

after serving for twenty-eight years as curator of the Department of Natural Sciences of the Brooklyn Museum, died on May 24, at the age of seventy years.

DR. ROY MACKEY, associate professor of mathematics at New Mexico State College, died on May 12, at the age of thirty-eight years.

## SCIENTIFIC EVENTS

### 1941 STALIN PRIZE-WINNERS IN THE U.S.S.R.<sup>1</sup>

OVER two hundred and fifty people—scientists, engineers and inventors—innovators of science and technique—have been honored with the title “Stalin Prize-winners.” Through their creative work they have all enriched Soviet science with new achievements.

Among Stalin prize-winners we find names of eminent scientists of the Soviet Union—academicians and professors. The body of academicians and professors are under the guidance of the president of the Academy of Sciences of the U.S.S.R., V. Komarov, and have conducted work in the development of national economy among the Urals under these wartime conditions, for which they have merited and been awarded the First Degree Stalin Prize.

The works of many Soviet physicists are widely known both in the Soviet Union and abroad. Works of the academicians Joffe, Mandelstam and Papalexi are new achievements in the field of physics in the Soviet Union.

The wise investigations of semi-conductors by Joffe have cast light on a very important and complicated question in physics. He has worked out theoretical principles for semi-conductors in industry. On the basis of Joffe's works it has become possible to obtain conductors with many desired properties—new current rectifiers; investigations on photo-conductivity and thermo-electricity have given new powerful thermo-elements ten times superior to those available. For this outstanding work Joffe has been awarded the First Degree Stalin Prize in the department of physico-mathematical sciences.

For many years physicists have been endeavoring to solve the involved problem of ascertaining the nature of distribution of radio waves near the earth's surface. Two Soviet physicists, Mandelstam and Papalexi, have found a successful solution to this problem, for which they have been adjudged Stalin Prizes.

The Stalin prize-winners include the eminent Soviet mathematician, Academician Bernstein, author of numerous works on the theory of probability and the theory of approximated methods of computation. The Soviet mathematician, Khristianovich, has worked

out a high theory, near sound-velocity aerodynamics, and has furnished, scientifically, grounded calculations for fast aircraft, thereby meriting the Stalin Prize award.

The numerous investigations in the domain of organic chemistry by Academician N. Zelinsky have played a big part in the technology of motor fuel, synthesis of aromatic carbohydrates, and in the sphere of defense chemistry. His work, published in 1941, contains about four hundred original investigations, for which he has been adjudged the Stalin Prize.

Satpaev, Kazakh geologist, has theoretically worked out the morphology and genesis of Djezkazgan in cuprous sandstone and has supplied valuable conclusions regarding the deposits of copper, iron, manganese and polymetallic ores and coal of Kazakhstan.

In the domain of the science of biology, the First Degree Stalin Prize has been awarded to Professor Y. Parnas, of the Ukrainian Academy of Sciences. In his work, “Gyco-genesis,” Parnas crystallizes his numerous investigations on metabolism in muscles; this work, which he conducted at the Lvov University, has now been destroyed.

Biologists adjudged Stalin Prizes include Professor A. Zavarzin. A remarkable work by the author, “Evolutional Histology of the Nervous System,” illustrates his theory of evolution of the nerve tissues and of the nervous system, from the simplest organisms up to man. All conclusions are built up on the vast amount of material collected and generalized by the author.

One of the most remarkable scientific works in the domain of medicine is entitled “Particular Pathological Anatomy,” by Academicians Abrikosov and Anichkov. The authors have crystallized a tremendous volume of material worked out by them, and have made great contributions to Soviet medical science.

Stalin Prizes likewise have been awarded to the outstanding surgeon, Professor Yudin, for his eminent work on military-field surgery, and also to the famous Leningrad surgeon, Petrov, the outstanding specialist on oncology and cancerous diseases of the stomach.

Under these conditions of the patriotic war, agricultural science acquires particular importance, as it is called upon to help Kolkhoz peasantry ensure provisions for the army and workers of the Soviet Union. The Stalin prize-winners include one of the country's leading zoo-technicians, Dyakov, the author of several

<sup>1</sup> Statement by Vice-chairman Stalin for the Prize-winning Committee, S. Kaftanov, *chairman*.

works on the feeding of livestock. Dyakov has worked out and introduced the individual feeding of livestock, and has also elaborated upon the principles of the combined-fodder industry.

Stalin prizes have also been awarded for the best works of historico-philologic sciences, including collective work group authors, under the guidance of V. Potemkin, "History of Diplomacy."

### ANTHROPOLOGICAL SURVEY OF THE PEOPLE OF THE UNITED PROV- INCES OF INDIA

ACCORDING to *Current Science*, a monthly Indian journal corresponding in scope to *Nature* and *SCIENCE*, the Government of India on the recommendation of the census commissioner for India has sanctioned a grant-in-aid for the statistical analysis of the anthropometric data collected by Dr. D. N. Majumdar, of the Lucknow University, in collaboration with the late census superintendent of the United Provinces in respect of the castes and tribes of the provinces. In view of the scientific importance of the work the Statistical Laboratory, Calcutta, under the direction of Professor P. C. Mahalanobis, has agreed to share half the cost of this analysis out of its own funds. The total cost is estimated at Rs.9,000.

Measurements relating to about 4,000 individuals have been collected in accordance with accepted modern technique. The material offers a valuable opportunity for a critical and scientific examination of the very foundations of Indian anthropometry. An appropriate statistical tool is available in the Generalized Distance ( $D^2$ -Statistic) the validity of which was fully acknowledged by Professor R. A. Fisher in his paper on "Statistical Utilization of Multiple Measurements" (*Annals of Eugenics*, 1938, 8, 376). It has not been possible, however, to use this new tool so far for lack of suitable material.

It is pointed out that a detailed analysis of the anthropometric material collected now will help in solving the basic problems of comparative anthropometry. It will show, for example, how far the generalized distance can be used for an objective classification of castes and tribes or races of human beings. Secondly, it will enable a standard panel or list of measurements being selected for comparative purposes. This will not only simplify and standardize the procedure of field work in anthropology but will enable valid comparisons being made between measurements taken by different observers. Thirdly, it will enable a critical comparison being made between results based on physical and cultural methods of study. Finally the proposed analysis will supply a scientific basis for the comparative anthropology of the United Provinces and North India generally.

A joint report by Professor P. C. Mahalanobis and

Dr. D. N. Majumdar will be submitted to the government of India. Besides this survey, a monograph on some of the important tribes and castes of the United Provinces will also be published for which the Provincial Census authorities have already sanctioned Rs.1,500.

### THE INTERNATIONAL GRADUATE SCHOOL EXCHANGE

THROUGH the generosity of the W. K. Kellogg Foundation of Battle Creek, Mich., the Pan American Congress of Ophthalmology announces the establishment of an international graduate student exchange. With the cooperation of the Department of State of the United States Government, twenty-five graduate physicians from Latin America will be brought to the United States for graduate training in ophthalmology. They will be assigned in turn to seventeen of the leading ophthalmic institutions to serve as accessory residents for a minimum of one year, or longer if they show unusual ability. The traveling expenses to and from the country of origin will be paid and each man will receive one thousand dollars a year from the foundation.

The Latin American physicians will be chosen by a committee in each country composed of the dean of the medical school, the professor of ophthalmology and an already existing committee of the American Legation under the supervision of the Department of State. The number of scholarships allotted to each country will be based upon the population and upon the number of ophthalmologists in the country. Applications must be filled through the local professor of ophthalmology and forwarded to the secretaries of the Pan American Congress of Ophthalmology. Those south of Panama are to be sent to Dr. M. Alvaro, São Paulo, Brazil, and those north to Dr. Conrad Berens, New York City. Each application must contain full information regarding the candidate and must bear an exhaustive endorsement by the professor of ophthalmology. After preliminary consideration by the secretarial board of the congress the applications will be returned to the local committees for the selection of candidates. Information about the selectees will be sent by the local committees through the secretaries of the Pan American Congress of Ophthalmology to the foundation for final acceptance.

The following institutions are participating:

The Massachusetts Eye and Ear Infirmary; the Ophthalmic Institute of Columbia University; Bellevue Hospital and College; New York Eye and Ear Infirmary; Wills Eye Hospital of Philadelphia; Wilmer Institute of the Johns Hopkins University; the University of Michigan; the University of Cincinnati; Northwestern University; the Illinois Eye and Ear Infirmary; Cook County Hospital; the Mayo Clinic; the State University of Iowa; Washington University of St. Louis; Tulane University