Preface

The Northeast and Southeast Pacific are the most productive fishing grounds in the world. The catches by marine capture fisheries in Asia including these two areas is estimated at about 40 million tones which amount to about a half of the global total catches. The present marine capture fisheries production in the world, however, already have reached at saturated amount, and excessive fishing pressure has impacted negatively on the natural fisheries resources and ocean environment.

Underwater acoustic technology has once been developed as the effective fishing tools, but it also has contributed to estimate fish resource abundances as scientific survey tools. Now the mission given to fisheries acousticians is to recommend appropriate fishery production based on the evaluation of fish resources using underwater acoustic technologies for the sustainable fisheries which do not impact on natural resources.

During the past decades, we had several international meetings on Fisheries Acoustics in Asia. The first meeting was held in Pusan, Korea, in 1997, entitled “International Workshop on Acoustic Surveys of North Pacific Fisheries Resources”, and the second meeting was held in Hakodate, Japan, in 2000, entitled “International Symposium on Advanced Techniques of Sampling Gear and Acoustical Surveys for Estimation of Fish Abundance and Behavior”.

Since after the symposiums, the number of researchers in Asia has been increased year by year, and the technology on underwater acoustics has been developed in Asian countries. However, information exchanging and cooperative works on fisheries acoustics over the countries still look like few. Since there are many problems peculiar to Asian fisheries, such like small quantities with numerous species, various species of benthic animals, many kinds of freshwater and aquaculture fisheries, the acoustical technologies must be applied for those problems.

Therefore, in 2007, we established the Asian Fisheries Acoustics Society (AFAS) at Dalian, China, based on the past activities in order to promote further progress of science and technologies on fisheries acoustics in Asian countries. Since then the annual meeting of the AFAS has been held every year, namely the AFAS2008 at Incheon, Korea, the AFAS2009 at Taipei, Taiwan, and the AFAS2010 at Penang, Malaysia.

The symposium held at AFAS2009 in Taipei from 9th to 10th September 2009 was entitled ”The International Conference of Fisheries Acoustics and Contribution for Sustainable Fisheries in Asia, 2009.” There gathered 63 persons not only from Asia but also from US and Europe. We had 36 presentations including the four invited presentations.

Fortunately, a special issue from the Journal of Marine Science and Technology (JMST), Taiwan, was planned for this symposium and selected papers were to be published. Focusing on the papers presented in the symposium, papers were called for, and, after the process of peer reviewing, eleven papers including three invited paper were selected for this special issue. The contents are wide and include the review of fisheries acoustics, the target strength of fish, acoustic surveys and so on. We will be happy if this issue serves for further progress in fisheries acoustics in Asia and other countries.

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