

## Talk by Dr. Muhammad Farooq-i-Azam in Seminar on Landslide Early Warning Systems

Dr. Muhammad Farooq-i-Azam delivered a talk titled “Landslide Monitoring and Alert System” in a seminar arranged by the University of Azad Jammu and Kashmir, Muzaffarabad. The seminar was organized by the Institute of Geology, University of Azad Jammu and Kashmir to highlight the progress and achievements made by the research project titled “Integrated and Multidisciplinary Investigations and Early Warning of High-Risk Landslides Using Space, Air and Ground Based Remote Sensing”, funded by the National Center for GIS and Space Applications (NCGSA).

Dr. Muhammad Farooq-i-Azam, who is also CoPI of the funded research project, presented the technical design and development of sensor node for gathering environment and soil parameters for landslide monitoring and early warning system being developed at the Department of Electrical and Computer Engineering, COMSATS University Islamabad, Lahore Campus. The node uses microcontroller and a set of sensors for gathering the geotechnical data. The data is then processed and analyzed to detect landslide activity and to provide a warning if necessary. The participants showed keen interest in the landslide monitoring and alert system (LAMAS) and expressed desire for collaboration with Dr. Muhammad Farooq-i-Azam.

Speakers and participants attended the conferences in person and also virtually from Pakistan, Italy, China and Poland.

**Programme**

Ongoing NCGSA funded research project entitled “Integrated and Multidisciplinary Investigations and Early Warning of High-Risk Landslides Using Space, Air, and Ground-based Remote Sensing” carried out by the Institute of Geology University of Azad Jammu and Kashmir along with other national and international research institutes/universities.  
*(Each talk is of 20-25 minutes duration including discussion)*

**Agenda:**

1. 11:00 - 11:30 AM: Inaugural Session  
Welcome Address: **Dr. Muhammad Farooq**  
Director, Institute of Geology, UAJK  
Opening Remarks: **Prof. Dr. Muhammad Basharat**  
Principal Investigator, Institute of Geology, UAJK
2. 11:30-11:50 AM: A talk on Role of Remote Sensing in Landslide Prediction by  
**Mr. Nasir Hameed**  
(Focal Person, Landuse Planning, Planning and Development Department, Govt. of AJ&K)
3. 11:55AM-12:20PM: A talk on Landslide Monitoring and Alert System by  
**Dr. Muhammad Farooq-i-Azam**  
(COMSATS University, Lahore Campus)
3. 12:30-01:00PM: A talk on Experiences in forecasting rainfall-induced landslides by  
**Dr. Maria Teresa Brunetti**  
CNR IRPI, Perugia, Italy
5. 1:00 P M: Concluding Remarks  
**Prof. Dr. Muhammad Rafique**  
(Dean Faculty of Science)

**A Technical Workshop/Seminar on Landslide Early Warning System**  
NCGSA Funded Research Project  
**03 June 2024**  
**King Abdullah Campus, Chatter Kalas, Muzaffarabad, Pakistan**  
Participants can also join virtually using following link :  
<https://meet.google.com/wtu-oned-wdf>

**Organized By:**  
**Institute of Geology, University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan**

Figure: Conference brochure



Figure: Speakers and participants joined in person and also virtually.