

dounding to the public good. For instance, the laboratories of the Bureau of Agricultural Chemistry and Engineering have been most helpful in working out problems of general interest. The four new regional research laboratories now under construction by the United States Department of Agriculture will no doubt be anxious to render similar assistance under suitable cooperative arrangements.

The government agency most frequently called upon to aid trade-association research is probably the National Bureau of Standards. This agency, as its name implies, is most important in standardization research, but arrangements can be made with it to supply research associates for work on particular industrial problems. More often, however, a grant in money is made to the bureau to provide funds for a specified task. One particularly important phase of the bureau's work is the preparation and distribution of standard analytical samples and standard test specimens. The analyses and physical properties are carefully determined by the bureau so that they can be used by individual laboratories to check the accuracy of their own methods and determinations.

SUMMER COURSES IN APPLIED MECHANICS AT BROWN UNIVERSITY

A STAFF of sixteen experts from Europe and America, representing "the best men available in the fields of mathematics, engineering and physics," has been selected to take charge of summer instruction and research in applied mechanics at Brown University, where special problems in defense industry will be studied by prospective defense technicians. Beginning on June 23 and continuing through September 13, the summer session is designed to help overcome a bottleneck in the supply of men with highly specialized knowledge who are needed in defense industry.

The first program of its kind will bring together, according to a statement made by Dr. R. G. D. Richardson, dean of the Graduate School, those "who are now so widely scattered that their work is relatively ineffective for instruction purposes." The courses to be offered will deal largely with higher mathematics. They will include "Partial Differential Equations," "Fluid Dynamics," "Elasticity," and seminars in fluid dynamics and elasticity. The personnel of the staff has been chosen "for their practical knowledge and experience, the high degree of their past achievements; and their grasp of the fundamental problems in mathematics which are related to defense preparations."

There will be six full-time professors and ten visiting lecturers. In the group of professors, one is Polish, two are Russian and three are German by birth. The German specialists are among those who have left their native country since Hitler's rise to power and whose outstanding achievements in applied mechanics have helped bring about the high quality and efficiency of Nazi planes and other fighting equipment.

The professors are:

Richard von Mises, now lecturer on aerodynamics and applied mathematics at Harvard University, and formerly director of the Institute for Applied Mathematics at the University of Berlin. One of the most eminent European authorities on aerodynamics, hydrodynamics and the theories of elasticity and probability, von Mises is known particularly for his studies of airplane body shapes and vibrations. His book on aeronautics has gone through five editions.

Kurt O. Friedrichs, professor of mathematics at New York University and formerly professor of mathematics at the Technological Institute at Braunschweig. He is widely known for his work in applied mathematics, including his mathematical investigations of the stresses on thin metal plates, like those used in airplane construction.

Ivan S. Sokolnikoff, professor of mathematics at the University of Wisconsin and expert for the National Defense Research Committee. He is known for his work in the theory of elasticity, mathematical physics, partial differential equations and boundary value problems.

Jacob D. Tamarkin, professor of mathematics at Brown University, formerly professor of mathematics at the University of Petrograd and the Petrograd Electrotechnical School. An editor of the international journal, *Mathematical Reviews*, his field is pure mathematics, particularly the Fourier Series and Laplace integrals.

Willi Prager, professor of engineering at the University of Istanbul, formerly associated with the Aerodynamical Institute of Göttingen. He is a world-recognized authority on structural statics, the theory of vibrations, hydrodynamics and the theory of plasticity.

Stefan Bergmann, lecturer at the Massachusetts Institute of Technology and formerly instructor at the Institute for Applied Mathematics at the University of Berlin. His specialized studies deal with applied mathematics, the theory of elasticity, fluid dynamics and electromagnetic theory.

The lecturers will include Professor R. D. Courant, mathematics, New York University; R. M. Foster, Bell Telephone Laboratories; Dr. Thornton C. Fry, mathematical research director, Bell Telephone Laboratories; Professor James N. Goodier, mechanics of engineering, Cornell University.

Professor Robert B. Lindsay, physics, Brown University; Dr. A. L. Nadai, mechanical engineering, Westinghouse Electric and Manufacturing Company; Dr. Hillel Poritzky, mathematician, General Electric Company; Dr. Theodore Theodorsen, chief, physical research division, National Advisory Committee for Aeronautics, Langley Field.

Professor Stephen P. Timoshenko, theoretical and applied mechanics, Stanford University; Professor Norbert Wiener, mathematics, Massachusetts Institute of Technology.

THE UNIVERSITY OF CHICAGO FIFTIETH ANNIVERSARY SYMPOSIA

A CORDIAL invitation is extended to scholars and scientific men to attend a series of Symposia with the general title "New Frontiers in Education and Research" in celebration of the fiftieth anniversary of