



NEAR EAST UNIVERSITY
WPMC 2019
2ND INTERNATIONAL
CONFERENCE ON

**WATER PROBLEMS
IN THE MEDITERRANEAN
COUNTRIES
6-10 MAY 2019**

NEAR EAST UNIVERSITY, NICOSIA, TURKISH REPUBLIC OF NORTHERN CYPRUS
www.neu.edu.tr

Day 1: May 6th 2019

Venue: İrfan Günsel Congress Center, Hall 2

9:00- 10:00 Registration

10:00– 12:00 Opening Ceremony

Opening Speeches:

President of the Conference: Prof. Dr. Hüseyin Gökçekuş

President of the Conference Scientific Committee: Prof. Dr. James La Moreaux

President of Chamber of Civil Engineers: Gürkan Yağcıoğlu

Vice Rector of Near East University: Assoc. Prof. Dr. Mustafa Kurt

Mayor of Gönyeli: Ahmet Benli

Plenary Speeches:

**Dr. Azhari Fatahalla Ahmed - Nobel Peace Prize for 2007 to the IPCC
Executive Manager and Co-Founder of Eco Qatar, LLC**

“The Current Status of the UN Framework Convention on Climate Change (UNFCCC), with Special Reference to the Paris Agreement and the Requirements for its Implementation by Parties”

Mr. Evren Yıldız - State Hydraulic Works (DSİ), Turkey

“Water Transfer Project from Turkey to Turkish Republic of Northern Cyprus”

Lunch Break: 12:00 – 14:00

Venue: İrfan Günsel Congress Center, Hall 2

14:00 – 16:00 Session 1: Hydraulics, Hydrology, and Hydrogeology

14:00 - 14:30 Plenary Speech: Prof. Dr. Miktad Kadioğlu - Istanbul Technical University, Turkey

“Climate Risk Management”

Moderator: Prof. Dr. Miktad Kadioğlu

1. Gizem Senel, Çiğdem Göksel, Ahmet Özgür Doğru

Coastal Lagoon Mapping and Monitoring Potential Evaluation of Landsat-8 OLI and Sentinel-2 MSI in Enez Dalyan Lagoon, Turkey.

2. Youssef Kassem, Hüseyin Gökçekuş, Hüseyin Çamur, Engin Esenel

Statistical analysis and the Probability Distribution of Monthly Rainfall in seven selected locations in Northern Cyprus.

3. Ahmet Özgür Doğru, Rawaa A. Abdulhussein, Merve Kuloğlu, Selda Mercan, Faruk Aşıcıoğlu

A GIS Assisted Methodology for Monitoring Illicit Drug use in Waste Water.

4. Çiğdem Göksel, Gizem Senel, Ahmet Özgür Doğru

Determination of Shoreline Change in the Black Sea Cost of İstanbul Using Remote Sensing and GIS Technology.

5. Hüseyin Gökçekuş, ² Youssef Kassem, ³ Ogodor Elvis Ikechukwu

Climate Change on Groundwater Resources in Nigeria: Review study.

Coffee Break: 16:00-16:20

Venue: İrfan Günsel Congress Center, Hall 2

16:20 - 18:20 Session 2: Water and Climate Change

Moderator: Dr. Azhari F. M. Ahmed

1. Jazuli Abdullahi, Gözen Elkıran, Vahid Nourani, AlaTahsin

A novel approach for precipitation modeling using artificial intelligence based ensemble model

2. Hüseyin Gökçekuş, Ersin Kıral, Gülsen Kıral, Nima Eini, Berna Uzun

Analysis and Prediction of Annual Precipitation values in Cyprus.

3. Hüseyin Gökçekuş, Derin Orhon, Tagesse Gichamo, Biruk Abate, Feto Esimo, Seval Sözen

Analysis of Hydrological Variability of Lake Beseka, Oromia Ethiopia for Sustainable Watershed Management.

4. Rabiü Aliyu Abdulkadir, Shaban Ismael Albarka Ali, Parvaneh Esmaili

Forecasting of Daily Rainfall in Ercan Airport, Northern Cyprus: A Comparison of Linear and Non-linear Models.

5. Youssef Kassem, Hüseyin Çamur, Engin Esenel, Hüseyin Gökçekuş

Mathematical modeling for hourly Rainfall Prediction A case study Mersin, Turkey

Dinner: 19:00 – 21:00. Hosted by Mayor of Gönyeli: Mr. Ahmet Benli

Day 2: May 7th 2019

Venue: İrfan Günsel Congress Center, Hall 2

09:00 - 09:40: Plenary speech: Prof. Dr. Derin Orhon

“Autonomous Desalination for Improving Resilience and Sustainability of Water Management in Northern Cyprus”

09:40 - 12:30 Session 1:Water Quality

Moderator: Prof. Dr. Umut Türker

1. Nahad Rehmat Ragan, Hussin A.M Yahia, Shaban Ismael Albrka Ali

Assessment of Drinking Water Quality and Its Impact on Residents Health in Muscat City, Oman.

2. Hüseyin Gökçekuş, Youssef Kassem, Rouzbeh Jafari Togifhi

Predicting the Total Rainfall at Various Selected Locations in Iran using Response Surface Methodology.

3. Toma Maina Antip

Littering and Its Possible Effect On Water Quality: A Case Study Of Jos-Bukuru Area.

4. Gebre Gelete, Hüseyin Gökçekuş, Dilber Uzun Özşahin, Tagesse Gichamo

Evaluation of Disinfection Techniques of Water Treatment.

Coffee Break: 11:00-11:15

Moderator: Assoc. Prof. Dr. Efsun Dindar

5. Gökhan Kayan, Amin Riazi, Esra Erten, Umut Türker

Optimizing Ungagged Watershed Parameters for the Evaluation of Runoff Discharge Based on SCS-CN Mmodel.

6. Hüseyin Gökçekuş, Dilber Uzun Özşahin, Mubarak Mustapha

Simulation and Evaluating of Water Sterilization Devices.

7. Mukhtar Nuhu Yahya, Ibrahim Khalil Umar, Abba Ibrahim, Hüseyin Gökçekuş

Water Quality Evaluation of some Boreholes and Dug Wells in Kano-Nigeria.

8.Tagesse Gichamo, Hüseyin Gökçekuş, Dilber Uzun Özşahin, Gebre Gelete

Evaluation of Different Natural Wastewater Treatment Alternatives

Lunch Break: 12:30-14:00

PARALLEL SESSIONS Hall 2 & Hall 4

Venue: İrfan Günsel Congress Center, Hall 2

14:00 - 16:00 Session 3: Emerging Pollutants in Water Resources/Microbial Contaminants in Water Resources

Moderator: Assoc. Prof. Dr. Nadir Dizge

- 1. Hüseyin Gökçekuş, Dilber Uzun Özşahin, Mukhtar Nuhu Yahya**
Comparative Analysis of Wastewater Treatment Technologies
- 2. Hüseyin Gökçekuş, Derin Orhon, Gözde Oğuz, Seval Sözen**
Integrated Water and Wastewater Management Strategy in TRNC – Basis for an Action Plan.
- 3. Sani Isah Abba, Gözen Elkıran, Vahid Nourani**
Improving Novel Extreme Learning Machine using PCA Algorithms for Modeling the Performance of Municipal Wastewater Treatment Plant.
- 4. Oubelkacem Abdellah, Choukr-Allah, Scardigno, Alessandra, Dragonetti Giovanna, Khadra Roula**
Treated Wastewater use on Citrus in Morocco: Assessing the Economic Feasibility of Irrigation and Nutrient Management Strategies.
- 5. Vahid Nourani, Elnaz Sharghi Atefeh Aliashrafizaghi, Hesam Najafi**
The Use of Support Vector Regression and Wavelet-Based Neural Networks for Real Municipal Wastewater Treatment Plant Effluent Quality Prediction.
- 6. Sani Isah Abba, Gözen Elkıran, Vahid Nourani**
Non-linear System Identification Modeling of Effluents Characteristic in municipal Wastewater Treatment Plant.
- 7. Tarzan Legoviç**
Carrying Capacity of Fish Culture

Venue: İrfan Günsel Congress Center, Hall 4

14:00 - 16:00 Session 2: Wastewater Treatment and Management

Moderator: Prof. Dr. Olcay Topaç Şaban

- 1. Zeynep Bilici, Zelal Işık, N. Altınay Perendeci, Bülent Keskinler, Nadir Dizge**
Protein and Lactose Separation by Modified Ultrafiltration Membrane using Layer by Layer Technique.
- 2. Okunbo Ayodeji Andrew, Saltuk Pirgaloğlu, Şifa Doğan**
Heat Activated Persulfate Oxidation of Reactive black 5.
- 3. Youssef Kassem, Hüseyin Gökçekuş, Wassim Janbein, Nima Eini, Dlveen Ali**
Public Opinion on Surface Water, Environmental Conditions, and Climate Change in Northern Cyprus.
- 4. Youssef Kassem, Hüseyin Gökçekuş, Fidan Aslanova, Yitbarek Andualem**
Assessments of Urban Domestic Water Supply Challenges in Case of Injibara Town, Ethiopia.

5. Nurudeen Kadejo Aileru, Olalekan Hammed Yusuf, Olabisi Olaitan Omobolaji,
Water Quality Challenge and Causes in Coastal States of Nigeria.

6. Hüseyin Gökçekuş, Youssef Kassem, Julia Aljamal
Mathematical Modeling for Monthly Rainfall Rate Prediction: A Case Study Morphou,
Northern Cyprus.

7. Tarzan Legoviç
How Many Visitors to Marine Nature Protection Park

Coffee Break: 16.00-16.15

Venue: İrfan Günsel Congress Center, Hall 2

16:15 - 19:00 Session 3:Water for Sustainable Cities

16:15 - 16:45: Plenary Speech: Prof. Ahmet Karagündüz

“Electrical Field Applications in Membrane Processes”

Moderator: Prof. Ahmet Karagündüz

1. Zehra Betül Öcal Sarıhan, Ahmet Karagündüz, Bülent Keskinler, Mehmet Salim, Emin Ender Çelebi, Gizem Başaran Dindaş, Melike Tuna
Developing A Sustainable Process With Boron Removal From Water.

2. Gözen Elkıran, Adamu Dahiru, Hüseyin Gökçekuş
Water Resources Management and Trend of Water use in North Cyprus.

3. Arif Yurtsev
An Economic Cost Benefit Analysis of Supplying Potable Water to Households in Northern Cyprus.

4. Philip Isaac Omwene, Meltem Yağcıoğlu, Ülker Diler Keriş Sen, Ahmet Erdem, Ahmet Karagündüz, Murat Dogru, Bülent Keskinler, Efsun Dindar, Nadir Dizge
Recovery of Succinic Acid from Cheese Whey Fermentation Broth by Reactive Extraction.

5. Meltem Yağcıoğlu, Philip Isaac Omwene, Ülker Diler Keriş Sen, Ahmet Karagündüz, Emrah Nikerel, Abdurrahman Akyol, Bülent Keskinler, F. Olcay Topaç Şaban, Fatma Ertan
Influence of Initial Lactic Acid Concentration on Succinic Acid Production.

6. Şifa Doğan
Risk Assessment of Selected Cephalosporins in Surface Waters: A regional case study.

7. Hüseyin Gökçekuş , Dilber Uzun Ozsahin , Nima Eini, Berna Uzun
Evaluating and Selecting the Best Domestic Water Standards

Day 3: May 8th, 2019

Venue: İrfan Günsel Congress Center, Hall 2

09:00 - 12:30 Session 1:Water Quality

09:00- 09:35: Plenary Speech: Prof. Dr.Vahid Nourani

“Application of Integral Transforms in Hydro-Climatic Studies”

Moderator: Prof. Dr. Vahid Nourani

1. Huseyin Gökçekuş, Derin Orhon, Gebre Gelete, Biruk Abate, K. Narayanan, Seval Sözen
Management strategy for Safe Drinking Water in Developing Countries – A Case Study for Assela, Ethiopia.

2. Bello Yusuph Adebayo
Ground Water used For Sustainable Irrigation in Nigeria.

3. Hüseyin Gökçekuş, Youssef Kassem, Qussai Omari
Water Resource in Syria: Past, Present and Future.

4. Youssef Kassem, Hüseyin Gökçekuş, Mohamad Asaad Shehab
Water Resources and Rainfall Distribution Function: A Case Study in Lebanon.

5. Faisal Mustafa, Gizem Şanlıtürk, Mümtaz Güran, Mustafa Gazi
Synthesis and Characterization of Alginate Beads Encapsulated Virkon S for Bacterial Disinfection Of Water.

Coffee Break: 11.00-11.15

6. Daniel F. Sillassie
Irrigation Water use Charge: To Reduce Climate Change Impact on Water Resources.

7. Hüseyin Gökçekuş, Vahid Nourani, Saied Jafariroodsari
Lessons from Artificial Recharge: A Case Study of Jafakend Watershed.

8.Khalil Rahmeh, Beste Çubukçuoğlu
The Impact of Cultural Activities on Water Systems and Its uses for Different Communities.

9.Hüseyin Gökçekuş, Youssef Kassem, Temesgen Mekuriaw, Julia Aljamal
Evaluating Impact of Land-use/Land-Cover Change on Surface Runoff using Arc SWAT Model: the Case of Sore and Geba Watershed, Ethiopia.

Lunch Break: 12:30-14:00

Venue: İrfan Günsel Congress Center, Hall 2

14:00- 16:50 Session 2: Sea water and environment

**14:00 - 14:30: Plenary Speech By: The President of Conference Scientific Committee:
Prof. Dr. James La Moreaux**

“ Limestone or Karst Terrains and Their Associated Concern”

Moderator: Prof. Dr. İlkay Salihoğlu

1. Bertuğ Akıntuğ, İbrahim Bay, Hüsnü Coşan, Cumhur Aydın, Abdullah Ekinci

Case Study: Analysis of 2018 Ciklos, North Cyprus Flash Flood.

2. Kabir Sadeghi, Fatemeh Nouban, Omer Damdelen

Analytical Modeling of the Characteristics of sea waves of the Northern Coastal Zones of Cyprus by Applying a Proposed Simplified Algorithm

3. Aliye Çağrı Deliceirmak, İlkay Salihoğlu

Physical Oceanographic Features of the Cilician Basin and Waste Water Dumping at the Coastal Zone of Kyrenia.

4. Vahid Nourani, Vahid Rezaverdinejad, Sayed-Saber Sharifi

Artificial Intelligence Models for Estimation of Monthly Global Solar Radiation: Performance Comparison of ANN and ANFIS Models.

5. Mehmet Fatih Hüseyinoğlu, Volkan Demir, Murat Draman, Yara Arda

Spatio-Temporal Distribution Of Lionfish, Pterois Miles In Kas-Kekova Marine Protected Area, Antalya, Turkey.

6. Kutlu Bayramoğlu and Mehmet Fatih Hüseyinoğlu

A Review on MARPOL Regulations with an Emphasis on Ballast Waters and Akdeniz Protected Area.

7. Mohammad Khoddamik Hosroshahi

Markovian Based Modeling for Wave Height Forecasting.

Coffe Break: 16:50-17:05

Venue: İrfan Günsel Congress Center, Hall 2

17:05 -19:10 Session 2: Emerging Pollutants in Water Resources/Microbial Contaminants in Water Resources

Moderator: Prof. Dr. Kabir Sadeghi

1. Dr. Azhari Fatahalla Ahmed - Nobel Peace Prize for 2007 to the IPCC

Executive Manager and Co-Founder of Eco Qatar, LLC

A Framework Aligned with Climate Change and Millennium Development Goals for Arabian Gulf ROPME Sea Area (RSA).

2. Nazak Rouzegari, Vahid Nourani, Amir Molaju

Evaluating the Efficiency of Genetic Algorithm (GA) in Optimizing Reservoir Operation Rules with Considering Environmental Water Demand.

3. Toma Maina Antip, Aşkın Kiraz

Achieving Water Pollution Control Through The Use Of Selected Instructional Strategies.

4. Akeem Oladipo, Mustafa Gazi, Ayodeji Ifebajo

Sun-Light Driven Enhanced Azo Dye Decontamination from Aqueous Solution by Co-CuFe₂O₄ Derived from Layered Double Hydroxide.

5. Hüseyin Gökçekuş, Youssef Kassem, Julia Aljamal

Analysis of Different Combinations of Meteorological Parameters in Predicting the Monthly Rainfall with ANN Approach: A Case Study at Morphou in Northern Cyprus.

6. Nuran Öze

Water and Culture

7. Ibrahim Özejder, Ayça Demet Atay

Are the News Media Fostering Water Conservation Culture? An Analysis of Turkish Cypriot Press.

Dinner : 19:30 – 21:30 - Dinner hosted by Assoc. Prof. Dr. İrfan Suat Günsel, Chairman of the Board of Trustees of Near East University.

Day 4: May 9th, 2019

10:00 – 15:00 Field Trip to Water Transfer Project from Turkey to TRNC – Geçitköy Reservoir

Meeting Point: In front of Near East University Grand Library