## The Partnership for Observation of the Global Oceans



At a meeting hosted by the Korea Ocean Research and Development Institute (KORDI) in Seoul in January 2011, scientists from 28 world-leading research institutions pledged to work together to improve knowledge and understanding of how our oceans are responding to global environmental change.

As we enter the second decade of the 21st Century scientists observe natural and human-induced changes to the ocean environment that have profound consequences for marine life, our climate and weather systems, and for the well-being of society world-wide.

The Partnership for Observation of the Global Oceans (POGO) declared its commitment to sharing data and technologies from observing networks all over the world to provide the most complete picture of the health of our oceans, the current state of the planet, and to give new insight into what the future may hold. Through its Oceans United forum, POGO will lead a campaign to integrate its work with those of relevant international organisations to ensure that ocean observations form an essential component of effective stewardship of the global environment.

The oceans – the planet's vast reservoirs of water, heat and carbon – are essential for all life on Earth. Fifty percent of the oxygen we breathe comes from the ocean; we rely on the sea for food, transport and recreation. Marine and atmospheric pollution, ocean warming, loss of polar ice cover, reduction of bio-diversity, overfishing and ocean acidification are already having a dramatic impact on the global environment.

Scientists from many disciplines including physics, chemistry, biology and geology, have used their knowledge, skills and technical expertise to observe the remotest parts of the oceans – from pole to pole, from the surface to the deepest ocean trenches and below the sea-bed itself. But there are still gaps in our knowledge. To enable the capture and interpretation of data from parts of the ocean where little is known, POGO is developing initiatives, including the Centre of Excellence in Ocean Observations and the Visiting Fellowship Programme, to help build marine scientific capacity and technological expertise in emerging countries.

## The Seoul Declaration recommends:

1. Establishment of a globally-coordinated network of time series observation stations in the oceans to monitor a rapidly changing Earth System through OceanSITES.

2. Monitoring of changes in ocean acidification at the global scale.

3. Implementation of a sustained deep ocean observation system to study the heat storage, deep-sea biogeochemistry and ecosystem function and other properties that are poorly known.

4. Improvement in baseline data and sustained observations, especially in vulnerable areas such as the polar oceans and semi-enclosed basins, to facilitate rapid response and mitigation in the event of natural or man-made disasters.

5. Development of Oceans United as a global forum for dialogue within the marine scientific community, and with international agencies responsible for marine stewardship; and development of communications plans to engage citizens of the world in the importance of marine research for the well-being of society.

Signed on behalf of all participants by:

Dated: 1 March 2011



Prof. Peter Herzig Chairman of POGO