

## *Outline of Symposium II:*

### *"Marine genomics: Fishery resources and biotechnology"*

The 20th century was the time when technology developed at a stretch. Thanks to this development, human population increased and human beings prospered on an unprecedented scale. As a result, however, various problems have arisen. They are, for example, problems of environmental destruction including global warming, energy and food, which is indispensable for human beings. Considering this situation, it is necessary to exploit limited earth resources effectively. Living organism production may be one solution to the problem of food supply, because living organisms will be infinitely maintainable resources, if the production is managed well. From the 21<sup>st</sup> century onward, especially important for the prosperity of human beings is the effective utilization of the ocean, which occupies a big area of the earth. The fishery industry takes the lead of this matter. Although aquaculture industry is developing, it is still in a rough stage equivalent to hunting compared with agriculture and the stock raising industry. Therefore, it is necessary to accelerate the breeding of fishery living organisms that are useful for human beings. For this purpose, genome science is an important and powerful tool. At this symposium subcommittee, we will look down at the present condition of the fishery living organism production that is becoming an important key of the food supply in the world from the viewpoint of genome research, and argue about the future of genome science.