

While there are cases in which valuable data may be obtained during a short visit, in general the cycle of the seasons must be observed to relate the subject of research truly to Arctic conditions. Freezing and thawing progress in long cycles, and ice and snow change rapidly under the influence of winter winds. While the summer is most spectacular superficially, there is more winter in the Arctic, and it cannot be known without the winter season.

The question may be raised as to whether it is now wise to establish a facility for research upon the extreme frontiers of civilization when routine teaching and regular research at home are short of personnel and facilities. Everywhere in the world today there is doubt as to the condition at these frontiers and fear of what may lie beyond them. Certainly, some of the men of science should be trying to explore and

define accurately the frontier conditions under which man, in his ignorance, clashes with his environment and misguided social and economic forces have regularly led to war. Scientific exploration at the Arctic frontiers, where natural forces are strong and clear, can guide the domestic operations of science in lines leading realistically forward.

Arctic research in the past has greatly enriched our culture, and no similar extent of temperate or tropical coast line can list names and works of such distinction as those which have derived their information from exploration along the Arctic Coast of America. There may be a great literature based upon Soviet Arctic researches, but this we cannot know until all workers in Arctic research freely exchange views across the Arctic Sea.

## NEWS and Notes

**Lawrence E. Stout**, professor of chemical engineering, Washington University, has been appointed dean of the School of Engineering. Dr. Stout's appointment will be effective July 1, when **A. S. Langsdorf** retires.

**Reidar F. Sognnaes**, recent winner of a Norwegian dental prize for his contribution toward the understanding of the reduction in dental decay which occurred in Norway during the war, was recently named associate professor of dental medicine in the Harvard School of Dental Medicine.

**William F. Hewitt, Jr.**, formerly of the Research Division, Smith, Kline & French Laboratories, has been appointed assistant professor of physiology in the School of Medicine, Howard University.

**Jack Purdue**, associate professor, will become chairman of the Department of Chemistry, Oklahoma Baptist University, Shawnee, effective in September.

**Robert A. Dreyer**, associate professor of geology, University of Kansas,

has recently been appointed chairman of the Department, to succeed **L. R. Laudon**, who will go to the University of Wisconsin after the spring semester.

**Joshua Lederberg**, formerly a research fellow at Yale University, has become assistant professor of genetics at the University of Wisconsin, where he is organizing a program in the genetics of bacteria and other microorganisms.

**B. F. Skinner**, of Indiana University, has been elected professor of psychology at Harvard University. Beginning in September 1948, he will offer a course in general education on Human Behavior and continue his researches on the behavior of organisms in the new Harvard Psychological Laboratories.

**William A. Dreyer**, University of Cincinnati, **Sherman C. Bishop**, University of Rochester, and **William M. Ingram**, Mills College, California, have been appointed to research fellowships at the Edmund Niles Huyck Ecological Research Station at Rensselaerville, New York, for the summer of 1948.

**Jesse P. Perry, Jr.**, who was recently graduated from the Duke University School of Forestry, has been appointed instructor in forestry at

Virginia Polytechnic Institute, Blacksburg.

**Thomas B. Niven**, formerly head of the biochemistry section of Economics Laboratory, Inc., St. Paul, has joined the staff of the Food Technology Department, Oregon State College, Corvallis.

### Grants and Awards

The American Academy of Arts and Sciences announces availability of grants for chemical research from the Cyrus M. Warren Fund. The grants cover expenditures for apparatus, supplies, or for the construction of special facilities for research in chemistry or in closely allied fields but do not cover salaries. The amount available to an individual is seldom in excess of \$300. Applications must be filed prior to May 1, 1948. Application blanks may be obtained from the Chairman, Frederick G. Keyes, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

The Louis Livingston Seaman Fund of the New York Academy of Medicine has available \$1,200 for furtherance of research in bacteriology and sanitary science during 1948. Provided by the will of the late Dr. Seaman, the funds may be used for securing of technical help, aid in pub-

lishing original work, or purchase of necessary books or apparatus. Applications from either institutions or individuals will be received by Dr. Wilson G. Smillie, Chairman of the Louis Livingston Seaman Fund, 1300 York Avenue, New York 21, New York, up to April 15, 1948.

**The Department of Bacteriology, University of Maryland**, has received \$4,107 from the U. S. Public Health Service in renewal of a grant for a study under the direction of Michael J. Pelezar on the metabolism of saprophytic *Neisseria*, with particular emphasis on their nutritional requirements.

**L. H. Schmidt**, Christ Hospital Institute of Medical Research, Cincinnati, has recently received funds from the Cinchona Products Institute, New York, for detailed studies on anti-malarial activities of various dosage regimes of quinine, administered either alone or in combination with pentaquine and other 8-amino-quinolines.

**The Board of Managers of The Jane Coffin Childs Memorial Fund for Medical Research** has recently authorized a number of grants for varying periods of time. Recipients of the grants and their projects follow:

Francisco Duran-Reynals, Yale University School of Medicine, relation of viruses to tumors, \$2,000.

Administration, Yale University School of Medicine, maintenance of animal house at 11 Rose Street, \$700.

Cornelius P. Rhoads, Memorial Hospital, chemical and metabolic studies of cancer in man and animals with special reference to steroids, \$30,000.

The Donner Foundation, continued support of the journal, *Cancer Research*, \$5,500.

Harry S. N. Greene, Yale University School of Medicine, biological behavior of human and animal tumors in natural and alien hosts, including immunochemical investigations of adult, embryonic, and cancer tissues, \$36,000.

Charles W. Hooker, Yale University School of Medicine, experimental and spontaneous testicular tumors in mice and other animals, \$9,200.

Alexander Haddow and associates, Chester Beatty Research Institute of the Royal Cancer Hospital (Free), London, England, investigations on cancer with special reference to the chemistry of carcinogenesis, viruses, and chemotherapy of cancer, \$5,000.

Janet Howell Clark, University of Rochester, effects of light radiations and other factors on the development of mammary tumors and leukemia in mice, \$4,100.

Millislav Demerec, Long Island Biological Association, Cold Spring Harbor, mutagenic potencies of carcinogens and related chemicals as determined with bacteria, \$8,000.

Sir Ernest L. Kennaway, St. Bartholomew's Hospital, London, England, statistical and laboratory studies of cancer, \$1,500.

Cornell University Medical College, development, training activities, and investigations of the Tumor Clinic, \$12,000.

In addition, the following fellowships were awarded:

Carl G. Baker, University of California, study of the specific accumulation of compounds in neoplasms with the aid of radioactive isotopes, \$4,958.34.

John B. Goetsch, Yale University School of Medicine, malignancy and autonomy of tumors of the human genitourinary system studied by heterologous transplantation, \$4,000.

Donald D. Mark, The Rockefeller Institute for Medical Research, precancerous lesions that precede the development of tumors in the liver, intestine, and skin, \$7,125.

John J. Trentin, Yale University School of Medicine, hormonal factors influencing mammary gland growth and development, \$5,133.33.

Alexander Symeonides, National Cancer Institute, \$1,400.

Richard B. Krakaur, The Rockefeller Institute for Medical Research, study of enzyme systems of cells, \$3,000.

**Graduates of Chicago medical schools** who completed their internship or one year of laboratory work in 1946 or thereafter are eligible to compete for the Joseph A. Capps Prize of \$400 of the Institute of Medicine of Chicago. The Prize,

which was founded by Dr. and Mrs. Edwin R. LeCount, will be given for meritorious investigation in medicine or in the specialties of medicine. Work in the fundamental sciences will be considered, provided it has a definite bearing on some medical problem. Manuscripts should be submitted to the Secretary of the Institute of Medicine of Chicago, 86 East Randolph Street, Chicago 1, not later than December 31, 1948. The winning manuscript will become the property of the Institute.

**The John and Mary R. Markle Foundation** has made public its first group of Scholars in Medical Science. For the support of the qualified young scientists who wish to make a career in academic medicine and their research, the Foundation has allocated \$400,000 to their respective medical schools, each school to receive \$25,000 payable at the rate of \$5,000 annually for 5 years. The 16 Scholars and the medical colleges nominating them are: Christian B. Anfinsen, Harvard Medical School; Henry H. Balch, New York University College of Medicine; Edward J. Beattie, Jr., George Washington University School of Medicine; Marcel E. Blanchaer, University of Manitoba; Ivan W. Brown, Jr., Duke University School of Medicine; Robert H. Ebert, Division of Biological Sciences, University of Chicago; Richard C. Fowler, University of Rochester School of Medicine and Dentistry; Henry D. Hoberman, Yale University School of Medicine; Ralph A. Kinsella, Jr., St. Louis University School of Medicine; Christian J. Lambertsen, University of Pennsylvania School of Medicine; William D. Lotspeich, Syracuse University College of Medicine; Preston B. Lowrance, University of Virginia Department of Medicine; Frederick D. McCandless, Albany Medical College; Manson Meads, Bowman Gray School of Medicine; Julius B. Richmond, University of Illinois College of Medicine; and Ralph O. Smith, Washington University School of Medicine.

**The American Telephone and Telegraph Company** recently announced the 9 winners of the 1948-49 Frank B. Jewett fellowships for research in the physical sciences. The

awards grant \$3,000 to the recipient and \$1,500 to the institution at which he chooses to do his research. Those receiving the 1948-49 postdoctoral fellowships are: Warren John Brehm, James Allister Jenkins, Robert Karplus, and Richard Nelson Thomas, all of Harvard University; Ernest Max Grunwald, Portland Cement Association, Chicago; Leon Albert Henkin, Princeton University; Alvin Ira Kosak, Ohio State University; Joaquin M. Luttinger, Physikalisches Institut, Zurich; and Paul Olum, Institute for Advanced Study.

## Colleges and Universities

The schedule for the series of lectures on statistical methods by L. H. C. Tippett to be given at Massachusetts Institute of Technology this spring (see *Science*, March 5, p. 242) has been revised as follows: "Statistical Methods for Industrial Quality Control," May 5-7, 3-5 P.M.; and "Statistical Methods for Technical Investigation and Experimentation," May 12-14, 3-5 P.M.

The College of Engineering, University of Illinois, has announced that 9 new options are available to mechanical engineering students: production engineering, design, power, research, aeronautical, air-conditioning and refrigeration, petroleum production, railway, and general. In production engineering four new courses are now operating—motion and time study, production engineering, tool engineering, and production control. Related courses include industrial quality control, industrial relations, and labor relations. Instructors for the courses are C. H. Casberg, John Henry, L. C. Pigage, and Everett Laitala. Graduate courses are being formulated.

Harvard's new synchro-cyclotron will probably be ready for a test run toward the end of this year, according to an article which recently appeared in the *Alumni Bulletin*. The article points out that the 95" machine, which is the same size as that being built at the Atomic Energy Research Establishment at Harwell, England, has been designed with sev-

eral points in mind, including its suitability for the 30 or so members of the cyclotron staff and its effective coverage of an energy region not covered with facility by the larger cyclotrons now in use in this country. Harvard's first cyclotron, a 42" machine, was turned over to the Manhattan District, U. S. Army Engineers, in 1943.

The Chemistry Alumni Association of the City College of New York has announced that Irving Langmuir, Nobel Prize winner and associate director of research, General Electric Company, will give the inaugural address of its Bicentennial Science Lectures on April 23 in the Great Hall of the College. His subject will be "Science and Common Sense: Convergent and Divergent Phenomena." Admission is free, but tickets should be obtained in advance from the Department of Chemistry, The City College, 140th Street & Convent Avenue, New York 31.

The lectures of the Herter Foundation for 1948 will be given by Ernest F. Gale, Medical Research Council Unit for Chemical Microbiology, Biochemical Laboratory, Cambridge, England, at the Hurd Memorial Hall, The Johns Hopkins Hospital, Baltimore, March 22-24.

## Summer Programs

The Department of Physics, University of Wisconsin, has announced that E. P. Wigner will join the staff as a visiting professor for the 1948 summer session (June 25-August 20). A seminar in theoretical physics will be held in addition to classes in thermodynamics, statistical mechanics, and nuclear physics.

The Summer School of Alcohol Studies conducted by the Laboratory of Applied Physiology, Yale University, will hold its 6th annual session July 9-August 6. The curriculum deals with the medical, psychological, psychiatric, sociological, economic, legal, religious, educational, and therapeutic aspects of alcohol problems. The 1948 course provides a special curriculum for physicians and other students professionally con-

cerned with the treatment and care of alcoholics, including work at the Yale Plan Clinic in New Haven.

The School, under the directorship of E. M. Jellinek, will have as lecturers authorities who have carried out original research in their respective fields. The lecturers, mainly from the faculties of Yale, include representatives of other national institutions of education, research, treatment, or rehabilitation.

Applications for admission and scholarships will be received up to April 15. A prospectus and application may be obtained by writing to the Executive Secretary, Summer School of Alcohol Studies, Yale University, 52 Hillhouse Avenue, New Haven, Connecticut.

The Oceanographic Laboratories of the University of Washington at Friday Harbor have reported that their summer staff will include Alfred C. Redfield, associate director of the Woods Hole Oceanographic Institution, who has been named Walker-Ames professor at the Laboratories, and Robert C. Miller, director of the California Academy of Sciences.

## Meetings and Elections

The Association of Geology Teachers will hold its 8th annual meeting April 9-10 at Hanover College, Hanover, Indiana. Those wishing to attend should notify the president, Arthur L. Howland, Department of Geology, Northwestern University, Evanston, Illinois.

The American College of Physicians has completed arrangements for its 29th annual session to be held in San Francisco, California, April 19-23. The 5-day meeting will include general sessions, lectures, clinic sessions at local hospitals, panel discussions, and demonstration tours with additional arrangements for sightseeing tours. Hotel accommodations have been facilitated and special trains, with postconvention tours to points of interest in the West, have been arranged. Copies of the final bulletin may be had by writing to the ACP Executive Offices, 4200 Pine Street, Philadelphia 4, Pennsylvania.

The annual meeting of the Society of American Bacteriologists will be held in Minneapolis, Minnesota, May 10 through 14, with headquarters at the Nicollet Hotel. There will be sessions on general agriculture, industrial and medical bacteriology, as well as immunology and comparative pathology.

The Society for Applied Spectroscopy, in cooperation with the Polytechnic Institute of Brooklyn, announces a Symposium on Spectroscopic Equipment, to be held May 22 at the Polytechnic Institute, 85-99 Livingston Street, Brooklyn 2, New York, under the chairmanship of W. L. Parker. Recent developments on instruments in the field of absorption and emission spectroscopy will be exhibited.

The Dallas Southern Clinical Society elected the following officers at a recent meeting: H. Walton Cochran, president; Frank A. Sealeman, vice-president; Lawrence B. Sheldon, secretary; and Andrew B. Small, treasurer. The new officers are all clinical faculty members at Southwestern Medical College.

The 44th annual meeting of the American Society of Zoologists was held in Chicago December 29-31 in conjunction with Section F (AAAS) and in association with a number of other biological societies. Of special significance, according to L. V. Domm, of the University of Chicago, secretary of the Society, were (1) the excellent quality of the symposia, (2) the large number of general papers presented, and (3) the large general attendance.

Two symposia were arranged. One, under the leadership of T. M. Sonneborn, was held jointly with the Genetics Society of America. Dr. Domm reports that the 7 participants presented an unusually well-integrated and coordinated account of recent work on plasmagenes, genes, and characters in *Paramecium aurelia* (estimated attendance, 600-700 persons). The other symposium, organized by J. L. Lush and also sponsored jointly with the Genetics Society, dealt with a review of methods for the genetic improvement of farm animals. Be-

tween 400 and 500 persons heard the 5 participants give a critical account of possibilities in artificial insemination, ways in which more exact knowledge of genes and linkage relations can be used, possibilities of mass selection, usefulness of family selection and inbreeding, and actual possibilities in progeny testing.

The annual dinner of the Society on the evening of December 30 in the Crystal Ballroom of the Blackstone Hotel was attended by 148 persons. Because of the illness of Franz Schrader, his address on "Three Quarter-Centuries of Cytology" (*Science*, February 13, p. 155) was read by C. L. Huskins, professor of botany at the University of Wisconsin.

At the annual business meeting on December 30 the Society elected Carl G. Hartman, Ortho Research Foundation, president; T. C. Nelson, Rutgers University, vice-president; Frank A. Brown, Jr., Northwestern University, treasurer; and J. H. Bodine, State University of Iowa, member of the Executive Committee. L. V. Domm continues as secretary.

### Letter From London

From time to time *Science* has published notes about the Mission on Science and Technology to the U. S. Embassy in London. Prior to the departure of the Mission, arrangements were made whereby a "Letter From London" would be forwarded for publication in *Science* at intervals of approximately two weeks. Although the staff is still far from complete, several specialists are already at work, and the first letter appears below. The regular schedule of two weeks will probably be followed as soon as the staff is complete; until such time, the letters will be published promptly on receipt.

Scientists, industrialists, and labor leaders have manifested considerable interest in the formation of a Committee on Industrial Productivity, announced by the Lord President of the Council, Mr. Herbert Morrison, in the House of Commons on December 18, 1947. The new Committee, which is ultimately responsible to Mr. Morrison, is for this reason put on the same level as the Advisory Council on Scientific Policy and the Defense Research Policy Committee. The earlier organizations are concerned with the development of new knowledge, but the establishment of the new Com-

mittee signified that the present government is equally concerned about the prompt and widespread application of science and technology.

Sir Henry Tizard, who acts as chairman of the earlier organizations, will also be the chairman of the Committee on Industrial Productivity. The person responsible for policy with regard to the development of new knowledge will also be charged with recommending means for its most efficient use. This fact alone warrants the closest attention being paid to the future accomplishments of the new Committee.

The concern of the Committee on Industrial Productivity will, as its name suggests, be primarily in the application of existing scientific and technological knowledge to industry, agriculture, and health. The social and psychological factors which accelerate or impede the introduction of new scientific knowledge are also to be studied in the light of current and future knowledge in the social sciences about this subject. Stated formally, the terms of reference of the Committee are:

"To advise the Lord President of the Council and the Chancellor of the Exchequer on the form and scale of research effort in the natural and social sciences, which will best assist an early increase in industrial productivity, and further to advise on the manner in which the results of such research can best be applied."

The extremely wide frame of reference of the Committee, comprehending, as it does, an examination of all factors which assist in an increase of national productivity, is somewhat narrowed when attention is paid to the panels which are to be established by the Committee.

One panel, under the chairmanship of Sir William Stanier, F.R.S., will be concerned with technological and operational research. Operational research, as used in Great Britain, has come to mean an attempt to provide executive or administrative officers with a quantitative estimate of their operational variables by use of the scientific method.

A second panel, under the chairmanship of S. Zuckerman, C.B.F.R.S., professor of anatomy at Birmingham,

will deal with the question of import substitution. This group will presumably develop their work in the light of the current international shortages in hard currency and undertake to suggest better means of using local and colonial raw materials and substitutes for traditional British imports. It is of some importance that both scientists and economists are represented on this panel.

A third panel, under the chairmanship of Sir George Schuster, K.C.S.I., K.C.M.G., C.B.E., M.E., will deal with the human factor affecting industrial productivity. This group will presumably investigate the causes of dissatisfaction among workers, the prospect for increasing individual output, the views of the worker and his organization on the introduction of the new technical developments.

Finally, Dr. Alexander King, director of the Scientific Secretariat of the Lord President's Office, will head a panel on technical information service. This group will recommend means for the more rapid dissemination of scientific knowledge with a view to its introduction into industry, agriculture, and other phases of the nation's production.

The Committee will operate in close cooperation with the Advisory Council on Scientific Policy because of Sir Henry Tizard's connection with both bodies. The Committee, as currently constituted, will be made up of representatives from government and university science, government departments, industry, and labor.

## NRC News

From December 1945 to December 1946 a committee of the Division of Geology and Geography sponsored several conferences devoted to problems of training in geology. Participants from educational and research institutions throughout the country engaged in lively and spontaneous discussion which reflected wide recognition of a need to improve geological curricula. Complete records of the conferences, and also a final report of the committee, have been published in the *Interim Proceedings of the Geological Society of America* (Parts 2, 4, and 5 of 1946, Parts 1 and 3 of 1947).

At the fourth of the conferences there was considerable support for a proposal that the Division of Geology and Geography be asked to publish, through a medium with wide circulation, a recommended list of courses prerequisite to graduate study in geology. In its final report the committee expressed the view that basic training for undergraduate students who intend to make geologic work their profession should include courses in mathematics, physics, chemistry, and biology, and in modern foreign languages. Through an oversight, the report did not ask that the Division arrange for wide publication of these views regarding preparation for graduate study. The present note is offered as a brief explanatory digest of the views expressed in the conference, in the hope that teachers of geology may be helped in their efforts to make the curriculum more effective.

The group responsible for the present statement has no desire, nor has it any commission, to set up "rules for accreditation" in geology. However, there is clear need for better teamwork than now exists in preparing students of geology for advanced study and for professional work. Graduate departments find that many of the applicants for admission are woefully deficient in basic preparation. Some applicants whose college transcripts show completion of numerous geologic courses lack the most elementary acquaintance with physics, chemistry, mathematics, and biology. We, and many others who took part in the conferences, are firmly convinced that the elements of these subjects are essential in any rounded education and are mandatory in geologic training. Elementary courses in the four allied subjects should be completed as early as possible in undergraduate years, in order that they may integrate most effectively with basic courses in geology. Too commonly, the allied subjects are treated as hurdles that may be taken at any stage in the educational program. Many principles of physical geology can be grasped only through some knowledge of physics and chemistry. Paleontology must, of course, build on a foundation of biology. An effective program of geologic training must put fundamental things first.

The present brief statement cannot undertake to make and explain specific recommendations for a complete undergraduate curriculum in geology. It is our conviction, however, that every program should include elementary courses in physics, chemistry, biology, and mathematics through calculus. There will be objection that one or another of these subjects is not essential for students interested in particular fields of geology. An effective answer to this objection rests on the sad experience of many students whose interests changed as they advanced, and especially of those who later found that their ignorance of a basic subject was a serious disqualification for attractive professional opportunities. After a broad foundation is laid, thought should be given to additional courses in auxiliary sciences that will aid in preparation for particular fields of geology. A second course in physics and a course in physical chemistry are urged for students who decide at an early stage to equip themselves for some aspect of physical geology. Those who elect paleontology will find it profitable to take one or two additional courses in biology before they begin graduate study.

Graduate departments have perennial trouble with students who are unprepared to meet requirements in foreign languages. If these requirements are to have any real value, students must master the languages in time to make them useful tools in advanced geologic study. Only an exceptional student can learn a language after he plunges into exacting graduate work. Basic training in languages should come in undergraduate years. It would be far better to defer some of the geologic courses commonly taken by undergraduates, in order to lay a sound foundation in the languages which ought to be ready for use at the very start of graduate study.

German has long been, and still is, the foreign language most valuable as a key to general literature in geology. French, the traditional second language for the graduate student, has a growing rival—Russian. There is not an abundance of first-class geologic literature in Spanish. Geologists who work in Mexico and other Latin-American countries must, of course, be able

to use Spanish, not only for practical everyday needs but also for a command of the local geologic literature. However, students in geology rarely can foresee that Spanish will serve their purpose better than another foreign language. It is recommended, therefore, that in general the languages for the geologic curriculum be German and either French or Russian.

Some of the continuing difficulties in these matters stem from the fact that many students decide at a late stage to prepare for professional work in geology. It would, of course, be simpler for all concerned if every student could assuredly map his complete program of study at the start of the freshman year. We cannot expect to attain this ideal and must be prepared to face difficulties from late decisions. However, we should not make compromises that destroy all standards. A student should be required to spend additional terms in undergraduate study rather than be permitted to enter a graduate department without basic preparation.

In the attempt to maintain creditable standards of preparation, small departments in "liberal arts" colleges may appear to be at a disadvantage because of limited teaching staffs. It has been pointed out, however, that some of these small departments have enviable records in supplying outstanding candidates for advanced study. A wise teacher in such a department can find in his apparent weakness a source of strength. Unable to offer numerous courses in his own subject, he can direct his students to essential courses in allied sciences and in foreign languages, thus enabling them to acquire keen-edged tools for their further progress. It has been pointed out that a student must have some continuous contact with geology if his enthusiastic interest is to be maintained. This is, of course, correct. A proper balance of diet is required, and geology must be the essential ingredient of the menu. Too often a lack of balance is the result of too many geologic dishes which the undergraduate is ill prepared to digest.

Members of the committee do not wish to give the appearance of belaboring unduly any particular theme. From our survey thus far, however,

we believe that a fundamental weakness in our training arises from a common failure to require of undergraduates early attention to basic subjects. Exceptional students are able to overcome the handicap of a defective curriculum. Wise repairing of the curriculum will help both the exceptional and the more ordinary students and will advance the development of geologic science. (COMMITTEE ON GEOLOGIC EDUCATION—*Chester R. Longwell* (chairman), *Robert Balk*, *David M. Delo*, *Maurice Ewing*, *M. King Hubbert*, *Hugh E. McKinstry*, *A. I. Levorsen*, *George A. Thiel*, *A. O. Woodford*.)

## Deaths

**K. F. Chamberlain**, 54, assistant state entomologist, New York State Museum, died December 4. His particular interest had been the study of aquatic beetles.

**N. H. Darton**, 82, consulting geologist since his retirement from the U. S. Geological Survey in 1936, died February 28 in Chevy Chase, Maryland.

**Ernest G. Maier**, 68, assistant professor of gynecology, University of Pennsylvania Graduate School, died March 5 in Philadelphia.

**George Edward Gage**, 64, head of the Department of Physiology, University of Massachusetts, and a member of its faculty for 37 years, died suddenly March 7 in Amherst, Massachusetts, following a heart attack.

**Reid Hunt**, 77, pharmacologist and professor emeritus at Harvard Medical School, died March 10 in Boston. Dr. Hunt is known for his work on the thyroid gland and the discovery of chemical mediation of nervous impulses through the use of acetylcholine.

**Eugene E. Gill**, 72, formerly associate professor of chemistry, Armour Institute of Technology, died March 10 in Denver, Colorado.

Since announcement of the foreign distribution program of radioisotopes late last summer by the Atomic Energy Commission, 44 shipments have been made to individuals and research groups in Australia, Argen-

tina, the United Kingdom, Denmark, Peru, Canada, Italy, and Sweden, while 8 other countries have completed the necessary arrangements for receiving shipments. Meantime, U. S. investigators have received approximately 1,000 shipments, bringing the total of shipments under the domestic distribution program to 2,200. Topping the list of exported isotopes is radiophosphorus, used mainly in medical therapy for treatment of serious blood diseases. When the full 6-month investigative period has been completed in each foreign country, progress reports will be submitted to AEC.

Simultaneously with the announcement concerning progress of the foreign isotope distribution program, AEC and Columbia University announced plans for public distribution and sale of the first two volumes of the Manhattan Project Technical Section of the National Nuclear Energy Series, to be published by McGraw-Hill under contract with Columbia. The series will consist of a compilation of unclassified or declassified research reports on work begun during the war and now carried on as part of the U. S. atomic energy program. The first two volumes will deal with contributions to medical science, Volume 1 dealing with the histopathological effects of radiation, and Volume 2 with the pharmacology and toxicology of uranium and fluorine compounds. It is expected that about 60 such volumes will be made available over the next two years.

## Make Plans for—

**American Association of Physical Anthropologists**, April 2-4, U. S. National Museum, Washington, D. C.

**American Mathematical Society**, April 16-17, New York City and Ann Arbor, Michigan; April 17, Berkeley, California.

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**AAAS**  
**Centennial Celebration**  
 Washington, D. C.  
 September 13-17, 1948  
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