

months, except for one or two return flights to deliver supplies.

A botanical expedition to Guatemala will be conducted by Paul C. Standley, curator of the herbarium, who will leave Chicago about the beginning of November. It is planned to spend approximately five months in the field, gathering herbarium material, for use in preparation of a flora of Guatemala, similar to that of Costa Rica, which is now in course of publication. Guatemala's vegetation is more varied in type than that of any other Central American country, although not so rich in species as that of Costa Rica.

THE WARSAW CONFERENCE ON MODERN PHYSICS

A CONFERENCE on the new theories in modern physics was held in Warsaw from May 29 to June 2 on the proposal of Professor Bialobrzeski, of the University J. Pilsudski, member of the International Committee of Intellectual Cooperation. It was organized by the International Institute with the help of the Polish Government and the Polish Committee of Intellectual Cooperation. Scientific men from various parts of the world attended the meeting and several reports were discussed which will be shortly published by the institute.

The complete list of participants follows: C. Bialobrzeski, the University J. Pilsudski; E. Bauer, the Collège de France; Niels Bohr, the University of Copenhagen; L. Brillouin, Collège de France; L. de Bröglie, the University of Paris; C. Darwin, the University of Cambridge; Sir Arthur Eddington, the University of Cambridge; R. H. Fowler, the University of Cambridge; G. Gamow, the George Washington University; S. Goudsmit, Princeton University; E. Hylleraas, University of Oslo; O. Klein, University of Stockholm; H. A. Kramers, the University of Leyden; L. de Kronig, University of Groningen; P. Langevin, Collège de France; Ch. Moeller, the University of Copenhagen; J. von Neumann, Princeton University; F. Perrin, the University of Paris; L. Rosenfeld, the University of Liège; W. Rubinowicz, the Jean Casimir University at Lwow; S. Szczeniowski, the Etienne Batory University at Wilno; J. Weissenhof, the Jagellonne University at Krakow; L. Wertenstein, the Free University of Warsaw; E. P. Wigner, Princeton University; F. J. Wisniewski, the Polytechnic School of Warsaw.

The following reports were presented and discussed:

(1) The necessity of the indeterminist interpretation of the formal structure of the quantic mechanics; value of the proof of indeterminism, J. v. Neumann; objections against the complete character of the theory of quanta; process of measurement as a *sui generis* phenomenon having an indeterminist character, Professor Niels Bohr.

(2) Questions concerning the relations between the quantic mechanics and the theory of relativity, Professor L. de Bröglie.

(3) Limits of the applicability of the present system of theoretical physics (nature of the elementary particles, action of the particles of great energy). Difficulties in what concerns the quantic theory of the electromagnetic field, Professor Kramers.

(4) Problem of the individuality of elementary particles and its relation to quantic statistics and the postulate of Pauli, Professor L. Brillouin.

(5) Cosmological applications of the theory of quanta, Professor Sir Arthur Eddington.

(6) The positivist and realist currents in the philosophy in physics, Professor Langevin.

Apart from the scientific work of the conference, a number of excursions were organized to Krakow and Zakopane.

THE ASHEVILLE MEETING OF THE FISHERIES AND CONSERVATION SOCIETIES

REPRESENTATIVES of forty-six states attended the combined meetings of the International Association of Game, Fish and Conservation Commissioners, the American Fisheries Society and the National Planning Council of Commercial and Game Fish Commissioners held at Asheville, N. C., during the week of June 20. June 20 and 21 were devoted to the convention of the International Association, June 22 to the annual meeting of the National Planning Council, and June 23 and 24 to the sessions of the American Fisheries Society. Saturday was reserved for a field trip to the Pisgah National Game Preserve to inspect the cooperative trout rearing station maintained by the United States Bureau of Fisheries, and Forest Service demonstrations of stream improvement work, fish cultural and fawn rearing activities.

Arthur L. Clarke, superintendent of fisheries of the Missouri Fish and Game Department, was elected president of the International Association to succeed Frank B. O'Connell. Other officers of the association include J. D. Chalk and Seth Gordon as first and second vice-presidents; R. P. Holland, secretary-treasurer, and Talbott Denmead, general counsel.

The morning session of the meeting of the National Planning Council of Commercial and Game Fish Commissioners was devoted to problems of interest to the Biological Survey, which has been included in the membership of the council since April, 1937.

Some thirty papers made up the varied program which was arranged for the members of the American Fisheries Society. The papers were grouped under the general subjects of fish management, fish culture, research studies and miscellaneous topics. Nine papers on various technical problems of fishery research were read.

At the business sessions of the Fisheries Society, Fred J. Foster, regional director of Pacific coast and Rocky Mountain fish cultural stations, was elected president, and Deputy Commissioner Jackson was elected chairman of the committee on foreign relations. Other officers are: T. H. Langlois, first vice-president; James Brown, second vice-president; Seth Gordon, secretary-treasurer, and Kenneth E. Cobb, librarian. Division vice-presidents for the coming year are: Dr. H. H. Mackay, fish culture; Lauren R. Donaldson, aquatic biology and physics; Dr. H. J. Deason, commercial fishing; William C. Adams, protection and legislation; and C. R. Guterman, angling. Walter H. Chute was named chairman of the committee on common and scientific names of fishes.

IN HONOR OF GEORGE W. STEWART

A PORTRAIT of Dr. George W. Stewart, who will begin this autumn his thirtieth year of service as head of the department of physics at the State University of Iowa, was formally presented to the university at a banquet given in his honor on June 19.

The portrait, which was painted by William McCloy, of Drake University, was given by colleagues and former students. The presentation was made by Dr. Homer L. Dodge, dean of the Graduate College of the University of Oklahoma, one of fifty-two students who have received the degree of doctor of philosophy under Dr. Stewart. Professor Stewart spoke on "The Human Values of Physics."

Dr. Carl E. Seashore, research professor of psychology and dean emeritus of the Graduate College of

the State University of Iowa, in accepting the portrait for the university, paid the following tribute to Dr. Stewart:

... eminent physicist through your significant contributions to basic problems in physical science, both pure and applied;

... recognized educator through your wise counsel and active leadership in graduate and undergraduate education, locally and nationally;

... great teacher by virtue of your sympathetic personal influence and comradeship with students and the fostering of progressive educational procedures;

... citizen of the world through your extensive travels and intimate associations with scholars at home and abroad and your ideals of the brotherhood of mankind;

... beloved citizen at home not only in your own name, but also through the noble civic spirit and service of your helpmate;

... gracious university host for colleagues and students, humble strangers and distinguished guests in your beautiful home;

... comrade with the seekers after truth, humbling yourself before the savants of all ages and projecting yourself into coming generations through your teachings and contributions to science;

... balanced personality in work and in play, in physical health, living in an atmosphere of intellectual, moral, social, artistic and religious pursuits, a whole man.

I bring you these sentiments of appreciation and appraisal in the name of the university.

Let the historian count this citation as a legend for the portrait now unveiled and to be appropriately associated with the projected murals, and thus let it mark a milestone at the present vantage ground in your distinguished career.

SCIENTIFIC NOTES AND NEWS

DR. FLOYD K. RICHTMYER, professor of physics and dean of the Graduate School of Cornell University, received the honorary degree of doctor of science at the commencement exercises of Lehigh University on June 14.

THE University of Toledo conferred at commencement the degree of doctor of science on Harry B. Meller, managing director of the Air Hygiene Foundation of the Mellon Institute, Pittsburgh, Pa.

C. F. HIRSHFELD, chief of research of the Detroit Edison Company, member and past chairman of the Engineers' Council for Professional Development, recently received the honorary degree of doctor of engineering from the University of Detroit, in recognition of his technical and scientific accomplishments in the field of engineering and in engineering education.

DR. FLORENCE B. SEIBERT, of the Henry Phipps Institute of the University of Pennsylvania, was presented with the Trudeau Medal "for outstanding re-

search in the field of tuberculosis" at the Los Angeles meeting of the National Tuberculosis Association.

PROFESSOR W. H. HOFFMANN, of the Finlay Institute, Havana, has been awarded the Great Iron Medal of the Senckenberg Society of Frankfurt-on-Main in recognition of his research in tropical medicine.

Nature states that Professor Max Planck, of Berlin, who is an honorary fellow of the Royal Society of Edinburgh, was the guest at a dinner held in his honor in the rooms of the society on June 23. The president, Sir D'Arcy Wentworth Thompson, was in the chair.

PROFESSOR J. E. LITTLEWOOD, Rouse Ball professor of mathematics in the University of Cambridge, has been awarded the triennial award of the De Morgan Medal for 1938 of the London Mathematical Society.

DR. RUDOLF KREUTZ, of Cologne, has been awarded the Sudhoff Medal by the German Society of the History of Medicine.