News and Notes

Heerlen Congress on Carboniferous Stratigraphy

THE Third Congress on Carboniferous Stratigraphy and Geology met in Heerlen, Netherlands, June 25–30. More than 200 scientists from 14 countries attended. Individuals and societies from a number of other countries registered or sent papers but were not present.

A. A. Thiadens, president of the congress and director of the Geologische Bureau of Heerlen, which sponsored the meetings, presided over the opening and closing sessions, and W. J. Jongmans presided over the round-table conferences. These two and several other polylinguists contributed much to the integration of the meeting and the amicable atmosphere.

Nearly 100 papers were read in stratigraphy, paleogeography, sedimentology, paleontology, and applied geology. No more than two meetings met concurrently, and they were usually of such diverse nature that those attending could hear all papers in which they had a basic interest.

General lectures were given by W. J. Jongmans, honorary president of the congress; J. J. Lam, Leiden; J. Doeglas, Wageningen; and Dr. Thiadens. Nearly all other papers were limited to 20 minutes each, with an additional 10 minutes for discussion. With few exceptions this schedule was adhered to by the speakers. French, English, and German were the three official languages used. The president of each session encouraged discussion, most of which was recorded immediately by the contributors themselves. Thus a record of the discussions, though not verbatim, is available for inclusion in the *Compte rendu* of the congress.

Eighteen papers in paleontology were nearly equally divided among paleobotany, palynology (fossil spores, pollen, etc.), and paleontology. Seven papers on cyclical sedimentation and 11 on coal origin and petrography constituted most of the program in sedimentology. Stratigraphy of the Carboniferous aroused considerable interest, with 11 papers on the boundaries of the Pennsylvanian and 10 on regional geology. Fifteen miscellaneous papers were given in tectonics, water and gas, applied coal petrography, and geophysics, and 4 in paleogeography.

Professor Jongmans presided over two of the three round-table conferences—stratigraphic delimitations and nomenclature of the Carboniferous, and discussion of palynological nomenclature and publications. At the conference on limitations and nomenclature of the Carboniferous, the recommendations that the Carboniferous be divided into two systems, the Mississippian and Pennsylvanian, met with considerable opposition. This proposal, supported by a majority of geologic organizations and specialists from the U. S., was presented to the congress by James Steele Williams at the request of the American Commission for Stratigraphic Nomenclature. Because of the spirited and nearly unanimous denunciation of the proposal by the European participants, an alternative and compromise proposal was introduced by M. K. Elias, of Nebraska. As it was finally written into the recommendations to be sent to the next International Geological Congress (Algeria, 1952), the term "subsystem" would be introduced into the stratigraphic nomenclature, and the Carboniferous would be divided into two parts called sub-systems.

The conference on palynology, attended by more than 50 persons representing most countries actively engaged in such research, reached several conclusions. Megaspores and microspores are to be treated as species, and such species can be united in genera and families. Other recommendations dealt with standardizing the size of magnifications in publication ($\times 50$ for megaspores; $\times 250$ for microspores) and formulation of names (the name should include an indication that a spore is being dealt with and should not imply relationship to other plants).

Several resolutions were passed at the conference on coal petrography. Additions to nomenclature established in 1935 were made, including massive micrinite, granular micrinite, and sklerotinite. Some terms are to be considered as incompletely defined. A recommendation was made that investigators attempt to gather more data on the reflectivity methods to resolve the present impasse in the use of this characteristic because of the contradictory results between the Berek photometer and photoelectric methods. A further recommendation that a committee on petrographic nomenclature should be established and should meet every two years has been partially carried out by the formation of such a committee, organized by R. Potonie, E. Stach, and the writer, on July 13, in Krefeld.

Mines were visited, and specimens collected on the final day, and a two-day sedimentological excursion to the vicinity of the Hague was conducted following the close of the conference.

At the opening session, the newly established Waterschoot van der Gracht medal for outstanding contributions to geology was awarded to W. J. Jongmans for his long service with the Geological Bureau and outstanding contributions to the international integration of Carboniferous stratigraphy. Professor Jongmans initiated the Heerlen Congress on Carboniferous Stratigraphy in 1927.

An extensive display of reconstructions of ancient life and landscapes from many sources was assembled in the corridors and balcony of the general meeting place, the fine new town hall of Heerlen. A 47-page explanatory guide was prepared for this most unusual exhibit. The collections, library, and facilities of the Geologische Bureau of Heerlen were open to the inspection and use of the participants.

Several papers were presented by Americans, in-

cluding James Steele Williams, the official U. S. delegate, Maxim K. Elias, Irving I. Breger, and the writer. Jack A. Simon read a paper for H. R. Wanless. Dr. Williams represented the U. S. Geological Survey, the American Society for Stratigraphic Nomenclature, and the Geological Society of America. The writer represented the Paleobotanical Section, Botanical Society of America, and, together with Mr. Simon, the Coal Geology Committee of the Society of Economic Geologists. Other Americans attending included J. P. Messervey, Deputy Minister of Mines of Nova Scotia, Wayne L. Fry, Cornell University, and Miss A. Karstrom, Illinois Geological Survey.

Physical arrangements for the participants and their accompanying guests, and the receptions by the state and city officials, were excellent. The cordiality will long be remembered.

AUREAL T. CROSS
West Virginia Geological Survey and
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The Oxford Conference on Low Temperatures

IN connection with the first postwar meeting of the Institut International du Froid (I.I.F.) in London, it was decided to hold the conference planned for 1951 by the Unesco Commission for Very Low Temperatures in Oxford during the week preceding the I.I.F. meeting. The Oxford Conference was attended by more than 200 physicists. The largest delegations from outside the United Kingdom were the Dutch and American, each numbering 35 people. One of the Japanese participants was delayed by a typhoon but arrived in time to give his paper on the last day of the sessions.

It had been the intention of the organizers of the conference to give younger physicists a chance to take an active part. As a result, the program became rather too heavily loaded with short papers. Apart from three longer, introductory contributions, there were more than 100 shorter papers distributed over ten meetings. The first two sessions dealt with thermal properties; the third, with resistivity; sections 4 to 6, with the properties of liquid helium; sections 7 and 8, with supraconductivity; and the last two, with magnetism.

The three longer papers were given by Bleaney (Oxford), F. London (Duke), and Fröhlich (Liverpool). Bleaney reported on recent advances in paramagnetism, and London reviewed the present state of the two-fluid theory of liquid helium, which he showed cannot be understood until a molecular theory of liquid helium is worked out. In the meantime, Simon (Oxford) asked whether it would not be possible to restate Landau's theory in intelligible language, since it seems to fit practically all experimental data. Frölich's paper dealt with his theory of supraconductivity, which appears to be another instance where a first approximation provides the correct answer, but where higher approximations may well be worse than the first one. It may be that the theory of semiconvergent series will play an important role in future theoretical physics. After Frölich's talk, Schafroth (Zurich) showed how one could obtain the London equations from Fröhlich's theory by using gauge-invariant methods. Pippard (Cambridge) pointed out that, although all theoretical physicists try to obtain London's equations from their model, he has obtained experimental evidence from radiofrequency work for the breakdown of the London equations.

In the same session (supraconductivity), Maxwell (N.B.S.) reported that for tin the critical temperature varied with the isotopic mass as $M^{-\alpha}$ where $\alpha = 0.486 \pm 0.031$, in agreement with Fröhlich's theory which predicts $\alpha = \frac{1}{2}$. For lead, however, Olsen (Oxford) found that insofar as T_c could be said to vary as $M^{-\alpha}$, α should be equal to 0.73. Experimental evidence for the existence of spatial, long-range order in supraconductors was given by Pippard. The ordered domains should contain about 10^{10} atoms.

In the session on thermal properties, Abraham (Argonne) reported on the work on the melting curve of He^3 using the blocked capillary technique. These measurements have now been extended down to a few tenths of a degree, and below 0.5° K the melting pressure seems to approach a constant value, indicating a possible transition in the liquid phase. The experimental uncertainty is still too large, however, to arrive at any definite conclusion at this stage, and experiments are continuing.

The sessions on liquid helium started with a survey of recent work in the Royal Society Mond Laboratory by Atkins (Cambridge), who showed that recent measurements on the velocity of first sound and on flow through wide capillaries could not be explained on the basis of the Gorter Mellink two-fluid theory. An additional result of the first sound measurements was that the Landau relation between first and second sound velocity at absolute zero, which seemed to be verified by Osborne's experiments, is not exactly obeyed. However, the experiments are not so conclusive as not to leave a safe margin for doubts. Jackson (Bristol) reported on an optical method for determining the thickness of helium films. A beam of polarized light is reflected by a polished surface. The difference in setting of the nicols between the experiment with and without a helium film on top of the polished surface then gives the film thickness. Heer (Ohio State), Sommers (Los Alamos), Taconis (Leiden), Beenakker (Leiden), and Lynton (Yale) all reported on different experiments involving solutions of He^3 in He^4 and the influence of the He^3 on vapor pressure, fountain effect, and other properties. On the whole, the discussion on liquid helium left one with the impression that no satisfactory theory exists to explain the experimental data. Especially, the marked difference between He^3 and He^4 is not understood, since a glib mentioning of the terms Fermi-Dirac or Bose-Einstein statistics does not really constitute an explanation.

From an experimental point of view, one should mention the measurements of H. C. Kramers (Leiden) of the specific heat of liquid helium below 1° K. It turns out that below about 0.65° K the specific heat follows a T^3 law, whereas above 0.65° K the power of T is much higher. It was stated that Landau's theory might explain this behavior.

As a last item of interest, some experiments have been performed on He^6 in Chicago. Because of the short half-life of this isotope the experiments are extremely difficult and as yet far from conclusive, but the first indications are that He^6 shows superfluidity.

We may conclude this report by expressing admiration and gratitude for the organization of the conference and the hospitality shown by our hosts of the Clarendon Laboratory. They hoped to produce a report on the conference within a few weeks so that, at the time the present remarks are published, the complete report will probably already be available.

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Scientists in the News

Wallace M. Alston has been inducted as the third president of Agnes Scott College, succeeding **James R. McCain,** who has been made president emeritus.

Virginia Bartow, of the University of Illinois, has been elected chairman of the American Chemical Society's Division of History of Chemistry. Dr. Bartow succeeds **Henry M. Leicester,** of the College of Physicians and Surgeons, San Francisco. **Alexander Silverman,** of the University of Pittsburgh, was named vice chairman, and **Sidney M. Edelstein,** technical director of the Dexter Chemical Corporation, New York, was re-elected secretary-treasurer.

Harrison S. Brown, of the Institute for Nuclear Studies at the University of Chicago, has accepted appointment as professor of geochemistry in the Division of the Geological Sciences at Caltech. He will join the faculty about Dec. 1. The new appointee won the AAAS $1,000 Prize in 1947 for his work on meteorites, and he was announced, at the American Chemical Society Diamond Jubilee meeting in September, as recipient of the $1,000 ACS Award in Pure Chemistry, to be presented at the ACS spring meeting.

Athletics and faculty-board differences are responsible for recent resignations and replacements at William and Mary College. **Alvin Duke Chandler** has resigned as rear admiral in the Navy to accept the presidency vacated by **John E. Pomfret** in September. Rear Admiral Chandler was, for a time, instructor in physics and electrical engineering at the Naval Academy. His appointment to William and Mary has prompted the resignation of **Nelson Marshall,** dean and professor of biology, with more resignations threatened because of alleged violations of accepted academic practices by the Board of Visitors. Dr. Pomfret has been appointed director of the Henry E. Huntington Library and Art Gallery at San Marino, Calif.

Arthur R. Colwell has been elected president of the American Diabetes Association. He is chairman of the Department of Medicine and Irving S. Cutter Memorial professor of medicine at Northwestern University's Medical School, and chairman of the Division of Medicine of Passavant Memorial Hospital, Chicago. He has served for several years on the council of the diabetes group and is a founder and past president of the Chicago Diabetes Association.

Gustave J. Dammin has been appointed consultant for Laboratories Services to the Health and Special Weapons Defense Division, Federal Civil Defense Administration, Washington, D. C. Dr. Dammin is professor of pathology and head of the Department of Pathology, School of Medicine, Washington University. He is also director of Central Laboratories at Barnes Hospital.

Thomas Bradford Drew, head of the Department of Chemical Engineering at Columbia University, will deliver the third Annual Lecture of the American Institute of Chemical Engineers. Professor Drew will speak on diffusion at the institute's annual meeting in Atlantic City Dec. 3.

Pol Duwez, associate professor of mechanical engineering at Caltech and chief of the Materials Section of the Jet Propulsion Laboratory, has been named by the U. S. Army Ordnance Corps to conduct a five-week mission abroad to study the metallurgy of titanium. Professor Duwez will visit industrial, government, and educational institution research laboratories in England, France, the Netherlands, and Belgium. He left Washington shortly after the meetings of the World Metallurgical Congress in Detroit, Oct. 14–19, where he functioned officially as one of the American conferees.

James D. Ebert, formerly of MIT, has been appointed assistant professor of zoology at Indiana University. Dr. Ebert will develop a program of teaching and research in biochemical embryology.

J. B. Edmonds, professor of horticulture at Mississippi State College, has been invited by the National Organizing Committee of the Thirteenth International Horticultural Congress to present a paper on "Cultural Studies of Sweet Potatoes of Southeastern United States." The congress will meet in London next Sept. 8–15.

Paul S. Epstein, professor of theoretical physics at Caltech, has been named to the American Committee of the International Congress for Cultural Freedom. The congress, headquartered in Paris, is devoting its efforts to fighting totalitarian regimentation—whether neo-Nazi or Communist—of the intellectual pursuits. Besides Dr. Epstein, other American delegates at a recent meeting in Andlau, France, were **Alsoph H.**

Corwin, of The Johns Hopkins University, and **Sidney Hook,** of New York University.

H. Clyde Eyster, research plant physiologist of the Charles F. Kettering Foundation, Yellow Springs, Ohio, will coordinate the photosynthesis research on blue-green algae at both the Ridgeleigh Terrace Laboratory in Dayton and at Antioch College.

Robert T. Gallagher has been named head of the Department of Mining Engineering at Lehigh University, filling the vacancy created by the death of **A. Copeland Callen** in July. He has been a member of the Lehigh faculty since 1942.

Henry Gilman, of the Iowa State College of Mechanical Arts, has won the 1952 Midwest Award of the St. Louis Section of the American Chemical Society. Consisting of an inscribed gold medallion, the Midwest Award is conferred annually on a scientist of the Middle West in recognition of "meritorious contributions to the advancement of pure or applied chemistry or chemical education."

Willard E. Givens, executive secretary of the National Education Association, has received the Save the Children Federation's second annual award for distinguished service to children.

George W. Goddard has been awarded the 1951 Progress Medal of the Photographic Society of America. Colonel Goddard, who is chief of the photographic laboratory of the engineering division at Wright Field AFB, Dayton, received the medal for his contributions to the progress of aerial photography.

Robert Y. Grant has resigned as chief, Mining and Geology Division, Natural Resources Section, General Headquarters, SCAP, and will return to his home in Seattle, Washington.

J. V. Harrison, of the Department of Geology, Oxford University, is visiting professor of geology at the University of Illinois for the academic year 1951–52. He will teach courses in structural and petroleum geology. Until 1938, Dr. Harrison was chief exploration geologist for Anglo-Iranian Oil Company.

Long Island University has appointed **Jacob I. Hartstein,** chairman of the psychology and education departments, director of the university's graduate school. In addition to his post at Long Island University, Dr. Hartstein is dean of the School of Education and Community Administration at Yeshiva University.

Victor S. Hicks has been appointed chief physicist of Tracerlab, to direct the physical research and development projects now being carried on. Prior to joining Tracerlab, Dr. Hicks was employed at Ansco, Binghampton, N. Y., where he had charge of the x-ray research laboratory.

Malvern J. Hiler has been appointed president of The Commonwealth Engineering Company of Ohio. He has served for the past three years as executive vice president.

E. Herndon Hudson has resumed his position as director of the Ohio University Health Service after a year's leave of absence with WHO. During his leave, Dr. Hudson organized a bejel syphilis project in Iraq with headquarters in Baghdad. The project is being continued through cooperation of WHO and the United Nations International Children's Emergency Fund and the Iraq government, under direction of an Iraqi doctor, with **G. W. Csonka** of London as adviser.

At the meeting of the American Academy of Arts and Sciences on Nov. 14, **Herbert Ives** will be presented the Rumford Premium for 1951 and will address the Academy on "Adventures with Standing Light Waves."

Robert W. Keeton, who is retiring as professor and head of the Department of Internal Medicine at the University of Illinois, a position he has held since 1933, was honored at a testimonial dinner given by more than 400 colleagues, former students, and friends. Among the speakers was **Anton J. Carlson,** emeritus professor of physiology at the University of Chicago and former president (1944) of the AAAS.

Lawrence A. Kimpton became chancellor of the University of Chicago at convocation ceremonies that included addresses by J. E. Wallace Sterling, president of Stanford University, and James B. Conant, as well as the conferring of honorary degrees on Detlev W. Bronk, Edwin A. Burtt, Harold F. Cherniss, Robert Maynard Hutchins, William A. Nitze, Arthur M. Schlesinger, and George W. Sherburn.

Chalmer Gatlin Kirkbride, vice president and director of Houdry Process Corp., will receive the 1951 Professional Progress Award in Chemical Engineering, sponsored by Celanese Corporation of America. The award, which carries with it a prize of $1,000, is administered by the American Institute of Chemical Engineers, and will be given at the organization's annual meeting in December. The award is made each year to a technical engineer under 45 years of age, "to recognize outstanding progress in the field of chemical engineering for the betterment of human relations and circumstances."

Arthur Blair Knapp, former vice president of Temple University, has been formally inducted as Denison University's fourteenth president in ceremonies in which Governor Frank J. Lausche welcomed him to his new position.

L. D. Leach, professor of plant pathology, University of California at Davis, is in Denmark on an ECA appointment. He will set up sugar-beet seed decorticating equipment and will work out a sugar-beet disease control program. Dr. Leach will return to the university about Jan. 1.

George V. LeRoy has been appointed associate dean

of the Division of Biological Sciences and associate professor of medicine at the University of Chicago Medical School. Dr. LeRoy supervised the biomedical program of the Eniwetok atomic-weapons test.

Seymour Levine, a former Western Reserve University biophysics instructor, has been named to the faculty of the University of Colorado School of Medicine. Dr. Levine, who has just completed specialized training at the Cooperstown Laboratories in Cooperstown, N. Y., will serve as an instructor in biophysics in the Department of Biophysics.

"Local Cold Injury—Frostbite," a research study by **Robert B. Lewis,** head of the Department of Pathology at the Air Force School of Aviation Medicine, has won for him the 1951 Wellcome Medal and Award given annually by the Association of Military Surgeons of the United States. This prize is awarded annually to the contestant who, in opinion of the association's judges, presents the most useful original investigation in the field of military medicine. In addition to a silver medal and scroll, the Wellcome Award carries a $500 honorarium and the winning paper is published in the *Military Surgeon,* official publication of the AMS.

L. R. Ludwig has been made director of engineering and research for the Westinghouse Electric Corporation's Atomic Power Division at Pittsburgh, succeeding **F. R. Benedict,** who is assuming new engineering responsibilities in the headquarters office of the company. Mr. Ludwig joined Westinghouse following his graduation from the University of Illinois in 1925.

Charles F. McKhann, of Cleveland, has been appointed acting medical director for United Cerebral Palsy. Dr. McKhann will coordinate medical activities in the united attack on cerebral palsy in cooperation with UCP's Research Council, headed by Sidney Farber, of Children's Medical Center and Harvard Medical School, Boston, and the Medical Advisory Committee, of which Winthrop M. Phelps, director of Children's Rehabilitation Institute, of Cockeysville, Md., is chairman.

Thaddeus R. Murroughs will head the new Laboratory of Binocular Seeing, recently established at Northern Illinois College of Optometry. Dr. Murroughs will serve on the teaching staff and will continue work in the Chicago Strabismus Research Project, which he conducted for the past year while director of the research department of the Chicago College of Optometry. The project is sponsored by the Society for Strabismus Research.

Elmer R. Noble has been appointed dean of liberal arts in Santa Barbara College, University of California. **Garrett Hardin** has succeeded him as chairman of the Department of Biological Sciences.

Edward B. Noel, G-E development engineer, received the second annual journal award at the national convention of the Photographic Society of America in Detroit. Mr. Noel, who carries on his scientific work in G-E's lamp development laboratory, Nela Park, Cleveland, was presented a scroll for "the most significant contribution in the technical or scientific fields" for 1950—a paper on "A New Low-Voltage Low-Power Flashtube of High Efficiency," which appeared in the January 1950 issue of *Photographic Science and Technique.* Mr. Noel and **P. B. Davis,** G-E assistant development engineer, are co-authors of the paper.

Gerhard A. Nothmann, assistant chairman of the mechanism and propulsion research department of Armour Research Foundation of Illinois Institute of Technology, has been appointed department chairman. He came to the foundation in 1948 as a research engineer and was appointed assistant supervisor of the mechanisms research section in September 1950, and assistant chairman of the mechanism and propulsion research department in May.

James M. Orten, associate professor of physiological chemistry, Wayne University College of Medicine, was elected secretary of the American Nutrition Association at the annual meeting held in Cleveland.

Winfred Overholser, of St. Elizabeth's Hospital, Washington, D. C., has been named Chevalier in the French National Order of the Legion of Honor for "services rendered to the progress of medical science in the field of psychiatry and for his outstanding contribution to international scientific cooperation." Dr. Overholser served as vice president of the First World Congress of Psychiatry held in Paris in September 1950.

Robert M. Page, superintendent of Radio Division III at the Naval Research Laboratory, has returned from a three-month survey of electronics developments in Germany. He was employed as technical consultant to the Military Security Board, Office of the High Command for Germany.

Walter Orr Roberts, of the High Altitude Observatory of Harvard University and the University of Colorado, Boulder, spent the latter half of October discussing "Unsolved Problems of the Sun's Atmosphere," as a Sigma Xi national lecturer at colleges and universities, and before Sigma Xi clubs in Montana, Idaho, Washington, Oregon, California, and Nevada.

Ernest Sachs, Jr., has been appointed assistant professor of neurosurgery and neurology at Tulane University and is acting chief of neurosurgery at the Charity Hospital, New Orleans.

Rosaltha H. Sanders, biochemist at the Arctic Health Research Center, USPHS, Anchorage, Alaska, has been appointed physiologist in the Creedmoor Institute for Psychobiologic Studies, Creedmoor State Hospital, Queens Village, N. Y.

Adolf Scheibe, chief of the Division of Electricity and Magnetism, Physikalische-Technische Bundesan-

stalt, Braunschweig (British Zone), Germany, recently spent about ten days at the National Bureau of Standards. Dr. Scheibe, who is particularly interested in work on quartz oscillators and their applications, served as acting president of the Physikalische-Technische Bundesanstalt from August 1950 until October of this year. The bureau was also visited recently by **Germano Centola,** director of the Stazione Sperimentale per la Cellulosa, Carta e Fibre Tessili Vegetali ed Artificiali, Milan.

Hubert G. Schenck, for six years chief of the Natural Resources Section, General Headquarters, SCAP, Tokyo, has accepted an appointment as chief, ECA Mission in Formosa.

Daniel S. Trifan, formerly at the University of California, has been appointed head of the chemical section of the plastics laboratory at Princeton University. Dr. Trifan will direct the high polymer research, backed for the past five years by the armed forces.

Robert A. Turner, of the Cornell University Medical College and the University of Massachusetts, has been appointed assistant professor of biochemistry in the College of Medicine, State University of New York, Brooklyn.

Education

Chicago Medical School has received a grant of $2,100 from the Lasdon Foundation for studies of fungus infections, under the direction of David M. Cohen, professor of dermatology and syphilology.

Escuela Interamericana, at Saltillo, Coahuila, Mexico, will begin its winter quarter on Nov. 12. It offers intensive courses in Spanish language and literature and in the history of Mexican civilization. Commercial Spanish, including Gregg shorthand, is also available The school is GI-approved, and prospective students may register in the U. S. through Donald M. Custer, Box 413, Salida, Colo. The summer quarter begins on July 8, 1952.

In schools throughout the state of Illinois, prospective teachers from classes at the **University of Illinois** have begun six weeks of full-time teaching. Each student in the "professional semester" is assigned to an experienced cooperating teacher in his own field after six weeks of work on the campus.

The **Institute on Administration of Scientific Research and Development,** offered by the American University with the cooperation of the AAAS and the National Research Council, has been rescheduled to Nov. 26–Nov. 30. The Institute is offered for persons engaged in research administration. The theme of the 1951 institute will be "Teamwork in Research." Special lecturers from government, industry, and other universities will lead sessions, in addition to staff members of the American University. Information concerning the institute is available from Lowell H. Hattery, 1901 F St., N.W., Washington 6, D. C.

Queens College has recently dedicated a science building, named Ira Remsen Hall in honor of Remsen, first president of the American Chemical Society.

The **University of South Dakota** has added five new members to the staff of the School of Medicine: C. D. Cox, of Pennsylvania State; Amos C. Michael, of Indiana University; and L. F. Michalek, Adaline N. Mather, and Robert Trankle.

Washington University has appointed the following assistant professors of physics: Martin Annis (MIT); Warren B. Cheston (University of Rochester); and Jonathan Townsend (Washington U). Robert N. Varney is on leave at the Bell Telephone Laboratories until next Sept. 1, and Robert D. Sard is at the University of Manchester on a Fulbright fellowship. In the Department of Geology, A. F. Frederickson is doing field work in classic Norwegian localities, with headquarters at the University of Oslo; James C. Brice is spending this semester at Harvard as part of a study (financed by the Ford Foundation) of the experimental programs in general education now being carried on by several large universities; and Betty Kellett Nadeau, micropaleontologist, has resigned; she will be succeeded by Dorothy Jung Echols, formerly a consultant associated with Pond Fork Oil and Gas Company.

The Personnel Research Center at **Wayne University** will conduct for the Department of the Navy a $25,000 year-long search for methods of establishing minimum physical specifications for Navy jobs. Benjamin Epstein, of the Mathematics Department, will direct research for the Navy on statistics related to the life and the fatigue testing of equipment. In the College of Medicine, the Michigan chapter of the Arthritis and Rheumatism Foundation is financing two one-year research projects; the Department of Health has provided funds for continuing support of the postgraduate program in obstetrics and to underwrite a program of coordinated professional training in child growth and development; USPHS grants will support research under the direction of Ernest Gardner, Walter H. Seegers, and Fred L. Rights; and Ciba Pharmaceutical is sponsoring endocrine research under Gordon B. Meyers.

Grants and Fellowships

Nine grants for research totaling $9,065 and ranging in amount from $500 to $1,500 have been made by the **American Academy of Arts and Sciences** from its Permanent Science Fund, and one grant of $500 from its Rumford Fund. Recipients are Forest F. Cleveland, Illinois Institute of Technology; Mark D. Altschule, Harvard Medical School; Henry N. Andrews, Jr., Washington University; Benjamin Karpman, Saint Elizabeths Hospital, Washington, D. C.; Maynard Mosely, University of California at Santa Barbara; Fritz Reder, University of Graz; George H. Scherr, Creighton University School of Medicine, Omaha; Oswald H. Robertson, Stanford University; Charmion Shelby, Library of Congress; and Hans Zinsser, University of Southern California Medical School.

The **Life Insurance Medical Research Fund** invites faculty members to nominate candidates for 1952–53 predoctoral fellowships for research in the medical sciences. These fellowships are open to those who will have completed one year or more of work or graduate school and are in a position to devote at least three quarters of their time to research. Preference is given to those who wish to work on fundamental problems in cardiovascular function. The usual stipend is at the rate of $1,800–$2,200 per annum. Candidates themselves should not apply, but should be nominated by investigators who are willing to sponsor them on the basis of personal knowledge. Closing date for nominations is *Dec. 31.* Further information may be obtained from the Scientific Director of the Fund at 2 E. 103rd St., New York 29.

Lilly Research Laboratories has awarded a grant to Russell R. de Alvarez, professor and executive officer of the Department of Obstetrics and Gynecology at the University of Washington School of Medicine, for continuation of his studies on water and electrolyte metabolism in the toxemias of pregnancy.

Carnegie Institute of Technology has received a $300,000 grant from the **A. W. Mellon Educational and Charitable Trust** to finance permanent Mellon scholarships. Established in 1938, the scholarships have been maintained by yearly grants. Unlike most awards, scholarship requirements are flexible, and if the applicant has shown a desire to help himself, or his need is the result of misfortune, he may be eligible for assistance.

National Distillers Chemical Corporation is sponsoring fellowships at Case Institute of Technology (Melvin J. Astle); University of Cincinnati (Charles E. Frank); Pennsylvania State (N. C. Deno); and Purdue (R. A. Benkeser). **National Distillers Products Corporation** is sponsoring a fellowship at the George Washington Carver Foundation at Tuskegee.

In the Laboratories

Babies Hospital of the Columbia-Presbyterian Medical Center is making a pilot study, supported by a grant from the Metropolitan Life Insurance Company, of accidents among children of school and preschool age, which now constitute the leading cause of death in this country at ages 1 to 19. The survey will be guided by an advisory committee composed of experts in education, psychiatry, epidemiology, pediatrics, accident prevention, and research methods. Rustin McIntosh is chairman of the committee, and William S. Langford is director of the study.

Carnegie Institution of Washington is continuing at Arthur D. Little, Inc., a project for the development of a commercial process for the culture of *Chlorella,* the green, unicellular alga. A pilot plant with a total growing area of 1,200 square feet has been put into operation. Environmental factors that affect the growth rate of *Chlorella* are being studied by several members of the institution's Department of Plant Biology at Palo Alto, Calif., and by J. E. Myers, University of Texas, a fellow of the institution. In a separate phase of the program, R. W. Krauss, University of Maryland, another institution fellow, is culturing a large variety of different species of algae.

The **Communicable Disease Center Technical Development Services Laboratories** have added George W. Pearce and Henry R. Krakauer to their staff. Dr. Pearce has been associated with the New York State Experiment Station, and Dr. Krakauer with Montefiore Hospital, New York.

Consolidated Vultee Aircraft Corporation has begun the construction of a mass-production plant for guided missiles, a Navy Ordnance facility, at Pomona, Calif. Pending occupancy of the Pomona plant approximately a year from now, the Guided Missile Division is operating in San Diego. First production project is an antiaircraft missile designed for shipboard or land launching. Among the personnel recently added to the division to expedite work on this project are C. R. Irvine, who will function as assistant division manager and chief engineer, and Harold W. Pope, assistant chief engineer.

General Aniline and Film Corporation has created two new executive posts in carrying out expansion plans. Cary W. Wagner has been elected vice president, and John C. Franklin vice president of operations for the company's dyestuffs and chemical division. Mr. Franklin was formerly manager of the AEC Oak Ridge operations.

Under the direction of Forrest F. Cleveland and Arnold G. Meister, **Illinois Institute of Technology** will continue its work on the molecular structure and thermodynamic properties of various chemical compounds, particularly methane and ethane. A contract awarded by the U. S. Office of Ordnance Research will support the program.

International Nickel Company of Canada has completed a new shaft and concentrator at its Creighton mines, bringing to a total of 13 the number of shafts operating in the Sudbury District. The new mill is part of a $100,000,000 program of underground mine development expected to be completed in 1953.

Roscoe B. Jackson Memorial Laboratory has appointed an Advisory Committee composed of Frank Beach, chairman, Leonard Carmichael, Howard S. Liddell, Donald O. Hebb, and Theodore C. Schneirla. The members of the committee will function as consultants in the laboratory's program of research on the genetics of animal behavior.

Harold C. Weingartner has been elected vice president and general manager of the Equipment Division of **National Research Corporation,** and James L. Vaughan has been appointed director of the Process Engineering Department. Mr. Weingartner has been chief engineer since 1946, and Mr. Vaughan has been design and development engineer for Rohm & Haas since 1947. National Research will build additional plant facilities in Newton, Mass., to be occupied by its Equipment Division next spring.

Meetings and Elections

Susan B. Riley, of George Peabody College for Teachers, has been elected president of the **American Association of University Women;** Louise Troxel was re-elected vice president, and Mrs. Arthur J. White was re-elected treasurer. Lucy S. Howorth was elected second vice president, and Mrs. Charles S. Bluemel, secretary.

The **American Institute of Electrical Engineers** and the **Institute of Radio Engineers** are sponsoring the first conference held specifically to review accomplishments in the field of large-scale computer engineering. Sessions will be held Dec. 10–12 in the Benjamin Franklin Hotel, Philadelphia, and in the Edison Building Dec. 11. The program is being directed by a committee under John C. McPherson, International Business Machines Corporation. The proceedings of the conference will be published shortly after the meeting.

The **American Society of Human Genetics** has elected F. J. Kallmann president for 1952, and C. H. Danforth vice president. S. C. Reed was elected secretary, and C. N. Herndon treasurer.

Harry G. Armstrong, Air Force surgeon general, has been elected president of the **Association of Military Surgeons,** succeeding Robert C. Cook. Winchell McK. Craig, of the Mayo Clinic, was elected first vice president and will succeed to the presidency next year.

The second **Thomas Alva Edison Foundation Institute for Science Teachers** will be held Nov. 12–13 at Glenmont, Mr. Edison's former home near West Orange, N. J. Sixty representatives of school administrators, guidance counsellors, science, mathematics, English, and social studies teachers, students, parent-teacher groups, and boards of education will attend the meeting, which will center on the theme "The Dependence of Western Civilization on American Industry and the Critical Shortage of Engineering and Scientific Manpower."

The **Paleontological Research Institution** has elected Kenneth E. Caster president, Katherine Van Winkle Palmer vice president, Gilbert D. Harris treasurer, Rebecca S. Harris secretary, Gilbert D. Harris director, and Edward Marks curator.

Recent Deaths

Charles H. Adams (83), astronomer, San Francisco, Aug. 8; **Ruth M. Addoms** (55), botanist, Durham, N. C.; **A. J. Allmand** (66), chemist, London, Aug. 11; **George W. Booth** (80), civil engineer, Lebanon Township, N. J., Oct. 1; **Lucien Bovet** (—), psychiatrist, Geneva, Switzerland, July 23; **Adolph Bregman** (61), consulting engineer, New York, Oct. 4; **Carl J. Bucher** (61), pathologist, Philadelphia, Oct. 9; **Walter M. Buswell** (85), botanist, Coral Gables, Fla., Sept. 29; **Hans Cloos** (—), geologist, Bonn, Germany, Sept. 26; **W. A. Cogshall** (77), astronomer, Rockford, Ill., Oct. 5; **Aubrey J. Collins** (76), pediatrician, Boston, Oct. 3; **Robert J. Cook** (63), orthopedic surgeon, New Haven, Conn., Oct. 4; **Parker M. Cort** (73), physician, Northampton, Mass., Sept. 27; **Robert E. Denike** (69), electrical engineer, Short Hills, N. J., Sept. 28; **Myron H. Detrick** (89), engineer, Jackson, Mich., Sept. 24; **J. Russell Doubman** (57), marketing expert, Philadelphia, Oct. 13; **Steven F. Evelyn** (67), consulting engineer, Westfield, Mass., Sept. 27; **Joseph Fleitas** (63), physician, Philadelphia, Sept. 24.

H. Galliard (—), parasitologist, Paris, July 7; **Lawrence H. Gerson** (63), industrial chemist, Cleveland, Oct. 2; **Donald Goodchild,** of Washington, D. C. (54), member administrative staff, American Council of Learned Societies, Middlebury, Vt., Sept. 27; **J. Howard Graham** (71), organic chemist, Philadelphia, Oct. 5; **George L. Haas** (75), optical instruments expert, New York, Sept. 26; **Edwin W. Hammer** (83), electrical engineer, Montclair, N. J., Oct. 11; **Albert G. Heller, Sr.** (67), podiatrist, Elizabeth, N. J., Oct. 1; **Edward F. Herschede,** of Cincinnati (70), gemologist, Toronto, Sept. 27; **Harold M. Horton** (65), mathematician, New Milford, Conn., Sept. 25; **Augustus Houghton** (72), technological editor, New York, Sept. 24; **Jens Jensen** (91), landscape expert, Ellison Bay, Wis., Oct. 1; **Chris Kaiser** (72), electrical engineer, New York, Sept. 29; **Joseph Kempfner** (54), ear, nose, and throat specialist, New York, Oct. 1; **Joseph H. Kerrick** (58), mining engineer, Philadelphia, Sept. 25; **Herman L. Kretschmer** (72), urologist and past president, American Medical Association, Chicago, Sept. 23; **Oliver C. Lester** (77), physicist, Boulder, Colo., Sept. 28; **Mark C. Lewis** (56), electrical engineer, Summit, N. J., Sept. 27.

William H. Martin (51), electrical engineer, Rahway, N. J., Oct. 3; **Robert J. May** (71), radiologist, Cleveland, Oct. 17; **Otto F. Meyerhof** (67), biochemist, Philadelphia, Oct. 6; **Harry F. Miter** (74), engineer, Cleveland, Oct. 5; **Bernard E. Mulligan** (81), health officer, Yonkers, N. Y., Sept. 23; **Hugo Newman** (84), educator, New York, Oct. 16; **Charles L. Poor** (85), astronomer, New York, Sept. 27; **Woodruff L. Post** (77), physician and surgeon, New York, Oct. 10; **Willett F. Ramsdell** (60), authority on forest conservation, Ann Arbor, Mich., Sept. 29; **William E. Ridenour** (78), chemist, Philadelphia, Oct. 16; **Walter E. Rogers** (61), botanist and ornithologist, Appleton, Wis., Oct. 5; **Frederick F. Shelden** (38), zoologist, Los Angeles, Sept. 2; **Murray Slotnick** (24), physicist, Ann Arbor, Oct. 5; **Raymond Squier,** of Greenwich, Conn. (52), gynecologist, New York, Sept. 17; **Calvin Sterling** (49), chemist, Plainfield, N. J., Oct. 1; **Lucien B. Stone** (60), mechanical engineer, Newark, N. J., Oct. 2; **Roland R. Tileston** (65), physicist, Pasadena, Sept. 18; **Arnold D. Tuttle** (71), physician, Chicago, Oct. 6; **Edward S. Welch** (82), horticulturist, Shenandoah, Ia., Sept. 22; **DeWitt G. Wilcox** (94), surgeon, Newton, Mass., Sept. 26; **Alfreda B. Withington** (91); physician, Pittsfield, Mass., Oct. 1; **Lynne K. Wood** (36), chemist, Lexington, Ky., Oct. 2; **Joseph J. Zimmerman** (36), internist, Philadelphia, Oct. 11; **Julio Zuluaga** (79), physician and surgeon, Manizales, Colombia, Oct. 2.