## Communicating through an exhibition; System of the Earth Revealed by Deep Sea Drilling

# Mayumi Arai[1]; Kei Takeuchi[2]

[1] Miraikan; [2] National Museum of Emerging Science and Innovation

http://www.miraikan.jst.go.jp/

At the National Museum of Emerging Science and Innovation (Miraikan), we put a focus on a person playing an active part in advanced technology and the domain, and relate information of the latest science to the world by various techniques (a exhibit, an exhibition, a publication, Web, a lecture, an experiment). Therefore we always are attune to trends of a new study.

The magnificent project; Integrated Ocean Drilling Project(IODP) which connects earth science and a bioscientific study started in 2003. The Japanese developed Deep Sea Drilling Vessel(CHIKYU) became the focal point of IODP. And Japan began to lead the world in IODP with the birth of this ship. Miraikan was well aware of this project and took about 2 years from a design to completion of the exhibition; System of the Earth Revealed by Deep Sea Drilling.

Japan initiated this major deep sea drilling project believing CHIKYU was an investment in not only a world benefiting scientific venture, but as in the youth of Japan further encouraging their interest and involvement in science.

We developed this exhibition at Miraikan in March 2006 as one of the latest studies with in one of the museum's permanent exhibition's themes; The Earth Environment and Frontiers. Even though this study is related to earth science such as earthquakes, climate change, and the birth of life, visitors have said that we don't understand the connection between the studies. However, this study clearly shows the links between earth sciences and the bioscientific field domain in order to address those problems. By this exhibition visitors can imagine and understand the Earth as one system, with many hints to know not only the evolution of the earth, but also a future global environment, all linked by a core sample provided by deep sea drilling. From IODP, there is great hope to better understand the structure of an earthquake as well as the underground biosphere. Therefore our thoughts flowed into this exhibition development wanting to relate the wonders of this study to all people.

We envisioned an exhibition space, that at first encounter, that could provide a perspective covering an introduction zone and the final aim of this study to understand the earth as one system.

The message corner highlights CHIKYU's crew, the many varied jobs, and views of the crew. The solidarity of purpose is striking, and school students are encouraged to follow in the crews footsteps. Such communication inspires students as even those with limited knowledge can understand CHIKYU's missions, relate to the crew's excitement and dedication, and thus feel a personal connection to the entire project. People teaching people, our desire is to bring the fascination world of science to all.