

The wide range of opportunity that is open to engineering physicists is indicated by the fact that a recently published bulletin of the National Research Council lists 1562 industrial laboratories and states that one-seventh of them include on their payrolls employees who are classed as "physicists." In these laboratories, as well as in others, there are many other employees who are trained physicists but who appear on the payrolls as engineers of one type or another. Among the more familiar companies employing physicists are the following: Bell Telephone Laboratories, General Electric Company, Westinghouse Electric and Manufacturing Company, Aluminum Company of America, American Optical Company, Armstrong Cork Company, Brooklyn Edison Company, Carnegie Steel Company, Chevrolet Motor Company, du Point de Nemours and Company, Eastman Kodak Company, Goodyear Rubber Company, Humble Oil Company, Johns-Manville Corporation, Montgomery Ward and Company, R. C. A. Radiotron Company, Shell Petroleum Corporation, Standard Oil Company, and Western Union Telegraph Company.

In these and other organizations, physicists are assisting in solving the most varied types of problems—problems arising in the development and application of linoleum floor coverings; acoustical wall coverings; heat insulators, dyes and inks; paints, lacquers, and varnishes; steam boilers; x-ray equipment; incubators and brooders; incandescent lamps; television equipment; road surfacing materials; wire-photo equipment; canning of food products; the refining of petroleum; air conditioning; sugar refining and coffee processing; farm machinery; airplanes and airships; methods of geophysical exploration for petroleum and other minerals; photographic equipment; mechanical refrigeration; radio and telephone equipment; optical goods; toilet preparations; and last but not least, furnaces and stoves.

In addition to the extensive group of industrial laboratories, there exists another group of laboratories, not connected with educational institutions, in which physicists are employed. Many of these are maintained by various branches of the Federal Government such as the Bureau of Standards, Bureau of Mines, Patent Office, Weather Bureau, Coast and Geodetic Survey, War Department, Navy Department, Department of Agriculture, and the Inspection Service.

Among these might be classed various privately endowed institutions such as the Smithsonian Institution, the Carnegie Institution of Washington, the Bartol Research Foundation and others.

It is to prepare students for work in such organizations as have been listed above that the curriculum in engineering physics is planned.

Almost half of the students majoring in physics go into industrial work. Because of our location, because of the exceptional opportunity afforded for training in a number of courses in the field of geophysics, and especially on account of the splendid reputation already made

in geophysical work by our graduates, recent graduates have had little difficulty in securing positions with the various oil companies and geophysical organizations. For this reason the majority of those who have sought industrial positions have gone into geophysical work.

James C. Davis is head of the department of mechanics and professor of mechanics.

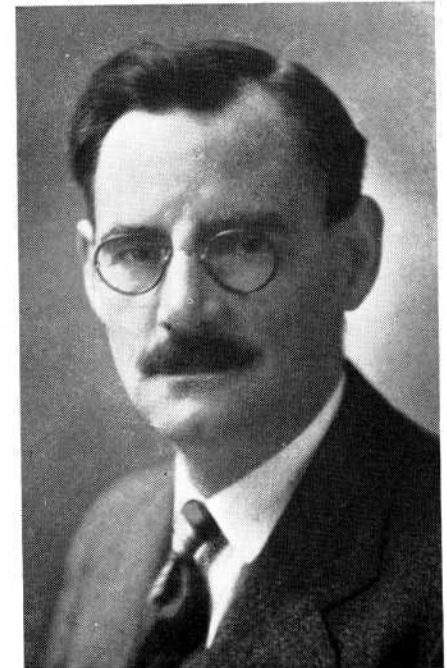
## General Engineering

By JAMES C. DAVIS  
Director

**A** FEW years ago a course in general engineering was introduced into this school. Its aims and purposes have been to supply a well balanced course in the field of engineering without over specialization in any specific branch of the profession.

The requirements for the freshman year are the same as those for mechanical, electrical, civil, chemical, and geological engineering students. The sophomore, junior, and senior engineering schedules embody the same studies in mathematics, physics, chemistry, English, and mechanics. The general engineering course requires additional courses in chemistry—general metallurgy, in mechanics—materials of engineering, in mathematics—theory of equations, in English—American literature, in American government or history, and in public speaking. Basic courses are also required in economics, accounting, and engineering contracts.

In order to bind the work thoroughly to professional engineering five hours of fundamental subject matter are required from electrical engineering, seven hours from civil engineering, seven hours from mechanical engineering. Fifteen hours



are also available for technical elective subjects. These subjects may be chosen from any or all of the professional courses of the various schools. Eight hours are also available for the pursuance of non-technical subjects such as English, modern languages, and history.

This course in general engineering seems to be supplying a real need. Some are taking it because they wish the more general training; others are taking it with a view to entering the design or research field; still others with a view to entering sales engineering.

Those who have completed this course have experienced no difficulty in securing positions and all seem to have been able to compete on equal terms with those who have taken a more specialized training.

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### Martin Is League Speaker

William Martin, '32law, Mayes county attorney, was a speaker before the University League of Young Democrats recently. Martin was a candidate for the state presidency of the League of Young Democrats.