

gation of ways in which man-made changes in the environment influence the weather to such matters as hurricane and tornado modification.

In any event, the intramural competition within the government for weather modification programs is less important than the programs themselves. It seems clear from the favorable reception given the NAS and NSF panel reports that the federal effort in weather modification will be expanded. Given a measure of goodwill and legislative craftsmanship, the jurisdictional problems can be settled. Senator Anderson himself has put it this way: "I'm not interested in who does it, so long as the job gets done."—LUTHER J. CARTER

Representative Thomas Dies

Albert Thomas (D-Texas), a veteran member of the House of Representatives and chairman of the appropriations subcommittee crucial to several scientific agencies, died Tuesday of cancer. He was 67.

He had been in Congress since 1937, and a member of the Appropriations Committee since 1941. Thomas was chairman of the subcommittee on independent offices, which had jurisdiction over granting funds for NASA, the National Science Foundation, the Office of Science and Technology, and other federal agencies not under departmental authority. He served on the Appropriations Committee's defense subcommittee, and on the Joint Atomic Energy Committee's subcommittees on security and communities. He was also a member of the Joint Committee on Reduction of Nonessential Federal Expenditures.

Announcements

The National Institute of **Child Health and Human Development** has been reorganized to give emphasis to four areas of scientific programming: reproduction, growth and development, aging, and mental retardation. Roy Hertz, scientific director, will have overall responsibility for the programs. Each area will be headed by a program director, in charge of both intramural research activities and the scientific aspects of extramural research.

The University of Notre Dame has established a graduate department of **microbiology** that will offer teaching

and research programs leading to both the master's and doctoral degrees. The department will conduct research at Notre Dame's Lobund Laboratory. Morris Pollard, director of the laboratory since 1961, will begin a 3-year term as head of the new department on 1 July.

The **Institute for College and University Administrators**, which conducts "short courses" for new college presidents and academic deans, is now sponsored by the American Council on Education. Headquarters for the Institute are being transferred from Harvard's graduate school of business administration to the ACE in Washington. Individual institutes for new presidents and deans will be conducted on college campuses across the country.

David C. Knapp, formerly professor of government and dean of the college of liberal arts at the University of New Hampshire, has been appointed director. He succeeds Robert W. Merry, chairman of the doctoral program of the Harvard business school, who had headed the program since its establishment in 1955.

Grants, Fellowships, and Awards

A center for advanced study in **theoretical psychology** has been established at the University of Alberta, Edmonton, with emphasis on the interdisciplinary and methodological aspects of the field. Postdoctoral programs will be arranged to suit the individual participants; fellowships are offered with stipends of up to \$6000, plus travel grants. Predoctoral students will enroll in one of the department's programs; scholarships ranging to \$4000 and assistantships up to \$3000, plus tuition and travel grants, are available. Additional information may be obtained from T. M. Nelson, Department of Psychology, University of Alberta, Edmonton, Canada.

A chair for a visiting scholar has been created at the **Cranbrook Institute of Science** for individuals who would like to work in the Detroit area for 3 months to 2 years. The program is flexible and well suited to persons on sabbatical or recently retired from academic life, and wanting to remain active in education, research in the natural or physical sciences, or conservation promotion. One appointment will be grant-

ed for any particular period; it will carry a stipend and the use of the new Thomas Edison house at Cranbrook. The first appointment is to begin in September. Further information on requirements and applications is available from the Director, Cranbrook Institute of Science, Bloomfield Hills, Michigan 48013. The institute is an independent, nonprofit organization supported by grants from the government, the Cranbrook Foundation, and from private sources.

The National Science Foundation will provide a limited number of travel grants for U.S. scholars attending the International Congress of **Americanists** in Argentina next September or the International Union of **Prehistoric and Protohistoric Sciences** in Czechoslovakia, also next September. The awards will be based on relevance of the applicants' research. Deadline for receipt of applications: *1 March*. (R. W. Lieban, Program Director for Anthropology, NSF, 1800 G Street N.W., Washington, D.C. 20550)

MIT is offering research associateships in **computer science**, supported by the International Business Machines Corporation. Applications should include an outline of the proposed research; statement of graduate courses, grades, and degrees; professional résumé; at least two letters of recommendation; and an indication of the desired appointment period and stipend. Preference will be given to applications for the whole academic year, although those for shorter terms will be considered. Research associateships at MIT are academic appointments, and although the recipients will have no teaching duties, they may supervise thesis students. Application deadline: *1 March*. (Director, MIT Computation Center, Room 26-142, MIT, Cambridge, Massachusetts)

Fellowships are available at the Stanford University medical school for training in clinical and experimental **cancer radiotherapy**. The 3-year program includes roentgen therapy, interstitial and intracavitary radium application, diagnostic and therapeutic uses of isotopes, clinical oncology, chemotherapy, and clinical and experimental research. Applicants must have graduated from an accredited medical school and have had at least a year of an approved internship. Stipends range from

(Continued on page 914)



Vertebrates:

Their Structure and Life

By W. B. YAPP, University of Birmingham, England

1965 544 pp. 200 illus. \$8.50

Invertebrate Zoology

By PAUL A. MEGLITSCH, Drake University

In Prep. 650 pp. 400 illus. prob. \$10.00

Inorganic Chemistry

By C. S. G. PHILLIPS, and R. J. P. WILLIAMS, both of Oxford University

Volume I 1965 704 pp. illus. \$8.00

Volume II April 1966 700 pp. illus. \$8.00

The Second Law:

An Introduction to Classical and Statistical Thermodynamics

By HENRY A. BENT, University of Minnesota

1965 450 pp. 70 line drawings \$6.00

The Molecular Biology of Development

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By MICHAEL J. S. DEWAR, University of Texas

1965 224 pp. paper \$2.95

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NEWS AND COMMENT

(Continued from page 808)

\$6000 to \$11,000, depending on previous training. (H. S. Kaplan, Stanford University School of Medicine, Palo Alto, California 94304)

Meeting Notes

The 2nd international **biophysics** congress will be held in Vienna, 5-9 September, sponsored by the International Organization for Pure and Applied Biophysics. Contributed papers on all areas of biophysics will be considered for presentation. Abstracts deadline: 15 May. (Secretariat, Mrs. E. Weidenhaus, Vienna Academie of Medicine, Alserstrasse 4, Vienna 9)

The American Meteorological Society will sponsor a conference on **marine meteorology**, 7-10 September, in Virginia Beach, Virginia. Papers are invited on exchange processes between atmosphere and oceans, weather systems over the oceans, oceanic physical influences, and applications of meteorology to operations in ocean areas. Abstracts: 200 words; deadline: 15 March. (J. R. Stinson, U.S. Navy Weather Research Facility, Naval Air Station, Norfolk, Virginia 23511)

A conference on **coherence and quantum optics** is scheduled at the University of Rochester, New York, 22-24 June. Emphasis will be on statistical properties of electromagnetic fields and the interactions of fields under conditions where coherence effects play a role. The sponsors are the University, the Air Force Office of Scientific Research, and the Air Force Cambridge Research Laboratory. Abstracts: 1000 words; deadline: 10 March. (E. Wolf, Department of Physics and Astronomy, University of Rochester, Rochester, New York 14627)

Papers are invited on fundamental and practical **applications of x-ray analysis** for a conference scheduled for 10-12 August in Denver. The sponsor is the metallurgy division of Denver Research Institute. Abstracts: 200 to 400 words, in duplicate; deadline: 11 April. Final manuscripts, in duplicate, and the author's consent to publish in the copyrighted proceedings of the conference, are required by 11 July. (Metallurgy Division, Denver Research Institute University of Denver, Colorado)

The Air Force Systems Command aerospace medical division and research and technology division will sponsor a symposium on **bionics** 3-5 May in Dayton, Ohio. Main emphasis will be on areas related to cybernetics; topics to be discussed include biological control and information-processing systems, artificial intelligence, pattern recognition, self-organizing and learning systems, and automata theory. (H. L. Oestreicher, Aerospace Medical Research Laboratories, Wright-Patterson Air Force Base, Ohio 45433)

A symposium on **underwater physiology** will be presented 23-25 March in Washington. The program includes reports on studies of man, animals, tissues, cells, and the effects of gases under conditions encountered at depths of more than 250 feet. (K. W. Hannah, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418)

An international conference on **lens design** with large computers will be held 5-8 July in Rochester, New York. The meeting will provide opportunity to evaluate and compare the performances of various programs for large computers and to synthesize information offered by these programs concerning the physics of optical systems. Although emphasis will be on optical design with large computers, papers about work done with small machines and simple programs will also be welcome. (Institute of Optics, University of Rochester, Rochester, New York 14627)

The 1966 **Laurentian Hormone** conference is scheduled for 28 August to 2 September in Mont Tremblant, Quebec. The program will include sessions on thyroid physiology, steroid hormones, peptide hormones, insulin and the pancreas, and hormones and metabolism. Participation will be limited. Deadline for applications: 20 April. (J. Sanford, 222 Maple Avenue, Shrewsbury, Massachusetts 01545)

North Dakota State University, Fargo, will present a research conference on the **biological sciences**, 31 March to 1 April. The meeting will be cosponsored by AIBS. Topics to be covered will include the probability of life in outer space, protein nutrition, environmental research problems, radiation biology, and bionics. (K. L. Larson, Department of Agronomy, North Dakota State University, Fargo)

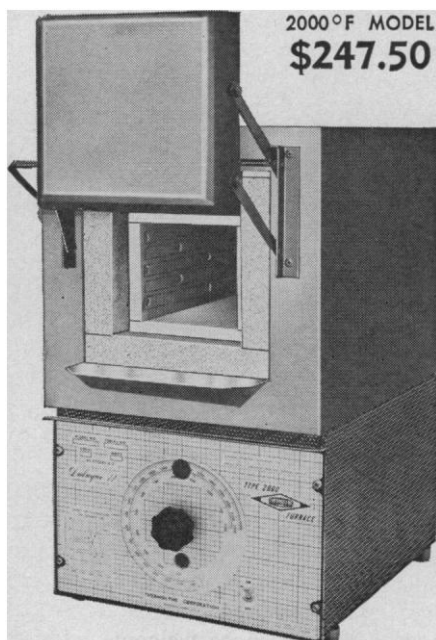
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Publications

The Engineering Manpower Commission has published the results of a survey of engineering students who graduated from college in 1965. The information was gleaned from questionnaires, completed by the placement directors of 186 engineering schools, regarding some 20,000 graduates. The survey indicates that the demand for new engineering graduates is high; some 87 percent had definite educational, job, or military commitments by graduation. About one of every four for whom information was available is going to graduate school; and salaries for those who accepted jobs averages \$634 a month, 3 1/2 percent higher than for 1964 graduates. (*The Placement of Engineering Graduates 1965*. Engineering Manpower Commission of Engineers Joint Council, Department P, 345 East 47th Street, New York 10017. \$1)

A base map of the **Atlantic Continental Shelf and Slope** has been published by the U.S. Geological Survey to help geologists record data from submerged lands. It incorporates more than 1.8 million soundings showing the topography of the ocean floor from Nova Scotia to Florida at a scale of 1 inch to 16 miles. The map was compiled from U.S. and Canadian data, supplemented with data collected by a team aboard the research vessel *Gosnold* during several cruises. The map is divided into three sheets which can be joined to form a single map. (*Map Showing Relation of Land and Submarine Topography*; miscellaneous map I-451. U.S.G.S., Washington, D.C. 20242; \$1.50 set)

A recent NSF publication discusses the numbers of **scientists and engineers who immigrated** to the United States during fiscal years 1962 and 1963. The report says that the majority came from the United Kingdom, Canada, and Germany, and that 7000 of 10,000 were engineers. The report also includes information on the migration of scientists and engineers prior to their immigration to the U.S. Data are based on special tabulations prepared for NSF by the Immigration and Naturalization Service. (*Scientists and Engineers from Abroad, Fiscal Years 1962 and 1963, Reviews of Data on Science Resources, Vol. 1, Number 5*. Superintendent of Documents, Government Printing Office, Washington, D.C. 20402; 5 cents)

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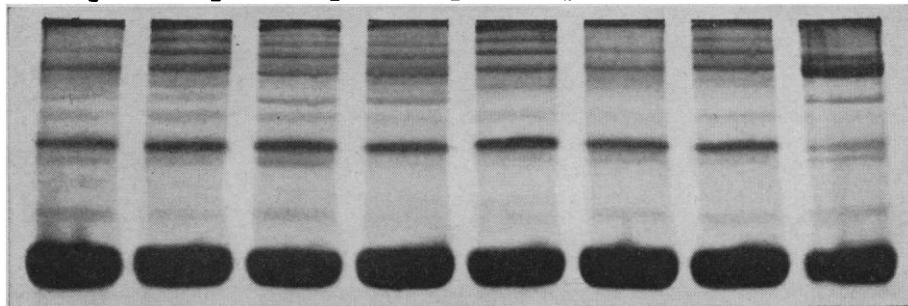
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Scientists in the News

Atomic Energy Commission chairman **Glenn T. Seaborg** has been awarded the 1966 Gibbs medal of the Chicago section of the American Chemical Society. The award was given to Seaborg for his outstanding contributions to pure and applied chemistry and for contributions to scientific and academic administration and to government service.

The new Home Secretary of the National Academy of Sciences is **Merle A. Tuve**, director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington.

South Dakota State University appointed **Duane Acker** dean of the college of agriculture and biological sciences, effective 1 February. He was associate dean of agriculture at Kansas State University.

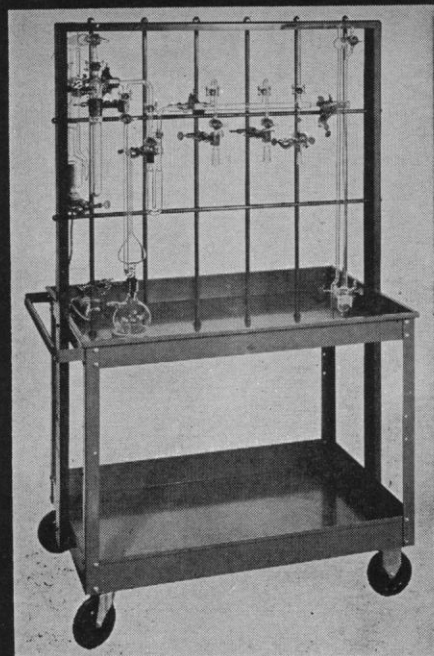
Edmund S. Nasset, professor emeritus of physiology at the University of Rochester, has become visiting professor of physiology at George Washington University medical school, Washington. The appointment will last through August.

Ralph E. Knutti, who retired last July as director of the National Heart Institute, has been appointed executive officer of Universities Associated for Research and Education in Pathology, an organization formed recently to encourage cooperation in that field among universities and other scientific institutions. The association's headquarters is 9650 Rockville Pike, Bethesda, Maryland.

Peyton Rous of New York City, a pioneer American researcher in the field of cancer, was named the main recipient of Germany's highest medical award—the Paul Ehrlich and Ludwig Darmstaedter prize. Rous, 86, a member emeritus of The Rockefeller University in New York, will receive the award in ceremonies in Frankfurt in March.

John A. Saxton, director of the United Kingdom Scientific Mission and scientific counsellor at the British Embassy in Washington, will return to England this spring to become director of the Radio and Space Research Station of the Science Research Council, in Slough.

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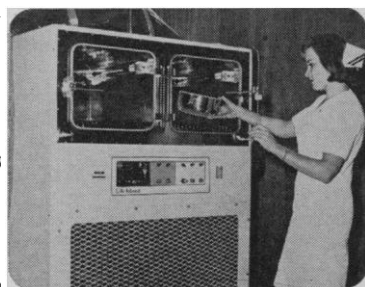
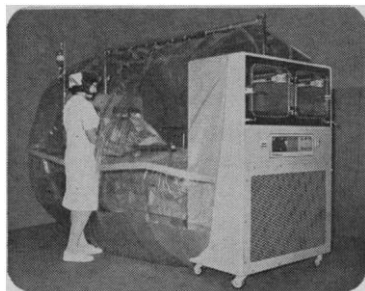
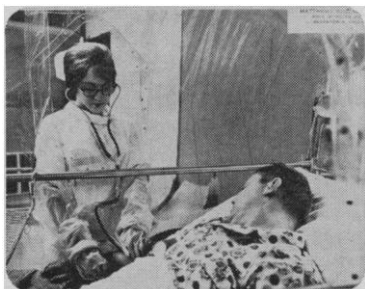
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Piet C. Gugelot, director of the Institute for Nuclear Physics, Amsterdam, Netherlands, has been named scientific director of NASA's Space Radiation Effects Laboratory, Newport News, Virginia, effective 1 January. Virginia Associated Research Center operates the laboratory under contract with NASA Langley Research Center.

Victor H. Weisskopf has returned to his position as Institute professor of physics at MIT, after a 5 years' leave of absence during which he was director general and scientific director of the European Organization for Nuclear Research (CERN), Geneva, Switzerland. He will be succeeded at CERN by **Bernard Gregory** of France, who has been a directorate member for research.

Robert C. Seamans, Jr. has been appointed as deputy administrator of NASA. He will retain his position as associate administrator for an indefinite period.

Recent Deaths

Saul Adler, 71; head of the parasitology department of Hebrew University, Jerusalem; 25 January.

Dirk Brouwer, 63; Munson professor of natural philosophy and astronomy at Yale University and director of the Yale Observatory; 31 January.

Harold C. M. Case, 75; retired professor and head of the department of agricultural economics at the University of Illinois; 3 January.

Israel L. Chaikoff, 63; professor of physiology and formerly co-chairman of the department, University of California, Berkeley; 25 January.

Ellsworth C. Dougherty, 44; lecturer in comparative nutrition and a specialist at the agricultural experiment station at the University of California, Berkeley; 21 December.

George Wicker Elderkin, 86; professor emeritus of art and archeology at Princeton University; 19 December.

Clarence B. Hilberry; president emeritus of Wayne State University; 10 January.

G. Albert Hill, 73; former professor of chemistry at Wesleyan University; 28 December.

Robert Hodes, 51; professor of physiology at Mount Sinai medical school; 27 January.

Albert W. Hull, 85; retired assistant director of the General Electric Research Laboratory; 22 January.

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Randolph Lovelace II, 58; director of space medicine for the National Aeronautics and Space Administration; 12 December.

E. Kennerly Marshall, Jr., 76; professor emeritus of pharmacology and experimental therapeutics at Johns Hopkins medical school; 10 January.

Benjamin Y. Morrison, 74; retired head of the division of plant exploration and introduction in the Agriculture Department's bureau of plant industry; 25 January.

René Perrin, 72; retired president and board chairman of Electro-Chimie D'Ugine, a leading French chemicals and metals concern; 15 January.

Hans Pettersson, 77; professor emeritus and former director of the Oceanographic Institute in Goteborg, Sweden; 25 January.

Charles Schank, 55; senior representative of the U.S. Atomic Energy Commission in Brussels, Belgium; 23 January.

Walter H. Schoewe, 74; emeritus associate professor of geology at the University of Kansas and editor of *Transactions of the Kansas Academy of Science*; 11 January.

Hervey Woodburn Shimer, 93; professor emeritus of paleontology at Massachusetts Institute of Technology; 13 December.

Anton N. Volsky, 68; Soviet nuclear scientist and member of the USSR Academy of Sciences; 7 January.

Frank Wilcoxon, 73; lecturer in statistics at Florida State University and chemistry research scientist at American Cyanamid Co.; 18 November.

Summer Institutes

Botanical Sciences, 6th, 20 June to 15 July, for college botany teachers; University of Massachusetts, Amherst; NSF grant to Botanical Society of America. Deadline: *1 March*. (E. L. Davis, Dept. of Botany, University of Massachusetts, Amherst)

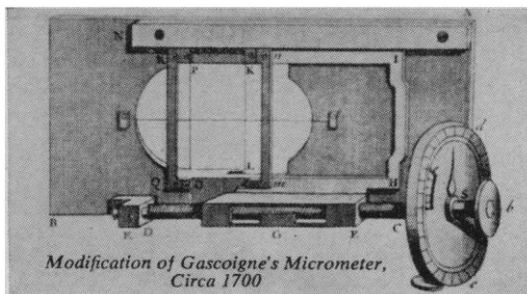
Cross Cultural Research, 3rd; 5 July to 26 August, University of Pittsburgh; NSF grant. Stipends: predoctoral, \$600-\$1000; postdoctoral, \$1200-\$1700. Deadline: *15 March*. (H. Barry, III; Department of Anthropology, University of Pittsburgh, Pittsburgh, Pa. 15213)

Erratum: On page 870, column 3, of this issue, the paragraph beginning "The three-and-one-half day symposium of Section O . . ." and the material that follows in column 1 and the top of column 2 of page 871 should be inserted on page 875 as part of Section O reports.

18 FEBRUARY 1966

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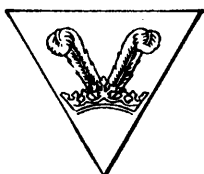
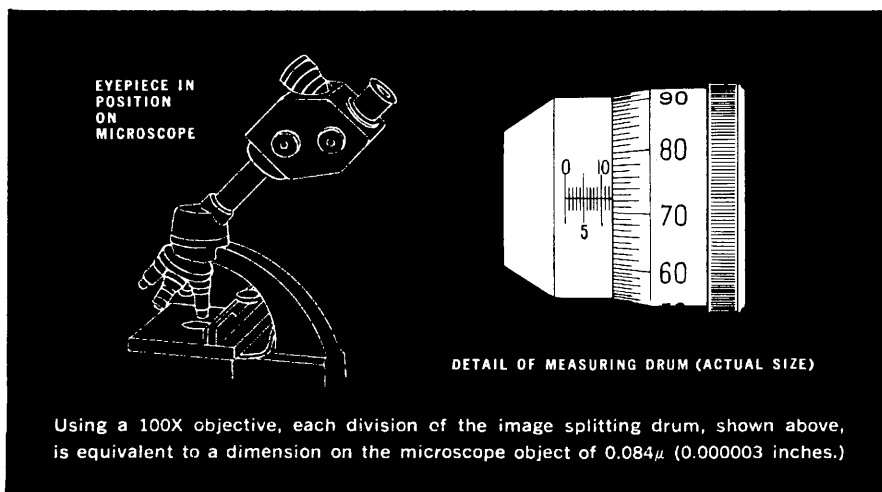


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