Opportunities in Experimental and Theoretical Research

GODDARD SPACE FLIGHT CENTER

The Goddard Space Flight Center, the National Aeronautics and Space Administration, is engaged in a program of basic research covering all phases of experimental and theoretical physics associated with the exploration of space. Opportunities exist for physicists, geophysicists, and astronomers in the program, which emphasizes the following areas:

**PLANETARY SCIENCES**
Atmospheres of the Moon and Planets; ionospheric physics; atomic and electronic interactions; planetary interiors; geodesy; the lunar surface and interior; meteor physics.

**ASTRONOMY**
Interstellar and intergalactic media; stellar structure; cosmology; relativity; development of new astronomical instruments for use in rockets, satellites and space probes.

**SOLAR PHYSICS**
Solar-terrestrial relationships; measurements in the ultraviolet and x-ray regions of the spectrum.

**METEOROLOGY**
Synoptic satellite and rocketsonde studies; theoretical meteorology.

**PLASMA PHYSICS**
Magnetofluid flow; magnetic fields and particle populations in space; cosmic rays.

Address your inquiry to:
Dr. Michael J. Vaccaro
Goddard Space Flight Center

N A S A
4555 Overlook Avenue, S.W.
Washington, D.C.

September


1–7. History and Philosophy of Science (General Assembly, History Div., Intern. Union of the History and Philosophy of Science), Barcelona, Spain. (R. Taton, IUHPS, 64, rue Gay-Lussac, Paris 5°, France.)


1–7 Oct. International Civil Aviation Organization (Meteorological Div.), Montreal, Canada. (ICAO, Maison de l’Aviation Internationale, Montreal, Canada.)


2–5. American Mathematical Soc. and Mathematical Assoc. of America (joint summer), Salt Lake City, Utah. (E. Pitcher, AMS, Lehigh Univ., Bethlehem, Pa.)

2–8. Foundations of Mathematics: Infinitistic Methods, symp., Warsaw, Poland. (A. Mostowski, Dept. of Mathematics, Univ. of California, Berkeley 4.)

2–9. British Assoc. for the Advancement of Science, 121st annual, York, England. (Secretary, BAAS, 18 Adam St., Adelphi, London, W.C.2, England.)


3–5. Nephrology, 1st intern. cong., Geneva, Switzerland, and Evian, France. (G. Richet, Hospital Necker, 149, rue de Sevres, Paris 7°, France.)


4–7. International Federation of Surveyors, annual (by invitation), Gracow, Australia. (IFS, 4, Kanaalweg, Delft, Netherlands.)

5–11. Application of Radiation Sources in Industry, intern. conf., Warsaw, Poland. (P. Fent, IAEA, Vienna, Austria.)

8–12. Standards on a Common Language for Machine Searching and Translation, intern. conf., Cleveland, Ohio. (Secretariat, Center for Documentation and Communication Research, Western Reserve Univ., Cleveland 6.)

New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable, and it reflects the claims of the manufacturer or other source. Neither Science nor the writer assumes responsibility for the accuracy of the information. A coupon for use in making inquiries concerning the items listed appears on page 182.

- **Vacuum-Tube Voltmeter** displays on two separate meters the r.m.s. values of both in-phase and quadrature components of input signal voltage with respect to a given sine wave reference voltage of the frequency. Frequency range is 20 cy to 20 kcy/sec. Voltage ranges are 15 mv to 20 v for the reference and 15 mv to 15 v for the signal. Input impedance is greater than 50 megohm in parallel with 13 pf. Accuracy of ±2 percent of full scale is claimed. (Solartron, Inc., Dept. 922)

- **Pulse Generator** delivers evenly spaced pulses of positive or negative polarity. A mercury relay is used to obtain fast rise and exponential decay approximating those produced by radiation detectors. Output is adjustable from 1 μv to 10 v by means of a ten-turn potentiometer. Dimensions are 7 by 8 by 10 in. (Atomic Accessories, Inc., Dept. 929)

- **Photoelectric Tape Reader** accepts five-, six-, or seven-channel numeric tape for computer input. Speed of operation is 400 characters per second. Starting and stopping are effected on one character. No reels are used to carry rolls of tape up to 500 ft in length. A winder keeps the tape neatly rolled at all times. (Bendix Computer Division, Dept. 930)

- **Vibration Recorder** is a hand-held instrument for recording vibration amplitudes of machinery. The device is available with either ink or waxed-paper recording. The record is produced on 1-in. wide tape 350 ft long. Magnification is adjustable from 2 to 20 times. Frequency range is 0 to 20,000 cy/min, and amplitude range is 0.0004 to 0.800 in. Tape speed is 70 to 275 in./min., and running time is ½ to 4½ min. Weight is 4½ lb. (Korland Co., Dept. 928)

- **Recorder - Controllers** of circular-chart type are equipped with either electric or pneumatic controls. All models include a constant-voltage supply that eliminates batteries, standard cells, and standardizing mechanism. Accuracy is ±0.25 percent of full scale or ±0.25 mv. Full-scale pen travel is 4½ in. with 5, 10, and 20 sec response time. Chart diameter is 12 in. Standard chart speeds range from 1 hr to 7 days/rev. (Daystrom, Inc., Dept. 935)

Joshua Stern
National Bureau of Standards
Washington, D.C.
New Products
JOSHUA STERN

Science 130 (3368), 178.
DOI: 10.1126/science.130.3368.178