

Message from Editor-in-Chief



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On behalf of the editorial committee of International Journal of Automation Technology, I would like to sincerely ask all of you a favour of me to activate this journal since I am convinced that the automation technology is indispensable to the convenience and prosperity of human being.

The automation technology began with the development and introduction of numerical control (NC) machine tools in the latter of 1950s. In 1960s, the technology was applied to assemble electric goods and automobiles together with the development of a wide variety of automation-related methods such as industrial robots, semiconductor technologies and so on. In 1970s, this tendency had greatly affected the automation of production systems, which was called FA (Factory Automation or Flexible Manufacturing System), that is, flexible systems to rapidly cope with the change in the sort and quantity of products. The construction of FA is still continuing even now.

The current state of art in production automation is the evolution by making the most of IT (Information Technology), where there are infinite tasks to be solved, for example, the cooperation with design, manufacturing and sales, life cycle control of products from production to waste by IC tag, product liability management, lean production taking account of environment protection and energy saving, product development with individuality and characteristic, production sustaining human skill, manufacture of high value-added products, development of future products, etc.

After the bubble disruption in 1990, Japan has been suffering from the economical recession for

15 years, thus resulting in hanging low of automation technology development as well as decreased equipment investment. In addition, our serious problem in Japan is the disappearance of valuable technologies and manufacturing spirit by the mass retirement of engineers who have born the automation technology and supported excellent product manufacture. Thus, it is an important issue to improve and develop the automation technologies further.

From the above mentioned viewpoint, the journal focuses on the advanced automation technologies ranging from fundamental technologies to a variety of industrial applications, which meet the requirements, especially from industries. The journal covers all sorts of automation technologies regarding design, manufacturing, assembly, inspection, transportation, logistics, machine tools, robotic system, control system and instruments, and so on. There are some journals with respect to the automation specific to scientific and fundamental research, however, no journal exists, which aims at providing engineering researches and practical developments.

Thus, the journal takes up a large amount of practical examples relating advanced automation technologies as review papers, research and development papers, news and interview so that the readers can take interest in the journal. The editorial committee wants IJAT to serve engineers and managers for the requirement of automation technology developments, and is all concerned for your contribution to IJAT.