



Port Said– Egypt

09 – 10 March 2023





Under the auspices of :

His Excellency Admiral. Osama Rabie

Chairman and Managing Director of Suez Canal Authority

&

His Excellency General. Adel Al-Ghadban

Port Said Governor





Conference Honorary Chairmen

Prof. Dr. Ashraf Elshihy

*President of EgyptianChinese University, Egypt
Former Minister of Higher Education and Scientific Research, Egypt*

&

Prof. Dr. Ayman Mohamed

President of Port Said University, Egypt



It is my great pleasure to welcome you all to the Twenty third International Water Technology Conference. This conference has already established itself as a key event in which the most influential researchers in the different Water-related fields and regulators from related governmental bodies and firms can come together to exchange insights and to influence each other's agendas.



This 23rd session is organized in Port Said.. It is a message addressed world wide of peace and security in all Egypt.

On this occasion, I would like to extend my deep gratitude to the organizing committees, for their continuous hard work in the organization of this conference.

I would like to extend my warmest regards to every guest, participant, and observer joining our conference; hoping that it will be successful and fruitful.

On behalf of the International Water Technology Association members, I would like to acknowledge the encouragement and support received from the official organizations in Egypt which have assured the continuity of Association activities since 2004 up to now.

Deep gratitude for conference sponsors; the respected ministers for their auspices and support for the organization of this conference.

Prof. Dr. Magdy Abou Rayan

President of International Water Technology Association

Former President of Mansoura University

IWTC23 Chairman



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**WELCOME
BIENVENUE**

**MERHABA
BENVENUTO**

The organizing committees extend to every participant a warm welcome to the Twenty third International Water Technology Conference IWTC 2023.

We hope that you will find time to follow researches and savor the ethnic, business, international and cultural aspects of our setting. We will do our best to make your stay in Port Said, Egypt very enjoyable.

Organizing Committee

Visit our Web Page: <http://iwtc2019.website2.me>

CONFERENCE ORGANIZATION

The conference is organized by:

Main Organizer



International Water Technology Association (IWTA)

In co-operation with



Port Said University, Egypt



Egyptian Chinese University, Egypt

Academic Organizers



*Academy of Scientific Research and Technology, (ASRT), **Egypt.***



*Arab Water Council, (AWC), **Egypt.***



*French Geological Survey (BRGM), France's Public Institution in Earth Science Applications, **France***



*Holding Company for Water and Wastewater, **Egypt***



*Kuwait Institute for Scientific Research (KISR), **Kuwait***



*Mansoura University, **Egypt***



*National Research Council (CNR), **Italy***



*Shirshov Institute of Oceanology, RAS, **Russia***

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Conference Chairperson

Magdy Abou Rayan

*President of International Water Technology Association
&
Ex-President of Mansoura University, Egypt.*

Conference Vice Chairmen

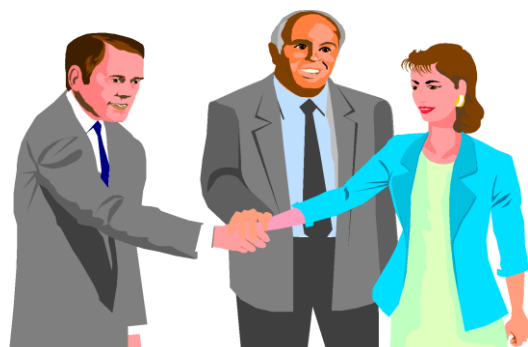
Andrea Scozzari

National Research Council (CNR-ISTI), Italy

Conference Secretary General

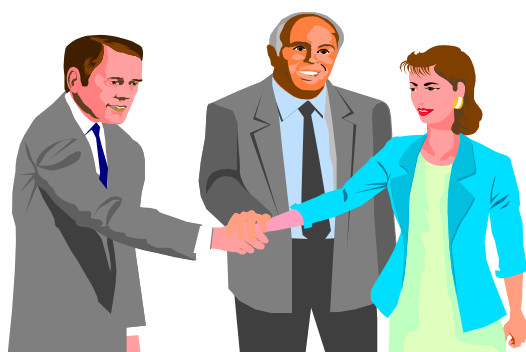
Kamal El-Nahhas

Suez Canal Authority, Egypt



CONFERENCE ORGANIZING COMMITTEE

 <i>Abd Elnaby Kabeel</i>	<i>Tanta University, Egypt</i>
 <i>Ali Al Magar</i>	<i>Environment Consult, Saudi Arabia</i>
 <i>Hassan Fayed</i>	<i>Narmer-engsim LLC. USA</i>
 <i>Ibrahim Khalid</i>	<i>M. Matroh Water and Wastewater co, Egypt</i>
 <i>Lachen Benaabidate</i>	<i>USMBA-Fez, Morocco</i>
 <i>Mohamed Mossad</i>	<i>Mansoura University, Egypt</i>
 <i>Nabil Hassan</i>	<i>Zagazig University, Egypt</i>
 <i>Oliver Saavedra</i>	<i>Universidad Privada Boliviana, Bolivia</i>
 <i>Rawya Rizk</i>	<i>Port Said University, Egypt</i>
 <i>Sherine S. Ismail</i>	<i>NR Inst., MWRI, Egypt.</i>
 <i>Tamim Younos</i>	<i>GWI Academy, Washington, DC, USA</i>

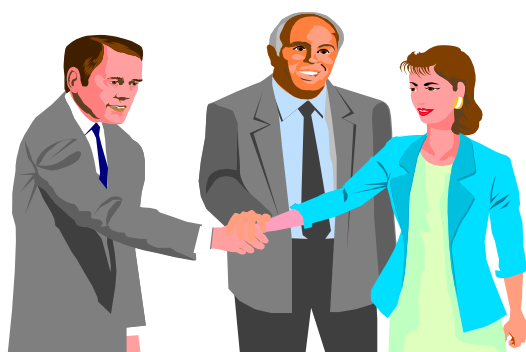


SCIENTIFIC COMMITTEE CHAIRMEN

-  *Andrey Kostianoy* *Russian Academy of Sciences, Russia*
 *Abdelazim Negm* *Zagazig University, Egypt*

SCIENTIFIC COMMITTEE MEMBERS

-  *Adel Alhadad* *Water Research Center, Kuwait*
 *Ahmed Moustafa* *Coastal Research Institute (CoRI), Egypt*
 *Ahmed Rashed* *Water Management Research Inst., Egypt*
 *Amgad Alansary* *Cairo University, Egypt*
 *Amr El-Feki* *Mansoura University, Egypt*
 *Hossam El-Moghazy* *Alexandria University, Egypt*
 *Ibrahim Gar Al-Alm* *Mansoura University, Egypt*
 *Inas Abu Talib* *National Research Center, Egypt*
 *Maha El-Shafey* *Housing and Building National Research center, Egypt*
 *Martina Zeleňáková* *Technical University of Košic, Slovakia*
 *Mohamed Ashour* *Assuit University, Egypt*
 *Nabil Elmenshawy* *Port-Said University, Egypt*
 *Osama Saleh* *Zagazig University, Egypt*
 *Saad Ragab* *Virginia Tech. University, USA*
 *Safey Elden Metwaly* *Desert Research Center, Egypt*
 *Sohair I. Abou-Elela* *National Research Center, Egypt*
 *Yasser Ahmed Hamed* *Port Said University, Egypt*



EXECUTIVE AND PROGRAM COMMITTEE



Kamal El-Nahas

Suez Canal Authority, Egypt (chairman)



Mohamed Bassyouni

Port Said University, Egypt



Reham Ibrahim

IWTA, Egypt



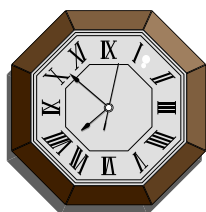
Walaa Ibrahim

IWTA, Egypt

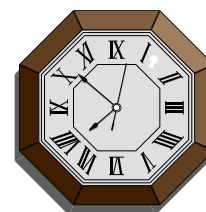


WalaaTarek

Mansoura University, Egypt



BRIEF PROGRAM



Thursday– March09, 2023

09:00 – 18:00	Registration
11:00 – 12:00	Opening Ceremonies
12:00 – 12:30	Coffee Break
12:30 – 13:30	Keynote Session (Moderators: Prof. Dr. Ashraf Elshihy & Prof. Dr. Magdy About Rayan & Prof. Dr. Andrea Scozzari) (1) Prof. Dr. Huessin Elatfy (2) Prof. Dr. Salvatore Straface (3) Eng. Amr Seoudy
13:30 – 15:00	Special Session, New Trends in Water Treatment Technology
15:00 – 15:30	Workshop (1), Contribution of Port Said University to Confront Climate Changes
15:30 – 16:00	Coffee Break
16:00 – 17:00	Session (1)
17:00 - 19:00	Workshop (2), Optimal Exploitation Strategies for Sustainable Utilization of Fossil Groundwater Reserves in Egypt
19:00	Dinner

Friday –March 10, 2023

09:30 – 10:45	Sessions (2), (3)
10:45– 11:45	Workshop (3), Climate Change Impact on Coastal Regions
11:45 – 13:15	Break
13:15 – 14:15	Sessions (4), (5)
14:15 – 15:15	Session (6)
15:15 – 16:00	Workshop (4), Water, Human Development and Sustainable Development: Triple Nexus (in Arabic language)
16:00 – 17:00	Session (7)
17:00 – 17:45	Workshop (5), New research Directions for Seawater Desalination Using Solar Energy
17:45 –18:30	Closing Ceremonies
19:00	Dinner

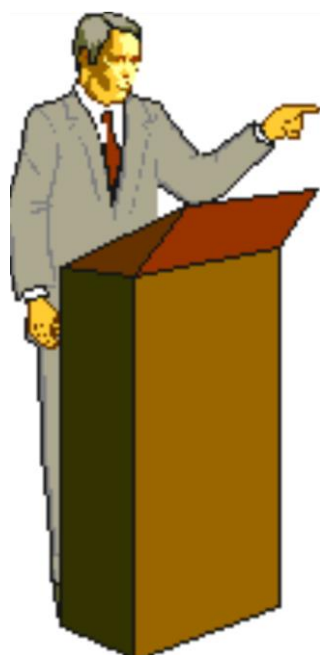
Thursday– March 09, 2023

Time	Room (A)
09:00 – 18:00	Registration
11:00 – 12:00	Opening Ceremonies
12:00 – 13:30	Coffee Break
12:30– 13:30	Keynote Session (Moderators: Prof.Dr. Ashraf Elshihy & Prof.Dr. Magdy Abou Rayan & Prof. Dr. Andrea Scozzari) (1) Prof. Dr. Huessin Elatfy (2) Prof. Dr. Salvatore Straface (3) Eng. Amro Seoudy
13:30– 15:00	Special session, <i>New Trends in Water Treatment Technology: Membrane Technology</i>
15:00 –15:30	Workshop (1), <i>Contribution of Port Said University to Confront Climate Changes</i>
15:30 – 16:00	Coffee Break
16:00 – 17:00	Technical session (1)
17:00 – 19:00	Workshop (2), <i>Optimal Exploitation Strategies for Sustainable Utilization of Fossil Groundwater Reserves in Egypt</i>
19:00	Dinner

Friday – March 10, 2023

Time	Room (A)	Room (B)
09:30 – 10:45	Technical session (2)	Technical session (3)
11:00 – 11:45	Workshop (3), <i>Climate Change Impact on Coastal Regions</i>	
11:45 – 13:15	Break	
13:15 – 14:15	Technical session (4)	Technical session (5)
14:15 – 15:15	Technical session (6)	
15:15 – 16:00	Workshop (4), <i>Water, Human Development and Sustainable Development: triple nexus (in Arabic language)</i>	
16:00 – 17:00	Technical session (7)	
17:00 – 17:45	Workshop (5), <i>New research Directions for Seawater Desalination Using Solar Energy</i>	
17:45 – 18:30	Closing Ceremonies	
19:00	Dinner	

KEYNOTE SESSION



No. of Keynote Lectures 3

SESSION MODERATORS

Prof. Dr. Ashraf Elshihy

President of Egyptian Chinese University, Egypt

Prof. Dr. Magdy Abou Rayan

President of International Water Technology Association

Prof. Dr. Andrea Scozzari

CNR-ISTI, Italy

KEYNOTE LECTURE (1)

Climate Change and its Effects on Water and Food Security in The Arab Region

H.E. Prof.Dr. Hussein Elatfy

*Secretary general of the Arab Water Council,
Former Minister of Water Resources & Irrigation, Egypt*

Date: March, 09, 2023

Time: 12:30 – 13:30

Place :Room (A), Main Hall

KEYNOTE LECTURE (2)

Sustainable Management of Coastal Aquifers

Prof. Dr. Salvatore Straface

Università della Calabria, Via Pietro Bucci, Italy

Date: March, 09, 2023

Time: 12:30 – 13:30

Place :Room (A), Main Hall

KEYNOTE LECTURE (3)

PPP Desalination Plants Economics and Management

Eng. Amr Seoudy

WTCO, CEO, Founder

Date: March, 09, 2023

Time: 12:30 – 13:30

Place :Room (A), Main Hall

SPECIAL SESSION

New Trends in Water Treatment Technology: Membrane Technology

Date March, 09, 2023
Time 13:30 – 15:00
Room Place :Room (A), Main Hall

Session Moderators ***Prof. Dr. Nabil H. Mostafa***
Zagazig University, Egypt.

Dr. Kamal El-Nahhas
Suez Canal Authority, Egypt

Dr. Mohamed Mossad
Mansoura University, Egypt

Speakers

Prof. Dr. Ahmed Shaaban, Prof. Dr. Marwa Shalaby & Prof. Dr. Heba Abdullah

National Research Center

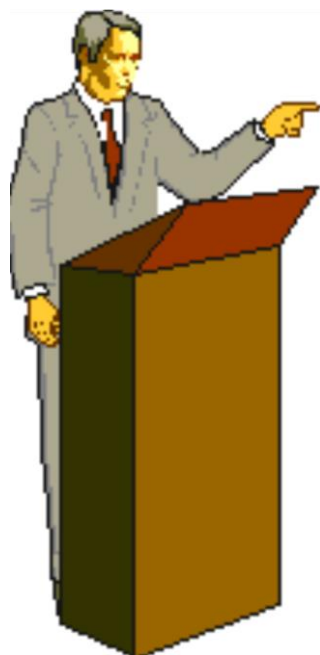
Eng. Khader Ibrahim

Soul Water Company

Dr. Ahmed Fathi

Watex Company

WORKSHOPS



No. of Workshops: 5

WORKSHOP (2)

Optimal Exploitation Strategies for Sustainable Utilization of Fossil Groundwater Reserves in Egypt

Discussion Moderators

Prof. Dr. Abdelazim Negm

Zagazig University, Egypt

Prof. Dr. Mohamed Ashour

Assuit University, Egypt

Prof. Dr. Andrea Scozzari

CNR-ISTI, Italy

Prof. Dr. Martina Zeleňáková

Technical University of Košic, Slovakia

Date

March, 09, 2023

Time

17:00 – 19:00

Room

Room (A), Main Hall

Speaker -1

Prof. Dr. Abdelazim Negm

Zagazig University, Egypt

Speaker -2

Dr. Asaad Armanuos

Tanta University, Egypt

Speaker -3

Dr. Doaa El Agha

Suez University, Egypt

Speaker -4

Eng. Ahmed Shalby

Tanta University, Egypt

Speaker -5

Eng. Sobhy Emara

Tanta University, Egypt

Speaker -6

Eng. Mohamed Metwally

Tanta University, Egypt

WORKSHOP (3)

Climate Change Impact on Coastal Regions

Discussion Moderators ***Prof. Dr. Andrea Scozzari***
CNR-ISTI, Italy

Prof. Dr. Mohamed Ashour
Assiout University, Egypt

Date March, 10, 2023
Time 10:45 – 11:45
Room Room (A), Main Hall

Speaker -1 ***Prof.Dr. Martina Zeleňáková***
Technical University of Košic,Slovakia

Speaker -2 ***Prof.Dr. Hany Farhat***
Zagazig University, Egypt.

WORKSHOP (4)

Water, Human Development and Sustainable Development: Triple Nexus
(in Arabic Language)

Discussion Moderators ***Prof.Dr. Sohair I. Abou-Elela***
National Research Center, Egypt

Prof.Dr. Inas Abu Talib
National Research Center, Egypt

Date March, 10, 2023
Time 15:15 – 16:00
Room Room (A), Main Hall

Speaker ***Dr. Aml hassan***
Expert, Human Development

WORKSHOP (5)

New Research Directions for Seawater Desalination Using Solar Energy

Discussion Moderators ***Prof. Dr. Nabil Elmenshawy***
Port Said University, Egypt

Prof. Dr. Nabil Hassan
Zagazig University, Egypt.

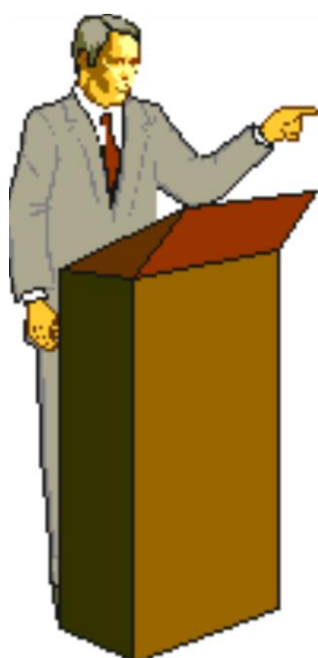
Prof. Dr. Abd Elnaby Kabeel
Tanta University, Egypt

Date March, 10, 2023
Time 17:00 – 17:45
Room Room (A), Main Hall

Speaker -1 ***Dr. Mohamed Ragab***
Mansoura University, Egypt.

Speaker -2 ***Dr. Mohamed Sameh***
Mansoura University, Egypt.

TECHNICAL SESSIONS



No. of Sessions **07**

No. of Papers **29**

Session 1

DESALINATION TECHNOLOGIES (DT)

Place: Room (A), Main Hall

Thursday–March 09, 2023

16:00 – 17:00

CHAIRPERSONS:

- **Nabil Hassan, Zagazig University, Egypt.**
- **Abd Elnaby Kabeel, Tanta University, Egypt.**
- **Nabil Elmenshawy, Port-Said University, Egypt.**
- **Ibrahim Khalid, Matroh Water and Wastewater co, Egypt.**

“Assessment of Farmland Reverse Osmosis Units in Kuwait and Strategies to Manage Reject Brine”.
H.Bhandary¹, A.Akber², R. Alambi³ and Y. Jayaramu⁴ **Kuwait**

¹ Water Research Center, Kuwait Institute for Scientific Research

² Water Research Center, Kuwait Institute for Scientific Research

³ Water Research Center, Kuwait Institute for Scientific Research

⁴ Water Research Center, Kuwait Institute for Scientific Research

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“Performance Assessment of Solar-Powered Membrane Desalination System: A Theoretical Modeling Approach Under Different Operating Conditions”.

S. A. El-Agouz^{1,2,a)}, Ali M. Aboghazala^{1,b)}, Ayman Refat Abd Elbar^{1,c)}, M. Y. Zakaria^{3,d)}, Khaled Khodary Esmaeil^{1,e)} and Mohamed E. Zayed^{1,f)} **Egypt**

¹ Department of Mechanical Power Engineering, Faculty of Engineering, Tanta University, Tanta, Egypt.

² Faculty of Industry and Energy Technology, Delta Technological University, Quesna, Egypt.

³ Military Technical College, El-Qobba Bridge, El Weili, Cairo, Egypt.

30

“Experimental Study on of New Design of Double Slope Solar Distiller with Wicked Prismatic Absorber Basin and Spraying Nozzles of Feed Supply”.

Mohamed E. Zayed^{1,a)}, Abdallah Kamal^{2,b)}, Ali M. Aboghazala^{1,c)}, Mohamed R. Diab^{3,d)}, Fadl A. Essa^{3,e)}, Ammar H. Elsheikh^{2,f)} **Egypt**

¹ Department of Mechanical Power Engineering, Faculty of Engineering, Tanta University, Tanta 31521, Egypt.

² Production Engineering and Mechanical Design Department, Tanta University, Tanta 31527, Egypt.

³ Mechanical Engineering Department, Faculty of Engineering, Kafrelsheikh University, Kafrelsheikh 33516, Egypt.

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“Water Desalination Using Hybrid Renewable Energy Sources: Challenges and Future Prospects”.

Magdy Abou Rayan¹, Abd Elnaby Kabeel^{2,3}, Mohamed Abdelgaied² **Egypt**

¹ Mechanical Power Engineering Department, Faculty of Engineering, Mansoura University-Egypt.

² Mechanical Power Engineering Department, Faculty of Engineering, Tanta University, Egypt.

³ Faculty of Engineering Delta, University for Science and Technology, Gamasa, Egypt.

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Session 2

WATER RESOURCES PLANNING AND MANAGEMENT (WR)

Place: Room (A), Main Hall
Friday– March 10, 2023 09:30 – 10:45

CHAIRPERSONS:

- **Mohamed Ashour**, Assuit University, Egypt .
- **Andrea Scozzari**, CNR-ISTI, Italy.
- **Martina Zeleňáková**, Technical University of Košice, Slovakia.

“Prospects of Cooperation on Transboundary Wastewater Management Between Palestinians and Israelis”.

Shaddad Attili¹ and R. El- Sheikh²

Palestine

¹ Ex Minister of Palestinian Water Authority and Negotiations support Unit advisor.

² Ex-Deputy Head of Palestinian Water Authority and Policy adviser to Prime Minister ,

8

“Temporal Comparison of GSMaP Rainfall Data: Case Study in Wadi Al-Khoud, Sultanate of Oman”.

Osama R. Ibrahim, Aysha Al-Shibli , Hanad Al-Rubaiai, Al Shiyama Al Roshdi, Maizoon Al-Saadi

Oman

Faculty of engineering, Sohar University, Sohar, Oman

13

“Deepening Methods of Quay Walls”.

Rana N. Zedan^{1*}, Asmaa A. Mashaly² and Ghada M. Abozaid³

Egypt

¹ Faculty of Engineering, Delta University for science and technology, Gamasa - 35712, Egypt,

² Faculty of Engineering, Delta University for science and technology, Gamasa - 35712, Egypt,

³ Faculty of Engineering, Delta University for science and technology, Gamasa - 35712, Egypt,

20

“Assessing The Impact of Building Wetlands for Rainwater Retention on The Society Development in The South-East of Slovakia”.

Maria Hlinkova¹, Martina Zelenakova² and Hany F. Abd-Elhamid^{3,4}

Slovakia

¹ Institute of Technology, Economics and Management in Construction, Faculty of Civil Engineering, Technical University of Kosice, 04200 Kosice, Slovakia

² Institute for Sustainable and Circular Construction, Department of Environmental Engineering, Faculty of Engineering, Technical University of Kosice, 04200 Kosice, Slovakia

³ Department of Water and Water Structures Engineering, Faculty of Engineering, Zagazig University, Egypt ,

⁴ Department of Environmental Engineering, Faculty of Engineering, Technical University Košice, 04200 Košice, Slovakia

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Session 3

WATER TREATMENT TECHNOLOGY (WTT)

Place: Room (B), VIP Hall
Friday– March 10, 2023 09:30 – 10:45

CHAIRPERSONS:

- **Sohair I. Abou-Elela, National Research Center, Egypt.**
- **Inas Abu Talib, National Research Center, Egypt.**
- **Adel Alhadad, Water Research Center, Kuwait.**
- **Ahmed Shaaban, National Research Center, Egypt.**

“Wastewater Industrial Database for Sabhan Area in Kuwait”.

A. Al-Haddad, M. E. Ahmed, H. Abdullah, A. Al-Matouq, M. Khajah, A. Abusam and R. Al-Yaseen,

Kuwait

Kuwait Institute for Scientific Research

1

“Experimental Study to Assess The Effect of Flow Through Submerged Biofilter on Hydraulic Properties of Polluted Streams”.

Hany F. Abd-Elhamid^{1,2}, Atef El Saiad¹, Emad H. El-Gohary³, Martina Zelenakova⁴ and Zeinab I. Salama⁵,

Egypt

¹Department of Water and Water Structures Engineering, Faculty of Engineering, Zagazig University, Egypt,

²Department of Environmental Engineering, Faculty of Engineering, Technical University Košice, 04200 Košice, Slovakia

³Department of Environmental Engineering, Faculty of Engineering, Zagazig University, Egypt,

⁴Institute of Circular and Sustainable Construction, Faculty of Civil Engineering, Technical University of Košice, 04200 Košice, Slovakia

⁵Higher Institute of Engineering and Technology Zagazig, Egypt

2

“Evaluation of Conductive Polymers Effect on TiO₂ Nanocomposites for Photocatalytic Degradation of Linear Alkyl-benzene Sulfonate (LAS) in Laundry Wastewater”.

Mai E.S. Barakat, Elsherbiny H.E. Yosef, Mohamed Ez-Dean Rashad Hassan

Egypt

Chemistry Department, Faculty of Science, Port Said University, Port Said, Egypt

22

“Heavy Metals and Parasitological Infection Associated with Oxidative Stress and Histopathological Alteration in The Clarias Gariepinus”

Heba Nageh Gad EL-Hak Attia,

Egypt

Zoology Department, Faculty of Science, Suez Canal University, Ismailia, 41522, Egypt

26

“Production of Biogas by Anaerobic Digestion from The Organic Waste”.

Eman Ahmed Goher

Egypt

Alexandria Sanitary Drainage Company; Alexandria, Egypt

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Session 4

HYDRAULICS AND HYDROLOGY, (HH), (A)

Place: Room (A), Main Hall
Friday– March 10, 2023 13:15 – 14:15

CHAIRPERSONS:

- **Osama Saleh, Zagazig University, Egypt.**
- **Yasser Hamed, Port Said University, Egypt.**
- **Hany Farhat, Zagazig University, Egypt.**

“Impact of Water Reuse Practice on Soil Characteristics, Salt Movement, and Yield -Field Experiments and Modeling in The Nile Delta”.

D. Sabri¹, B. Tischbein², and R. Hinkelmann³,

Egypt

IKEO International Consultants,

2ZEF Bonn, Germany,

3TU Berlin, Germany,

03

“Model Driven Scenarios for Water Quality Control of Lake Mariut”.

Noha Donia,

Egypt

Environmental Hydraulics professor, Vice dean environments affairs, Institute of Environmental studies and researches, Ain shams University

05

“Monthly Drinking Water Efficiency at A Riverbank Filtration Site at Embaba, Cairo”.

Osama K. Saleh¹, Ismail Abd-Elaty¹, Hala M. Ganayem¹ and Samah H. Abd El Ghany²,

Egypt

¹Water and Water Structures Engineering Department, Faculty of Engineering, Zagazig University, Zagazig 44519, Egypt.

²Lecturer, Lecturer, 10th of Ramadan Higher Technological institute, Irrigation and Hydraulics, Civil Engineering Department, Egypt

12

“Coastal Environmental Issues of Climate Change Along The Nile Delta Coastline”.

R. Mohamed¹ and M. Abd-El- Mooty²,

Egypt

¹Faculty of Engineering, Alexandria University

²Faculty of Engineering, Alexandria University

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Session 5

AGRICULTURAL WATER ISSUES, (AGI)

Place: Room (B), VIP Hall

Friday– March 10, 2023

13:15 – 14:15

CHAIRPERSONS:

- **Abdelazim Negm, Zagazig University, Egypt.**
- **Sherine S. Ismail, NRI, NWRC, MWRI, Egypt.**

“Addressing Operational and Governance Challenges Facing The Water Banking and Adaptation of Agriculture to Climate Change in Palestine”.

R. El-Sheikh¹

Palestine

Ex-Deputy Head of Palestinian Water Authority and Policy adviser to Prime Minister

09

“Water, Food, and Energy: A Nexus for Advancing Food Security and Sustainable Agriculture”.

Mohamed ELSayed Gabr^{1,*}, Nawaf S. Alhajeri², Salem Ali Al Jabri³, Fahad M. Al-Fadhli⁴

Egypt

¹Civil Engineering Department, Higher Institute for Engineering and Technology, New Damietta, Ministry of Higher Education, Egypt. ORCID: 0000-0003-2448-601X.

Department of Environmental Technology Management, College of Life Sciences, Kuwait University,

³Department of Soils, Water, and Agricultural Engineering, Sultan Qaboos University, Muscat, Oman

⁴Department of Chemical Engineering. College of Engineering and Petroleum, Kuwait University, Safat 13060, Kuwait.

23

“Sericulture A Source of Eco-Friendly and Sustainable Farming”.

Khursheed A. Dar, N.A Ganie, Farhat Qadri, K.A Sahaf and M.F Baqal

India

COLLEGE OF TEMPERATE SERICULTURE, MIRGUND, Sher-e-Kashmir UNIVERSITY OF AGRICULTURAL SCIENCES & TECHNOLOGY OF KASHMIR

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“Stand Alone Agricultural Greenhouse to Mitigate Climate Change and Helps Facing IWRM Challenges in Egypt”.

Abdelazim Mohamed Negm

Egypt

Professor, Faculty of Engineering, Zagazig University, Zagazig, Egypt

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Session 6

GROUNDWATER MANAGEMENT (GM)

Place: Room (A), Main Hall

Friday– March 10, 2023

14:15 – 15:15

CHAIRPERSONS:

- **Martina Zeleňáková, Technical University of Košic, Slovakia.**
- **Yasser Hamed, Port Said University, Egypt.**
- **Asaad Armanuos, Tanta University, Egypt**

“Enhancing Public-Private Partnership Towards Resilience in Gaza Desalinated Drinking Water Supply”.

R. El-Sheikh¹

Palestine

1 Ex-Deputy Head of Palestinian Water Authority and Policy adviser to Prime Minister.

07

“Optimum Strategies for Sustainable Fossil Groundwater Reserve Utilization in Egypt”.

Sobhy Emar¹, Mohamed Metwally¹, Ahmed Shalby¹, Doaa El Agha², Asaad M. Armanuos¹, Tamer A. Gado¹, Abdelazim Negm³

Egypt

¹ Faculty of Engineering, Tanta University, Tanta, Egypt

² Faculty of Engineering, Suez University, Suez, Egypt,

³ Faculty of Engineering, Zagazig University, Zagazig, Egypt

21

“Prospective and Challenges of Sustainable Water Resources for Irrigation in Kuwait”.

Mohamed ELsayed Gabr^{1*}, Nawaf S. Alhajeri², Salem Ali Al Jabri³, Fahad M. Al-Fadhli⁴

Egypt

¹ Civil Engineering Department, Higher Institute for Engineering and Technology, New Damietta, Ministry of Higher Education, Egypt. ORCID: 0000-0003-2448-601X.

² Environmental Technology Management Department, College of Life Sciences, Kuwait University,

³ Department of Soils, Water, and Agricultural Engineering, Sultan Qaboos University, Muscat, Sultanate of Oman,

⁴ Department of Chemical Engineering. College of Engineering and Petroleum, Kuwait University, Safat 13060, Kuwait

27

“Control Of Saltwater Intrusion in Unconfined Coastal Aquifers Using Vertical Cutoff Wall”.

Sobhy R. Emar¹, Asaad M. Armanuos², Tamer A. Gado³ and Bakenaz A. Zeidan⁴

Egypt

¹ Irrigation and Hydraulics Engineering Department, Faculty of Engineering, Tanta University, Egypt

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Session 7

HYDRAULICS AND HYDROLOGY, (HH), (B)

Place: Room (A), Main Hall

Friday– March 10, 2023

16:00 – 17:00

CHAIRPERSONS:

- **Andrea Scozzari, CNR-ISTI, Italy.**
- **Osama Saleh, Zagazig University, Egypt.**
- **Mohamed Ashour, Assuit University, Egypt.**

“Numerical Modelling for Morphological Changes Along The Nile Delta Coast (El-Banaieen Area)”.

R. Mohamed¹, D.Abdalla², and M. Abd-El- Mooty³

Egypt

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³Faculty of Engineering, Alexandria University

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“Assessment of Potential of Roof-Top Rainwater Harvesting in Ibb City, Yemen”.

Mohamed G. Hafiz¹, Mashaal Q. Saleh², and Ashraf H. Ghanem³

Egypt

¹Faculty of Engineering, Cairo University

²Ministry of Public Works and Highways, Yemen

³Faculty of Engineering, Cairo University

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“Climate Changes Impact on Submerged Breakwatrs Efficiency and Proposed Sustainable Alternative”.

Mahmoud E. Saad; Osami S. Rageh and Mahmoud El-Gamal

Egypt

Irrigation and Hydraulics Dept, Mansoura University, Faculty of Engineering, Mansoura, Egypt.

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“Estimation of Runoff in Upper Blue Nile and its Tributaries”.

Nadia M. Eshra¹ and Mohammed salah²

Egypt

Professor, Head of Hydropower unit, Nile Research Institute,

Assistant researcher, Hydropower Unit, Nile research Institute

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About Port Said



Port Said Governorate is located in the northeast of Egypt, where the Mediterranean Sea meets the Suez Canal, and is bordered by the northeast Mediterranean Sea, east of the Sinai Peninsula located in the Sinai Peninsula, on the south by Ismailia Governorate, and on the south by Ismailia Governorate. south of Ismailia Governorate. south of Ismailia Governorate. South.Gharb with the three governorates of Damietta (from the northwest), Sharqiya (from the west) and Sharqiya (from the southwest) .

Port Said Governorate is one of the Canal Zone governorates of Egypt. It is located in the northeastern part of the country, on the Mediterranean Sea at the northern gate of the Suez Canal, making it the second most important harbor in Egypt.

The most important landmarks of Port Said Governorate

It includes a number of ancient and modern antiquities dating back to ancient history .

Tennis Island

It is located in the southwest of Port Said Governorate and northeast of Lake Manzala. The word "tennis" means island in Greek. The city was distinguished by its fertile land and information cliffs that I carried a book about in the winter magazine. The archaeological hill of Tennis, at a distance of about 8 km², spent about an hour .

Port Said lighthouse

It was established in 1869 within the Sharq neighborhood of the old and famous Port Said neighborhoods, and it was known as Al-Borji. This kind of business is in construction.





Suez Canal Authority

The Authority building, the Navy House, or the House of the Fleet..which was known as the House of the Navy or the British Naval Hall. It is a palace and was the first building built by Khedive Ismail on the shore of the canal in Port Said to receive his guests from the kings and heads of state who visited Egypt during his reign, and Britain bought it during the World War. American leadership and British

leadership in the Middle East. They were evacuated from him and all of Egypt on the eighteenth of 1956 as a last base in the Canal Zone and Egypt.

President Abdel Nasser raised the flag of Egypt, declaring its freedom and independence .

These areas are located in the administrative regions, and these regions, regions, provinces and the eastern region, and the Persians in the Christian era were known as (Perma or Parmon) in Islam, and we became their name in Islam in late India. And this was amazing, it was an end goal, it, it was a goal behind it, and it was a dream to read some of its traces just to remind people.

Port Said National Museum of Antiquities

There are several museums in this area. One may want to visit the Port Said National Museum of Antiquities for cultural tourism. The ministry of antiquities launched this museum in 1987 at the confluence of the Suez Canal waters and the Mediterranean Sea. It houses about 9,000 artefacts from all eras, ranging from the Pharaonic, Greek, Roman, and modern periods and Coptic and Islamic eras.

Military Museum of Port Said

The Military Museum of Port Said, established in 1964, commemorates 1956 the tripartite aggression on the city. It features armoury and military artefacts, equipment used in the wars fought between 1956 – 1967 and 1973.



Al-Nasr Museum of Modern Art

Al-Nasr Museum of Modern Art in Port Said opened on December 25, 1995, and includes artwork by Egyptian artists in various branches of Fine Art.

Statue de Lesseps

The Statue de Lesseps, honouring Ferdinand de Lesseps, the Suez and Panama Canals developer, has its base at the entrance to the Suez Canal, along Palestine Street, where passing ships come from all over the world. It makes it a favourite with tourists. Nearby is the Suez Canal Authority building built on the banks of Port Said at the start of the project.

Roman Church

One can find historic churches in Port Said Governorate. Christians established a Roman Church in 1926; a Melkite Greek Catholic Church called Saint Elias Greek Catholic Church and an old French Cathedral.

Central Perk Café



Owned by a couple of fans of the famous TV series "Friends", Central Perk is a copy of that café with the sofas and exposed brick walls. It has quickly become the top hangout and best coffee option in town. The menu is international with sandwiches, salads, pasta, pizza, plus cakes and desserts to tempt you as well.

Port Fouad

Port Fuad is the Asian part of this Afro-Asian governorate "Port Said" where you'll think that you're in Europe for a second whilst you walk in its streets. There is a ferry that is used to cross the Canal between Port Said and Port Fuad holding both people and cars for free. It is a nice journey where you can live the experience of being on two different continents at the same time and enjoy watching seagulls flying around.



Port Said is divided into seven regions :

Al Sharq: One of the oldest neighborhoods. Its history dates back to 1880, when it was inhabited by foreign canal engineers. It was known as the European Quarter or the Frankish Quarter. To the north is the Mediterranean Sea, and to the west is the Arab Quarter .

Al-Arab: It is the second oldest neighborhood, and its foundation dates back to 1890, when it was inhabited by Egyptian workers, who were responsible for digging the canal. It is bordered on the north by the Mediterranean Sea, on the south by the Directorate of the South, on the east by the Sharq region, and on the west by the climate zone .

Al-Manakh: It is one of the neighborhoods of the modern city, as its establishment dates back to 1952, and it combines areas and areas of modern urban expansion in addition to random sprawl. It is bordered on the north by the Mediterranean Sea, on the south by the suburban area, on the east by the Arab region, and on the west by the suburban area .

Suburbs: It is one of the neighborhoods of the modern city, where it was necessary to establish it and society in general.

Al Janoub:It is one of the modern city districts, and its establishment dates back to 2002.

Al-Zohour:It is one of the city's modern neighborhoods, as its establishment dates back to the year 2000.

The West is the city's newest neighborhood, and was separated from the Flower District in 2015.



International Water Technology Association

International Water Technology Association is a non-governmental Association no.1623 for 2004. It was established by a panel of experts and university professors. On October 2010 the Council announcement of the structure amendment to create the International Association.

The aims of this association are to:

1. Highlight the importance of water issue both socially and economically at the local, national and international levels.
2. Highlight the importance of preserving water and its resources.
3. Support and spread out modern technology concerning water treatment and desalination.
4. Organize training courses in the field of water management and treatment.
5. Organize scientific meetings which aim to raise the awareness of people concerning the water issue and its dimensions.
6. Conduct research studies and projects in the field of preserving the aquatic resources and water management.

The first activity of this association was participating in the organization of the 8th International Conference for Water Technology. The association aims at organizing a number of training courses in the field of protecting aquatic resources against pollution, the technology of water desalination and water treatment. In addition, a number of workshops will be held on the importance of some national issues such as:

- Water and development of isolated areas.
- Crop structure and its role in saving water.
- Water resources management.
- Evaluating the economic value of water.



CONFERENCE INFORMATION & VENUE

Registration, Opening Ceremonies, Technical Sessions will all be held at:

Grand Hotel, Port Said

- Opening and Closing Ceremonies will be held in the Main Hall
- Technical Sessions and Workshops will be held in Rooms A and B

REGISTRATION AT THE CONFERENCE DESK

All participants must register upon their arrival at the registration desk located at hotel. The registration desk will be open from Thursday 09 March at 09:00 to 18:00.

Every registered participant will receive the necessary documents: name tags, Abstracts booklet, tickets for lunches, bag and a CD.

PRESENTATION, COMMUNICATIONS AND DISCUSSION

There will be two parallel sessions, according to this program. Every session room is equipped with an LCD projector. If you require any specific audio-visual equipment, all authors must contact the technicians' 30 min. before the session.

The time allocated for each presentation is 15 minutes in addition to 5 minutes discussion. All conducted in the English Language.

Presentation Guidelines

Aspect Ratio: Always use landscape format (i.e. wider than tall) when creating slides. If portrait format information must be displayed, show it at its fullest height within a landscape slide and/ or split the information over two slides.

Presentation should be made in widescreen 16:9 this will avoid any problems when projecting on a HD screen and ideally with a resolution of 1920/ 1080.

Fonts: Use large, clear typefaces and consider 40 pt the absolute minimum font size, as any smaller will be unreadable. Try to use a 'standard' font, the use of non standard fonts can create problems if you are loading a Power Point presentation from disk, or if it has been e-mailed onto a host computer. If the font is not available on the host it will be automatically substituted by another, which will very often disrupt the slide layout. If you do need to use a "Corporate font" please make sure to bring a USB with the font, so it can be installed onto our presentation machines.

Layout & Content: Text slides should contain key points to reinforce and illustrate your spoken message. Use double spacing between lines. Generally, you should have no more than 6 words per line, and no more than 6 lines per slide. Use contrasting colours for backgrounds and type font colours should be in the range of whites to yellow for dark backgrounds and black to dark blue for light backgrounds. Avoid using red as it doesn't project well and may agitate your audience. Try not to use animations or sound effects unless they are crucial to your presentation. These things are a distraction to your audience.

Charts & Graphs: Again try to keep these simple, bold and clear. Keeping the legend and values within the guidelines for font sizes as above may give a rough guide as to how much information the graph can contain and remain viewable.

Scanned Images: Images for use in Power Point presentation should not be scanned at too high a resolution. A resolution of 72 dpi is satisfactory for projection. Scanning at higher rates produce very large files, this can be slow at loading and restrict the portability of the presentation. Save the images as JPEG or other compatible file types for more compact presentation.

Checking your slides: As a guide to the clarity of your slides under conference conditions sit back from your monitor and view your presentation. If you are using a "14" monitor the equivalent viewing distance for the back row of a 50m auditorium with a 5.3' x 3' projection screen is around 7m. If you are struggling to read your slides at this distance then a significant proportion of your audience will also be unable to read your presentation.

Video: If you intend using a video during your presentation try to avoid having the video imbedded within your presentation. i.e. as a slide as some laptops will not play the video and you will end up with a black screen appearing on the projection. It may look ok on your laptop but 80% of the time it will not be outputted from the computer to the external monitor. We recommend that you supply any video inserts you require for your presentation on any of the following formats Digital Betacam, DVD, MPEG, Quicktime, H264 or DVcam.

Backup copies: always have a backup copy of your presentation on CD or USB.

6 Tips for Writing a Professional Bio

1. KEEP IT SHORT

While there's no right or wrong term, it may help you to remember the difference between bio and biography.

Bio = short. Biography = long.

Don't write a biography when a bio will suffice. Normally it's best to limit your bio to three or four sentences. If it's too long people won't read it. When writing a personal profile or "about me" for your website, you can make it a little longer if you wish.

2. BRIEFLY HIGHLIGHT YOUR MAIN ACHIEVEMENTS

The purpose of writing a bio is to demonstrate your professional credibility. Unlike a resume, a work bio only needs to cover the "high points" of your career.

3. LET YOUR PERSONALITY SHOW

Since your professional bio is an advertisement for you, make it reflect the real you. If you're a down-to-earth person, use unpretentious language. If you have a particular passion, let the reader know. Some people say that personal information is not relevant in a work bio because it has nothing to do with the job. That may be true, but most readers like getting a sense of who you are outside of your professional role.

4. TAILOR YOUR BIO TO THE READER

Write a bio about you but for the reader. Ideally, your professional bio will address these three reader questions:

- 1) Who you are...*
- 2) Your expertise and how it addresses...*
- 3) Your reader's problem or goal...*

5. MAKE IT EASY TO READ

When you write a bio, break the information into short paragraphs (no more than three sentences in each paragraph). Studies show that when people are faced with a large block of text (especially on a computer screen), they just skim over it quickly. By making your paragraphs nice and short, you'll increase the likelihood that people will actually read your bio.

6. WRITE A BIO IN THIRD PERSON

What this means is to write a bio as though someone else is talking about you. Instead of writing "I am" and "I graduated", you write "Jane Smith is" and "She graduated". Use your full name (first and last) the first time. After that, it's up to you whether to refer to yourself by your full name, just your first name, or just your last name.

Guidelines for Speaking at an Event

Preparing, Delivering and Executing your Presentation

Delivering a presentation at an IQPC conference gives our audience a chance to listen to and discuss your experiences, and benefit from your pragmatic solutions. We hope it also gives you a chance to meet your peers and take advantage of the networking and learning opportunity the conference aims to provide, as our guest.

We hope that the following points will assist you in making your session as successful and enjoyable as possible.

Preparing your Presentation

Less is more! Your slides should reflect the most important points and information you are presenting.

Include a contents slide at the beginning of your presentation;so that the audience understands exactly what they will learn from your presentation.

Use bold colours that are easy to read;and legible from the back of the room.

Very your presentation; incorporate videos, flipcharts as well as your Power Point presentation.

Submit your presentation at least 3 weeks prior to the conference; so that conference documentation can be compiled, and delegates can follow your presentation on the day.

If this deadline will present you with any difficulty, please contact your Conference Manger as soon as possible to discuss.

Delivering your Presentation

Reflect on your personal corporate experiences;with both anecdotal and empirical evidence, include disasters as well as successes Honesty is very highly rated by delegates.

Refer to speakers that have presented before; so that the conference flows together.

Explain any acronyms or terms used within your presentation; IQPC conferences attract delegates from a vast international arena who may not be familiar with certain terms.

Executing your presentation

About a natural presentation style; interactivity helps to make the conference as informal and friendly as possible.

Involve the audience; possibly using a hands up/hands down, sit down/ stand up approach like a voting tool.

Prepare quick practical exercises; individually or in a group to give delegates a hands-on experience.

Use objects and props to stimulate discussions

Move delegates around the room; so they interact with new people.

These are only a few suggestions; please feel free to structure your presentation as you feel will best suit the content.

Thank you very much for making our events as successful as possible. We appreciate that a huge amount of energy and effort goes into making these conferences a memorable and fun experience for all concerned. We do hope and anticipate that you also benefit from your time working with us.

Session Chairmen

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2	<i>Optimal Exploitation Strategies for Sustainable Utilization of Fossil Groundwater Reserves in Egypt</i>	<i>Abdelazim Negm Mohamed Ashour Andrea Scozzari Martina Zeleňáková</i>
3	<i>Climate Change Impact on Coastal Regions</i>	<i>Mohamed Ashour Andrea Scozzari</i>
4	<i>Water, Human Development and Sustainable Development: triple nexus (in Arabic language)</i>	<i>Sohair I. Abou-Elela Inas Abu Talib</i>

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