

The International Commission attaches great importance to the "Official List," which they hope will develop into a powerful instrument for stabilizing zoological nomenclature. The International Commission believes that the forthcoming publication of the "Official List" in book form will be of great practical value to workers in many fields. It is the hope of the commission that its publication will stimulate specialists to make proposals for the addition to the "Official List" of other generic names of importance not only in systematic zoology but also in the applied sciences and in the teaching of zoology at the universities.

The International Commission is anxious to issue each of the above works at the lowest possible price, for they desire that both shall be within the financial means of every zoologist. It will only be possible for the International Commission to achieve this object, if before publication they are assured of a sufficient volume of immediate sales. Zoologists are accordingly invited at once to register themselves as prospective subscribers. As soon as the publication price has been fixed, a notification will be sent to all such subscribers who will be granted a discount of twenty per cent. on the publication price, provided that payment at the reduced rate is made to the commission before the date of publication. All inquiries should be addressed to the International Commission on Zoological Nomenclature at their Publications Office, 41 Queen's Gate, London, S.W.7.

FRANCIS HEMMING,
*Secretary to the International Commission
on Zoological Nomenclature*

MAY 8, 1945

ANNIVERSARY OF THE ACADEMY OF SCIENCES OF THE U.S.S.R.

A NUMBER of scientific men, including members of the American Philosophical Society, the National Academy of Sciences, the American Academy of Arts and Sciences and the Society of the Sigma Xi, left New York this week by plane to attend at the invitation of the Soviet Government the two hundred and twentieth anniversary of the Academy of Sciences of the Union of Soviet Socialist Republics, which will be held from June 15 to 28 in Moscow and Leningrad.

Dr. Harlow Shapley, director of the Harvard College Observatory, will represent the Society of Sigma Xi and the Independent Citizens' Committee of the Arts, Sciences and Professions at the anniversary celebration. Dr. Detlev W. Bronk, professor of biophysics at the University of Pennsylvania, will represent the National Academy of Sciences.

A scroll containing greetings to the scientific men of the Soviet Union signed by twelve Americans was presented to Dr. Shapley by Dr. Harold C. Urey, professor of chemistry at Columbia University.

Among those included in the party in addition to Dr. Shapley and Dr. Bronk are Dr. James W. Alexander, professor of mathematics at the Institute for Advanced Study, Princeton, N. J.; Dr. James E. Church, of Reno, meteorologist for the U. S. Weather Bureau; Dr. Edward U. Condon, associate director of the research laboratory of Westinghouse Electric Corporation, East Pittsburgh, Pa.; Dr. Henry Field, of the Library of Congress; Dr. Isaac M. Koltzoff, head of the department of chemistry of the University of Minnesota; Dr. Irving Langmuir, associate director of the research laboratory of the General Electric Company, Schenectady, N. Y.; Dr. James W. McBain, professor of chemistry at Stanford University; Dr. Duncan A. MacInnes, member of the Rockefeller Institute for Medical Research; Dr. Arpad L. Nadai, consulting engineer of the Westinghouse Laboratory; Arthur Upham Pope, archeologist and director of the Iranian Institute, New York; Edwin S. Smith, director of the National Council of American-Soviet Friendship, Inc.; Manuel S. Vallarta, president of the Mexican Academy of Sciences.

While in Russia Dr. Shapley expects to observe the total solar eclipse of July 9, which will originate in Idaho and terminate in Siberia. Members of the eclipse party will include Dr. Duncan MacInnes, Dr. Irving Langmuir, Dr. Henry Field, Dr. Edward U. Condon and Manuel S. Vallarta.

NEW FLUID MECHANICS LABORATORY AT SYRACUSE UNIVERSITY

A NEW Fluid Mechanics Laboratory, which will be devoted to experimental and test work in the field of fluid mechanics, and featuring pump testing and analyses of performance of pumps, is being installed in the College of Applied Science of Syracuse University.

This new addition to the facilities of the department of mechanical engineering has been made possible by a recent gift of \$10,000 from the Oberdorfer Foundries, Inc., of Syracuse, N. Y., through its president, Kenneth A. Digney.

This laboratory will be in Machinery Hall in a space along the west wall on the same floor as the machine shop. This space, 21 feet by 44 feet, is enclosed by a partition wall of frame construction with a wall covering of heavy plywood to a height of eight feet with glass enclosure above this height reaching to the ceiling, which is about fifteen feet above floor level. The heavy plywood wall covering was chosen in preference to plaster or other materials so as to resist without serious damage the impact of accidental blows from tools or from machinery being moved and, also, to permit easy mounting of lightweight instruments on the walls. A partition wall divides the space into two rooms, allowing a smaller

room, ten feet by twenty-one feet, at the north end, which is to be used as a computation and record room. The floor of the main laboratory room is provided with a waterproof mulsomastic covering pitched downward toward a drain outlet located near the center of the room, and is flashed with sheet lead around the walls. A drain pipe to the sewer has been installed and the piping for the water supply has been completed. Further installation details await delivery of the principal machinery now on order.

The immediate purposes of this laboratory are to provide testing facilities for determining the characteristics of pumps of rotary and centrifugal types, and to permit testing under unusual service conditions to observe effects of erosion and corrosion. The information so gained can then be used in the development of improved designs.

It is planned that the laboratory will be further developed to include facilities for research, experimentation and demonstration in the mechanics of fluids (both liquids and gases) for the benefit of graduate and undergraduate students.

In the testing of pumps the power input will be provided by direct coupling to 220-volt, direct-current electrical, cradle-type dynamometers, three of which have been ordered. These dynamometers have motor-ing capacities of 40 horsepower, 5 horsepower and $\frac{1}{2}$ horsepower, with speed variations from 1,200 r.p.m. to 5,000 r.p.m. The small unit will be included in a bench set-up for which a suitable laboratory bench equipped with drain has been provided. The largest unit will be mounted on a steel-slotted engine base about five feet wide by fourteen feet long, which will be provided with adjustable supports for mounting pumps of various designs or dimensions. This same base and driving unit will be equally well adapted to the testing of rotary, centrifugal or axial flow gas compressors. It is expected that the units to be tested will be changed frequently, hence a monorail running the length of the laboratory and extending to an outside door of the building will be installed. This will be equipped with a hoist capable of lifting the machines to be tested from grade level, about twelve feet below the floor level at this outside door. A precision, air-balance type, recording flow meter along with suitable accessory air-compressor equipment has been ordered. Also, there will be provided various types of flow-measuring devices, including venturi meters, orifice meters and nozzles. Much of the latter equipment, along with necessary instruments, is available in present laboratory equipment. Following the installation of the equipment now on order the piping arrangements will be completed, including tanks and drums to contain the fluids to be handled. Weighing tanks mounted on platform scales will be added. Part

of the piping and storage tanks will be adapted to the handling of corrosive solutions of various sorts.

In addition to the equipment provided for testing machinery there will be developed and built various types of apparatus for demonstration and experimental work in the flow of fluids. Also, it is planned that various installations will be made from time to time for research purposes. In general, the idea prevails that this is not to be a fixed installation to be retained as originally made for a period of years; but is to be a very flexible laboratory installation capable of following closely the needs and trends of industry in the field of fluid mechanics.

FLUID LABORATORY

Objectives:

Testing facilities for determining characteristics of pumps.
Development of pumps.
Facilities for student research, experiments and demonstrations in the mechanics of fluids.

Equipment:

3 dynamometers accommodating pumps from fractional HP sizes to 40 HP.
Precision, air-balance type recording flow meter.
Air compressor.
Gages, miscellaneous.
Tanks and drums suitable for adapting equipment to various fluids.
Record files, drafting facilities, technical reference literature.
Laboratory benches and cabinets.

Difficulties in getting materials, equipment and problems of constructing special test stands, etc., are delaying factors.

Laboratory space: Laboratory 34 × 21 and adjoining office 10 × 21. Totally enclosed. Located in Machinery Hall.

1/2 HP at 1,800/5,000 r.p.m.

5 HP at 1,250/4,000 r.p.m.

40 HP at 1,550/4,000 r.p.m.

JOHN A. KING

SYRACUSE UNIVERSITY

CHAPTERS OF THE SOCIETY OF THE SIGMA XI

THE Cornell Chapter of the Society of Sigma Xi held its annual initiation on May 23. President O. F. Curtis spoke on "Biological Science in the News." Following the banquet, Professor A. A. Allen, of Cornell University, gave an illustrated lecture on "The Bird's World." The Cornell Chapter has recently written to all former members in connection with its affiliation program. The portion of all affiliates' dues which remains with the local chapter will be used for the establishment of the Cornell Sigma Xi Fellowship, with a stipend of \$500. It is anticipated that the first award will be made in 1946,