

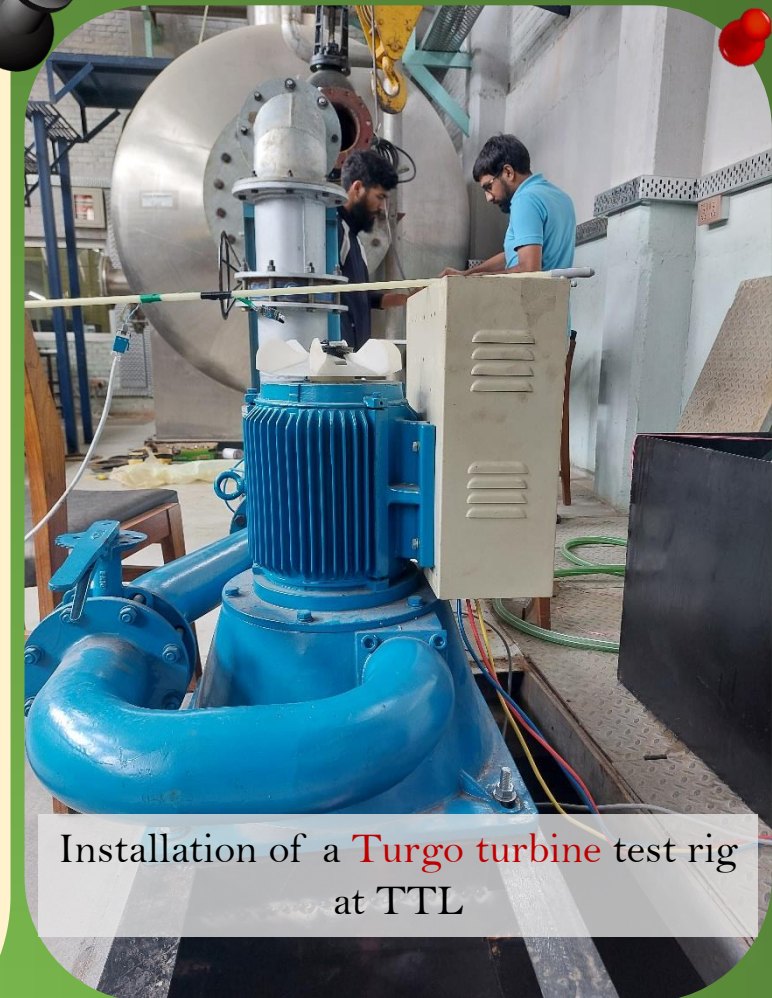
# MONTHLY BULLETIN

## TURBINE TESTING LAB

### SEPTEMBER, 2023

#### Submission of the papers from projects at TTL in the University Scholar Conference 2023

- Fidelity Analysis of Sand-Casting Technique For Manufacturing Francis Runner by **Ravi Poudel** et. al.
- Numerical Study on Sediment Erosion Resistivity of Conventional and Optimized Francis Runner in Different Operating Conditions In Sediment-Laden Flow by **Pawan Lal Bijukchhe** et. al.
- Comparative Study of Different Erosion Models in Francis Runner Blades Using Openfoam by **Suprim Shrestha** et. al.
- Numerical Study of Sediment Erosion in Guide Vanes of Francis Turbine Using Cascade Rig by **Rakish Shrestha** et. al.
- Numerical Study of Erosion in Pelton Spear Valve: Role of Implementation of Gravity on Lagrangian Particles Using Openfoam by **Prithvi Gurung** et. al.
- Investigation Of Mechanical Faults in Fan Using Vibration Analysis by Subarna Paudel et. al.
- Fault Detection In Turbines Using Machine Learning: A Study Of The Capabilities Of Various Classification Algorithms by **Aditi Baral** et. al.
- Analysis of Butterfly Valve Flow Coefficient through Computational Fluid Dynamics by **Bikram Singh Bhattarai** et. al.
- Reverse Engineering on Pelton Runners by **Suman Shrestha** et. al.



Installation of a **Turgo turbine** test rig at TTL



Visit by Prof. Dr. Wolfgang Streicher from University of Innsbruck, Austria on September 24

Meeting with Mountain Energy Nepal Ltd regarding the recent **erosion pattern in the turbines of Mistri Khola HPP**, 42 MW on September 29 along with prospects of further collaboration



Installation of a **Francis turbine** in the erosion rig