

Workshop Program

1 st day: 9 th May 2017	
9:30 – 9:45	Opening session (Kihada Hall) Chair: Sameh Kantoush
	Opening address Tomoo Inoue (Kinki Regional Development Bureau, MLIT)
	Workshop introduction and guest welcome Tetsuya Sumi (Kyoto University, Japan)
9:45 – 10:45	Keynote lecture (Kihada Hall) Chair: Sameh Kantoush
	Raising a child and the ZEN of sediment management George W. Annandale (George W. Annandale, Inc., USA)
	Hydraulic desilting of reservoir in Taiwan Chien-Hsin Lai (Water Resources Agency, Taiwan)
10:45 – 10:55	Group photo
10:55 – 11:15	Coffee break
11:15 – 12:55	Session 1 (Kihada Hall) Chair: Robert M. Boes Sediment bypass projects in the world
	Clear water separation and sediment bypass of the oldest masonry dam in Japan –its structure and function of Kobe’s Nunobiki and Karasuhara Reservoir– Makoto Matsushita (Kobe City Waterworks Bureau, Japan)
	Case analysis of sediment bypass tunnels (Switzerland, Taiwan, Japan) Hideaki Ohori (Water Resources Environment Center, Japan)
	Reservoir flushing, routing, and bypass in the United States: a survey of US practice and models of proposed activities Stanford Gibson (US Army Corps of Engineers, USA)
	Conversion of diversion tunnels to bottom outlets at Xiaolongdi Dam on Yellow River Sheng T. (Paul) Hsu (GT International, Taiwan)
	The development of sediment bypass channel for sediment management in the Brantas River Basin, Indonesia Agus Santoso (Jasa Tirta I Public Corporation, Indonesia)
12:55 – 14:00	Lunch (Kihada Hybrid Floor)
12:55 – 14:00	Poster session (Kihada Hybrid Floor)

14:00 – 15:40	Session 2 (Kihada Hall) Predicting and controlling sediment in upstream river and reservoirs Chair: Tsang-Jung Chang
	Monitoring scheme for sediment bypass tunnel at Koshiyama Dam Hiroyuki Takeuchi (Tenryu River MLIT, Japan)
	Precipitation prediction methods developed by the Kansai Electric Power Co., Inc. Yusuke Otsubo (Kansai Electric Power Co., Inc., Japan)
	Investigation on plunge point location and turbidity current movement in the Shihmen Reservoir Fong-Zuo Lee (National Taiwan University, Taiwan)
	Allocating water storage of multiple reservoirs to enhance empty flushing Frederick N.-F. Chou (National Cheng-Kung University, Taiwan)
	Design concepts of desilting tunnel at Shimen Reservoir in Taiwan Yan-Jhih Lin (Sinotech Engineering Consultants, Taiwan)
15:40 – 16:00	Coffee break
16:00 – 17:40	Session 3 (Kihada Hall) Tunnel (hydraulics, invert abrasion, maintenance) Chair: Daizo Tsutsumi
	Hydraulics of water, air-water and sediment flow in downstream-controlled sediment bypass tunnels Robert M. Boes (ETH Zurich, Switzerland)
	Abrasion prediction at Mud Mountain sediment bypass tunnel Christian Auel (ILF Consulting Engineers, Austria)
	Field calibration of abrasion prediction models for concrete and granite invert linings Michelle Müller-Hagmann (ETH Zurich, Switzerland)
	Euler-Lagrange simulation of invert concrete abrasion Tomoo Fukuda (Chuo University, Japan)
	Mean flow and turbulence variation due to invert abrasion Takaaki Okamoto (Kyoto University, Japan)
18:00 – 18:20	Move to Fushimi by bus
18:30 – 21:00	Welcome reception (Kizakura Fushimigura, Fushimi)
21:00 – 21:20	Move to Kyoto by bus

Each presentation in Session 1-3:

15 minutes for talk + 5 minutes for question/discussion

All speakers should bring presentation file to the Kihada hall before the session starts

2 nd day: 10 th May 2017	
8:00	Come to bus parking place, Hachijo, Kyoto Station
8:00 – 8:45	Move to Uji by bus
9:00 – 10:40	Session 4 (Kihada Hall) Chair: George W. Annandale Bedload monitoring
	Calibration of Swiss Plate Geophone System for bedload monitoring in a sediment bypass tunnel Ismail Albayrak (ETH Zurich, Switzerland)
	Bedload monitoring in a mountain stream: Method for improving the accuracy of the calibration relationship between acoustic pulses and bedload discharge Daizo Tsutsumi (Kyoto University, Japan)
	Experimental study on measurement method of gravel discharge rate in high-speed flow using plate-type sensor Toshiyuki Sakurai (Public Works Research Institute, Japan)
	Bedload monitoring with impact plates at the outlet of Koshibu sediment bypass tunnel Takahiro Koshiba (Kyoto University, Japan)
	Simulation of gravel transport in bypass tunnel during sediment bypass operation of Asahi Dam Yoji Kubota (Hydro-soft Technology Institute, Japan)
10:40 – 11:00	Coffee break
11:00 – 12:20	Session 5 (Kihada Hall) Chair: Kozo Watanabe Downstream aspects (morphological and ecological effects)
	Ecological effects of SBT operations on a residual river: Solis SBT case-study Eduardo J. Martín (EAWAG, Switzerland)
	Downstream morphological effects of SBT releases: 1D numerical study and preliminary LiDAR data analysis Matteo Facchini (ETH Zurich, Switzerland)
	Invertebrate community changes in the downstream of dam after the operation of sediment bypass tunnel Sohei Kobayashi (Kyoto University, Japan)
	Metabarcoding-based assessment of the influence of sediment bypass tunnels on the macroinvertebrate communities in dam-fragmented rivers Joeselle M. Serrana (Ehime University, Japan)
12:20 – 13:20	Lunch (Kihada Hybrid Floor)
12:20 – 13:20	Poster session (Kihada Hybrid Floor)

13:20 – 14:40	Session 6 (Kihada Hall) Chair: Yasuhiro Takemon Operation and environment impact assessment
	Test-run plan and environmental monitoring plan for reservoir sedimentation control facilities in Miwa Dam Redevelopment (interim report) Yoshihiro Sawagashira (Mibu River MLIT, Japan)
	Outline and present of Matsukawa Dam redevelopment project Satoshi Narusawa (Matsukawa Dam Nagano Prefecture, Japan)
	Downstream variations of suspended solid concentration due to desilting operation in typhoon event Cheng-Chia Huang (National Taiwan University, Taiwan)
	Ecological importance of an integrated approach to riverbed management –case study analysis Makoto Hyodo (IDEA Consultants Inc., Japan)
14:40 – 14:50	Closing session (Kihada Hall) Chair: Sameh Kantoush
	Closing remarks Tetsuya Sumi (Kyoto University, Japan)
15:00 – 18:00	Move to Nagano by bus
19:30	Dinner at Hotel

Each presentation in Session 4-6:

15 minutes for talk + 5 minutes for question/discussion

All speakers should bring presentation file to the Kihada Hall before the session starts

Poster session

1 st day: 12:55 – 14:00, 2 nd day: 12:20 – 13:20 at Kihada hybrid floor	
	Sedimentation control effect and environmental impact of sediment bypass in Miwa Dam Redevelopment Project Yoshihiro Sawagashira (Mibu River MLIT, Japan)
	Evaluating the performance of a sediment bypass tunnel with integrated operation and surrogate modeling Frederick N.-F. Chou (National Cheng-Kung University, Taiwan)
	Measurement of shear velocity and bed load discharge Hiroshi Koseki (Public Works Research Institute, Japan)
	Application of hydrophone system for the sediment discharge monitoring in the Fuji River Kunihiro Tomita (Civil Engineering and Eco-Technology Consultants, Japan)
	Effect of sediment replenishment on downstream reaches of dams: case study of the Futase Dam Yasumitsu Kato (Civil Engineering and Eco-Technology Consultants, Japan)
	Planning of sediment bypass tunnel for hydropower dams Chihaya Onda (J-POWER, Japan)
	Effects of riverbed deformation on the dynamic modeling of riparian vegetation succession and its application for river management Hanae Ito (Civil Engineering and Eco-Technology Consultants, Japan)
	Simulation of the process of inflow, deposition and discharge of sediment in the bypass facility of Koshibu dam Yoji Kubota (Hydro-soft Technology Institute, Japan)
	Study on morpho- and hydro-dynamics of multi-box culverts Hao-Che Ho (National Taiwan University, Taiwan)
	Drawing up the first edition of the comprehensive sediment management plant of the Tenryu River Basin Keiji Kanou (Chubu Regional Management Bureau MLIT, Japan)
	The study about sediment runoff of the Kawamada Dam catchment Atsuhiko Yorozuya (Public Works Research Institute, Japan)
	Sedimentation problem in small hydropower plants: a case study for Filyos River, Turkey Serhat Kucukali (Çankaya University, Turkey)
	Diffusion modeling of the distribution of sediment infill in hyperpycnal mountain reservoirs Hervé Capart (National Taiwan University, Taiwan)

Each presentation: poster size of A0 (portrait) or smaller

All posters should be put on a panel prepared in the Hybrid Space from 9:30 9th to 13:20 10th
