

KEYNOTE 1

- [K-1](#) CASE HISTORIES IN SOIL AND ROCK EROSION: WOODROW WILSON BRIDGE, BRAZOS RIVER MEANDER, NORMANDY CLIFFS, AND NEW ORLEANS LEVEES
*Jean-Louis BRAUD, USA

KEYNOTE 2

- [K-2](#) THE PHYSICS OF LOCAL SCOUR AT BRIDGE PIERS
*Bruce MELVILLE, New Zealand

KEYNOTE 3

- [K-3](#) HOW IS THE GAP BETWEEN THE CONCEPT AND PRACTICE OF INTEGRATED SEDIMENT MANAGEMENT BRIDGED?
*Koh-ichi FUJITA, Japan

KEYNOTE 4

- [K-4](#) DESIGN AND PRACTICE OF SCOUR AND EROSION COUNTERMEASURES IN WATERWAYS
*Michael HEIBAUM, Germany

KEYNOTE 5

- [K-5](#) A COMPREHENSIVE STUDY ON SEDIMENT MOVEMENT IN TENRYU RIVER WATERSHED AND ENSHU COAST
*Shinji SATO, Haijiang LIU, Japan

KEYNOTE 6

- [K-6](#) COASTAL AND OFFSHORE SCOUR / EROSION ISSUES – RECENT ADVANCES
*B. Mutlu SUMER, Denmark

KEYNOTE 7

- [K-7](#) TSUNAMI SCOUR AND SEDIMENTATION
*Harry YEH, USA

(A) LABORATORY STUDIES AND ANALYSES SESSION 1

- [A-1](#) BRIDGE SCOUR: THE VIEW FROM INSIDE THE PIER
*Gary PARKER, USA
- [A-2](#) SCALING ISSUES FOR LABORATORY MODELING OF BRIDGE PIER SCOUR
Seung Oh LEE, *Terry STURM, USA
- [A-3](#) NEWTON'S SECOND LAW AND SCOURING
*Gijs HOFFMANS, Henk VERHEIJ, The Netherlands
- [A-4](#) EXPANSION RATIO EFFECTS ON SCOUR BY 3D JETS
*M.A.A. FARUQUE, Jueyi SUI, T. BOLISETTI, Ram BALACHANDAR, Canada
- [A-5](#) THREE DIMENSIONAL SCOUR
*Gijs HOFFMANS, Henk VERHEIJ, The Netherlands

(A) LABORATORY STUDIES AND ANALYSES SESSION 2

- [A-6](#) INSTABILITY OF STREAM GEOMETRY
*Hiroshi TAKEBAYASHI, Japan
- [A-7](#) TIME EVOLUTION OF SCOUR AND DEPOSITION AROUND A CYLINDRICAL PIER IN STEADY FLOW
*Shinya UMEDA, Tatsuo YAMAZAKI, Hajime ISHIDA, Japan
- [A-8](#) THREE DIMENSIONAL NUMERICAL MODELING OF PIER SCOUR
*Hans BIHS, Nils Reidar B. OLSEN, Norway
- [A-9](#) TIME-DEPENDENT SCOUR DEVELOPMENT UNDER COMBINED CURRENT AND WAVES CONDITIONS - LABORATORY EXPERIMENTS WITH ONLINE MONITORING TECHNIQUE
*Tim RAAIJMAKERS, Daniel RUDOLPH, The Netherlands
- [A-10](#) EFFECT OF THE HORSESHOE VORTEX SYSTEM ON THE GEOMETRY OF A DEVELOPING SCOUR HOLE AT A CYLINDER
*Oscar LINK, Christian GOBERT, Michael MANHARDT, Ulrich ZANKE, Chile
- [A-11](#) A DETACHED EDDY SIMULATION STUDY OF THE HORSESHOE VORTEX SYSTEM IN THE FLOW PAST A BRIDGE ABUTMENT WITH A SCOUR HOLE AT A HIGH REYNOLDS NUMBER
Mete KOKEN, *George CONSTANTINESCU, USA

(A) LABORATORY STUDIES AND ANALYSES SESSION 3

- [A-12](#) TEMPORAL VARIATION OF SCOUR DEPTH AT NONUNIFORM CYLINDRICAL PIER WITH UNEXPOSED FOUNDATION
*Jau-Yau LU, Jian-Hao HONG, Jun-Ji LEE, Zhong-Zhi SHI, Taiwan

- [A-13](#) LOCAL SCOUR AROUND A SUBMERGED CYLINDRICAL PIER
*Yasunori MUTO, Japan
- [A-14](#) CHARACTERISTICS OF LOCAL SCOUR AROUND CLOSURE WORKS AND THE APPLICATION TO THE BOTTOM CHANGE SIMULATION
Hideo OHTANI, Takao TOOE, Hidehiro KATSUI, Kazuo ISHINO, *Kazunori ITO, Japan
- [A-15](#) INTERACTION BETWEEN A SUBMERGED VANE AND THE CHANNEL BANK
*Huei-Tau OUYANG, Jih-Sung LAI, Hsin YU, Chih-Huang LU, Taiwan
- [A-16](#) THE EFFECT OF MINOR SPUR DIKE ON SCOURING AT THE FIRST SPUR DIKE IN THE GRAVEL BED
*A. SHAFIAE, A. ARDESHIR, S.M. SADAT-HELBAR, M. SANEIE, Iran

(A) LABORATORY STUDIES AND ANALYSES SESSION 6

- [A-17](#) AUTOMATED SEDIMENT EROSION RATE APPARATUS FOR MEASUREMENT OF EROSION RATE OF UNDISTURBED SEDIMENTS
*Kyu-Nam HWANG, Hong Ryul RYU, Seung Oh LEE, Yong-Sik CHO, Korea
- [A-18](#) THREE ABUTMENT SCOUR CONDITIONS INVESTIGATED WITH LABORATORY FLUMES
Robert ETTEMA, *Tatsuaki NAKATO, Atsuhiko YOROZUYA, Marian MUSTE, USA
- [A-19](#) NUMERICAL INVESTIGATION ON THE ONSET OF TUNNEL EROSION UNDERNEATH A SUBMARINE PIPELINE IN CURRENTS
Cheng-Cai LUO, *Fu-Ping GAO, China
- [A-20](#) SCOUR REDUCTION BY USING A COLLAR AROUND A PIER GROUP
*Mubeen BEG, INDIA
- [A-21](#) 1D AND 2D HYDRAULIC SIMULATIONS FOR BRIDGE SCOUR PREDICTION: A COMPARATIVE STUDY
Xinbao YU, *Xiong (Bill) YU, USA

(A) LABORATORY STUDIES AND ANALYSES SESSION 7

- [A-22](#) NUMERICAL SIMULATION OF LOCAL SCOUR BELOW A VIBRATING PIPELINE IN CURRENTS
Ming ZHAO, *Liang CHENG, Australia
- [A-23](#) SCOUR DOWNSTREAM OF A BLOCK RAMP IN ASYMMETRIC STILLING BASINS
*Stefano PAGLIARA, Michele PALERMO, Italy
- [A-24](#) CALCULATION OF BED VARIATION IN CURVED CHANNELS
*Te-Yung HSIEH, Jinn-Chuang YANG, Taiwan, R.O.C.
- [A-25](#) EFFECT OF COLLAR LENGTH ON TIME DEVELOPMENT OF SCOURING AROUND RECTANGULAR BRIDGE PIERS
*Mohammad B. MASHAHR, Amir Reza ZARRATI, Ebrahim MOKALLAF, Iran
- [A-26](#) SCOUR AT CYLINDRICAL BRIDGE PIER IN A 180 DEGREE CHANNEL BEND
*Yaser EMAMI, S. Amin SALAMATIAN, Masoud GHODSIAN, Iran

(B) FIELD OBSERVATION AND ANALYSES SESSION 2

- [B-1](#) DEVELOPMENT OF MULTIFUNCTION SCOUR MONITORING DEVICE FOR RAILWAY BRIDGE PIERS PART 1: BACKGROUND AND CONCEPT
*Osamu SUZUKI, Yosuke MASUI, Masato ABE, Masahiko SAMIZO, Makoto SHIMAMURA, Japan
- [B-2](#) DEVELOPMENT OF MULTIFUNCTION SCOUR MONITORING DEVICE FOR RAILWAY BRIDGE PIERS PART 2: RESULTS OF FIELD TESTING
*Yosuke MASUI, Osamu SUZUKI, Masato ABE, Masahiko SAMIZO, Hiroyuki FURUKAWA, Makoto SHIMAMURA, Japan
- [B-3](#) MONITORING SCOUR DEPTH AT BRIDGE PIER BY USING MEMS SENSOR
Yung-Bin LIN, Kuo-Chun CHANG, *Jih-Sung LAI, Yih-Chi TAN, Fong-Zuo LEE, Taiwan
- [B-4](#) BRIDGE SCOUR FIELD INSPECTION SYSTEM USING MOBILE NETWORK AND PDA
*Jae Hyun PARK, Moonkyung CHUNG, Ju Hyung LEE, Kiseok KWAK, Korea
- [B-5](#) A METHOD TO EXTRACT SCOURED BRIDGE PIERS
*Satoru KOSHIMIZU, Masahiko SAMIZO, Taiki MORI, Japan
- [B-6](#) NONDESTRUCTIVE EVALUATION OF RAILWAY BRIDGE SUBSTRUCTURES BY PERCUSSION TEST
*Masahiro SHINODA, Hiroshi HAYA, Seiji MURATA, Japan

(B) FIELD OBSERVATION AND ANALYSES SESSION 4

- [B-7](#) DYNAMICS OF EROSION PROCESSES IN THE NIZHNYAYA-VOLGA PRIKASPIY REGION
A. BOGOMOLOV, S. SHIJAN, M. SHUBIN, *A. ZHUSSUPBEKOV, R. ZHAPBASOV, R. KABASHEV, Kazakhstan

[B-8](#) APPLICATION OF AN INTEGRATED GEOPHYSICAL METHOD TO LEVEE EVALUATION
*Koichi HAYASHI, Tomoyuki ABE, Toshihiko TANAKA, Chisato KONISHI, Japan

[B-9](#) UNDERSTANDING FALLING APRONS –EXPERIENCE FROM THE LOWER BRAHMAPUTRA / JAMUNA RIVER
*Knut OBERHAGEMANN, Philemon DIGGELMANN, MUKHLES-UZ-ZAMAN, Canada

[B-10](#) STABILITY OF OLD STONE GROINS IN THE KATSURA RIVER DURING FLOODS
*Taisuke ISHIGAKI, Takahiro ASANO, Ryuji KAWANAKA, Japan

[B-11](#) RIVER BANK EROSION AND SUSTAINABLE PROTECTION STRATEGIES
*Md. Shofiul ISLAM, Bangladesh

(B) FIELD OBSERVATION AND ANALYSES SESSION 5

[B-12](#) SCOUR MONITORING AROUND THE BREAKWATER HEAD AT MAILIAO HARBOR
*Meng-Yi CHEN, Jyh-Cheng CHU, Taiwan

[B-13](#) AN ASSESSMENT OF FIELD DATA FOR SCOUR AT OFFSHORE WIND TURBINE FOUNDATIONS
*Richard WHITEHOUSE, John HARRIS, James SUTHERLAND, Jon REES, UK

[B-14](#) COASTAL EROSION SURFACES DETECTED BY GROUND PENETRATING RADAR AND CORING SURVEY: A CASE STUDY IN COASTAL AREA AROUND THE TENRYU RIVER MOUTH
*Tomohiro TAKAGAWA, Yutaro FUKASE, Haijiang LIU, Shinji SATO, Japan

[B-15](#) TIME-DEPENDENT SCOUR DEVELOPMENT UNDER COMBINED CURRENT AND WAVE CONDITIONS – HINDCAST OF FIELD MEASUREMENTS
*Daniel RUDOLPH, Tim RAAIJMAKERS, Cor-Jan STAM, The Netherlands

[B-16](#) FIELD OBSERVATION OF WAVE INDUCED PORE WATER PRESSURED CHANGE IN SEABED
*Kinya MIURA, Shingo ASAHARA, Junya TANAKA, Natsuhiko OTSUKA, Takeharu KONAMI, Japan

(B) FIELD OBSERVATION AND ANALYSES SESSION 6

[B-17](#) SCOUR DEVELOPMENT ALONGSIDE RIVERBANK PROTECTION IN A BRAIDED RIVER - SELECTED CASES FROM BANGLADESH
*Dennis HOTOPP, Knut OBERHAGEMANN, Makbul HOSSAIN, Canada

[B-18](#) RAPID BEDROCK EROSION IN THE TAAN RIVER, TAIWAN
*Ming-Wan HUANG, Meng-Hsiung CHENG, Jyh-Jong LIAO, Yii-Wen PAN, Taiwan

[B-19](#) CROSS-SHORE BOTTOM PROFILES ALONG AN OBSERVATIONAL PIER AND ITS SEASONAL VARIATIONS
*Yasuyuki BABA, Kiyoshi UCHIYAMA, Hideo SEKIGUCHI, Hajime NAKAGAWA, Japan

[B-20](#) COASTAL EROSION IN THE TROPICAL RAPID ACCRETION DELTA – A CASE STUDY OF THE RED RIVER DELTA, VIETNAM
*Do Minh DUC, Kazuya YASUHARA, Satoshi MURAKAMI, Hideo KOMINE, Vietnam

[B-21](#) EFFECTIVENESS OF TOP-SHAPED BLOCKS FOR PREVENTING SETTLEMENT OF WAVE-DISSIPATING BLOCKS UNDER WAVE ACTION
*Ikuo YASUKAWA, Shigeyuki NOTO, Katsuhiko ARAI, Ping LI, Japan

(C) MATERIAL ASPECTS SESSION 1

[C-1](#) EFFECT OF SUCTION ON CLEAR-WATER SCOUR AT BRIDGE PIERS
*Yee-Meng CHIEW, Ying Ying CHEN, Singapore

[C-2](#) CENTRIFUGE MODELING OF RIVERBANK FAILURE DURING A DECLINE IN THE WATER LEVEL
*Ryosuke UZUOKA, Shingo HORIMI, Noriaki SENTO, Motoki KAZAMA, Japan

[C-3](#) COMPUTATION OF THE LEVEE BREACH BY OVERFLOW
*Takeshi NOTE, Keiko UDO, Akira MANO, Japan

[C-4](#) MODEL TESTS ON GEOBAGS FOR EROSION PROTECTION
Charles NEILL, *Monica MANNERSTRÖM, Abu Kalam AZAD, Canada

[C-5](#) MECHANICAL BEHAVIOR OF COASTAL SOFT CLIFF SUBJECTED TO WAVE EROSION
*Shima KAWAMURA, Seiichi MIURA, Masaki KURIBAYASHI, Japan

(C) MATERIAL ASPECTS SESSION 4

[C-6](#) EXPERIMENTAL STUDY ON THE EFFECT OF BIOFILM FOR BED MUD EROSION IN ANNULAR FLUME
*Ryoichi WATANABE, Koreyoshi YAMASAKI, Taichi TEBAKARI, Tetsuya KUSUDA, Japan

[C-7](#) EROSION RATE OF COHESIVE SEDIMENT BY RUNNING WATER
*Masato SEKINE, Ken-ichiro NISHIMORI, Japan

[C-8](#) THE ESTIMATE METHOD OF EROSION RATE OF COHESIVE MATERIALS (CRL-AET)
*Akira ODA, Takahisa MIZUYAMA, Kuniaki MIYAMOTO, Yuji HASEGAWA, Japan

[C-9](#) DEVELOPMENT OF A NEW TEST TO CHARACTERIZE DISPERSION OF SOIL
Tuan Long PHAM, *Christophe CHEVALIER, Myriam DUC, Philippe REIFFSTECK, Sylvine GUEDON, France

[C-10](#) THE INFLUENCE OF SOME ENGINEERING PARAMETERS ON THE EROSION OF SOILS
*Pierre-Louis REGAZZONI, Gregory HANSON, Tony WAHL, Didier MAROT, Jean-Robert COURIVAUD, Jean-Jacques FRY, France

(C) MATERIAL ASPECTS SESSION 5

[C-11](#) STUDY ON UPWARD MOVEMENT OF FINES FROM SANDY SEABED UNDER CYCLIC WATER PRESSURE CHANGE DUE TO WAVES
Takashi TSUCHIDA, *Akihiro MATSUI, Ryoichi ASAUMI, Japan

[C-12](#) PIPING PHENOMENA IN HETEROGENEOUS SANDS – EXPERIMENTS AND SIMULATIONS
*Vera VAN BEEK, André KOELEWIJN, Gerard KRUSE, Hans SELLMEIJER, Frans BARENDSE, The Netherlands

[C-13](#) EVALUATION OF ANALYSES OF DOWNSTREAM PIPING OF WEIRS BY MODEL EXPERIMENTS AND ELASTO-PLASTIC FEM
*Kenji OKAJIMA, Tadatsugu TANAKA, Japan

[C-14](#) SEEPAGE AND EROSION MECHANISMS OF SANDY GROUND DUE TO AIR BUBBLES
Hirotaka SAKAI, *Kenichi MAEDA, Japan

[C-15](#) CHEMICAL COMPOUNDS EFFECTS ON CRITICAL SHEAR STRESS AND ERODIBILITY OF VOLCANIC ASH SOILS
Islam AWAD, *Noriyuki YASUFUKU, Japan

(C) MATERIAL ASPECTS SESSION 6

[C-16](#) HORIZONTAL GRANULAR FILTERS
*Gijs HOFFMANS, Henk den ADEL, Henk VERHEIJ, The Netherlands

[C-17](#) MEASURING DEVELOPING SCOUR HOLES IN GRAVEL
Reda DIAB, *Oscar LINK, Ulrich ZANKE, Chile

[C-18](#) DISCRETE ELEMENT MODELLING OF SOIL EROSION
*David MUIR WOOD, Kenichi MAEDA, Emi NUKUDANI, UK

[C-19](#) EFFECT OF PARTICLE GRADATION ON SEEPAGE FAILURE IN GRANULAR SOILS
*Takaji KOKUSHO, Yusuke FUJIKURA, Japan

[C-20](#) PIPING FAILURE IN SUBWAY CONSTRUCTION DUE TO INTERNAL EROSION OF SILTY SAND
*Kenji ISHIHARA, Wei F. LEE, Japan

(D) SEDIMENT ROUTING SYSTEM AND SEDIMENT MANAGEMENT SESSION 1

[D-1](#) RATIO OF BED LOAD TO TOTAL SEDIMENT LOAD IN COARSE-BED RIVERS
*Mehdi YASI, Rahim HAMZEPOURI, Iran

[D-2](#) APPLICATION OF UAV AERIAL PHOTOGRAPHY TO TEMPOROSPATIAL ASSESSMENT OF TIDAL FLAT GEOMORPHOLOGY
*Yoichi WATABE, Shinji SASSA, Japan

[D-3](#) CARTOGRAPHY OF COASTAL DYNAMICS: (CASE STUDY: COASTAL FRINGE FROM HAMMAM-LIF TO SOLYMAR BEACH -TUNISIA)
*Samir MEDHIOUB, Chokri YAICH, Tunisia

[D-4](#) SEDIMENT TRANSPORT AROUND HEADLANDS IN THE SOUTHERN SENDAI COAST
*Yusuke MIURA, Masato MINAMI, Keiko UDO, Akira MANO, Japan

[D-5](#) LABORATORY STUDY ON THE EFFECT OF WALLS FOR PREVENTING OFFSHORE SEDIMENT MOVEMENT AROUND A SUBMARINE CANYON
*Kouji YAMADA, Masaya FUKUHAMA, Shinji FUKUSHIMA, Tokihiro SHIMOYA, Junichi ARIMURA, Toshimitu TAKAGI, Japan

(D) SEDIMENT ROUTING SYSTEM AND SEDIMENT MANAGEMENT SESSION 3

[D-6](#) MORPHOLOGICAL CHARACTERIZATION OF THE LOWER REACH OF THE TENRYU RIVER
Guangwei HUANG, Japan

[D-7](#) GEOMORPHOLOGICAL EVOLUTION AND SEDIMENT BUDGET ANALYSIS WITH THE UJI RIVER, KYOTO
*Ryoukei AZUMA, Hideo SEKIGUCHI, Japan

[D-8](#) A STUDY ON SUSTAINABLE SEDIMENT MANAGEMENT IN MERAPI VOLCANIC AREA
*Jazaul IKHSAN, Muhammad SULAIMAN, Masaharu FUJITA, Japan

[D-9](#) FORMATION OF GIANT RIPPLES IN A CIRCULAR WATER FLUME
*Keisuke TANIGUCHI, Tomohiro TAKAGAWA, Fujio MASUDA, Japan

- [D-10](#) EXPERIMENTAL STUDY OF THE GENERATION OF CYCLIC MIGRATION STEPS.
*Yasuaki SAKAMOTO, Kazuo TAKI, Japan

(D) SEDIMENT ROUTING SYSTEM AND SEDIMENT MANAGEMENT SESSION 4

- [D-11](#) MORPHODYNAMICS OF INTERTIDAL SAND BARS: FEEDBACK BETWEEN SEDIMENT TRANSPORT AND SUCTION DYNAMICS EFFECTS
*Shinji SASSA, Yoichi WATABE, Japan

- [D-12](#) MORPHOLOGICAL RESPONSE OF RIVER CHANNEL DUE TO WEIR RECONSTRUCTION
*Hao ZHANG, Keiichi KANDA, Yasunori MUTO, Hajime NAKAGAWA, Japan

- [D-13](#) FUZZY REGRESSION APPROACH TO ESTIMATING THE SETTLING VELOCITY OF SEDIMENT PARTICLES
*Seyed Morteza SADAT-HELBAR, Mohammad Hossein NIKSOKHAN, Ebrahim AMIRI-TOKALDANY, Iran

- [D-14](#) DISTRIBUTION OF SURFACE DEPOSITS OFF SHIMIZU COAST, SHIZUOKA PREFECTURE, JAPAN
*Shuro YOSHIKAWA, Kenji NEMOTO, Japan

- [D-15](#) HYDRAULIC CONDITIONS OF TURBIDITY CURRENTS ESTIMATED BY INVERSE ANALYSIS
*Hajime NARUSE, Cornel OLARIU, Japan

(D) SEDIMENT ROUTING SYSTEM AND SEDIMENT MANAGEMENT SESSION 5

- [D-16](#) DECREASING SCOUR POTENTIAL DOWNSTREAM OF OVERTOPPING DAMS USING CREST MODIFICATIONS
Mike GEORGE, George ANNANDALE, USA

- [D-17](#) INFLUENCE OF SEDIMENT FLUSHING FROM RESERVOIRS ON RIVERBED VARIATIONS
*Shuheji MINAMI, Masaharu FUJITA, Japan

- [D-18](#) EVALUATION OF EFFICIENCY OF RESERVOIR SEDIMENT FLUSHING IN KUROBE RIVER
*Tetsuya SUMI, Japan

- [D-19](#) PLUNGE POOL DESIGN AT GEBIDEM DAM (SWITZERLAND)
*Erik BOLLAERT, Nicola-V. BRETZ, Switzerland

- [D-20](#) SCOUR FORMATION AT BOTTOM OUTLET OF KÁRAHNJÚKAR DAM
*Erik BOLLAERT, Anton SCHLEISS, Björn STEFANSSON, Switzerland

(E) HILLSLOPE CONSERVATION AND DEBRIS FLOW SESSION 2

- [E-1](#) SEASONAL CHANGES IN THE AMOUNT OF LITTER LAYER AND SOIL EROSION IN THE FOREST FLOOR - AN IMPOVERISHED UNDERSTORY BY DEER IMPACT AT DOUDAIRA, TANZAWA MOUNTAINS -
*Taeko WAKAHARA, Yoshiharu ISHIKAWA, Katsushige SHIRAKI, Hiroto TODA, Takahiro MIYA, Fumiko KATAOKA, Masakazu SUZUKI, Yoshimi UCHIYAMA, Japan

- [E-2](#) SEDIMENT PRODUCTION FROM WEATHERED BEDROCK IN WINTER SEASON - FIELD OBSERVATION AND NUMERICAL SIMULATION -
*Daizo TSUTSUMI, Masaharu FUJITA, Japan

- [E-3](#) RATIO OF RAINFALL DRIVEN EROSION TO RUNOFF DRIVEN EROSION FOR DIFFERENT UNDERSTORIES ON STEEP SLOPE OF FOREST
*Afshin GHARAMANI, Yoshiharu ISHIKAWA, Katsushige SHIRAKI, Takashi GOMI, Japan

- [E-4](#) EROSION PROCESSES OF THE COLLAPSED MASS OF THE GIGANTIC LANDSLIDE OF MT. BAWAKARAENG, SULAWESI, INDONESIA IN 2004 REVEALED BY MULTI-TEMPORAL SATELLITE IMAGES
*Takao YAMAKOSHI, Yoshikazu SHIMIZU, Nobutomo OSANAI, Katsuo SASAHARA, Ken TSUTSUI, Japan

- [E-5](#) DESIGN STUDY OF GEOSYNTHETICAL MATERIAL SYSTEM PROTECTING HIGHWAYS FROM STONE FALL
*Sergey KUDRYAVTSEV, Yury BERESTYANY, Evgeny FEDORENKO, Tanya VALTSEVA, Roman MIHALIN, Russia

(E) HILLSLOPE CONSERVATION AND DEBRIS FLOW SESSION 3

- [E-6](#) EXPERIMENTAL STUDY ON PREDICTION OF FAILURE MODE OF LANDSLIDE DAMS
*Ripendra AWAL, Hajime NAKAGAWA, Kenji KAWAIKE, Yasuyuki BABA, Hao ZHANG, Japan

- [E-7](#) SIMPLE AND LOW-COST EARLY WARNING SYSTEM FOR SLOPE FAILURE DUE TO RAINFALL AND EROSION
*Taro UCHIMURA, Ikuo TOWHATA, Wang LIN, Ichiro SEKO, Japan

- [E-8](#) DEBRIS-FLOW BEHAVIORS IN A STEEP MOUNTAINOUS TORRENT ON OHYA LANDSLIDE, JAPAN
*Fumitoshi IMAZUMI, Satoshi TSUCHIYA, Japan

[E-9](#) NUMERICAL SIMULATION ON PREDICTION OF DEBRIS-FLOW HYDROGRAPH OF HETEROGENEOUS BED MATERIAL AND SEDIMENT TRANSPORT IN A MOUNTAINOUS RIVER

*Badri Bhakta SHRESTHA, Hajime NAKAGAWA, Kenji KAWAIKE, Yasuyuki BABA, Japan

[E-10](#) AN EXPERIMENTAL STUDY ON DRAG FORCE OF STONY DEBRIS FLOW

*Takashi MATSUSHIMA, Kazumasa SATO, Yasuo YAMADA, Senro KURAOKA, Japan

(F) HAZARD MANAGEMENT AND CASE STUDIES SESSION 7

[F-1](#) STUDY ON SCOUR BY TSUNAMIS –EXAMPLES OF PORT AND HARBOR STRUCTURES–

*Osamu OKAMOTO, Katsuya ODA, Kentaro KUMAGAI, Japan

[F-2](#) STUDY ON NUMERICAL MODEL OF TOPOGRAPHY CHANGE DUE TO TSUNAMI

*Takeshi NISHIHATA, Hiroshi SANUKI, Yoichi MORIYA, Kazuhisa GOTO, Japan

[F-3](#) FORESHORE EROSION OF KASHIMA COAST BY 2006 AUTUMN STORMS

*Elsayed M. GALAL, Satoshi TAKEWAKA, Shinya SASAKURA, Japan

[F-4](#) LOCALLY CONCENTRATED SEVERE BEACH EROSION ON SEISHO COAST CAUSED BY TYPHOON T0709

*Yoshimitsu TAJIMA, Shinji SATO, Japan

[F-5](#) COLLAPSE SCENE INVESTIGATION (CSI) CARMEL RIVER BRIDGE FAILURE

*Catherine M.C. AVILA, USA
