

Keynote Speech 2

“KOSEN: Its Importance and Role Now and in the Future”



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Summary of the Speech:

In Japan, the “Kosen” and the faculty of engineering at university, at which the education and research on science and technology are focused on, have fostered a great number of young engineers who try to be technical professionals in the future, and both the institutions have made great contributions to Japan’s high economic growth.

Today, however, human beings face many serious environmental problems such as global warming, ozone layer destruction, and deforestation. Considering these critical situations of the world, a central question has been: “in order to support sustainable development for the future, what should the importance and role of science and technology be? and what should the importance and role of education and research in the institutions of higher education be?”

“Kosen (National Colleges of Technology in Japan)”, established in 1961 in response to strong demand from industry, is widely known for its own distinctive features: five-year intensive training engineering education from 15 years old, and subsequently, two-year advanced courses where, in addition to regular classes, PBL (Project-Based Learning) is conducted and the opportunity of a long-term internship is given. According to the review of higher education by the Organization for Economic Cooperation and Development (OECD), the early practical education of engineering like KOSEN is highly acclaimed as one of the successful examples in the OECD member countries.

Therefore, in order to heighten the presence of KOSEN and to fully respond to the expectations for KOSEN from the society of the 21st century, I would like to openly discuss future possibilities of KOSEN from various perspectives in the sessions of the symposium.

Biography of Dr. Yujiro Hayashi:

Academic Degree: Doctor of Engineering

Field of Research: Thermal Engineering

Education:

Mar. 1970: Graduate School of Science and Technology, Tokyo Institute of Technology
(Doctor of Engineering)

Work Experience:

Apr. 2009 - Present: President, Institute of National Colleges of Technology

Apr. 2004 - Mar. 2008: President, National University Cooperation, Kanazawa University

Sep. 1999 - Mar. 2004: President, Kanazawa University

Apr. 1997 - Sep. 1999: Dean, Faculty of Engineering, Kanazawa University

Oct. 1981 - Jun. 1982: Visiting Professor, Purdue University in U.S.A

Oct. 1981 - Mar. 1997: Professor, Faculty of Engineering, Kanazawa University

Apr. 1971 - Sep. 1981: Associate Professor, Faculty of Engineering, Kanazawa University

Apr. 1970 - Mar. 1971: Lecturer, Faculty of Engineering, Kanazawa University

Others:

Oct. 2005 - Present: Representative Member, Science Council of Japan

May. 2010 – Present: President, Japan Society of Thermal Science and Engineering