B. Cellular Metabolism and Tissue Respiration. C. G. King, *chairman.*

1939

A. Resinous Polymers. H. L. Bender, *chairman.*

B. Vitamins. C. G. King, *chairman.*

C. Relation of Structure to Physiological Action. Walter H. Hartung, *chairman.*

1940

A. Frontiers in Petroleum Chemistry. C. R. Wagner, *chairman.*

B. Catalysis. E. C. Williams, *chairman.*

C. Organic High Molecular Weight Type Compounds. H. L. Bender, *chairman.*

D. Vitamins. C. G. King, *chairman.*

E. Relation of Structure to Physiological Action. Walter H. Hartung, *chairman.*

F. Applications of X-ray and Electron Diffraction. Maurice L. Huggins, *chairman.*

1941

A. Frontiers in Petroleum Chemistry. C. R. Wagner, *chairman.*

B. Catalysis. E. C. Williams, *chairman.*

C. Organic High Molecular Weight Compounds, S. S. Kistler, *chairman.*

D. The Structure and Chemistry of Textile Fibers. Milton Harris, *chairman.*

E. Vitamins. C. G. King, *chairman.*

F. X-ray and Electron Diffraction. Maurice L. Huggins, *chairman.*

G. Corrosion. R. M. Burns, *chairman.*

H. Photosynthesis. O. L. Inman, *chairman.*

It is expected that ten conferences will be held in 1942, probably beginning on June 22.

Gibson Island is situated in Chesapeake Bay about 20 miles south of Baltimore. It is approximately 1,000 acres in area and is connected with the mainland by a causeway. The island is privately controlled and admission to it is only by card from the Gibson Island Club. In addition to the club and the property purchased by the association, there are about 80 private residences on the island, leaving most of it quite uninhabited and covered by forests. The island offers opportunity for golf, tennis, both salt and fresh water bathing, fishing and sailing.

The property purchased by the association consists of a large residence and auxiliary buildings on a wooded lot 3.6 acres in area situated on the highest hill on the island. The conferences are held on a large screened porch that can be darkened enough to permit of the use of projection equipment in the day time. The house provides accommodations for about 25 men. Others attending the conferences, including those who are accompanied by their wives, live at the club. All meals are taken at the club.

Substantial gifts by industrial companies whose laboratories have been represented at the Gibson Island conferences have enabled the association to purchase the property. Each contributing company has the right to have a representative at each conference. This is a substantial right because there have been many more applicants for admission to the conferences than can be accepted unless the limit of 60 that has been set is exceeded. It has been felt by the participants that to make the conferences larger would take from them something of the informality and intimate contacts that have made them valuable. The companies that have so far contributed to the project are as follows:

Atlantic Coast Fisheries Company, New York City.
The Barrett Company, New York City.
Davison Chemical Corporation, Baltimore, Md.
Distillation Products, Inc., Rochester, N. Y.
Ethyl Gasoline Corporation, New York City.
General Electric Company, Schenectady, N. Y.
B. F. Goodrich Company, Akron, Ohio.
Hercules Powder Company, Inc., Wilmington, Del.
Merck and Company, Inc., Rahway, N. J.
Monsanto Chemical Company, St. Louis, Mo.
Norton Company, Worcester, Mass.
Pittsburgh Plate Glass Company, Barberton, Ohio.
Standard Brands, Inc., New York City.
Standard Oil Development Company, Elizabeth, N. J.
The Texas Company, New York City.

Since the conferences have now been provided a permanent home it has been suggested that the whole project be known as the *A. A. A. S. Research Institute.* In order that it may be guided with the maximum wisdom a Policy Committee has been set up, consisting of the director of the conferences, the chairman and vice-chairman of each conference, representing the association, and a representative appointed by each of the contributing companies. The first meeting of the Policy Committee will be held on September 9 at Atlantic City at the time of the meeting of the American Chemical Society.

THE SOUTHWESTERN DIVISION

By Dr. FRANK E. E. GERMANN
EXECUTIVE SECRETARY

THE twenty-first annual meeting of the Southwestern Division of the American Association for the Advancement of Science was held in conjunction with nine associated societies at Lubbock, Texas, during the week of April 28, 1941. The associated societies were the Council of Texas Archaeologists, the Clearing

House for the Southwestern Museums, the Mathematical Association of America (Southwestern Section), the Society for American Archaeology, the Texas Archaeological and Paleontological Society, the West Texas Chamber of Commerce Resource and Museum Institute, the West Texas Division of the Texas Academy of Science, the West Texas Historical and Scientific Society and the West Texas Museum Association.

Through the splendid efforts of the local committee, headed by Dr. William M. Craig, the faculty and students of the Texas Technological College contributed very greatly to the success of the meeting, both from the point of view of the presentation of papers and of attendance at the sessions. In addition to the one hundred and fifteen regularly registered scientists, a large number of students were enrolled without charge and given student badges. As a result of this encouragement, the attendance of students at the various sessions was large. Attendance at each of the four sections which met simultaneously ranged from fifty to one hundred. A total of one hundred and forty papers were presented.

A committee for the entertainment of visiting ladies, headed by Mrs. Roscoe Wilson, provided diversion for those not caring to attend the scientific sessions. The entire association participated in a tea given by President and Mrs. Clifford B. Jones on Monday from four-thirty to six at their beautiful home on the campus.

The field trips planned for Thursday included an all-day trip to the Canadian River archeological sites north of Amarillo, a study of native vegetation in the nearby canyons, an all-day trip to the Calgary Triassic deposits and vertebrate remains, a study of dry and irrigated windbreaks and plantings of introduced trees and shrubs. Because of very heavy rains, most of these trips did not materialize.

On Sunday evening the executive council held a business session at the home of Dr. W. M. Craig, at which time it was decided to meet jointly with the American Association for the Advancement of Science in Dallas, December 29, 1941, to January 3, 1942, as well as to urge our members to participate in the sessions of the Pacific Division meeting in Salt Lake City in June, 1942.

The secretary was asked to attend the Dallas meeting as the official delegate of the division and to circularize the members regarding the desirability of their individual participation. In order to harmonize the name with past practice, it was voted to change the title of the secretary-treasurer to executive secretary-treasurer. Dates of future meetings were discussed, and it was agreed that the 1942 meeting would be in Las Cruces, New Mexico.

In recognition of his outstanding work in the field of geology, geography and archeology, Dr. Robert Thomas Hill, of Dallas, Texas, was elected an honorary member of the Southwestern Division. Dr. Hill died on July 28 in his eighty-third year.

In view of the proximity of Las Cruces, the place of the 1942 meeting, to Mexico, an increased effort is to be made this year to interest the scientists of Mexico in the meetings of the Southwestern Division. Many European scientists are now refugees below the border, and it is hoped to bring about a closer bond for our mutual benefit. This action is especially fitting since the states of Chihuahua and Sonora lie within the boundaries of our division.

At the first general sessions on Monday morning President Clifford B. Jones gave the welcoming address, to which Dr. C. V. Newsom, chairman of the department of mathematics of the University of New Mexico and president of the division, gave the response. On Monday evening, following the annual Sigma Xi dinner, Dr. Ernst Antevs, research associate of the Carnegie Institution of Washington, gave an illustrated address on "Climatic Variations in the Southwest During the Past 75,000 Years." On Tuesday Dr. E. T. Bell, professor of mathematics at the California Institute of Technology, gave a very interesting popular lecture to a combined group of scientists on the subject of "Diophantine Analysis."

For the past twelve years the Southwestern Division has sponsored a general public lecture named in honor of General John Wesley Powell, the first explorer of the Grand Canyon of the Colorado River. This year the speaker was Dr. Bernadotte Everly Schmitt, who spoke on Tuesday evening to a large enthusiastic audience in the Senior High School Auditorium on the subject, "The United States and the War." Dr. Schmitt is Andrew MacLeish distinguished service professor at the University of Chicago and Pulitzer prize winner for his work, "The Coming of the War, 1914." The annual dinner of the division was held in the ball room of the Hilton Hotel on Wednesday and was followed immediately by the address of the retiring president, Dr. C. V. Newsom, who gave a talk on "Mathematics and the Sciences." Another address thrown open to the public was that of Dr. F. S. Henika, regional game manager of the Game, Fish, and Oyster Commission, who spoke on "Conservation of Wild Life."

Officers elected at the general business session and the business sessions of the various sections are as follows:

President: Dr. William M. Craig, professor of chemistry, Texas Technological College, Lubbock.

Vice-President: Dr. H. P. Mera, Laboratory of Anthropology, Santa Fe, New Mexico.

Executive Committee: Dr. C. V. Newsom, University of

New Mexico, Albuquerque, for a three-year term; and Professor Victor J. Smith, Sul Ross State Teachers College, Alpine, Texas, to serve the remaining unexpired term of Dr. H. P. Mera, who was elected vice-president.

Biological Sciences:
Chairman, Dr. A. L. Hershey, Las Cruces, New Mexico
Secretary, Dr. Omer E. Sperry, Alpine, Texas

Mathematics:
Chairman, Professor Roy MacKay, Portales, New Mexico
Vice-Chairman, Dr. Lyle Mehlenbacher, Flagstaff, Arizona
Secretary, Dr. Harold D. Larsen, Albuquerque, New Mexico

Physical Sciences:
Chairman, Dr. C. T. Elvey, Fort Davis, Texas
Secretary, Dr. Oscar B. Muench, Las Vegas, New Mexico.

Social Sciences:
Chairman, Professor F. Martin Brown, Colorado Springs, Colorado
Secretary, Miss Katharine Bartlett, Flagstaff, Arizona

SCIENTIFIC EVENTS

CHEMICAL RESEARCH REPORTS

THE United States has led the world in the output of chemical research reports for the past ten years according to a survey made by Dr. E. J. Crane, professor of chemistry at the Ohio State University.

"Curves showing the relative shares of Germany and the United States in percentages of the world's total output of chemical papers since 1913 would take the form of an 'X' lying on its side with the upward slant representing the United States and the downward slant, Germany." Dr. Crane states that:

The crossing of the lines apparently occurred in 1930. An irregular spot would indicate the effects of the world war. An almost straight curve underlining this prostrate 'X' would represent the output of the next most active country—the British Empire.

In 1913, the last year before the world war, the German output of chemical papers was 34.4 per cent. of the world's total, while that of the United States was 20.7 per cent. and of the British Empire, 14.4. In 1939, in a sense the last year before the beginning of the present war in Europe since it got under way slowly and publication was little affected at first, the output of papers in the United States had reached 27.7 per cent. and Germany's had dropped to 18.7, with the British output remaining approximately 14 per cent.

At approximately the time when the lines of the 'X' cross, the British output was 13.5 per cent.; figures showing the effects of the world war (14.9, 16.8 and 15.4 per cent. for the British Empire for 1917, 1918 and 1923) still justify keeping the British curve approximately straight.

Most noteworthy is the strong development of chemical publication in Russia, which in 1913 has 2.5 per cent. of the total number of abstracts; in 1929, 3.4 per cent. and in 1939, 11.1 per cent. A good many Russian chemists have also been publishing papers in German periodicals.

While the figures on abstracts are not an exact measure of chemical research activity in the various countries, they have a good deal of meaning, nevertheless. No doubt there has been a growing amount of chemical research work directly bearing on national defense which has not been published. This may be true to a larger degree for some countries than for others.

There is also much industrial research activity that is not reflected in the publication of papers. Perhaps the number of chemical patents issued in the various countries may be considered a rough measure of industrial research activity in chemistry. In 1939, *Chemical Abstracts,* which endeavors to cover the chemical patents completely, published the following numbers of patent abstracts: United States, 7,727; Great Britain, 4,872; Germany, 2,929; France, 2,377.

The chemists of a few of the smaller countries, as Denmark, publish a considerable percentage of their papers in the journals of other countries. Happenings in Europe during the past year make the listing of countries puzzling, but the present survey ends with 1939.

France was fifth in number of abstracts published in 1939, ranking after the Soviet Union. Her percentage of the total was 9.1; Japan came next with 4.4 per cent., and Italy seventh, with 3 per cent. In 1913, Italy's percentage was 4.7, and in 1929, 3. France's percentage in 1913 was 13; it dropped to 7 in 1929. Japan had a percentage of only 0.37 in 1913, but reached 3.7 by 1929.

GRANTS OF THE GEOLOGICAL SOCIETY OF AMERICA

IN addition to grants authorized by the council of the Geological Society of America, which have already been reported, the following grants have been made in paleontology and petrology:

Paleontology, Invertebrate—$1,700.

Charles A. Anderson, University of California, will be assisted by J. Wyatt Durham in the study of Pliocene fossils collected in 1940 in Lower California on the cruise of the *E. W. Scripps* into the Gulf of California under a grant from the Geological Society of America. Mr. Durham was an assistant on that expedition and collected the fossils. $950.

E. R. Eller, Carnegie Museum, will study the Manitoulin (Silurian) dolomite of New York and Ontario with view to correlating its beds with beds of equivalent age in other parts of North America. Special study is to be