# calendar

## **NOVEMBER 1974**

- 10-14 Engineering in Medicine and Biology [IEEE] Philadelphia, Pa. 7/73
- Society of Exploration Geophysicists 44th Meeting [Society of Exploration Geophysicists] Dallas, Tex.
- LAMPF Users Group Meeting [LAMPF Users Group Inc] Los Ala-11. 12 Meeting mos, N.M. 3/74
- 11, 12 Workshop on Optical Fabrication and Testing [OSA] Rochester, N.Y. (OSA, 2100 Pa. Ave, NW, Washington, D.C. 20037)
- Ultrasonics Symp [IEEE] Milwaukee, Wis. [8/1/74] 3/74 11-13
- Gamma-Ray Transition Probabilities [IUPAP; Indian National Science Academy; Univ Grant Commission] 11-15 Delhi, India 5/74
- 11-15 Plasma Physics and Controlled Nuclear Fusion Research [IAEA] Tokyo, Japan 11/73
- Quantum Crystals [Georgian Academy of Sciences] Tbilissi, USSR (E. L. Andronikashvilli, Inst of Physics. Academy of Sciences of the Georgian SSR, Tbilissi, USSR)
- 12-14 Aerospace and Aeronautical Meteorology [American Met Soc] El Paso, Texas [5/15/74] 3/74
- Los Angeles Reactive Pollutant Pro-12-14 gram Findings [Coordinating Research Council] Santa Barbara, Cal. 9/74
- 12-14 Joint Measurement Conf [NBS] Washington, D.C. 9/74
- Electron Devices—Int Meeting [IEEE] Washington, D.C. (IEEE, 345 E. 47th St, New York, N.Y. 10017) 17-19
- 18, 19 . Supply of Natural Uranium-Int Symp [Deutsches Atomforum e.V.;

West Germany (Deutsches Atomforum e.V., Haus X, Allianplatz, 53 Bonn 1, West Germany)

- 18-20
- Weather Modification-4th Conf 18-21
- Analytical Chemistry and Spectros-18-22 copy [Fed of Analytical Chemistry and Spectroscopy Societies] Atlantic
- Technology of Electroluminescent Diodes [IEEE] Atlanta, Ga. [8/1/74] 20. 21
- 25-27 Fluid Dynamics Div Meeting [APS
- . Safety of Nuclear Power Stations Schweizerische Vereinigung Atomenergie] Zurich, Switz (Sekre-tariat, SVA, Bärenplatz 2, Postfach
- 26, 27 Hungarian Soc of Nuclear Medicine—1st National Conf [HSNM]
  Budapest, Hungary (I. Rodé, HSNM, XII. Ráth György u. 7–9, Budapest, Hungary) [6/1/74]
- High Temperature Reactor and Process Applications [British Nucle-26-28 ar Energy Soc] London, UK (J. G. Watson, BNES, 1-7 Great George
- 30-4 Radiation Physics-Int Seminar

## **DECEMBER 1974**

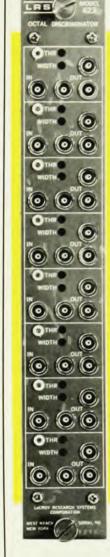
- Joint Winter Meeting [AAPM-Radio-logical Society of North America] Chicago, III. 7/73 1-5
- 2-3 · Molecular Spectroscopy, Energy

ANC American Nuclear Society

# Nuclear Technology Soc | Mainz,

- Semiconductor Lasers—4th IEEE Int Conf [IEEE] Atlanta, Ga. [8/1/ 74 5/74
- [American Met Soc] Fort Lauder-dale, Fla. [5/22/74] 3/74
- City, N.J. 1/74
- 5/74
- Div. of Fluid Dynamics] Pasadena, Calif. [9/20/74] 10/73
- 2613, CH-3001 Berne, Switz)
- St, London SWIP 3AA, UK)
- [Bose Inst] Calcutta, India 5/74

## NIM Model 623 8-Channel Updating Discriminator



8 discriminators in a single-width module. Individually variable thresholds —30 mV to

Threshold stability 50 μV/°C.

Extremely low (<2%) input reflections eliminate multiple-pulsing due to reflections.

Threshold monitor point on each channel permits reproducible threshold adjustment using common DVM.

Maximum rate > 100 MHz

Updating "deadtimeless" operation per-mits retriggering even while an output from a previous input is still present.

3 NIM outputs per channel.

Output durations individually adjustable from < 6 ns to >150 ns.

Width variation < 0.3%/°C and < 0.1%/% for variation of any supply voltage. Time slewing 1 ns for good timing perform-

Input-output delay <

This is a complete listing of physics-related meetings known to us. A complete calendar will appear in alternate months (no calendar in other months). Those wishing to submit items for the calendar should send complete information at least three months before the notice should appear.

Appreviations:		ANS	Afficial Nuclear Society
AAPM	American Association of Physicists in Medicine	ASTM	American Society for Testing and Ma- terials
AAPT	American Association of Physics	AVS	American Vacuum Society
	Teachers	EPS	European Physical Society
AAS	American Astronomical Society	IAEA	International Atomic Energy Agency
ACA	American Crystallographic Association	IEEE	Institute of Electrical and Electronics
APS	American Physical Society		Engineers
ASA	Acoustical Society of America	IOP	The Institute of Physics
OSA	Optical Society of America	IUPAP	International Union of Pure and Ap-
SPS	Society of Physics Students		plied Physics
SofR	Society of Rheology	NAS	National Academy of Sciences
		NBS	National Bureau of Standards
AEC	US Atomic Energy Commission	NSF	National Science Foundation
AIAA	American Institute of Aeronautics and	ONR	Office of Naval Research
	Astronautics	ORNI	Oak Ridge National Laboratory

Abbrewietten

date subject [Sponsor] Location (Contact) [abstract deadline] Physics Today reference • new listing new or revised information

High energy physicists tell us that the new LRS Model 623 Octal Discriminator new LHS Model 623 Octal Discriminator provides everything they could ever want in a high density discriminator. That's probably why it's fast becoming a standard at many of the world's major accelerators. It offers the performance to handle a wide variety of counter applications bubbil discriminators. cations, hybrid circuit enhanced reliability you can depend on, and a price which is far below the value it represents. To put it into your experiment, contact your nearest LRS Sales Office.

## LRS

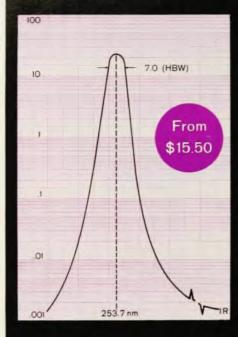
LeCROY RESEARCH SYSTEMS CORP.; 126
N. Rie, 303; W. Nyack, N.Y. 10994; (914) 3587900; TWX: 710-575-2629 • LRS SA; 81
Avenue Louis Casai; 1216 Cointrin-Geneva,
Switzerland; (022) 34 39 23 • LRS LTD.; 74
High St.; Wheatley, Oxford O'Y9 1XP, U.K.;
(08677) 3540 • CANBERRA ELEKTRONIK
GMBH: 6000 Frankfurt/Main 70; Geleitstrasse
10; W. Germany; (0611) 624074 • APTEC
ENGINEERING LTD.; 312 Dolomite Drive;
Downsview, Ontario, Canada; (416) 661-9722
OFFICES THROUGHOUT THE WORLD OFFICES THROUGHOUT THE WORLD

Circle No. 73 on Reader Service Card

Transfer and Chemical Lasers | Athens College Athens, Ala. (G. L. Athens College, Athens, Workman Ala. 36511)

- 2-4 Electron and Atomic Physics Div Meeting [APS Electron and Atomic Physics Div] Chicago, III. [9/20/74]
- Remote Sensing Applied to Energy-Related Problems [Univ of Miami] Miami, Fla. (Clean Energy Research Inst, School of Engineering and Environmental Design, Univ of Miami, PO Box 248294, Coral Gables, Fla.)
- 3-5 · Irradiation Behavior of Fuel Cladding and Core Component Materials—European Conf [Kerntechnische Gesellschaft im Deutschen Atomforum e.V., Brit Nuclear Energy Soc, Gesellschaft für Kernforschung mbH] Karlsruhe, West Germany (D. R. Harries, Metallurgy Div, AERE, Harwell, Didcot, Berkshire, UK) [4/
- 3-5 Power Semiconductors and their Applications [Institution of Electrical Engineers | London, UK 10/73
- Magnetism and Magnetic Materials [IEEE; AIP] San Francisco, Calif. 10/73 3-6
- 5-7 · Distribution of Secondary Electrons from Ionizing Collisions— Symp [Univ of Western Ontario] London, Ontario, Canada (T. M. Luke, Center for Interdisciplinary Studies in Chemical Physics, Physics Bldg, Univ of Western Ontario, London, Ontario, Canada N6A 3K7) [9/30/74]
- General and Southeastern Sectional 5-7 Meeting [APS] Atlanta, Ga. 3/74
- SPS Regional Meeting—Zones 4, 5 and 6 [SPS] Atlanta, Ga. 9/74
- AAS Div on Dynamical Astronomy Meeting [AAS] Tampa, Fla. (P. K. Seidelmann, US Naval Observato-8-10 ry, Washington, D.C. 20390)
- Electron Devices Meeting [IEEE] Washington, D.C. 3/74 8-11
- · Earthquakes and Lifelines [Engineering Foundation] Pacific Grove, Cal. (Engineering Foundation, United Engineering Center, 345 E. 47th St, New York, N.Y. 10017)
- Ionizing Radiation for Sterilization of 9-13 Biomedical Products and Biological Tissues [IAEA] Bombay, India 11/73
- Siting of Nuclear Facilities [IAEA] 9-13 Vienna, Austria [7/18/74] 7/74
- 65th Physics Exhibition French 9-14 Physical Soc | Paris 7/74
- Solid State Physics, Neutron Scat-9-20 tering, and Radiation Damage—Int Conf [NSF; Pakistan AEC] Islamabad, Pakistan 9/74
- 10-13 The 144th Meeting [AAS] Gainesville, Fla. 7/73
- Physical Chemistry of Oscillatory Phenomena [The Chemical Soc] 11, 12 London, England (Faraday Div, The Chemical Soc, Burlington House, London W1V OBN, England)
- 11-13 Nuclear Power Systems Symp and Exhibition [IEEE] Washington, D.C. (H. A. Thomas, Gulf Energy and Environmental Systems, POB 608, San Diego, Cal. 92112)
- 11-13 Nuclear Science Symp [IEEE; AEC; NASA: NBS] Washington, D.C. 7/

# FOR Hq LINE FILTERS...



## at 253.7 nm

Try our Mercury line filters. They feature an induced transmission design and provide a high degree of off-band rejection. We make a wide range of UV filters for mercury line and atomic absorption spectroscopy from .5" square to 2" square. They are available in quantities from 1 to 1000.

We also feature a wide variety of stock wavelengths from 240.0 thru 1060.0 nm. Special filters for use in image transfer systems are available at most wavelengths - call or write for further information.

## DITRIC OPTICS

247 MAPLE STREET • MARLBORO, MA. 01752 . 617/481-4629 28059 AVENUE STANFORD • VALENCIA, CA. 91355 • 805/257-3450

Circle No. 74 on Reader Service Card

- 11-13 Scintillation and Semiconductor Counter Symp—Nuclear Science Symp [IEEE; AEC; NASA; NBS] Washington, D.C. 7/73
- American Geophysical Union Fall Annual Meeting [AGU] San Francisco, Cal. (M. Walt, Lockheed Palo Alto Research Lab, Dept 52-10, Bldg 201, 3251 Hanover St, Palo Alto, Cal. 94304) [10/1/74]
- Radiation Protection—1st Asian Regional Congress [Bhabha Atomic Research Centre] Bombay, India 9/
- 16-20 Relativistic Astrophysics-7th Texas Symp [APS] Dallas, Tex. 5/
- Biorheology—2nd Int Congress [Int Union of Pure and Applied Biophys-ics] Rehovot, Israel 5/74 29-7

## JANUARY 1975

- 6-8 Mechanics and Physics of Fracture [IOP; The Metals Soc] Cambridge, UK 3/74
- 6-8 Solid-State Physics Conf [IOP] Manchester, UK 7/74
- Optical Fiber Transmission [OSA; IEEE] Williamsburg, Va. [10/18/74] 7-9
- Electronic and Magnetic Proper-7-11 ties of Liquid Metals—Int Conf Or-ganizing Committee] Mexico City, Mexico (J. Keller, Depto. de Quimica Teórica, División de Estudios Superiores, Facultad de Quimica, UNAM, Mexico 20, D.F.) [9/15/74]

- Laser Energy Conversion—2nd NASA Conf [NASA] Moffett Field, Cal. (K. W. Billman, Mail Stop 230-3, NASA/Ames Research Center, Mof-fett Field, Cal. 94035) [11/1/74]
- 27-29 Metric Education—2nd Int Conf [Univ of Southern Miss.] Biloxi, Miss. (G. Tinnon, Dept of Conferences and Workshops, Div of Extension and Public Service, Univ of Southern Miss., Box 56, Hattiesburg, Miss. Miss., 39401)
- Western Spectroscopy Assoc— 22nd Annual Conf [WSA] Pacific Grove, Cal. (G. R. Haugen, L-404, 29-31 Univ of Cal., Lawrence Livermore Lab, Livermore, Cal. 94550)
- 29-1 January Meeting [APS-AAPT] Anaheim, Calif. 3/74

## **FEBRUARY 1975**

- Optical Properties Highly 3-5 Transparent Solids [Univ of R.I.] Waterville Valley, N.H. (P. D. Gianino, AFCRL (LQS), Bedford, Mass. 01730) [11/25/74]
- Acoustical Holography and Imaging [ASA; IEEE] San Diego, Calif. [9/ 15/74] 5/74 4-7
- Biomedical Symp [San Diego Biomed Symp] San Diego, Cal. [9/ 4/74] 9/74
- Molecular Transitions and Relaxations [Michigan Foundation for Advanced Research] Midland, Mich. 12/73
- 10-12 Plasma Physics-10th Conf [Australian Inst of Nuclear Science and Engineering] Lucas Heights,

# Ditric Optics, Inc., Marlboro, Massachusetts announces

the opening of a second facility for production of its Optical Interference Filters

to be located at

28059 Avenue Stanford, Valencia, California 91355 Telephone 805/257-3450

The Valencia facility will also produce
Ditric's new line of
Laser Coatings and Anti-Reflection Coatings
as well as offer
comprehensive facilities for Optical Fabrication

- Australia (W. M. Lavers, AINSE, Private Mail Bag, PO Sutherland, NSW 2232, Australia)
- Structure-Property Relationships in Thick Film and Bulk Coatings [AVS] San Francisco, Cal. (R. F. Bunshah, Dept of Engineering, 6532 Boelter Hall, Univ of Cal, Los Angeles, Cal. 90024) [10/15/74]
- 12-14 Int Solid State Circuits Conf [IEEE] Philadelphia, Pa. 7/74
- 16-21 Radiology 11th Inter-American Congress [Inter-American College of Radiology] Bogota, Columbia 12/73
- 20, 21 Applied Vacuum Science and Technology—4th Annual Symp [AVS] Tampa, Fla. (J. L. Provo, AVS, PO Box 11508, St. Petersburg, Fla. 33733) [12/15/74]
- 24-28 Solar Astronomers—1st European Meeting [Organizing Committee] Florence, Italy (C. de Jager, Space Research Lab of the Astronomical Inst, Beneluxlaan 21, Utrecht, Netherlands)

## **MARCH 1975**

- 3-7 Nuclear Cross Sections and Technology [APS Nuclear Physics Div. ANS Reactor Div; NBS; AEC] Washington, D.C. 3/74
- 4-7 Low Light and Thermal Imaging
  Systems [Inst of Electrical Engineers] London 7/74
- Uranium Isotope Separation Processes—Int Conf [Brit Nuclear Energy Soc] London, UK (BNES Secretariat, Institution of Civil Engineers, 1–7 Great George St, London SW1P

- 3AA, UK)
- 10-13 Crystal Physics Symp—ACA Spring Meeting [ACA] Charlottesville, Va. (E. Snider, AIP, 335 E. 45th St, New York, N.Y. 10017)
- 10-14 AdvancesinBiomedicalDosimetry— Symp [IAEA] Vienna, Austria 9/74
- 2-14 Particle Accelerator Conf [IEEE; NBS; APS; AEC; NSF] Washington, D.C. 12/73
- 14, 15 Theoretical Physics—13th Annual Eastern Conf [Organizing Committee] Phila., Pa. (H. Primakoff, Physics Dept, Univ of Pa., Phila., Pa. 19174)
- 17–20 Surfaces [IOP] Warwick, UK (Meetings Officer, IOP, 47 Belgrave Sq. London, SW1X 8QX, UK) [12/1/74]
- 17-21 OSA Spring Conf [OSA] Anaheim, Cal. (J. W. Quinn, OSA, 2100 Pennsylvania Ave NW, Washington, D.C. 20037)
- 17-21 Waves and Instabilities in Plasmas [Inst for Theoretical Physics] Innsbruck, Austria 7/74
- 17-25 Use of High-Level Radiation in Waste Treatment—Status and Prospects—Symp [IAEA] Munich, West Germany [10/1/74] 9/74
- 18–20 Conf on Micro-Electron Beam Technology for Fabrication, Recording and Dynamic Inspection [IOP] Cambridge, England (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK) [1/15/75]
- OSA Meeting [OSA] Anaheim,
   Cal. (J. W. Quinn, OSA, 2100 Pennsylvania Ave, NW, Washington, D.C.

#### 20037)

- 24, 25 Defect-Property Relationships in Solids—Nat'l Conf [Princeton Univ; Materials Research Soc] Princeton Univ 9/74
- Nuclear Interactions at Medium and Low Energies [IOP; EPS; Atomic Energy Research Establishment] Harwell, UK (T. W. Coulon, AERE Harwell, Didcot, Berkshire, OX11 ORA, UK)
- 24–26 Ultrasonics Int Conf and Exhibition [IPC Science and Tech Press Ltd] Imperial College, London, UK 9/74
- Automatic Image Processing In Astronomy—Int Conf [Organizing Committee] Utrecht, Netherlands (C. de Jager, Space Research Lab of the Astronomical Inst, Beneluxlaan 21, Utrecht, The Netherlands)
- 25, 26 The Magnetosphere, Ionosphere and Solar Terrestrial Environment [IOP and Royal Astronomical Soc] Exeter, UK (W. G. V. Rosser, Dept of Physics, Univ of Exeter, Stocker Road, Exeter EX4 4QL, UK)
- 25-27 Inst of Acoustics—Spring Meeting [IOP] Nottingham, UK (Secretariat, IOP, 47 Belgrave Square, London SW1X 8QX, UK)
- 31-3 General Meeting [APS] Denver,
- 31–4 Clustering Phenomena—2nd Int Conf [Organizing Committee] College Park, Md. 7/74

#### **APRIL 1975**

- 2-4 Crystallography Group Meeting [IOP Crystallography Group] Lancaster, UK 10/73
- 2-4 Physical Adsorption in Condensed Phases—Faraday General Discussion Meeting [Organizing Committee] Bristol, UK (G. D. Parfitt, Tioxide Int Ltd., Billingham, Teeside TS23 1PS, UK) [6/15/74]
- 2-4 Physics of Hot Plasma in the Magnetosphere [Swedish Nobel Foundation] Kiruna, Sweden 7/74
- 7-9 Interatomic Forces in Condensed Matter [IOP] Reading, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)
- 7-10 Multiphoton Processes [Service de Physique Atomique] Valée de la Loire, France 9/74
- 7-12 Molecular Beams—5th Symp [Lab de Physique Moleculaire des Hautes Energies] Nice, France 5/74
- 8-10 Int Convention and Exposition [IEEE] New York, N.Y. 10/73
- 8-11 Acoustics [ASA] Austin, Tex. 7/73
- 8-11

   Atomic and Molecular Physics—
  7th Nat'l Conf [IOP] Edinburgh, UK
  (Meetings Officer, IOP, 47 Belgrave
  Square, London SW1X 8QX, UK)
- 8-11 Engineering Uses of Coherent Optics [IOP] Glasgow, UK 1/74
- 8-11 Incoherent, Light Sources [IOP] Loughborough, UK 5/74
- 9-11 Magnetic Resonance in Conductors and Disordered Materials [EPS]
  Paris, France (J. H. Strange, Physics
  Lab, Kent University, Canterbury,
  Kent, UK)
- 9–11 Temperature Measurement [Materials Testing Group of IOP; Inst of Measurement and Control; Inst of Electrical Engineers] Teddington, UK [7/5/74] 1/73

## CRYOGENIC Temperature Controller



## **Model 5301**

Accurate temperature control in Research Dewars, Cryogenic Freezers, Tensile Cryostats for physics, chemistry, metallurgy and other scientific fields where the process, temperature and/or control requirements change frequently. System features control stability better than .01°K from below 0.3° to 320°K with less than one microwatt power dissipation in the sensor. Three mode control: Proportional, rate and reset with internal parameter controls, allowing to tune the controller to thermal characteristics of the system. 100 watts output, short circuit proof, DC for minimum interference to other low level instrumentation.



INSTRUMENTATION

1314 Hanley Industrial Court, St. Louis, Mo. 63144 (314) 968-4740

## **PROGRAMMER**



## Model 5350

The Model 5350 Programmer is an electromechanical function generator, consisting of a digitally controlled servo-system driving a 10 turn potentiometer at a wide range of sweep rates. The Programmer finds application in the process control field with other instrumentation, whose output is controlled by a resistance or resistance ratio, such as powersupplies, magnetic generators, audio or RF oscillators as well as temperature, deposition-rate, vacuum and similar controllers.



INSTRUMENTATION

1314 Hanley Industrial Court, St. Louis, Mo. 63144 (314) 968-4740

Circle No. 75 on Reader Service Card

- 9-11 Soft Magnetic Materials [EPS] Cardiff, Wales, UK 9/74
- 14-16 Computational Physics of Liquids and Solids [IOP] Oxford, UK (J. W. E. Lewis, Atlas Computer Lab, Chilton, Didcot, Berkshire OX11 OQY, UK)
- 14-17 INTERMAG 1975 [IOP; IEEE; Inst of Electrical Engineers] London, UK 8/
- Nuclear Quadrupole Resonance Spectroscopy—3rd Int Symp [Organizing Committee] Gainesville, Fla. (T. A. Scott, Dept of Physics, Univ of Fla., Gainesville, Fla. 32611) [11/ 15/74]
- 14-18 Magnet Technology—5th Int Conf [Laboratori Nazionali de Frascati] Frascati, Italy [11/1/74] 5/74
- 20-23

   Circuits and Systems—Int Symp
  [Organizing Committee] Newton,
  Mass. (J. Logan, Computer-Aided
  Analysis Dept, Bell Labs, North Andover, Mass. 01845)
- IEEE Electrical and Electronic Engineers in Israel [IEEE Israeli Section] Tel Aviv, Israel (IEEE, 345 E. 47th St, New York, N.Y. 10017) [10/15/74]
- 21–25 Int European Nuclear Conf [Organizing Committee] Paris 7/74
- 28-1 **General Meeting** [APS] Washington, D.C. 10/73

#### **MAY 1975**

- 3-8 American Ceramic Soc 77th Annual Meeting [American Ceramic Soc] Washington, D.C. 5/74
- 5-8 Static Electrification—4th Cont
- 6-8

   IEEE Photovoltaic Specialists
   Conf [Electron Devices Group]
   Scottsdale, Ariz (D. J. Curtin, COM-SAT Labs, POB 115, Clarksburg, Md. 20734) [11/1/74]
- 9, 10 Liquid Crystals—APS Ohio Section Spring Meeting [APS] Kent,
  Ohio (APS, 335 E 45th St, New York,
  N.Y. 10017)
- 11–15 Radiation Research Soc—Annual Meeting [RRS] Miami Beach, Fla. (R. J. Burk Jr., 4211 39th St, NW, Washington, D.C. 20016)
- 11-16 Electrochemical Soc Meeting [Electrochem Soc] Toronto, Canada [12/1/74] 9/74
- 12-14 Int Microwave Symp [IEEE] Palo Alto, Calif. 10/73
- 13–16 Radiation Protection—3rd European Congress [Assoc Belge de Radioprotection; British Radiological Protection Assoc Ltd] Amsterdam [10/ 1/74] 7/74
- 19-21 Aerospace Electronics [IEEE] Dayton, Ohio 10/73
- 28–30 Frequency Control—29th Annual Symp [US Army] Atlantic City, N.J. (J. R. Vig, US Army Electronics Command, AMSEL-TL-MF, Fort Monmouth, N.J. 07703) [1/15/75]
- 28–30 Laser Engineering and Applications [IEEE] Washington, D.C. 8/73

## **JUNE 1975**

- 2-4 Physical Electronics Conf [APS Divisions of Solid State Physics and Electron and Atomic Physics] Univ Park, Pennsylvania 9/74
- Effective Interactions and Operators in Nuclei [Organizing Commit-

- tee, Univ of Ariz.] Tucson, Ariz. (B. Barrett, Physics Dept, Univ of Ariz., Tucson, Ariz. 85721)
- 3-6 US-Japan S of R Joint Meeting [S of R] Honolulu, Hawaii (R. B. Bird, Dept of Chemical Engineering, Univ of Wisc., 1415 Johnson Dr, Madison, Wisc. 53706) [1/15/75]
  - Atomic Masses and Fundamental Constants—5th Int Conf [IUPAP] Paris, France (P. Grivet, AMCO-5, Institut d'Electronique Fondamentale, Bâtiment 220, Université Paris-Sud, F-91405 Orsay, France)
- 8-13 High Energy Physics and Nuclear Structure—6th Int Conf [IUPAP; NSF; AEC] Santa Fe, N.M. 9/74
- 9-11 Applications of Ferroelectrics— IEEE Symp [IEEE; Sandia Labs; Army Research Office] Albuquerque, N.M. (C. E. Land, Sandia Labs, Div 5113, Albuquerque, N.M. 87115) [1/15/75]
- 15-18 Nuclear Reactors—Int Conf [Canadian Nuclear Assoc] Ottawa, Canada (J. A. Weller, CNA, Suite 1120, 65 Queen St West, Toronto M5H 2M5, Canada) [3/31/75]
- 15-20 Fluidization Conf [Engineering Foundation] Pacific Grove, Cal. (Engineering Foundation, 345 E. 47th St, New York, N.Y. 10017) [9/6/74]
- 15–20 21st Annual Meeting [American Nuclear Society] Dallas, Tex. 10/73
- 16-18 **General Meeting** [APS] Knoxville, Tenn. 10/73
- Lasers in Physical Chemistry and Biophysics [Société de Chimie Physique] Paris, France (C. Troyanow-sky, SCP, 10, rue Vauquelin, 75231 Paris Cedex 05, France)
- 17-20 Soc of Nuclear Medicine Annual Meeting [Soc of Nuclear Medicine] Philadelphia, Pa. 7/74
- 19-21 General Meeting [AAPT] Boulder, Colo. 7/73
- European Assoc of Radiology— 3rd Congress and Tech Exhibition [Brit Inst of Radiology] Edinburgh, UK (Secretary General, 3rd Congress of the EAR, PO Box 14, 79 Lauriston Place, Edinburgh EH1 1DB, Scotland, UK)
- Laser Spectroscopy—2nd Conf [Laboratoire de Spectrométrie Physique] Megève, France (J. C. Pebay-Peyroula, Laboratoire de Spectrométrie Physique, BP No 53, F-38041 Grenoble Cedex, France)

## **JULY 1975**

- Stars and Galaxies from an Observational Point of View [Georgian Astrophysical Observatory] Tbilissi, USSR (E. K. Kharadze, Astrophysical Observatory, Abastumani, Georgia, USSR)
- 6-13 Sedimentology—9th Int Congress [Int Union of Geological Sciences] Nice, France (S. Van der Heide, Rijks Geol. Dienst. Postbus 379, Haarlem, Netherlands)
- 7-11 Atomic Spectroscopy—7th Conf [EPS] Grenoble, France (J. C. Pebay-Peyroula, Laboratoire Spectrométrie Physique, BP 53, F-38041, Grenoble Cedex, France)
- Phonon Scattering in Solids—2nd Int Conf [IOP, Univ of Nottingham] Nottingham, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)

- 13–17 Crystal Growth—3rd National Conf [American Assoc for Crystal Growth] Palo Alto, Calif. 5/74
- 13-17 Health Physics [Health Physics Society] Buffalo, N.Y. 10/73
- 21-25 Dielectric Materials, Measure-ments and Applications [Inst of Electrical Engineers | Cambridge, UK (IEE Conf Dept, Savoy Place, London WC2R OBL, UK)
- Int Conf on the Physics of Electron-24-30 ic and Atomic Collisions [Univ of Washington] Seattle, Washington, 11/73
- Conduction and Breakdown of Di-28-31 electric Liquids-5th Int Conf [Delft Univ of Tech] Noordwijk, The Netherlands [1/1/75] 9/74
- . IUPAP Congress of Physics Edu-30-6 cation [IUPAP; UNESCO; IOP] Edinburgh, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)

## **AUGUST 1975**

- Medical Physics [AAPM] San Anto-3-7 nio, Texas 1/74
- Biophysics-5th Int Congress 4-9 [IUPAP] Copenhagen, Denmark (DIS Congress Service, 3 Knabrostraede, DK 1210 Copenhagen K, Denmark)
- Neutron Diffraction Conf [Int Union of Crystallography] Petten (NH), The Netherlands (W. Kraak, Neutron Diffraction Conf, Reactor Centrum Nederland, Petten (NH), The Netherlands)
- Crystallography [Int Union of Crys-7-15 tallography] Amsterdam, The Netherlands 10/73
- Infrared Physics [Swiss Federal Inst of Tech] Zürich, Switz. 9/74 11-15
- Low Temperature Physics-14th Int 14-20 Conf [IUPAP; Int Inst of Refrigera-tion] Otaniemi, Finland [5/15/75] 3/74
- Cosmic Ray Conf—4th Int [IUPAP] Munich, West Germany 5/74 15-29
- Astronomy [AAS] San Diego, Calif. 17-20
- 18-22 Phenomena in Ionized Gases-12th Int Conf [Technische Hogeschool te Eindhoven, The Netherlands 9/74
- Active Semiconductor Devices 19-21 for Microwaves and Integrated Optics [Cornell Electrical Engineering School; IEEE] Ithaca, N.Y. (L. F. Eastman, Program Chairman, School of Electrical Engineering, Phillips Hall, Cornell Univ, Ithaca, N.Y. 14850)
- Cyclotrons and their Applications-19-22 6th Int Conf [Swiss Inst for Nuclear Research] Zürich, Switz. 7/74
- 21-27 Lepton and Photon Interactions at High Energies [IUPAP; AEC; NSF; Stanford Linear Accelerator Center] Stanford, Cal. (Conf Secretary, SLAC, PO Box 4349, Stanford, Cal. 94305)
- 22-6 · Int Union of Geodesy and Geophysics-General Assembly [IUGG] Grenoble, France (P. J. Melchior, Ob-servatoire Royal de Belgique, 3 Ave Circulaire, Brussels B 1180, Belgium)
- 25-28 Accuracy of Flow Measurement by Laser Doppler Methods—Symp [Tech Univ of Denmark; Disa Elek-tronik A/S, Denmark] Copenhagen, Denmark (LDA Symp 1975, c/o Tech Univ of Denmark, Dept of Fluid Me-

- chanics, Bldg 404, 2800 Lyngby, Denmark) [2/1/75]
- Atomic Spectroscopy [Australian Academy of Science] Clayton, Vic-25-29 Australian toria, Australia 3/74
- 25-29 Int Commission for Optics-10th Session [OSA] Prague, Czech. 7/74
- 25-29 Statistical Physics-Int [IUPAP] Budapest, Hungary [5/1/75] 7/74
- Thin Films-Basic Problems, Appli-25-29 cations and Trends [Int Thin Film Committee] Budapest, Hungary [12/1/74] 7/74
- 25-30 Polarization Phenomena in Nuclear Reactions-4th Int Symp [IUPAP] Zürich, Switz 9/74
- □ Phonon Scattering in Solids—2nd Int Conf [EPS] Nottingham, UK 9/74 27-30

## SEPTEMBER 1975

- Controlled Fusion and Plasma Phys-1-5 ics [EPS] Lausanne, Switzerland 3/
- Electronic Properties of Solids 1-5 under High Pressure [EPS; European High Pressure Research Group] Leuven, Belgium [5/15/75] 1/74
- Luminescence—Int Conf [IUPAP] Tokyo, Japan 5/74
- · Multiple Periodic Variable Stars 1-5 [Int Astronomical Union] Budapest, Hungary (W. S. Fitch, Steward Observatory, University of Ariz., Tucson, Ariz. 85721)
- · Quantum Electronics-2nd Nat'l Conf [IOP] Oxford, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)
- In Situ Composites-II-Int Conf [General Electric] Lakeville, Conn. (M. R. Jackson, General Electric Co., Corporate Research and Develop-ment, Schenectady, N.Y. 12345) [3/1/75]
- Developments in Electron Microscopy and Analysis [IOP] Bristol, UK (J. W. Steeds, H. H. Wills Physics Lab, Univ of Bristol, BS8 1TL, UK)
- Gasdynamics of Explosions and 8-11 Reactive Systems—5th Int Colloq [Int Academy of Astronautics] Bourges, France (H. van Gelder, Secretary, Int Academy of Astronautics, 250 rue Saint Jacques, Paris, France) [3/1/75]
- Applications of Ion Beams to Materials—Int Conf [IOP] Coventry, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK) 8-12
- Physical Aspects of Noise in Solid State Devices—Int Conf [Dutch 9-11 Physical Soc] Noordwijkerhout, The Netherlands 9/74
- ☐ Energy and Physics—Gen Conf [EPS] Bucharest, Rumania 9/74 9-12
- □ Beam-Foil Spectroscopy—4th Int Conf [Univ of Tenn; ORNL] Gatlin-burg, Tenn. 9/74 15-19
- . Thin Films-Int Conf [IOP] Hes-15-19 lington, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)
- Optical Fiber Comm-Int Conf [IEE, 16-19 IOP] London, UK 9/74
- 22-26 Ferroelectricity [EPS] Zurich, Switzerland 5/74
- □ Atomic Spectroscopy
  [NBS] Gaithersburg, Md. 9/74 Symp 23-26

## **Model 1653**

A high speed, 22 inch recorder designed to operate on-line to scientific and general purpose computers in graphic output applications.

- Plug-to-plug compatibility (hard-ware and software) with all standard 300 steps/sec. plotters used in the computer field (CAL-COMP and COMPLOT).
- Z-fold paper (367 ft. long) folding conveniently into notebook size.
- 0.01 inch step (0.25 mm optional) with 300 steps/sec, operation.
- Single step resolution with one step repeatability.
- Pen point exposure for manually setting origin.
- Simple control panel layout with single function switch.
- Integral chromed steel stand with paper storage.

Price: \$3,300.00

## artronix

INSTRUMENTATION

1314 Hanley Industrial Court, St. Louis, Mo. 63144 (314) 968-4740

Circle No. 76 on Reader Service Card

## PLACEMENT SERVICE REGISTER

## AMERICAN INSTITUTE OF PHYSICS

to be held in connection with The Annual Joint Meeting of The American Physical Society-American Association of Physics Teachers

January 29-31, 1975

## Anaheim Convention Center, Anaheim, California

The primary purpose of the Register is to arrange personal interviews between physicists seeking employment and prospective employers. Interviews will be arranged between employers' representatives and applicants attending

## for the EMPLOYER seeking physicists

Universities, colleges, research institutions, industrial organizations and government laboratories are invited to participate in the Placement Register and schedule interviews with physicists attending the meeting. A complete register of physicists seeking employment will be available at a nominal service charge upon request at the meeting and after the meeting.

## for the PHYSICIST seeking employment

Information and meeting applications for registering for the Placement Register may be obtained by writing to the Institute office. The deadline for being included in the Register is December 20, 1974.

Participants should report to the Exhibit Hall in the Anaheim Convention Center upon arrival at the meeting.

Address all inquiries to: THE PLACEMENT SERVICE AMERICAN INSTITUTE OF PHYSICS • 335 East 45 Street, New York, N.Y. 10017

## positions open

## **Postdoctoral Appointee**

## **Physical Sciences**

The Argonne National Laboratory Energy and Environmental Systems Division has a postdoctoral position available for a physical scientist interested in air pollution dispersion modeling. Essential requirements are experience in FORTRAN programming, demonstrable interest in interdisciplinary studies, and the ability to interact closely and constructively with colleagues. Experience and/or formal course work in the following is desirable: methods of numerical analysis, meteorology, chemical kinetics, systems and air pollution modeling.

Send resumes along with grade transcripts and letters of recommendation to Mr. Ronald A. Johns, Manager, Professional Placement.



## ARGONNE NATIONAL LABORATORY

9700 South Cass Avenue, Argonne, III. 60439

The University of Georgia, Athens, Georgia invites applications for the position of Head, Department of Physics and Astronomy. The department consists of 27 faculty members and offers the Bachelor's, Master's, and Doctoral programs. The University of Georgia is a co-educational, graduate and undergraduate state university with about 20,000 students, and is located in northeast Georgia 70 miles from Atlanta. Applicant must have Ph.D. degree in Physics with considerable academic sense in the real of full by few with considerable academic experience, must qualify for the rank of full professor, and must be qualified to head department which is active in both research and instruction. Salary is excellent and negotiable depending on qualifications.

The University of Georgia is an Affirmative Action/Equal Opportunity Employer.
Send resume and at least three references to: Dr. John E. Rives, Chair-

man, Search Committee, Department of Physics and Astronomy, University of Georgia, Athens, Georgia 30602.

# SOVIET JOURNAL OF

A translation, beginning with Vol. 1, No. 1. 1971, of "Kvantovaya Elektronika."

Experimental and theoretical work on quantum electronics and its applications in science and technology: lasers, interaction of coherent radiation with matter, holography, non-linear optics, and related topics.

Monthly. Approx. 3,000 Russian pages annually. \$180 domestic. \$184 foreign. \$187 optional air freight Europe. \$196 optional air freight Asia.

Please address orders and inquiries to Marketing Services:

## AMERICAN INSTITUTE OF PHYSICS

335 East 45 Street, New York, N.Y. 10017

## OCTOBER 1975

- 5-12 Fundamental Aspects of Radiation Damage in Metals [AEC; ORNL] Gatlinburg, Tenn. 7/74
- 6–10 Analytical Chemistry and Spectroscopy [Fed of Analytical Chemistry and Spectroscopy Societies] Indianapolis, Ind. 1/74
- 8-10 Scintillation and Semiconductor Counter Symp [IEEE] Washington, D.C. (IEEE, 345 E. 47th St, New York, N.Y. 10017)
- 12–15 Electron Devices [IEEE] Washington, D.C. 10/73
- 12-16 Society of Exploration Geophysicists 45th Meeting [Soc of Exploration Geophysicists] Denver, Colo. 7/74
- 20-22 Frontiers in Education—Int Conf [IEEE] Atlanta, Ga. (IEEE, 345 E. 47th St, New York, N.Y. 10017 [12/15/74]
- 21-24 Annual Meeting [OSA] Boston, Mass 7/73
- 30-1 Nuclear Physics Div [APS] Austin, Texas 7/74

#### **NOVEMBER 1975**

- 3-5 Refuse-to-Energy Conf [World Environment and Resources Council IEEE; ASME] Montreux, Switz. 7/74
- World Energy Engineering Exposition and Congress [Clapp & Poliak Inc] Chicago, III. (K. E. Knowles, Clapp & Poliak, Inc, 245 Park Ave, New York, N.Y. 10017)
- 4-7 Acoustics [ASA] San Francisco, Calif. 7/73
- 10-13 Plasma Physics Div [APS] St. Petersburg, Fla. 7/74
- 13-15 Southeastern Sectional Meeting [APS] Montgomery, Ala. 7/74
- 16-21 Joint Meeting and Atom Fair [ANS; Atomic Industrial Forum] San Francisco, Calif. 10/73
- 18-21 Engineering Problems of Fusion Research—6th Symp [IEEE; ANS] San Diego, Cal. 9/74
- 19-21 Nuclear Science Symp [NPS] San Francisco, Cal. 9/74
- 20, 21 Rowland-Wood: 100 Years of Physical Optics at Hopkins [Johns Hopkins Univ] Baltimore, Md. (A. Pevsner, Physics Dept, Johns Hopkins Univ, Baltimore, Md. 21218)
- 24-26 Fluid Dynamics Div [APS] College Park, Md. 7/74

## DECEMBER 1975

- 1-4 Low-Lying Lattice Vibrational Modes and Their Relationship to Superconductivity and Ferroelectricity—Int Conf [APS] San Juan, Puerto Rico (M. Gómez, Physics Dept, Univ of Puerto Rico, Rio Piedras, Puerto Rico)
- 2-6 **Joint Meeting** [AAPM-Radiological Society of North America] Chicago, III. 7/73
- 3-5 Electron and Atomic Physics Div [APS] Tucson, Ariz. 7/74
- 9-12 Magnetism and Magnetic Materials [IEEE; AIP] Philadelphia 10/73
- 29-31 General Meeting [APS] Pasadena, Calif. 10/73

## FEBRUARY 1976

2-5 Joint Meeting [APS-AAPT] New York, N.Y. 7/73

### **MARCH 1976**

29-1 General Meeting [APS] Atlanta, Ga. 7/73

## **APRIL 1976**

- 6-9 Acoustics [ASA] Washington, D.C.
- 13-15 Crystallography Group Spring Conf [IOP] Aberdeen, UK (Meetings Officer, IOP, 47 Belgrave Square, London SW1X 8QX, UK)

#### **MAY 1976**

- 10-12 Scintillation and Semiconductor Counter Symp [IEEE] Washington, D.C. 9/74
- 11–14 Int Convention [IEEE] Boston, Mass. 9/74
- 15-19 Spectroscopy—15th National Assembly [Soc for Applied Spectroscopy] Philadelphia, Pa. 10/73

#### **JUNE 1976**

21-24 **The 148th Meeting** [AAS] Haverford, Pa. 7/73

## NEW LISTING OF SHORT COURSES AND SCHOOLS

#### 18-22 NOVEMBER 1974

Advanced Water Pollution Control: Physical and Chemical Waste Treatment [Univ of Tex.] Austin, Tex. (Engineering Inst, PO Box K, Univ of Tex. at Austin, Austin, Tex. 78712)

## 10-14 FEBRUARY 1975

Multivariate Analysis [Univ of Tex.] Austin, Tex. (Engineering Inst, PO Box K, Univ of Tex. at Austin, Austin, Tex. 78712)

## 7-11 APRIL

Advanced Water Pollution Control: Physical and Chemical Waste Treatment [Univ of Tex.] Austin, Tex. (Engineering Inst, PO Box K, Univ of Tex. at Austin, Austin, Tex. 78712)

## 9-24 JUNE

The Spectroscopy of the Excited State [North Atlantic Treaty Organization] Errice, Italy (B. Di Bartolo, Physics Dept, Boston College, Chestnut Hill, Mass. 02167)

## 23 JUNE-3 JULY

The Physics of Quantum Electronics [Univ of Ariz.] Santa Fe, N.M. (S. F. Jacobs, Optical Sciences Center, Univ of Ariz., Tucson, Ariz.)

## 22 JULY-2 AUGUST

Crystallographic Summer School Committee on Crystallographic Apparatus; Int Union of Crystallography, Prague, Czechoslovakia (J. N. King, IUCr Secretariat, 13 White Friars, Chester CH1 1NZ, UK)

## 27 JULY-1 AUGUST

Expanding Role of the Diagnostic Radiological Physicist [AAPM] Houston, Tex. (S. C. Bushong, Dept of Radiology, Baylor College of Medicine, Tex. Medical Center, Houston, Tex. 77025)



Circle No. 77 on Reader Service Card