

CALENDAR

NOVEMBER 1991

24-27 Noise in Physical Systems and 1/f Fluctuations Kyoto, Japan *Contact:* Toshimitsu Musha [Tel. (81)(45) 9221111 ext 2546] Tokyo Inst of Tech, Nagatsuta, Midoriku, Yokohama 227, Japan

25-13 Wksp on Nonlinear Dynamics and Earthquake Prediction Trieste, Italy *Contact:* ICTP

- **26-28 Symp on Correlation** Toulouse, France *Contact:* Groupe Europa [Fax: (33)(61) 32 66 00] 40 Blvd des Recolets, BP 4406, 31405 Toulouse Cedex, France

DECEMBER 1991

1-6 AAPM/RSNA Ann Joint Mtg Chicago, IL *Contact:* RSNA, 2021 Spring Rd, Ste 600, Oak Brook, IL 60521

2-6 MRS Fall Mtg Boston, MA *Contact:* MRS

- **2-13 Winter Sch on Star Formation in Stellar Sys** Tenerife, Spain *Contact:* Winter Sch Organizing Committee, Instituto de Astrofísica de Canaria, 38200 La Laguna, Tenerife, Spain

8-11 Intl Electron Devices Mtg Washington, DC *Contact:* Melissa Widerkehr [Tel. (202) 347-5900] Courtesy Associates, 655 15th St NW, Suite 300, Washington, DC 20005

8-13 14th Intl Conf on Lasers San Diego, CA *Contact:* Soc for Opt and Quantum Electronics [Tel. (703) 642-5838] PO Box 245, McLean, VA 22101

9-10 Parallel Problem Solving from Nature Zürich, Switzerland *Contact:* Diethelm Würtz [Tel. (41)(1) 256-5567] Interdisciplinary Project Ctr for Supercomputing-ETH Zürich, ETH Zentrum, CLU B3, CH-8092 Zürich, Switzerland

9-11 Short Course on Plasma Etching *Contact:* Univ Consortium for Continuing Education

9-12 Hypernuclear and Strange Particle Phys Shimoda, Japan *Contact:* Osamu Morimatsu [Fax: (81) 0424-62-0763] Inst for Nuclear Study, Univ of Tokyo, 3-2-1 Midori-cho, Tanashi, Tokyo 188, Japan

9-13 AGU Fall Mtg San Francisco, CA *Contact:* AGU

9-13 Short Course on Sonar Signal Processing *Contact:* Univ Consortium for Continuing Education

- **12-16 Intl Symp on Indian and Other Asiatic Astronomies** Hyderabad and Jaipur, India *Contact:* Prof. Sidharth, B. M. Birla Planetariums and Sci Museums, Adarsh Nagar, Hyderabad 500463, India
- 15-19 2nd Intl Conf on Molecular Electronics Sci and Tech** St Thomas, US Virgin Islands *Contact:* Eng Foundation

18-20 Wksp on the 17 keV Neutrino Question Berkeley, CA *Contact:* Timothy Edberg [Tel. (510) 642-1067] Ctr for Particle Astrophys, 301 LeConte Hall, Univ of California, Berkeley, CA 94720

18-20 Intl Conf on Emerging Optoelectronics Technologies Bangalore, India

Contact: Krishna Shenai, GE Corporate R&D, PO Box 8, Schenectady, NY 12301

29-5 Intl Wksp: Ordering Disorder—Prospect and Retrospect in Condensed Matter Phys Hyderabad, India *Contact:* D. G. Naugle [Tel. (409) 845-7717] Phys Dept, Texas A&M Univ, College Station, TX 77843

JANUARY 1992

6-9 AAPT Winter Mtg Orlando, FL *Contact:* AAPT [Tel. (301) 345-4200] 5112 Berwyn Rd, College Park, MD 20740

- **6-10 Neptune and Triton** Tucson, AZ *Contact:* D. Cruikshank [Tel. (415) 604-4244] NASA Ames Rsch Ctr, Moffett Field, CA 94035

6-11 Winter Conf on Plasma Spectrochemistry San Diego, CA *Contact:* R. Barnes [Tel. (413) 545-2294] c/o ICP Info Newsletter, Univ of Massachusetts, Dept of Chem, GRC Towers, Amherst, MA 01003-0035

ADDRESS KEY

Addresses for some frequently listed organizations are given below.

AAPM 335 E 45th St, New York, NY 10017 [Tel. (212) 661 7026]

AAPT 5112 Berwyn Rd, College Park, MD 20740 [Tel. (301) 345-4200]

AAS 2000 Florida Ave NW, Ste 300, Washington, DC 20009 [Tel. (202) 328-2010]

AGU 2000 Florida Ave NW, Washington, DC 20009 [Tel. (202) 462-6903]

ANS 555 N Kensington Ave, La Grange Park, IL 60525 [Tel. (708) 352-6611]

APS 335 E 45th Street, New York, NY 10017 [Tel. (212) 682-7341]

ASA 500 Sunnyside Blvd, Woodbury, NY 11797-2999 [Tel. (516) 349 7800 ext 481]

AVS 335 E 45th Street, New York, NY 10017 [Tel. (212) 661 9404]

Engineering Foundation 345 E 47th St, New York, NY 10017 [Tel. (212) 705-7835]

ICTP PO Box 586, 34100 Trieste, Italy [Fax (39)(40) 224163]

MRS 9800 McKnight Rd, Pittsburgh, PA 15237 [Tel. (412) 367-3003]

OSA 2010 Massachusetts Ave NW, Washington, DC 20036 [Tel. (202) 223-8130]

SPIE PO Box 10, Bellingham, WA 98227-0010 [Tel. (206) 676-3290]

Soc for Imaging Sci and Tech 7003 Kilworth Ln, Springfield, VA 22151 [Tel. (703) 642-9090]

Univ Consortium for Continuing Education 16161 Ventura Blvd, Encino, CA 91436 [Tel. (818) 995-6335]

Please note: Complete information is now given for all listings. New listings are marked ● and newly revised listings are marked ○. Addresses for frequently listed organizations are given in the accompanying table. The complete listings are coded as follows:

date title

§ indicates financial aid may be available for some to attend the meeting.

This calendar appears in alternate (odd-numbered) months. Notices should be sent to: Calendar, PHYSICS TODAY, 335 East 45th Street, New York NY 10017, at least three months in advance.

AAAS American Association for the Advancement of Science
AAPM American Association of Physicists in Medicine
AAPT American Association of Physics Teachers
AAS American Astronomical Society
ACA American Crystallographic Association
AGU American Geophysical Union
ANS American Nuclear Society
APS American Physical Society
ASA Acoustical Society of America
AVS American Vacuum Society

BNL Brookhaven National Laboratory
CNRS Centre National de la Recherche Scientifique
DOE Department of Energy
DPG Deutsche Physikalische Gesellschaft
EPS European Physical Society
IAEA International Atomic Energy Agency
IAU International Astronomical Union
ICTP International Centre for Theoretical Physics

IEEE Institute of Electrical and Electronics Engineers
IOP Institute of Physics (London)
IUPAC International Union of Pure and Applied Chemistry
IUPAP International Union of Pure and Applied Physics
LBL Lawrence Berkeley Laboratory
LLNL Lawrence Livermore National Laboratory
MRS Materials Research Society
NAS National Academy of Sciences
NIST National Institute of Standards and Technology
NRC Nuclear Regulatory Commission
NRL Naval Research Laboratory
NSF National Science Foundation
ORNL Oak Ridge National Laboratory
OSA Optical Society of America
S of R Society of Rheology
SPIE International Society for Optical Engineering
SPS Society of Physics Students

7-10 Nonlinear Phenomena in Stellar Variability Mito, Japan *Contact:* M. Takeuti, Astronomical Inst, Tohoku Univ, Aoba, Aoba-ku, Sendai 980, Japan

7-10 15th Nuclear Phys Symp Oaxtepec, Mexico *Contact:* P. O. Hess [Fax: (52)(905) 548-4569] Instituto de Ciencias Nucleares, AP 70-543, Mexico 04510 DF

● **12-16 179th Mtg of AAS** Atlanta, GA *Contact:* AAS Note revised dates

12-17 Vapor Phase Manufacture of Ceramics Kona, HI *Contact:* Eng Foundation

13-24 Chaos and Quantum Chaos: Sum Sch in Theor Phys Johannesburg, South Africa *Contact:* Erna Pheiffer [Tel. (27)(12) 841-3812] PO Box 2600, Pretoria, South Africa

● **18-23 Conf on Fullerene Molecules** Tucson, AZ *Contact:* Eng Foundation

18-25 Winter Wksp on Nuclear Dynamics Jackson Hole, WY *Contact:* Wolfgang Bauer [Tel. (517) 353-5965] NSCL/Cyclotron Lab, Michigan State Univ, East Lansing, MI 48824

19-24 Top Mtg on Opt Data Storage Los Angeles, CA *Contact:* OSA

21-24 Mass Loss on the Asymptotic Giant Branch and Beyond La Serena, Chile *Contact:* H. E. Schwarz [Tel. (56)(2) 2285006] Eur Southern Observatory, Casilla 19001, Santiago 19, Chile

● **24 Symp on Phys of Space Plasmas** Cambridge, MA *Contact:* Tom Chang, MIT, Ctr for Space Rsch, Room 37-271, Cambridge, MA 02139

26-28 Mtg on Noninvasive Assessment of the Visual Sys Santa Fe, NM *Contact:* OSA

27-29 Intl Top Conf on New Ideas in Tokamak Confinement La Jolla, CA *Contact:* Inst for Adv Phys Studies [Tel. (619) 456-5737] PO Box 2946, La Jolla, CA 92038

● **27-31 Laser Fundamentals and Sys** Orlando, FL *Contact:* Eng Tech Inst [Tel. (800) 367-4238] PO Box 8859, Waco, TX 76714-8859

27-31 Ocean Sciences Mtg New Orleans, LA *Contact:* AGU

27-31 Mtg on Laser Applications to Chemical Analysis Salt Lake City, UT *Contact:* OSA

29-30 Top Mtg on Ophthalmic and Visual Optics Santa Fe, NM *Contact:* OSA

● **29-31 Intl Superconductor Applications** San Diego, CA *Contact:* SCAA [Tel. (714) 362-9701] 27692 Deputy Circle, Laguna Hills, CA 92653

29-31 Opt Fiber Sensors Conf Monterey, CA *Contact:* OSA

31-1 Mtg on Advances in Color Vision Irvine, CA *Contact:* OSA

FEBRUARY 1992

● **1-8 Computational Methods in Field Theory** Schladming, Austria *Contact:* Organizing Committee 31.IUKT [Fax: (43) (316) 384091] Institut für Theoretische Physik, Karl-Franzens-Universität Graz, Universitätsplatz 5, A-8010 Graz, Austria

3-7 Opt Fiber Communication Conf San Jose, CA *Contact:* OSA

● **4-6 UV and X-Ray Spectroscopy of Astrophysical and Lab Plasmas** Berkeley, CA *Contact:* Steven Kahn, Dept of Phys, Univ of California, Berkeley, CA 94720 *Note revised dates*

● **6-11 AAAS Mtg** Chicago, IL *Contact:* Stacy Weinberg [Tel. (202) 326-6462] AAAS, 1333 H St, NW, Washington, DC 20005

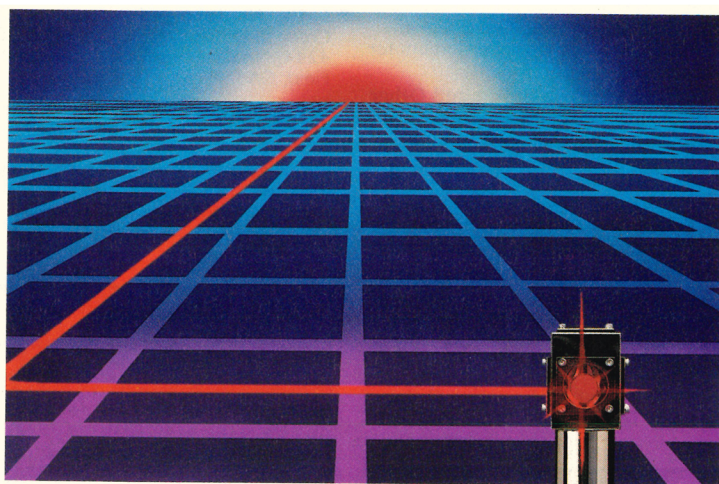
9-14 SPSE-SPIE Symp on Electronic Imaging: Sci and Tech San Jose, CA *Contact:* Soc for Imaging Sci and Tech

10-14 Natl Cong of the Australian Inst of Phys Melbourne, Australia *Contact:* G. N. Taylor [Tel. (61)(3) 344-5456] 10th AIP Cong Secretary, Sch of Phys, Univ of Melbourne, Parkville VIC 3052, Australia

10-15 Conf of the Soc for Imaging Sci and Tech East Rutherford, NJ *Contact:* Soc for Imaging Sci and Tech

● **11-13 Wksp on High Resolution Spectroscopy with the VLT** Garching, Germany *Contact:* ESO [Tel. (49)(89) 320060] Karl-Schwarzschild-Str 2, D-W8046 Garching bei München, Germany

One Cryogenic Equipment Manufacturer Beats The Others Cold!



Only APC offers you this complete package:

- a full line of highest quality cryogenic refrigeration systems for spectroscopy, superconductivity research and materials characterization, Displex®.....Closed Cycle.....10K to 450K Heliplex®.....Closed Cycle.....3.6K to 300K Heli-Tran®.....Open Cycle.....2K to 300K
- a single source supplier, with total in-house capabilities and a worldwide service network,
- technical assistance from experienced applications engineers who match the right product to your specific needs,
- and a 3-year warranty, the longest in the industry.

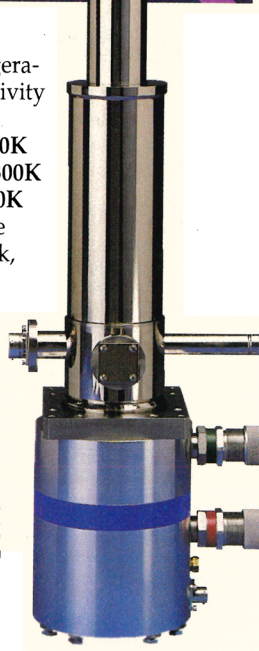
Advancing the technology of cryogenic systems.

APC

CRYOGENICS INC

A SUBSIDIARY OF INTERMAGNETICS GENERAL CORPORATION

1833 Vultee Street • Allentown, PA 18103
Sales: 800-525-3072 • Service: 800-525-3071
FAX 215-791-0440 • Sunnyvale, CA 408-736-4406



MRS Show—Booth #14

Circle number 78 on Reader Service Card

CALENDAR

17-19 Mtg on Adv Solid-State Lasers Santa Fe, NM Contact: OSA

- **17-28 Opt Sci and Eng** Tucson, AZ Contact: P. N. Slater [Tel. (602) 885-3798] Opt Sys and Eng Short Courses Inc, PO Box 18667, Tucson, AZ 85731

19-21 Mtg on Compact Blue-Green Lasers Santa Fe, NM Contact: OSA

- **24-28 Laser Safety** Phoenix, AZ Contact: Eng Tech Inst, PO Box 8859, Waco, TX 76714-8859

MARCH 1992

2-4 14th Austin Symp on Molecular Structure Austin, TX Contact: James E. Boggs [Tel. (512) 471-7525] Dept of Chem, Univ of Texas, Austin, TX 78712

2-5 Mtg on Phys of X-Ray Multilayer Structures Jackson Hole, WY Contact: OSA

- **2-6 Infrared Solar Phys** Tucson, AZ Contact: Douglas Rabin, Natl Solar Observatory, PO Box 26732, Tucson, AZ 85726-6732 Note revised dates

6-7 Joint Mtg of the Texas Sections of AAPT and APS San Marcos, TX Contact: James Crawford [Tel. (512) 245-2131] Phys Dept, Southwest Texas State Univ, San Marcos, TX 78666

8-11 Top Mtg on Advances in Reactor Phys Charleston, SC Contact: H. C. Honck [Tel. (803) 649-4201] Computer Application Tech, 621 Colleton Ave, SE, Aiken, SC 29801

8-13 Symp on Microlithography San Jose, CA Contact: SPIE

9-11 Symp on Integrated Ferroelectrics Monterey, CA Contact: ISIP '92 Conf Coordinator [Tel. (719) 593-3488] Microelectronics Rsch Lab, Univ of Colorado, PO Box 7150, Colorado Springs, CO 80933-7150

9-12 General Conf of the Condensed Matter Div of the EPS Prague, Czechoslovakia Contact: V. Smid, Czechoslovakia Academy of Sci, Cukrovarnicka 10, 162 00 Praha 6, Czechoslovakia

12-16 Intl Wksp on Dynamical Fluctuations and Correlations in Nuclear Collisions Aussois, France Contact: Eric Surraud, GANIL, BP 5027, F-14021 Caen Cedex, France

14-21 32nd Sanibel Symposia St. Augustine, FL Contact: Sanibel Symposia, 362 Williamson Hall, Univ of Florida, Gainesville, FL 32611-2085

15-20 Mtg on Signal Recovery and Synthesis Lake Tahoe, NV Contact: OSA

- **16-20 Effective Opt Coating Design** London-Gatwick, UK Contact: H. A. Macleod [Tel. (602) 325-8721] Thin Film Ctr, 2745 E Via Rotonda, Tucson, AZ 85716

- **16-20 Lunar and Planetary Sci** Houston, TX Contact: Prog Services Dept, LPI, 3303 NASA Rd 1, Houston, TX 77058-4399

16-20 APS March Mtg Indianapolis, IN Contact: APS

- **17-20 Recent Advances in High-Energy Astron** Toulouse, France Contact: Pierre Mandrou [Fax: (33) 31 55 67 07] 9 Ave du Colonel Roche, 31027 Toulouse, France

24-28 Eur Particle Accelerator Conf Berlin, Germany Contact: H. Henke [Tel. (49)(30) 314-224-90] EPAC '92, Conf Sec-

retariat, Einsteinufer 17, D-1000 Berlin 10, Germany

30-3 10th Intl Conf on Plasma-Surface Interactions in Controlled Fusion Devices Monterey, CA Contact: Walter Bauer [Tel. (510) 294-2994] Sandia Natl Lab, Dept 8340, PO Box 969, Livermore, CA 94551-0969

- **30-4 Space in Service of the Changing Earth** Munich, Germany Contact: B. Pfeiffer, ESA/ESTEC-ISY Office, Keplerlaan 1, PO Box 2200, AG Noordwijk, The Netherlands

APRIL 1992

5-9 Muonic Atoms and Molecules Ascona, Switzerland Contact: L. Schaller [Fax: (44)(37) 826-519] Institut de Physique, Université de Fribourg, Pérolles, CH-1700 Fribourg, Switzerland

6-9 Complementary Approaches to Double and Multiple Star Rsch Atlanta, GA Contact: H. A. McAlister, Ctr for High Angular Resolution Astron, Georgia State Univ, Atlanta, GA 30303-3083

6-9 Global Warming: A Call for Intl Coordination Chicago, IL Contact: sup-

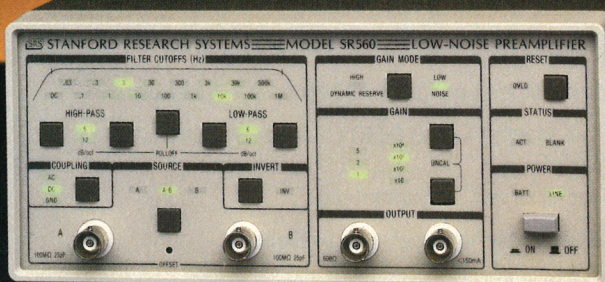
No Noise Is Good Noise The SR560 Low-Noise Preamplifier

is the ideal voltage amplifier for the most demanding applications. With a low 2 nV/√Hz of input noise, even the smallest signals won't get lost. Two adjustable signal filters, each configurable as high or low pass, attenuate unwanted interference. Internal batteries provide operation isolated from the AC line.

And the best news of all, the SR560 is priced at only \$1895, including remote interface. Whether you need lower noise, higher gain, or greater bandwidth, call Stanford Research Systems and take a closer look at the SR560.

\$1895.00

2 nV/√Hz input noise
1MHz bandwidth
Gain variable to 50,000
AC or DC coupled
True differential or single-ended input
2 configurable signal filters
Selectable gain allocation
120 dB CMRR
Line/Internal battery operation
Remote interface



Stanford Research Systems

1290 D Reamwood Avenue, Sunnyvale, CA 94089
TEL (408) 744-9040 FAX 4087449049 TLX 706891 SRS UD

Circle number 79 on Reader Service Card

CON Intl [Tel. (708) 910-1551] One Heritage Plaza, PO Box 5275, Woodridge, IL 60517-0275

6-10 General Assembly of the Eur Geophys Soc Edinburgh, Scotland
Contact: EGS Office [Tel. (49) 5556-1440] Postfach 49, D-3411 Katlenburg-Lindau, Germany

6-10 Mtg on Integrated Photonics
Rsch New Orleans, LA Contact: OSA

12-18 Stars on the Main Sequence and Close To It Vienna, Austria Contact: L. Figl, Inst für Astronomie, Türkenschanzstrasse 17, Universität Wien, A-1180 Wien, Austria

13-16 Intl Magnetism Conf St Louis, MO Contact: John Nyenhuis [Tel. (317) 494-3524] Purdue Univ, Sch of Electrical Eng, West Lafayette, IN 47907

13-17 Eur Symp on Materials and Fluid Sci in Microgravity Brussels, Belgium Contact: J. C. Legros [Fax: (32)(2) 650 36 53] Université Libre de Bruxelles, Microgravity Rsch Ctr, CP 165, Ave F D Roosevelt, 50, B-1050 Brussels, Belgium

14-16 Wksp on Regularities, Classifications and Predictions of Adv Materials Como, Italy Contact: John Rodgers [Tel. (613) 993-3294] Natl Rsch Council, M-55, Rm-275, Ottawa K1A 0S2, Canada

20-24 APS Spring Mtg Washington, DC Contact: APS

26-30 New Horizons in Radiation Protection and Shielding Pasco, Washington Contact: Hans Toffer [Tel. (509) 376-2894] Westinghouse Hanford Co, PO Box 1970, Richland, WA 99352

27-30 Progress in Telescope and Instrumentation Tech Garching, Germany Contact: Christina Stoffer, ESO, Karl-Schwarzschild-Str 2, D-8046 Garching bei München, Germany

27-1 MRS Spring Mtg San Francisco, CA Contact: MRS

28-1 Temperature: Measurement and Control in Sci and Industry Toronto, Canada Contact: Instrument Soc of Amer, PO Box 12277, Rsch Triangle Park, NC 27709

30-1 Pittsburgh Conf on Modeling and Simulation Pittsburgh, PA Contact: Marlin H. Mickle [Tel. (412) 624-9682] 348 Benedum Eng Hall, Univ of Pittsburgh, Pittsburgh, PA 15261

MAY 1992

2-3 Directions and Implications of Adv Computing Berkeley, CA Contact: Doug Schuler [Tel. (206) 632-1659] 2202 N 41st St, Seattle, WA 98103

10-15 Quantum Electronics and Laser Sci Conf Anaheim, CA Contact: OSA

10-15 Imaging East Rutherford, NJ Contact: Soc for Imaging Sci and Tech

11-15 AGU Spring Mtg Montreal, Canada Contact: AGU

11-15 123rd Mtg of ASA Salt Lake City, UT Contact: ASA

● **13-15 Cong on Tech and Tech Exchange** Evry, France Contact: Ruby Glasgow [Tel. (412) 795-5300] ITI, 7125 Saltsburg Rd, Pittsburgh, PA 15235-2297

17-22 Soc for Information Display Intl Symp Boston, MA Contact: Terri Lichtenstein [Tel. (212) 620-3375] Palisades Inst for Rsch Services, Inc, 201 Varick St, Ste 1140, New York, NY 10014

18-21 Intl Conf on Nuclear Structure at High Angular Momentum Ottawa, Canada Contact: June Elliott [Tel. (613) 584-3311] Chalk River Labs, Chalk River, Ontario, Canada K0J 1J0

19-22 Refraction of Transatmospheric Signals in Geodesy The Hague, The Netherlands Contact: F. H. Schröder [Tel. (31)(15) 782819] Netherlands Geodetic Commission, PO Box 5030, NL-2600 GA Delft, The Netherlands

22-23 Wksp on Large Gamma-Ray Detector Arrays Chalk River, Ontario Contact: June Elliott [Tel. (613) 584-3311] Chalk River Labs, Chalk River, Ontario, Canada K0J 1J0

25-29 Conf on High-Power Particle Beams Washington, DC Contact: Beams '92 [Tel. (202) 404-8360] PO Box 1077, Oxon Hill, MD 20750

● **26-30 NATO Adv Rsch Wksp on Localization and Propagation of Classical Waves in Structures** Aghia Pelaghia, Crete Contact: C. M. Soukoulis [Tel. (515) 294-2816] Ames Lab, Iowa State Univ, Ames, IA 50011

JUNE 1992

1-3 Symp on Photonic Measurements Sopron, Hungary Contact: J. Schanda [Tel.

Optical Spectrum Analyzer

New

The new range of Optical Spectrum Analyzers from Melles Griot are designed for the fast and easy measurement of laser line and mode structure. The two-mirror confocal interferometer configuration and matching input lens allow easy alignment of the system to the laser beam. The system can be used to measure laser linewidths, analyze mode structure, monitor the effects of optical system feedback, and examine the effects of fiber transmission on optical modes.

- Measure laser spectral and modal properties
- Broadband coatings from 240nm to 1.8 μ m available
- Free Spectral Range (FSR) choice of 300MHz, 2GHz or 10GHz
- Finesse of 200 — guaranteed
- **Fiber optic** input versions available
- Confocal mirror configuration for **fast alignment** and quick results
- User-friendly control unit

OPTICAL INSTRUMENTATION

MELLES GRIOT

1770 Kettering St. ■ Irvine, CA 92714 ■ 1-800-835-2626 ■ (714) 261-5600 ■ Fax (714) 261-7589

Circle number 80 on Reader Service Card

CALENDAR

(43)(1) 753-187] Chairman of IMEKO TC 2, Kegelgasse 27, A-1030 Vienna, Austria

1-3 Mtg on Surface Roughness and Scattering Tucson, AZ Contact: OSA

1-3 Conf on Plasma Sci Tampa, FL Contact: Norman L. Oleson [Tel. (813) 974-2658] Univ of South Florida, Dept of Phys, Tampa, FL 33620

1-5 Mtg on Opt Interference Coating Tucson, AZ Contact: OSA

1-7 Mtg of the Intl Union of Crystallography Commission on Computing Veszprém, Hungary Contact: H. D. Flack, Université de Genève, 24 quai Ernest Ansermet, CH-1211, Geneva 4, Switzerland

7-11 180th Mtg of AAS Columbus, OH Contact: AAS

7-12 Ann Mtg of the ANS Boston, MA Contact: ANS

7-19 NATO ASI Sum Sch: High Density Digital Recording Castelvecchio Pascoli, Italy Contact: Gary J. Long [Tel. (314) 341-4438] Dept of Chem, Univ of Missouri, Rolla, MO 65401

● **8-12 Semiconductor Symp: Wide-Band-Gap Semiconductors** Trieste, Italy Contact: C. G. van de Walle [Tel. (415) 812-4163] Xerox PARC, 3333 Coyote Hill Rd, Palo Alto, CA 94304

● **8-26 Convection in Astrophys** Aspen, CO Contact: Sudip Chakravarty [Tel. (213) 825-4974] Dept of Phys, Univ of California, 405 Hilgard Ave, Los Angeles, CA 90024-1547

10-12 Symp on Applied Surface Analysis Ann Arbor, MI Contact: Stephen Gaarenstroom [Tel. (313) 986-0835] General Motors Rsch Lab, 30500 Mound Rd, Box 9055, Warren, MI 48090-9055

14-17 Conf for Environmental Pollution Control Washington, DC Contact: Michele Voso [Tel. (212) 705-7148] ASME, 345 E 47th St, New York, NY 10017

14-19 Intl Quantum Electronics Conf Vienna, Austria Contact: Conf Secretariat [Tel. (43)(1) 587-6044] ICOS Congress Organization Service, Schleifmühlgasse 1/14, A-1040 Vienna, Austria

15-19 Symp on Quantum Fluids and Solids University Park, PA Contact: Paul Sokol [Tel. (814) 863-0528] Dept of Phys, Pennsylvania State Univ, Univ Park, PA 16802

22-26 Environmental Sensing Symp Berlin, Germany Contact: SPIE

● **23-25 Imaging Conf and Exposition** Washington, DC Contact: AFCEA Exhibits Dept [Tel. (703) 631-6200] 4400 Fair Lakes Court, Fairfax, VA 22033

○ **24-27 Mtg on the History of Particle Phys** Stanford, CA Contact: Nina Adelman Stolar, SLAC, MS 70, PO Box 4349, Stanford, CA 94309

28-4 Intl Conf in General Relativity and Gravitation Córdoba, Argentina Contact: Local Organizing Committee [Tel. (54)(51) 40802] FAMAF, Univ of Córdoba, Laprida 854, 5000 Córdoba, Argentina

● **29-2 Small Satellite Sys and Services** Arachon, France Contact: Claude Salmon [Tel. (33) 61 32 66 99] 18 Ave E Belin, 31055 Toulouse Cedex, France

29-3 Conf on Solid Films and Surfaces Paris, France Contact: J. Lecante [Fax: (33)(1)64 46 41 02] LURE-Bât 209 D, Uni-

versité Paris-Sud, 91405 Orsay Cedex, France

29-3 1992 Intl Conf on Plasma Phys Innsbruck, Austria Contact: W. Lindinger [Tel. (05)(12) 748-5120] Inst for Ion Phys, Univ of Innsbruck, Technikerstrasse 25/III, A-6020 Innsbruck, Austria

29-5 Intl Colloq on Group-Theoretical Methods in Phys Salamanca, Spain Contact: Luis J. Boya [Fax: (34)(76) 567920] Dept Física Teórica, Univ of Zaragoza, 50.009 Zaragoza, Spain

● **30-2 Adverse Environmental Impacts on Astron** Paris, France Contact: D.

McNally, Univ of London Observatory, Mill Hill Park, London, NW7 2QS, UK

30-3 Eur Turbulence Conf Delft, The Netherlands Contact: H. J. van der Brugge-Peters, J. M. Burgers Centre, Delft Univ of Tech, Rotterdamseweg 145, 2628 AL Delft, The Netherlands

JULY 1992

5-10 Teton Sum Sch: Galaxy Evolution—Environment and Ecology Grand Teton Natl Park, WY Contact: H. A. Thronson [Tel. (307) 766-6150] Univ of Wyoming, Dept of Phys and Astron, Laramie, WY 82071

Win the Race in Research!

FTIR for Research • FTIR for Research • FTIR for Research

With:

Versatility

- Complete systems for multi-experiment, multi-user measurement needs with quick trouble free experiment change-over.
- Low cost, minimal configurations for specific measurement needs with future upgradability.
- Dedicated configurations.

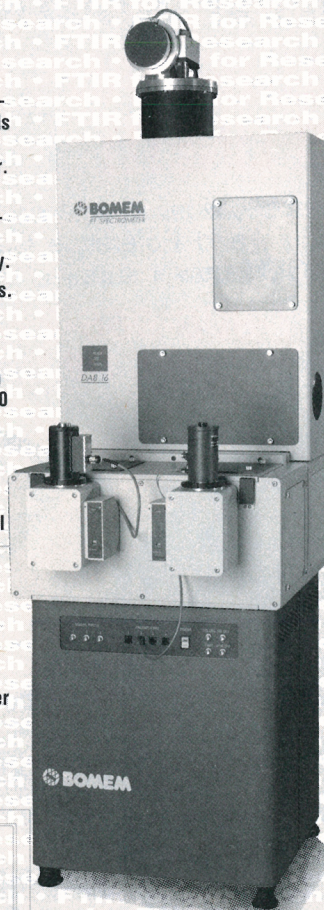
Flexibility

One system covers:

- Full spectral range from 4 cm^{-1} in far IR to $55\,000 \text{ cm}^{-1}$ in UV.
- Resolution range from 64 cm^{-1} to 0.0026 cm^{-1}
- Interchangeable detectors for all spectral regions and sensitivity needs.

Accessibility

- Open spectrometer hardware and software architecture.
- Wide choice of computer selectable operating parameters.
- Source code provided
- Spectrometer is a node on thin-wire Ethernet.



Our customers have achieved breakthrough results in:

- High resolution wide spectral range photoluminescence of many semiconductor materials and structures.
- Impurity studies in semiconductor materials by transmission, reflection and PTIS.
- Molecular structure determination by high resolution gas phase spectroscopy.
- FT Raman spectroscopy of light sensitive proteins.
- In situ measurement of minor constituents related to ozone chemistry.
- Atmospheric chemistry.
- Matrix isolation studies of unstable radicals.
- Characterization of high Tc and other ceramic materials in far IR.

FTIR for Research • FTIR for Research • FTIR for Research

Now you can buy a top-of-the-line FTIR at a mid range price

BOMEM
Hartmann & Braun

Bomem Inc./Hartmann & Braun
450 Saint-Jean-Baptiste Ave
Quebec, Quebec
Canada G2E 5S5
Tel.: (418) 877-2944
North America: 1 800 888 FTIR

This product line is under GSA schedule GS-00F-2401A

Circle number 81 on Reader Service Card

7-12 Top Mtg on the Tech of Fusion Energy Boston, MA *Contact:* Stephen O. Dean [Tel. (301) 258-0545] Fusion Power Assoc, 2 Professional Dr, Ste 248, Gaithersburg, MD 20879

- **12-19 Effects of Surface Heterogeneity in Adsorption and Catalysis on Solids** Kazimierz, Poland *Contact:* B. W. Wojciechowski [Tel. (613) 545-2788] Dept of Chemical Eng, Queen's Univ, Kingston, Ontario, Canada K7L 3N6

13-17 Nuclear and Space Radiation Effects Conf New Orleans, LA *Contact:* Mayrant Simons [Tel. (919) 541-5933]

Rsch Triangle Inst, PO Box 12194, Rsch Triangle Park, NC 27709

13-17 Planetary Nebulae Innsbruck, Austria *Contact:* A. Acker, Université Louis Pasteur, Observatoire de Strasbourg, 11 rue de l'Université, F-69000 Strasbourg, France

13-18 Intl Symp on Macromolecules Prague, Czechoslovakia *Contact:* PMM Secretariat, Inst of Macromolecular Chem, Czechoslovakia Acad of Sci, Heyrovskeho n.2, 162 06 Prague 6, Czechoslovakia

- **15-18 Stellar Pulsation and Pulsating Variable Stars** Pullman, WA *Contact:*

James Nemec [Tel. (509) 335-3136] Prog in Astron, Washington State Univ, Pullman, WA 99164-3113

- **15-26 NATO ASI on Techniques and Concepts of High-Energy Phys** St. Croix, US Virgin Islands *Contact:* C. Jones [Tel. (716) 275-4351] Dept of Phys and Astron, Univ of Rochester, Rochester, NY 14627

- **20-24 Intl Conf on High-Energy Accelerators** Hamburg, Germany *Contact:* HEACC'92 Conf Office [Tel. (49)(40) 8998-2636] DESY, Notkestr 85, D-2000 Hamburg 52, Germany

20-24 Intl Conf on the Phys of Transition Metals Darmstadt, Germany *Contact:* J. Kübler [Tel. (49)(6151) 163481] Inst of Solid-State Phys, Hochschulstr 6, D-6100 Darmstadt, Germany

- **20-31 Latin Amer Wksp in Plasma Phys** Mexico City, Mexico *Contact:* Julio Herrera [Fax: (52-5) 548-4569] Instituto de Ciencias Nucleares, UNAM AP 70-543, 04510 Mexico DF

26-31 18th Intl Symp on Rarefied-Gas Dynamics Vancouver, Canada *Contact:* B. Shizgal [Tel. (604) 822-3997] Dept of Chem, Univ of British Columbia, Vancouver, BC, Canada V6T 1Z1

AUGUST 1992

2-7 Conf on Atomic Phys Munich, Germany *Contact:* T. W. Hänsch [Fax: (49)(89) 28 51 92] Max-Planck-Institut für Quantenoptik, 8046 Garching, Germany

3-7 Intl Conf on Phonon Scattering in Condensed Matter Ithaca, NY *Contact:* Robert O. Pohl, Phonon Scattering [Tel. (607) 255-3303] LASSP, Clark Hall, Cornell Univ, Ithaca, NY 14853-2501

3-7 STATPHYS 18 Berlin, Germany *Contact:* Siegfried Hess [Tel. (49)(30) 314-2 37 63] Institut für Theoretische Physik, Technische Universität Berlin, Sekr. PN 7-1, Hardenbergstr 36, D-1000 Berlin 12, Germany

4-7 Stellar Photometry—Current Techniques and Future Developments Dublin, Ireland *Contact:* I. Elliott, Dunsink Observatory, Castleknock, Dublin 15, Ireland

6-10 Wksp on Slow-Positron Beam Techniques for Solids and Surfaces Jackson, WY *Contact:* Eric H. Ottewill [Tel. (208) 526-1751] EG&G Idaho Inc, Idaho Natl Eng Lab, PO Box 1625, Idaho Falls, ID 83415-2114

8-13 ACA Ann Mtg Pittsburgh, PA *Contact:* ACA [Tel. (716) 856-9600] Box 96, Ellicott Station, Buffalo, NY 14205

- **9-14 High-Speed Optoelectronic Devices and Circuits** Banff, Canada *Contact:* Eng Foundation

10-15 AAPT Summer Mtg Orono, ME *Contact:* AAPT

- **12-19 Wksp on Physical Acoustics** Nanjing, China *Contact:* T. H. Wang [Fax: (86) (25) 307965] Acoustics Inst, Nanjing Univ, Nanjing 210008, China

17-21 Intl Cong on Rheology Brussels, Belgium *Contact:* S of R [Tel. (212) 661-9404] 335 E 45th St, New York, NY 10017

17-22 Galactic Bulges Ghent, Belgium *Contact:* Sterrewacht, Leiden, PO 9513, 2300 RA, Leiden, The Netherlands

23-27 Ann Mtg AAPM Calgary, Canada *Contact:* AAPM

Q: HIGH VOLTAGE POWER SUPPLY SOLUTIONS???

A: CALL BERTAN'S TOLL FREE HOT LINE!!!

For immediate applications assistance or a copy of our 102 page Product and Reference Catalog describing laboratory and OEM power supplies up to 100 kV, call

**1-800-966-2776,
ext. 118.**



BERTAN High Voltage

121 New South Road • Hicksville, NY 11801
516-433-3110 • TWX 510-221-2144 • FAX 516-935-1766

Circle number 82 on Reader Service Card

CALENDAR

23-28 Applied Superconductivity Conf Chicago, IL *Contact:* Kenneth E. Gray [Tel. (708) 972-5525] Bldg 223, Argonne Natl Lab, Argonne, IL 60439

- **24-27 Plasma Environments of Comets** Ann Arbor, MI *Contact:* T. I. Gombosi [Tel. (313) 764-7222] Dept of Atmospheric, Oceanic and Space Sci, Space Phys Rsch Lab, Ann Arbor, MI 48109-2143

24-28 Joint Varenna-Lausanne Intl Wksp on Theory of Fusion Plasmas Varenna, Italy *Contact:* E. Sindoni [Fax: (39)(2) 2392205] Intl School of Plasma Phys, Via Celoria 16, 20133 Milano, Italy

27-29 Progress in Telescope and Instrumentation Techniques Garching, Germany *Contact:* G. Ai, Beijing Astron Obs, Western District, Beijing, China

- **28-9 World Space Cong** Washington, DC *Contact:* COSPAR, Amer Inst of Aeronautics and Astronautics, 370 l'Enfant Promenade, SW, Washington, DC

- **30-11 NATO ASI on Ultrashort Processes in Condensed Matter II** Ciocco, Italy *Contact:* W. E. Bron [Tel. (714) 856-4345] Dept of Phys, Univ of California, Irvine, CA 92717

SEPTEMBER 1992

2-12 Course and Wksp on Industrial Applications of Plasma Physics Varenna, Italy *Contact:* E. Sindoni [Fax: (39)(2) 2392205] Intl School of Plasma Phys, Via Celoria 16, 20133 Milano, Italy

- **6-13 Cosmic Dynamo** Potsdam, Germany *Contact:* F. Krause, Zentralinstitut für Astrophysik, Rosa-Luxembourg-Str 17a, Potsdam, Germany *Note revised dates*

7-11 Conf on Structure, Dynamics and the States of Matter Brioni Island, Croatia, Yugoslavia *Contact:* S. D. Bosanac [Fax: (38)(41) 425-497] R Bošković Inst, Bijenička 54, 41001 Zagreb, Croatia, Yugoslavia

7-11 Intl Conf on Electrical Contacts Loughborough, UK *Contact:* ICEC '92, Dept of Electronic and Electrical Eng, Loughborough Univ of Tech, Loughborough, Leicestershire LE11 3TU, UK

7-12 Eur Cong on Electron Microscopy Granada, Spain *Contact:* Antonio Rios [Tel. (958) 202212 ext 258] Dept of Cell Bio, Faculty of Sciences, Univ of Granada, 18071 Granada, Spain

14-17 Atomic Spectra and Oscillator Strengths for Astrophysical and Lab Plasmas Washington, DC *Contact:* Jack Sugar [Tel. (301) 975-3218] NIST, Bldg 221, Rm A167, Gaithersburg, MD 20899

14-18 Symp on Fusion Tech Rome, Italy *Contact:* H. Knoepfel [Tel. (39)(6) 9400-5415] ENEA, Fusion Dept, CP 65, I-00044 Frascati, Italy

16-22 Symp on Small Particles and Inorganic Clusters Chicago, IL *Contact:* R. Stephen Berry [Tel. (312) 702-3177] IS-SPIC 6, Dept of Chem, Univ of Chicago, 5735 S Ellis Ave, Chicago, IL 60637

20-25 OSA Ann Mtg Albuquerque, NM *Contact:* OSA

- **21-25 Observational Cosmology** Milano, Italy *Contact:* Osservatorio Astronomico, Via Brera 28, 20121 Milano, Italy

21-25 Special Intl Conf on Teacher Training in Phys Dortmund, Germany *Contact:* D. K. Nachtigall [Tel. (49)(231) 755-2989] Inst of Phys, Univ of Dort-

mund, Otto-Hahn-Strasse, D-4600 Dortmund, Germany

21-25 Symp on Gas Flow and Chemical Lasers Crete, Greece *Contact:* C. Fotakis [Fax: (30)(81) 239735] GCL Symp Chairman, FORTH-IESL, PO Box 1527, 711 10 Heraklion, Crete, Greece

OCTOBER 1992

- **5-9 Astron with Millimeter and Sub-millimeter Wave Interferometry** Hakone, Japan *Contact:* M. Ishiguro, Nobeyama Radio Observatory, Nobeyama, Minamiasaku, Nagano 384-13, Japan

12-16 Vacuum Cong and Conf on Solid Surfaces The Hague, The Netherlands *Contact:* Van Namen, Westerlaken Cong Organization Services, PO Box 1558, 6501 BN Nijmegen, The Netherlands

- **15-19 Magnetic Field, Velocity Field and Current Sys of Solar Active Regions** Beijing, China *Contact:* H. Zirin, Beijing Astronomical Observatory, Chinese Academy of Sciences, Beijing 100080, China

- **18-23 Applications and Fabrication of Nanostructures** Kona, HI *Contact:* Eng Foundation

- **19-23 AAS Div of Planetary Sciences** Munich, Germany *Contact:* AAS

20-30 Nuclear Sci Symp Orlando, FL *Contact:* John Dawson [Tel. (708) 972-6541] High Energy Phys, Argonne Natl Lab, Argonne, IL 60439

31-4 124th Mtg of ASA New Orleans, LA *Contact:* ASA

NOVEMBER 1992

- **2-6 IAU Latin America Regional Mtg** Santiago, Chile *Contact:* C. Anguita, Dept of Astron, Facultad de Ciencias Fisicas y Matematicas, Universidad de Chile, Casilla 36-D, Santiago, Chile

8-13 Soc for Imaging Sci and Tech: East-West Symp III Maui, Hawaii *Contact:* Soc for Imaging Sci and Tech

9-13 39th Natl AVS Symp Chicago, IL *Contact:* AVS

12-14 Mtg of the Southeastern Section of APS Oak Ridge, TN *Contact:* APS

15-20 OPTCON '92 Boston, MA *Contact:* OSA

15-20 Winter Mtg of the ANS Chicago, IL *Contact:* ANS

16-20 Mtg of the APS Div of Plasma Phys Seattle, WA *Contact:* APS

29-4 AAPM/RSNA Ann Joint Mtg Chicago, IL *Contact:* RSNA, 2021 Spring Rd, Ste 600, Oak Brook, IL 60521

30-5 MRS Fall Mtg Boston, MA *Contact:* MRS

DECEMBER 1992

1-4 Conf on Magnetism and Magnetic Materials Houston, TX *Contact:* Courtesy Assoc Inc, 655 15th St NW, Suite 300, Washington, DC 20005

7-11 AGU Fall Mtg San Francisco, CA *Contact:* AGU

JANUARY 1993

3-7 181st Mtg of AAS Phoenix, AZ *Contact:* AAS

SUPERCONDUCTING MAGNET SYSTEMS



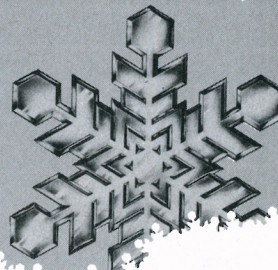
- ✱ Fields to 17 TESLA
- ✱ Compact, efficient magnet designs
- ✱ Standard and custom magnets and cryostats

CRYOGENIC INSTRUMENTATION

- NEW** ±10 volt, high current, linear magnet power supplies
- NEW** Sample and hold digital liquid helium level meters
- ✱ Digital liquid nitrogen level meters
- ✱ Hall effect gaussmeters
- ✱ IEEE-488/RS-232C computer interfaces

CRYOGENIC ACCESSORIES

- ✱ Vapor cooled current leads
- ✱ Cryothermometers
- ✱ Helium transfer lines



INNOVATION AND
EXCELLENCE IN CRYOMAGNETICS



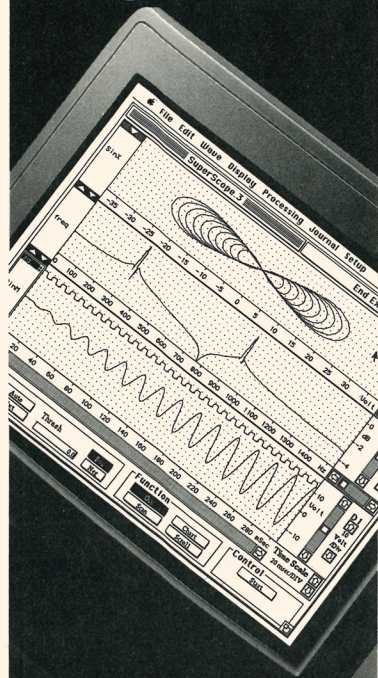
CRYOMAGNETICS, INC.

1006 Alvin Weinberg Drive
Oak Ridge, TN 37830 USA

(615) 482-9551 • FAX (615) 483-1253

Circle number 83 on Reader Service Card

SUPER SCOPE®



Dream Screen Instruments

SuperScope allows you to design the instrument of your dreams in minutes to digitize, analyze, view, store and present waveforms with the Macintosh.



Call for a free 56-page catalog, 12-page SuperScope Brochure or Application Notes in your field.



GW INSTRUMENTS

THE COMPUTER INSTRUMENT COMPANY

35 Medford St. • Somerville, MA 02143 • FAX 617/625-4096

4-7 AAPT Winter Mtg New Orleans, LA Contact: AAPT [Tel. (301) 345-4200] 5112 Berwyn Rd, College Park, MD 20740

FEBRUARY 1993

7-10 64th Ann Mtg of S of R Santa Barbara, CA Contact: S of R [Tel. (212) 661-9404 ext 611] 335 E 45th St, New York, NY 10017-3483

21-26 Opt Fiber Communication Conf San Jose, CA Contact: OSA

MARCH 1993

22-26 APS March Mtg Seattle, WA Contact: APS

APRIL 1993

12-16 MRS Spring Mtg San Francisco, CA Contact: MRS

MAY 1993

2-7 Conf on Lasers and Electro-Optics/Quantum Electronics and Laser Sci Baltimore, MD Contact: OSA

14-21 Particle Accelerator Conf Washington, DC Contact: Christopher W. Leemann [Tel. (804) 249-7554] CEBAF, 12000 Jefferson Ave, Newport News, VA 23606

17-21 125th Mtg of ASA Ottawa, Ontario, Canada Contact: ASA

23-28 ACA Mtg Albuquerque, NM Contact: Allen Larson, LANSCE-89-025, A805, Los Alamos Natl Lab, Los Alamos, NM 87455

24-28 AGU Spring Mtg Baltimore, MD Contact: AGU

JUNE 1993

6-10 182nd Mtg AAS Berkeley, CA Contact: AAS

7-9 Conf on Plasma Sci Vancouver, Canada Contact: Andrew Ng [Tel. (604) 228-3191] Univ of British Columbia, Dept of Physics, 6224 Agricultural Rd, Vancouver, BC, Canada V6T 2A6

● **13-18 Biennial Conf on Carbon** Buffalo, NY Contact: D. Chung [Tel. (716) 636-2520] Composite Materials Rsch Lab, Furnas Hall, State Univ of New York, Buffalo, NY 14260

20-24 Ann Mtg of the ANS Las Vegas, NV Contact: ANS

28-3 Conf on Particles and Nuclei Perugia, Italy Contact: Carlo Schaefer [Tel. (39)(6) 7979-4560/1] Dept of Phys, Univ of Rome, via E Carnevale, I-00173 Rome, Italy

JULY 1993

● **19-23 Nuclear and Space Radiation Effects Conf** Snowbird Resort, UT Contact: Paul Dressendorfer [Tel. (505) 844-5373] Sandia Natl Labs, Albuquerque, NM 87185

AUGUST 1993

4-11 Conf on Low-Temperature Phys Eugene, OR Contact: Russell J. Donnelly [Tel. (503) 346-4751] Dept of Phys, Univ of Oregon, Eugene, OR 97403-1274

8-12 Ann Mtg of AAPM Washington, DC Contact: AAPM

● **16-20 Asian-Pacific Regional Mtg** Pune, India Contact: J. V. Narlikar, Inter Univ Ctr for Astron and Astrophys, Post Bag 4, Ganeshkhind, Pune 411007, India

21-29 Cong and General Assembly of the Intl Union of Crystallography Beijing, China Contact: M.-C. Shao, Inst of Physical Chem, Dept of Chem, Beijing Univ, Beijing, China 100871

30-4 Conf on Surface Sci Warwick, UK Contact: C. F. McConville [Tel. (44)(203) 523353] ECOS-13, Dept of Phys, Univ of Warwick, Coventry CV4 7AL, UK

OCTOBER 1993

● **4-7 Symp on Fusion Eng** Burlington, VT Contact: Albe M. Dawson [Tel. (617) 253-5547] 175 Albany St, Cambridge, MA 02139-4307

4-8 126th Mtg of ASA Denver, CO Contact: ASA

● **17-21 65th Ann Mtg of S of R** Boston, MA Contact: S of R [Tel. (212) 661-9404 ext 611] 335 E 45th St, New York, NY 10017-3483

NOVEMBER 1993

● **2-5 IEEE Nuclear Sci Symp** San Francisco, CA Contact: E. J. Lampo [Tel. (510) 486-6779] LBL, Univ of California, Berkeley, CA 94720

14-19 Winter Mtg of the ANS San Francisco, CA Contact: ANS

● **14-19 OPTCON '93** San Jose, CA Contact: OSA

15-19 40th Ann AVS Symp Orlando, FL Contact: AVS

29-4 MRS Fall Mtg Boston, MA Contact: MRS

DECEMBER 1993

6-10 AGU Fall Mtg San Francisco, CA Contact: AGU

JANUARY 1994

11-15 183rd Mtg of AAS Washington, DC Contact: AAS

FEBRUARY 1994

21-25 Opt Fiber Communications San Jose, CA Contact: OSA

MARCH 1994

21-25 APS March Mtg Pittsburgh, PA Contact: APS

APRIL 1994

11-16 MRS Spring Mtg San Francisco, CA Contact: MRS

MAY 1994

● **8-13 Conf on Lasers and Electro-Optics and Intl Quantum Electronics Conf** Anaheim, CA Contact: OSA

JUNE 1994

● **6-8 Conf on Plasma Sci** Santa Fe, NM Contact: Anthony L. Perrat [Tel. (505) 667-1574] Los Alamos Natl Lab, Group X-10, MS B-259, PO Box 1663, Los Alamos, NM 87545

19-24 Ann Mtg of the ANS New Orleans, LA Contact: ANS

Circle number 84 on Reader Service Card