

ICSEWEN21

INTERNATIONAL CONFERENCE ON
SUSTAINABLE ENERGY-WATER-ENVIRONMENT
NEXUS IN DESERT CLIMATE

Draft Programme

Draft Programme

DAY 1 – 22nd November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Inaugural Ceremony: Live-streamed from Doha

In-person registration and Online moderated networking opportunity

Welcome Speeches from distinguished guests and strategic conference partners and sponsors

Coffee Break

Panel Discussion: Opportunities and Challenges for the Energy Water Environment Nexus

Keynote Speech

Lunch Break

Keynote Speeches

Inaugural Session Close

Exhibition and Online Networking Opportunity

ICSE MEN21

Draft Programme

DAY 2 - 23rd November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Online moderated networking opportunity

Plenary Speech

Panel Discussion: Integrated Water Resources Management (IWRM) in Arid Regions

Panelists: Prof. Esra Aleisa (Kuwait University), Prof. Mohammed Abdulrazzak (King Abdulaziz University)

Coffee Break

Parallel Session 1

Sustainable and Smart Building Technologies Energy Solutions

Dr. Scott Hinson, CTO Pecan Street (USA)

Prof. Dragan Boscovic - School of Computing and Augmented Intelligence (SCAI), Arizona State University

Parallel Session 2

Wastewater Management

Prof. Rong Wang, Nanyang Technological University

Novel materials for Environmental Applications

Prof. Mike Zoworotko, University of Limerick

Workshop P1:
Sustainable
Petrochemical Industry

Lunch Break

Poster Session

New Sustainability Paradigms and Frameworks

Prof. Silvana Dalmazzone, University of Turin, Italy

Young Innovators Competition Finals

(<https://www.hbku.edu.qa/en/academic-events/QEERI-SUST-YIA21>)

Exhibition and Online Networking Opportunity

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Draft Programme

DAY 2 - Workshop P1: Sustainable Petrochemical Industry - 23rd November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Opening Remarks and welcoming Speech, Dr. Marc Vermeersch, Executive Director, QEERI

Opening Remarks & Welcome Speech (Co-Sponsor), Erik Dzhordzhashvili, Deputy General Director at Rosneft International Centre for Research and Development, QSTP – LLC

Roundtable Panel Discussion: **Role of Carbon Management in Circular Petrochemical Industry**

Morning Session: From Water to Resource – Development of Sustainable Petrochemical Feedstock

Keynote Speech: **Cultivation of microalgae as a source of raw materials for petrochemical processing.**

Dr. Maria A. Sinetova, Head of the Group of Eco physiology of Microalgae, Institute of Plant Physiology, Russian Academy of Sciences

A Low Carbon Chemical Industry Towards a Net-Zero Emission, Qatar Case Study

Dr. Abdulkarem Amhamed, Project Director CO₂ Cluster, QEERI Energy Centre

Photobioreactors for intensive cultivation of biomass feedstock using cyanobacteria

Boris V. Gabel, Engineer, K.A. Timiryazev Institute of Plant Physiology, Russia

Energy efficient method for producing cellulose filaments of Lyocell-type.

Prof. Dr. Valeriy G. Kulichikhin, Head of Rheology laboratory, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Science

Lunch Break

Afternoon Session: Chemical Processing of Sustainable Feedstock to Valuable Chemical and Petrochemicals

A method of producing glycols based on saccharides of plant origin.

Prof. Dr. Anton L. Maximov, General director, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Science

A method of producing glycerol ketals based on polysaccharides for environment friendly solvents and components of fuel.

Dr. Vadim O. Samoilov, Research Scientist, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Science

Production of polylactic acid polymers from bio-feed.

Dr. Dmitry V. Marochkin, Deputy head of Oxo-products laboratory, QSTP – LLC, “Rosneft Research and Development Center”

Keynote Speech: **CO₂ Utilisation Systems within An Energy, Food, and Water Nexus**

Dr. Tareq Al-Ansari, College of Science and Engineering, HBKU, Qatar

ICSE MEN 21

Draft Programme

DAY 3 – 24th November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Online moderated networking opportunity

Plenary Speech

Panel Discussion: Environmental Sustainability and Public Health Implications

Coffee Break

Parallel Session 1	Parallel Session 2	Parallel Session 3	Workshop P2: Sustainable Petrochemical Industry
Desalination Mr. Friedrich Alt , Desalination Technology Research Institute – Seawater Conversion Corporation (SWCC), KSA	Public Health Impacts of Environmental Pollution Prof. Susan Anenberg , George Washington University Milken Institute School of Public Health, USA	Sustainability of Urban and Industrial Infrastructures Dr. Nicholas Laycock , Shell Pearl GTL	
Power Systems and Smart Grids Prof. Dr Saifur Rahman , Joseph R. Loring professor of electrical and computer engineering, Virginia Tech, USA	Climate Change Policy in the GCC Dr. Bassam Fattouh , Oxford Institute for Energy Studies	Material Selection for Sustainable Power Plants Dr. Reza Javaherdashti , Eninco Engineering B.V., The Netherlands	

Lunch Break

Poster Session	Qatar Culture Session
Early-Stage Researcher Showcase	

Exhibition and Networking Opportunity

ICSE MEN21

Draft Programme

DAY 3 -Workshop P2: Sustainable Petrochemical Industry – 24th November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Morning Session: Sustainable and Circular Chemical Industry

Keynote Speech: Development of state-of-the-art methods of chemical recycling of polymer waste.

Prof. Dr. Anton L. Maximov, General director, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Science

Gas to X Chemistry for Circular Economy

Prof. Dr. Konstantin B. Rudyak, General Director, LLC “Rosneft Research and Development Centre”

Methane processing into aromatic petrochemical products and hydrogen

Dr. Evgeniy V. Korolev, Gas chemistry laboratory, “Rosneft Research and Development Centre”,

Coffee Break

Morning Session: Sustainable and Circular Textile Industry

Keynote Speech: Development and Opportunities for polymer recycling to Sustainable Textile Products

Dr. Shaid Rasul, Director of Advance Practice, Mechanical Engineering and Textile Circular Economy (Texonomy), Northumbria University

Title: TBA

Giuseppe Pezzini, Chief Executive Officer (CEO), Pielleitalia, Italy

Title: TBA

Mujeebullah Khan, Chief Executive Officer (CEO), iTextile, Pakistan

Closing Remarks, Dr. Marc Vermeersch, Executive Director, QEERI

Lunch Break

Afternoon Session: QEERI-Industry Close Door Event

QEERI-Industry Close Door Event (By Invitation Only)

Theme: Carbon Management for a Net Zero O&G Industry

Participants: Participating organisation to be announced.

Draft Programme

DAY 4 – 25th November 2021

Programme 08:30 – 17:00 AST (Arabian Standard Time, GMT+3)

Online moderated networking opportunity

Plenary Speech: Research and Development Priorities to Advance Solar Photovoltaic Lifecycle Costs and Performance
Prof. Michael Woodhouse

Panel Discussion: **Smart Sustainable Energy Systems in Desert Climates.**

Moderator: Dr. Veronica Bermudez Benito

Panelists: **Prof. Mauro Pravettoni**, Head PV Module Characterization and Reliability Group, SERIS; **Prof Stefan De Wolf**, Full Professor, KAUST; **Dr. Antonio Sanfilippo**, Chief Scientist, QEERI; **Dr. Gilles POULAIN**, Solar R&D Program Manager, TotalEnergies; **Abdul Aziz Ahmed A Z Al Mahmoud**, Manager of Production Planning, Water Resources, & Business Development at QGEWC (Kahramaa)

Coffee Break

Parallel Session 1	Parallel Session 2	Parallel Session 3
Transportation Electrification Dr. Sheldon S. Williamson - Canada Research Chair in Electric Storage Systems for Transportation Electrification at Ontario Tech University	Environmental Sensing Ms. Pat Keady, Founder , CEO, President of Aerosol Devices Inc, USA	Pollution Control: Detection to Mitigation
Solar Energy Applications Professor Federico Rosei - Full Professor at the Centre Énergie, Matériaux et Télécommunications, Institut National de la Recherche Scientifique, Varennes (QC) Canada	Global Environmental Change Prof. Jean Sciare , Cyprus Institute	Food Security and the Energy-Water-Environment Nexus Dr. Elena Vallino , Research Fellow at Polytechnic of Turin, Italy

Lunch Break

Qatar STEM Innovation Session featuring National Innovation Showcase (co-hosted by Qatar Scientific Club)

Prize giving Awards Ceremony

Conference Closing Address, Dr. Marc Vermeersch, QEERI Executive Director

ICSE MEN 21