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## **PRESS RELEASE**

## Regional Geodesy Centre (RGC) to come up at IIT (ISM) by the end of August; RGC to carry out monitoring of the subsidence prone areas, apart from carrying out study of Natural Hazards etc.

IIT (ISM) will soon have a Regional Geodesy Centre (RGC), which will carry out study of subsidence prone areas, developed due to coal mining and other associated mining activities. Construction work for the center, which is being established near the seismological observatory is going at fast pace and it is likely to be operational by the end of August.

Geodesy is the science of accurately measuring the shape, size, orientation and mass distribution and how these vary with time. It deals of precise measurement of elements of surface of earth and their treatment for the determination of their geographic positions on the surface of earth.

Giving details, Dr Vasanta Govind Kumar Villuri, Associate Professor of Mining Engineering at IIT (ISM) who is also the principal investigator (PI) of the project of Department of Science & Technology said, "The center being established with a fund of Rs 1.5 crore provided by Department of Science & Technology will operate in close coordination with the Seismological Observatory of the institute and other relevant facilities of Department of Applied Geophysics, Applied Geology and Mining Engineering"

"The literature work for the launching of centre has been going for over an year in consultation with the National Geodesy Centre (NGC) at IIT Kanpur where we carried out several visits" said Prof Villuri and added that similar regional centres for Geodesy are being established simultaneously in Motilal Nehru National Institute of Technology (MNNIT) Allahabad; IIT Bombay; Indian Institute of Space Science and Technology, Thiruvananthapuram; Anna University, Chennai and Maulana Azad National Institute of Technology, Bhopal.

Divulging more details, Prof Villuri whose area of research interest is in the field of Surveying, Photogrammetry, Remote sensing, Image Processing, GIS, GPS and Hydrology said, "The project being implemented under the guidance of Prof Dheeraj Kumar, Deputy Director of IIT (ISM) as its partron is aimed to carry out study in field of Geodesy, Subsidence in Mining areas and natural hazards etc in early stage and later on we can move to other field like movement of tectonic plates etc as per the direction of the concerned authorities" added Prof Srinivas Pasupuleti, Associate Professor of Civil Engineering department is working as Co-Principal Investigator (Co PI) of the project

"The data generated and analyzed during study will be used for the study of research scholars as well as B Tech and M Tech students" said Villuri and added that the presence of Seismological Observatory at IIT (ISM) will be added advantage for the upcoming Regional Centre for Geodesy for collation of data etc.

The study of the subsidence areas will be useful for the Mining companies operational in different parts of the Jharkhand and elsewhere as well as the for city planners as it will help in subsidence zone mapping etc that will help for the smooth execution of upcoming infrastructure projects etc.





"At Regional Geodesy Centre we will be carrying out close monitoring of the subsidence prone areas and movements taking place in different subsidence prone areas across Jharkhand and elsewhere, primarily caused due to Mining activities etc" further summed up Villuri.

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