

GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
RAJYA SABHA  
UNSTARRED QUESTION NO. - 2112  
ANSWERED ON – 16/12/2021

**SAMUDRAYAAN PROJECT**

**2112. Shri T.G. Venkatesh:**

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

- (a) whether Government has launched the Samudrayaan Project for Deep Ocean Exploration for rare minerals and National Institute of Ocean technology had developed a 'personnel sphere,' built of mild steel and tested it as an unmanned trial, using the Ocean Research Vessel Sagar Nidhi, in the Bay of Bengal;
- (b) if so, the details thereof; and
- (c) the present status of the project?

**ANSWER**

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR  
MINISTRY OF SCIENCE AND TECHNOLOGY  
AND EARTH SCIENCES  
(DR. JITENDRA SINGH)

- (a) Yes, Sir. Under the Deep Ocean Mission launched by the Government of India, a manned scientific submersible has been proposed to be developed for deep ocean exploration. The project is named as Samudrayaan. National Institute of Ocean Technology (NIOT), an autonomous Institute under the Ministry of Earth Sciences, had developed and tested a 'personnel sphere' for a manned submersible system for 500 metre water depth rating.
- (b) Personnel Sphere of 2.1m diameter to be used as a crew module up to 500 m water depth has been developed using mild steel and tested upto 600 m water depth in the Bay of Bengal using the research Vessel Sagar Nidhi during October 2021.
- (c) One Titanium alloy personnel sphere for manned submersible system for 6000 metre water depth rating, is under development in association with Vikram Sarabhai Space Centre, ISRO, Thiruvananthapuram.

\*\*\*\*\*