



Turbine Testing Lab Wishes you all HAPPY NEW YEAR 2018!!!

Energize Nepal Project

- Study of **LabVIEW programming fundamentals**: Modular Programming with SubVIs, Data Types & Building User Interfaces.
- Study of sensors available at TTL and interfacing with LabVIEW programming.
- Working on torque, flow, head & rpm for **calibration** of measuring instruments.

Lab Activities

- Technical and financial evaluation of **VFD and Electric Motor** completed and the tender awarded to Adwell International Pvt. Ltd.
- Conduction of proposal defense for Mechanical 3rd & 2nd year (Hydropower group) students on Dec 10 and Dec 12 respectively.
- Selection and preparation of hydropower student projects for showcasing on **Himalayan Hydro Expo 2018** going to be held on 5th- 7th January, 2018 organized by IPPAN, Nepal.
- Tender for construction works and relocation and maintenance of valves/ connections at TTL opened.

Research Grant Proposal Presentation

- Presentation by Dr. Hari Prasad Neopane, Member Secretary- TTL on "Capacity development for experimental investigation of sediment erosion in hydraulic turbine at TTL" on 28th December as a part of collaborative research grant proposal of **University Grant Commission (UGC)**, Sanothimi, Bhaktapur.

International Visit

- Dr. Biraj Singh Thapa, Assistant Lecturer, DoME, made a visit to **Wuhan University, China** from 27- 31 December and presented about TTL at State Key Laboratory of Water Resources & Hydropower Engineering Science in the university.

Activities of PhD student

- Final fabrication works on **3 guide vane cascade rig** & thesis writing on progress.



Activities of ENEP PhD candidate

- 3D Modelling of turbine components and its fluid model for simulation.
- Meshing of turbine components in ANSYS Workbench.
- Study of **optimization techniques** used in Francis turbine components.

Activities of ENEP MS student

- Francis runner blade design by **Bovet Method**.
- Blade profile generation with Bladegen modular-ANSYS & mesh generation with **Turbogrid**.
- Blade analysis in CFX on progress.

Lab Visits

- Visit by Bijay Sagar Pradhan, Managing Director and other representatives from **Event Solution Pvt. Ltd.** on 21st December to ensure the participation of KU students & researchers on Himalayan Hydro Expo 2018 on 5th-7th January.
- Visit by Prof. Li Fei, Vice President- **Wuhan University**, China along with his delegates on 22nd December which was facilitated by Prof. Dr. Bim Prasad Shrestha, on behalf of the Office of Vice- Chancellor, KU.
- Visit by Er. Raj Kumar Chaulagain- Assistant Professor- Department of Automobile and Mechanical Engineering, **Thapathali Campus**, Institute of Engineering on 25th December.
- Visit by 10+2 science stream students of **Baylor International Academy** as part of their science excursion on 27th December.

Undergraduate student projects

- 12 projects from Mechanical **2nd & 3rd year** (Hydropower group) students.
- 3 projects from Mechanical **final year** students.