

National Education, it has been organized by a committee of professional geologists from the Ministry of Industries' Geological and Mining Service. These men, trained in Europe or the United States, now form the board of regents. They are: Drs. V. M. López, *chairman*; M. Tello; P. I. Aguerrevere; Santiago E. Aguerrevere, and G. Zuloaga. The faculty includes: N. B. Knox, technical director and professor of geology; Ely Mencher, professor of paleontology; Bela Murakosy, professor of topography, and Hermann Kaiser, professor of chemistry.

There are no tuition fees for Venezuelans, but candidates must pass examinations in mathematics, chemistry, physics, biology, English and French before being admitted. The course is four years and leads to a degree. Six scholarships have been granted to students from other North and South American countries. Many of the students are on scholarships provided by the oil companies operating in Venezuela, which give the student not only cash to live on but opportunity for field and laboratory work during vacations.

N. B. KNOX,
Director of the Institute

THE TROPICAL STATION OF THE MISSOURI BOTANICAL GARDEN

THE Missouri Botanical Garden, like all similar institutions which are solely dependent for support upon rentals from business property and returns from investments, has suffered a sharp reduction in its income during the past years. Unlike many institutions, the cost of maintaining the estate, city taxes, annual bequests, etc., must all be deducted before money is available for maintaining the numerous activities of the garden. Since the budget must be balanced, the only way to do this is to reduce expenses or increase resources.

An appeal for contributions to a "Friends of the Garden Fund" will shortly be made and it is hoped that this may result in restoring the income to something like it was ten years ago. In the meantime one of the economies which has regretfully been enforced is the abandonment of the Tropical Station on the Canal Zone.

This station was established in 1926, at the time the Powell orchids were acquired, and through the years has been a most helpful adjunct in building up the orchid collection. Recently the station has been the headquarters for expeditions for plants other than orchids, looking towards a more complete study of the flora of Panama.

The Canal Zone Government is taking over the station and will maintain it as a park for the benefit of residents and tourists. Fortunately Paul Allen, formerly manager of the station, will remain in the employ

of the Canal Zone, and will be able to act as the tropical representative of the garden. This will make possible the continuation of the work on the flora of Panama, and it is hoped that because of the facilities still available this project will not suffer unduly because of the station ceasing to be an adjunct of the garden.

SCIENCE AT THE NEW YORK WORLD'S FAIR

ACCORDING to an official statement recently issued by authorities of the New York World's Fair, "Science, one of the fundamental principles on which the New York World's Fair has been built, will have a special display of its own, portraying its influence on the individual, the family, education and social life." Dr. Albert Einstein is chairman of the Advisory Committee on Science. He is cooperating with Dr. Gerald Wendt, director of science and education, in endeavoring to present "a dramatically visual program that will be understandable and revealing to the average layman." The exhibit, sponsored jointly by the fair corporation and the American Association for Adult Education, also will include education "as a force in the never-ending search for truth, standing between civilization and disaster." One of the seven exhibits under Science and Education will occupy 10,000 square feet of space in a triangular structure, which will house the "Hall of Man," containing the exhibits on medicine and public health. The official announcement states that "The twin exhibit will deal with ideas, with the true nature of science and education and with their social implications. In the first exhibit the purpose will be to show the 'secret of success' that has brought science to the fore. In the latter exhibit will be featured the responsibility of citizens in a democracy to keep pace with this changing world and the necessity for regarding education as a life-long process. There will be no effort to 'teach' science or to compete with the fascinating commercial exhibits, since science pervades practically every department of the fair. Similarly, in education there will be no exhibit of 'school work,' of school materials or of specific educational institutions."

Museum News describes the building of the New York Zoological Society, which is a one-story structure with a great ball at one corner for showing the "Bathysphere," in which Dr. William Beebe made his deep-sea observations, accompanied by specimens and models of deep-sea fish, and with special bays at another corner for a large habitat group and at one end for the cage of the society's giant panda. At the entrance to the building will be two dioramas showing the effect of time on zoological life, the dioramas representing the New York area a million years ago and to-day. Other exhibits will show brilliantly colored species of

living birds and fish contrasted with colorless animals, an electric eel with explanation of how its electricity is generated and used, an insect group and a battery of motion picture projectors showing a series of zoological films. At the exit is a room devoted to information concerning the society, its activities and its objectives. The enterprise is financed by a group of trustees of the society, and is administered by a separate corporation formed for the purpose.

THE AWARD OF GUGGENHEIM FELLOWSHIPS

THE John Simon Guggenheim Memorial Foundation has announced the award of sixty-nine fellowships amounting to \$150,000. The recipients were chosen from among more than a thousand applicants.

The fellowships are granted to scholars, artists and scientific workers who by their previous work have shown themselves to possess unusual ability. Men and women, married and unmarried, of all races and creeds, who are citizens or permanent residents of the United States, are eligible on equal terms. The fellows are usually of ages between twenty-five and forty years. This year their average age is thirty-six years. They may work anywhere in the world where their work can best be done. Forty-three of the fellows just appointed intend to work abroad in whole or in part. The stipends are usually \$2,500 a year.

The fellows chosen are resident in twenty-two states, only five of which are in the East. They were born in twenty-four states and eight foreign countries. Fourteen of the fellows are not college-trained. Forty-seven are members of the faculties of colleges and universities, and twenty-two are free-lance scholars and artists. The University of Wisconsin leads with four members of its faculty. The Johns Hopkins University and the Universities of Missouri and California have three each. Purdue University, Sarah Lawrence College, Cornell University, Columbia University and the University of Chicago have two each.

Fellowships awarded in the sciences are:

DR. LAWRENCE R. BLINKS, professor of biology, Stanford University, for investigations of the relations of metabolism to the bio-electric properties of large plant cells.

DR. MAURICE EWING, assistant professor of physics, Lehigh University, his second fellowship, for deep-sea investigations by gravitational and seismic methods.

DR. ISIDORE GERSH, instructor in anatomy, the Johns Hopkins Medical School, for studies of the intracellular distribution of certain organic compounds.

DR. HENRY N. HARKINS, instructor in surgery, Medical School of the University of Chicago, for research into the nature and causes of surgical shock.

DR. LOUIS GEORGE HENYEU, instructor in astronomy, Yerkes Observatory, University of Chicago, to study the theory of the formation of stellar absorption lines.

DR. EARL MARTIN HILDEBRAND, assistant professor of plant pathology, Cornell University, for research on the modes of transmission of certain new virus diseases of fruit plants, with chief emphasis on determining how they are spread by insect carriers.

DR. HUBERT M. JAMES, professor of physics, Purdue University, to make a study of the application of wave mechanics to the computation of intensities in band spectra.

DR. CHARLES W. JONES, assistant professor of English, Cornell University, to study European scientific manuscripts of the eighth to twelfth centuries as preparation for the writing of a history of the physical sciences as they were known in the early Middle Ages.

DR. LELAND S. MCCLUNG, instructor in research medicine, Hooper Foundation for Medical Research, University of California, for studies of certain disease-producing and food-spoiling bacteria.

DR. ALFRED GEORGE MARSHAK, physiologist, formerly associated with the Deaconess Hospital in Boston, for investigations of the mechanism of chromosome division, especially the nature of the chromosome structure as revealed by response to neutron bombardment in the cyclotron at the University of California.

DR. ROSE C. L. MOONEY, associate professor of physics, Newcomb College and Tulane University, for research into the structure of crystals by methods of x-ray analysis.

DR. EARLE HAMLET MYERS, instructor in zoology, Compton Junior College, California, to continue his studies of the life cycles of the Foraminifera, with special reference to the role of these organisms in the sea and their significance in geological formations.

DR. GREGORY PINCUS, visiting professor of experimental zoology, Clark University, for the continuation of his investigations of the developmental physiology of mammalian eggs and embryos.

DR. HILDA FLORENCE ROSENE, assistant professor of zoology, University of Texas, for investigations of the forces and structures involved in the absorption and transport of water by plants.

ADRIAAN JOSEPH VAN ROSSEM, curator of the Dicky Collections, to study the ornithological collections of Europe.

DR. EMIL L. SMITH, instructor in biophysics, Columbia University, for a study of the kinetics and mechanism of photosynthesis.

DR. HAROLD R. SNYDER, instructor in organic chemistry, University of Illinois, for a study of the configuration of nitrogen in organic compounds.

DR. CHESTER STOCK, professor of paleontology, California Institute of Technology, for a vertebrate paleontological reconnaissance of Mexico.

DR. ROBERT C. TRYON, associate professor of psychology, University of California, to write a book on the inheritance of ability to learn, based upon data derived from a series of experiments on the ability of successive generations of rats to learn their way through complicated mazes.

DR. MELVILLE L. WOLFROTH, associate professor of chemistry, the Ohio State University, for studies of the general methods of investigating the organic structure of