TECHNICAL SESSION-A: ACOUSTIC AND DILUTION METHODS OF DISCHARGE MEASUREMENT

Oct 22, 2010 (Friday) 09:00 to 11:00 hrs

1.	Hydro Power Development in India *Praveen Saxena, and Arun Kumar*
2.	Accuracy of an Absolute Method used for Relative Measurements: Study of an Acoustic Transit Time Method *Urban Andersson, Niklas Dahlbäck, Per Sundqvist*
3.	Optimization of the ADM by Adaptive Weighting for the Gaussian Quadrature Integration *Peter Gruber, Thomas Staubli, Thomas Tresch, Fabian Wermelinger*
4.	Improvements to the Accuracy of Discharge Measurements by Acoustic Scintillation Resulting from Revisions to Data Processing Procedures *D. D. Lemon, D. R. Topham, D. Billenness*
5.	Flow Measurement in Hydroelectric Stations using Tracer Dilution Method – Case Studies *U. Muthukumar, Jacob Chandapillai, S. Saseendran*
6.	Performance Testing of a Low Head Small Hydro Power (SHP) Plant-Zho Suwei (Taiwan) –a Case Study**,** *Santosh Ghosh, Sudhir Mali and Jagadish T. Kshirsagar*

TECHNICAL SESSION-B: PRESSURE-TIME METHOD OF DISCHARGE MEASUREMENT

Oct 22, 2010 (Friday) 11:30 to 13:00 hrs

1.	The Pressure-Time Measurements Project at LTU and NTNU *Pontus P. Jonsson, Jørgen Ramdal, Michel J. Cervantes, Ole G. Dahlhaug, Torbjørn K. Nielsen*
2.	Uncertainties for Pressure-Time Efficiency Measurements *Jørgen Ramdal, Pontus P. Jonsson, Ole Gunnar Dahlhaug, Torbjørn K. Nielsen, Michel Cervantes*
3.	Selected Problems in Calculation Procedures for the Gibson Discharge Measurement Method *Adam Adamkowski, Waldemar Janicki*
4.	On Site Pressure Pulse Measurement of Hydraulic Machines *S. Rammohan, S. Manikandan, S. Saseendran*

TECHNICAL SESSION-C: MISCELLANEOUS TOPICS

Oct 22, 2010 (Friday) 14:00 to 16:00 hrs

1.	Smart Rehabilitation Project of 7 Small HPP's *Petr Ševčík, Alois Krejčí*
2.	Development and Testing of a Cross Flow Turbine *A. Tamil Chandran, G. Anil, Jacob Chandapillai*
3.	Silt Monitoring via Ultrasonic Signal Analysis *Bruno Lüscher, Peter Gruber*
4.	Center of Excellence at Kathmandu University for R&D and Test Certification of Hydraulic Turbines *Biraj Singh Thapa, Bhola Thapa, Ole G. Dahlhaug*
5.	Development of LabVIEW based Integrated Data Acquisition System for Pump as Turbine Generator Unit Performance Evaluation *Raj Kumar Viral, S.N. Singh*
6.	Low Cost ROV for Hydraulic Measurements and Navigation within the Canals/Rivers *K. S. Nagla, Moin Uddin, Dilbag Singh*

Poster Presentation (Exhibition Area) The Calibration Laboratory for hydrometric measuring instruments of the Swiss National Hydrological Survey by *Thomas Schott.*

TECHNICAL SESSION-D: EFFICIENCY MEASUREMENT BY THERMODYNAMIC METHOD
Oct 23, 2010 (Saturday) 09:00 to 11:00 hrs

1.	Uncertainty and Performance of a Low Head Thermodynamic Measurement *Jørgen Ramdal, Atle Lundekvam,Eirik Bøkko, Ole G. Dahlhaug, Torbjørn K. Nielsen*
2.	Measurement of Turbine Efficiency by Thermodynamic Method for Field Acceptance Test of Hydro Turbine and Comparison with Model Test Result *Mukesh Mangla, Nitin Khodre*
3.	Corrective Terms of Thermodynamic Efficiency Measurements *André Abgottspon, Marc Briggeler, Thomas Staubli*
4.	IEC 60041–1991, "Field Acceptance Tests to Determine the Hydraulic Performance of Hydraulic Turbines, Storage Pumps and Pump-Turbines". Clause 14 "Thermodynamic Method for Measuring Efficiency" Comments *Harald Hulaas, Leif Vinnogg*
5.	Efficiency Measurement of Hydro Machine by Thermodynamic Method *Patil Shantaram. S., H. K. Verma, Arun Kumar*
6.	Water to wire efficiency measurements in small hydroelectric units by means of thermodynamic and "thermo-calorimetric" method *Fabio F. Muciaccia*, Gianalberto Grego* , Paolo Ciolli*, Arno Dossi**

TECHNICAL SESSION-E: NEW EFFICIENCY MEASURING TECHNIQUES
Oct 23, 2010 (Saturday) 11:30 to 13:00 hrs

1.	A New Method for Continuous Efficiency Measurement of Hydraulic Turbines *Jonathan Nicolle, Gilles Proulx*
2.	Prototype Hill Chart Testing of a Saxo Unit *Emmanuel Côté, Éric Cloutier*
3.	On the Use of Spiral Piezometer Tap Calibration Equations as a Transfer Standard between Absolute Discharge Measurement *D. R. Topham*
4.	3-Dimensional Field Measurements in Short Intakes using an Acoustic Doppler Profiler *Dr J Skripalle*
5.	An Efficiencies' Comparison Concerning the Energy Losses between inclined Submerged and Free Water Outflows Downstream of a Hydropower Plant *D. Dimitriou, J. Demetriou, E. Retsinis*

TECHNICAL SESSION-F: CFD AND NUMERICAL ANALYSIS
Oct 23, 2010 (Saturday) 14:00 to 15:30 hrs

1.	Aspects of the numerical simulation of the flow in penstocks *E. Casartelli, L. Roux, N. Ledergerber*
2.	Investigation of Flow Profile in Open Channels using CFD *B. K. Gandhi, H.K. Verma, Boby Abraham*
3.	Hydraulic Performance of Elbow Draft Tube for different Geometric Configurations using CFD *Vishnu Prasad, Ruchi Khare, Abhas Chincholikar*
4.	CFD Approach for Prediction of Efficiency of Francis turbine *Sanjay Jain, R. P. Saini, Arun Kumar*

Note: Each presenter is expected to present through power point slides for 12 to 15 minutes followed by 5 to 8 minutes of discussion.