## GOVERNMENT OF INDIA EARTH SCIENCES LOK SABHA

UNSTARRED QUESTION NO:1716 ANSWERED ON:01.12.2011 SEISMIC MONITORING AT KOYNA Bhujbal Shri Sameer ;Gorakhnath Shri

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

- (a) whether research is being undertaken for developing a device for forecasting earthquakes;
- (b) if so, the details thereof;
- (c) whether the proposed seismic monitoring laboratory at Koyna could be the deepest network of sensors lodged in the earth's crust that could predict the intensity and occurrence of earthquakes; and
- (d) if so, the details thereof?

## **Answer**

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATEIN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI ASHWANI KUMAR)

- (a) (b) Research efforts are initiated under National Program on Earthquake Precursors (NPEP) to monitor and study various earthquake precursory phenomena in critical seismo-tectonic environments, which possibly would help in understanding the earthquake generation processes better and lead to identifying possible earthquake precursors. Such an effort is organised through a multi-institutional and multi-disciplinary mechanism to adopt an integrated approach of generation, assimilation and analyses from a suite of Multi-Parametric Geophysical Observations (MPGOs), that are being established at Ghuttu (in Uttarakhand), Shillong (in Meghalaya) and Koyna(in Maharashtra) to monitor various earthquake precursory phenomena..
- (c) (d) No Madam. The sensors in the proposed seismic laboratory in Koyna would be placed at a depth of 7km and that would not be the deepest in the world. As Koyna earthquakes have been occurring in a very small rock volume that would be monitored from close vicinity for possible changes in the rock properties, chemistry of fluids, stress field etc.