



International Sustainability Workshop (ISW 2021)

Center for Sustainable Development
College of Arts and Sciences
Qatar University

Organized within the Qatar Sustainability Week 2021
Via Microsoft Teams And
Qatar University, Library (Building B13) Room 117

October 26-27, 2021
Hybrid Workshop
Qatar University, Doha, Qatar



International Sustainability Workshop (ISW 2021)

ISW 2021 Overview

Demographic explosion, climate change, urbanization, change of life quality, and increasing food demand have put extra pressure on food, energy, and water resources and subsequent waste management issues. These resources should be sustainably managed to avoid overexploitation and depletion, and at the same time satisfying the needs of the present and future generations. The International Sustainability Workshop 2021 will explore the possibilities of sustainable resource use and management in Qatar and worldwide. The latest experiences, knowledge, lessons learned, and best practices will be presented and discussed by multidisciplinary experts from Qatar, USA, Japan, Germany, Italy, UK, and UAE. The scientific advancements in sustainable development will be covered through 4 dedicated sessions focused on "Food", "Water and Waste", "Energy", and "Sustainability and Global Issues".

Poster Session

The organizers kindly invite students and researchers to submit abstracts and posters, for oral presentation, in English or Arabic. Participants from diverse backgrounds are welcome to participate with priority given to topics that investigate contemporary issues related to Qatar and worldwide. The selected posters will be presented by the authors on 27 October 2021.

Possible topics for posters

- Food, water, energy, and waste nexus
- Sustainability and global issues
- Technological advancements in agriculture
- Sustainable resource management
- Other related topics

Important Dates/Deadlines

Interested participants need to submit an abstract of 300 words to: CSD.events@qu.edu.qa before **16 October 2021**. Candidates whose abstracts are accepted will be notified by **21 October 2021** and will be ready to present their posters on **27 October 2021**.



Technical Requirements

- Poster dimensions: A0 (width x height) = 33.11-inch x 46.8 inch (84.1 cm x 118.9 cm)
- Layout: Portrait Orientation
- File Format: Electronic version of posters must be submitted in Adobe Acrobat file format only (.pdf)

Poster Awards

The best three posters selected by the committee will receive awards, during the poster session of the workshop on **27 October 2021**.

Attestation of Participation for poster presenters will be provided

We look forward to your participation in the ISW 2021 at Qatar University.

Best regards,

Organizing and Scientific Committee Members

List of the Organizing and Scientific Committee Members:

- Prof. Sami Sayadi (Chair / Coordinator – Director QU / CAS / CSD)
- Prof. Mohammed Abu Dieyeh (Head of Department QU / CAS / DBES)
- Prof. Nabil Zouari (QU / CAS / DBES)
- Dr. Hareb Aljabri (QU / CAS / CSD)
- Dr. Imen Saadaoui (QU / CAS / CSD)
- Dr. Ahmed Ouammi (QU / CAS / CSD)
- Dr. Ioannis Chachladakis (QU / CAS / CSD)
- Dr. Helmi Hamdi (QU / CAS / CSD)
- Dr. Probir Das (QU / CAS / CSD)
- Dr. Mohammad Al-Saidi (QU / CAS / DIA) and
- Dr. Theodora Karanisa (QU / CAS / CSD)

The Workshop's agenda is overleaf.



International Sustainability Workshop (ISW 2021) Agenda

Time is in AST - Arabia Standard Time

Day I (Tuesday, 26th October 2021)

08:45 AST **Opening of International Sustainability Workshop 2021**

09:00 – 09:10 **Prof. Ahmed Elzatahry**, Dean, College of Arts and Sciences, Qatar University

09:10 - 09:30 **Prof. Sami Sayadi**, Director, Center for Sustainable Development, Qatar University

Session I: Water and Waste

Moderators: Dr. Nabil Zouari and Dr. Ioannis Chachladakis

09:30 – 10:00 **Keynote speaker**

Advanced membranes for water treatment and desalination applications

Dr. Alberto Figoli, Director of the Institute on Membrane Technology of the National Research Council (ITM-CNR), Italy

10:00 – 10:30 **Keynote speaker**

Industrial Water Management

Prof. Dr.-Ing. Sven-Uwe Geissen, Dep. of Environmental Technology, Chair of Environmental Process Engineering, Technical University of Berlin, Germany

10:30 – 10:50 **Value chain of e-waste**

Dr. Eleni Iacovidou and Mr. Matt Chatfield, Division of Environmental Sciences, Department of Life Sciences, Brunel University London, United Kingdom

10:50 – 11:10 **Various applications of waste tyre rubber**

Dr. Faris Tarlochan, Professor, Mechanical and Industrial Engineering Department, College of Engineering, Qatar University

11:10 – 11:30 **Novel pre-treatment strategies of algal biomass for the production of bioethanol and Biopolymer**

Dr. Fares Almomani, Professor, Department of Chemical Engineering, College of Engineering, Qatar University

11:30 – 11:45 **Advanced membrane-based technologies for treatment of Water and Wastewater**

Dr. Mohammad Yousaf Ashfaq, Department of Biological & Environmental Sciences, CAS, Qatar University

11:45 – 12:05 **Break**

Session II: Food

Moderators: Dr. Samir Jaoua and Dr. Imen Saadaoui

- 12:05 – 12:35 Keynote speaker**
Investigation and Application of Local Qatari Microbial resources for the Biological Control of pathogenic Bacteria, Insects and Mycotoxigenic Fungi
Dr. Samir Jaoua, Professor, Microbiology and Molecular & Microbial Biotechnology, Department of Biological & Environmental Sciences, CAS, Qatar University
- 12:35 – 13:05 Keynote speaker**
Nano-enabled agriculture: A path to global food security?
Dr. Jason C. White, Director, Connecticut Agricultural Experiment Station (CAES), USA
- 13:05 – 13:25 Sustainable agriculture in hot climates**
Mr. Nasser Al-Khalaf, Managing Director, Agrico for Agriculture Development, Qatar
- 13:25 – 13:45 Applying sustainable farming in marginal environments**
Dr. Dionysia Lyra, Halophyte Agronomist, International Center for Biosaline Agriculture, Dubai, UAE
- 13:45 – 14:05 Qatar marine microalgae: a promising alternative towards superfood production in arid environment**
Dr. Imen Saadaoui, Research Associate Professor, Center for Sustainable Development, CAS, Qatar University
- 14:05 – 14:20 Novel *Prosopis juliflora* water-soluble leaf ethanolic extract as postharvest diseases bio-controlled: *in-vitro* results and direct applications on fruits**
Ms. Iman Ali Saleh, Department of Biological & Environmental Sciences, CAS, Qatar University
- 14:20 – 15:00 Discussion**

Day II (Wednesday, 27th October 2021)

Session III: Energy

Moderators: Dr. Ahmed Ouammi and Dr. Probir Das

- 09:00 – 09:30 Keynote speaker**
AST
Biogas as an important element of an energy supply with renewable energy
Dr. Hans Oechsner, State Institute of Agricultural Engineering and Bioenergy, University of Hohenheim, Stuttgart, Germany
- 09:30 – 09:50 A feasibility study of producing biolubricant from marine microalgae**
Dr. Probir Das, Research Associate Professor, Center for Sustainable Development, CAS, Qatar University
- 09:50 – 10:10 Qatar Greener Schools Initiative**
Dr. Adel Gastli, Professor, Electrical Engineering Department, College of Engineering, Qatar University
- 10:10 – 10:30 Solar-based integrated energy systems for sustainable desalination**
Dr. Yusuf Bicer, Assistant Professor, College of Science and Engineering, Hamad Bin Khalifa University, Qatar
- 10:30 – 10:50 Break**

Session IV: Sustainability and Global changes

Moderators: Dr. Mohammed Abu Dieyeh and Dr. Mohammad Al-Saidi

- 10:50 - 11:20** **Keynote speaker**
M-NEX: An urban food-energy-water nexus platform for planning and design sustainable cities
Dr. Wanglin Yan, Professor of Geographic Information Science, KEIO University, Japan
- 11:20 – 11:40** **Towards sustainability through resource nexus studies: emphasis on FEWW**
Dr. Tareq Al-Ansari, Associate Professor, College of Science and Engineering, Hamad bin Khalifa University, Qatar
- 11:40 – 12:00** **The journey of finding sustainable utilization option of industrial biosludge in Qatar**
Mr. Ali Al-Sharshani, Senior Researcher, Qatar Shell Research and Technology Centre (QSRTC)
- 12:00 – 12:20** **Climate Change Risks and Sea Level Rise in Qatar: a Disaster Risk Reduction Policy Approach**
Dr. Laurent Lambert, Assistant Professor, Doha Institute for Graduate Studies, Qatar
- 12:20 – 12:40** **The COVID-19 pandemic and the water-energy-food supply security in the Middle East**
Dr. Mohammad Al-Saidi, Research Assistant Professor, Department of International Affairs, CAS, Qatar University
- 12:40 – 12:55** **Potentiality of indigenous bacteria in stabilization and clean-up of local soil**
Dr. Zulfa Ali Saleh Al Disi, Department of Biological & Environmental Sciences, CAS, Qatar University
- 12:55 – 15:00** **Poster Session and Discussion**

Speakers



Dr. Alberto Figoli
Director
Institute on Membrane Technology of the National Research
Council (ITM-CNR)
Italy

Alberto Figoli has been serving as the Director of the Institute on Membrane Technology of the National Research Council of Italy, ITMCNR since March 2019. He obtained his Ph.D. degree from the Membrane Technology Group at Twente University (Enschede, The Netherlands) in 2001. He graduated in the field of Food Science and Technology at the Agriculture University of Milan in 1996. From 2001 to 2019, he was a researcher at the Institute on Membrane Technology (CNR-ITM) in Rende (CS), Italy. He is responsible and involved in various national and international projects. He published more than 270 scientific papers, book chapters, special issues as well as five books, three patents, and many oral presentations (also as invited and keynote lecture) at national and international conferences and workshops. He is an expert in the field of membrane technology, particularly in membrane preparation and characterisation and their application in the environmental field and water treatment.



Prof. Dr.-Ing. Sven-Uwe Geissen
Dep. of Environmental Technology
Chair of Environmental Process Engineering
Technical University of Berlin
Germany

Prof. Dr.-Ing. Sven-Uwe Geissen holds a “Diplom-Ingenieur” on Chemical Engineering and a Ph.D. with Prof. Vogelpohl both from the TU Clausthal, Germany. He has worked as a Technical Assistant at the Oeko-Systeme GmbH, Breitscheid, Germany and he was also the recipient of the Research Engineer and Dechema Scholar, Technical University of Clausthal between 1987-1991. He was a Head of the Water Treatment Group, TU Clausthal between 1991-2004 and since 2000 he is a Consultant at the TECHNOCON GmbH, Clausthal, Germany. Between 1991-2004 he was Assistant Professor, at TU Clausthal whereas between 1999-2004 he was a Lecturer (official title: Akademischer Rat, Akademischer Oberrat) at TU Clausthal, as well. Since 2004 Dr. Geissen is a Professor and Head of the Environmental Process Engineering Chair, Department of Environmental Technology, Technische Universität Berlin. Prof. Geissen has over 80 refereed publications and is the co-editor of 4 IWA-WST issues and the co-inventor of 7 patents. He has won the IWA Resource Recovery Cluster Award 2019 and the BMBF German-African Innovation Incentive Award 2020. Moreover, he is an elected member of the IWA expert group “Advanced Oxidation Processes”, an elected chair of the PROCESSNET GVC/Dechema expert group “Industrial Water”, an elected vice-president of AQUANET Network Berlin-Brandenburg, and finally an elected member of the executive board of German Water Partnership.

Speakers



Dr. Jason C. White
Director
The Connecticut Agricultural Experiment Station
New Haven, CT
USA

Dr. Jason C. White is the Director of the Connecticut Agricultural Experiment Station, the oldest Agricultural Experiment Station in the country. His primary research program focuses on food safety and security, with specific interests on the impact of nanomaterials on agricultural plants and on the use of nanoscale materials to increase food production through sustainable nano-enabled agriculture. Dr. White was elected to the Connecticut Academy of Science and Engineering in 2021 and is a member of the European Science Foundation (ESF) College of Experts. He is also a Commissioned Official of the United States Food and Drug Administration (US FDA). Dr. White is the Managing Editor for the International Journal of Phytoremediation, an Associate Editor for NanoImpact, on the editorial board of Environmental Pollution and the Editorial Advisory Boards of Environmental Science & Technology and Environmental Science & Technology Letters. Dr. White received the Environmental Science and Technology “Super Reviewer” Award in 2011, and the Inaugural 2020 Environmental Science & Technology Lifetime Reviewer Award. He also received the Environmental Science: Nano Outstanding Reviewer Award in 2016, 2018, 2019, and 2020. Dr. White was also a Clarivate Web of Science Highly Cited Researcher in 2020. Dr. White received his Ph.D. in Environmental Toxicology from Cornell University in 1997 and has secondary appointments as a Clinical Professor of Epidemiology Yale School of Public Health, a Visiting Scientist at the Harvard University TH Chan School of Public Health, and as an Adjunct Faculty Member of the University of Massachusetts Stockbridge School of Agriculture. He has an h-index of 69 and has published 250 papers that have been cited 15,080 times.



Dr. Samir Jaoua
Professor
Microbiology and Molecular & Microbial Biotechnology
Department of Biological & Environmental Sciences
Qatar University, Qatar

Professor Dr. Samir Jaoua has a Ph.D. from the University of Technology of Compiègne (France) and is a Professor at the Department of Biological and Environmental Sciences (CAS, Qatar Univ.). He is also a qualified Professor in French universities, a Professor at the University of Sfax (Tunisia) and an official member of the Committee of Professors at the University of Sassari (Italy).

Prof. Samir Jaoua is a Microbiologist and molecular and microbial geneticist, having more than 33 years of experience in microbiology and molecular & microbial Biotechnology in France, Switzerland, Belgium, Germany, Tunisia, and Qatar. He is mainly senior author in 140 international original research articles in international peer-reviewed Scopus and web of Sc. Journals (Scopus H-index 30), and in several national and US patents. Prof. Samir Jaoua has been isolating and exploring microorganisms and their bioactive molecules for the biocontrol of pathogens, toxins, mycotoxins, and diseases, using microbial, molecular, and cloning strategies safe for the environment. He was recently the winner of the Qatar University Research Excellence Award (2017) in the category “Sciences and Engineering”.

Speakers



Dr. Hans Oechsner
State Institute of Agricultural Engineering and Bioenergy
University of Hohenheim
Stuttgart, Germany

Dr. Hans Oechsner studied Agricultural Engineering at the Universities Giessen and Hohenheim where he obtained his Dipl.-Ing. agr., his Ph.D. and his Dr. sc. agr. Since 1990 he is a Scientist at the State Institute for Agricultural Engineering and Bioenergy and since 2004, he is the Director of the State Institute for Agricultural Engineering and Bioenergy. Dr. Hans Oechsner is working in the field of Biogas and doing advanced and fundamental research as well in the laboratory as in full-scale biogas-plants in practice. Further responsibilities are the consultancy for farmers and companies and training for teaching and consulting staff. His topics of research are the development of new biogas systems, the optimization of the biogas process, the control of biodegradation, methane yield of substrates, environmental effects of biogas systems, and the treatment of digestate.



Dr. Wanglin Yan
Professor of Geographic Information Science
KEIO University
Japan

Wanglin Yan (Ph.D.) is a Professor at the Faculty of Environmental Information Studies, and Graduate School of Media and Governance, Keio University. Prof. Yan is a distinguished scholar in Environmental and Geo-informational Science for urban and regional planning by multi-disciplinary and transdisciplinary approaches. He has led the sub-regional node of the Asia-Pacific Adaptation Network of UNEP and is devoted to climate change adaptation and disaster risk reduction in Japan and northeast Asian countries. Recently he is leading the international consortium of M-NEX (<http://m-nex.net>) and developing the design-led nexus approach for urban food-energy-water innovations, which is one of the projects of Sustainable Urbanisation Global Initiatives on Food-Water-Energy Nexus by Belmont Forum/JPI Urban Europe.

Speakers



Dr. Fares Almomani
Professor
Department of Chemical Engineering
College of Engineering
Qatar University, Qatar

Dr. Fares Almomani joined the Department of Chemical Engineering, College of Engineering of Qatar University as Associate Professor in August 2014. Dr. Fares received his Ph.D. in Chemical and Environmental Engineering from Barcelona University, Spain in 2003. After his Ph.D., he became a Postdoctoral fellow at the University of Alberta in 2003, working on advanced wastewater treatment technologies. He then worked at Mutah University, Jordan between 2004-2011 as an Assistant and Associate Professor. In 2011 Dr. Almomani moved to Canada and worked at the University of Ottawa and Carleton University. Dr. Almomani's research experiences involve Advanced Oxidation Technologies, developing a novel approach to measure the kinetics of ozonation reaction, Fundamental application of biofilms technology in wastewater treatment, developing an in-line and real-time method to measure polymer concentrations in water and wastewater treatment processes, use of microalgae as advanced wastewater treatment.



Dr. Eleni Iacovidou
Lecturer in Environmental Management
Division of Environmental Sciences, Department of Life
Sciences
Brunel University London, UK

Dr. Eleni Iacovidou (Brunel University, UK) is a multidisciplinary researcher developing new methods and metrics for assessing the sustainability of resource recovery systems. She combines environmental science and engineering with an understanding of the political, organizational, structural, and cultural aspects that act synergistically in a resource recovery system to highlight areas of intervention for promoting sustainability. Dr. Iacovidou's work is focused on plastic packaging waste systems (formal and informal) trying to analyse the processes, stakeholders and complex value involved in such systems, and identifying ways to connect the downstream with upstream parts of the plastic value chain using sustainability transitions. She is a Lecturer in Environmental Management leading teaching on environmental governance, management, and sustainable development. She sits on the Industry/Defra Working Group, she is a member of the Centre for Artificial Intelligence (AI) at Brunel University, and the Head of Strategy of the newly established Society of Creative, Regenerative and Sustainable Systems (CRES) (University of Oxford). She previously worked at the University of Leeds, leading research on the valuation of resource recovery from waste and the promotion of 'recovery' interventions and digitalization in the construction sector. Before that role, she led the strategic partnership between Imperial College London and Veolia Environmental Services (VES), fostering collaborations between industry, academia, local authorities, and policymakers. She is a chemist by background, with expertise in environmental engineering and environmental management research following studies at the Department of Chemistry, University of Crete and the Centre for Environmental Policy, Imperial College London.

Speakers



Dr. Faris Tarlochan
Professor, Department of Mechanical and Industrial Engineering
College of Engineering
Qatar University, Qatar

Dr. Faris Tarlochan is currently a Professor in the Department of Mechanical and Industrial Engineering at the College of Engineering, Qatar University. He joined Qatar University in 2013. Prior to Qatar, Dr. Faris had spent 12 years in the field of academics in Malaysia. He had obtained his degrees from Purdue University and University Putra Malaysia. His research and teaching areas are in the fields of design, additive manufacturing, applied mechanics, road safety and engineering education. He is very involved in research, teaching, and professional services. Thus far as a lead principal investigator (LPI), he had led successfully over 10 national research grants and several consultancy projects. He has published over 100 papers in peer-reviewed journals. In terms of administrative duties, Dr. Faris headed several research centers in his previous institution. He was also the Program Coordinator for the Mechanical Engineering undergraduate program at Qatar University (2014-2018). Currently, he is the Director for Qatar Transportation and Traffic Safety Center at Qatar University (2018-present). Due to his involvement in engineering education, he was invited as an external program reviewer to few universities. Finally, Dr. Faris is a Chartered Engineering with the Engineering Council of UK and a Professional Engineer in the Board of Engineers Malaysia. He is also a Fellow of the Institution of Mechanical Engineers UK (IMechE). He seats as an Associate/Editor for few peer-reviewed journals.



Dr. Mohammad Yousaf Ashfaq
Research Associate
Biological and Environmental Sciences Department, CAS
Qatar University, Qatar

Dr. Mohammad Yousaf Ashfaq was born and brought up in Qatar and has obtained Ph.D. in Biological and Environmental Sciences from Qatar University with distinction in June 2020. He has published 20 research articles in high-impact factor International Journals, 2 book chapters, and has participated in various research events and conferences. He also serves as a “Review Editor” in Frontiers in Environmental Chemistry Journal (Section: Chemical Treatments) and as a “Reviewer” in the Journal of Petroleum Exploration and Production Technology.

Dr. Yousaf works as a Research Associate in an NPRP-funded research project. He is working in the field of Water and Wastewater treatment using a multidisciplinary approach comprising Chemistry, Microbiology, Material Science, and Engineering to overcome challenges faced by different treatment processes. Dr. Yousaf strives to reach excellence in the field of Environmental Science and Engineering and plays his role in the sustainable development of the country.

Speakers



Dr. Dionysia Lyra
Halophyte Agronomist
International Center for Biosaline Agriculture (ICBA)
Dubai
UAE

Dr. Dionysia Angeliki Lyra joined ICBA as Post-Doctoral Researcher in 2013. Prior to that, she had been on a post-doctoral fellowship at the Laboratory of Agronomy at the Agricultural University of Athens where she was involved in the evaluation of barley genotypes for drought resistance and crop yield. She holds a Ph.D. degree in Plant Science from the Agricultural University of Athens, Greece and she has received scholarships and grants from the Hellenic Ministry of Educational Affairs, E.U., European Weed Research Society, Arab-American Frontiers, USAID, and private sector. Currently, she is working on the evaluation of *Salicornia bigelovii* germplasm and its cultivation potential in coastal desert areas and on Integrated Agri- Aquaculture Systems (IAAS) using reject brine from inland desalination units. She has authored and co-authored over 50 publications, including a technical manual on principles of sustainable agriculture and water management, articles in peer-reviewed journals, conference papers, and research reports.



Dr. Imen Saadaoui
Associate Professor
Center for Sustainable Development, CAS
Qatar University, Qatar

Dr. Imen Saadaoui is a Research Associate Professor in the Algal Technologies Program, Center for Sustainable Development, Qatar University. Dr. Saadaoui is holding a Ph.D. in Molecular Biology. She joined Qatar University in 2011 as a Post-Doctoral Researcher for the Biofuel project, funded by Qatar Airways, QSTP and Qatar University. Within this project, she had a key role in the establishment of the Qatar University Culture Collection of Cyanobacteria and Microalgae (QUCCCM), and the investigation of local isolates in terms of growth rate and metabolite production, to select the most suitable strain for Biofuel production. The promising achievements of the Biofuel project led to the promotion of the Biofuel Laboratories to the Algal Technologies Program (ATP) under the Centre for Sustainable Development. Within the ATP, Dr. Saadaoui is active as a Research Associate Professor, in which capacity she manages various research projects, related to several algae applications, such as biofuels, food security, biofertilizers, and pharmaceuticals.

Speakers



Ms. Iman Saleh
Teaching Assistant
Biological and Environmental Sciences Department, CAS
Qatar University, Qatar

Ms. Iman Saleh is a Microbiology Teaching Assistant at the Biological and Environmental Sciences Department at Qatar University, where she teaches practical sessions of various Biology courses including Microbiology.

Iman has earned her master's degree from the American University of Beirut on the microbiological quality of dairy products including homemade cheese, and the antimicrobial resistance patterns of environmental bacterial isolates. Iman is currently one of the DBES TAs and Ph.D. students, her area of research is Microbiology, post-harvest fungal diseases and the development of natural bio-controller. Iman has published her MS research work in peer-reviewed journals in addition to book chapters, and recent review articles. In the last two years, Iman has been very active in research, and she published many reviews and research articles.



Dr. Probir Das
Associate Professor
Center for Sustainable Development, CAS
Qatar University, Qatar

Dr. Probir Das is a Research Associate Professor at the Center for Sustainable Development of Qatar University (QU). He has over 15 years of experience working with different microalgae-based projects – covering biofuel, bioremediation, bulk chemicals, high-value products, feed, etc. Prior to joining QU, he was working as a Scientist at the Institute of Chemical and Engineering Sciences (Singapore). He received his Ph.D. degree in Environmental Engineering from the National University of Singapore (NUS). At present, he is involved in multiple microalgae-based projects; through these projects, together with other completed projects, Dr. Das and the other colleagues at the CSD are developing large-scale microalgal biomass production in the Qatari desert for various applications. He has over 35 international peer-reviewed publications related to microalgae biomass cultivation, harvesting, downstream processing, and LCA analysis.

Speakers



Dr. Adel Gastli
Professor
Electrical Engineering Department
College of Engineering
Qatar University, Qatar

Prof. Adel Gastli received the B.Sc. Degree in Electrical Engineering from National School of Engineers of Tunis, Tunisia in 1985. From Sept. 1985 till Sept. 1987, he worked with the National Institute for Standards and Intellectual Property in Tunisia. He received the M.Sc. and Ph.D. degrees in Electrical & Computer Engineering from Nagoya Institute of Technology, Japan in Mar. 1990, and Mar. 1993 respectively. He worked with Mitsubishi Electric Corporation in Japan from Apr. 1993 to Jul. 1995. He joined the Electrical and Computer Engineering Department at Sultan Qaboos University, Oman, in Aug. 1995. He served as a Head of the Department from Sept. 2001 to Aug. 2003 and from Sept. 2007 to Aug. 2009. He was appointed as the Director of the Sultan Qaboos University Quality Assurance Office from Feb. 2010 to Jan. 2013. In Feb. 2013, he joined the Electrical Engineering Department at Qatar University as Professor and Kahramaa-Siemens Chair in energy efficiency. From Aug. 2013 till Sept. 2015, he was appointed the College of Engineering Associate Dean for Academic Affairs. He established the Clean Energy & Energy Efficiency Research Group at QU in March 2013. His current research interests include energy efficiency, renewable energy, electric vehicles, and smart grid. He is a Senior IEEE member and an ABET Evaluator.



Dr. Yusuf Bicer
Assistant Professor
Division of Sustainable Development
College of Science and Engineering (CSE)
Hamad Bin Khalifa University, Qatar

Dr. Yusuf Bicer is an assistant professor of the Division of Sustainable Development in the College of Science and Engineering at Hamad Bin Khalifa University in Doha, Qatar. His research area focuses on solar energy utilization in various processes such as effective cooling in greenhouses through innovative approaches, development of renewable-based integrated energy systems, and clean fuel production, including hydrogen and ammonia.

He has published more than 85 publications in various high-ranked journals and books, and about 50 conference papers. He has co-authored a recent book on 'Integrated Energy Systems for Multigeneration' published by Elsevier in September 2020. Dr. Yusuf Bicer received his Ph.D. in mechanical engineering from the University of Ontario Institute of Technology in Oshawa, Canada. He completed his BS in Control Engineering (2012) and a master's degree in Energy Science and Technology (2014) at Istanbul Technical University, Turkey. His Ph.D. thesis focused on photoelectrochemical-based hydrogen and ammonia production options. He also worked for more than two years at Istanbul Practical Gas and Energy Technologies Research Engineering Industrial Trade Inc. on natural gas and solar energy applications.

Speakers



Dr. Tareq Al-Ansari
Associate Professor
Division of Sustainable Development
College of Science and Engineering
Hamad bin Khalifa University, Qatar

Dr. Tareq Al-Ansari acquired a Beng. in Mechanical Engineering from the University College of London, an MPhil. in Engineering for Sustainable Development from the University of Cambridge and completed his Ph.D. at the Imperial College London in Sustainable Development and Environmental Engineering. Currently, he is an Associate Professor at the College of Science and Engineering at HBKU within the Division of Sustainable Development and the Division of Engineering Management and Decision Sciences, where he is the division head.



Mr. Ali Al-Sharshani
Senior Researcher
Qatar Shell Research and Technology Centre (QSRTC)
Qatar

Mr. Ali Al-Sharshani is a Senior Researcher - Gas-to-Liquid Products at Shell since 2019, holding an MBA and a BSc. in Chemical Engineering from Qatar University. Currently, he is pursuing a Ph.D. in Energy Sustainability at Hamad Bin Khalifa University in Qatar with a special focus on water treatment and reuse in Qatar. He has worked as an Associate Researcher for Pearl GTL project catalyst production and as a Research lead on Shell-Qatar on an international research consortium investigating the benefits of using Gas-to-Liquid jet fuel in commercial aircraft engines. Mr. Ali has also experience as a Domestic Supply Advisor introducing GTL products to the local Qatari market and as a Sales working Manager-GTL Products both from 2012 to 2017. Moreover, he is the Product Development Manager at the Pearl GTL since 2017, leading all value enhancement opportunity projects and acting as an integrator in the development of new products in specifically targeted sectors supporting the business growth targets to be achieved.

Speakers



Dr. Laurent Lambert
Assistant Professor
Doha Institute for Graduate Studies
Qatar

Dr. Laurent A. Lambert is Asst. Professor at the Doha Institute for Graduate Studies, Qatar, and at Sciences Po Paris, France. He has been working on the Water-Energy-Climate Nexus in the Middle East and Africa over the past 16 years. He is a former representative of the global research community at the United Nations and a board member of the UN's Climate Technology Center & Network. Laurent holds bachelor's and master's degrees in Geography from the University of Paris1 Sorbonne and a Ph.D. from the Oxford University School of Geography and the Environment.



Dr. Mohammad Al-Saidi
Research Assistant Professor
Department of International Affairs
College of Arts and Sciences
Qatar University, Qatar

Dr. Mohammad Al-Saidi is a Research Assistant Professor for "Natural Resources Governance" at the Department of International Affairs, College of Arts and Sciences at Qatar University. He is a holder of an M. Sc (Econ), an M. A. (Pol), an M.A. (Soc), and a Dr rer. pol. (Econ) from the Heidelberg University in Germany. Dr. Mohammad's research interests are about Environmental policy & politics in the Middle East; Sustainability Transition in the Gulf Cooperation Council (GCC); Water Governance, Regional Environmental Cooperation; Integrated Water, Resources Management (IWRM), Water-Energy-Food Nexus, Marginal Resources for Degrowth and Circularity; Transboundary Water Politics and Diplomacy; Geopolitics of Sustainable Development; State, Development and the Water Issue in Yemen, the Eastern Nile Basin.



Dr. Zulfa Ali Saleh Al Disi
Biological and Environmental Sciences Department
College of Arts and Sciences
Qatar University, Qatar

Dr. Zulfa Ali Saleh Al Disi holds a Bachelor's degree in chemistry, Master of Business Administration (MBA), Masters and Ph.D. in Biological and Environment Sciences from Qatar University. She has worked as Research Assistant and then as Post Doc in the frame of NPRP projects. Dr. Zulfa's research work focused on bioremediation using hydrocarbon-degrading bacteria isolated from Qatar soils and on biomineralization by mineral forming bacteria isolated -mainly- from Qatar Sabkhas. Currently, she is working on the QNRF award PDRA5 Grant entitled "Development of novel biosurfactants and extracellular polymeric substances (EPS) produced by Qatari indigenous bacteria for removal of heavy metals".