

Answer: Aside from the psychological aversion in people's minds to matters dealing with the handling, treatment, and disposal of wastes, there are perhaps four major practical factors associated with sanitary engineering which have contributed to and continue to affect the status of the profession. These are: (1) sanitary engineering has not been a uniquely identifiable curriculum in the Nation's undergraduate schools, (2) there is confusion in the definition of the function of the sanitary engineer, (3) the public is not aware of the specific activities of the sanitary engineer and, in many cases, even of the existence of sanitary engineers, and (4) the salary structure. These factors are very much interrelated.

Historically, sanitary engineering curriculums have been associated very closely with civil engineering departments in most engineering colleges and universities. In order that the neophyte engineering student be aware of the opportunities and the challenges that exist for him in the study, the understanding, and the manipulation of the environment in which we live, sanitary engineering curriculums must be given specific identification. The interdepartmental nature of some elements of the curriculums is not in conflict with identifiability and is certainly not unique in today's university programs.

There is confusion even among sanitary engineers themselves as to the function of the sanitary engineer within the engineering profession as a whole and within society. Recently, there has emerged the concept of "environmental engineering" which is concerned with all the environmental factors to which man is exposed and which directly affect his health and well-being. It is generally felt that the environmental engineer should be a generalist in terms of his knowledge of the broad areas related to air, land, and water pollution or to physical chemical, biological, radiological, etc., insults to man. Unfortunately, this generalist approach is in conflict with the ideas of this era in which the "glamour" of science is associated with the specialists. In order that our efforts be directed most effectively to the many scientific and engineering problems of the environment, both generalists and specialists are required. It is necessary to blend and utilize the talents and capabilities of the entire engineering profession and of mathematicians, physicists, chemists, and biological scientists, who may have been trained in other areas, for the solution of water pollution problems. Specialists in environmental sciences and engineering can be developed through the mechanism of intensive training programs.

The general public must be made more aware of the pressing environmental problems that we as a nation face. The problems of water resources, urban development, solid wastes and transportation require immediate, intensive research and development attention.

Inasmuch as sanitary engineers have been traditionally hired primarily by State health departments, schools and the Federal Government, the salary levels which a graduate sanitary engineer can expect to achieve are not comparable with those of other segments of the engineering profession. I believe it is fair to state that the "glamour" and dignity of a given profession are nearly always associated with the degree of public awareness of the functions of the profession, and this in turn is nearly always associated with expenditures of money by industries, State and local governments, and the Federal Government in areas associated with these functions. It is necessary to make salary levels more comparable to other fields of endeavor.