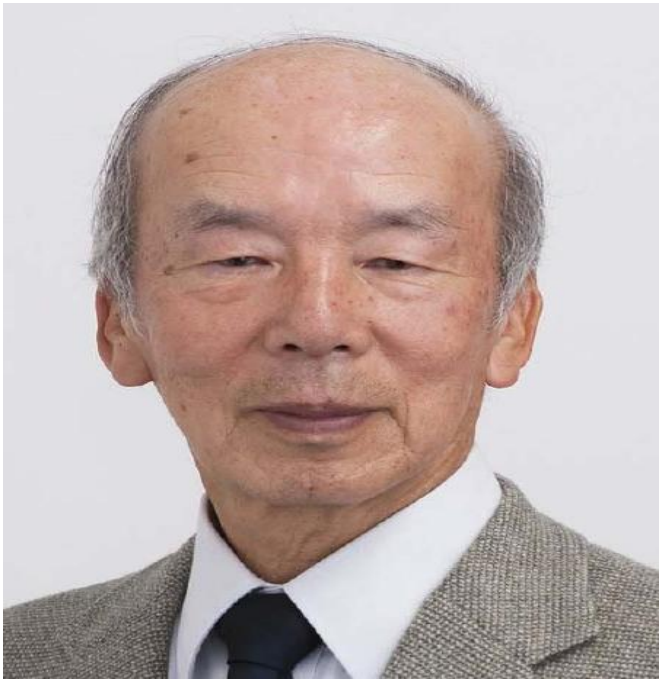
Plenary Keynote Speaker
Day 1, Monday, July 7, AM

Breakthrough by Extensive Application of Lifecycle Management and Systems Design Approaches beyond Boundaries

Prof. Yoshiaki Ohkami, Immediate Past Dean and Advisor to Institute of System Design and Management, Keio University



Brief Biography

Yoshiaki Ohkami obtained Dr. Engineering in Control Engineering from Tokyo Institute of Technology and worked for National Aerospace Laboratory as research engineer on spacecraft control and large space systems (1968-1992). During this period, he worked as visiting scholar at UCLA under NASA/MSFC contract and Deputy Director for Space Station Program of Japan. He became professor at Tokyo Institute of Technology (1992-1999), and at Keio University (1999-2005) while serving as Research Inspector at JAXA Space Center. Now he serves as Advisor for Institute of Systems Design and Management, Keio University. Major fields include Strategic Systems Engineering,

Dynamics and Control of Mechanical Systems, and Field Robotics. He is a fellow of JSME and the INCOSE, and member of ASME, IEEE and Japan Society for Aeronautical and Space Sciences.

Abstract

After having enjoyed prosperous and animated period of economic growth until the middle of 1980's, engineering and social systems of Japan have encountered a difficult time with many issues to resolve, especially in higher levels of social systems. However, most of these issues could be overcome if we employ a kind of boundary-free approaches. Boundary may be geographical, organizational, political and so on. By comparing successful examples and best practices with failures and lessons learned, the presenter intends to demonstrate that Japanese are reluctant to accept and prioritization of tiered structures and that realizable solutions are feasible for apparently difficult situations if we start with lifecycle considerations at first. Such topics will be covered as nuclear power plant operations in energy and ecology issues, road networks for the weak of transportation systems, sightseeing business by preserving natural landscape. Also includes are recent happenings such as agriculture-fishery conflict at Isahaya water gate, rapid population decrease and stationary employment, and so on. All of these examples shows importance of systems design with lifecycle management. "Think the end before start" as da Vinci said.