Geosciences Division
Physical Research Laboratory

Tuesday Seminar

Stream power: A unified concept in fluvial geomorphology

Abstract

Last two decades have witnessed major advancements in the quantitative understanding of geomorphological processes at different spatio-temporal scales. Modelling of geomorphic processes needs well defined geomorphic transport law(s) for different geomorphic systems. Studies in fluvial geomorphology has benefitted by a concept of stream power, which is a fundamental parameter to define driving force at any scale. It was incorporated in geomorphic studies from sixties through a study of sediment transport (Bagnold, 1966*). Subsequently, the stream power concept has been successfully applied to model various processes at different scales ranging from sand particle movement to landscape evolution processes. My talk will highlight the significance of unified concept in a geomorphic system, which led to integrate processes at different scales. The work will highlight new advancements and challenges in this research area.

*Bagnold, R.A., 1966. An approach to the sediment transport problem from general physics. Geological Survey Professional Paper 422-I, I1– I37.

Speaker: Dr. Vikrant Jain
IIT, Gandhinagar

Date	Time	Venue
28-March-2017	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 hrs

A. K. Sudheer, Geosciences Division