Welcome to the 4th International Symposium on Kuroshio Science

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Ladies and gentlemen. Good morning.

I am a head of the department of Kuroshio Science, Graduate School of Integrated Arts and Sciences, Kochi University. It is my great pleasure to welcome all of you to the 4th International Symposium on Kuroshio Science. In this time, I think we are entering the second phase of Kuroshio study, because this symposium is the beginning of the second turn. Please let me make a brief review on Kuroshio study we have conducted so far.

The Kuroshio Current is one of the greatest currents in the world, and it flows north, eastwards from the Philippine Sea past Taiwan and southeast Japan to the North Pacific. The Kuroshio Current therefore has a great influence on cultures, climate, natural resources, flora and fauna in many Southeast Asian countries, from the subtropical zone to the temperate zone. Since these past decades, we have been having serious problems such as the deterioration of marine environment, especially in coastal areas along the Kuroshio Current. Although problems are caused widely beyond the borders of nations, there is very limited information on the recent deteriorating conditions surrounding the coastal areas. For the purpose of the preservation and restoration of the marine environment, it is essential for us to research through collaborative activities on a multi-country basis.

To understand the present status of coastal environment and marine ecosystem in Kuroshio regions, Kochi University concluded both MOU and MOSE first with three universities and one government organization in Taiwan and the Philippines. Based on this, we have started to collaborate with each other, so that we may identify the relevant problems and constraints and exchange academic views for maintaining and restoring the marine environment and resources. We selected five research sites for the collaborative study. During the past years, we have conducted ecological survey of seaweed/seagrass beds and coral reefs along with their associated fishes. We have also carried out socio-economic survey of land and resource utilization and its effect.

The results obtained through the collaboration among three countries have been presented in the Kuroshio Symposium, which was held annually in 2007 by Kochi University, in 2008 by National Sun Yat-sen University and in 2009 by Bicol University. Proceedings in these symposia were published on the three special issues of Kuroshio Science, so I do believe that the contributions and detail achievements presented within them serve as useful reference materials for all of those who are involving in Kuroshio-related study. During the past investigations, we focused mainly on marine ecology and marine resource management. From the data and information we have accumulated, we have now realized that the coastal environment may be remarkably affected and disturbed by human activities in land. Therefore, we begin to recognize that it is important to link "study on the sea" to "study on the land" for sustainable utilization of natural resources.

Tomorrow we listen to a lecture by professor Tanaka, who is conducting new integrated studies linking between marine and terrestrial ecosystems. I hope we discuss about a new approach of Kuroshio Science in the light of a linkage between the sea and land in this symposium. Also in this time, we expand the Kuroshio Triangle to form a new domain, named "The Kuroshio-Related S-Shaped Zone" and join new partners in our network, Universiti Malaysia Sarawak and Universitas Tanjungpura, West Kalimantan, Indonesia. I expect that we find out the next step for future cooperative research among these 5 countries in the Kuroshio region, based on active information exchanges on both marine and land-based environment and ecosystems. Finally, I would like to express my sincere appreciation for all your efforts in preparing papers and presentations and for taking time to participate in this symposium. I wish you all have a fruitful time and pleasant stay here in Kochi. Thank you very much.