

Email	Favorites
Print	Delicious
Digg	Google
MySpace	Live
Facebook	StumbleUpon
Twitter	More... (54)

Home > States > Kerala

Amrita University to dedicate wireless landslide

Express News Service
First Published : 18 Sep 2009 01:19:00 AM IST
Last Updated : 18 Sep 2009 10:17:39 AM IST
 KOCHI: Amrita Vishwa Vidyapeetham (Amrita University), a rapidly emerging worldclass university established by Mata Amritanandamayi, has created a revolutionary wireless sensor network [system](#) for detecting landslides. After months of non-stop testing, this breakthrough landslide detection system is being dedicated to the nation on Friday, at Amritapuri, Kollam.



The wirelessly deep earth sensor probe.

Recognising the potential of the system, which is the first of its kind in the country, around 25 experts from all over the country, including heads from the Defence Research and Development Organization (DRDO), Department of Science and [Technology](#) (DST), are converging on the Amritapuri campus to witness the system transmit data live from the landslide site in picturesque Munnar in Idukki district.

Amrita's wireless landslide system is the culmination of years of intense research and development apart of WINSOC ([Wireless](#) Sensor Networks with Self- Organisation Capabilities for Critical and Emergency Applications) project. The project has brought together nine of the top European universities and research organisations, including the University of Rome in Italy, EPFL in Switzerland, etc, and two Indian partners. Amrita is the one and only Indian university partner.

The system consists of a complex network of 50 geological sensors, interconnected by multiple wireless communication links, including WiFi, Zigbee, and VSAT, all feeding data 24 hours, 7 days a week, to Amrita's state-of-the-art computational analysis facility at Amritapuri.

This is the first time ever world over where the capabilities of wireless sensor [network technology](#) has been used for developing landslide detection system.

Within the next 3 months, Amrita has plans to extend this network to 150 geological sensors and 25 wireless sensor nodes as part of the research funding provided by the Central Government.

The system addresses one of the most pressing needs for saving lives in the nation's disaster-prone areas. Last July, this system successfully issued a warning of a possible landslide during the torrential rains that lashed throughout the State, and has come as a lifeline for Munnar region.

An outstanding feature of the system is that the signals have been made online on the website, www.winsoc.org <<http://www.winsoc.org>> and thereby researchers across the world can study the signal variations and patterns on a real-time basis.

Research agencies in India are keenly following the progress of the project which is expected to have immense societal benefits. The Department of Science and Technology and the DRDO have shown interest in the application of this technology in the landslide/avalancheprone areas of the Himalayan ranges.

Apart from landslides, the system can have broad applications in monitoring floods, avalanches, gas leakages, forest fires, water contamination, border [security](#), healthcare, etc, in various parts of the country. Dr Maneesha Ramesh, Associate Professor and Head of Wireless Networks and Applications at Amrita University, is the principal investigator on this project.

Email	Print	Delicious	Digg	Google	Facebook	Yahoo	Reddit
-------	-------	-----------	------	--------	----------	-------	--------

Comments

Be First and Enter Your Comments ...

Post your comments *

Email *

Name *

rediff.com
just your stuff

Be famous sitting at your desk
Upload pics & Videos
with ease on iShare

[CLICK HERE TO START ►](#)

