CALENDAR

Information in the calendar is compiled from a file maintained in the PHYSICS TODAY office. Readers are invited to write or telephone for information beyond what we print. The date at the end of each item refers to the issue of PHYSICS TODAY in which the item is listed with more detail than appears in subsequent issues.

ABBREVIATIONS: APS, American Physical Society; OSA, Optical Society of America; ASA, Acoustical Society of America; s of R, Society of Rheology; AAPT, American Association of Physics Teachers; ACA, American Crystallographic Association; AAS, American Astronomical Society; AEC, US Atomic Energy Commission; IEEE, Institute of Electrical and Electronics Engineers; IPPS, The Institute of Physics and The Physical Society; IUPAP, International Union of Pure and Applied Physics; NBS, National Bureau of Standards; ORNL, Oak Ridge National Laboratory.

Coding of each item is as follows: date subject \square host \square Location (Contact) [submission deadline] PT ref.

• new listing

• new information

OCTOBER 1967

- 1-15 Elementary Particles, Herceg Novi, Yugoslavia (P. Cüer) 9/67
- 2-7 ☐ GERMAN PHYSICAL SOCIETY ☐ Berlin (E. Boersch) 4/67
- 3 (through 16 Dec.) Condensed Matter □ INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS □ Trieste, Italy (ICTP) [7/31] 7/67
- 3-5 Radiation Effects in Semiconductors □ SANDIA LABORATORIES □ Sante Fe, N. M. (F. L. Vook) [6/1] 6/67
- 4-6 Circuit and Systems Theory □ BEEE □ Monticello, Ill. (J. B. Cruz Jr) [8/1] 7/67
- 4-6 Ultrasonics

 ver, B. C. (B. A. Auld) [8/1] 6/67
- 6-7 Elementary Particles
 Stony Brook, N. Y. (O. Ames) 9/67
- 9 Excited Materials
 U. OF
 NORTH CAROLINA
 Chapel Hill,
 N. C. (S. I. Choi) 7/67
- 11-13 ☐ OSA ☐ Detroit (M. E. Warga) 12/66
- 12, 13 Physics of Selenium and Tellurium □ SELENIUM AND TELLUR-

- IUM DEVELOPMENT ASSOCIATION

 ☐ Montreal (H. I. Fusfeld) 6/67
- 15–20 Semiconductors

 CHEMICAL SOCIETY

 Chicago

 (M. E. Jones) [9/8] 9/67
- 16–19 Materials Research □ NBS □ Gaithersburg, Md. (R. S. Carter) [6/15] 6/67
- 16–20 Fiber and Polymer Microscopy

 ☐ MCCRONE RESEARCH INSTITUTE
 ☐ Chicago (M. L. Fallert) 7/67
- 16-27 Cryogenic Engineering ☐ UNI-VERSITY OF CALIFORNIA EXTEN-SION, LOS ANGELES ☐ LOS Angeles (Engineering and Physical Sciences Extension, U. of Calif. Extension, Los Angeles, Calif. 90024) [10/9] 10/67

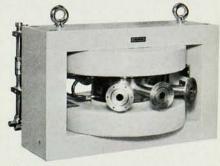
This short course will cover: thermodynamic and transport properties of fluids, refrigeration and liquefaction processes, transfer and handling of fluids including cryogenic safety, heat transfer as applied to low temperature thermal insulations systems, vacuum technology, transport and thermal properties of solids, instrumentation.

17–19 • Antennas and Propagation ☐ IEEE ☐ U. of Michigan, Ann Arbor (T.B.A. Senior, Radiation Lab., U. of Mich., 201 Catherine St., Ann Arbor, Mich. 48101) [7/1] 10/67

Topics discussed at this symposium will include: antennas, electromagnetic theory, radio wave propagation, scattering and diffraction, radar and radio astronomy, plasma physics, radio physics.

17-20 Nuclear Physics, Nuclear Chem-

A New Line of Multiport Switching Magnets



Featuring

- High Field Uniformity
- High Quality Magnetic Materials
- Field Homogenizing Filters
- Contoured Pole Edges
- Water Cooled Coils
- Protected Vacuum Chambers

These and many other features are provided in Alpha's new line of Multiport Switching Magnets, designed to be used as a precise research tool in conjunction with both low and high energy particle accelerators.

Mass energy products up to 275 at $\pm 45^{\circ}$ are provided in standard units, and higher mass energy products are available in designs to meet exact customer specifications.

Alpha will perform a complete design service for Beam Transport Systems, given only the input conditions and the required characteristics at the output.

Contact your local engineering representative.

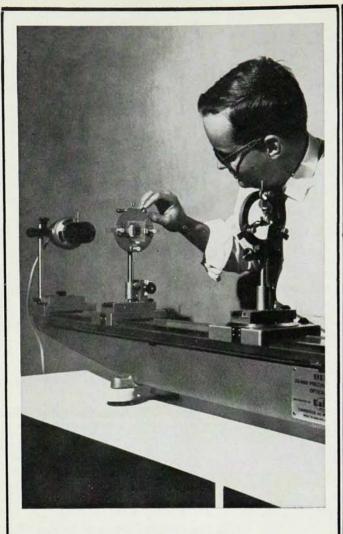
Send	for	free	brochure.	pt 8

Nome______
Title____
Organization____

Address_____



460 Roland Way, Oakland, Calif. 94621 Phone (415) 635-2700



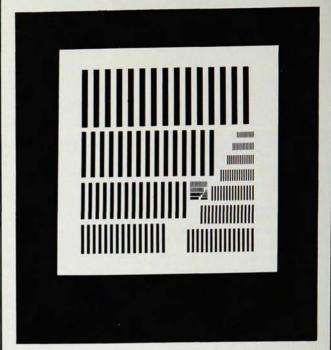
We believe that Ealing has the most comprehensive range of Optical Tables, Benches, and Accessories available. For virtually all applications, including;

- Image Analysis
- System Evaluation
- · Spatial Filtering
- · Lens Testing
- Spectrometry
- Interferometry
- OTF Analysis

You are invited to contact Mr. Frank Ferguson (617, 491-1515) for further details or for consultation regarding the suitability of this system for your applications.



THE EALING CORPORATION



Optical Targets*

1 line per mm 1000 lines per mm

in 31 precise steps (each in the ratio of $\sqrt{10}$). Each frequency is made up of 15 bars and the distortion at 300 lines/mm is less than 5%.

FIXED TEST TARGETS

Available on square (2 in. x 2 in.) or round (24mm to 50mm diameter) glass plates from \$252 F.O.B. Destination.

VARIABLE MODULATION TEST TARGETS

The same target mounted in a little, convenient box with internal quartz-jodine illumination. The target modulation can be accurately varied from 0 to 1 while the average intensity remains constant. Easily set to Military Standard 150-A.

Write or phone Frank Ferguson at 617-491-1515. He'll be pleased to tell you more and send you free our New Products Supplement #2 with complete details of these targets.

*Patents pending by Diffraction Limited, Inc., Bedford, Massachusetts.



THE EALING CORPORATION

- istry and Elementary Particles, Warsaw, Poland (L. Leszczyn-ski) 9/67
- 18-20 Exploding Wires □ AIR FORCE CAMBRIDGE RESEARCH LABORA-TORIES Boston (W. G. Chace)
- Gaseous Electronics □ APS □ San Francisco (R. N. Varney) 18 - 20[9/1] 2/67
- Electron Devices □ IEEE □ Washington, D. C. (B. J. Mc-Murtry) [8/1] 7/67 18-20
- 20, 21 ☐ AAPT-APS NEW ENGLAND SEC-TIONS | Lewiston, Maine For APS: (R. F. Kingsbury) [9/22] 7/67 For AAPS: (W. H. Ross) 9/67
- 20, 21 □ APS OHIO SECTION □ Columbus (K. C. Brog, Battelle Memo-rial Institute, 505 Kings Avenue, Columbus, Ohio 43201) 10/67 Invited papers at this meeting will be on the general topic of astrophysics.
- ☐ APS NUCLEAR PHYSICS DIVISION ☐ Madison, Wis. (J. A. Harvey) [9/22] 4/67
- □ s of R □ Washington, D. C. (A. B. Bestul) 9/67
- 23-25 Electronics

 REE Chicago (P. E. Mayes, E. E. Dept., U. of Illinois, Urbana, Ill. 61801) [5/1]

This national conference will include discussions in the areas of: direct energy conversion, circuit and system theory, electronic power applications, electronic switching, engineering cryogenics, magnetics, microelectronics, optical electronics, quantum electronics.

- X-Ray Techniques in Materials Science | IPPS | London (Meetings Officer, IPPS) [7/31] 9/67
- 30-31 Materials Research □ U. OF MIS-Souri D Rolla, Mo. (W. J. James Graduate Center for Materials Research, U. of Missouri at Rolla, Rolla, Mo. 65401) 10/67

In conjunction with the dedication of its new Graduate Center for Materials Research of the University of Missouri Space Science Research Center, the University of Missouri will host an invited paper symposium on Materials Research-Problems and Prospects. The symposium will emphasize the present state of the science in selected fields and examine the more promising new analytical techniques available for its exploration. Walter R. Hibbard, director of the US Bureau of Mines and chairman of the National Academy of Science-National Research Council Materials Advisory Board will deliver the dedicatory address.

applications of the powder method in x-ray crystallography to solid state research, electrochemistry, high temperature chemistry, high temperature polymers, point defects in nonstoichiometric compounds.

30-1 • Chemistry and Spectroscopy □ AMERICAN CHEMICAL SOCIETY-SO-CIETY FOR APPLIED SPECTROSCOPY ☐ Anaheim, Calif. (D. Mc-Carthy, Naval Weapons Center, Corona, Calif. 91720) [7/15] 10/67

Sessions of the Society for Applied Spectroscopy will cover: atomic emission and absorption, molecular spectroscopy and fluorescence, mass spectroscopy, magnetic resonance, x-ray, nuclear methods.

Nuclear Science ☐ IEEE ☐ Los Angeles (R. C. Maninger) [6/15] 31 - 2

NOVEMBER 1967

- Plasmas in Open-Ended Geometry □ ORNL □ Gatlinburg, Tenn. (Conference Chairman, ORNL)
- 1-3 Northeast Electronics Research and Engineering Meeting □ IEEE □ Boston (E. Witche, 31 Channing St., Newton, Mass.) 10/67

Topics of this NEREM program will include: direct solid state microwave power generation, lasers, computers in math., physics and engineering, electroöptic systems, microwave electronics, new developments in holography, radar and radio astronomy.

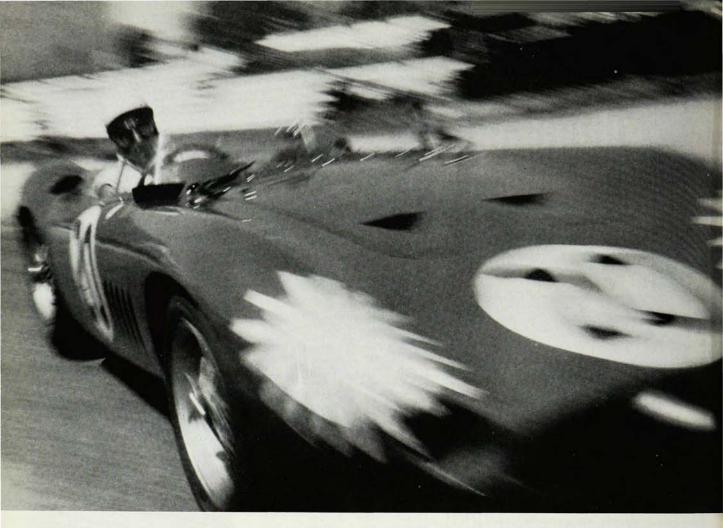
- Diffraction | MELLON INSTITUTE 1-3 Pittsburgh (S. Diamond) [9/11] 6/67
- 1 3Circuits and Systems

 IEEE Pacific Grove, Calif. (S. R. Parker) [9/1] 7/67
- ☐ AAPT TEXAS SECTION ☐ Sherman, Tex. (V. E. Bottom) 7/67 3, 4
- □ AAPT-MICHIGAN SECTION □ Grand Valley State College, Allendale, Mich. (D. W. Steb-bins, Michigan Technological U., Houghton, Mich.) 10/67
- Midwest Solid State Conference ☐ U. OF MISSOURI ☐ Columbia, Mo. (E. B. Hensley) 9/67
- Photopolymers \square Society of plastic engineers \square Ellenville, N. Y. (J. M. Schiller) 6/67
- 6-8
- Reliability Physics

 Los Angeles (G. T. Jacobi) [6/15] 7/67
- Characterization of Materials 8-10 U. OF ROCHESTER ☐ Rochester, N. Y. (G. J. Su) 9/67
- Plasma Physics ☐ APS ☐ Austin, Tex. (W. E. Drummond) [9/30] 8/67
- 13–15 Thermal Conductivity ☐ NBS ☐ Gaithersburg, Md. (D. R. Flynn, Building 226, Rm. B114, National Bureau of Standards, Wash., D. C. 20234) 10/67

Topics: theoretical studies of heat conduction, correlation of experimental data and theory, new and improved methods of measuring thermal





Can there be this kind of excitement in engineering

A high-performance car in a four-wheel drift around the first turn at Watkins Glen* typifies the excitement of sportscar racing . . . precision machinery and human skill in cool coordination.

Is it an exaggeration to suggest there should be an analogous excitement in your engineering career? In engineering, too, professional skill is constantly pitted against variables of mathematics, materials and men. And the pace can be fast.

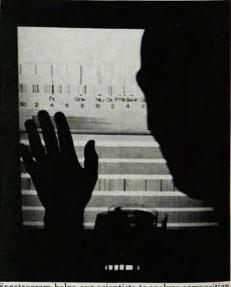
This is the kind of engineering excitement Xerox can offer you:

- a strong drive into new areas and new technologies in a variety of fields . . . imaging, data handling, graphic arts, education
- a growth pattern stimulating in itself . . . total operating revenues up from \$25 million in 1957 to over \$500 million in 1966; research and development expenditures, at \$45 million in 1966, up 36% over 1965
- a professional environment and esprit which you have to experience to believe
- both long-range technical aims and day-to-day engineering problems on a scale to satisfy any engineer.

Sound unlikely? Check it out and see. Your degree in Engineering or Science can qualify you for some intriguing openings at Xerox, in fundamental and applied research, engineering, manufacturing and programming.

Please forward resume to Mr. J.W. Turner, Dept. ZVZ-126, Xerox Corporation, P.O. Box 1995, Rochester, New York 14603. An Equal Opportunity Employer (M/F).

TryXerox and see



Spectrogram helps our scientists to analyze composition of materials used in xerography.



conductivity, thermal contact conductance, in-

- 14-16 Computers □ AMERICAN FEDERA-TION OF INFORMATION PROCESS-ING SOCIETIES ☐ Anaheim, Calif. (H. T. Larson) [4/14] 7/67
- □ ASA □ Miami, Fla. (J. C. Steinberg) 12/66 14-17
- 16 18□ APS □ New York City (W. W. Havens Jr) 12/66
- 18 ☐ AAPT IOWA SECTION ☐ Iowa City (G. W. Bowen) 7/67
- ☐ AAPT NORTHERN CALIFORNIA SECTION Arcata, Calif. (L. M. Clendenning) 9/67
- Fluid Dynamics □ APS □ Bethlehem, Pa. (P. S. Klebanoff) [10/5] 7/67 20-22
- 20-22 Beam Foil Spectroscopy □ U. OF ARIZONA □ Tucson, Ariz. (S. Bashkim, Physics Dept., U. of Arizona, Tucson, Ariz. 85721) [9/15] 10/67

DECEMBER 1967

- ☐ AMERICAN ASSOCIATION OF 1, 2 PHYSICISTS IN MEDICINE | Chicago (J. R. Cameron) [10/1]
- π N Scattering □ U. OF CALIF. □ Irvine, Calif. (G. L. Shaw) 7/67 1, 2
- (through 20 Jan.) Quantum Chemistry, Solid-State Physics and Quantum Biology D U. OF FLORIDA-U. OF UPPSALA
 Gainesville, Fla. (Winter Insti-tute, U. of Florida) [10/1] 8/67
- □ AAS □ Philadelphia (G. C. McVittie) 2/67 5-7
- 18-20 ☐ APS ☐ Pasadena, Calif. (W. Whaling) 9/67
- \square AAAS \square New York (R. L. Taylor) 9/67 26-30

JANUARY 1968

- Solid-State Physics □ IPPS □ Manchester, England (Meetings Officer, IPPS) [10/27] 8/67 3-6
- 24, 25 Health Physics | HEALTH PHYS-ICS SOCIETY Augusta, Ga. (J. H. Horton) [10/16] 8/67
- 29-31 Laser Safety ☐ US PUBLIC HEALTH SERVICE-CHILDREN'S HOS-PITAL RESEARCH FOUNDATION
 Cincinnati, Ohio (Mrs. M. S. Runck, Laser Laboratory, The Children's Hospital Research Foundation, Elland Ave. and Bethesda, Cincinnati, Ohio 45229) 10/67
- 29-31 Photosensitization in Solids □ AIR FORCE CAMBRIDGE RESEARCH LABORATORIES Tucson, Ariz. (N. F. Yannoni, CRFE, AFCRL, L. G. Hanscom Field, Bedford, Mass.) (by invitation) 10/67

- 29-1 □ APS □ Chicago (R. G. Sachs) 12/66
 - 29 1 \square AAPT \square Chicago (S. S. Ballard) 2/67
 - 29-2 Measurement Engineering □ ARIZONA STATE U. ☐ Tempe, Ariz. (P. Stein, Engineering Cen-ter, Arizona State U., Tempe, Ariz. 85281) [1/19] 10/67

The program emphasizes the essential unity between theoretical and experimental approaches to measurement.

FEBRUARY 1968

- 1 3Solar Astronomy

 AAAS

 Tucson, Arizona (N. Sheeley) [12/ 7] 9/67
- 4 7□ ACA □ Tucson. Ariz. (D. H. Templeton) 9/67
- 5 7□ s of R □ San Diego, Calif. (J. F. Johnson) 9/67
- 14-16 Solid State Circuits □ IEEE □ U. of Pennsylvania, Philadelphia (R. Webster, Texas Instruments Inc., PO Box 5012, MS 9, Dallas, Tex. 75222) [10/23] 10/67

Topics of this conference are: circuit theory, electron devices, microwave theory, magnetics. Considerable emphasis will be placed on design aspects of integrated circuits.

- □ APS □ Boston (W. W. Havens Jr) 9/67
- 26-29 Elementary Particles □ INSTITUT FÜR THEORETISCHE PHYSIK DER UNIVERSITÄT GRAZ

 Schladming,
 Styria, Austria (H. Kühnelt, Institut für Theoretische Physik,
 Universitätsplatz 5, A-8010 Graz,
 Austria) 10/67 Austria) 10/67

This winterschool will cover discrete symmetries and phenomenology in elementary particle physics.

26-1 • Lasers and Their Engineering Applications □ U. OF CALIFORNIA EXTENSION □ Berkeley, Calif. (Head, Engineering Extension, U. of California, Berkeley, Calif. 94720) 10/67

Topics of this course will be: fundamentals of quantum physics, semiconductor, chemical, gas and Q-switched lasers, nonlinear optics, stimulated Raman and Brillouin scattering, parametric amplification, light modulation and demodulation, holography, mode coupling in lasers, quantum noise in communication systems and limitations on information capacity imposed by quantum mechanics.

Scintillation and Semiconductor 2.8 - 1Counters

AEC-IEEE

Washington, D. C. (G. A. Morton) [11/7] 8/67

MARCH 1968

- Neutron Cross Section and Technology □ APS-AEC-NBS □ Washington, D. C. (D. T. Goldman) [12/1] 8/67
- Nuclear Electronics and Radioprotection

 CENTRE DE PHY-SIQUE ATOMIQUE ET NUCLÉAIRE DE LA FACULTE DES SCIENCES
 Toulouse, France (Faculté des Sciences, Centre de Physique



- Rise time change <70 ns from 0-1000 pf; Gain change < -4% from 0-1000 pf \$275.00
- Model 450 Series: Probe assemblies for Gamma and X-Ray Scintillation Detectors -ask for details.



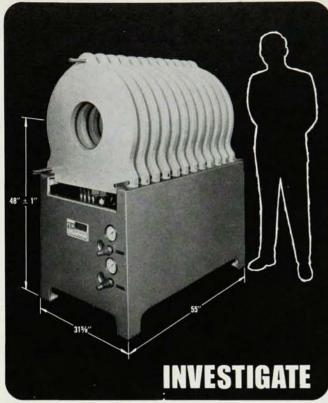


AREA CODE 312

1723 North 25th Avenue

Melrose Park, Illinois 60160

BEFORE BUYING AN AIR CORE SOLENOID ...



P.E.M. AIR CORE SOLENOID MODEL ACS 12-27-72

NI/COIL = 35,600 AMP-TURNS/INCH

R/COIL @ 20° C = .035 OHM

I max/COIL = 740 AMPS

P max/COIL = 26 KW

H;0 FLOW/COIL = 2.6 GPM

P.E.M.'S
FLEXIBLE DESIGN,
GOOD QUALITY,
FAST DELIVERY
and
REASONABLE PRICE!

Adaptability by design is a specialty of ours. That's why this air core solenoid features modular coil design—you select the bench length and number of coil modules to meet your specific requirements. Here are other benefits of the design:

- **a** Current density along the axis can be adjusted to produce the desired field distribution
- **b** Coils are wound with continuous radial spiral and opposing conductor transitions to minimize field distortion
- **C** Coils are wound with hollow copper conductor vacuum-impregnated with epoxy resin in aluminum support rings

Write or call—we'll gladly send you all the facts. We at PEM design to your exact needs. Count on PEM for fast delivery, too!



PACIFIC ELECTRIC MOTOR CO.

1009 66th Avenue • Oakland, California 94621 • 415/569-7621

IBM invites you to live and work in thoroughbred country.

We have immediate openings for physicists in Lexington, Kentucky.

At IBM Lexington you can work for one of the fastest growing divisions of IBM—while your family enjoys the pleasant life of Kentucky's bluegrass thoroughbred country.

IBM Lexington is growing so fast that our staff has doubled in the past four years. Which means unusual opportunities for advancement—and challenging, diversified work.

There's plenty of growth ahead because we develop and manufacture small business systems, a booming peacetime industry solidly based on nationwide demand.

We have openings right now for: PHYSICISTS: Applicants should possess a M.S. or Ph.D. in physics and have experience in solid state physics, semi-conductor or photo-conductor experience, if possible. Work in applied physics, both theory and experimental.

Company-paid benefits include insurance, hospitalization, tuition refund. Attractive stock purchase plan. Relocation expenses paid.

Write today to:

Mr. Terry Moble Dept. UG2-K IBM Corporation New Circle Road Lexington, Kentucky

IBM

An Equal Opportunity Employer

Atomique Nucléaire, 118 route de Narbonne, 31 Toulouse- 04-France) [10/15] 10/67

Topics of this international symposium will include: detectors based on ionization and excitation phenomena; spectrometry and dosimetry of gamma-rays, neutrons, and high energy particles; dosimeters, the medium of which is equivalent to biological tissue; associated circuits; devices for the measurement of ambient radioactivity.

- 12–15 □ osa □ Washington, D. C. (M. E. Warga) 9/67
- 18–21 ☐ APS ☐ Berkeley, Calif. (W. Whaling 9/67
- 28–30 Low Luminosity Stars □ NATIONAL SCIENCE FOUNDATION-AAS
 □ U. of Virginia, Charlottesville,
 Va. (S. Kumar, Leander McCormick Observatory, U. of Virginia,
 PO Box 3818 University Station,
 Charlottesville, Va. 22903) by
 invitation 10/67

APRIL 1968

- 1-3 Heavy Particle Collisions ☐ IPPS ☐ Belfast, Ireland (Meetings Officer, IPPS) [9/29] 9/67
- 2-3 Semimetals and Narrow Gap Semiconductors
 PPS Durham, England (Meetings Officer, PPS) [1/5] 9/67
- 2-4 ☐ AAS ☐ Charlottesville, Va. (P. M. Routly) 9/67
- 3-5 Magnetics | IEEE | Washington, D. C. (J. M. Lommel) [12/15] 9/67
- 17–19 Structure Analysis □ IPPS □ U. of York; York, England (Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1) [1/5] 10/67

The program will consist of sessions on: methods of solving crystal structure, results of structure analysis, thermal vibrations, disorder and phase transitions.

22-24 • Thin Films

Southampton, England (Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1) [1/19] 10/67

The conference will cover nucleation, growth and structure of thin films. Work on films prepared by chemical, electrochemical, vacuum deposition, sputtering, vapor phase reaction and oxidation techniques, will be discussed.

22-24 • Frequency Control □ US ARMY ELECTRONICS COMMAND □ Atlantic City, N.J. (M. F. Timm, Electronics Components Laboratory, US Army Electronics Command, Fort Monmouth, N.J. 07703) [12/15] 10/67

This symposium will cover progress in research and development of quartz crystal devices, piezo-electric filters, oscillator and frequency synthesis circuits, fundamental properties of quartz, atomic and molecular resonance devices.

22-25 ☐ APS ☐ Washington, D. C. (W. W. Havens Jr) 9/67

8–10 • Electronic Components

ELECTRONIC INDUSTRIES ASSOCIATION

Wash., D. C. (F. M. Collins, Speer Research Laboratory, Packard Road & 47th St., Niagara Falls, N. Y. 14302) [10/10] 10/67

The scope of the program will include: linear and non-linear resistive, capacitive, inductive and magnetic components; materials, processes and protective systems for film integrated components and circuits; electrooptics, magnetics, time delay, microwave integrated circuits, electrochemical, and electromechanical devices; new concepts, materials, devices, modules, hybrid circuits, integration of new components and microelectronic circuit developments into equipment and circuit packaging.

- 12–18 Universal Aspects of Atmospheric Electricity □ AIR FORCE CAMBRIDGE RESEARCH LABORATORIES □ Tokyo (Capt. J. H. Shock, CRTE, L. G. Hanscom Field, Bedford, Mass.) 10/67
- 13-17 Applied Spectroscopy ☐ SOCIETY FOR APPLIED SPECTROSCOPY ☐ Chicago (E. Lanterman, Borg-Warner Corp., R. C. Ingersoll Research Center, Wolf and Algonquin Roads, Des Plaines, Ill. 60018) [1/15] 10/67

All areas of theoretical and applied spectroscopy will be covered, including: activation analysis, arc-spark emission, atomic absorbtion, far infra-ed, flame emission, infrared mass spectrometry, molecular luminescence, nuclear particle and gamma ray, Raman, solid state, ultraviolet and visible, x-ray.

14-17 • Quantum Electronics ☐ JOINT COUNCIL ON QUANTUM ELECTRONICS ☐ Miami, Fla. (R. W. Terhune, Ford Motor Co., PO Box 2053, Dearborn, Mich. 48121) [1/8] 10/67

Fields to be covered in this international conference are: basic theory and basic physics of masers and lasers, optical parametric interactions and devices, advances in quantum electronic devices and technology, applications of quantum electronics, related topics in physics, electronics, and optics.

27-31 • Thermionic Generation Generation Generation Generation Stresa, Italy (European Nuclear Energy Agency, 38 boulevard Suchet, Paris 16e, France) [12/15]

Topics: convertor performance, plasma and surface phenomena, materials (including nuclear fuels), in-pile studies, heat pipes and related devices, integrated systems.

JUNE 1968

- 16-20 ☐ HEALTH PHYSICS SOCIETY ☐ Denver, Colo. (W. R. Hendee, Radiology Dept., U. of Colorado Medical Center, 4200 E. 9th St., Denver, Colo. 80220) [2/1]
- 17-19 ☐ APS ☐ Los Alamos, N. M. (W. Whaling, California Institute of Technology, 1201 E. California St., Pasadena, Calif. 91109) 10/67

JULY 1968

15–18 • Electrical Contact Phenomena

□ IPPS □ University College of
Swansea, Wales (Meetings Offi-

Maximized Value...

High Voltage Supplies



In accordance AECTID-20893

Consider:

- Model 251 Scintillation H.V.
 Supply: 500-1500 volts in 100
 volt steps with 125 volt vernier
 between steps; Pos or Neg
 polarity internally selected to
 prevent accidental reversal—
 front panel lights indicate
 polarity; 1 ma output current
 at < 10 mv ripple; stability
 0.005%/°C.....\$250.00

Interested?

CALL COLLECT



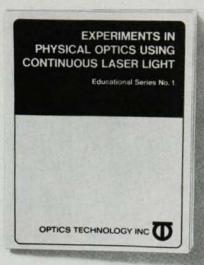
AREA CODE 312

344-2212

MECH-TRONICS NUCLEAR CORP.

1723 North 25th Avenue
Melrose Park, Illinois 60160

At \$2 a copy, we're losing money.



We don't make our money publishing books. But once you've read this one, you should be a pretty good prospect for the various modules in our growing Optical Physics Lab.

You can start with our CW laser, our new holographic camera, our new fiber optics kit, our interferometer, or our physical optics demonstration kit - rugged, quality instruments and components we've pioneered to help you teach "light" more effectively.

Years from now, you'll still be using these teaching modules to demonstrate the whole spectrum of optical phenomena. After all, they were developed by well known physicists and teachers to give you a lifetime of service. Just ask any of the more than 700 schools that have already bought our equipment.

In the meantime, be a big spender and send us two dollars for the new Experiment Book. We'll throw in information about the Optical Physics Lab. For free. If you're not a big spender, just ask for the free information. We'll send it-postpaid.



OPTICS TECHNOLOGY INC

901-77 California Avenue Stanford Industrial Park Palo Alto, California 94304 (415) 327-6600 Sales Offices in Principal Cities

In Europe: UP N.V. S.A. 108, Meersstraat 🔳 Gent, Belgium

CAN YOU ASSUME A MORE RESPONSIBLE POSITION

Our clients, leading national scientific organiza-tions, are seeking scientists of proven ability to assume research and management positions. As these are extremely responsible positions, inter-ested scientists must be able to demonstrate sig-nificant scientific accomplishment in one of the fol-lowing areas:

infrared . nuclear physics . . . thermodynamics
. . radar systems . . . communications theory
. . plasma physics . . semi-conductor research
. . magnetics . . thin films . . inorganics
. . satellite systems . . acoustics . . optics . . . cryogenics . . or thermionics.

Fees and relocation expenses paid by client companies.

If you qualify for these positions offering remuneration up to \$30,000, you are invited to direct your resume in confidence to:

Mr. Vincent A. Nickerson Dept. PT-10



"EMPLOYMENT SPECIALISTS" Serving the scientific community for over 40 years. 150 Tremont Street Boston, Massachusetts 02111 HAncock 6-8400

EDAR GROVE, N. J. 07009 PECIAL

OUARTER-WAVE AND HAIF-WAVE PLATES

IN STOCK: Standard 15 and 20 mm sizes, mica and crystal quartz, first-order and multipleorder types.



 $\lambda/4$ and $\lambda/2$ for laser λ 's, low and high-power applications.

CATALOG UPON REQUEST

one reliable source of optical components for research, development and production

How to put your talents to the test:

Come to IBM in Lexington, Kentucky. There's plenty of opportunity to do state-of-the-art development work with one of IBM's fastest growing divisions.

PHYSICISTS: Advance your career with R&D work in solid state technology, including photo devices, semiconductors, and optics B.S., M.S., or Ph.D.

ELECTRICAL ENGINEERS: Circuit design, logic and system design, solid state technology (including photo devices). 0-10 years' experience and B.S., M.S., or Ph.D.

MECHANICAL ENGINEER: B.S. or M.S. in mechanical engineering to do state-of-art work in development engineering. You'll design, build and analyze mechanical or electro-mechanical systems. And you'll most probably follow through on your designs all the way into production.

TEST EQUIPMENT ENGINEER: Design special test equipment—then supervise its construction. You'll use solid state logic and analog circuitry. Required: B.S. or M.S. in E.E., 0-5 years' experience.

METALLURGISTS: Work in diverse technologies including sintered metals, materials application, ferrous and nonferrous alloys, service failure analysis. B.S. or M.S. and strong background in physical metallurgy required.

At Lexington your family can live in Kentucky's beautiful bluegrass country. And there's a full range of company paid benefits, including tuition refund.

If you want to do challenging work, write:

Mr. Terry Mobley IBM Corporation Dept. UG2-K New Circle Road Lexington Kentucky 40507

IBM

An Equal Opportunity Employer

cer, IPPS, 47 Belgrave Sq., London, SW 1) [2/1] 10/67

AUGUST 1968

- 7-9 Ellipsometry U. OF NEBRASKA

 Lincoln, Neb. (N. M. Bashara) 9/67
- 12–16 🗆 ACA 🗆 Buffalo, N. Y. (D. Harker, Roswell Park Mem. Inst., Buffalo, N. Y. 14203) 10/67
- 21–23 Applications of X-Ray Analysis

 Denver Research Institute
 U. of Denver, Colo. (J. B. Newirk, Metallurgy Dept., U. of Denver, Denver, Colo. 80210)
 10/67
- 21–28 Low Temperature Physics

 OF ST ANDREWS
 St Andrews, Scotland (D. M. Finlayson, School of Physical Sciences, U. of St Andrews, North Haugh, St Andrews, Scotland) 10/67
- 26–31 Applied Mechanics ☐ STANFORD U. ☐ Stanford, Calif. (C. R. Steele, 12th International Congress of Applied Mechanics, PO Box 5789, Stanford, Calif. 94305) [2/2] 10/67
- 26–30 Reactivity in Solids ☐ INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY ☐ Schenectady, N. Y. (R. W. Roberts, General Electric R&D Center, PO Box 8, Schenectady, N. Y. 12301) 10/67

The sessions of this symposium will cover the following topics: crystal structures, surfaces, defects and diffusion processes in chemical reaction involving solids, and the nucleation and growth of new phases in solid state reactions; thermal and photochemical decomposition reactions of inorganic compounds and reactions of elements, alloys and chemical compounds with gases and solutions; production of crystalline solids from reactants in the gaseous phase; chemical reactions in vitreous solids, chemical reactions in high pressure systems.

SEPTEMBER 1968

- 16–21 ☐ 15TH AMPERE COLLOQUIUM ☐ St Martin d'Hères, France (P. Averbuch) 9/67
- 10-15 Magnetic Oxides ☐ INSTITUTE OF PHYSICS OF THE ACADEMY OF SR ROMANIA ☐ Bucharest, Romania (M. Rosenberg, Institute of Physics, Calea Victoriei 114, Bucharest, Romania) 10/67

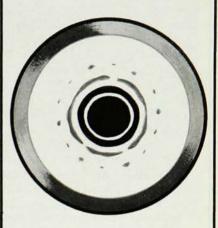
Topics: exchange and magnetic ordering, electronic structure, crystalline field, transport, magnetic anisotropy and after effect, domain structure and magnetization processes, optical properties, Mössbauer effect, magnetic resonance and relaxation, chemical properties and single crystal growth of magnetic oxides, important new applications of magnetic oxide materials.

16–18 • Laser Measurements ☐ INTERNATIONAL SCIENTIFIC RADIO UNION ☐ Warsaw, Poland (S. Hahn, Komitet Narodowy URSI, Warsaw IPPT, Swietokrzyska. 21 Poland) [2/1] 10/67

DECEMBER 1968

16–20 Relativistic Astrophysics SOUTHWEST CENTER FOR ADVANCED STUDIES Dallas (I. Robinson) 9/67

Have you seen your IR lately?



Convert and display infrared or ultraviolet with EOA's new LASERVIEWER*. Observe geometric mode patterns of 1.06, 1.08, 1.15, 3.39, or 10.6 μ lasers.



Salient specifications are:

- May be used over entire IR range. Unit has ultraviolet capability.
- Sensitivity better than one milliwatt/ mm² on high sensitivity screen.
- Will accept beams up to 2 inches in diameter.
- Maximum intensity 100 watts/cm² on high power screen. LASERVIEWER* will accept up to 100 watts CW.
- Image persistence of approximately one second.

The Model EOA-9032 LASERVIEWER* is available now and is priced at only \$295.00.

* Trademark

Ask ELECTRO OPTICS ASSOCIATES, where the Second Generation of Lasers is available now.



ELECTRO OPTICS ASSOCIATES

981 COMMERCIAL AVENUE, PALO ALTO, CALIFORNIA (415) 327-6200