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Calendar

Material for inclusion in the calendar and meeting sections should be received 6 weeks prior to the date of the issue in which it is to appear. Further information can be obtained by writing to the addresses indicated in parentheses.

December

- 17 Wright Brothers Lecture, Washington, D. C. (*Inst. of the Aerospace Sciences*, 2 E. 64 St., New York 21, N. Y.)
- 19-20 Irreversibility & Statistical Mechanics Conf., Queen Mary Col., London (*The Inst. of Physics & The Physical Soc.*, 47 Belgrave Sq., London S. W. 1, England) (See Oct. PT, p. 86)
- 26-31 Am. Assoc. for the Advancement of Science, ann. mtg., NYC (AAAS, 1515 Mass. Ave., N. W., Washington 5, D. C.)
- 27-29 Strong Interactions Conf., U. of Calif., Berkeley (A. C. Helmholz, U. of Calif., Berkeley 4, Calif.) (See Nov. PT, p. 76)
- 27-30 American Astronomical Society, with AAAS in NYC (A. Hynek, Smithsonian Astrophysical Observatory, 60 Garden St., Cambridge 38, Mass.)
- 29-31 American Physical Society, Berkeley, Calif. (W. A. Nierenberg, U. of Calif., Berkeley 4, Calif.)

1961

January

- 8-12 Thermoelectric Energy Conversion, joint technical soc.-Dept. of Defense symp., Statler-Hilton Hotel, Dallas, Tex. (P. H. Klein, Bldg. 3, Rm. 221, General Electric Co., Syracuse, N. Y.)
- 9-11 Reliability & Quality Control, symp. spons'd by PGQC of IRE, AIEE, ASQC, EIA, at Bellevue-Stratford Hotel, Phila., Pa. (R. L. Schroer, ACF Electronics, 11 Park Pl., Paramus, N. Y.)
- 10 Physics Club of Chicago (The Mössbauer Effect by J. Heverle), Younker's Restaurant, Chicago (E. L. Russell, Welch Scientific Co., 1515 Sedgwick St., Chicago 10, Ill.)
- 10 SAS New York Sect. mtg. on Application of Atomic & Molecular Resonance Phenomena for Frequency & Time Control, Stevens Inst. of Technology, Hoboken, N. J. (P. Lublin, General Telephone & Electronics Labs, Bayside, N. Y.)
- 16-18 Am. Astronautical Soc., Sheraton Hotel, Dallas (A. S. Sibilis, Chance Vought Aircraft, Dallas, Tex.)
- 16-19 Instrument Soc. of Am. Instrument-Automation Conf. at Sheraton-Jefferson Hotel and Exhibit at Kiel Auditorium, St. Louis, Mo. (W. H. Kushnick, 313 Sixth Ave., Pittsburgh 22, Pa.)
- 23-26 Am. Meteorological Soc., ann. mtg., NYC (K. C. Spengler, 45 Beacon St., Boston 8, Mass.)

February

- 1-3 Military Electronics Conv. spons'd by PGME of IRE, Biltmore Hotel, Los Angeles (J. J. Myers, Hoffman Electronics Corp., 3717 S. Grand Ave., Los Angeles, Calif.)

- 1-4 American Physical Society, Hotel New Yorker, NYC (K. K. Darrow, 538 W. 120 St., New York 27, N. Y.)
- 1-4 American Association of Physics Teachers, Hotel New Yorker, NYC; send abstracts to M. Correll, DePaul U., Greencastle, Ind. (F. Verbrugge, U. of Minnesota, Minneapolis 14, Minn.)
- 15-17 Solid-State Circuit Conf., internat'l, spons'd by IRE, AIEE, U. of Pa., at U. of Pa. & Sheraton Hotel, Phila. (F. H. Blecher, Bell Telephone Labs, Murray Hill, N. J.) (See Sept. PT, p. 76)
- 20-26 Semiconductor Devices, internat'l symp., Paris (*Fédération Nat'le des Industries Electroniques*, 23 rue de Lubeck, Paris 16, France)
- 27-3 Pittsburgh Conf. on Analytical Chem. & Applied Spectroscopy & New Frontiers in Optics & Spectroscopy Symp., Pittsburgh (W. F. Harris, Westinghouse Electric Corp., Pittsburgh 35, Pa.)

March

- 2-4 Optical Society of America, Pick-Roosevelt Hotel, Pittsburgh, Pa. (Mary Wurga, 1155 16th St., N. W., Washington 6, D. C.)
- 9-10 Engineering Aspects of Magneto-hydrodynamics Symp. spons'd by AIEE, IAS, IRE, at U. of Pa., Philadelphia (N. W. Mather, Project Matterhorn, P. O. Box 451, Princeton, N. J.)
- 20-22 American Physical Society, US Naval Postgraduate School, Monterey (W. A. Nierenberg, U. of Calif., Berkeley 4, Calif.)
- 21-23 APS Division of High-Polymer Physics, Monterey, Calif. (D. W. McCall, Bell Telephone Labs, Murray Hill, N. J.)
- 27-31 Temperature—Its Measurement & Control in Science & Industry, nat'l symp. spons'd by AIP, ISA, NBS, Columbus, Ohio (C. M. Herzfeld, Nat'l Bureau of Standards, Washington 25, D. C.) (See July PT, p. 74)

April

- 4-6 Electromagnetics & Fluid Dynamics of Gaseous Plasma, Polytechnic Inst. of B'klyn symp. spons'd by IRE, IAS, US Defense Research Agencies, at Engineering Soc. Bldg., NYC (M. Bloom, PIB, 55 Johnson St., B'klyn 1, N. Y.)
- 11-13 Ultrapurification of Semiconductor Materials Conf., New England Mutual Hall, Boston (*Electronics Research Directorate*, L. G. Hanscom Field, Bedford, Mass.)
- 15-24 Photography, Cinematography, & Optics, internat'l biennial, Paris (*J. d'Autrevaux, Syndicat Général d'Industrie Photo & Cinéma*, 94 rue de Rennes, Paris 6, France)
- 18-20 Chemical Reactions in the Lower & Upper Atmosphere Symp. spons'd by Stanford Research Inst., at Mark Hopkins Hotel, San Francisco (R. D. Cadle, SRI, Menlo Park, Calif.) (See Aug. PT, p. 62)

Basic Research For Industry

In discussions about industrial research activities, the above phrase usually reads "Basic Research IN Industry," and most observers agree that it must and does exist. In this we concur, adding only that contract research FOR industry by an independent laboratory may oftentimes be more efficient than fundamental studies undertaken within industrial organizations. The reason is that the staff scientists of a not-for-profit independent research laboratory, such as the Physics Division of the Armour Research Foundation, can pursue research of their own interest under sponsorship by any one or several industrial organizations or government agencies. In basic research, self-motivation of the scientist is a major factor which can best be cultivated by an atmosphere in which research for its own sake is possible. In addition, cross fertilization between research programs in different branches of physics can most readily occur when a wide variety of research activities exists in the same laboratory. Furthermore, fundamentally new scientific discoveries made on research programs can be immediately followed up and expanded along lines of interest to either government or industry when both types of sponsorship exist concurrently in the same laboratory. To take maximum advantage of these possibilities, the staff scientists of an independent contract research laboratory must be alert to developing research areas and capable of expanding their own activities to meet the challenge of new ideas. They must have a well-developed sense of scientific self-interest in order to suggest and carry through research programs which can be supported by any of the many possible industrial and government sponsors. The self-satisfaction and financial rewards to the individual scientists of the ARF Physics Division are outstanding. In addition, liberal fringe benefits and four week vacations are provided. We will be pleased to discuss all of these features with senior level research physicists who feel their professional future will blossom in the environment of our Physics Division.

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- Kilomegacycle ultrasonics
- Non-linear magnetostriction
- Sound velocity in liquid-gas mixture
- Sound propagation and weather

CHEMICAL PHYSICS

- Radiation induced polymerization
- Structural effects in radiation chemistry
- Radiation produced free radicals
- Reactions in organic halogen compounds
- Ionization cross sections

NUCLEAR PHYSICS

- k-shell ionization by mesons
- Neutron image intensifiers
- Beta-excited x-ray sources
- Gamma-ray backscattering
- Mossbauer absorption

OPTICS

- Image structure and information theory
- Fiber optics research
- IR and UV backgrounds
- Studies in frustrated total reflection
- Ultraviolet photon counters

PLASMA PHYSICS

- Stability of finite plasmas
- Shock wave induced reactions
- High resolution electron guns
- Gas discharge neutron source
- Modification of the ionosphere

SOLID STATE PHYSICS

- Excess noise in semiconductors
- Organic semiconductors
- High temperature thermoelectricity
- Microwave absorption in solids
- Radiation effects on solid surfaces

REACTOR PHYSICS

- Dust fueled reactor concept (ADFR)
- Radiation streaming
- Critical facility safety
- Radiation heating from nuclear devices
- Boiling water reactor redesign (EBWR)

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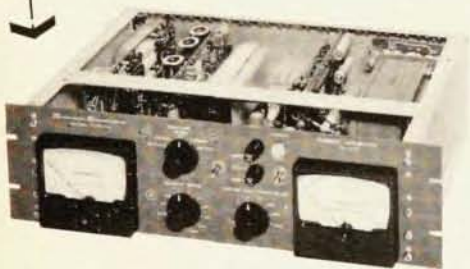
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1961

- 24-26 Nat'l Academy of Sciences, ann. mtg., Washington, D. C. (NAS, 2101 Constitution Ave., Washington 25, D. C.)
- 24-27 American Physical Society, Sheraton-Park Hotel, Washington, D. C. (K. K. Darrow, 538 W. 120 St., New York 27, N. Y.)

May

- 8-9 Topology in Circuit Theory, 5th Midwest Symp. at Allerton Pk. in Monticello, & U. of Ill. in Urbana (M. E. Van Valkenburg, U. of Ill., Urbana, Ill.) (See May PT, p. 73)
- 11-13 Acoustical Society of America, Bellevue-Stratford Hotel, Philadelphia, Pa. (M. E. Hawley, RCA, Moorestown, N. J.)
- 23-25 Large Capacity Memory Techniques for Computing Systems, symp. sponsored by ONR Information Systems Branch, in Dept. of Interior Auditorium, Washington, D. C. (Miss J. Lenn, Code 430A, Office of Naval Research, Washington 25, D. C.)

June

- 4-9 ASTM Comm. E-14 on Mass Spectrometry, Chicago, Ill.; send abstracts before Feb. 1 to R. E. Fox, Westinghouse Research Labs, Pittsburgh 35, Pa. (G. Crable, Gulf Research Center, P. O. Box 2038, Pittsburgh 30, Pa.)
- 12-15 Physics of Electronic & Atomic Collisions, internat'l conf., U. of Colo., Boulder (B. Bederson, New York U., New York 53, N. Y.) (See July '60 PT, p. 75)
- 13-16 Gas Chromatography Symp., biennial internat'l, Kellogg Center, Mich. State U., E. Lansing, Mich. (H. J. Noebels, ISA, 313 Sixth Ave., Pittsburgh 22, Pa.)
- 18-21 American Astronomical Society, Nantucket (A. Hynek, Smithsonian Astrophysical Observatory, 60 Garden St., Cambridge 38, Mass.)
- 20-22 Am. Meteorological Soc. with AAAS Pacific Div., Davis; send abstracts before Jan. 1 to T. V. Crawford, U. of Calif., Davis, Calif. (K. C. Spengler, 45 Beacon St., Boston 8, Mass.)
- 20-24 Vacuum Techniques, internat'l cong., Paris (P. Fleury, Institut d'Optique, 3 blvd. Pasteur, Paris 15, France)
- 22-24 American Physical Society, U. of Mexico, Mexico City (K. K. Darrow, 538 W. 120 St., New York 27, N. Y.)
- 29-1 American Association of Physics Teachers, Stanford U., Palo Alto, Calif. (F. Verbrugge, U. of Minnesota, Minneapolis 14, Minn.)

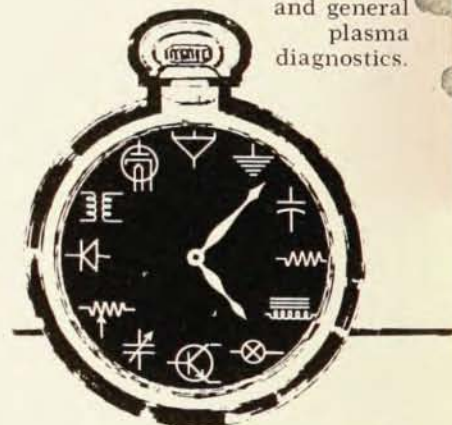
July

- 4-8 Optical Materials, Internat'l Comm. for Optics mtg., Paris (A. Maréchal, Institut d'Optique, 3 blvd. Pasteur, Paris 15, France)
- 6-7 Free Radicals, internat'l symp., Uppsala (Symp. Secretariat, c/o Inst. of Phys. Chem., Uppsala, Sweden)
- 10-14 Optical Instruments & Techniques Conf., arranged by British Nat'l Comm. for Physics under auspices of Internat'l Commission for Optics, London (K. J. Habbell, Nat'l Physical Lab, Teddington, Middlesex, England)
- 31-4 Internat'l Congress of Biophysics, Stockholm (B. Lindström, Karolinska Institutet, Stockholm 60, Sweden) (See Oct. '60 PT, p. 88)

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