

News and Notes

International Conference on Nuclear Physics and the Physics of Elementary Particles

UNDER the sponsorship of the AEC and the ONR the Institute for Nuclear Studies, University of Chicago, invited about 200 physicists, including 45 scientists from abroad, to an international meeting Sept. 16-22, 1951, to discuss the present status of nuclear physics. Eleven scheduled sessions were held, each featuring one or two main talks, with subsequent short contributions and discussion. In addition to these sessions, several informal meetings on special subjects were organized.

The conference started Monday morning with a session on the present status of knowledge concerning fundamental particles, summarized by Dr. Fermi. Although he listed 21 "fundamental" particles, most of the discussion dealt with the π -meson. The most significant results obtained using the meson beams produced by high-energy accelerators are probably the determination of spin (0) and parity (odd) of the π -meson and the detection of considerable unexplained differences in both the production of π^+ and π^- and in their total cross sections with hydrogen. In one of the afternoon sessions Dr. Taschek reported on reactions involving not more than 6 nucleons. No evidence has been found for the di-neutron or for an excited state of He^4 . On the other hand, both members of the $P_{3/2} - P_{1/2}$ doublet of He^5 seem to have been observed. Several of the subsequent contributions dealt with the determination of momentum and parity of excited states, using (d, p) reactions (Rotblat, Cassels, Peierls), and resonance scattering of protons (Richards) or neutrons (Huber). In a parallel session the design of high-energy accelerators was discussed by Drs. Haworth (Brookhaven cosmotron), Barnes, Creutz, Tyren (synchrocyclotrons), and Lawson (iron-free synchrotron).

Dr. Serber sketched the present status of meson theory on Tuesday morning. It appears that a pseudoscalar meson—as required by experiment—explains most facts satisfactorily, but that more experiments are needed to fix the character of the meson-nucleon coupling (Marshak). Preliminary results of a nonlinear meson theory able to explain the saturation of nuclear forces were reported by Schiff. In the next session Segrè gave a survey of the neutron-proton and proton-proton scattering experiments. Despite marked differences in the energy and angular dependence of the cross sections at high energies, the experiments yield neither proof nor disproof of the identity of n - p and p - p forces. Dr. Williams described a preliminary experiment showing the production of polarized proton beams by $P_{3/2}$ scattering on He. In a session on mass spectroscopy Dr. Nier discussed recent developments, including the extension of the precision mass determination to heavier nuclei and the

removal of a discrepancy between the values for the $\text{CH}_4\text{—O}$ doublet obtained by direct measurement and by reaction cycles.

Wednesday morning was devoted to different theories on cosmogony and the formation of nuclei. Although the most extensive theoretical research, as presented by Dr. Gamow, seems to have been done using an expanding universe starting with hot condensed matter, there are so many difficulties—e.g., concerning initial density and the masses of galaxies—that different attempts cannot be disregarded. Other questions discussed were the energy production in supernovae, for which the formation of Be^7 by α -particles and (α, γ) processes was advocated; the energy production in stars by proton-proton and similar reactions, equal in importance to the carbon cycle; and the abundance of uranium in the earth's crust, which seems to be 250 times that in cosmic matter. The afternoon was reserved for a visit to the Institute for Nuclear Studies, where the measurement of the cross section of hydrogen for mesons was demonstrated.

Thursday morning Dr. Jensen gave an impressive survey of the success of the nuclear shell model using j - j coupling. Most of the ensuing discussion was concerned with the question of the effective magnetic spin moment of the nucleons in nuclei. The second talk, on classification of nuclear isomers, was given by Dr. Goldhaber. Experimental lifetime energy relations seem to be reliably established and differ considerably from older theoretical estimates. The most interesting feature is the constancy, within better than a factor two, of the nuclear matrix elements for magnetic sixteenth-pole transitions. Dr. Robson described experiments on the radioactive decay of the neutron, with a half-life of 12.8 ± 2.5 min, and a decay energy of 783 ± 13 kev. The matrix elements for the neutron, H^3 , and He^6 decay are very closely identical. Neutrino recoil experiments were reported by Drs. Allen, Sherwin, and Jacobsen. Comparison of theory and experiment (Wu) shows that all β -spectra measured to date can be explained using the tensor interaction, with the exception of RaE , for which a mixture of tensor and scalar interactions is proposed (Marshak), though this is at variance with the symmetry principle (De Groot). In a concurrent session on neutrons and fission, Dr. Hughes described experiments with pile neutrons, including measurements of cross sections for fast neutrons, scattering experiments on crystals with very slow ("standing") neutrons of wavelength 5-25 Å, and recent experiments with neutron mirrors. Among the other contributions were a report on the energy variation of total cross sections for fast neutrons (Barschall) and a description of the Norwegian U-D₂O reactor (Dahl).

In the last session (gamma rays and photonuclear reactions) Dr. Dumond demonstrated his curved-crystal γ -ray spectrometer, which allows accurate determinations of energies up to 1.5 mev. The previous

discrepancy between the annihilation radiation and the Compton wavelength was recently shown to be due to a nonlinearity in the instrument. There is, thus, no more reason to doubt the identity of electron and positron mass. Dr. Deutsch reported on the level splitting in positronium, which was found, by Zeeman effect, to agree with the theoretical prediction that includes an annihilation-exchange term. In the discussion of photonuclear reactions it was indicated that both types of processes—that involving the formation of a compound nucleus and the direct photonucleonic effect—exist. In a few cases not only was the customary strong electric dipole absorption observed, but also a magnetic dipole-electric quadrupole absorption.

Friday afternoon was again free for visits and group discussions. On Saturday some of the delegates participated in an excursion to the Yerkes Observatory at Williams Bay, Wis. This report would not be complete without mentioning the excellent organization of the conference by S. K. Allison and the staff of the Institute for Nuclear Studies, as well as the many social functions enjoyed by the delegates.

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Scientists in the News

Victor Cohn, science writer for the *Minneapolis Tribune*, and **John Lear**, of New York, an associate editor of *Collier's*, will receive the 1951 AAAS-George Westinghouse Science Writing Awards of \$1,000 each at a special luncheon during the Annual Meeting of the AAAS in Philadelphia. Mr. Cohn won his award for a series of articles on the problems and opportunities of old age, entitled "Never Too Old," which appeared in the *Tribune* Jan. 15-31. Mr. Lear's prize-winning article was "Atomic Miracle," which appeared in the Apr. 21 issue of *Collier's*. It describes in graphic detail the pioneer medical research being done with nuclear reactions in the hospital at Brookhaven National Laboratory. **Dick Pearce**, reporter for the *San Francisco Examiner*, received honorable mention in the newspaper field for "Surgery in the Dark." Winners of honorable mention in the magazine field were **Claude Stanush** and **Kenneth MacLeisch**, of the Science Department of *Life*, for "Geography of the Universe," and **Frederick G. Vosburgh**, assistant editor of *The National Geographic Magazine*, for "Torchbearers of the Twilight." The annual awards are made possible by the Westinghouse Educational Foundation and are administered by the AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Raymond B. Allen has resigned as president of the University of Washington to accept a presidential appointment as director of the government's Psychological Strategy Board. Dr. Allen will take over his new duties in Washington, D. C., Jan. 2. He succeeds **Gordon Gray**, who organized the board but recently resigned to return to his post as president of the University of North Carolina.

William L. Batt, president of S.K.F. Industries, Inc., and minister in charge of the ECA mission to the United Kingdom, received the Engineering Societies' Hoover Medal, and **Ervin C. Bailey**, vice president of Babcock & Wilcox, was awarded the Societies' John Fritz Medal, for leadership and achievement in the engineering profession and in public service. The awards were made at the 72nd annual meeting of the American Society of Mechanical Engineers. Among recipients of awards for achievements in mechanical engineering were **Thomas Roy Jones**, president of Daystrom, Inc. (Henry Laurence Gantt Medal, presented jointly with the American Management Association); **Glenn B. Warren**, general manager of G-E's turbine division (ASME Medal); **George Rupert Fink**, president of the National Steel Corp. (Holley Medal); **Jacob P. Den Hartog**, professor of mechanical engineering at MIT, (Worcester Reed Warner Medal); **J. Kenneth Salisbury**, division engineer in G-E's engineering and consulting laboratory (Richards Memorial Award); **Clayton H. Barnard**, of the Bailey Meter Co. (Melville Prize Medal); and **Warren M. Rohsenow**, assistant professor of mechanical engineering at MIT (Pi Tau Sigma gold medal).

The Hawaiian Sugar Planters' Association has elected **Alexander G. Budge**, president of Castle & Cooke, Ltd., president for 1952 in accordance with a policy whereby the presidency is rotated among the heads of the five major sugar agencies. Mr. Budge, who was president in 1947, replaces **H. P. Faye**.

Martín Cárdenas, professor of genetics and phytopathology at the Universidad Autónoma "Simón Bolívar," Cochabamba, Bolivia, recently received the Mary Soper Pope Award of the Cranbrook Institute of Science. This award, established at Cranbrook Institute in 1946 by Gustavus D. Pope in memory of his wife, is given from time to time for noteworthy and distinguished accomplishment in the field of the plant sciences.

William F. Cook, USAF (MC), has become chief of the newly organized Facilities Division within the Directorate of Plans and Hospitalization for the Office of the Air Force Surgeon General. Colonel Cook has been surgeon for the 3d and 8th Bomber Commands and the 12th Air Force. Within the same directorate **Lee I. Saul** and **John Waldner** have been assigned to organization and mobilization planning duties for the Medical Service Plans Division. **Raymond L. Vanhoy** has been assigned to supply planning and allowance duties for the directorate's Medical Materiel Division.

In addition to support from the North Dakota Cancer Society (SCIENCE, 114, 474 [1951]) grants-in-aid totaling \$21,022 have been awarded to **W. E. Cornatzer**, University of North Dakota Medical School: \$11,572 from the AEC to study the effects of radiation on the functional capacity of tissues, and \$9,450 from the USPHS to study the effects of drugs and hormones on the phospholipid turnover in animals and man.

R. Adams Dutcher, professor emeritus of Pennsylvania State College, has been cited by the Department of the Army for his investigations of enemy industry for the Technical Industrial Intelligence Committee of the Joint Chiefs of Staff.

Gerald D. Fasman, who holds a Royal Society of Canada postdoctorate scholarship, has started research work under A. R. Todd at Cambridge University, England.

Ernest Carroll Faust, Department of Tropical Medicine and Public Health, Tulane University, has been appointed a member of the WHO Expert Panel on Parasitic Diseases, to serve for a period of five years.

John B. Field has been appointed assistant professor of clinical medicine at the University of Southern California School of Medicine. He was formerly instructor of biochemistry and pharmacology at the University of Rochester School of Medicine and Dentistry 1945-48, and completed his residency training at the New York Hospital-Cornell University Medical Center and Memorial Hospital Cancer Center. His major undertaking will be to develop a program of investigation into cancer chemotherapy, for which he has been given an initial grant of \$16,000 from the Damon Runyon Fund.

The National Aeronautics Association has announced that the 1951 Wright Brothers Memorial Trophy will be awarded to **Jerome Clark Hunsaker**, chairman of the National Advisory Committee for Aeronautics.

Joseph H. Lancor, Jr., has been named director of the Transducer Division of Consolidated Engineering Corporation. He will supervise and direct the design and development of transducers, including vibration pickup, accelerometers, and pressure pickup. Before joining Consolidated, Mr. Lancor was director of product engineering of Vitro Corporation of America, formerly the Kellogg Corporation.

E. Bruce Levy, member of the Standing Committee on Crop Improvement in the Pacific Area, has been awarded the R. B. Bennett Prize for 1951 by the Royal Society of Arts, England. The prize is awarded every three years for the most outstanding contribution from the Dominions, India, Burma, and the Colonies to the promotion of arts, agriculture, or industries and commerce of the overseas Empire during the intervening period. Mr. Levy, who is director of the New Zealand Grasslands Research Division, received the award for his work on grassland farming.

O. H. Frankel, another member of the Standing Committee, has been appointed chief of the Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra, Australia. Dr. Frankel has been on the staff of the New Zealand Department of Scientific and Industrial Research since 1929, first as geneticist at the Wheat Research Institute, later as chief executive officer of the institute, and finally as director of the Crop Research Division of the DSIR.

Charles W. MacGregor, professor of applied mechanics and head of the materials division at MIT, has been named vice president of the University of Pennsylvania in charge of engineering and scientific studies. In the office at Pennsylvania, newly created by the trustees, Dr. MacGregor will have jurisdiction over the engineering and scientific departments of the university, including the Towne Scientific School and the Moore School of Electrical Engineering. He will begin his work at Pennsylvania in February.

Malcolm S. McIlroy has been appointed assistant director of the School of Electrical Engineering at Cornell University. Before joining the Cornell staff in 1947, he was with the General Electric Company, Schenectady, and the Central Hudson Gas and Electric Corp., Poughkeepsie. He also taught at MIT, where he was assistant director of the institution's radar school during the war.

F. Stearns MacNeil, of the U. S. Geological Survey, is studying the little-known atolls of the Northern Marshalls. Information will be sought on the geology and the marine biology and ecology of the reefs and lagoons, as well as on the geology, soils, ground water, and life of the islands. Guam, and possibly other islands in the Mariannas, will be visited before he returns.

Klare S. Markley, principal chemist at the Southern Regional Research Laboratory, New Orleans, has won the 1951 Southwest Award of the American Chemical Society. In 1945 Dr. Markley was a member of the technical and industrial intelligence committee of the Joint Chiefs of Staff, which investigated the fat and oil industries of Europe. He also headed FAO missions to Venezuela in 1948 and to Guatemala in 1949.

Nelson Marshall has been appointed acting associate director of the Oceanographic Institute of Florida State University. Dr. Marshall recently resigned as dean of William and Mary in protest against the Board of Visitors' method of choosing the new president without prior consultation with a faculty committee (*SCIENCE*, 114, 511 [1951]). Dr. Marshall had suggested in 1949 that certain irregularities were being perpetrated in connection with the school's athletic program. At the behest of the college's former president, John E. Pomfret, he undertook an investigation last spring. The inquiry uncovered evidence of falsification of high-school qualifications for promising athletes and certain instances in which physical education grades had been awarded for credit not earned.

Olaf Morgan Norlie, of Northfield, Minn., formerly dean and professor of religion at Hartwick College, director of the Hartwick Seminary, professor of psychology at Luther College, and, more recently, archivist at St. Olaf College, has been given the Knight Cross of the First Class of the Royal Order of St. Olav by King Haakon VII of Norway.

William W. Rubey, research geologist of the U. S. Geological Survey, has been appointed chairman of

the National Research Council of the National Academy of Sciences. Mr. Rubey assumed his duties on the first of October, succeeding **Douglas Whitaker**, who has returned to Stanford University as dean of humanities and sciences on the completion of his term as chairman of the council.

Marion M. Sandomire has moved from Washington, D. C., to New York, where she will be statistician in the Production Division of the New York Operations Office, Atomic Energy Commission.

Arlic W. Schorger, retired Madison industrialist, has been named professor of wildlife management for the remainder of the academic year at the University of Wisconsin. Although his lifelong vocation has been in chemistry, he has become one of the nation's authorities on the historical aspects of wildlife in the Lake states.

Elmer E. Stickley, physicist, has left the Pittsburgh Plate Glass Co. to join the Medical Department of Brookhaven National Laboratory. Dr. Stickley joins the Physiology Division of the department, where he will correlate physical and biological measurements of effects of radiation on living cells.

V. A. Tiedjens, director of the Virginia Truck Experiment Station at Norfolk since July 1945, has resigned to become director of research for Na-Churs Plant Food Co., Marion, Ohio. **W. H. Brittingham**, horticulturist at the Texas Experiment Station, will succeed him as director.

Paola S. Timiras, formerly assistant professor in the Department of Experimental Medicine and Surgery of the University of Montreal, has been named assistant professor in the Department of Physiology of the same institution. Dr. Timiras will be in charge of the course on pharmacology.

Paul Vigoureux, of the British Admiralty Research Laboratory, is visiting various naval research laboratories in the U. S. for a period of six months. His headquarters will be the Naval Ordnance Laboratory, White Oak, Md. Dr. Vigoureux is a specialist in ultrasonics.

Theron Wasson, chief geologist of The Pure Oil Company, has been given the Award of Merit "in recognition of his achievements in the field of petroleum geology" by the Alumni Federation of the Carnegie Institute of Technology.

Chi Hua Wu, associate professor of gross anatomy at the National Defense Medical Center in Taipei, Formosa, is at the Washington University School of Medicine on a six-months traveling fellowship, sponsored by the American Bureau for Medical Aid to China. Dr. Wu will stay at Washington University for three months to study methods of teaching, trends in research, equipment, textbooks, and other related materials. For the last three months of his fellowship, Dr. Wu hopes to visit New York, Columbia, Harvard, Yale, Cornell, Chicago, Michigan, and California universities.

Education

Brown Instruments Division of Minneapolis-Honeywell Regulator Company will begin its second semester of courses in instrument maintenance and repair on Jan. 7 at the Brown School, Philadelphia. A large part of the six months' training will be for the benefit of Honeywell customers' men, but it is expected that special courses will be held for government engineers, including those from the AEC, educational institutions, and from various friendly nations. Among the studies will be pyrometry and electronic potentiometers, pneumatic control and transmission, flow meters, and electrically operated automatic controls.

At **Cornell University**, the Committee for Air Safety Research will broaden its activities and change its title to "The Cornell Committee for Transportation Safety Research." It will embark on a new research program designed to provide information that will enable manufacturers to make the automobile a less lethal form of transportation. The program ultimately may extend to highway engineering and other elements of accident prevention. Theodore P. Wright, vice president for research at Cornell and former CAA administrator, will head the new committee, which will draw on work being done by the Crash Injury Research Project at the Cornell Medical College, the Cornell Aeronautical Laboratory in Buffalo, and the engineering and scientific units on the Ithaca campus. The group will also have the cooperation of the Gugenheim Aviation Safety Center.

The **Defence Research Board's** vessel *C.G.M.V. Cancolim II*, which left Esquimalt on July 28, has returned from hydrographic and oceanographic investigations in the coastal waters of the Beaufort Sea, both off the Canadian mainland and along the west coast of Banks Island as far north as Prince Alfred Cape, and also in Amundsen Gulf as far east at the entrance to Dolphin and Union Strait. The limits of the continental shelf in this region were defined, the characteristics of the waters investigated, and a considerable number of biological specimens collected for the Fisheries Research Board and for the National Museum. Four astronomical control points were established and special surveys made for the Department of Resources and Development.

Richard S. Hunter and the staff of the **Henry A. Gardner Laboratory**, Bethesda, Md., will hold a course Feb. 11-15 designed to help technologists measure color, reflectance, gloss, and other appearance attributes of materials. Emphasis will be on the measurement of the fundamental optical and psychological factors that cause materials to appear as they do.

The **Harvard College Observatory** on Oak Ridge in the town of Harvard, Mass., will be renamed the George R. Agassiz Station, in recognition of the lifelong interest of the late Mr. Agassiz in the development of astronomy at Harvard. The Station, main Harvard Northern Hemisphere observation post, was

established in 1932, and Mr. Agassiz was closely associated with its planning and construction. Among his many gifts in support of astronomy at Harvard is the new super-nova-search camera, which is now under construction and which will become part of the station at Bloemfontein, S. A. In 1927 he established the Agassiz Research Fellowships for the support of advanced students in astronomy.

The remaining schedule for the **Howard University Chemistry Lecture Series** (*SCIENCE*, **114**, 114 [1951]) is as follows: Jan. 17, P. J. W. Debye; Feb. 21, S. A. Waksman; Mar. 6, C. D. Coryell; Mar. 20, G. W. Wheland; Apr. 24, Melvin Calvin; May 15, I. M. Kolthoff. Reservations may be obtained from Lloyd N. Ferguson, of the Chemistry Department.

Oak Ridge Institute of Nuclear Studies Special Training Division has scheduled its Radioisotope Techniques Courses to begin Jan. 7, Feb. 4, and Mar. 10. Arrangements have been made to accept a small number of foreign participants, although the summer courses will continue to be limited to U. S. personnel. Foreign applicants, who must be from countries receiving radioisotopes from the U. S., should make application through their embassy or legation and through the U. S. Department of State. Full information may be obtained from Ralph T. Overman, chairman of the division.

Illinois Institute of Technology is offering graduate assistantships in chemistry beginning in February, June, and September, and chemistry staff positions in teaching and research. Undergraduate scholarships in engineering and liberal arts are available for the spring semester. Application forms may be obtained from the Director of Admissions, 3300 S. Federal St., Chicago 16.

Grants and Fellowships

The **Field Foundation** has made a grant of \$19,800 to the Austen Riggs Foundation for research in juvenile delinquency, narcotics addiction, and other emotional problems of adolescence. Work will be carried on at the Riggs Clinic, Pittsfield, Mass., the Riggs Foundation, Stockbridge, Mass., and the Psychiatric Institute, Pittsburgh, Pa., under the direction of Erik H. Erikson.

The **Foundation for Microbiology**, organized at Rutgers last August, will make its first grants only to those projects that cannot obtain support elsewhere. Thus the foundation will "consider requests for aid in less spectacular but vitally important aspects of microbiology, such as the publication of special treatises and other scientific reports in the field of microbiology, maintenance of collections of cultures of microorganisms, and organization of microbiological conferences and symposia. . . ."

Fifty General Electric Science Fellowships will be awarded to high-school chemistry and physics teachers in 13 Eastern states and the District of Columbia for

summer study at Union College. Classroom and laboratory instruction at the college will be supplemented by trips through G-E installations in the area. Similar programs are given at Case Institute of Technology and at Rensselaer Polytechnic Institute.

The Pitman-Moore Company, a division of Allied Laboratories, has renamed its pharmacology fellowships the **Hanzlik Fellowships in Pharmacology** in memory of the late Paul J. Hanzlik, well known for his many contributions in the field of pharmacology.

Research Corporation will administer the **Kendall-Hench Fund**, created by a grant of \$100,000 from Merck & Co., Inc., and an allotment from the corporation of a portion of its income from patent rights in cortisone. Established in honor of the two 1950 Nobel prize winners in medicine, the fund made its first grant (\$22,500) to Princeton to help initiate and support Dr. Kendall's researches at the James Forrestal Research Center, where he has recently become visiting professor of chemistry. Additional commitments of \$12,500 per year for the next two years were also made to ensure continuity of the work.

The **John and Mary R. Markle Foundation** has made a grant of \$100,000 to the Social Science Research Council to stimulate research in developing new methods that will reveal emotional stability, drive, force, motivation, and other characteristics in young people, not measured by current intelligence and aptitude tests. The annual report of the foundation reveals that grants of more than \$1,160,000 were made during the past academic year. Largest amounts went to U. S. and Canadian medical colleges for the support of Markle Scholars in Medical Research.

The **National Heart Institute**, U. S. Public Health Service, is conducting a research training program in enzyme chemistry, with particular reference to heart muscle, at the Institute for Enzyme Research of the University of Wisconsin for a limited number of trainees, under the direction of David E. Green and Henry Lardy. Candidates must possess a Ph.D. or M.D. degree in order to qualify. Application forms (returnable before Jan. 15) may be obtained from the Institute. A research trainee can start the program any time during the period July 1952 to July 1953, and the training period is for 12 months.

The **National Multiple Sclerosis Society** has awarded a grant of \$15,000 to Peter Bent Brigham Hospital, Boston, for an investigation of the part played by the adrenal gland in the disease. George W. Thorn will be in charge of the research. The effectiveness of treatment with ACTH and cortisone will be main objective of the investigation. Under another grant, Paul Thygesen, Copenhagen, is working on a research program to perfect a technique of evaluating the course of the crippling nerve disorder. Patients will be given complete neurological examinations at three-week intervals and their symptoms noted graphically, thus determining the effectiveness of a particular form of therapy.

Meetings and Elections

The **American Chemical Society** has chosen Farrington Daniels, of the University of Wisconsin, president-elect for 1953. President for 1952 will be Edgar C. Britton, of the Dow Chemical Company. He will succeed N. Howell Furman. Wallace R. Brode and William G. Young were elected to three-year terms on the Board of Directors. The ACS Division of Agricultural and Food Chemistry elected Asger F. Langlykke chairman, succeeding Bernard E. Proctor. Arthur N. Prater was chosen chairman-elect, and Louis B. Howard secretary-treasurer. The Division of Biological Chemistry chose Richard H. Barnes chairman, to succeed John T. Edsall, and Esmond E. Snell vice chairman. Otto Schales was named secretary-treasurer. In the Division of Organic Chemistry, Robert C. Elderfield succeeds William S. Johnson as chairman, and Walter M. Lauer was made chairman-elect. Nelson J. Leonard was re-elected secretary.

At Atlantic City the **American Institute of Chemical Engineers** elected William I. Burt president for 1952. William T. Nichols was elected vice president, and Stephen L. Tyler and C. R. DeLong were re-elected executive secretary and treasurer, respectively. William T. Dixon was elected to a one-year term as director and J. Henry Rushton, Philip H. Groggins, J. C. Elgin, and Arthur K. Doolittle, to three-year terms.

Charles W. Chillson has been elected president of the **American Rocket Society**. He succeeds Herbert R. J. Grosch. Frederick C. Durant, 3rd, was named vice president, and G. Edward Pendray, Martin Summerfield, and Maurice J. Zuerow serve as directors.

Geology teachers from 10 states met in Detroit on Nov. 10 to organize a national **Association of Geology Teachers**, to foster improvement in the teaching of the earth sciences, to emphasize their cultural significance, and to disseminate knowledge in the field to the general public. Officers of the association for 1951-52 are: president, Kurt E. Lowe, City College of New York; vice president, Percival Robertson; secretary, Ralph Digman, Harpur College, Endicott, N. Y.; treasurer, Gerald M. Friedman; and editor, William F. Read. Further information about the association may be obtained from the president or the secretary.

Donald B. Sinclair, chief engineer of the General Radio Company, Cambridge, Mass., has been elected president of the **Institute of Radio Engineers**. Harold L. Kirke was elected vice president.

The **Saskatchewan Geological Society**, recently organized as an associate of the American Association of Petroleum Geologists, has received its letters patent from the Canadian government. Officers are: president, Allen B. Graves, Socony-Vacuum Oil Company; vice president, James T. Cawley, director of mines for the Province of Saskatchewan; secretary, Robert A. Bishop, director of exploration for Sohio Oil; Herbert F. Dodson, geophysicist for Tidewater Oil, business manager; and Robert B. Campbell, independent geologist, program chairman.

Miscellaneous

Chester I. Barnard, president of the Rockefeller Foundation, was elected chairman of the National Science Board of the **National Science Foundation** at its second annual meeting, to succeed James B. Conant. Edwin B. Fred, president of the University of Wisconsin, was re-elected vice chairman. The new chairman and vice chairman were elected for two-year terms of office as prescribed by the National Science Foundation Act of 1950. Four members of the Executive Committee, whose terms had expired, were also re-elected: Mr. Barnard; Detlev Bronk, president of Johns Hopkins University and of the National Academy of Sciences; Lee A. DuBridge, president of California Institute of Technology; and Elvin C. Stakman, chief of the Division of Plant Pathology and Botany at the University of Minnesota. The National Science Foundation is beginning its second year of operation with programs in support of basic research in the medical, mathematical, physical, engineering, and biological sciences. A guide to assist investigators in the preparation of requests for research grants has just been distributed to educational institutions, laboratories, and other organizations in a position to carry on or direct competent scientific research. Applications are also being received for National Science Foundation graduate fellowships for the academic year 1952-53 in the same fields. The foundation expects to award about 400 such fellowships. Applications may be obtained from the Fellowship Office, National Research Council, Washington 25, D. C.

The format of *Nucleonics*, McGraw-Hill publication, will be changed in January from digest to standard size, and at the same time the editorial content will be increased by about 25 per cent. Present technical coverage will be maintained, and three new kinds of articles will be added: nontechnical interpretations of significant trends in the field; articles on how to construct and maintain equipment; and broad technical review articles.

A **Panel of International Corresponding Neurologists**, composed of 56 neurologists from 26 countries, has been established with headquarters at the National Multiple Sclerosis Society. Through its liaison with the NRC Medical Sciences Information Exchange, the society will be able to keep corresponding neurologists informed of all developments in this country and will in turn receive reports from its contacts throughout the world.

The **Registry of Rare Chemicals**, 35 W. 33rd St., Chicago 16, Ill., is asking for the following: vanadium trisulfide; methylammonium chromic sulfate; boron silicide; triethylgermanium hydride; cyclobutanone; cyclobutyl bromide; vinyl-*p*-xylene; tetrahydrothiapyran; 5-methyltryptophane; 2-methylthiazole; *p*-fluorobenzenesulfonic acid; dodecyl gallate; 1,7-dimethylnaphthalene; 9,10-dihydrophenanthrene; difluoromethane; eriodietin; diplococain; biliflavin; L-idose; benzoquinonecarboxylic acid; and cyclobutane.