



Energize Nepal Project

- Participation of TTL in **annual meeting** of EnergizeNepal project and briefing about the overall status and progress of the project along with donor and other stakeholders on 6th July at KU.
- **Budget disbursement** required for Year II (Jul- Dec 2017 & Jan- Jun 2018) submitted to **Energize Nepal Program Office** on 13th July.
- **Procurement process** for torque transducer and underground reservoir coating in process after tender.
- CAD design of **draft tube** and **turbine support** in progress.
- Surveys to figure out **instrument calibrating institution** commenced by Oblique Shrestha, PhD candidate at TTL.

Lab Activities

- **Technical evaluation** for torque transducer and VFD & Electric Motors completed.
- **3-D printing** of parts of Francis turbine for second year undergraduate students (Hydropower Group).
- Supervision of Joong Hyun Eo, **intern student** at TTL on CAD modelling and 3D printing of impulse turbine.
- Supervision of **DoME- UNG projects** (Final year, Third year and Hydropower group- 1st & 2nd year).

Publications

- Biraj Singh Thapa, Ole Gunnar Dahlhaug and Bhola Thapa, *Sediment erosion induced leakage flow from guide vane clearance gap in a low specific speed Francis turbine*, Renewable Energy Journal, Vol 107, July 2017, Pages 253-261.
- Biraj Singh Thapa, Ole Gunnar Dahlhaug and Bhola Thapa, *Effects of sediment erosion in guide vanes of Francis turbine*, Wear, DOI: 10.1016/j.wear.2017.07.012.



Workshop

- Mr. Ram Lama and Mr. Dadi Ram Dahal; ENEP students from TTL attended the Training program on Research Methodology “Analysis of data by using computer software” organized by Department of Natural Sciences, Kathmandu University from 3rd- 10th July, 2017 at KU, Dhulikhel.

Academic Activities of PhD Candidate

- Mr. Sailesh Chitrakar, PhD candidate at TTL completed his 1.5 months visit at NTNU. Unsteady simulations of his project completed at NTNU.
- PIV equipments from Waterpower Laboratory, NTNU arrived at TTL for his further experiments.
- Manufacturing of 3 GV cascade rig inspection carried out on 19th July.
- Expected delivery of the rig and pressure tanks at the end of August.

Activities of ENEP Students

- Study of model to prototype conversion of Francis turbine.
- Study design of draft tube and labyrinth seal.
- Undertaking the course works of Research Methodology, Statistics & Probability and Maintenance Engineering.
- Hydraulic Machine labworks for Civil Engineering 3rd year students.
- Co-ordination of 1st year & 2nd year Hydropower Group student projects.

Lab Visits

- Visit by the delegates from various organizations in USAID training led by Prof. Subodh Sharma, Director RDC, KU on 13th July.
- Visit by the delegates from Energy Development Council (EDC) comprising Chairperson Mr. Sujit Acharya and Executive Manager Ms. Itnuma Subba on 20th July.
- Visit by the delegates from China South Industries Group Corporation, hydro-turbine generating equipment division comprising District Manager Ms. Lily Zhang on 20th July.
- Visit by Ms. Sujata Dhakal, representative from KU- Business Incubation Centre (KUBIC) on 31st July to know about the status of equipments (computer & printer) provided by KU-BIC for incubatee at Turbine Design Service (TDS).