

AU Seminars

During 2024, AU organized a series of seminars and workshops through its various academic and non-academic departments. These seminars catered to both academic and general audiences, targeting diverse groups and contributing to raising awareness, promoting social responsibility, and providing practical knowledge for the benefit of students, faculty, and the wider public including AU Alumni, and Faculty and staff of higher education sector in Kuwait. This initiative highlighted AU's commitment to community engagement and continuous learning across a wide range of subject areas

SEMINAR ANNOUNCEMENT

**"THE FUTURE APPEARANCE
OF WATER SCARCITY IN
THE ARABIAN PENINSULA"**



Dr. Masoud Irannezhad

Assistant Professor of Civil Engineering (Water Resources)



5th May, 2025



12:30 PM - 2:00 PM



Auditorium

BIO:

Dr. Masoud Irannezhad is an Assistant Professor of Civil Engineering at the Australian University (AU) in Kuwait. His research focuses on the complex interactions among climate, water resources, and sustainable development. Dr. Irannezhad has published 44 peer-reviewed articles in high-impact journals, including Science, and contributed to the IPCC's Sixth Assessment Report (AR6), and his publications have been cited over 1,300 times. He currently leads innovative research projects on sustainable urban flash flood management, funded by the Kuwait Foundation for the Advancement of Sciences (KFAS) and the Henan Province Foreign Expert Projects in China.

BRIEF DESCRIPTION:

Water plays a critical role in achieving the United Nations' 2030 Sustainable Development Goals (SDGs), particularly in arid regions such as the Arabian Peninsula (AP). This study uses GRACE satellite observations and model simulations to evaluate future changes in terrestrial water storage (TWS) across the AP under different greenhouse gas scenarios. Projections indicate significant TWS declines in southeastern Saudi Arabia and eastern Yemen, while northern areas, including Kuwait, may experience increases. The impacts are expected to intensify toward the end of the century, especially under higher-emission scenarios. These results underscore the need for sustainable water management strategies to enhance resilience and support long-term development in the region.

SEMINAR ANNOUNCEMENT

**KNPC ROLE IN CLIMATE
CHANGE MITIGATION**



Eng. Hosam Jamal

Team Leader, Environment Division, KNPC

 3rd Feb, 2025

 12:30 PM - 2:00 PM

 AU Auditorium

BIO:

Mr. Hosam Jamal, a Post Graduate Engineer, has about 18 years working experience in the Environment Division at KNPC. He is currently working as Team Leader-Environment at KNPC, Kuwait. He has worked in various capacities at large sized refineries (Mina Al-Ahmadi and Mina Abdullah, Kuwait) and also handled many Oil and Gas related Mega-Projects. His contributions and experiences are mainly in the field of Air and Water Pollution Control and Management at Refineries/related Projects, Solid and Hazardous Waste Management, Environment Impact Assessment, coordination with Regulatory Agencies etc. Mr. Hosam is an avid reader and represented KNPC in various national and international climate change forums.

BRIEF DESCRIPTION:

Climate change is one of the most pressing global challenges, driven by the accumulation of greenhouse gases (GHGs) in the atmosphere due to anthropogenic activities. The energy sector is a significant contributor to GHG emissions, primarily through the burning of fossil fuels and industrial processes. KNPC has recognized its role and initiated a pivotal role in mitigating climate change by adopting cleaner technologies, improving energy efficiency, and investing in sustainable practices.

The presentation will encompass the issue of climate change and the efforts of the international community under UN to save the planet from deleterious affects. The presentation will highlight various initiatives and vision of KNPC to mitigate climate change

SEMINAR ANNOUNCEMENT

**KUWAIT ENERGY
TRANSITION AGENDA**



Eng. Sara Akbar

Chairperson and CEO of OilSERV, Kuwait and Iraq



1st Oct, 2024



12:00 PM – 1:00 PM



AU Auditorium
& MS Teams

BIO:

Eng. Sara Akbar has over 37 years of experience in the oil and gas industry, and is currently the Chairperson and CEO of OilSERV, Kuwait and Iraq; part of the OilSERV Group, an indigenous oilfield services company operating in the MENA region. Furthermore, Eng. Sara serves as a Non-Executive Director of Petrofac since January 2018.

Eng. Sara has been the Chairperson of Advisory Board to the American University of Kuwait (AUK) College of Business & Economics (CBE) since 2016. She is a board member in Life Energy Co.

In the past, Sara served as Director on various Kuwaiti companies and industry Societies including the Society of Petroleum Engineers (SPE), Kuwait Society of Engineers (KSE), Kuwait Gulf Oil Company (KGOC) and Kuwait Drilling Company (KDC) Association of International Petroleum Negotiators (AIPN).

BRIEF DESCRIPTION:

The talk will describe the road map for energy transition for Kuwait, it will include a macro picture of the energy transition efforts internationally and its impact on the region and on Kuwait.

The talk will cover all facets of energy transition elements including:

- Energy efficiency
- Emission control and monetization
- Energy substitution
- Alternative energy potential

SEMINAR ANNOUNCEMENT

**"FUNDAMENTALS OF
AN ENGINEER'S HEALTH,
SAFETY, SECURITY
& ENVIRONMENT"**



Eng. Noor Adel Alsadi, MPH.

HSSE Manager - Sustainability Lead IHS Towers Kuwait



26th Mar, 2024



12:00 PM - 1:00 PM



Auditorium &
MS Teams

BIO:

HSSE Enthusiast Practitioner with an Environmental Engineer Degree and master's in public health for Environment and Occupational Health. Professional Trainer in various accredited establishments in the oil and gas sector and telecommunication towers.

BRIEF DESCRIPTION:

This compact comprehensive session covers key topics such as distinguishing hazards from risks, the importance of inspections and audits, strategies for preventing dropped objects and ensuring safety while working at height, alongside managing fire and electrical hazards. Ideal for engineers at all levels, this presentation is a gateway to mastering safety protocols and leadership in the engineering domain, ensuring a safer work environment for everyone in accordance to IOSH standards.

SEMINAR ANNOUNCEMENT

**"CARBON CAPTURE,
TRANSPORTATION, AND STORAGE
(CCTS) - RESEARCH AND
EDUCATION CHALLENGES
AND OPPORTUNITIES"**



Prof. Eissa Alsafran

Professor of Petroleum Engineering at Kuwait University



Tue, 21st Nov. 2023



12:00 PM - 1:00 PM



AU Auditorium

BIO:

Prof. Eissa Al-Safran is a professor of petroleum engineering (PE) and a former vice dean for research and academic affairs at the College of Engineering and Petroleum at Kuwait University. Prof. Al-Safran is currently an adjunct professor of PE at the New Mexico Institute of Mining and Technology (NMT) and was a visiting professor at the Nuclear Science and Engineering Department at the Massachusetts Institute of Technology (MIT) where he taught a graduate course and co-supervised PhD students. He was also a visiting research professor at the PE departments at the University of Tulsa (TU) and NMT. Prof. Al-Safran is the founder and director of the Kuwait University Petroleum Production Int. Collaborative Research Program and co-founder and associate director of the NMT Production and Drilling research consortium. He earned a BSc. (1995), MSc. (1999), and Ph.D. (2003) degrees in PE, and an MSc. degree in mathematics and science education (2003), all from TU. He is the co-author of the SPE book "Applied Multiphase Flow in Pipes and Flow Assurance-Oil and Gas Production," and has authored and co-authored more than 110 peer-reviewed journal and conference publications.

BRIEF DESCRIPTION:

The CO₂ buildup and implications for climate change and its effect on the future of the earth are of great concern to all of us. However, the International Energy Agency (IEA) 2022 Stated Policy (STEPS) and the Shell Sky scenarios, both aggressive decarbonization forecasts, of the world energy outlook show an ongoing, long-term role for oil and gas. Some of the ways the petroleum industry can lead the decarbonization effort include developing and supporting the growth of CCUS, geothermal, and hydrogen technologies through research and education. Therefore, the PE industry is part of the solution and has a major role in energy transition to combat climate change. In addition, petroleum engineers will continue to have relevance and renewed importance in the energy transition because of their unique set of skills and competencies in fluid flow in conduits and porous media that lend themselves to CCUS and geothermal energy extraction. Petroleum engineering, with its unique blend of skills and technologies, is unmatched and needed for a long time.

SEMINAR ANNOUNCEMENT

**"SUSTAINABILITY IN OIL
AND GAS INDUSTRY"**



Dr. Fajhan Al-Mutairi, PhD



Tue, 10th Oct. 2023



12:00 PM - 1:00 PM



AU Auditorium

BIO:

Dr. Fajhan holds a PhD in petroleum engineering. His specialty is in intelligent wells technology and digital oilfields. He graduated from Heriot-Watt University in Edinburgh, Scotland. After working for 14 years at Kuwait Institute for Scientific Research (KISR), Dr. Fajhan joined Schlumberger as a Completion Domain Champion. He recently was appointed as Sustainability Manager for SLB Kuwait as well as Completions Sales Manager.

BRIEF DESCRIPTION:

The world faces its greatest balancing act - to provide reliable, accessible, and affordable energy to meet growing demand while rapidly decarbonizing for a sustainable future. In this talk, we'll discuss how the energy industry is meeting this challenge. We'll explore new technologies that reduce carbon emissions, changes in our energy systems, and how digital tools are making everything more efficient and sustainable. Join us to learn more about the exciting changes that are helping to protect our planet's future.

SEMINAR ANNOUNCEMENT

**"THE INTERSECTION OF AI
AND RENEWABLE ENERGY:
EXPLORING NEW HORIZONS
FOR ELECTRICAL ENGINEERS"**



Ms. Hebah Abbas

Chairwoman, Sustainability Committee, Kuwait Water Association.

 Tue, 3rd Oct. 2023

 12:00 PM - 1:00 PM

 AU Auditorium

BIO:

Eng. Hebah Abbas is a chief specialist Electrical Engineer at the Ministry of Education Kuwait, Technical Advisor and Chairwoman of Sustainability Committee at Kuwait Water Association. A graduate of Syracuse University, New York , she has more than 20 years of experience in multiple sectors such as Education, Telecommunications, Construction, Utilities and Sustainability.

BRIEF DESCRIPTION:

In this seminar, Hebah Abbas will discuss the innovative intersection of Artificial Intelligence (AI) and renewable energy. It will cover a wide array of topics including how AI can enhance the efficiency of renewable systems, enable predictive maintenance, optimize energy use, and even forecast energy demand. Case studies of successful implementations of AI in the energy sector will be highlighted. Attendees will be inspired to think innovatively about their role in integrating AI with renewables and to envision how they can contribute to a sustainable future. This seminar will provide an opportunity for students to see firsthand the transformative potential of these technologies and the exciting career opportunities that lie at this intersection.

SEMINAR ANNOUNCEMENT

**"FLAX FIBER REINFORCED
CONCRETE FOR SUSTAINABLE
BUILDING MATERIAL"**



Dr. Zainab Al Hajaj

Assistant Professor at the Mechanical Engineering Department
of the Australian University

 Tue, 19th Sep. 2023

 12:00 PM – 1:00 PM

 AU Auditorium

BIO:

Dr. Al Hajaj is an Assistant Professor at the Mechanical Engineering Department of the Australian University and an Adjunct Professor at the Toronto Metropolitan University. Dr. Al Hajaj has considerable research in the field of mechanical and damage characterization of materials. Her research interests lie in the area of composite materials, natural fibers, energy efficiency, heat transfer and mechanical characterization. Dr. Al Hajaj is also an active member in the Kuwait Society of Engineers (KSE).

BRIEF DESCRIPTION:

Industries are in high demand to produce materials from natural resources such as natural fiber in order to reduce the impact of climate change, promote economic growth and reduce energy consumption. This work was performed to examine the effect of incorporating flax fiber in concrete at different fiber content, in terms of compressive strength, split tensile strength and compressive modulus of elasticity. Flax fiber reinforced concrete manifested notable improvement in the compressive strength and modulus of elasticity up to 1% of fiber by weight of concrete. Incorporating flax fiber in concrete provides good mechanical performance that can be used as a sustainable construction material for buildings.