

Talk-15

What is "engineer's ethics"?

Kazuhisa Todayama

Nagoya University, Nagoya, Japan

Abstract

A decade has passed since engineering ethics and its education were introduced into universities in Japan. However, the present situation seems still chaotic. Because engineering ethics started as a reaction to ABET (The Accreditation Board for Engineering and Technology) and/or JABEE (the Japan Accreditation Board for Engineering Education), the sense of ownership on the side of working engineers is quite immature and there is no consensus on what is "engineer's ethics". What is needed is to shift (1) from reactions to external pressures to acting on ones own initiative, (2) from trial-and-error practices by each individual to collaboration among engineers, philosophers, engineering professors, and citizens. To realize these changes, engineering ethics should be regarded as a part of a social movement which aims to improve engineers social status as semi-professionals.

The history of engineering ethics in US will be briefly surveyed. That has important implications for Japan, namely, that when we think about what to teach in engineering ethics education and how it should be done, it is important to consider these problems against the background of the social systems which give substance to engineering ethics and make it work in real life situations.