

Medals of Science to Dicke, Sandage, Slater, Wheeler

Four of the nine National Medals of Science awarded in 1970 went to three physicists and an astronomer: Robert H. Dicke (Princeton), Allan R. Sandage (Cal Tech), John C. Slater (University of Florida) and John A. Wheeler (Princeton). The National Medals of Science, presented annually since 1962, represent the highest award of the US Government for "outstanding contributions to scientific and engineering development."

Dicke's award is for his work in pioneering the development of radar and microwaves and for his contributions to the study of the nature of the universe. He is currently the chairman of the physics department at Princeton, where he has been a faculty member since 1946. His interest in microwave devices dates from his earlier association (1941-46) with the Radiation Laboratory at Massachusetts Institute of Technology.

The award to Sandage is for his contributions in extending man's knowledge and understanding of the universe. Most notable among these contributions are his discovery of quasi-stellar sources and work on stellar evolution. With a University of Illinois bachelor's degree and a PhD soon to be awarded by Cal Tech, Sandage joined the Mount Wilson and Palomar Observatories in 1952 as a staff member. He is still with Cal Tech at the now renamed Hale Observatories.

Slater's medal is for his contributions to the basic theory of atoms, molecules and matter in solid form. Significant among these contributions are his applications of quantum mechanics to molecular structure and to crystals. After taking a PhD at Harvard in 1923 Slater remained at Harvard as a faculty member for six years. Then, in 1930, he started his long association with MIT—as chairman of the physics department for 21 years and as Institute Professor for a further 15 years. Upon retiring from MIT in 1966, he took up his present post as graduate research professor of physics and chemistry at the University of Florida.

Wheeler receives his medal for contributions to the theory of nuclear fission and his work on gravitational and

electromagnetic phenomena. He has been with the Princeton faculty since 1938; earlier he had worked at the University of Copenhagen with Niels Bohr, at New York University and at the University of North Carolina. Currently he holds the Joseph Henry chair of physics at Princeton.

Warren P. Mason to receive ASA Gold Medal

The Acoustical Society of America has chosen Warren P. Mason to receive its highest award, the Gold Medal. The award, which was established in 1954 and is bestowed biennially, was presented to Mason during the April meeting of the ASA in Washington, D. C. Mason is being cited for his contributions as a "physicist, engineer, inventor, author and teacher . . . in advancing the



MASON

technology of electroacoustics for half a century."

Mason, who officially retired in 1965 after 44 years of association with Bell Telephone Laboratories, was specifically cited for his electromechanical filters (considered to be the keystone of carrier-frequency telephony) and his research on piezoelectric crystals and ceramics, which enabled the generation of high acoustic power under water. At Bell Labs he also studied or supervised research in adhesion and friction in metals, photoelasticity, ultrasonic delay lines, high-pressure effects and the mechanical properties of materials in the ultrasonic- and hypersonic-frequency regions.

Currently Mason is spending quarter-time with the Institute for the Study of Fatigue and Reliability at George Washington University. Since his retirement he has also spent time with Columbia University.

Burton, Ogle and Sewell are AEC citation recipients

Three physicists were among the four nuclear scientists to receive the Atomic Energy Commission's citation for outstanding contributions to the US atomic energy programs. The recipients were Milton Burton, director of the University of Notre Dame Radiation Laboratory; William E. Ogle, test division leader of Los Alamos Scientific Laboratory, and Duane C. Sewell, associate director of the University of California's Lawrence Radiation Laboratory at Livermore. The citation, which was established in August 1960, consists of a gold medal and a parchment scroll.

Burton was cited for determining the effect of intense radiation on a variety of materials and pure substances, particularly graphite and water, and thus influencing the design and operation of the first production reactors. He was further cited for his role in establishing the University of Notre Dame Radiation Laboratory, of which he has been director since 1947.

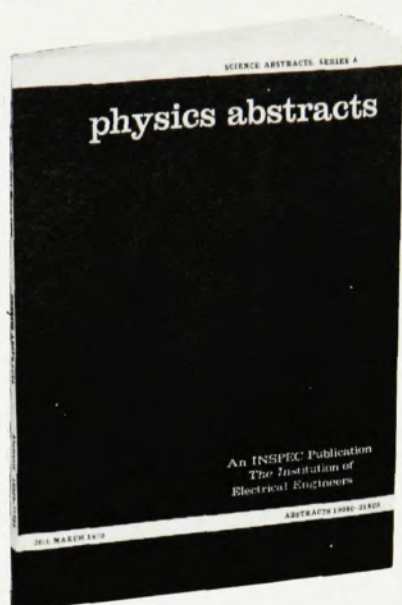
Ogle was cited for his "leadership and participation in the nuclear weapons test program of the Los Alamos Scientific Laboratory since 1944 and as test division leader since 1965."

Sewell was honored for his contributions to the uses of nuclear energy first as director of scientific operations at Livermore, and later as associate director there. He was also cited for his service to the General Advisory Committee of the AEC as scientific adviser from 1963 to 1968.

Anthony J. DeMaria has been appointed chief physicist of the electromagnetics laboratories at United Aircraft Research Laboratories.

Edwin J. Schillinger has returned to full-time physics teaching and research at DePaul University, after four years as dean of the university's college of liberal

physics abstracts



a full library service for literature searching.

in each issue:

Author index: alphabetical list of authors' names with abstract number...

Bibliography index: lists articles written specifically as bibliographies or carrying enough citations to be useful as bibliographies. Entries in alphabetical order of short title; include number of citations and abstract number of each bibliography...

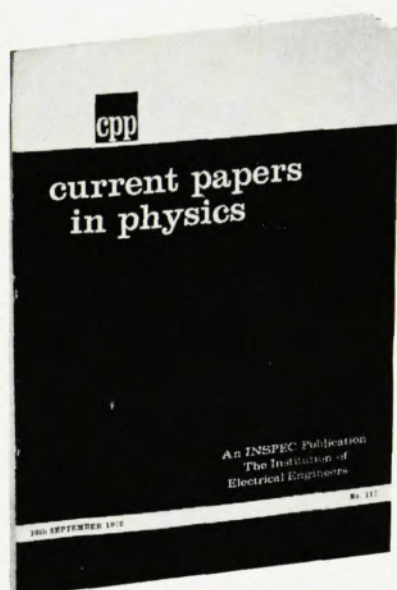
Book index: short titles of books, authors', editors' and publishers' names and abstract number...

Conference index: details of papers from special conference publications or periodical journals. Entries include short title, conference location, date, sponsors and abstract number...

Patent index: patent numbers in order, by country, with short title, assignee or inventor name and abstract number...

Report index: primary report numbers in order, by issuing authority, with short title and abstract number.

current papers in physics



...records and classifies titles and bibliographic details of original publications

...alerts scientists and engineers to the latest periodical journal literature.

AMERICAN INSTITUTE OF PHYSICS
335 East 45th Street, New York, N.Y. 10017
Dear Sirs,

Please enter my subscription(s) as follows:

	*Member	Non-member
CURRENT PAPERS IN PHYSICS Fortnightly—January-December 1971 ..	☐ \$ 14.40	☐ \$ 28.80
PHYSICS ABSTRACTS Fortnightly—plus separate semiannual subject and author indexes— January-December 1971	☐ \$264.00	☐ \$264.00
PHYSICS ABSTRACTS Concurrent microfiche editions	☐ \$264.00	☐ \$264.00
PHYSICS ABSTRACTS Microfiche and printed editions	☐ \$396.00	☐ \$396.00

☐ check enclosed ☐ please bill

(Make checks payable to the American Institute of Physics)

*I am a member of _____
an AIP Member Society

Signature _____

Name _____
(please print)

Address _____

City _____

State _____ Zip _____

we hear that

arts and sciences. Also joining the department are **Donald O. Van Ostenburg**, formerly of Argonne National Laboratory, as associate professor and **James M. Piowaty**, formerly of the University of Notre Dame, as assistant professor. **James J. Vasa** and **Zuhair M. El Saffar** have been promoted to associate professor.

Walter T. Grandy, Jr has been appointed new head of the department of physics at the University of Wyoming. The department has also named **Theodore J. Pepin** as assistant professor.

Georgia Institute of Technology has appointed **Henry S. Valk** as dean of the General College and professor of physics. Valk was formerly chairman of the department of physics at the University of Nebraska. **Donald C. O'Shea** has joined the staff as assistant professor.

James W. Cronin has been named university professor in the department of physics and in the Enrico Fermi Institute at the University of Chicago. University professorships are authorized by the board of trustees to recognize "distinguished scholars." Cronin, who earned his PhD degree from the University of Chicago, is currently visiting professor at the university, while on leave from Princeton University. He is also working at the National Accelerator Laboratory in Batavia, Illinois. Cronin was one of the senior physicists who in 1964 conducted the experiment on time reversal invariance, the results of which are now known as the Fitch-Cronin effect.



CRONIN

The Joint Institute for Laboratory Astrophysics of the National Bureau of Standards and the University of Colorado at Boulder has elected **Stephen J. Smith** as chairman.

James S. Owens has been elected vice president of Champion Spark Plug Company.

Recently promoted to senior research associates at Stanford Linear Accelerator Center are **Herbert C. DeStaebler**, **Gregory A. Leow**, **John R. Rees** and **Joseph Murray**.

William R. Busing, of the chemistry division of the Oak Ridge National Laboratory, has been elected president of the American Crystallographic Association. Elected as vice-president was **Jerome Karle** of the Naval Re-

search Laboratory. Karle will automatically succeed Busing as president in 1972. **Henderson Cole**, of IBM Research Center, was elected treasurer for a three-year term.

Denos C. Gazis has been appointed to a two-year term as director of the general sciences department of the IBM Watson Research Center in Yorktown Heights.

The State University of New York at Albany has appointed **Benjamin E. Chi** as chairman and **Robert P. Lanni** as assistant chairman of the physics department. **Raymond E. Benenson** and **Marvin J. Pryor** have been promoted to professor. Recent additions to the department include **Hassaram Bakhru** from Yale University, **Nelson Cue** from SUNY at Stony Brook and **Wilfried Scholz** from the University of Pennsylvania as assistant professors, and **Norbert Rosenzweig** from Argonne National Laboratory as professor.

Alfred Bennick, **Leon Cohen** and **Kalman Kalikstein** have been promoted to associate professor at the department of physics and astronomy of Hunter College. **Arnold Kritz**, **Bo Lawergren** and **Robert Marino** have joined the staff as assistant professors.

Joining the National Bureau of Standards as chief of the absolute electrical measurements section in the Institute for Basic Standards is **Barry N. Taylor**. Taylor was formerly with RCA Laboratories.

The new vice-chancellor for academic affairs and provost of the University of Massachusetts, Amherst is **Robert L. Gluckstern**. Gluckstern was formerly professor of physics and head of the department of physics and astronomy.

Gulf Oil Corporation has appointed **A. Bruce King**, director of the physical sciences division, as director of the planning and economics division. **John G. Larson**, supervisor of the chemical physics section, physical sciences, has succeeded King as director of the physical sciences division.

William C. Wiley, formerly director of the applied physics laboratory at Bendix Corporation, is joining the Leeds and Northrup Company as vice president and director of corporate research.

Texas Tech University has promoted **Magne Kristiansen** and **Raymond W. Mires** to professor.

Robert G. Jahn, professor of aerospace sciences at Princeton University, is the new dean of the university's school of engineering and applied science. □

PULSE ANALYSIS

NEW LOW PRICES

100 MHZ (4096)



- Dual Parameter
- 100 mHz Digitizing Rate
- 8192 Channel Resolution
- Digital Baseline
- PHA & Multiscale
- 4096 Channel 10⁶ Memory
- 2 μ s Memory Cycle
- Log or Linear Display
- Dynascan (Live) Display
- Integration & Stripping with unique view before store mode
- Mag Tape Readout with unique off line Tape to Hard Copy Mode
- Selective Readout of Intensified Channels

8192 461A/1018



- 100 mHz Digitizing
- PHA & Multiscale
- 10⁶ Memory
- 5" CRT Display
- Log or Linear Display
- Automatic Operation
- Digital or Analog Readout
- 8192 Channel Resolution with selective Storage of any 512 or 1024 Channel sub group
- Digital Baseline selectable in Binary Increments

BLUE BOXES



- 100, 400, 1024 Channels
- 1, 2, 4 Inputs
- Single Channel
- PHA, MCS, Analog Sample
- Digital & Analog Readout
- X2, X4, or X8 Resolution Expansion
- Four Simultaneous Inputs with Built in Amplifiers for Hi or Low Level
- Memory Division for Spectrum Stripping and Integration of Peaks
- Instant Service on TII and TMC equipment

ti TECHNICAL INSTRUMENTS

441 Washington Avenue
North Haven, Connecticut 06473
Phone (203) 239-2501

SALES OFFICES:
Chicago (312) 944-5297 Calif. (415) 648-1066