

TECHNICAL PROGRAM:
5th INTERNATIONAL SYMPOSIUM
on DAM SAFETY and EXHIBITION
(Second Part)

Monday, October 29, 2018

09.00 – 18.00 Registration Desk Open

09.00 -17.30 City Tour

Tuesday, October 30, 2018

7.30 – 18.00 Registration Desk Open

9.30 – 11.00 Opening Session

11.00-11.30 Break and Opening Exhibition

11.30-12.30 Keynote Speech1

Hall A: Prens Island

Prof.Dr. Mustafa ALTINAKAR, “Two-Dimensional Dam-Break Flood Modeling and Mapping for the USA”

12.30-13.30 Lunch

13.30- 15.00 Concurrent Technical Session1

Hall A: Prens Island

Chair: Prof.Dr. Erich Bauer

- 1) **A. Bagherzadeh Khalkhali “Instrument Challenges and Monitoring of Shahr-E-Bijar Dam”**
- 2) **Bariş Sevim “Earthquake Response of Bhakra Gravity Dam”**
- 3) **Bariş Sevim “Effects of Base Width - Dam Height Ratio on the Structural Response of Gravity Dams”**
- 4) **Borjana Bogatinoska, Frosina Panovska, Ana Grupcheva, Stefanija Ivanovska, Dimitar Kondinski, Stevcho Mitovski, Ljupcho Petkovski “Static Analysis of Gratche Arch Dam – A Case Study”**
- 5) **İdris Bedirhanoğlu, Çağrı Mollamahmutoğlu, M. Şefik İmamoğlu “Damage of the Derbendikhan Dam during the Last Mw 7.3 Halabja Earthquake”**

- 6) **Melih Calamak, Meric Yilmaz** “*A Review of the Anita Dam Incident: Internal Erosion Caused by a Buried Conduit and Lessons Learned*”

Hall B: Buyukada Island

Chair: Prof.Dr. Dimitar S. Kisliakov

- 1) **Seyed Sajad Aali , Abbas Ali Ghezsofloo** “*An Investigation of Energy Dissipation in Convergent Stepped Spillways Using Flow 3D Model*”
- 2) **Alper Aydemir, Aytaç Güven** “*Prediction of Embankment Dam Breach Width*”
- 3) **Alper Aldemir** “*Remedies for Thermal Strain Related Problems*”
- 4) **Ayla Bilgin** “*Environmental Impacts of Large Dams: Yusufeli Dam Example (Artvin/ Turkey)*”
- 5) **Ali Yildiz, Ali İhsan Martı** “*Physical Modeling of Submerged Flow under Sluice Gate: Investigation of Scale Effects and Dynamic Similarity*”

Hall C: Heybeliada Island

Chair: Prof.Dr. Ljupcho Petkovski

- 1) **Cristina D. Yuliningtyas , Amos Sangka** “*Dam Expert Panel in the Framework of Dam Safety Management of Bener Dam, Indonesia*”
- 2) **Ahmet Can Altunişik, Hasan Sesli, Metin Hüsem, Ebru Kalkan** “*Structural Behavior of Concrete Gravity Dams Using Westergaard, Lagrange and Euler Approaches*”
- 3) **Anissa Mayangsari, Kadek Widyasari** “*Foundation Treatment of Porous Foundation at Bajulmati Dam*”
- 4) **Halil Kumsar, Ali Rıza Özdamar** “*Stability Assessment of Slope Failures in Spillway Site for Seki Dam-Muğla, Turkey*”
- 5) **Halil Kumsar, Ömer Aydan** “*Engineering Geological Investigation of Beylerli Dam (Çardak-Denizli) Spillway Landslide in Terms of Dam Safety*”

15.00-15.30 Break

15.30-16.30 Keynote Speech2

Hall A: Prens Island

Prof.Dr. Erich Bauer, “*Modelling of Collapse Settlements and Long-Term Deformations of Rockfill Dams*”

16.30- 18.00 Concurrent Technical Session2

Hall A: Prens Island

Chair: Prof.Dr. Anton J. SCHLEISS

- 1) **Ercan GEMİCİ, Fatih GÖKTEPE, Murat ŞAHİN** “*Seismic Analysis of Concrete-Rockfill Combination Dam on Elastic Foundation*”

- 2) **Enyue JI, Zhongzhi FU, Shengshui CHEN, Qiming ZHONG** “*Stress and Deformation Simulation of a High Asphalt Core Rockfill Dam on Thick Overburden Layers*”
- 3) **Mohammad Davoodi, Fariborz Sanjari** “*Influence of Different Orientations and Reference Axes of Ground Motions on the Engineering Demand Parameters of an Embankment Dam*”
- 4) **Kwan Ben Sim, Raudhah Ahmadi, Lidyana Roslan, Ahmed Abdullahi and Meldi Suhatri** “*Seismic Response of Murum Concrete Gravity Dam Located in Sarawak, Malaysia*”
- 5) **M.A. Hariri-Ardebili, S.M. Seyed-Kolbadi, V.E. Saouma, J. Salamon** “*Seismic Response of Gravity Dams with Random Finite Element Method*”
- 6) **Mohammadkeya Khosravi, Linke Li, Saeed Safikhani, Erich Bauer** “*Numerical Simulations of the Wetting Effect On the Long Term Behaviour of Concrete Face Rockfill Dam*”

Hall B: Buyukada Island

Panel Discussion

Title: Dam Safety for the Countries in Southeast Europe

Moderator: Prof.Dr. Feng JIN

Speakers:

Prof.Dr. Dimitar S. Kisliakov, Bulgaria

Dr. George Dounias, Greece

Prof.Dr. Ljupcho Petkovski, Mecedonia

Altan Abdulamit, Romania

Prof.Dr. Hasan TOSUN, Turkey

Hall C:Heybeliada Island

Chair: Prof.Dr. Ayşegül Kibaroğlu

- 1) **Cem Tokatli** “*Water Quality Assesment of Kirklareli Dam Lakes (Northern Section of the Ergene River Basin)*”
- 2) **Cem Tokatli** “*Water Quality Assesment of Edirne Dam Lakes (Western Section of the Ergene River Basin)*”
- 3) **Fatih Bakanoğullari, Cantekin Kivrak** “*Affect to Runoffs of Hydrological Similarities of Two Agricultural Subwatersheds Which are Located in Meriç Basin*”
- 4) **Ulviye Kamburoğlu Çebi** “*Some Physical-Chemical Characteristics and Irrigation Water Quality Classes of the Dams in Edirne Province*”
- 5) **Ayşegül Özgenç Aksoy, Semire Oğuzhan, Görkem Tanir, Mustafa Doğan, Mehmet Şükrü Güney** “*Experimental Investigation of the Effect of Vegetation on the Water Depth and Velocity Values Due to Dam Break for Sudden Failure*”

18.00- Welcome Cocktail in Cevahir Asia Hotel

Wednesday, October 31, 2018

7.30 – 18.00 Registration Desk Open

8.30 – 10.00 Concurrent Technical Session3

Hall A: Prens Island

Chair: Prof.Dr. Feyza Çinicioğlu

- 1) **Mohammad Alembagheri** “*Using Vector-Valued IMS in PSDM of Concrete Dams*”
- 2) **Muhammed Uçar, Şerife Yurdagül Kumcu** “*Comparison of Physical Modeling and CFD Simulation of Flow over Spillway in the Arkun Dam*”
- 3) **Muhammet YILMAZ, Fatih TOSUNOGLU** “*Investigating Impact of Dams on Annual Maximum Flows of Rivers in Euphrates Basin, Turkey*”
- 4) **Memduh Karalar, Murat Çavuşli** “*Examination of 3D Nonlinear Creep Behaviour of a Concrete Faced Rockfill Dam Considering Dam Body-Foundation-Concrete Slab Interaction*”
- 5) **Memduh Karalar, Murat Çavuşli** “*Three Dimensional Non-Linear Seismic Behaviour of Ilisu Concrete Faced Rockfill Dam*”

Hall B: Buyukada Island

Chair: Prof.Dr. Victor E. Sauoma

- 1) **Armin Ahmadi, Abbas Ali Ghezelsoufloo, Amirhossein Aghakhani Afshar** “*Investigating the Long-Term Prospects of Precipitation and Comparison Between Gfdl-Esm2g and Miroc-Esm Models in Kashafrood River Basin*”
- 2) **Gökmen Tayfur, M. Sukru Guney, Gokcen Bombar, Tanil Arkis** “*How to Construct a Large-Scale Distorted Physical Model to Realistically Study Dam Break Flows*”
- 3) **Gul S. Sahin, C. Melisa Kaya, Gokmen Tayfur** “*Comparison of Hecras 1D and 2D Dam Break Flow Simulations: Case Studies of Urkmez Dam*”
- 4) **Gökçen Uysal, Aynur Şensoy** “*Short Term Operation of Reservoir System with Neural Network Model Based Ensemble Streamflows and Stochastic Optimization*”
- 5) **Yavuz Özeren, Luc Rebillout, Mustafa Altınakar** “*Dam-Break Follow Experiments of Water-Granular Mixtures*”

Hall C: Heybeliada Island

Chair: Prof.Dr. M.Emin Emiroğlu

- 1) **Tuğçe Tütüncübaşı Tosun, M. Yener Özkan, Gülru Saadet Yildiz, Erdal Çokça** “*Deformation Analysis of Concrete Faced Aydın Karacasu Dam and Comparison of Theoretical Results with Measurements*”
- 2) **Turgut Vatan Tosun, Hasan Tosun** “*Dynamic Analyses for Small Embankment Dams and a Case Study*”
- 3) **Yılmaz Emre Sariçiçek, Onur Pekcan** “*An Artificial Intelligence Based Approach for Investigating Slope Stability of Earth Dams*”

- 4) **Şerife Yurdagül Kumcu** “*Experimental and Numerical Modelling of Dam Spillways*”
- 5) **Ayşegül Kibaroğlu** “*Technical Cooperation on Dam Safety in the Euphrates -Tigris River Basin*”

10.00-11.00 Keynote Speech3

Hall A : Prens Island

Prof.Dr. Anton J. SCHLEISS, “*The Safety Challenge of River Diversion During Construction of Dams*”

11.00-11.30 Break

11.30-12.30 Keynote Speech4

Hall A : Prens Island

Prof.Dr. Victor E. Sauoma “*Probabilistic Cracking, Ageing and Shaking of Concrete Dams*”

12.30-13.30 Lunch

13.30- 15.00 Concurrent Technical Session4

Hall A: Prens Island

Chair: Prof.Dr. Şebnem ELÇİ

- 1) **Neşe Açınal, Tefaruk Haktanir** “*A Comparison of Radial-Gated and Free-Flow Ogee Flood Spillways in Case of Yedigöze Dam*”
- 2) **Neşe Açınal, Hatice Çitakoğlu, Tefaruk Haktanir, Gülsüm Yazıcı** “*Frequency Analyses of Annual Flood Peaks of Streams in Five Basins of the Black Sea*”
- 3) **Neslihan Beden, Vahdettin Dem, Hesham Alrayess, Asli Ulke Keskin** “*Comparison of 2D Hydraulic Models for Flood Simulation on the Mert River Turkey*”
- 4) **Oğuz Demirkiran, Suat Akgül, Yakup Köşker, Oğuz Başkan**, “*Sediment Yield of Ankara-Nallıhan- Bozyaka Reservoir Basin*”
- 5) **Hesham Alrayess, Salem Gharbia, Neslihan Beden, Asli Ulke Keskin** “*Using Machine Learning Techniques and Deep Learning in Forecasting the Hydroelectric Power Generation in Almus Dam, Turkey*”

Hall B: Buyukada Island

Chair: Prof.Dr. Melek Cevza Kazezyılmaz Alhan

- 1) **Bahadır Öztürk, Alper Baba** “*The Importance of Surface Water and Groundwater Resources for the Sustainability of the Karaburun Peninsula, İzmir, Turkey*”
- 2) **Ender Demirel** “*Effect of Reservoir Bottom Absorption on the Hydrodynamic Response of Dam-Reservoirs During Earthquake*”
- 3) **Erhan Demir, İbrahim Biroğlu** “*Sedimentation Problem in Dam Reservoirs; Hasanlar Dam Reservoir as an Example*”
- 4) **Sahnaz Tigrek, Emrah Yalcin** “*Evaluating the Effects of Non-Sequential Construction of Cascade Reservoirs on Potential Active Water Storage Capacity*”
- 5) **Fatih Tosunoglu, Muhammet Yilmaz, Sezai Yildiz** “*Precise Estimation of Peak Flows for Different Return Periods: The Case of Coruh Basin, Turkey*”

Hall C: Heybeliada Island

Chair: Prof.Dr. Turgut UZEL

- 1) **Pouya Zahedi, Hamed Farshbaf Aghajani** “*The Effect of Clay Core Specifications on the Seepage Behavior of an Earthfill Dam*”
- 2) **Hasan Karakul** “*A Numerical Evaluation of Excess Pore Pressure Development in Clay-Bearing Rock under the Uniaxial Compression*”
- 3) **Marco Bacchelli, Giovanna Lilliu, Alberto Scuero, Gabriella Vaschetti** “*Maintenance of Dams: Fast and Durable Repair with Polymeric Geomembranes*”
- 4) **Nihat Ataman** “*Tailings Dams and Their Risk Assessment*”
- 5) **Raffaella Granata, Carlo Crippa** “*Mosul Dam, Iraq: Maintenance Grouting Works for the Dam Safety*”

15.00-15.30 Break

15.30-16.30 Keynote Speech5

Hall A : Prens Island

Prof.Dr. Feng JIN “*Recent Advances in Rock-filled Concrete Dams and Self-protected Underwater Concrete*”

16.00- 17.30 Concurrent Technical Session5

Hall A : Prens Island

Chair: Prof.Dr. Şükrü Güney

- 1) **Şerife Yurdagül Kumcu, Mustafa Altınakar** “*Flood Simulation of the Obruk Dam*”
- 2) **Mohammed Shoaib Syed, Shaik Abdul Khader Jilani** “*Automatic Earthquake Detection & Safety Measurements for Monitoring the Dams Using Gps Zigbee and Gsm Technologies*”
- 3) **Mosbah Ben Said, Ahmed Ouamane** “*Optimization of the Labyrinth Weir Performance*”
- 4) **Zülal Akbay Arama, S. Feyza Çinicioğlu** “*Safety Evaluation in Soft Foundation Soils during Fill Construction*”
- 5) **Zülal Akbay Arama** “*Rapid and Slow Drawdown Effects on the Stability of Clay Core Dams*”

Hall B: Buyukada Island

Chair: Prof.Dr. Yunus KALKAN

- 1) Ebru Kalkan, Ahmet Can Altunişik, Hasan Basri Başağa, Barış Sevim “Development of Software to Predict the Modal Parameters and Structural Behavior of Single Curved Arch Dams”
- 2) Tuğba Özkoca, Cenk Sezen, Aslı Ülke Keskin “The Different Methods for the Design of Reservoir Capacity at Gazipaşa Gökçeler Dam”
- 3) Cristina D. Yuliningtyas, Amos Sangka “Dam Expert Panel in the Framework of Dam Safety Management of Bener Dam, Indonesia”
- 4) M. Şefik İmamoğlu, İdris Bedirhanoğlu, Çağrı Mollamahmutoğlu “Evaluation of 12 November 2017 Mw 7.3 – 30 km South of Halabja Iraq-Iran Border Earthquake and Its Effects on Darbandikhan Dam from a Geological Perspective”
- 5) Gökçen Bombar, Şebnem Elçi “Up-To-Date Review of Dam-Break Studies”

Hall C: Heybeliada Island

Chair: Prof.Dr. Kasım Yenigün

- 1) Emrah Sevinç, M.Şükrü Güney “Time Varied Water Depths and Local Velocities Resulting from Flood Wave Propagation in the Distorted Physical Model of Ürkmez Dam in the case of Partial Vegetation”
- 2) Abderrahmane NOUI, Bachir SAKAA “Experimental Comparison Between Thick-Walled Spillways And Spillways With Dug”
- 3) Ben Khadda BEN AMMAR “Effect Of The Environment Of The Beni Haroun Dam (Mila) On The Mechanical Behavior Of Prefabricated Concrete For The Spillway And The Dike Ben Khadda”
- 4) Christian Gasser “Fully Probabilistic Seismic Analysis of An Arch Dam”
- 5) Ton Peters, Frans Van Den Berg, Ahmed Elkadi “Real Time Dam Stability Forecasting”

Hall D: Burgazada Island

Chair: Prof.Dr. Mehmet Berilgen

- 1) Şebnem ELÇİ, Oğuz HAZAR “Assessment of Sediment Capture Performances of Coanda and Tyrolean Intakes by Experiments”
- 2) Tuğba Özkoca, Cenk Sezen, Aslı Ülke Keskin “The Different Methods for the Design of Reservoir Capacity at Gazipaşa Gökçeler Dam”
- 3) Hemn T. Mohammed, Kasım Yenigün “General Evaluation on Iraqis' Dams and Lessons Learned”
- 4) Hasan Tosun, Turgut Vatan Tosun “Earthquake Safety of Large Dams Located in Kucuk Menderes Basin, West Turkey”
- 5) Hasan Tosun, Tefik Baran Önder “Safety Assessment for Existing Large Reservoirs Constructed in Istanbul Metropolitan Area”

17.30-18.30 Keynote Speech6

Hall A : Prens Island

Prof.Dr. Gökmen Tayfur “*Overview of Dams in the Middle East Throughout History and Dam Failures in the World during the Last Century*”

19.00- Dinner Meal in DSI Convention Center

Thursday; November 1, 2018

7.30 – 18.00 Registration Desk Open

8.00 – 9.30 Concurrent Technical Session6

Hall A: Prens Island

Chair: Prof.Dr. Tefaruk Haktanır

- 1) **Tamaz Chelidze, Alessandro Tibaldi, Nino Tsereteli, Vakhtang Abshidze, Nodar Varamashvili, Zurab Chelidze** “*Early Warning Systems for Dam Safety: Case of Large Enguri Dam, Georgia*”
- 2) **Mohammad Davoodi, Reza Afzalsoltani** “*Total Risk Analysis of Twenty-Five Large Dams in Iran*”
- 3) **Muhammad Zain, Muhammad Usman, Khawar Munir, Zahid Shehzad, Talat Iqbal** “*Safety Assessment of Dams in Pakistan: A Case Study of Tarbela Dam*”
- 4) **Ahmet Can Altunişik, Barış Sevim, Murat Günaydin, Süleyman Adanur, Ebru Kalkan** “*Structural Health Monitoring of Laboratory Arch Dam Model*”
- 5) **Umut Kirdemir, Umut Okkan** “*The Projection of Reservoir Volume of Marmara Lake Under Rcp Scenarios*”

Hall B: Buyukada Island

Chair:Prof.Dr. Tuncel EDİL

- 1) **Slavko Milevski** “*Predicting of Behavior of Measurement Point at Dams*”
- 2) **Ali Rıza Öç** “*Dam and Public Safety During Operation Period*”
- 3) **Uğur Şafak Çavuş, Murat Kilit** “*Failure Mechanism of Embankment Dams and Qualitative Risk Assessment Method*”
- 4) **Uğur Şafak Çavuş, Murat Kilit, İsmail Zorluer** “*Guidelines on the Stability and Design of Geomembrane Faced Embankment Dams Located on Pervious Foundations*”

Hall C: Heybeliada Island

Chair: Prof.Dr. Gökmen Tayfur

- 1) **Çağla Irmak Ünal, Zafer Bozkuş** “*Two Dimensional Dam Break Analysis of Berdan Dam with Hec-Ras 5.0.3*”
- 2) **Sedat Kömürcü, Murat Yılmaz** “*Numerical Analysis of the Structural Behaviour of Arch Dams using Shell Finite Element Formulation*”
- 3) **Selda Durmaz, Deniz Ülgen** “*Earthquake Induced Permanent Displacement Assessment for Rockfill Dams*”
- 4) **Ali Yildiz, Ali İhsan Marti, Şerife Yurdagül Kumcu** “*Numerical Modeling of Submerged Hydraulic Jump under a Sluice Gate, Comparison of Numerical and Physical Models*”
- 5) **Mustafa Tunç, Muhammet Emin Emiroğlu** “*Relationship between Sediment Transport and Scour Geometry for High Flow Velocities at the Labyrinth Side Weirs*”

9.30-10.20 Keynote Speech7

Hall A: Prens Island

Dr. Donald Bruce and Prof.Dr. Hasan TOSUN “*Design and Construction of Grout Curtains and Cutoff Walls: Case Studies from USA and Turkey*”

10.20-10.40 Break

10.40-11.30 Keynote Speech8

Hall A: Prens Island

Prof.Dr. Jin-Ting Wang “*Nonlinear dynamic behavior of high arch dams*”

11.30-12.30 Closing Ceremony

Hall A: Prens Island

12.30-13.30 Lunch

13.30-16.30 Concurrent Workshops

13.30-16.30 Workshop1: Dam-Break Modelling-Mapping and Flood Control

13.30-16.30 Workshop2: Use of Geotextile for Dams and Appurtenant Structures

13.30-16.30 Workshop3: Evaluation of Numerical Models and Input Parameters

13.30-16.30 Workshop4: Concrete Faced Rockfill Dams

Friday; November 2, 2018

Technical Tour to dams around Istanbul City