

MONTHLY BULLETIN

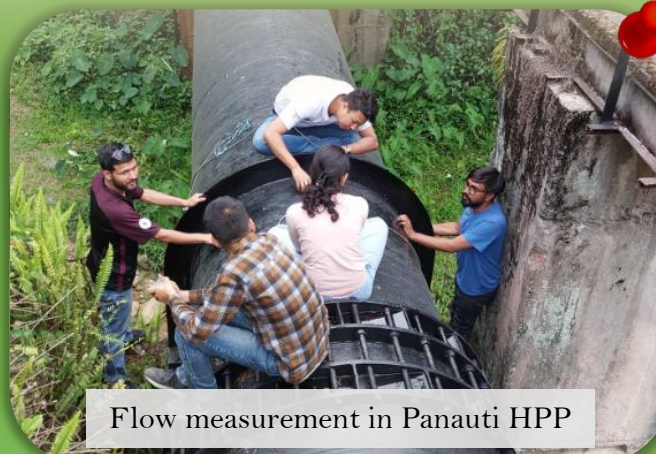
TURBINE TESTING LAB

MAY, 2022

Flow and pressure measurements carried out at Panauti HPP on May 24 to estimate the efficiency of the powerplant. Flow measurement was conducted through the newly procured Ultrasonic Flowmeter from the CMHydro project. Similar measurements were also carried out at Trishuli HPP on May 29-31.



Pressure measurements in Panauti HPP



Flow measurement in Panauti HPP

PhD defense of Mr. Oblique Shrestha completed successfully on May 23 on the topic, “Development of sediment friendly cross-flow hydro turbine”



PhD defense of Oblique Shrestha

Paper presentations in USC conference (17-18 May) from the projects at TTL:

K Shrestha*, R. Poudel, S. Shrestha, B. Thapa, S. Chitrakar, Q. Zhongdong, Z. Guo *Computational study of sediment erosion on Francis blades to study impact of impingement angle on erosion rate*

A Pandey, P L Bijukchhe*, P Khanal, S Acharya, S Chitrakar, H P Neopane *Numerical study of a coil Pump and comparison with field measurement*

A Pandey*, Saroj Gautam, Sailesh Chitrakar, Nirmal Acharya, Pawan Lal Bijukchhe *Numerical investigation of flow behaviour and erosion potential in side-wall clearance between guide vane and runner*

R Shrestha, S.S. Pradhan*, P. Gurung, A. Ghimire, S. Chitrakar, *Numerical analysis of erosion and erosion induced vibrations in Francis turbine*

A Paudyal*, A K.C, S Adhikari, S Chitrakar, A Kapali *Experimental and numerical analysis of sediment erosion in turgo turbines*

S Dhungana*, S K Shrestha, S Chitrakar, H P Neopane *Optimization of design and operational parameters of bio-sand filter using response surface methodology*

A Karna*, S Chitrakar, M Bhurtel, S Bishwokarma, P Dahal *Design, FEM analysis and CFD analysis of traditional and hooped Pelton runner*

* *Presenter*