

**GOVERNMENT OF INDIA  
EARTH SCIENCES  
LOK SABHA**

UNSTARRED QUESTION NO:3972  
ANSWERED ON:06.08.2014  
CAPSULE TO UNRAVEL OCEAN MYSTERIES  
Patel Smt. Jayshreeben

**Will the Minister of EARTH SCIENCES be pleased to state:**

- (a) whether the National Institute of Ocean Technology proposes to build any submersible capsule to unravel the mysteries of the ocean;
- (b) if so, the details of the project relating to the said capsule; and
- (c) the details of benefits likely to accrue therefrom?

**Answer**

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (Independent Charge)(DR. JITENDRA SINGH)

- (a) Yes, Madam. Based on the experience gained while developing and operating an unmanned underwater vehicle for 6000 meter water depth, the National Institute of Ocean Technology, an autonomous Institute under the Ministry of Earth Sciences, intends to develop a manned research submersible.
- (b) The proposed manned submersible, capable to carry 3 member crew and with a design depth of 6000 m with an underwater endurance of 10 to 12 hours, is proposed to be built in association with a suitable technical partner identified through a global tender.
- (c) Apart from knowledge acquisition and capacity building in the area of manned deep sea vehicle development, the manned submersible, with scientists onboard with suitable observation and intervention devices, can be a tool for exploration of mineral resources of the ocean like polymetallic nodules, cobalt enriched ferromanganese crust, polymetallic sulphides, hydrothermal vents, gas hydrates; exploration of deep-sea life forms; observation, intervention and engineering support for underwater activities; and underwater search and recovery operations.