



Day 1: 29 January 2025

Morning Session

Location: Main Hall, Building # 60

- 08:00 AM - 09:00 AM | Registration and Welcome
 09:00 AM - 09:05 AM | MC (Opening)
 09:05 AM - 09:15 AM | Technical Organizing Committee Chair-Conference at a glance
 09:15 AM - 09:30 AM | Mayor Fahad Al-Jubair Speech
 09:30 AM - 09:35 AM | A Glimpse into ARCEMS: Video
 09:35 AM - 09:50 AM | Dr. Ali Al-Shaikhi (Patronage Speech on Behalf of KFUPM President)
 09:50 AM - 10:00 AM | Awarding Strategic Partner by Dr. Ali Al-Shaikhi
 10:00 AM - 10:15 AM | Group Photo + Short Break + Exhibition Tour

Theme 1: Strategies for Achieving Sustainable Development Goals in GCC

Keynote Speakers

10:15 AM - 10:35 AM

Excellency Fahad Al-Jubeir |

Mayor of The Eastern Province

10:40 AM - 11:00 AM

Dr. Talal Al-Harigi | Ecosystem-Based Strategies for Sustainable Greening; Experiences from a Protected Area

CEO of Imam Abdulaziz bin Mohammed Royal Reserve Development Authority

11:05 AM - 11:25 AM

Dr. Sabique Langodan | An Advanced Oil Spill Monitoring and Trajectory Prediction System for Aramco

Environmental Lead, Saudi Aramco

11:30 AM - 11:50 AM

Dr. Ahmed Algamdi |

Head of the Research and Innovation Department, National Center for Vegetation Cover (NCVC)

The Green Sustainable Future in the Kingdom of Saudi Arabia (GiKS)



11:55 AM - 12:15 PM

Dr. Bruno Pulido | NEOM's Environmental Technologies Ecosystem – Redefining Compliance and Monitoring of Large-Scale Projects.

Environmental Quality Manager, NEOM

12:20 PM - 12:40 PM

Prof. Abdulrahman Al Lily |

Professor and Vice President for Graduate Studies and Scientific Research, King Faisal University

12:40 PM - 01:35 PM

Lunch Break

Afternoon Session

Location: Main Hall, Building # 60

Theme 2: Stewardship of Semi-arid Terrestrial Ecosystems

Keynote Speakers

1:35 PM - 1:55 PM

Ms. Donia Abdelwahed | UNESCO's Biosphere Reserves and Geoparks: Catalysts for Sustainable Living, Livelihoods, and Biodiversity Conservation

UNESCO-Doha, Qatar

2:00 PM - 2:20 PM

Eng. Hussam Turki | Saudi Arabia's Geopark: A Model for Sustainable Tourism Development

NCVC

2:25 PM - 2:45 PM

Dr. Sorab Pandey | Mitigating Adverse Impacts of Groundwater Extraction on Ecosystems

Principal Engineer, GSI Environmental Inc., USA

2:50 PM - 3:10 PM

Dr. Mariska Weijrman | Restoration & Rewilding in a hyper-arid region; Challenges and Opportunities

Imam Abdulaziz Bin Mohammed Royal Reserve Development Authority

The Green Sustainable Future in the Kingdom of Saudi Arabia (GiKS)



Parallel sessions 3:15 PM – 4:45 PM

Locations: Main Hall (Session 1),
Room # 103 (Session 2)
Room #104 (Session 3)

Building # 60

Time	Session 1- Geopark and Protected Area	Session 2- Clean Tech, Clear Future	Session 3- Clean Tech, Clear Future
3:15 PM - 3:30 PM	Mr. Borut Rubinic <i>The Royal Commission for AlUla</i>	ID101- Dr. Hamed, Lamy <i>King Faisal University</i>	ID 106- Dr. Alhajri, Eman <i>Imam Abdulrahman Bin Faisal University</i>
3:30 PM - 3:45 PM	Mr. Emad Ansari <i>Salma Geopark NCVC</i>	ID 51- Dr. Abdullah, Amr Sayed Hassan <i>Imam Mohammad Ibn Saud Islamic University (IMSIU)</i>	ID 52- Darrag, Hossam <i>King Faisal University</i>
3:45 PM - 4:00 PM	Dr. Haris Ahmed Khan <i>NCVC</i>	ID 59- Dr. Saber, Osama <i>King Faisal University</i>	ID 82- Dr. Jamal, Tarique <i>King Fahd University of Petroleum & Minerals</i>
4:00 PM - 4:15 PM	Mr. Mohammed Jaha <i>North Riyadh Geopark, NCVC</i>	ID 73- Dr. Islam, Shumaila <i>King Faisal university</i>	ID40- Dr. AlShoaibi, Adil <i>King Faisal University</i>
4:15 PM - 4:30 PM	Mr. Jan Freedman <i>Royal Commission for AlUla</i>		ID-65-Dr. Khaled Mohaisen <i>King Fahd University of Petroleum and Minerals</i>

End of Day 1



Day2:30 January 2025

Morning Session

Location: Main Hall, Building # 60

Theme 3: Ecosystem-based Management of Marine Resources

Keynote Speakers

8:35 AM - 8:55 AM

Dr. Ali Alshaiki |

Assistant Deputy of Livestock and Fisheries, Ministry of Environment, Water & Agriculture (MEWA)

9:00 AM - 9:20 AM

Dr. Eman Sabbagh |

Senior Specialist, National Center for Wildlife(NCW)

9:25 AM - 9:45 AM

Dr. Thamban Meloth | Polar Warming and its Impact on the Tropics

Director, National Centre for Polar and Ocean Research (NCPOR), India

9:50 AM - 10:10 AM

Dr. Susana Carvalho | Marine Research in the Red Sea: Addressing Anthropogenic Threats to Ensure a Green Future for Saudi Arabia

Associate Professor of Practice of Marine Science, KAUST

10:15 AM - 10:35 AM

Dr. Chicco Birrel |

Deputy Director, The General Organization for the Conservation of Coral Reefs and Turtles in the Red Sea (SHAMS)

10:40 AM - 11:00 AM

Dr. Mark Dimech | Business Planning in Fisheries – The Ecosystem-Based Approach to Fisheries Management

Marine Director, KAUST

11:05 AM - 11:25 AM

Dr. Will Le Quesne | Marine Climate Change in the Arabian Gulf: Impacts and Resilience Building Opportunities

Director, International Centre for Ocean Protection and Use (iOPUS), CEFAS

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The Green Sustainable Future in the Kingdom of Saudi Arabia (GiKS)



Parallel Sessions 11:30 AM – 12:30 PM

Locations: Main Hall (Session 1),
Room # 104 (Session 2)

Building # 60

Time	Session 1- Marine Ecosystem	Session 2- Technology & Fisheries Management
11:30 AM - 11:45 AM	Dr. Mariusz Jaremko <i>King Abdullah University of Science and Technology</i>	ID 13- Dr. Ibrahim, Amel <i>King Faisal University</i>
11:45 AM - 12:00 PM	ID 47- Dr. Alghamdi, Amal <i>King Saud University</i>	ID31- Dr. Boulila, Nesrine <i>King Abdullah University of Science and Technology</i>
12:00 PM - 12:15 PM		ID98- Dr. Naeem Sattar, Muhammad <i>King Faisal University</i>
12:15 PM - 01:30 PM	Lunch Break	



Day 2: 30 January 2025

Afternoon Session

Location: Main Hall, Building # 60

Theme 4: Smart Technologies in Environmental Monitoring

Keynote Speakers

1:30 PM - 1:50 PM

Er. Adnan Al Alyany | Environmental Technologies for a More Sustainable Future

Director General of Environmental Technologies, National Center of Environmental Compliance (NCEC)

1:55 PM - 2:15 PM

Prof. Emmanuel Hanert | Vulnerability Assessment of The Arabian Gulf's Sensitive Coastal Infrastructures to Oil Spills

Full Professor, Faculty of Bioscience Engineering, UCLouvain, Belgium

2:20 PM - 2:40 PM

Dr. Aman Singh | Smart Environmental and Water Management: Applications of Data Science and AI

Senior Hydrogeologist, GSI Environmental Inc., USA

2:45 PM - 3:05 PM

Dr. Aboobacker V.M. | Climate Change; Numerical Modelling of Waves and Currents; Marine Biogeochemistry

Research Associate Professor Environmental Science Center, Qatar University

3:10 PM - 3:30 PM

Eng. Omar Ibrahim Abunayyan |

Director of Specialized Technologies, NCW

The Green Sustainable Future in the Kingdom of Saudi Arabia (GiKS)



Parallel sessions 03:30 PM – 04:45 PM
Locations: Main Hall (Session 1),
Room # 103 (Session 2)

Building # 60

Time	Session 1- Technology in Environment	Session 2- Technology in Environment
3:30 PM - 3:45 PM	ID 1- Dr. Aloshan, Mohammed <i>Imam Mohammad Ibn Saud Islamic University (IMSIU)</i>	ID20- Dr. Elbashir, Abdalla <i>King Faisal University</i>
3:45 PM - 4:00 PM	ID 15- Dr. Md Masudur Rahman <i>King Fahd University of Technology and Minerals</i>	ID 8- Dr. Tarek Z. Khouri <i>DPC – USA</i>
4:00 PM - 4:15 PM	ID49- Dr. Khan, Gausal <i>King Faisal University</i>	ID112- Dr. Alotaibi, Abdulrahman <i>Jubail industrial college</i>
4:15 PM - 4:30 PM	ID69- Aliyu, Abdulrahman <i>King Fahd University of Technology and Minerals</i>	ID113- Dr. David Nicholas <i>King Faisal University</i>
4:30 PM - 4:45 PM	ID 108- Dr. Jannet Jamii <i>King Faisal University</i>	ID 18- Dr. Hamada, Ahmed <i>Menoufia University, EGYPT</i>

End of Day 2



Details of Parallel Session

Theme 2: Stewardship of Semi-arid Terrestrial Ecosystems

Day-1 Afternoon Parallel sessions 3:15 PM – 4:30 PM

Afternoon Session-1- Geopark and Protected Area

Location: Main Hall

Time	Speaker	Topics
3:15 PM - 3:30 PM	Mr. Borut Rubinic <i>The Royal Commission for AIUla</i>	Ecosystem revitalization in Sharaan National Park, AIUla – an example of science-based adaptive management of arid ecosystems
3:30 PM - 3:45 PM	Mr. Emad Ansari <i>Salma Geopark NCV</i>	Salma Geopark
3:45 PM - 4:00 PM	Dr. Haris Ahmed Khan <i>NCVC</i>	International Significance of Salma Geopark
4:00 PM - 4:15 PM	Mr. Mohammed Jaha <i>North Riyadh Geopark, NCV</i>	North Riyadh Geopark
4:15 PM - 4:30 PM	Mr. Jan Freedman <i>Royal Commission for AIUla</i>	When the rocks protect: How the rich geo-heritage of AIUla is helping to safeguard the environment.

Afternoon Session 2 Clean Tec., Clean Future

Location Room #103

Time	Speaker	Topics
3:15 PM - 3:30 PM	ID101- Dr. Hamed, Lamy	<i>Assessment Of Sugar Beet Agricultural Practices For Sustainable Production Under Semi-arid Environments</i>

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	<i>King Faisal University</i>	
3:30 PM - 3:45 PM	ID 51- Dr. Abdullah, Amr Sayed Hassan <i>Imam Mohammad Ibn Saud Islamic University (IMSIU)</i>	<i>Toward Humanizing Cities, Assessment of Optimization Solutions to Improve Outdoor Thermal Comfort in a Recreation Area of Residential Block: A Case Study in Riyadh City, Saudi Arabi</i>
3:45 PM - 4:00 PM	ID 59- Dr. Saber, Osama <i>King Faisal University</i>	<i>Controlling the carbon species to design effective photocatalysts based on explosive reactions for purifying water by light</i>
4:00 PM - 4:15 PM	ID 73- Dr. Islam, Shumaila <i>King Faisal university</i>	<i>Synergistic Effects in a Mesoporous Cu₂O/Anatase-Silica Nanocomposite: Enhanced Photocatalytic Activity</i>

Afternoon Session -3 Clean Tec., Clean Future

Location Room # 104

Time	Speaker	Topics
3:15 PM - 3:30 PM	ID 106- Dr. Alhajri, Eman <i>Imam Abdulrahman Bin Faisal University</i>	MXene based membrane for water purification
3:30 PM - 3:45 PM	ID 52- Darrag, Hossam <i>King Faisal University</i>	Production of natural plant extracts using somatic embryonic and cell suspension as a cheap and safe technology for wastewater treatment
3:45 PM - 4:00 PM	ID 82- Dr. Jamal, Tarique <i>King Fahd University of Petroleum & Minerals</i>	Nanocrystalline Cellulose From Arrowroot Fiber: A Green Route to Advanced Nanocomposite Films
4:00 PM - 4:15 PM	ID 40- Dr. AlShoaibi, Adil <i>King Faisal University</i>	Green NaTiO ₂ /AC Nanocomposite Electrodes for High-Performance Sodium-Ion Capacitors



Theme 3: Ecosystem-based Management of Marine Resources

Day-2 Morning Parallel sessions 11:30 AM – 12:30 PM

Morning Session 1- Marine Ecosystem

Location: Main Hall

Time	Speaker	Topics
11:30 AM - 11:45 AM	Dr. Mariusz Jaremko <i>King Abdullah University of Science and Technology</i>	To be healthy and functional we need to see – NMR and metabolomics as supporters of food and health science
11:45 AM - 12:00 PM	ID 47- Dr. Alghamdi, Amal <i>King Saud University</i>	Mangrove Microbes: A Natural Boost for Rice Farming
Lunch Break		

Morning Session 2- Technology & Fisheries Management

Location Room #104

Time	Speaker	Topics
11:30 AM - 11:45 AM	ID 13- Dr. Ibrahim, Amel <i>King Faisal University</i>	Environmental Risks of Metals Contamination in Marine Sediments: A Comprehensive Assessment
11:45 AM - 12:00 PM	ID31- Dr. Boulila, Nesrine <i>King Abdullah University of Science and Technology</i>	Fish Ageing in Red Sea – Insights for Sustainable Fisheries Management
12:00 PM - 12:15 PM	ID98- Dr. Naeem Sattar, Muhammad <i>King Faisal University</i>	Targeted RNAi-Based Control of Red Palm Weevil: An innovative Approach to Safeguard Date Palm Cultivation
Lunch Break		



Theme 3: Smart Technologies in Environmental Monitoring

Day-2 Afternoon Parallel Session 03:15 PM to 4:30 PM

Afternoon Session-1 Technology in Environment

Location Room # Main Hall

Time	Speaker	Topics
3:15 PM - 3:30 PM	ID 1- Dr. Aloshan, Mohammed Imam Mohammad Ibn Saud Islamic University (IMSIU)	Projecting Future Cooling Load and Energy Demand in Saudi Residential Buildings Under Climate Change Scenarios
3:30 PM - 3:45 PM	ID 15- Dr. Md Masudur Rahman King Fahd University of Technology and Minerals	Satellite-based analysis of particulate organic carbon and its physical-biological drivers in the Arabian Gulf
3:45 PM - 4:00 PM	ID49- Dr. Khan, Gausal King Faisal University	Composition (Vaccine) for Treating/ Preventing Insulin Resistance/Type 2 Diabetes
4:00 PM - 4:15 PM	ID69- Dr. Aliyu, Abdulrahman King Fahd University of Technology and Minerals	Emerging Technology in Environmental Monitoring
4:15 PM - 4:30 PM	ID 108- Dr. Jannet Jamii King Faisal University	Developing Renewable Energy for Sustainability: Applications of Machine Learning in Solar Irradiance Forecasting
End of Day 2		

Afternoon Session-2 Technology in Environment

Location Room # 103

Time	Speaker	Topics
3:15 PM - 3:30 PM	ID20- Dr. Elbashir, Abdalla <i>King Faisal University</i>	Remediation of Gemifloxacin using deep eutectic solvents graphene oxide magnetite ferrofluids

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3:30 PM - 3:45 PM	ID 8- Dr. Tarek Z. Khouri <i>DPC – USA</i>	Smart Water Resources Management Through Remote Sensing: Accelerating SDGs Achievement in the GCC Region
3:45 PM - 4:00 PM	ID112- Dr. Alotaibi, Abdulrahman <i>Jubail Industrial College</i>	Invention of a device for watering plants by condensing moisture and fog
4:00 PM - 4:15 PM	ID113- Dr. David Nicholas <i>King Faisal University</i>	Environmental Data to Support MEA and SDG Reporting - Lessons for KSA from the Caribbean
4:15 PM - 4:30 PM	ID 18- Dr. Hamada, Ahmed <i>Menoufia University, EGYPT</i>	Sustainability of Modern Vertical-Axis Wind Turbine Systems
End of Day 2		