is such a function of sets in a Euclidean space, measure is another one. The book ends with the question as to which properties characterize dimension among all possible functions of sets. It is to be hoped that this remark may, as many other remarks of the book undoubtedly will, stimulate further research in this difficult but really fundamental field of modern geometry.

KARL MENGER

UNIVERSITY OF NOTRE DAME

CHEMISTRY

Principles of General Chemistry. By STUART R. BRINKLEY. Third edition. x + 703 pp. New York: Macmillan Company. August, 1941. \$4.00.

In comparison with the second edition (1933) of this well-known college text, this new one offers some changes in the order of the topics in the introductory chapters, to render more effective the scientific deductions which follow. In line with modern developments, increasing use is made of physico-chemical concepts in theoretical discussions and in their application to practical industrial processes. A chapter has been added dealing with the nucleus of the atom, artificial radioactivity, transmutation of the elements and nuclear fission. In other respects, also, the work has been brought up to date.

General Chemistry. By HARRY N. HOLMES. Fourth edition. viii + 720 pp. New York: Macmillan Company. June, 1941. \$3.75.

OF the many books on general chemistry which have appeared during recent years, few have presented the subject with the charm and allure which characterize this new edition of Dr. Holmes's justly popular text. Simple, straightforward and clear, in its narration and discussions, it is not only easy but also exceptionally interesting reading. The innumerable ways in which chemistry concerns our lives, our industries and our civilization are illustrated by arresting examples. Any student who digests what this book contains will have acquired, in addition to his chemical knowledge, a surprising store of useful information and a pretty good general education.

The new material added to the third edition (1936) concerns the conception of electrovalence, covalence and coordinate covalence, nuclear chemistry, radiation chemistry, colloid chemistry, uranium fission, new achievements with giant cyclotrons, chemotherapeutic advances, etc., as well as the later developments in manufacturing chemistry (synthetic rubber, Nylon, etc.). Each chapter concludes with "Exercises" and "References."

MARSTON T. BOGERT

COLUMBIA UNIVERSITY

SOCIETIES AND MEETINGS

THE SECOND LAS CRUCES MEETING OF THE SOUTHWESTERN DIVISION

The twenty-second annual meeting of the Southwestern Division of the American Association for the Advancement of Science and eight associated societies and institutions was held in Las Cruces, New Mexico, during the week of April 27. The associated societies were the American Association of University Professors, Clearing House for Southwestern Museums, El Paso Archaeological Society, Mathematical Association of America, New Mexico Academy of Science, Society for American Archaeology, State College Biological Society and White Sands National Monument.

Although there were those who felt the meeting should not be held because of the war emergency, the paid registration of ninety seems to have thoroughly proved the wisdom of carrying on. One objection to holding meetings at the present time is that most persons drive and now the rubber situation will keep them home. In answer to this, it is worth noting that about 40 per cent. of the papers presented were the product of teachers and research workers residing at the host institution. This situation is often overlooked, but during the months to come we are going to realize more and more the importance of taking scientific

meetings to men and women who for one reason or another rarely have the opportunity of going to a meeting away from home. What is equally important is the necessity of vacations even during war times, and these can frequently be combined with business.

The New Mexico State College of Agriculture and Mechanic Arts, serving as host institution, was aided by the New Mexico State College Experiment Station, the U.S. Bureau of Plant Industry and the White Sands National Monument. The college was founded in 1889 when travel was by way of the "Jornada del Muerto" or by the Santa Fe railroad. It is located at State College, which lies at one corner of a triangle, having sides of three to four miles, the other corners being occupied by Las Cruces and Mesilla. To the east lie the Organ Mountains with one of the most beautifully serrated skylines to be found in North America. The country is rich in tradition and folk lore going back to the days when it was still beyond the United States and was a part of Old Mexico. The museum at Old Mesilla, a village of adobe buildings, is filled with historic articles associated with both the peaceful settlers and the bandits of old, such as Billy the Kid.

A large measure of the success of the meeting was due to the carefully selected local committee, headed by Professor C. W. Botkin. The meeting was officially opened by a welcoming address by J. W. Branson, acting president of the college, to which Dr. Wm. M. Craig, president of the division, responded for the association.

After-dinner addresses were given by Drs. John D. Clark and Donald D. Brand, of the University of New Mexico at Albuquerque, on "Conservation Since 1933" and "Observations on Certain South American Economies," respectively. The thirteenth annual John Wesley Powell Memorial Lecture was given in the Branigan Memorial Library in Las Cruces on Tuesday evening by Mr. Howard W. Blakeslee, joint Pulitzer Prize winner in journalism in 1937. Mr. Blakeslee, who is the science editor of the Associated Press, spoke on "Science Moves Ahead."

Most of the eighty-seven papers whose titles were printed in the program were delivered by the authors in person, but more urgent government assignments kept some from coming to Las Cruces. These titles showed the mark of war as well as of peace, ranging from "The Anatomy of Guayule," by Ernst Artschwager, of the Bureau of Plant Industry of the U. S. Department of Agriculture, to "A Preliminary Examination of Some Proposals for World Reconstruction," by Professor P. M. Baldwin, of the New Mexico State College. These papers were delivered in the four rather general sections of Biological, Mathematical, Physical and Social Sciences.

Both the palate and the artistic sense were given a rare treat on the occasion of the Wednesday noon Spanish luncheon at "La Posta" in Old Mesilla. "La Posta" is operated by the Griggs family, descendants of the pioneers, in the original adobe building made famous by its rare tradition and modern excellence. After the luncheon, Dr. Fabian Garcia, director of the Experiment Station and a native of Chihuahua, Mexico, told many interesting stories of the early days in the village, including many of his own personal experiences which were told partly in Spanish, partly in English.

Tuesday afternoon was devoted to an excursion to the "White Sands National Monument," fifty-four miles northeast of Las Cruces near Alamogordo, New Mexico. This largest of the rare gypsum deserts covers more than 600 square miles of snowdrift-like "sand" dunes consisting of sparkling white dehydrated calcium sulphate. Some of these dunes are over fifty feet high and are constantly being moved by the prevailing winds. Descriptive talks were given on the grounds by Dr. W. B. McDougall, of the Park Service, on the "History and Development of White Sands National Monument"; by Dr. S. B. Talmage, of the

Department of Geology of the New Mexico School of Mines at Socorro, on "Gypsum on Tour"; and by Dr. F. W. Emerson, of the Department of Biology of the New Mexico Highlands University at Las Vegas, on "Some Biological Relations of the White Sands." After spending more than an hour climbing upon the dunes and sliding down the steep faces, the scientists with wives and children were thoroughly ready to do justice to the "Chuck Wagon Supper" which was prepared on the grounds.

On Wednesday evening Dr. Wm. M. Craig, retiring president, delivered his address on "The Rôle of Spectrography in National Defense," in the auditorium in Hadley Hall.

For those who stayed over on Thursday there was a choice of visiting the Jornada Experimental Ranges of the New Mexico College of Agriculture and Mechanic Arts and of the U. S. Forest Service, a trip to the Organ Mountains to study the native flora and fauna, the Conkling Cave and Bishop's Cap Mountain, or to El Paso, Texas, and Juarez, Mexico.

At the annual business meeting, Dr. H. P. Mera, of the Laboratory of Anthropology at Santa Fe, New Mexico, was chosen president, and Professor F. H. Douglas, of the Denver Art Museum, was chosen vicepresident. New members of the executive council chosen were Dr. Wm. M. Craig and Dr. E. W. Haury.

Section officers elected for the coming year were:

Biological Sciences:

Dr. E. F. Castetter, Chairman, University of New Mexico.

Dr. Edna Johnson, Secretary, University of Colorado. Mathematical Sciences:

Dr. Emmett Hazlewood, *Chairman*, Texas Technological College.

Dr. P. M. Swingle, Vice-Chairman, New Mexico State College.

Dr. H. D. Larsen, Secretary, University of New Mexico.

Physical Sciences:

Dr. O. B. Muench, Chairman, New Mexico Highlands University.

Dr. Parry Reiche, Secretary, Albuquerque, New Mexico.

Social Sciences:

Professor F. H. Douglas, Chairman, Denver Art

Professor W. W. Postlethwaite, Secretary, Colorado College.

The 1943 meeting will be held in Colorado Springs, Colorado, and the 1944 meeting in Phoenix, Arizona. An invitation to meet in Las Vegas in 1945 was received, but action was postponed.

Frank E. E. Germann, Executive Secretary-Treasurer

UNIVERSITY OF COLORADO