GENERAL SCIENCE

First Annual NSF Report

➤ THE MOST immediate problem facing the National Science Foundation is the relation of the present emergency to the support of basic research. This is pointed out in the first annual report of the foundation transmitted by President Truman to Congress.

The problem is one that has been considered at length by the board of the foundation and its director, Dr. Alan T. Waterman, the report says. Declaring that the country must be in a state of operational readiness, insofar as science is concerned, for the next two or three years, the report goes on to say that, over the long pull, the program of basic research of the foundation can be most effective.

Figures show, the report states, that the smallest portion of financial support for all scientific work goes to basic research. However, no up-to-date assessment has been made of the national research and development picture. The foundation considers that one of its first tasks will be to make a thorough review of the present national pattern of research and development.

As for scientific manpower, the report points to the growing shortage in both research and development. The extent to which the defense program will continue to drain the national supply of scientific manpower, the report says, emphasizes the need for the training program in science planned by the foundation.

Dr. James B. Conant, chairman of the National Science Board, in a foreward, emphasizes that the report must necessarily be a description of progress in formulating plans.

"If the Congress will each year provide sufficient funds to enable the director and his staff to carry out the program we have laid down," declared Dr. Conant, "I have no doubt that over the years this new way of expending taxpayers' money will prove to have been a wise departure from the usual pattern."

Science News Letter, January 26, 1952

METALLURGY

Alloy Titanium and Zirconium for Wide Use

➤ TWO PLENTIFUL but now little used metals, titanium and zirconium, will mix in any proportion to form valuable alloys, the U. S. Bureau of Mines has discovered in recent investigations.

These light, corrosion-resistant metals can be used in many applications, particularly in alloyed form, and many uses are promised for the new alloys.

Titanium is the world's fourth most plentiful metal but has been little used in metallic form in the past because of difficulties in separating it from the minerals in which it is formed by a commercially economical process.

Zirconium is not as plentiful as titanium but it is more abundant than such common metals as copper, nickel and lead. Its separation is also a problem. But methods have been developed recently by the Bureau and by private industry by which both titanium and zirconium may be economically obtained. Both promise to become important metals in everyday use.

The Bureau, in cooperation with the U. S. Air Force, has been making an extensive study of zirconium alloys during the past four years. More recently it has directed that study to a more detailed investigation of a selected group of alloys, particularly with titanium, a much lighter metal. It has just issued a report of this work, a copy of which can be obtained without cost from the Bureau of Mines office at 4800 Forbes St., Pittsburgh. Its title is "Zirconium-Titanium System; Constitution Diagram and Properties."

Science News Letter, January 26, 1952

Radar is coming into wide use clocking car drivers as they speed along highways.

Antlers shed annually by deer are often destroyed by mice and other rodents for the minerals they contain.

Question Box

AGRICULTURE

What weed-killer increases the size of apricots? p. 56.

ASTRONOMY

What eclipses will occur in February? p. 58.

DENTISTRY

What are some of the tricks in learning to wear false teeth? p. 62.

ENTOMOLOGY

What is the party line for Russian bees? p. 54.

GENERAL SCIENCE

How many applications were made for each National Science Foundation fellowship available? p. 50.

MEDICINE

What drug will quiet hangover shakes? p. 54.

How many causes have been found for a pain in the neck? p. 59.

PHYSICS

How can odors be removed from a home freezer? p. 56.

Photographs: Cover, Milt Young and Bob Richardson; p. 50 and 51, Gulf Oil Corporation; p. 53, University of Illinois; p. 55, B. F. Goodrich.

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