## Hon'ble Governor of Tamil Nadu, Thiru. Banwarilal Purohit participated as Guest of Honour at the Silver Jubilee Celebrations of National Institute of Ocean Technology (NIOT)

Thiru. Banwarilal Purohit, Hon'ble Governor of Tamil Nadu participated as Guest of Honour at the Silver Jubilee Celebrations of National Institute of Ocean Technology (NIOT) at National Institute of Ocean Technology (NIOT), Chennai today (03.11.2019) and addressed the gathering. Hon'ble Vice President of India, Thiru. Venkaiah Naidu participated as Chief Guest.

Hon'ble Governor said, "It gives me great pleasure to be present here today on the occasion of the Silver Jubilee Celebrations of the National Institute of Ocean Technology (NIOT). We are fortunate to have the Hon'ble Vice-President of India as the Chief Guest for the function. His presence here in our midst is a honour about which all of us feel privileged and proud.

The National Institute of Ocean Technology was established in November 1993 under the Ministry of Earth Sciences, with the mandate to develop and demonstrate technologies for utilizing the ocean resources for ensuring, energy security, water security and for enabling coastal protection and mining of resources from the ocean bed. With a multi-disciplinary manpower and a 'laboratory to industry' approach NIOT has made rapid strides in the last 25 years, resulting in capacity building and infrastructure development in the area of ocean technology.

The United Nation's groundbreaking work in adopting the 1982 Law of the Sea Convention stands as a defining moment in the extension of international law to the vast, shared water resources available in our oceans. The convention has resolved several important issues related to ocean usage and sovereignty, such as:

- Freedom-of-navigation rights
- Territorial sea boundaries
- Exclusive economic zones up to 200 miles offshore
- Rules for extending continental shelf rights up to 350 miles offshore
- Creation of the International Seabed Authority
- The creation of other conflict-resolution mechanisms such as the United Nations Commission on the Limits of the Continental Shelf.

The ocean is an integral component of the world's climate buffering mechanism. The main forms of climate buffering by the ocean are by the transport of heat through ocean currents traveling across huge basins. Air temperatures worldwide are regulated by the circulation of heat by the oceans.

Phytoplankton accounts for possibly 90% of the world's oxygen production because water covers about 70% of the Earth and phytoplankton are abundant in the surface layers of the oceans. Some of the oxygen produced by phytoplankton is absorbed by the ocean, but most flows into the atmosphere where it becomes available to all of mankind.

While the oceans provide commercially important living and nonliving resources, sustainable methods for harnessing and maintaining them, especially for future generations are also essential. Management of ocean resources requires a diverse network of sustained ocean observations that includes satellite measurements, buoys and deep ocean sensors.

Today as we celebrate the Silver Jubilee event for the NIOT, one can proudly recall some of the important achievements of the institute. These include

- Demonstration of a floating desalination plant.
- Development and demonstration of shallow water mining system
- The development of a Remotely Operable Vehicle (ROV) which has been successfully tested at 5289m water depth in the Central Indian Ocean Basin.
- Development of a Remotely Operable Sub-sea In-situ Soil tester which has been successfully tested to facilitate safe deployment of sub-sea mining machine.
- Installation of five sets of High Frequency Radar at Tamil Nadu, Andhra Pradesh, Orissa, Gujarat and Andaman & Nicobar Islands as a part of Tsunami Early Warning Systems.

and

• The deployment of Pradyu, the indigenously developed drifter with INSAT communication in the Bay of Bengal for collecting valuable data.

It is also heartening to know that NIOT is involved in developing technologies for a wide range of areas such as

- Harnessing the deep ocean resources.
- Development of human operated submersible (MANSUB) for deep and shallow waters.

- Sustainable coastal protection techniques
- Offshore wind energy
- Drinking water needs of coastal India
- Indigenization of marine sensors
- Dissemination of Offshore cage culture facility

and

Tsunami data collection

The above technologies are certain to bring immense benefit to the people of India. I consider it a privilege to be here to address all of you on such a momentous occasion, as the Silver Jubilee Celebrations of the National Institute of Ocean Technology. The NIOT has been most appropriately located at Chennai, the capital of Tamil Nadu which has the 2nd longest coastline among the states of India and houses more than 10 lakh fishermen. The state has taken a number of steps to promote both marine and inland fisheries and I am sure that the launch of the coastal flood warning system application at today's function will help to promote the welfare of the fishermen of the state.

I extend my best wishes and greetings to all the Scientists and officers serving in the National Institute of Ocean Technology and wish them well. May the Institute grow in strength to emerge with greater prestige and glory in the coming years and may they be visited with success in all their endeavours.

On this occasion, Dr. Harsh Vardhan, Hon'ble Union Minister of Health and Family Welfare, Science and Technology and Earth Sciences, Thiru. O. Pannerselvam, Hon'ble Deputy Chief Minister of Tamil Nadu, Dr. M. Rajeevan, Secretary, Ministry of Earth Sciences, Thiru.B.Anand.I.A.S., Additional Secretary, Ministry of Earth Sciences, Dr. M.A. Atmanand, Director, National Institute of Ocean Technology and other dignitaries participated.

Raj Bhavan, Chennai – 22 Date : 03.11.2019 Sd/-

Joint Director (PR)