

26 MAY		CONFERENCE ROOM #2
09:30 - 10:30		
10:30 - 10:45		
10:45 - 11:45		
11:45 - 13:00		Lunch
13:00 - 14:15	TS2: Water Resources and Climate Change CHAIR: Cevza Melek Kazezyilmaz-Alhan	CHARACTERISING THE WATER FOOTPRINT IN SEYHAN RIVER BASIN <i>Abdullah Muratoğlu, Erkan Erdem and Muhammed Sungur Demir</i>
		INVESTIGATING THE CHEMICAL STATUS OF GROUNDWATER FOR IRRIGATION PURPOSES: A CASE STUDY FROM A GEOTHERMALLY POLLUTED AREA (ALASEHIR, TURKEY) <i>Onur Gungor Sahin, Serhat Tonkul and Orhan Gunduz</i>
		ESTIMATING THE WATER FOOTPRINT OF ELECTRICITY IN ARTIFICIAL RESERVOIRS: A CASE STUDY FOR ATATURK DAM <i>Abdullah Muratoglu, Zehra Sakinc, Mehmet Ishak Yuce and Ali Aytek</i>
		EVALUATION OF GREEN ROOF MODELING PERFORMANCE OF EPA SWMM AND AN IMPROVED EQUATION FOR GREEN ROOF DRAINAGE FLOW <i>Kavsar Bako and Cevza Melek Kazezyilmaz-Alhan</i>
		MATHEMATICAL MODELING OF WATER QUALITY MODELING IN A POLLUTED RIVER UNDER POINT AND NON-POINT SOURCES: CASE STUDY, BAKIRÇAY RIVER <i>Yigitkan Kazanci, Yakup Karaaslan, Taner Kimençe, Burhan Firat Çankaya, Aylin Okuldaş Çetin, Selcan Batuk, Okan Fıstıkoğlu, Alper Baba and Orhan Gündüz</i>
14:30 - 14:45		Coffee Break
14:45 - 16:00	TS4: Coastal and Maritime Hydraulics CHAIR: Berguzar Ozbahceci	MODELING OF WIND AND WAVE CLIMATE OF BOZCAADA COASTAL REGION <i>Asu Inan, Kagan Cebe and Yunus Yilmaz</i>
		MODELING OF POLLUTION LOADS CARRIED BY SURFACE STREAMS TO KAVAKLARBOĞAZI SALT MARSH <i>Kagan Cebe and Inan Asu</i>
		FLOW PATTERNS AROUND SINGLE AND DOUBLE PERMEABLE AND IMPERMEABLE GROYNES <i>Obaidullah Safie and Akihiro Tominaga</i>
		EXPERIMENTAL INVESTIGATION OF LOCAL SCOUR AROUND THE HEAD SECTION OF THE RUBBLE MOUND BREAKWATER IN CASE OF BROKEN WAVES <i>Yusuf Yasir, Muhammed Ikbal Tortumluoglu and Mustafa Dogan</i>
		EXPERIMENTAL AND NUMERICAL INVESTIGATION OF THE SCOUR CAUSED BY SHIP PROPELLER WASH IN CASE OF FINE SAND <i>Cansu Özyaman, Mustafa Doğan, Selim Altun and Vahid Abdi</i>
		SEABED SCOUR INDUCED BY PROPELLER JET <i>Ali Doğu, Damla Yılmaz, Kubilay Cihan, Ayşe Yüksel Ozan and Osman Yıldız</i>
16:15 - 16:30		Coffee Break
16:30 - 18:15	TS6: Coastal and Maritime Hydraulics CHAIR: V.S.Özgür Kirca	A Four-Decade Analysis of Deltaic Shoreline Changes in the Black Sea <i>Tahsin Görmüş, Berna Ayat and Burak Aydoğan</i>
		EXPERIMENTAL STUDY ON A SPAR TYPE FLOATING PLATFORM WITH MODIFIED MOORING LINES IN THE WAVE CHANNEL <i>Berguzar Ozbahceci, Ünver Ozkol, Kadir Aktaş, Elif Girgin, Ali Aridici and Yuksel Alkarem</i>
		THE USE OF GEOTEXTILE FILLED SAND ELEMENTS (GEOTUBE® UNITS) FOR EROSION PROTECTION OF BEACHES AND DUNES <i>Edwin Zengerink and Nazife İşik</i>
		NUMERICAL MODELING OF THE 30 OCTOBER 2020 SEFERİHISAR-İZMİR (AEGEAN SEA) TSUNAMI AND ITS COASTAL EFFECTS <i>Gozde Guney Dogan Bingol, Ahmet Cevdet Yalciner, Duygu Tufekci Enginar and Mehmet Lutfi Suzen</i>
		HYDRODYNAMICAL COMPARISON OF NAMI DANCE AND XBEACH NON-HYDROSTATIC ON A BENCHMARK STUDY <i>Yağiz Arda Cicek, Gozde Guney Dogan Bingol, Isikhan Guler, Cuneyt Baykal and Ahmet Cevdet Yalciner</i>
		EFFECT OF SEA LEVEL FLUCTUATIONS ON COASTAL FLOOD HAZARDS IN İZMİR BAY <i>Berguzar Ozbahceci, Salih Ak and Dogan Kisacik</i>
18:30 - 18:45		Coffee Break
18:45 - :)		



**İZMİR INSTITUTE OF TECHNOLOGY  
CAMPUS MAP**

**14<sup>th</sup> INTERNATIONAL CONFERENCE  
ON HYDROSCIENCE AND ENGINEERING**

26 - 27 MAY, 2022  
Izmir, TURKEY



**ICHE 2022**



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26 MAY	CONFERENCE ROOM #1	
09:30 - 10:30	Opening Ceremony	
10:30 - 10:45	Coffee Break	
10:45 - 11:45	Key Note 1 <i>Ana Maria da Silva</i>	
11:45 - 13:00	Lunch	
13:00 - 13:15	TS1: Computational Hydraulics and Turbulent Flows CHAIR: Yavuz Özeren	NUMERICAL SIMULATION of LANDSLIDE GENERATED SURFACE WAVES USING OVERSET GRID METHOD <i>Adnan Tolga Kürümüş, Reza Mohajer Barough, Erhan Tarık Karayama, Ender Demirel and İsmail Aydın</i>
13:15 - 13:30		LES OF ASYMMETRIC COLLIDING GRAVITY CURRENTS <i>Angelos Kokkinos and Panagiotis Prinos</i>
13:30 - 13:45		ASSESSMENT of HEC-RAS TWO-DIMENSIONAL HYDRAULIC MODEL for an URBANIZED REGION <i>Enver Taşçı, Gökçen Uysal and Aynur Şensoy</i>
13:45 - 14:00		NUMERICAL STUDIES ON PREDICTING VELOCITY FIELDS OF UPSTREAM CHANNEL THAT COMBINED WITH HEAD POND USED IN MECHANICAL WASTEWATER TREATMENT PLANT <i>Naqihan Sahin, and Rahim Şibil</i>
14:00 - 14:15		NUMERICAL INVESTIGATION OF FLOW AROUND AN ISOLATED PIER ON AN INCLINED SURFACE <i>Mete Köken, Emre Hesap, Gökçen Bombar, Şebnem Elçi and Antonio Heleno Cardoso</i>
14:15 - 14:30		Coffee Break
14:30 - 14:45	TS3: Water Quality and Ecohydraulics CHAIR: Tamer Ayvaz	A SIMULATION-OPTIMIZATION APPROACH FOR SOLVING THE WASTEWATER LOAD ALLOCATION PROBLEMS IN RIVER BASIN SYSTEMS <i>Derya Sadak, M. Tamer Ayvaz, Alper Elçi, Mehmet Dilaver and Selma Ayaz</i>
14:45 - 15:00		EVALUATING THE EFFECT OF LOW IMPACT DEVELOPMENTS ON WATER QUALITY IMPROVEMENT: A CASE STUDY IN BANDAR SUNWAY <i>Andreas Aditya Hermawan, Jing Pang Haw and Amin Talei</i>
15:00 - 15:15		JELLYFISH TRANSPORT MODEL DEVELOPMENT IN AN IRISH FJORD <i>Md Ashkar Bin Sayeed, Fearghal O'donncha, Tom Doyle, Reduan Atan, Michael Hartnett and Stephen Nash</i>
15:15 - 15:30		KITCHEN GREY WATER TREATMENT USING A RAINGARDEN <i>Badronnisa Yusuf and Amira Atiqah Mustafa</i>
15:30 - 15:45		AN EXPERIMENTAL STUDY ON ARTIFICIAL DESTRATIFICATION OF THERMALLY STRATIFIED RESERVOIRS <i>Sebnem Elçi, Oguz Hazar, Nisa Bahadiroglu and Derya Karakaya</i>
15:45 - 16:00		APPLICATION OF WASP MODEL FOR ASSESSMENT OF WATER QUALITY OF THE PORSUK RIVER, TURKEY <i>Emre Dumlu and Sebnem Elçi</i>
16:00 - 16:30	Coffee Break	
16:30 - 16:45	TS5: Sediment Transport and Reservoir Sedimentation CHAIR: Antonio Heleno Cardoso	SEDIMENTATION OF HASAN LAR DAM RESERVOIR USING BATHYMETRIC FIELD STUDIES AND GIS <i>Yakup Darama and Mehmet Ali Akgul</i>
16:45 - 17:00		NUMERICAL MODELLING of RESERVOIR FLUSHING: A REVIEW <i>Gregor Petkovsek and Yuichi Kitamura</i>
17:00 - 17:15		A GENERALIZED FORMULA FOR SEDIMENT INCIPIENT MOTION IN RIGID BOUNDARY OPEN CHANNEL FLOW <i>Mir Jafar Sadegh Safari</i>
17:15 - 17:30		EXPERIMENTAL INVESTIGATION OF FLOW FEATURE AT WAKE REGION OF CIRCULAR AND SQUARE BRIDGE PIER <i>Cansu Özyaman and Sandor Baranya</i>
17:30 - 17:45		COMPARISON OF LEVENBERG-MARQUART AND BAYESIAN LEARNING ALGORITHMS FOR SUSPENDED SEDIMENT LOAD PREDICTION <i>Merve Okan and Asli Bor</i>
17:45 - 18:00		EXPERIMENTAL INVESTIGATION ON THE GEOMETRY OF SCOUR HOLES AROUND A CYLINDER PIER <i>Ebru Taşkaya, Zehra Büyüker, Gökçen Bombar and António Heleno Cardoso</i>
18:00 - 18:45	Coffee Break	
18:45 - :)	WELCOME COCTAIL	

27 MAY	CONFERENCE ROOM #1	
09:30 - 10:30	Key Note 2 <i>Mustafa Altınakar</i>	
10:30 - 10:45	Coffee Break	
10:45 - 11:00	TS7: Watershed Hydrology and Management CHAIR: Ali Arda Şorman	PREDICTION of FLOOD SUSCEPTIBILITY USING FREQUENCY RATIO METHOD: A CASE STUDY of FIFTH DISTRICT, EGYPT <i>Mohamed Wahba, Hassan Shokry, Wael Elsadek, Shinjiro Kanae and Mahmoud Sharaan</i>
11:00 - 11:15		PERFORMANCE OF DIFFERENT LOSS METHODS IN SNOWMELT RUNOFF MODELING <i>Soykan Civelek, Gökçen Uysal, Talha Orhan and Aynur Şensoy</i>
11:15 - 11:30		APPLICATION OF IMPROVED VISUALIZATION TO THE TREND ASSESSMENT OF PRECIPITATION IN THE EASTERN BLACK SEA BASIN, TURKEY <i>Mehmet Berkant Yıldız, Murat Şan, Murat Kankal and Sinan Nacar</i>
11:30 - 11:45		ASSESSMENT OF REGIONAL DROUGHT TRENDS BY USING IMPROVED VISUALIZATION VERSION OF INNOVATIVE TREND ANALYSIS AND MANN KENDALL TEST <i>Mehmet Berkant Yıldız, Sinan Nacar, Murat Kankal and Murat Şan</i>
11:45 - 12:00		EVALUATING THE POTENTIAL OF GRIDDED PRECIPITATION DATASETS FOR HYDROLOGICAL MODELING UNDER DIFFERENT CALIBRATION SCENARIOS <i>Hamed Hafizi and Ali Arda Şorman</i>
12:00 - 12:15		MULTI-OBJECTIVE HYDROLOGIC MODEL CALIBRATION FOR RUNOFF FORECASTING <i>Yusuf Oğulcan Doğan, Ali Arda Şorman and Aynur Şensoy</i>
12:15 - 13:30	Lunch	
13:30 - 13:45	TS9: Watershed Hydrology and Management CHAIR: Hafzullah Aksoy	A SHALLOW ARTIFICIAL NEURAL NETWORK MODEL FOR RAINFALL DISAGGREGATION <i>Hüsamettin Tavsi and Burak Aydoğan</i>
13:45 - 14:00		A QUANTITATIVE COMPARISON OF GROUND-BASED, SATELLITE-BASED AND MODEL-BASED PRECIPITATION PRODUCTS OVER TURKEY <i>Onur Gungör Sahin, Behnam Khorrami and Orhan Gunduz</i>
14:00 - 14:15		SIMULATION OF WATER RESOURCES OF TAHTALI-SEFERİHİSAR SUB-BASIN BASED ON A WEAP MODEL <i>Sait Mutlu Karahan and Şebnem Elçi</i>
14:15 - 14:30		DATA-DRIVEN WATER QUALITY ASSESSMENT OF INLAND WATERBODIES USING SATELLITE SPECTRAL DATA: A CONCEPTUAL FRAMEWORK <i>Osama H. Heba and Şebnem Elçi</i>
14:30 - 14:45		DROUGHT INDICES AND INTENSITY-DURATION-FREQUENCY CURVES FOR KUCUK MENDERES RIVER BASIN <i>Yonca Cavus, Halil Ibrahim Burgan, Hafzullah Aksoy, Hakan Aksu, Bulent Selek, Ebru Eris and Hulya Boyacıoğlu</i>
14:45 - 15:00		CRITICAL DROUGHT INTENSITY-DURATION-FREQUENCY CURVES AND SPATIAL DISTRIBUTION OF PRECIPITATION DEFICIT <i>Yonca Cavus and Hafzullah Aksoy</i>
15:00 - 15:15	Coffee Break	
15:15 - 15:30	TS11: Sediment Transport and Reservoir Sedimentation CHAIR: Melih Çalamak	A RELIABILITY-BASED INVESTIGATION of INCEPTION of MOTION For BED SEDIMENT <i>Omer Sari and V. S. Ozgur Kirca</i>
15:30 - 15:45		EXPERIMENTAL STUDY OF A HOMOGENEOUS DAM BREAK WITH A BREACH <i>Ebru Taşkaya, Zehra Büyüker, Büşra Öztürk, Gökçen Bombar, Gökmen Tayfur</i>
15:45 - 16:00		APPLICATION OF GENETIC ALGORITHM METHOD TO DEVELOP EQUATIONS FOR WATER CAPTURING PERFORMANCE (WCP) AND SEDIMENT RELEASE EFFICIENCY (SRE) OF <i>Oguz Hazar, Gokmen Tayfur and Sebnem Elci</i>
16:00 - 16:15		HBV-DE: A NEW DIFFERENTIAL EVOLUTION-BASED CALIBRATION APPROACH FOR THE HBV HYDROLOGICAL MODEL <i>Pinar Gokce Durgut, Tugba Altıparmak Ay and M. Tamer Ayvaz</i>
16:15 - 16:30	ESTIMATION OF LEAKY-CONFINED AQUIFER PARAMETERS FROM PUMPING TEST DATA BY USING LEVENBERG-MARQUARDT ALGORITHM <i>Tugba Altıparmak Ay, Pinar Gokce Durgut and M. Tamer Ayvaz</i>	
16:30 - 17:00	Coffee Break	
17:00 - 18:00	CLOSING CEREMONY	
19:00 - :)	GALA DINNER	

27 MAY	CONFERENCE ROOM #2	
09:30 - 10:30	Coffee Break	
10:30 - 10:45	TS8: Urban Flooding and Drainage CHAIR: Gökmen Tayfur	FLOOD HAZARD ANALYSIS DUE TO OVERTOPPING OF DALAMAN AKKOPRU DAM: A CASE STUDY <i>Kutay Yılmaz, Yunus Oruc, Yakup Darama, Abiddin Berhan Melek and Cagla Irmak Unal</i>
10:45 - 11:00		HYDRODYNAMIC MODELLING OF THE URBAN FLOODING IN BOZKURT DISTRICT, KASTAMONU, TURKEY ON AUGUST 11, 2021 <i>Hayri Baycan, Ceyhan Gök and Uğur Boyraz</i>
11:00 - 11:15		FLOOD MODELING OF EZINE AND AYANCIK STREAM WATERSHEDS IN WESTERN BLACK SEA BASIN, TURKEY <i>Hayri Baycan, Miraç Nur Ciner, Ceyhan GÖK, İsmail Bilal Peker and Sezar Gülbaz</i>
11:15 - 11:30		VARIABILITY OF PRECIPITATION UNDER THE EXPECTED CHANGE IN CLIMATE USING CMIP5 PROJECTIONS OVER ENTIRE TURKEY <i>M. Tuğrul Yılmaz, N. Erhan Ersoy and İsmail Yuçel</i>
11:30 - 11:45		PERFORMANCE EVALUATION OF THE EUROPEAN FLOOD AWARENESS SYSTEM OVER ANTALYA BASIN, TURKEY <i>Koray Kamil Yılmaz and Robert Adler</i>
11:45 - 12:00	Poster Presentation	TRANSITION PROCESSES OF SEDIMENT TRANSPORT MODES WITH STREAM GRADIENT CHANGES <i>Takashi Wada, Kazuki Kobayashi and Hiroshi Miwa</i>
12:00 - 12:15		GRAVEL MOBILIZATION AND CHANNEL EVOLUTION DUE TO SAND-COVERING ON GRAVEL BEDS <i>Hiroshi Miwa, Takashi Wada and Yuhei Oota</i>
12:15 - 13:30	Lunch	
13:30 - 13:45	TS10: Advances in Laboratory Measurements and Instrumentation CHAIR: Serife Yurdağul Kumcu	A WAVE CONTROL SYSYTEM FOR IRREGULAR AND REGULAR WAVE GENERATION <i>Bassem Nouloui, Muhammed İkbal Tortumluoğlu, Mustafa Doğan and Yağın Arısoy</i>
13:45 - 14:00		INVESTIGATION OF THE CHARACTERISTICS OF LABYRINTH SPILLWAYS BY EXPERIMENTAL AND MATHEMATICAL MODELLING METHODS <i>Ezgi İspir and Serife Yurdağul Kumcu</i>
14:00 - 14:15		SIMULTANEOUS LATERAL FLOW OVER WEIRS AND UNDER GATES (H- WEIRS) <i>Veysi Kartal and M. Emin Emiroğlu</i>
14:15 - 14:30		FRICIONAL PRESSURE LOSSES IN SEDIMENT TRANSPORTING CLOSED CONDUITS <i>Pelin İlker and Mehmet Sorgun</i>
14:30 - 14:45		NEW DEVELOPMENT IN CCHE1D CHANNEL NETWORK MODELS <i>Yaoxin Zhang and Yafei Jia</i>
14:45 - 15:00		Coffee Break
15:00 - 15:15	TS12: Water Resources and Climate Change CHAIR: Muhammet Emin Emiroğlu	A SUSTANIABLE CLEAN ENERGY SOURCE for MITIGATING CO2 EMISSIONS in WEST ANATOLIAN-AEGEAN EZTENSIONAL REGION <i>Tolga Ayzıl, Dornadula Chandrasekharan and Alper Baba</i>
15:15 - 15:30		EXPERIMENTAL INVESTIGATION OF LANDSLIDE GENERATED WAVES IN A LABORATORY TEST SET-UP <i>Reza Mohajer Barough, Erhan Tarık Karayama, Adnan Tolga Kürümüş, Ender Demirel and İsmail Aydın</i>
15:30 - 15:45		PHYSICAL and NUMERICAL MODELLING of ENERGY DISSIPATION RATIOS of T_SHAPED OF ENERGY DISSIPATING BLOCKS in STILLING BASIN <i>Serife Yurdağul Kumcu, Kamil İspir and Ozgur Yılmaz</i>
15:45 - 16:00		EXPERIMENTAL STUDY OF THE EVOLUTION OF THE BREACH AND THE DISCHARGE THROUGH THE BREACH RESULTING FROM PIPING DUE TO SEEPAGE AT THE UPPER CORNER OF EARTH-FILL DAM <i>Sukru Guney, Emre Dumlu, Merve Okan and Gokmen Tayfur</i>
16:00 - 16:15	IRRIGATION WATER CONSERVATION PRACTICES in the MISSISSIPPI RIVER ALLUVIAL PLAIN: On-FARM RESERVOIRS <i>Yavuz Ozeren, Daniel Wren and William Rossell</i>	
16:15 - 16:30	3D NUMERICAL SIMULATION OF FLOW, SEDIMENT AND MERCURY DISTRIBUTION IN ENID LAKE, MISSISSIPPI <i>Xiaobo Chao, A.K.M. Azad Hossain, Yafei Jia and James Cizdziel</i>	
16:30 - 16:45	Poster Presentation	SIMULATION OF FLOW STRUCTURE IN 90° GOMATI RIVER BEND USING CCHE2D MODEL <i>Animesh Das and Sushant Kumar Biswal</i>
16:45 - 17:00		STOCHASTIC SUSPENDED SEDIMENT TRANSPORT with MEMORIES <i>Serena Y. Hung and Christina W. Tsai</i>
16:45 - 17:00	Coffee Break	
18:00 - 18:45	Coffee Break	
18:45 - :)	WELCOME COCTAIL	

WORKSHOP

**28 MAY**  
**ALL DAY - TECHNICAL TRIP**  
**Ephesus Ancient Ruins - Cine Dam**