: attitude; audience awareness; hand-outs; impromptu speaking; organization; practice; references; visual aids; word choice.

Solid-State Microwave/Millimeter-Wave Power Generation, Amplification, and Control; IEEE Transactions on Microwave Theory and Techniques, Vol. MTT-27, No. 5, May 1979. \$10.00. **JH 48751**

Coverage: The issue takes up two interrelated subjects: progress in microwave systems and progress in solid-state devices. The six topic areas are: gallium arsenide field effect transistors; silicon bipolar tran-

sistors; IMPATT and other junction devices; power combining techniques; millimeter-wave devices; and control devices.

Technology '80—An Applications Review; IEEE Spectrum, Vol. 17, No. 1, Jan 1980. \$8.00. **JH 50112**

Coverage: In this year's technology review, two major themes emerge: the area of very large scale integration (VLSI) and the way that the oil crisis is influencing design concepts in electrotechnology. The issue covers these applications: computers, with emphasis on software; communications and microwave; solid-state looks to VLSI; instruments get smarter; innovation in the factory; power/energy developments; consumer electronics; electrotechnology as a "prime mover;" aerospace and military; medicine; technology and society. In general the applications discussed are currently in use or will be soon.

IEEE Standards

Unless otherwise noted, Standards listed in this section are distributed under OOP Option 5.

ANSI/IEEE C37.1-1979 American National Standard; IEEE Standard Definition, Specification, and Analysis of Manual, Automatic, and Supervisory Station Control and Data Acquisition; Dec 31, 1979. 39 p., \$7.50. **SH07377**

ANSI/IEEE C37.2-1979 American National Standard; IEEE Standard Electrical Power System Device Function Numbers; Dec 31, 1979. 20 p., \$6.00. **SH07286**

ANSI/IEEE C 37.5-1979 (Revision of ANSI C37.5-1969) American National Standard; IEEE Guide for Calculation of Fault Currents for Application of AC High-Voltage Circuit Breakers Rated on a Total Current Basis; Dec 31, 1979. 20 p., \$5.00. **SH06932**

ANSI/IEEE C37.37-1979 American National Standard; Loading Guide for AC High-Voltage Air Switches (in excess of 1000 volts); Dec 31, 1979. 12 p., \$4.00. **SH06353**

ANSI/IEEE C37.97-1979 American National Standard; IEEE Guide for Protective Relay Applications to Power System Buses; Dec 19, 1979. 20 p., \$5.00. **SH07351**

ANSI/IEEE C57.12.01-1979 American National Standard; IEEE Standard General Requirements for Dry-Type Distribution and Power Transformers; Nov. 30, 1979. 27p., \$5.00. **SH06890**

ANSI/IEEE C57.12.91-1979 American National Standard; IEEE Standard Test Code for Dry-Type Distribution and Power Transformers; Dec 14, 1979. 47 p., \$6.00. **SH07443**

ANSI/IEEE Std 730 (Issued Jan 1980 for trial use) Draft American National Standard; IEEE Trial-Use Standard for Software Quality Assurance Plans; Feb 22, 1980. 7 p., \$4.00. **SH07773** (NOTE: Distribution of this draft standard for comment shall not continue beyond 12 months from the date of publication.)

Archival Nuclear IEEE Standards. ©1978, approx. 250 p., LC 78-70586, \$32.50. **SH07500** (not distributed under OOP). Contents: Set of 18 withdrawn or superseded Nuclear IEEE Standards appearing as issued, with a note on the title page referring to the next approved edition.

IEEE Std 149-1979 (Revision of IEEE Std 149-1965) IEEE Standard Test Procedures for Antennas; Dec 19, 1979. 143 p., LC 79-92425, ISBN 0-471-08032-2, \$15.95. **SH07682**

IEEE Std 367-1979 IEEE Guide for Determining the Maximum Electric Power Station Ground Potential Rise and Induced Voltage from a Power Fault; Dec 18, 1979. 54 p., \$7.50. **SH07328**

IEEE Std 539-1979 IEEE Standard Definitions of Terms Relating to Overhead-Power-Line Corona and Radio Noise; Dec 18, 1979. 11 p., \$4.50. **SH06882**

IEEE Std 583A-1979 Supplement to CAMAC (Computer Automated Measurement and Control) IEEE Standards Documents; Dec 7, 1979. 8 p., **SH07385**. This supplement is to be inserted in each of the following standards: IEEE Std 583-1975, IEEE Standard Modular Instrumentation and Digital Interface System (CAMAC), SH05835; IEEE Std 595-1976, Standard Serial Highway Interface System (CAMAC), SH06197; IEEE Std 596-1976, Standard Parallel Highway Interface System (CAMAC), SH06205; CAMAC Instrumentation and Interface Standards, LC 76-39660, SH06437

IEEE Std 758-1979 IEEE Standard Subroutines for CAMAC; Dec 28, 1979. 24 p., \$5.00. **SH07609**

IEEE Press

Data Conversion Integrated Circuits, A Book of Selected Reprints, edited by Daniel J. Dooley (Data Conditioning Devices, Inc.). ©1980. 298 p. ISBN Clothbound 0-87942-131-2, ISBN Paperbound 0-87942-132-0, LC 80-10541 (CIP Data is on the verso of the title page). \$26.95. **PC01263** (OOP 2). Also distributed through John Wiley & Sons, Inc. Wiley Order Number Clothbound: 0-471-08154-X.

Content: This volume gives designers and users of data conversion devices a compact source for design and reference information. The seven sections in the book discuss the various aspects of data conversion with emphasis on circuit design. Two earlier IEEE Press Books are on related topics: *Analog Integrated Circuits* (PC01081); and *Integrated Circuit Operational Amplifiers* (PC01065). Both are listed in the Jan 1979 issue of the Bulletin.

Digital Signal Processing, Programs for, edited by the Digital Signal Processing Committee of the IEEE Acoustics, Speech, and Signal Processing Society. ©1979. 592 p. ISBN Clothbound 0-87942-127-4, ISBN Paperbound 0-87942-128-2, LC 79-89028. \$35.00. **PC01180** (OOP 2). **Tape of Programs for Digital Signal Processing**. \$50.00. **PT05009** (800 bpi) or **PT05017** (1600 bpi) (not distributed under OOP). Tapes will be produced on demand by the IEEE Data Processing Department.

Content: This book is a departure from the usual format of the IEEE Press series. It consists of a collection of 29 computer programs for digital signal analysis (all in ANSI FORTRAN), for which a machine-readable version is also being made available. The volume contains four standards followed by eight groups of programs: Fourier transform programs; power spectrum analysis, and correlation; fast convolution program; linear prediction analysis of speech signals; FIR filter design and synthesis; IIR filter design and synthesis; cepstral analysis; interpolation and decimation. The machine-readable version is a standard ½-inch 600-ft. tape, in EBCDIC, and is available in either 800 or 1600 bits/inch.

Multidimensional Systems: Theory & Applications, a Book of Selected Reprints, edited by N. K. Bose (University of Pittsburgh). ©1979. 295 p., ISBN Clothbound 0-87942-109-6, ISBN Paperbound 0-87942-110-X, LC 78-55096. \$29.95. **PC01107** (OOP 2). Also distributed through John Wiley & Sons, Inc. Wiley Order Number Clothbound: 0-471-05214-0.

Content: Areas covered include variable-parameter and lumped-distributed network synthesis, stiff differential systems, continuous and discrete nonlinear system characterization via the Volterra series, signal processing, approximation and the supporting mathematical and computational tools. The introductory paper features an extensive bibliography.

Tutorials

Interactive Computer Graphics, Tutorial and Selected Readings in, initially presented at the 20th IEEE Computer Society International Conference (COMPCON Spring 80), held Feb 25–28, 1980 in San Francisco, CA; edited by Herbert Freeman. 415 p., LC 79-91237 (preassigned), \$25.00. **EH0156-0** (OOP 8). The Digest of Papers (80 CH1491-0 C) from COMPCON Spring 80 is listed in the Conference Publications section of this issue.

Microprogramming: A Tutorial and Survey of Recent Developments; (special section, p. 2-20) *IEEE Transactions on Computers*, Vol. C-29, No. 1, Jan 1980, \$10.00. **JH 50732** (not distributed under OOP).

Microprocessor Systems, Tutorial: Design of, initially presented at Tutorial Week, held Dec 10-14, 1979 in San Diego, CA; edited by John H. Carson. 262 p., LC 79-89495 (preassigned), \$16.00. **EH0155-2** (OOP 8)

Reclosers, Sectionalizers, and Fuses, Application and Coordination of, held [Feb 7, 1980] at the 1980 Power Engineering Society Winter Meeting in New York, NY; Sponsored by IEEE PES. *IEEE Tutorial Course—Course Text*, 94 p., \$16.00. **80EH0157-8 PWR** (OOP 8)

Software Design Strategies, Tutorial, initially presented at the IEEE Computer Society's 3rd International Computer Software and Applications Conference (COMPSAC 79), held Nov 6-8, 1979 in Chicago, IL; sponsored by IEEE C; edited by Glenn D. Bergland and Ronald D. Gordon. 415 p., LC 79-91319 (preassigned), \$16.00. **EH0149-5** (OOP 8). Proceedings (79CH1515-6 C) from COMPSAC 79 is listed in the Jan 80 issue of the Bulletin.

VLSI: The Coming Revolution in Applications and Design, Tutorial, initially presented at the 20th IEEE Computer Society International Conference (COMPCON Spring 80), held Feb 25-28, 1980 in San Francisco, CA; edited by Rex Rice. 315 p., LC 79-93146 (preassigned), \$22.00. **EH0158-6** (OOP 8). The Digest of Papers (80CH1491-0 C) from COMPCON Spring 80 is listed in the Conference Publications section of this issue.

Miscellaneous Publications

1978 Index to IEEE Publications. ©1980, LC 75-646004, \$75.00. **JH50088** (OOP 1-All and All-Transactions-Subscribers; OOP 7 will receive mail solicitation)

Coverage: Author and Subject Indexes to all papers in IEEE periodicals and conference publications, as well as to IEEE Press books, Standards, and miscellaneous publications.

Fission Breeder Reactor—An Energy Seminar. Papers from the meeting held Mar 26-27, 1979 in Washington, DC; sponsored by IEEE Energy Committee. 102 p., LC 80-80438 (preassigned), \$30.00. **TH0072-9** (OOP 6)

Coverage: The purpose of this first Energy Seminar is to aid in formulating the IEEE position on breeder reactor technology. Seven papers with the discussions of each are included in this volume along with introductory material.

IEEE Membership Directory, 1979-1980. 1182 p., \$50.00. **JH46854**

Coverage: This biennial directory contains not only the IEEE membership roster but also such features as officers and directors 1963-1979; biographies of fellows; and honorary members. A new feature this year is the addition of telephone numbers (when authorized) in the membership roster.

Nuclear Energy: Its International Impact and Promise; Special Publication No. 17 of the IEEE PES, presented at the 1979 Power Engineering Society Summer Meeting held on Jul 17, 1979 in Vancouver, B.C., Canada. 28 p., \$6.00. **80TH0070-3 PWR** (OOP 6). The Text of "A" Papers from this Meeting (79CH1458-9 PWR) is listed in the April 1980 issue of the Bulletin.

Coverage: Nuclear power from a world viewpoint is discussed, with emphasis on Canada, France, Japan, and the U.S. The morality of the use of nuclear energy is also discussed.

Changes in IEEE Periodicals

New Publication: IEEE Electron Device Letters. ISSN 0193-8576. Published monthly, commencing with Vol. EDL-1, No. 1, Jan 1980. Subscription price: \$20.00.

Coverage: This journal provides rapid dissemination of new results in the field of electron devices. Contributions are no more than two pages in length and usually appear two months after receipt.

New Publication: IEEE Technical Activities Guide (TAG). ISSN 0195-3273. Published quarterly, commencing with Vol. 1, No. 1, Jan 1980. Subscription price: \$20.00.

Coverage: This publication features a five-year cross-indexed schedule of over 100 IEEE Conferences with dates, locations, sponsors, information contacts, and publication plans. Other features: "Call for papers" for IEEE sponsored conferences; schedule of IEEE topical interest meetings; recent IEEE conference publications; and other items.

Title Change: from *IEEE Transactions on Geoscience Electronics* (ISSN 0018-9413) to *IEEE Transactions on Geoscience and Remote Sensing* (ISSN 0196-2892), commencing with Vol. GE-18, No. 1, Jan 1980.

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