



University of Bahrain

# **6TH SUSTAINABILITY AND RESILIENCE CONFERENCE: INTEGRATION OF NATURE-BASED SOLUTIONS IN INDUSTRIAL AND DEVELOPMENTAL TRANSITIONS**

**DECEMBER 22-23, 2024, ONLINE CONFERENCE**

DECEMBER 2024

## INTRODUCTION

As the global community continues to navigate the complexities of sustainability and resilience, the need for innovative and integrative solutions is advancing. In this spirit, the University of Bahrain is delighted to host the 6th International Conference in Sustainability and Resilience, taking a significant leap forward with this year's theme: Integration of Nature-Based Solutions in Industrial and Developmental Transitions.

Building on the foundation laid by the previous Sustainability and Resilience Conferences, this year's conference aims to bridge the gap between natural ecosystems, green solutions, and industrial and developmental sectors. The University of Bahrain is committed to offering a platform that encourages the exchange of groundbreaking research, innovative strategies, and practical insights through the conference. Participants from across the globe—researchers, industry professionals, policymakers, and community leaders—are invited to share their experiences, challenges, and successes in integrating nature-based solutions for a sustainable future. By offering a blend of academic rigor and practical applications, the 6th International Conference in Sustainability and Resilience aspires to catalyze action, inspire collaboration, and contribute to the global dialogue on sustainability and resilience.

The conference is structured around seven key tracks, each addressing vital aspects of sustainability and resilience through the lens of nature-based solutions. These tracks will be explored through plenary sessions, and technical discussions, providing a comprehensive overview of current trends, challenges, and opportunities in utilizing nature for industrial and developmental transitions.



# T RACKS

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- **Ecosystem and Biodiversity-Centric Nature-Based Solutions for Developmental Projects**
- **Renewable Energy and Nature-Based Solutions**
- **Industrial Symbiosis and Circular Economy**
- **Water Management and Conservation**
- **Climate Change Adaptation and Mitigation**
- **Policy Support, Financing, and Incentives for Green Solutions**
- **Technological Innovations and Nature-Based Solutions**

# COMMITTEES



**Conference Chairperson**  
President of University of Bahrain

## Steering Committee



**Dr. Mohamed R. Qader**



**Prof. Mohammad El-Hilo**



**Dr. Athraa S. Abbas Al-Mosawi**



**Dr. Haifa Ebrahim Al-Khalifa**

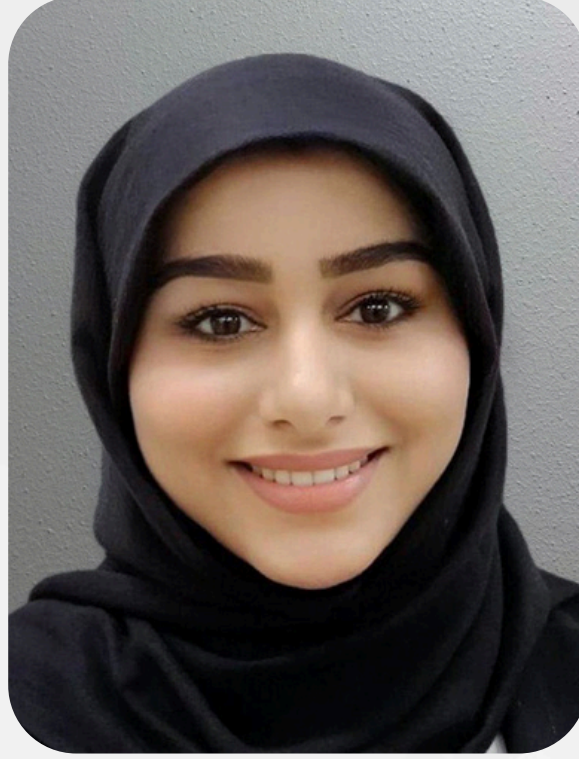


**Dr. Hessa Jassim Al-Junaid**

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**Chair: Dr. Wafa Al-Madani**



**Dr. Hayat Abdulla Yusuf**



**Dr. Sh. Fay Al Khalifa**



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**Dr. Majeed Safar Hussain**



**Dr. Yasser Ismaeel Al-Alawi**



**Dr. Naglaa El Dessouky**



**Dr. Basma Taqi al-Najar**



**Dr. Ezzat Khan**



**Dr. Ghadeer Ismail**



**Dr. Fatema Yusuf Alsebaie**

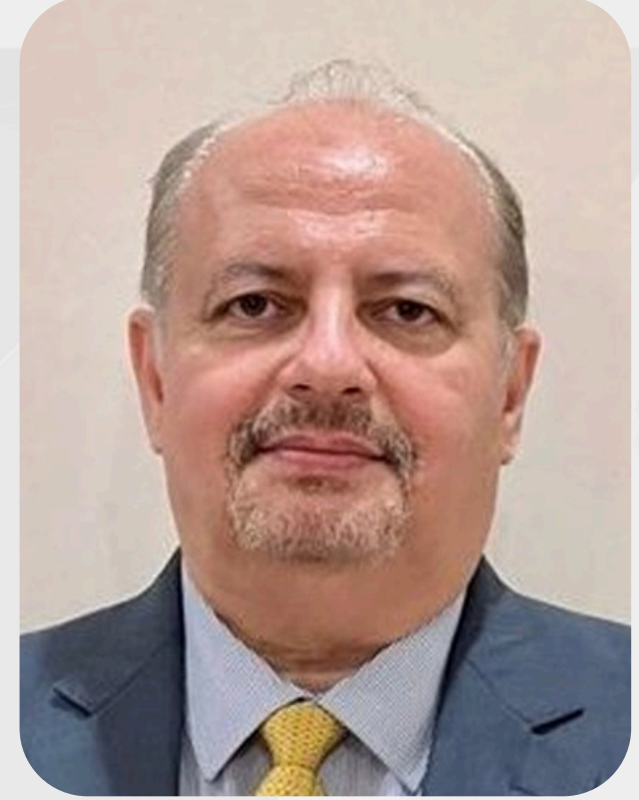
# Publication Committee



**Chair: Dr. Hayat Abdulla Yusuf**



**Dr. Abdulla Alqadomi**



**Prof. Islam Hamdy Elghonaimy**



**Dr. Raja Mohamed Sumsudeen**



**Dr. Maamar Taleb**



**Dr. Riaz Muhammad**



**Dr. Majeed Safar Hussain**



**Dr. Naglaa El Dessouky**

# Scientific Committee



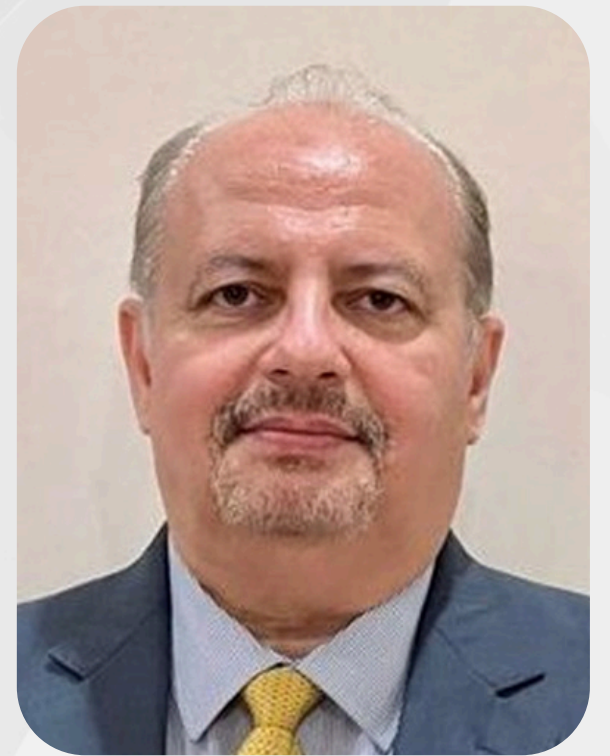
**Dr. Zainab Ali Mohamed**



**Dr. Wafa Al-Madani**



**Dr. Sh. Fay Al-Khalifa**



**Prof. Islam Hamdy Elghonaimy**



**Dr. Riaz Muhammad**



**Dr. Raja Mohamed Sumsudeen**



**Dr. Maamar Taleb**



**Dr. Ezzat Khan**



**Dr. Fatema Alsebaie**



**Dr. Ghadeer Ismail**

# External Scientific Committee



**Prof. Isa Qamber**

Honorary chair of IEEE  
Kingdom of Bahrain.



**Prof. D. Devaraj**

Department of Electrical and  
Electronics Engineering,  
Kalasalingam Academy of Research  
and Education



**Prof. Ranjith Dayaratne**

Asian School of Architecture  
Melbourne, Australia.



**Dr. Ghassan Murad**

Telecoms Executive and M&A  
Advisory Professional - Corporate  
Finance & Valuation - Board level  
Strategic Advice - Interested in  
Data-driven Science and Machine  
Learning Control



**Dr. Abdulla Al-Abbasi**

Darasat  
Kingdom of Bahrain



**Dr. Dalia El Dardiry**

Imam Abdulrahman Bin Faisal  
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University Utara Malaysia



**Dr. Muftooh Ur Rehman Siddiqi**

Aston University  
UK



**Dr. Aruna Jeyanthi**

Kalasalingam Academy of  
Research and Education,  
India



**Dr. Zain H. Yamani**

Director of the KFUPM  
Interdisciplinary Research Center  
for Hydrogen and Energy Storage



**Dr. Abdulmueen Bogis**

American Teaching Fellow - Division  
of Landscape Architecture - PLAD,  
College of Architecture - University of  
Oklahoma



**Dr. Amer Habibullah**

Department of Landscape  
Architecture - King  
Abdulaziz University



**Dr. Laeeq Razzak Janjua**

WSB University  
Poland



**Dr. Mirela Panait**

Petroleum-Gas University of  
Ploiesti; Romanian Academy,  
Romania



# Keynote Speaker

## DAY 1: 22 DECEMBER 2024



**Eng. Mohamed Al Shehab**

VP - Corporate Finance & Investor Relations  
Bapco Energies  
Kingdom of Bahrain



**Dr. Muftooh Ur Rehman Siddiqi**

Associate professor  
Director of MSc Smart Manufacturing Programme  
College of Engineering and Physical Sciences  
Aston University - United Kingdom

## DAY 2: 23 DECEMBER 2024



**Dr. Abdulmueen Bogis**

American Teaching Fellow  
Division of Landscape Architecture - PLAD  
College of Architecture - University of Oklahoma  
USA



**Dr. Amer Habibullah**

Assistant professor  
Co-founder and current president of the Saudi  
Society of Landscape Architecture  
Assistant Professor of History and Theories of  
Landscape Architecture  
Department of Landscape Architecture  
King Abdulaziz University  
Kingdom of Saudi Arabia



**Prof. Zain H. Yamani**

Director of the Interdisciplinary Research Center  
for Hydrogen and Energy Storage  
Circular Carbon Economy Representative  
King Fahd University of Petroleum and Minerals  
(KFUPM)  
Kingdom of Saudi Arabia

# DAY 1: 22 DECEMBER 2024

Time*	Program	Link	
9.30 AM	Welcome Note	Main Hall Link 	
9.40 AM	The Speech of H.E. the President of the University of Bahrain		
9.47 AM	Transition		
9.48 AM	The Speech of H.E. the Dean of Graduate Studies and Scientific Research		
9:55 AM	<u>Introducing the Keynote Speaker: Eng. Mohamed Al Shehab</u> VP – Corporate Finance & Investor Relations – Bapco Energies		
10.00 AM	Keynote Speech		
10:25 AM	<u>Introducing the Keynote Speaker: Dr. Muftooh Ur Rehman Siddiqi</u> Aston University		
10.30 AM	Keynote Speech		
11.00 AM	BREAK		
11.30 Am - 13:30 PM	Parallel Sessions A1-A3		Please check sessions link
	<b>Session A1: Industrial Symbiosis and Circular Economy</b> Chairing of the session: Dr. Yaser Al-Alawi - Dr. Fatema Alsebaie	Session A1 Link 	
	<b>Session A2: Policy Support, Financing, and Incentives for Green Solutions</b> Chairing of the session: Dr. Naglaa Fathy El Dessouky - Dr. Yomna Ahmed	Session A2 Link 	
	<b>Session A3: Renewable Energy and Nature-Based Solutions</b> Chairing of the session: Dr. Rajamohamed Sumsudeen - Dr. Ezzat Khan	Session A3 Link 	
	<b>Session A4: Water Management and Conservation</b> Chairing of the session: Prof. Islam Elghonaimy - Dr. Hayat Abdulla Yusuf	Session A4 Link 	
Technical Support Link 			

\* Bahrain Time GMT+3

# DAY 2: 23 DECEMBER 2024

Time*	Program	Link
9.30 AM	Welcome Note and Introducing the Keynote Speaker	Main Hall Link 
9.35 AM	<u>Keynote Speech: Dr. Abdulmueen Bogis</u> American Teaching Fellow, Division of Landscape Architecture PLAD, College of Architecture – University of Oklahoma	
10.00 AM	Introducing the Keynote Speaker	
10:05 AM	<u>Keynote Speech: Dr. Amer Habibullah</u> Department of Landscape Architecture King Abdulaziz University - President of SSLA	
10.30 AM	Introducing the Keynote Speaker	
10:35 AM	<u>Keynote Speech: Prof. Zain H. Yamani</u> Director of the KFUPM Interdisciplinary Research Center for Hydrogen and Energy Storage	
11.00 AM	BREAK	
11.30 AM - 13:30 PM	Parallel Sessions B1-B3	Please check sessions link
	<b>Session B1: Ecosystem and Biodiversity-Centric Nature-Based Solutions for Developmental Projects</b> Chairing of the session: Dr. Wafa Al-Madani - Mrs. Noor Al-Alawi	Session B1 Link 
	<b>Session B2: Technological Innovations and Nature-Based Solutions 1</b> Chairing of the session: Dr. Majeed S. Jasim - Dr. Zainab Mohammed Redha	Session B2 Link 
	<b>Session B3: Technological Innovations and Nature-Based Solutions 2</b> Chairing of the session: Dr. Ghadeer Ismail Mohammed - Dr. Naglaa Fathy El Dessouky	Session B3 Link 
14.00 PM	Closing Remarks	Main Hall Link 
Technical Support Link 		

\* Bahrain Time GMT+3