News and Notes

Quantitative Aspects of Provenance and Environment of Sedimentary Rocks

About 50 geologists from nine midwestern states gathered at the Illinois State Geological Survey on 2 Oct. 1954 to discuss statistical and other quantitative approaches to the problems of sedimentary rock environments and provenance. Seventeen organizations, primarily universities and geological surveys, were represented. The group that assembled represented the following specialties: 12 sedimentary petrologists, 14 stratigraphers, 6 clay mineralogists, 5 (Pleistocene) geomorphologists, 5 paleontologists, 2 mathematical statisticians, 1 geochemist, and 1 petroleum engineer.

After a welcome by John C. Frye, chief of the Illinois Geological Survey, and an introduction by P. E. Potter (Illinois Geological Survey), the morning was devoted to two papers on the provenance of sedimentary rocks by Lynn Jacobsen (University of Kentucky) and Raymond Siever (Illinois Geological Survey). Jacobsen's paper, "Source of sediments of the Ardmore basin," described a sedimentary petrographic approach to the study of the provenance of a wedge of sediment of relatively small area but of great thickness. Siever, in his paper "Provenance study of the Lower Pennsylvania of the Eastern Interior Basin," used not only sedimentary petrography but a systematic study of cross-bedding directions to arrive at the location and constitution of source areas. In contrast to the Ardmore basin study, this report covered a relatively thin, widespread group of rocks. Discussion of these two papers was led by R. C. Moore (Kansas Geological Survey), Gordon Rittenhouse (Shell Oil Co.), H. R. Wanless (University of Illinois), and John Ferm (U.S. Geological Survey). In addition to a discussion of specific conclusions, it was suggested that the volumetric relationships between the sediments and the source materials generally available be checked in such studies. Some divergence of opinion was expressed on the nature, classification, and interpretation of cross-bedding in various types of rocks. Several expressed the desirability of a cautious evaluation of mean cross-bedding directions as a reflection of the direction of the source areas.

The afternoon session was devoted to three papers illustrating quantitative approaches to different aspects of environmental interpretation. The first paper, "Environmental significance of faunal studies in the Permian of Texas" by E. C. Olson (University of Chicago), showed how integration of general geology with quantitative study of vertebrate fossils can provide insight into the interrelationships between evolutionary trends of vertebrates and changing physical environmental conditions. In the course of discussion, led by L. L. Sloss (Northwestern University) and D. H. Swann (Illinois Geological Survey), emphasis was placed on the importance of a statistical biometric approach to such problems, which enables conclusions to be drawn from a large sample of fossils. There was some discussion concerning the correlation of faunal evolutionary trends with stable versus unstable environments.

The second paper in the afternoon, "The St. Peter sandstone, physical characteristics and environment" by E. C. Dapples (Northwestern University), showed a purely physical approach to the problems of environmental reconstruction, using lithofacies maps, grain-size analyses, and other measurable physical characteristics. The discussants of this paper were J. C. Griffiths (Pennsylvania State University) and H. B. Willman (Illinois Geological Survey). In addition to pleas for more exact petrographic descriptions, the points raised included the possible results to be expected from the petrographic study of such a uniform sand body, the validity of interpretations based on rock units that are not everywhere time-equivalent and that may include unconformities, and the correctness of some of the specific environmental conclusions based on the study of the St. Peter.

The final paper, "Some aspects of the clay mineralogy of Lower Pennsylvanian sandstones" by H. D. Glass (Illinois Geological Survey), was an attempt to integrate clay mineral study with sedimentary petrography and regional geology in order to distinguish between contributions from the source area and changes in mineralogy induced by depositional environment. In the course of the discussion period, led by R. E. Grim (University of Illinois) and A. Swineford (Kansas Geological Survey), the somewhat contrasting ideas on clay mineral genesis of Millot and Rivière were discussed. The importance of the effects of diagenesis and weathering on clay mineral composition dominated much of this discussion.

The first part of the conference closed with a brief summary by W. C. Krumbein (Northwestern University). Krumbein noted the general trend to quantitative treatment of geologic problems and the strong increase in the use of statistical analysis in sedimentary research.

The second part of the conference consisted of a short field trip, led by Potter and Siever, covering exposures of the Mansfield sandstone (Lower Pennsylvanian) near Attica, Ind. On this trip the members had a chance to see and discuss the measurement, statistical evaluation, and origin of cross-bedding. At the final stop, the group spent 2 hr in a generalized critique of cross-bedding interpretation and statistical analysis, after which the conference ended. The conference accomplished its objective of full and free discussion of a small number of papers with adequate time allowed for the presentation of research papers. No transcript of the conference is being published other than this note. Although no similar future con-

ferences are planned, it is hoped that national organizations will promote and sponsor regional meetings such as this.

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Science News

Pertinent information concerning **the biological sciences in Poland** is contained in the following interview with Kazimierz Petrusewicz, corresponding member of the Polish Academy of Sciences, and head of the Biological Sciences Section of the academy, published by *Zycie Warszawy* under the title "Ten years' development of biological sciences in People's Poland."

Before the war the biological sciences in Poland were based on a conception of formal genetics which was anti-evolutionary and founded on metaphysics. The influence of this conception was very widespread, and affected not only the science of heredity, but also, in the form of its generalization, neo-Darwinism, all the other fields of biological science as well. As a result of inadequate equipment and facilities, and also, at times, of uncritical acceptance of the achievements of science in the West, most of the work done in research was unimportant and descriptive in character, and no important new theories were put forward.

Biology as a science stemmed mainly from agriculture and medicine, it has made generalizations on the basis of experience in these fields, but at the same time exerted an active influence on practice, helping man to master Nature in increasing degree. But Polish science in the period between the wars usually forgot about these basic functions of the biological sciences. Practice was frequently regarded with contempt. 'Pure science' was held up as the ideal to be followed by the scientist. This attitude of the scientists was perhaps due partly to the fact that the Poland of the landowners was not interested in the application of scientific methods in agriculture, since the overwhelming mass of the exploited small and middle holders, ran their farms in extremely primitive conditions.

In this situation, therefore, biology in Poland by its attitude consciously or unconsciously served the interests of the propertied classes. Of course, we also had individual research workers who continued the progressive achievements of Polish Darwinists of the second half of the 19th and the beginning of the 20th centuries, and who had outstanding achievements to their credit, representing an important, if not always a conscious, contribution to the development of materialist biology.

During the war great numbers of our biologists were lost, and the little we had in the way of research centers and institutes were almost completely destroyed. . . .

In the mathematics and natural science departments of the universities alone, the number of chairs held in biology has risen from 24 before the war to 56 at the present time, and in the agriculture and forestry departments, as well as in the agricultural colleges, the number of such chairs has risen from 69 to 167.

Immediately after the liberation of Poland the research and teaching institutions were not only reconstructed, but extended as well. The Nencki Experimental Biology Institute was re-opened as early as 1945. And when the Polish Academy of Sciences was set up in 1952, there was a great increase in the number of biological research centers. Not only were the old ones extended, but many new ones also were set up. The social transformations which took place in Poland played an immense role in transforming the essence and functions of biological science in our country. Biologists in Poland now joined in building the foundations of Socialism, they came nearer to the life of the nation, and took upon themselves tasks dictated by the new needs of society.

We should not underestimate the enormous influence on Polish biology of the revolutionary changes in the biological sciences, brought about by the victory of Michurinite biology at the session of the All-Union Lenin Academy of Agricultural Sciences, held in August 1948. The victory won in the Soviet Union over the Mendel-Weissman-Morgan school of formal genetics set in motion the process of overcoming in Polish biology the anti-evolutionary influence which predominated in the years between the wars. Now, when People's Poland has been in existence for ten years, biologists in Poland are beginning to display more confidence and more success in undertaking independent research of a fundamental character.

The direct assistance of eminent Soviet scientists played an important role in this ideological turning point, while the visits of Polish biologists to the Soviet Union did a great deal to raise the level of research work in our institutes and to popularize creative discussion between scientists. . . .

Around Professor R. Kozlowski there is now a whole group of exceptionally talented young paleozoologists. Whereas before the war this distinguished scientist had scarcely one assistant, today he has fourteen. In paleobotany Professor Szafer is continuing his excellent work. A group of young research workers under Professor Dehnel are working on the dynamics of development. A school of evolutionary ethology and experimental biology is doing good work under the guidance of Professor Jan Dembowski, President of the Polish Academy of Sciences. The extensive premises of the Nencki Institute in Warsaw will be given over for use before the end of the year, and will thus afford splendid conditions for those scientists who are working under the direction of Professor Dembowski.

Excellent results are also being obtained by a group of ecologists working under Professor Tarwid in the Ecological Institute of the Academy. Here theory is linked with practical problems concerning fresh-water fish and the combating of pests, etc.

As far as individual work is concerned, mention must first of all be made of the work of Professor Dembowski and his students on the ethology of invertebrate animals; the research of Professor Marchlewski on poly- and heterospermy; the work of the late Professor Hirszfeld on immunology and haematology, of Professor Szafer on the flora of the Tertiary, of Professor W. Stefanski on parasites in domestic animals and on the combating of these, as well as the interesting work of Professor Z. Raabe on the philogenesis of protozoa and a number of other works.

The great achievements of Polish biology can be seen in the fact that between 1949 and 1953 seventeen biologists were awarded State Prizes. . . .

The Ninth Plenum of the PUWP Central Committee, the Second PUWP Congress, the latest decisions of the Party and the Government on the rehabilitation of fallow-land and the improvement of fodder supplies, mobilize biology equally with the other sciences in Poland, to increase their efforts and their contribution towards solving the problems confronting the national economy.

The assistance of the State, the high qualifications of our scientists, as well as their patriotism and devotion, are guarantees that the tasks at present facing the biological sciences will be fulfilled.

There follows a translation of a paragraph taken from the written presentation of the newly appointed professor of physiology to the Medical School authorities in **Buenos Aires**; it was published in the *Boletin "CUM,"* Buenos Aires, Sept. 1954.

If one takes Physiology from the viewpoint of the chair to which new students come to mold their scientific and spiritual wealth in the first years of their medical career, one could teach them that function is modified according to the political, economic, and social environment of the Nation, and they could learn with physiological and biological basis the fundaments of our National Sovereignty doctrine, based on Social justice and on Economic liberation.

Growing concern has been expressed in recent months over the misuse of security clearance procedures for political purposes and over efforts to discredit an opponent's point of view by labeling it "communistic." The *Los Angeles Daily News*—recently reported as defunct—has accused the Los Angeles County Medical Association of using this device to attack a program of medical care that the medical association dislikes. The *Daily News* for 14 Dec. editorialized:

Just as the opponents of public housing obtained the services of a congressional committee to link the program with "creeping socialism," so did the Los Angeles County Medical Association arrange with the State Un-American Activities Committee to link certain types of health programs with "communism."

In the recently concluded public hearings here, which were candidly admitted to be the work of the local medical organization, the tip-off lies in the fact that there was nothing to expose that hadn't been exposed ad infinitum. . . .

The real purpose of the County Medical Association was disclosed through the consistency with which the attack focused on a small organization that provides the kind of medical plan the association violently dislikes. . . .

It was another example of the cynical use of investigative power for political purposes.

In all fairness to the medical profession, it should be said that many of its members hate this misuse of power and intolerance of dissent. . . .

In the academic year 1953–54 a total of **26 percent of the age group 18–21 attended college** as compared with only 4 percent in the year 1900. This sixfold increase was revealed in an address delivered at the 69th annual convention of the Modern Language Association of America held in New York 27–29 Dec. The speaker was Milton Katz of Harvard University Law School, who was formerly an associate director for the Ford Foundation.

In a recent interview with reporters of the United Press, Harold C. Urey, atomic scientist and former Nobel prizewinner, expressed the opinion that "Americans might be giving the Soviet Union **too little credit for nuclear and military progress.**" He said that the Russians "had beaten the British to the punch with the prime nuclear weapons" and that we "can't judge their technical achievements by their standard of living because they choose not to apply their know-how to living."

In noting **the achievements in science** for the year 1954, Waldemar Kaempffert, *New York Times* science editor, wrote in part:

The past year was rich in scientific and technologic achievements. Many were of more social than of purely scientific importance. Among these were the accounts given of the mass inoculation of children with Dr. Jonas Salk's now famous vaccine, the recommendations of the AAAS for changing the security-risk policy of the Administration, the developments in the exploitation of atomic energy and the President's "atoms for peace" plan.

Among scientific achievements, Kaempffert cited the total synthesization of strychnine, accomplished after 3 yr work by R. W. Woodward and his associates, Harvard University; the findings of D. Krech, M. R. Rosenzweig, and E. L. Bennett, all of the University of California, that the difference between the brain of an ordinary person and that of a genius may be a difference in the amount of cholinesterase, an enzyme [*Science* **120**, 994 (1954)]; and the isolation of a protein, properdin, by researchers at Western Reserve University [*Science* **120**, 279 (1954)].

The U.S. Department of Labor's consumer price index in selected U.S. cities for the latest month reported (Nov. 1954) indicates a **0.2-percent rise in medical care** cost over the same month a year ago. The department's figures show an increase from 72.6 to 126.1 (on the basis of 100 for 1947–49) within the past 15 yr. The latest increase was attributed to higher hospital rates and physicians' fees.

N. Datta-Majundar, director of anthropology of the Indian Government, has reported that a team of anthropologists has established contact with a **tribe of the Little Andamans, the Onges,** who maintain a primitive form of life. The Onges, he said, know nothing of agriculture and have not heard of steel. Their fishing arrows are made of tree twigs polished on thorny plants. Their only means of support and sustenance are hunting and fishing. Blood tests have shown that the Onges are racially connected with the Melanesians of Oceania. The Andaman Islands, where the Onges were found, are in the Bay of Bengal.

Scientists in the News

Edmund V. Cowdry, research professor emeritus and lecturer in anatomy and director of the Wernse Laboratory of Cancer Research, Washington University, St. Louis, was honored recently for his almost 40 yr of scientific activity and for his contributions to anatomy, cytology, cancer research, and gerontology at a dinner given by the Detroit Institute of Cancer Research, Wayne University. Many of Cowdry's former students, colleagues, and friends attended.

The U.S. Naval Ordnance Laboratory, Silver Spring, Md., has presented its first efficiency award to **Joseph Petes,** supervisory physicist in the Explosion Effects Division. Although provision for such an award has long been made, it has never before been given. Petes suggested and tested an unshielded type of Army Signal Corps cable for use in the network of special cable connecting the instrumentation necessary for studies of atomic blasts. The cost of the original shielded cable was $396,000 for some 300 mi; with Petes' unshielded cable the cost is reduced to $27,000, a saving of $369,000.

After 38 yr of continuous service, **Ray Palmer Baker,** vice president of Rensselaer Polytechnic Institute and director of the Industrial Council, has resigned. During his long tenure Baker has helped to raise the professional level of technical education in the nation's engineering colleges. He will devote his time to the cultural history of the United States on which he has been working for a long time.

Edward K. Markell of the Medical School of the University of California at Los Angeles left this month for Mexico where he will make a study of the use of cortisone against onchocerciasis, a tropical disease borne by the black gnat. Markell recently reported on his investigation in Tahiti of the use of cortisone in the treatment of elephantiasis, an advanced form of filiariasis, also a disease caused by parasites. Because cortisone was beneficial, Markell hopes it may be useful in treating onchocerciasis, an illness that results in the formation of nodules over the body and inflammation of eye tissue that frequently leads to blindness.

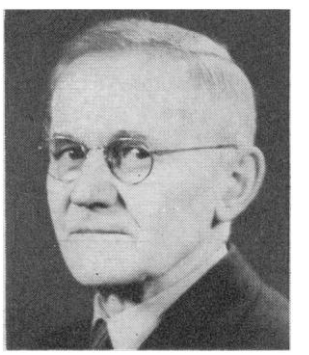
George M. Naimark, former director of control at Strong Cobb and Co., Inc., Cleveland, O., has become assistant to the director of the medical research department, White Laboratories, Inc., Kenilworth, N.J.

The national Junior Chamber of Commerce has named **John H. Hollomon,** manager of the metallurgy department, General Electric Research Laboratory, as one of America's 10 outstanding young men of 1954. Hollomon was selected for his leadership in metallurgy and metallurgical research, and for special service to his country in war and peace. He is the author of numerous technical papers as well as a textbook on *Ferrous Metallurgical Design.*

Appointment of **J. C. Carter,** plant pathologist of the Illinois Natural History Survey Division of the State Department of Registration and Education, to head the survey's section of applied botany and plant pathology has been announced. Carter fills the vacancy left by the death of Leo R. Tehon on 17 Oct.

R. E. Blackwelder has resigned as associate curator of the Division of Insects at the U.S. National Museum. He will continue to serve as secretary-treasurer of the Society of Systematic Zoology.

Louis Williams McKeehan, professor of physics at Yale University, who is on sabbatical leave during the current academic year, will retire in June. He retired last June from the directorships of Yale's Sloane Physics Laboratory and Edwards Street Laboratory. On 3 June 1954 Dr. and Mrs. McKeehan were given a farewell dinner at the Yale faculty club by his colleagues and their wives.



Louis W. McKeehan [Yale University News Bureau]

McKeehan's main field of research has been ferromagnetism. He has also maintained a strong interest in technical research and development matters for the U.S. Navy, and his work in this field has made him one of the foremost experts in undersea warfare. He had a long career in the Navy, including active service during both World Wars and reserve service between, and retired from active duty, with the rank of captain, in 1946. In 1951 he was instrumental in starting a Harbor Protection Research Laboratory at Yale with the support of the Office of Naval Research, and he remains one of its consultants. He is active as well as a member of the Mine Advisory Committee for the Navy Department. Both the U.S. Army Air Forces and the U.S. Navy have awarded him the Legion of Merit.

McKeehan became a member of the Yale faculty in 1927 as professor of physics and, except for leave of absence during World War II, was also director of the Sloane Physics Laboratory from that time. He received his formal education at the U.S. Naval Academy the University of Minnesota, Cambridge University, and Yale. In addition to his academic work at Yale and his work for the Government, McKeehan has also worked for industry in the research departments of Western Electric Company and Bell Telephone Laboratories.

McKeehan is coauthor, with A. F. Kovarik, of *Radioactivity* (1925, 1929), and he is the author of many technical articles in the fields of radioactivity, discharge in gases, x-ray crystallometry, ferromagnetism, submarine mines, slow motion of spheres in gases, and scattering of cathode and beta rays.

Lionel E. H. Whitby, Regius professor of physics and former vice chancellor of Cambridge University, England, is serving as visiting professor of medicine at the State University of New York College of Medicine in Brooklyn for the month of January. Whitby has made many contributions to medical literature on hematologic and bacteriologic subjects. Among his publications are *The Laboratory in Surgical Practice* (with E. C. Dodds), *Medical Bacteriology, The Nurse's Handbook of Hygiene,* and *Disorders of the Blood.*

It has been indicated that **John Z. Bowers,** now dean of the University of Utah College of Medicine, will become dean of the University of Wisconsin Medical School on 1 July. Formal confirmation of the appointment will be voted on at the January meeting of the University's Board of Regents. Bowers has directed important research on the effects of radiation, and has represented American scientists in a number of international projects.

Sidney W. Nelson of the University of Chicago Clinics has been appointed chairman of the department of radiology at Ohio State University effective 1 July. He succeeds **Hugh J. Means,** who will retire.

G. Robert Coatney, chief, section on chemotherapy, Laboratory of Tropical Diseases, National Institutes of Health, has received the Gorgas medal, silver scroll, and a $500 honorarium for outstanding contributions to the chemotherapy of malaria. The medal and prize were presented to him by the Association of Military Surgeons of the United States during its 64th annual convention held recently in Washington, D.C.

Oliver T. Buckley of Maplewood, N.J., retired president of Bell Telephone Laboratories, Inc., has been awarded the 1954 Edison medal by the American Institute of Electrical Engineers "for his personal contributions to the science and art which have made possible a trans-Atlantic telephone cable; for his wise leadership of a great industrial laboratory; for outstanding services to the Government of his country." Presentation will be made on 2 Feb. during the general meeting of the institute at the Statler Hotel, New York.

The board of directors of the American Chemical Society recently paid tribute at a dinner in the Statler Hotel, New York, to two men who have long been leaders of the society and the chemical profession. Those honored were **Walter A. Schmidt** of Los Angeles, president and general manager of the Western Precipitation Corp., who is retiring from the A.C.S. board, and **Robert T. Baldwin** of New York, former A.C.S. treasurer and member of the board who is terminating 24 yr of service as chairman of the society's finance committee.

Edward C. Reifenstein, Jr., formerly associated with the Schering Corp. in a research administrative capacity, has been appointed associate medical director of E. R. Squibb and Sons Div. of Olin Mathieson Chemical Corp., with headquarters in New York. He will devote his efforts to the medical and scientific research aspects of a new program on certain preparations in the hormone field.

Konrad Lorenz, one of the founders of the new science of ethology, and director of the Max Planck Institute of Comparative Ethology in Westphalia, Germany, recently delivered a series of lectures in Washington, D.C. Held under the auspices of the Smithsonian Institution and the Washington Academy of Sciences, the lectures were concerned with the study of animal behavior in relation to its environment, which is the main concern of ethology.

T. Smith Taylor, formerly director of research for the U.S. Testing Co., Hoboken, N.J., has been appointed director of testing for the Rand Development Corp., Cleveland, Ohio.

Howard A. Rusk, director of the Institute of Physical Medicine and Rehabilitation at New York University–Bellevue Medical Center and an associate editor of the *New York Times,* was the recipient of the 1954 distinguished service award of the Phi Delta Epsilon medical fraternity. The award, presented at the society's 50th anniversary banquet, was given to Rusk as an "outstanding educator and humanitarian, a pioneer in the field of physical medicine and rehabilitation, dedicated to restoring health and independence to those previously relegated to chronic infirmity."

Elden D. Haller, formerly associated with Beckman Instruments, Inc., Fullerton, Calif., has joined the technology and development staff of Arthur W. Thomas Co., Philadelphia, Pa., where he will be available for consultation on spectroscopy and general analytic instrumentation.

Meetings

A feature of the two-day program of the **55th annual conference of veterinarians,** held 4–5 Jan. under the auspices of the University of Pennsylvania's School of Veterinary Medicine in Philadelphia, was the telecast of operations and technical procedures involved in the medical care of large and small animals. The telecasts were made over a closed circuit and were produced and sponsored by Smith, Kline and French laboratories. Mark W. Allam, dean of the Veterinary School, presided over the meeting sessions.

A conference on **Electrical Utilization of Aluminum** sponsored by the power division of the American Institute of Electrical Engineers, will be held in the William Penn Hotel, Pittsburgh, 15–17 Mar., with R. N. Wagner of the Aluminum Company of America as general chairman. The conference will feature discussions and papers on present and future uses of aluminum in transmission and distribution system and in other electric equipment. Several inspection trips to Pittsburgh plants are also planned.

At a recent meeting in Tucson, Ariz., the executive committee for the **World Symposium on Applied Solar Energy** established 2–5 Nov. 1955 as the new date for the conference to be held at Phoenix, Ariz. The symposium was originally announced for 12–15 Jan. The meeting, which is to be conducted under the leadership of Stanford Research Institute, will bring together leading scientific and industrial interests in solar energy utilization. The program is being designed to evaluate present knowledge of the sun's energy in terms of practical applications for individual industries. The decision to postpone the meeting was made to allow maximum participation by scientists and industrialists from foreign countries. The program will include presentation of results of research at several European and Asiatic centers investigating applications of solar energy.

Paul L. Magill, technical director of the Stanford Research Institute Air Research Laboratories, returned recently from a month's stay in Japan, during which he met with officials of the Osaka Sun-Heat Center, Issei Yamamoto of the Kami-Tanakami Observatory at Sigaken, and witnessed a demonstration of solar cookery arranged by the Goto Photometric Laboratory of Tokyo. Thomas D. Parks, chairman of SRI's chemistry department, is at present in Europe conferring with scientists in England, Scotland, France, Belgium, and Holland on research in applied solar energy and water reutilization.

General chairman for the symposium is Lewis W. Douglas of Tucson and New York, former ambassador to Great Britain. Merritt L. Kastens, assistant director of Stanford Research Institute, is vice chairman. Chief sponsor of the symposium is the Association for Applied Solar Energy, formed last March by a group of southwestern industrialists, agriculturists, and educators.

The 1955 Conference on High-Speed Computers will be held at Louisiana State University, Baton Rouge, 14–16 Feb. The conference is open to businessmen, office managers, accountants, engineers, chemists, physicists, and other potential users. Inquiries may be directed to O. A. Nance, associate professor of chemistry, Louisiana State University, Baton Rouge 3, La.

The last four of the **Harvey Society's 50th anniversary series,** to be given under the auspices of the New York Academy of Medicine at its headquarters, are as follows:

17 Feb., "Some aspects of the constitution and behavior of normal and malignant cells maintained in continuous culture." George O. Gey, assistant professor of surgery, Johns Hopkins School of Medicine.

17 Mar., "The use of bacterial mutants in the study of biosynthetic paths." Bernard D. Davis, professor of pharmacology, New York University College of Medicine.

21 Apr., "The biosynthesis of porphyrins." David Shemin, professor of biochemistry, College of Physicians and Surgeons, Columbia University.

19 May, "Osmotic activity in relation to the movement of water under normal and pathological conditions." Eugene L. Opie, emeritus professor of pathology, Cornell University Medical College, and guest of the Rockefeller Institute for Medical Research.

The 9th **International Congress of Refrigeration** will be held in Paris, 31 Aug.–15 Sept. Information may be obtained from the General Secretariat of the International Institute of Refrigeration, 117, boulevard Malesherbes, Paris 17e.

The 5th divisional conference of the Chemical Engineering Division, the **Chemical Institute of Canada,** will be held in Ottawa, Ont., 7–9 March. Fifteen papers will be presented during the first 2 days of the conference while the third day will be devoted to plant visits. Some 300 chemical engineers and industrial chemists are expected to attend.

As a part of the centennial celebration at Michigan State College, the School of Home Economics is presenting a symposium on **Potentialities of Women in the Middle Years,** to be held 18–20 Apr. 1955. Emphasis will be placed on problems and challenges evolving from the changing role of women in the middle years and on the research findings related to these changes. National leaders in the physiological, psychological, sociologic, economic, and employment aspects of the field will take part in the program. This is the first group of this caliber to consider this problem on an interdisciplinary basis and to attempt to summarize the resultant research findings.

Society Elections

Association for Research in Nervous and Mental Disease: pres., J. E. Moore; sec.-treas., Clarence C. Hare, Neurological Institute, New York; asst. sec., Rollo J. Masselink, Neurological Institute, New York. The vice presidents are John Romano and David Seegal.

International Society of Hematology: pres., William Dameshek, New England Center Hospital, Boston; pres.-elect, G. Di Guglielmo, Rome, Italy. The vice presidents are L. M. Tocantins, Philadelphia; Ignacio Gongalez-Guzman, Mexico City; S. Amano, Kyoto, Japan; and A. Hittmair, Innsbruck, Austria. The secretary generals are S. Haberman, Dallas, Tex., and M. Bessis, Paris, France.

American Pharmaceutical Association: pres.-elect, John B. Heinz, Salt Lake City, Utah; 1st v. pres.-elect, Troy C. Daniels, San Francisco, Calif.; 2nd v. pres.-elect, George C. Roberts, Greenwood, Miss.

The **Arctic Institute of North America:** chairman of the board of governors, John C. Case, Socony-Vacuum Oil Co., New York; v. chairman, Graham W. Rowley, Dept. of Northern Affairs and National Resources, Ottawa; sec., Hugh S. Bostock, Geological Survey of Canada, Ottawa; treas., Walter A. Wood, Arctic Institute of North America.