

CALENDAR

Meeting announcements intended for inclusion in the calendar should be submitted at least eight weeks before meetings are to take place. Send notices to Physics Today, 335 East 45th Street, New York, N.Y. 10017.

• new announcement

♦ change from previous listing

March 1966

- 15-18 **Optical Society of America** (Washington, D.C.): *Mary E. Warga, 1155 16th St., NW, Washington 6.* (See Jan. PT, p. 158)
- 17-19 Isobaric Spin in Nuclear Physics (Florida State U.), **APS Topical Conf.**; abstracts deadline Feb. 11: *D. Robson, Physics Dept., Florida State U., Tallahassee, Fla.*
- 20-23 Large-Scale Production and Application of Radioisotopes (Augusta, Ga.) spons'd by American Nuclear Lab., *Aiken, S.C.* (See Jan. PT, p. 165)
- 22-23 Biomagnetics (U. of Illinois): *D. J. Hoppe, 116 Illini Hall, U. of Illinois, Champaign, Ill.*
- 22-24 Neutron Cross Section Technology (Washington, D.C.), **APS Topical Conf.**; *W. W. Havens, Jr., Dept. of Physics, Columbia U., 538 W. 120th St., New York, N.Y.* (See Oct. PT, p. 122)
- 26 • **Optical Society of Chicago** (Chicago): *D. A. Pontarelli, IIT Research Institute, 10 W. 35th St., Chicago, Ill.*
- 28-31 **American Physical Society** (Durham, N.C.): *K. K. Darrow, The American Physical Soc., 538 W. 120th St., New York 27, N.Y.*
- Physics Exhibition (London) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England*
- 29-1 Ultraviolet and X-Ray Spectroscopy of Laboratory and Astrophysical Plasmas (Culham Lab) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England* (See Oct. PT, p. 122).
- 30-1 **American Astronomical Society** (Hampton, Va.): *G. C. McVittie, Secretary, U. of Illinois Observatory, Urbana, Ill.*
- Nuclear and Particle Physics (U. of Oxford) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1* (See Oct. PT, p. 122)
- Engineering Aspects of Magneto-hydrodynamics (Princeton U.) spons'd by American Soc. of Mechanical Engrs., Inst. of Electrical and Electronics Engrs., American Inst. of Aeronautics and Astronautics, Princeton U: *G. Jahn, Guggenheim Labs, Forrestal Research Center, Princeton, N.J.*
- 31, 1 Theoretical and Applied Mechanics (U. of South Carolina): *J. D. Waugh, U. of South Carolina, Columbia, S.C.*

April 1966

- 4-7 Scattering, Nonlinear Optics, and Electromagneto-optics (U. of York) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1, England*
- 6, 7 Phonons (U. of Edinburgh) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England* (See Sept. PT, p. 117)
- 6-8 Electron and Laser Beam Technology (Ann Arbor, Mich.) spons'd by U. of Mich., Inst. of Electrical and Electronics Engineers: *J. E. Rowe, U. of Michigan, Ann Arbor, Mich.* (See Jan. PT, p. 158)
- 8, 9 • **APS New England Section** (Brown U.): *A. M. Russell, Scott Lab, Wesleyan U., Middletown, Conn.*
- 11-15 Aeronomic Studies of the Lower Ionosphere (Ottawa) spons'd by Air Force Cambridge Research Labs, Canadian Defense Research Telecommunications Establishment: *W. Pfister, Upper Atmosphere Physics Lab, AFCRL, L. G. Hanscom Field, Bedford, Mass.* (See Jan. PT, p. 165)
- 12 The Operation and Scope of the Ames Laboratory (Chicago) spons'd by Physics Club of Chicago: *M. Lubin, Pioneer Electronic and Research Corp., 743 Circle Ave., Forest Park, Ill.*
- 12-14 Remote Sensing of the Environment (U. of Michigan) spons'd by Air Force Cambridge Research Labs, Office of Naval Research: *C. E. Molineux, Terrestrial Sciences Lab, AFCRL, L. G. Hanscom Field, Bedford, Mass.*
- Generalized Networks (New York City) spons'd by Inst. of Electrical and Electronics Engrs., **Optical Soc. of America**, Soc. of Industrial and Applied Mathematics, Polytechnic Inst. of Brooklyn; *Jerome Fox, Polytechnic Inst. of Brooklyn, 333 Jay St., Brooklyn, N.Y.* (See Dec. PT, p. 96)
- 12-15 Quantum Electronics (Phoenix) spons'd by Quantum Electronics Council: *J. P. Gordon, Bell Telephone Labs, Murray Hill, N.J.* (See Oct. PT, p. 122)
- 13-15 Integration of Teaching Physics and Chemistry (Sheffield) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1.*
- 14, 15 Molecular Interactions and the Crystallography of Ceramics (U. of Nottingham) spons'd by Inst. of Physics and Physical Soc.: *Meeting Officer, IPPS, 47 Belgrave Sq., London SW 1.*

15, 16 • **AAPT Central Pennsylvania Section** (Muhlenberg College): *H. L. Raub, Physics Dept., Muhlenberg College, Allentown, Pa.*

Superconductivity and Superfluidity (Cornell U.), **APS New York State Section**: *J. A. Krumhansl, Lab of Atomic and Solid State Physics, Cornell U., Ithaca, N.Y.*

17-20 Electron and Ion Beam Science and Technology (New York City): *R. Bakish, Electronics and Alloys, Inc., Ridgefield, N.J.*

18-20 Electronic Processes in Low-Mobility Solids (Sheffield) spons'd by Physics Dept, Glass Technology Dept., U. of Sheffield; abstracts deadline Feb. 21: *I. G. Austin, Physics Dept., The University, Sheffield 3, England* (See Jan. PT, p. 160)

19-21 Performance Assessment of High Vacuum Pumps (U. of Sussex) spons'd by Inst. of Physics and Physical Soc.; send abstracts by Feb. 18 to *J. Yarwood, Dept. of Mathematics and Physics, The Polytechnic, Regent St., London W 1; Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England*

Frequency Control (Atlantic City) spons'd by US Army Electronics Command: *M. F. Timm, Electronic Components Lab, US Army Electronics Command, Att: AMSEL-KL-ST, Fort Monmouth, N.J.* (See Dec. PT, p. 96)

19-22 American Geophysical Union (Washington, D.C.): *W. E. Smith, AGU, 1145 19th St., NW, Washington, D.C.* (See Dec. PT, p. 96)

20-22 Magnetics (Stuttgart) spons'd by Inst. of Electrical and Electronics Engrs., German Working Group for Ferromagnetism: *V. L. Newhouse, General Electric Research Lab, PO Box 1088, Schenectady, N. Y.* (See Oct. PT, p. 122)

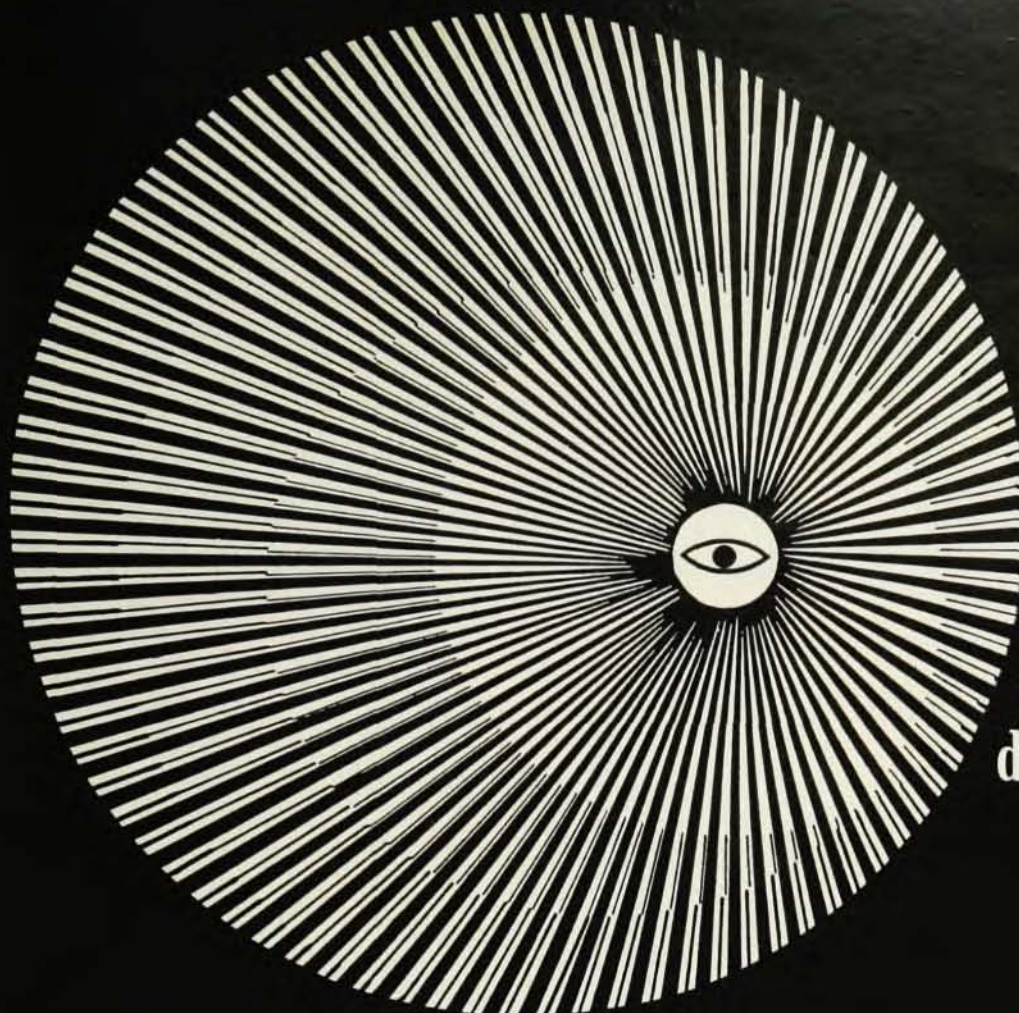
21, 22 Early Stages of Constitutional Change in Metals and Other Materials (Nat'l Physical Lab, Teddington) spons'd by Inst. of Physics and Physical Soc., Nat'l Physical Lab: *Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England* (See Jan. PT, p. 165)

25-28 **American Physical Society** (Washington, D.C.): *K. K. Darrow, The American Physical Society, 538 W. 120th St., New York 27, N.Y.*

May 1966

1-5 • **Point Defects in Crystals** (Washington, D.C.): *A. D. Franklin, Nat'l Bureau of Standards, Washington, D.C.*

2-7 International Commission on Optics (Paris): *Congress Secretariat,*



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in
the
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- Ultrasonic properties of metals
- Real-time data system development
- Transient-free, non-interruptible electric power
- Advanced communication system for naval ships
- *Seeing in the dark*
- Weapons radiation effects evaluation
- New electronics personnel-training techniques
- Shipboard weapons system analyses
- Supersonic water-entry shock environment
- Radar beam behavior in near/far fields of space
- Weapons performance/reliability analysis

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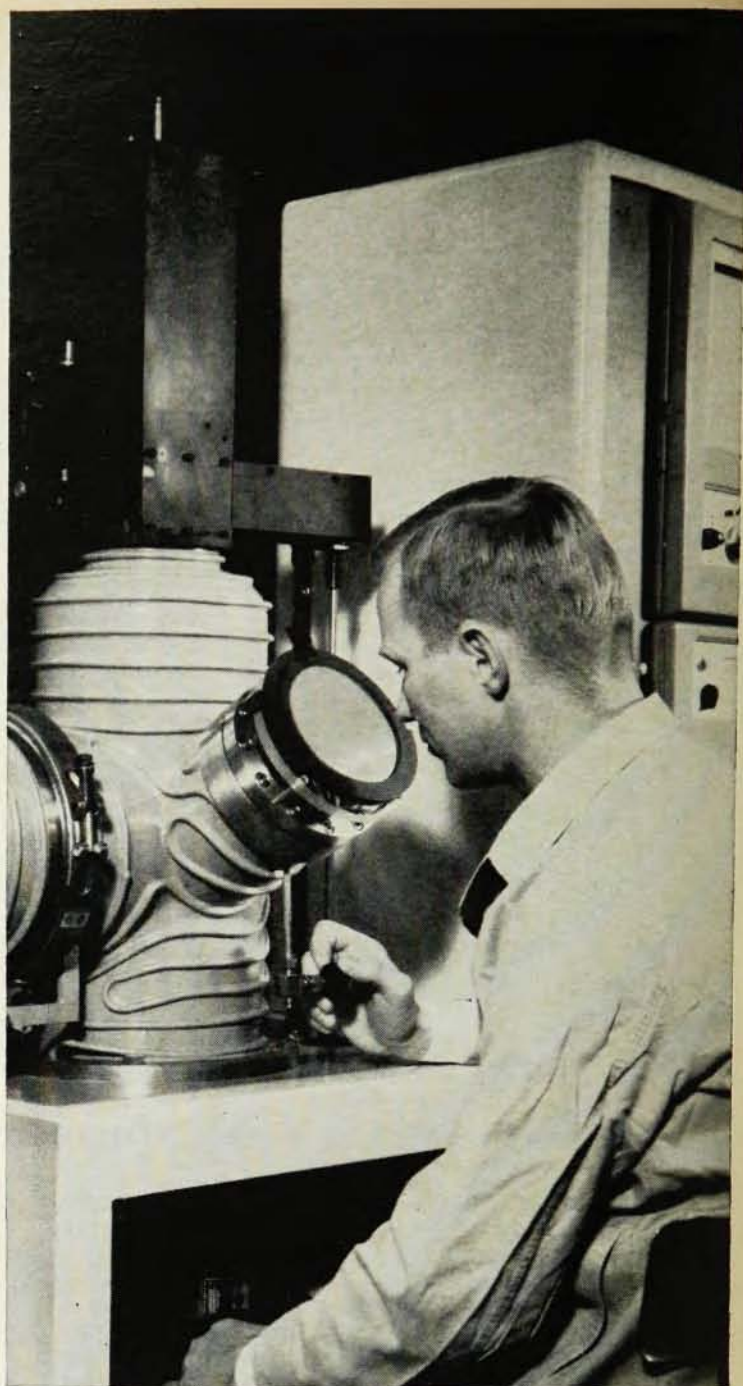
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CIO 7, Institut d'Optique, 3, Blvd. Pasteur, Paris 15, France (See Sept. PT, p. 117)

- 4-6 Electron Probe Microanalysis (College Park, Md.): A. J. Tousimis, Biodynamics Labs, Washington Science Center, 6010 Executive Blvd., Rockville, Md.
- 10 The Clocks of Living Things (Chicago) spons'd by Physics Club of Chicago: M. Lubin, Pioneer Electronic and Research Corp., 743 Circle Ave., Forest Park, Ill.
- 17-19 Fast Breeder Reactors (London) spons'd by United Kingdom Atomic Energy Authority: UKAEA, Charles II St., London SW 1, England
- 20-21 • Surface Physics (Washington State U.): E. E. Donaldson, Physics Dept., Washington State U., Pullman, Wash.
- 31-3 Radiation Stimulation and Molecular Processes (Paris) spons'd by Soc. of Physical Chemistry: G. Emschwiller, SPC, 10 rue Vauquelin, Paris 5, France

June 1966

- 1-4 Acoustical Society of America (Boston); abstracts deadline March 2: L. Batchelder, Raytheon Co., 20 Seyon St., Waltham, Mass.
 - 13-15 Cryogenic Engineering (Boulder) spons'd by U. of Colorado, Nat'l Bureau of Standards; abstracts deadline Mar. 1: K. D. Timmerhaus, Secretary, Cryogenic Engineering Conference, Engineering Research Center, U. of Colorado, Boulder, Colo. (See Jan. PT, p. 162)
 - 13-16 Ceramic Microstructure (U. of Calif., Berkeley): C. V. Peterson, Lawrence Radiation Lab, Bldg. 62, Rm. 205, Berkeley 4, Calif.
 - 13-17 Society for Applied Spectroscopy (Chicago); abstracts deadline Mar. 1: J. E. Burroughs, Borg-Warner Corp., Roy C. Ingersoll Research Center, Wolf and Algonquin Rds., Des Plaines, Ill.
- Molecular Structure and Spectroscopy (Columbus) spons'd by Ohio State U.; abstracts deadline Apr. 1: K. N. Rao, Dept. of Physics, Ohio State U., Columbus, Ohio
- 13-18 American Association for the Advancement of Science (Seattle); abstracts deadline Apr. 1: R. C. Miller, California Academy of Science, San Francisco 18, Calif.
 - 14-17 Applied Mechanics (U. of Minn.): R. Plunkett, 107 Aero Bldg., U. of Minnesota, Minneapolis, Minn. (See Oct. PT, p. 125)
 - 16-18 American Association of Physics Teachers (Montana State U., Bozeman): A. B. Arons, Physics Dept., Amherst College, Amherst, Mass.

Liquid Helium Technology (Boulder) spons'd by International Institute of Refrigeration Commission 1; abstracts deadline Mar. 1: IIR Commission 1 Symposium, Cryogenic Div., National Bureau of Standards, Boulder, Colo. (See Jan. PT, p. 162)

Microwave Theory and Technique (Palo Alto, Calif.) spons'd by

Inst. of Electrical and Electronics Engrs.: IEEE, 345 E. 47th St., New York, N. Y.

- 19-23 American Nuclear Society (Denver): O. J. Du Temple, ANS, 244 E. Ogden Ave., Hinsdale, Ill.
- 20-22 American Physical Society (Minneapolis); abstracts deadline Apr. 18: R. G. Sachs, PO Box 344, Argonne, Ill.
- 20-24 Crystal Growth (Boston) spons'd by Air Force Cambridge Research Labs: M. Schieber, 40 Acorn Pk., Cambridge, Mass.
- 21-23 Precision Electromagnetic Measurements (Boulder, Colo.) spons'd by Nat'l Bureau of Standards, Inst. of Electrical and Electronics Engrs., Internat'l Scientific Radio Union: J. Cronland, Bureau of Continued Education, U. of Colorado, Boulder, Colo. (See Nov. PT, p. 111)
- 22-24 Coherence and Quantum Optics (Rochester); abstracts deadline Mar. 10: E. Wolf, Dept. of Physics and Astronomy, U. of Rochester, Rochester, N. Y. (See Oct. PT, p. 125)
- 26-2 Radiation Research (Belluno, Italy) spons'd by Internat'l Assoc. of Radiation Research: G. Silini, Secy-General, Third Internat'l Congress of Radiation Research, Casella Postale 2359, Rome A-D, Italy (See Dec. PT, p. 96)
- 27 (through Aug. 5) International School of Nonlinear Mathematics and Physics (Munich); application deadline Mar. 1: N. J. Zabusky, Nonlinear School, Bell Telephone Labs, Whippany, N.J.
- 27-30 Health Physics Society (Houston): O. L. Pirtle, Jr., Hastings Radiochemical Works, PO Box 60448, A. N. S., Houston, Tex.

July 1966

- 4-8 Rarefied Gas Dynamics (Oxford); abstracts deadline March 1966: C. L. Brundin, Dept. of Engineering Science, U. of Oxford, Parks Rd., Oxford, England (See Oct. PT, p. 125)
- Magnetohydrodynamic Electrical Power Generation (Salzburg) spons'd by European Nuclear Energy Agency, Internat'l Atomic Energy Agency: ENEA, 38 Blvd. Suchet, Paris, France
- 4 • (through Aug. 27) High Energy Astrophysics (Les Houches, France), U. of Grenoble summer school, applications deadline Mar. 1: C. De Witt, Physics Dept., U. of N. Carolina, Chapel Hill, N.C. (See Nov. PT, p. 96)
 - 7, 8 Spectroscopy and Automation (U. of Bristol) spons'd by Inst. of Physics and Physical Soc.: Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England (See Jan. PT, p. 158)
 - 11-16 Statistical Mechanics and Thermodynamics (Copenhagen): T. A. Bak, H. C. Oersted Inst., U. of Copenhagen, Copenhagen, Denmark
 - 12-21 International Union of Crystallography (Moscow) spons'd by Academy of Sciences of the USSR, Internat'l Union of Crystallography:



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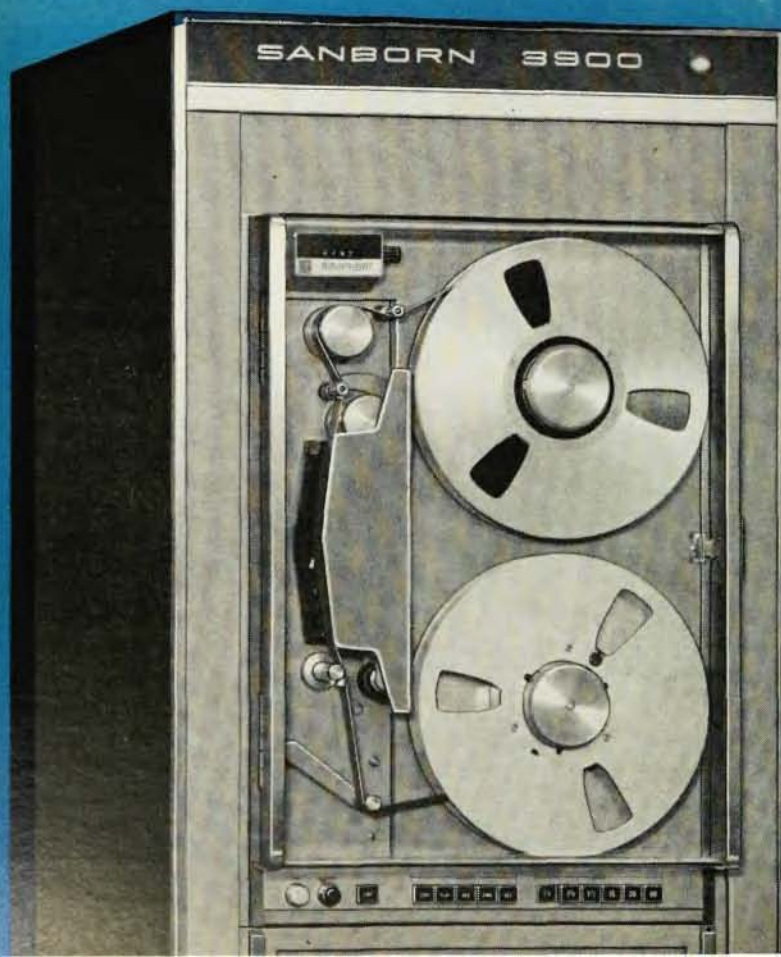
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60 ips	300-250 KC	± 3 db	35 db	29 db
15 ips	100-62.5 KC 300-44 KC	± 3 db	32 db 38 db	27 db
1 7/8 ips	50-7 KC 300-5 KC	± 3 db	30 db 39 db	26 db

*Measured with bandpass filter at output with an 18 db/octave rolloff

FM MODE

Tape Speed	Bandwidth	Frequency Response	FM Center Carrier Frequency (Nominal)	S/N Ratio* Without Flutter Comp.	Total Harmonic Distortion
60 ips	0-20 KC	+0, -1db	108 KC	45 db	1.5%
15 ips	0-5 KC	+0, -1db	27.0 KC	45 db	1.5%
1 7/8 ips	0-625 cps	+0, -1db	3.38 KC	40 db	1.8%

*Noise measured over full bandwidth, min. rms at zero freq. dev., with lowpass filter placed at output. Filter has 18 db/octave rolloffs.

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Drive Speed Accuracy: $\pm 0.25\%$.

FLUTTER

Speed	Bandwidth	Flutter (p-p)
60 ips	0-200 cps 0-10 KC	0.2 % 0.6 %
30 ips	0-200 cps 0-5 KC	0.2 % 0.8 %
15 ips	0-200 cps 0-2.5 KC	0.25 % 0.6 %
7 1/2 ips	0-200 cps 0-1.25 KC	0.5 % 0.65 %
3 3/4 ips	0-200 cps 0-625 cps	0.5 % 0.8 %
1 7/8 ips	0-200 cps 0-312 cps	0.8 % 1.2 %

HEWLETT
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DIVISION

J. Ibers, Dept. of Chemistry,
Northwestern U., Evanston, Ill.
(See Oct. PT, p. 125)

August 1966

- 21-25 Electron Microscopy Society of America (San Francisco): G. Thomas, Dept. of Mineral Technology, U. of California, Berkeley 4, Calif.
- 23-30 Luminescence (Budapest) spons'd by Internat'l Union of Pure and Applied Physics, Hungarian Academy of Sciences: G. Szigeti, Research Inst. for Technical Physics, Hungarian Academy of Sciences, Budapest, POB: Ujpest 1, No. 76, Hungary (See Oct. PT, p. 127)
- 26-29 Calorimetry below 20°K (Helsinki), spons'd by Internat'l Union of Pure and Applied Physics, Finnish Physical Soc., Finnish Inst. of Technology; abstracts deadline May 1: O. V. Lounasmaa, Dept. of Technical Physics, Inst. of Technology, Otaniemi (Helsinki), Finland
- 29-31 American Physical Society (Mexico City); abstracts deadline May 27: K. K. Darrow, The American Physical Society, 538 W. 120th St., New York 27, N.Y.
- Mathematical Association of America (Rutgers U.): R. Hailpern, U. of Buffalo, Buffalo, N. Y.
- 31-6 • Low Temperature Physics (Moscow) spons'd by Internat'l Union of Pure and Applied Physics: J. F. Allen, Physics Dept., St. Salvator's College, U. of St. Andrews, Fife, Scotland

September 1966

- 5-7 Rare Earths (U. of Durham) spons'd by Inst. of Physics and Physical Soc.; send abstracts by June 24 to W. D. Corner, Dept. of Physics, South Road, Durham; Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England
- 5-9 International Organization for Pure and Applied Biophysics (Vienna); abstracts deadline May 15: E. Weidenhaus, Viennese Medical Academy, Alserstr. 4, Vienna 9, Austria (See Sept. PT, p. 119)
- 5-10 Magnetic Resonance and Relaxation (Ljubljana), 14th Colloque AMPERE, spons'd by Yugoslav Federal Council for Coordination of Research, Nuclear Energy Commission, Groupement AMPERE: Secretary, 14th Colloque AMPERE, Nuclear Institute "Jozef Stefan," Ljubljana, Yugoslavia (See Oct. PT, p. 127)
- International Radiation Protection Association (Rome); abstracts deadline Mar. 31: C. Polvani, IRPA, Casella Postale 2359, Rome, Italy (See Jan. PT, p. 158)
- 6-10 • Molecular Structure and Spectroscopy (Ohio State U.): K. Narahari Rao, Molecular Spectroscopy Symp., Physics Dept., Ohio State U., 174 W. 18th Ave., Columbus, Ohio
- 8-13 Physics of Semiconductors (Tokyo) spons'd by Physical Soc. of

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Japan, Internat'l Union of Pure and Applied Physics: *G. M. Hato-yama, PSI, Hongo, PO Box 28, Tokyo, Japan*

9, 10 • High Energy Physics Instrumentation (Stanford): *W. K. H. Panofsky, Stanford Linear Accelerator Center, Stanford U., Stanford, Calif.*

12-14 • Applications of Generalized Functions to System Theory (State U. of New York, Stony Point) spons'd by Soc. for Industrial and Applied Mathematics; abstracts deadline July 11: *A. H. Zemanian, Dept. of Applied Analysis, State U. of New York, Stony Brook, N.Y.*

12-17 • Nuclear Physics (Gatlinburg, Tenn.) spons'd by Oak Ridge Nat'l Lab, Atomic Energy Commission, Internat'l Union of Pure and Applied Physics; abstracts deadline July 22: *A. Zucker, Internat'l Conf. on Nuclear Physics, ORNL, PO Box X, Oak Ridge, Tenn.*

19-23 • Liquid Metals (Brookhaven Nat'l Lab) spons'd by Atomic Energy Commission, Internat'l Union of Pure and Applied Physics; send abstracts to *A. Paskin, Metallurgy and Materials Science Div., BNL: J. R. Weeks, Metallurgy and Materials Science Div., BNL, Upton, Long Island, N.Y.*

21-23 • Nuclear Physics (U. of Glasgow) spons'd by Inst. of Physics and Physical Soc.: *Meetings Officer, IPPS, 47 Belgrave Sq. London SW 1, England*

Physics of Semiconducting Compounds (U. of Wales) spons'd by Inst. of Physics and Physical Soc.; send abstracts by July 1 to *R. H. Jones, Dept. of Physics, University College of Swansea, Singleton Park, Swansea: Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England (See Jan. PT, p. 160)*

28-30 Physical Basis of Yield and Fracture (U. of Oxford) spons'd by Inst. of Physics and Physical Soc.: *Harlow, Essex: Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England*

October 1966

9-15 XVIIth International Astronomical Congress (Madrid) spons'd by International Astronomical Federation: *IAF, 250 rue Saint-Jacques, Paris 6, France (See Jan. PT, p. 160)*

17-21 • Nuclear Data—Microscopic Cross Sections and Other Data Basic for Reactors (Paris) spons'd by Internat'l Atomic Energy Agency: *J. H. Kane, Chief, Internat'l Confs. Branch, Div. of Technical Information, US Atomic Energy Agency, Washington, D.C.*

17-22 • German Physical Society (Munich): *K. H. Riewe, Postfach 169, (Heraeus), 645 Hanau, Germany*

19-22 Optical Society of America (San Francisco): *Mary E. Warga, 1155 16th St., NW, Washington 6, D.C.*