many years with the physics program at the National Science Foundation and is now on leave from his job with the Commerce Department in Washington.

W. Lewis Hyde, provost of University Heights of New York University, is president-elect of the Optical Society of America, effective 1 Jan. New directors-at-large are James L. Harris of the University of California at San Diego, William L. Wolfe of Honeywell Radiation Center and Peter Franken of the University of Michigan.

Elected vice-president-director of research for General Telephone & Electronics Laboratories is Paul E. Ritt.

John W. DeWire has been named associate director of the Cornell University Laboratory of Nuclear Studies. DeWire's emphasis will be on coordination of research activities at Cornell's 10-GeV synchrotron.

At the University of Rochester Albert Simon was appointed professor.

Gordon A. Newkirk was appointed associate director of the National Center for Atmospheric Research and director of the NCAR High Altitude Observatory. He is also professor adjoint at the University of Colorado.

H. A. Sandmeier is on a six-month leave from the University of California, Los Alamos Scientific Laboratory, to serve as visiting professor at the University of Stuttgart, Germany.

Named chairman of the Atomic Energy Commission Advisory Committee on Isotopes and Radiation Development is John W. Landis.

The University of Massachusetts, Amherst, dept of physics and astronomy promoted Leroy F. Cook and Phillips R. Jones to professor. Appointed associate professors are Dietrich Freytag and Gerald A. Peterson, formerly of CERN and Yale respectively. Richard G. Huguenin of Harvard was appointed associate professor of astronomy; Allan R. Hoffman of Brown and James F. Walker of MIT are assistant professors and William A. Dent is assistant professor of astronomy.

Everett M. Hafner, previously with the University of Rochester, has become dean of the School of Natural Science of Hampshire College in Amherst, Mass.

An associate chemist for Argonne National Laboratory, **Donald L. Horrocks**, was named assistant editor of *Applied Spectroscopy*.

Brian J. Thompson has become director of the University of Rochester Institute of Optics and professor of optics. He was formerly general manager of the West Coast branch of Technical Operations, Inc.

R. WALTER CUNNINGHAM, one of the three astronauts on the 11-day Apollo 7 earth-orbital flight, is a physicist. Marsh W. White, Sigma Pi Sigma president, tells us he is a member of that organization and the American Geophysical Union. Cunningham took his bachelor's and master's degrees in physics at UCLA and had nearly completed his doctorate when he entered the space program as a civilian astronaut.

Donald P. Burcham has been promoted to manager of the Jet Propulsion Laboratory space sciences division.

Kuo Wei Chang was appointed senior scientist at Space Sciences Inc.

John Wheeler Receives AEC 1968 Enrico Fermi Award

The 1968 Enrico Fermi Award, given by the Atomic Energy Commission,



will go this month to John Archibald Wheeler. He is the Joseph Henry Professor of Physics at Princeton and is honored for his pioneering contributions to understanding nuclear fission

wheeler ing nuclear assion and to developing the technology of plutonium-production reactors and his continuing broad contributions to nuclear science.

The award, which includes \$25 000, a gold medal and a citation, is named

for Enrico Fermi, who helped achieve the first sustained controlled nuclear reaction.

Wheeler served in 1943 as consultant and guide to the du Pont Company in the design and construction of the Hanford reactors. He urged a conservative design to overcome the Xe¹³⁵ poisoning which appeared when reactors began to operate in 1944. He also worked on reactor shielding theory, reactor control and problems of reactor heating. After the war, at Los Alamos and Princeton, he made fundamental contributions to the work on thermal fusion, both explosive and controlled.

In 1946 Wheeler was a pioneer in the theory of positronium and later in the theory of muons and muonic atoms. He was among the first to consider the effects of rotational and vibrational degrees of freedom in accounting for low-lying excited states of nuclei. Wheeler also studied the application of optical dispersion relations to elementary-particle physics.

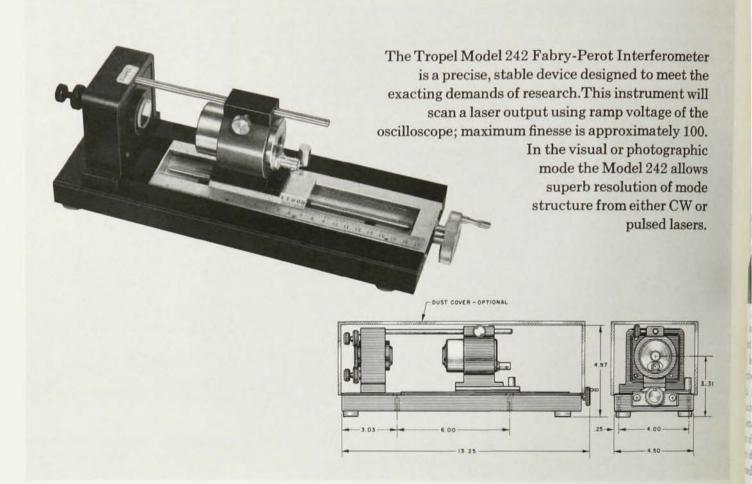
ASA Honors Hale Sabine For Architectural Acoustics

The Acoustical Society of America has honored Hale J. Sabine with its Wallace Clement Sabine Award. The award recognizes Sabine's contributions to the theory and practice of architectural acoustics, his studies of the theory of sound absorbing materials and his leadership in the development of standard procedures for measuring acoustical properties of materials.

The award is given every two years

TROPEL MODEL 242

PLANO FABRY-PEROT INTERFEROMETER, 0-170 mm SEPARATION



SPECIFICATIONS:

Entrance Aperture: .625"
Exit Aperture: .750"
Mirror Separation: .1mm

Mirror Separation:
X-Y Adjustments:

Z Adjustment:

Imm to 170mm
Differential 500 Pitch,
Coarse Adjustments
Rapid Advance and
Locking Mech. with

40 Pitch Fine Adjustment

Scales & Vernier: Accurate Readout of Mirror Separation to .10mm

Locking Mech. with 40 Pitch Fine

> e Readout of (Tr eparation Mi

Scanning Head: Deflection .65µ

per 100 V. 1500 V Max. Tropel Model 245 Pz

Drive

Mirrors: Reflectance: >99.0% Absorption: <0.1%

Flatness: $\lambda/50$ Available over 3
Spectral Regions
(Tropel Model #130

Mirrors)

Base Mountings:

ntings: Magnetic or 1/4-20

Scanning Diode: Cap Screws
Sensitive thru .35 to

1.15µ with BNC Connector

*PRICE COMPLETE: \$191000

including dust cover FOB Fairport, N. Y.

*Subject to change without notice

For further information contact

TROPEL, INC.

Designers and Manufacturers of Precision Optical Systems and Instruments

52 WEST AVENUE FAIRPORT, N. Y. 14450

PHONE: (716) 377-3200

to a member who has significantly contributed to the field of architectural acoustics. Sabine is the manager of the sound laboratory of Owens-Corning Fiberglas Technical Center, where he directs acoustical research and technical support activities. Sabine has contributed to measuring flow resistance and impedance, evaluating and predicting the performance of line ducts and developing testing techniques for transmission loss and reverberation chamber absorption.

John Bardeen Is Recipient of Michelson-Morley Award

The Albert A. Michelson-Edward W. Morley Award of Case Western Re-



BARDEEN

serve University
was presented to
John Bardeen, professor of physics
and electrical engineering at the University of Illinois.
Bardeen was cited
for his contributions to the theory

of solid state, especially for development of the theory of superconductivity leading to new insights into collective electronic phenomena in solids and for pioneering applications of quantum theory to surface properties of semiconductors leading to the invention of the transistor. The award consists of \$5000 and a silver plaque; it is named for the scientists who disproved the concept of an ether which permeated the universe. Bardeen was corecipient of the Nobel Prize in 1956 for his work on the transistor and is currently president of the American Physical Society.

Babcock, Glass Scientist, Joins Arizona Optical Center

Clarence L. Babcock, a glass scientist at Owens-Illinois, Inc for 34 years, has begun a new career at the age of 64. He has become research professor of optical sciences at the new University of Arizona Optical Sciences Center in Tucson. The center, unique in the US, offers master's and doctor's degrees in optical sciences in addition to research on and instruction in the development and fabrication of optical devices for space, defense, astronomy and industry.

Babcock is responsible for research

Computer Performance; Calculator Price.



WANG 380

640 Program Steps 24 Storage Registers LOG_eX, e^x , X^2 , \sqrt{x} , $\frac{1}{x}$, +, -, X, \div Performs Subroutines, Loops, Branches, Makes Decisions.

No special programming language needed. The Wang 380 learns programs directly from keyboard operations and stores them on plug-in magnetic tape cartridges.

You can tailor system capability to your exact needs with compatible accessories including:

Output Writer, CRT Display, additional Data Storage, Teletype, Trig Pack, and On-line Interface.

There is nothing comparable, anywhere.



Dept. 12AN, 836 North St., Tewksbury, Massachusetts 01876 • Tel. 617 851-7311

Call today	all today for immediate trial:			(601) 982-1721	(714) 234-5651
(201) 241-0250 (203) 223-7588 (203) 288-8481 (205) 595-0694 (206) 622-2466 (212) 682-5921 (213) 278-3232	(215) 642-4321 (216) 333-6611 (301) 588-3711 (301) 821-8212 (303) 364-7361 (304) 344-9431 (305) 564-3785	(309) 674-8931 (312) 889-2254 (313) 278-4744 (314) 727-0256 (317) 631-0909 (402) 341-6042 (404) 457-6441	(415) 454-4140 (415) 692-0584 (504) 729-6858 (505) 255-9042 (512) 454-4324 (513) 531-2729 (517) 835-7300 (518) 463-8877	(602) 265-8747 (608) 244-9261 (612) 881-5324 (615) 588-5731 (616) 454-4212 (617) 851-7311 (702) 322-4692 (703) 877-5535	(716) 381-5440 (717) 397-3212 (805) 962-6112 (816) 421-0890 (817) 834-1433 (901) 272-7488 (916) 489-7326
(214) 361-4351	(305) 841-3691	(405) 842-7882	(601) 234-7631	(713) 668-0275	(919) 288-1695