Hygiene Foundation of America Inc.; The John B. Pierce Laboratory of Hygiene, New Haven, Connecticut; The Saranac Laboratories at Saranac Lake, New York; life insurance companies as well as mutual and stock company compensation insurance carriers; and many of the larger private industries. Recently trade unions are evidencing an active interest in industrial health. In 1945 a health institute was opened by the United Automobile Workers (CIO) in Detroit to give diagnostic service to union members. Employees no longer regard x-ray examinations or industrial hygiene surveys with the suspicion that was common a few years earlier. This change of attitude is due in part to improved practices, but mainly to educational successes: in short, the average employee now understands the purpose of such health control work and realizes its value to his well-being. Some states now require pre-employment and periodic medical examinations for persons exposed to potentially harmful materials.

II. World War II and Industrial Hygiene Service

Industrial hygiene procedures have largely passed through the period of inquiry into the causes of ill health and now devote their energies to anticipating and avoiding harmful situations before they have time to cause injury. Many different organizations played a part in this rapid development during the period of rapidly expanded production in 1941–45.

A. OFFICIAL AGENCIES

The Army provided men to make surveys and recommend control measures in Army-owned and Army-operated industrial installations. Similar service was rendered to government-owned, privately operated munitions plants by other government industrial hygiene groups co-operating with the Army. The Navy provided men for its shore establishments, and co-operated with the Maritime Commission in providing service for private shipyards. The United States Public Health Service supplied funds and loaned trained personnel to state and municipal health departments, and also conducted field surveys in industry, especially munitions works. The United States Labor Department concentrated upon activities of an educational nature. The United States Bureau of Mines greatly expanded its health program in relation to mining operations. During and following the period of reconversion to the manufacture of civilian goods many of the trained men who had been active in government agencies were reabsorbed by industry.

B. INSURANCE AND INDUSTRIAL GROUPS

Life insurance and compensation carriers were rather active in the field well before 1941, and they continued their work as best they could with inroads into their personnel occurring from all sides during the war-production years. They are now expanding their activities and re-employing trained men.

During this period industry became much more active in the field than formerly, partly because of a newly awakened interest as a result of state and municipal

activity, partly as a result of organized labor's demands for healthful working environments, partly as a hedge against racketeering, but largely because of a desire on the part of management to make the working environment healthful and attractive, not purely from an altruistic attitude but because management began to realize that the maintenance of a healthful environment pays dividends. More and more industrial concerns have come to the conclusion that industrial hygiene is a necessary adjunct to production and not something to be entrusted entirely to overworked government agencies.

Private institutions, such as, for instance, The Industrial Hygiene Foundation, encountered greatly expanded demands for their services during this period.

C. EDUCATIONAL INSTITUTIONS

Those colleges that had given any organized instruction in industrial hygiene prior to 1940 now provided short courses for greatly expanded classes in an effort to give a large number of interested persons sufficient knowledge to make them useful workers in the field during war-expanded production. During and following this period many medical schools set up short courses in industrial medicine and hygiene as orientation and refresher courses. A few institutions of advanced learning have provided special instruction in health and safety. The present plans include advanced training and education leading to degrees in health and safety engineering, but the opportunities for advanced instruction for chemists, physicists, mechanical engineers, and others who wish to prepare themselves for industrial hygiene engineering are still discouragingly inadequate.

A recent report[3] of the Committee on Professional Education of the American Public Health Association lists Columbia, Harvard, Johns Hopkins, Toronto, Yale, and the state universities of California, Michigan, Minnesota, and North Carolina among the institutions accredited to give the degree of master of public health for the academic year 1946–47. This report recognizes the basic sciences underlying public health practices, including industrial hygiene. Therefore, all graduates of these schools presumably will have received at least a good orientation course in industrial hygiene; some may have an opportunity to prepare for later specialization in it. As the reservoir of competent, experienced industrial hygienists grows, we hope for a greater number of qualified teachers of the subject in order that more students may be encouraged to specialize in the field and thus fill the growing needs of industry and official health and accident control agencies for such specialists.

There has been concurrently a movement to provide advanced courses in technical safety and hygiene for graduates of the arts and sciences independently of any medical or public health schools. The ultimate result of such instruction, if extensive, would be expected to be a merger of safety and industrial hygiene into something yet to be named. That there is opportunity for such academic instruction is apparent but there have been much hesitation, uncertainty, and bickering about its initiation. This has been due in the past to a dearth of suitable text material and

[3] Committee on Professional Education, *Am. J. Pub. Health*, **36**, 244 (1946).