

News (Attachment 1)

The Summary of September 2022

1- Title: Closing Ceremony of the 43rd Training Course

2- Title: Inclusion of the Solar House of KISR in the Kuwait Register of Historic Buildings

Summary:

The National Council for Culture, Arts and Literature has included the Solar House of the Energy and Construction Research Centre of KISR in the Kuwait Register of Historic Buildings (KHBR), which is of historical significance and reflects the product's scientific and technical heritage.

3- Title: KISR Hosts IAEA Regional Training Course on Body Measurement

Summary:

The International Atomic Energy Agency (IAEA) organized a regional training course titled "Body Composition Assessment" at the Kuwait Institute for Scientific Research (KISR). The course aimed to train participants in the coordinated research project "Application of Nuclear Techniques to Determine Fat Mass and Upper Limits of Body Measurements".

4- Title: KISR Participates in the Science Summit during the 77th Session of the United Nations General Assembly with a Virtual Seminar Titled "The Role of Infrastructure in Sustainable Development"

Summary:

The Kuwait Institute for Scientific Research (KISR), represented by the Energy and Building Research Center (EBRC), participated in the Science Summit, during the seventy-seventh session of the United Nations General Assembly during the period 13-30 September 2022.

News (Attachment 2)

The Detailed News - September 2022

Title: Closing Ceremony of the 43rd Training Course



News:

* Speech by Dr. Mana Al-Sidirawi, Acting Director-General of KISR*

At the end of the 43rd Summer Training Course

From 1 August - 1 September 2022

In the name of God, the Merciful

My dear students

Good Morning,

I am pleased to welcome you, at the closing ceremony of the 43rd Summer Training Course, which returned after a two-year stop due to compliance with the precautionary measures decided by the national authorities to curb the outbreak of the coronavirus pandemic. And now we are happy to meet our dear students in stable conditions, thanks to the Almighty. He has praise and resilience, and for the science and human minds that have played an important role in confronting this pandemic, reaching effective vaccines and moving forward towards reliable treatments. Hence we recognize the importance of science and the important role of its institutions, as well as the importance of scientific research activity that (my sons and daughters) have practiced some of its experiences and lived in its atmosphere over the course of a month.

Dignified audience

This summer training course, which KISR has been organizing annually for nearly half a century, represents an important value in shaping our children's ideas for the future. For its passion for science, interest in development issues and a broad knowledge of innovation, with specialized scientific research programs benefiting our children at the high school and university levels during which they are preparing for very important future steps. National Development Plan ", which contributes to the building of human beings and the support of the National Development Plan Kuwait New 2035, whose seven pillars included a human development pillar titled "Creative human capital".

In this year's course, we were pleased with the participation of (155) students, including (100) from the high school level and (55) from the university level. The course included (7) scientific programs to be introduced for the first time in such courses, specializing in: reverse engineering, nutrition, air chemistry, radiation physics and wastewater treatment. It also included two competitions of a scientific nature, the first titled "Solutions to the challenges of Kuwait Vision 2035", the second relating to the design of "Scientific posters", as well as a day of motivation for trainees and another dedicated to sports activity.

Ladies and Gentlemen

Undoubtedly, Kuwait Institute for Scientific Research's contribution to human construction through such activities, it is an essential contribution, as it constitutes an innovative environment that brings together our children with the tools and foundations of research, development, innovation and creativity, modern technologies and best knowledge programs are used to build national human capital that meets and responds to future needs and responds to it, also transmits global knowledge and best practices in human development.

Dear Participants Students

I would like to pay tribute to you for your efforts and seriousness. You were great models. You interacted exceptionally, vitally and effectively with the components of the course. Your commitment was admired. Your thoughts were and will continue to be appreciated. Continue to be passionate about science, development and thought-provoking, as our country's true wealth and future. Always understand that training does not stop, and knowledge does not end.

I cannot fail here to pay tribute to your families, who provide you with all the essentials of learning and training and believe that the best investment is in their children and in strengthening their abilities.

I would also like to pay tribute to the participants of this session from the Department of Manpower Development and the Department of Marketing Programs Implementation. Allow me to extend special thanks and tributes to researchers and lecturers from the various centers and sectors KISR. I appreciate their knowledge and effort. Thanks are extended to sponsors and supporters, mainly Boubyan Bank, Motion Company, Kuwait Flour Mills and Bakeries Company, Foda Fuda Company, Al-Rawdatain Water Filling Company, City Bus Company, Tajded Educational Consulting Company, Jedit and Kuwait Winter Games Club.

May God lead us contribute to the development of our country under the wise leadership of his Highness the Emir of the country, and His Highness the Crown Prince and His Highness the Prime Minister.

Speech By The Manager of The Course, Dr. Nasser Al Sayegh *

Dr.Nasser ALSayegh Reciting a poem.

In the name of God, the Merciful

Director of KISR, Guests, and dear students whom are Kuwait scholar's tomorrow,

Dear Colleagues.

On behalf (KISR) and the participants in the 43rd Summer Training Course, I welcome you and thank you for your kind attendance at the closing ceremony of the summer course, which the (KISR) is keen to organize annually for our high school and university students.

Dear students you will draw the present and future of Kuwait, you have achieved the honorable success in the course over the past weeks. I have found in you the patience, determination and I did not see this in students your age before.

Dear colleagues who are working in the course, no matter what words of thanks, praise and appreciation I will not fulfill your right, but all thanks to you for the fruitful time and effort we have spent together working to increase the success of this course, thank you for all this experience and assistance you provided to me and your participating students, you have undoubtedly proved to be the second family closest to me and the student.

As the political leadership has always urged us to accomplish and uphold the science to build a new Kuwait with a sophisticated vision to call Kuwait to the refineries of the developed countries, "Science is the foundation of the up liftmen of the human and the renaissance of homelands throughout the ages and times".

The Emir of Kuwait Sheikh Nawaf Al-Ahmad Al-Jaber Al-Sabah and the Crown Prince of His Highness Sheikh Mishal al Al-Ahmad Al-Jaber Al-Sabah reiterate the hope of the people of this nation to increase Kuwait's scientific standing and international standing.

In conclusion

You will always remain part of the family of KISR and our doors will always be open to you. This is your second home as you have entrusted and I wish you more success, excellence, and creativity.

Your Brother manager of the 43rd Summer Training Course

*** Students Speech For Summer Course (43) Student: Jumana al-Najdi ***

In the name of God the Merciful

Dr. Mana Al-Sidirawi Acting Director General of KISR

Mr. Abdelmohsen Al-Harun Acting Executive Director of Management, Finance and Support Services Sector

Dear Audience...

Dear students....

Good Morning,

It is my great pride and privilege to stand in front of this dignified crowd of my colleagues who are participating in the 43rd summer training course of the KISR, which presented us with an excellent opportunity to stand among the laureates of this distinguished scientific edifice.

It is a sense of pride, to stand once and for all, in these moments when the smiles of joy are mixed with the expressions of goodbye at the conclusion of a meeting of several weeks. The minds and spirits on board the ship of success met with colleagues who were one soul in scattered bodies.

Honorable Guests

We spent moments that we will not forget, gaining good company and light that brightens our minds and awareness of what it means to love learning.

The five-week journey was a door we opened and learned from.

- The group is a secret to success
- That insistence is the secret of the struggle
- Optimism is the color of hope

Dear Audience,

On behalf of my colleagues,I would like to give you my thanks.

I am deeply grateful for your participation in these warm moments, and I hope you will allow us to extend special thanks to our mothers and fathers who have coexisted with our internship at KISR.

We pledge to be always thankful and I cannot fail here only to thank the family of the KISR for their support, and welcome and opening their hearts before doors.

The most important thanks remain to the officials and supervisors of the training course and to the elite researchers and scientists who have taught us so much. I say to them, you have enclosed our necks with the beauty of your work and the greatness of your giving. You have not been stingy with us with any information, advice or guidance. You have been standing by our side and firmness.

Finally, the word remains and the covenant remains. We are proud of KISR. We will remain so, me and my colleagues pledge to move forward and to invest our knowledge of the summer course as a basis on which to build our dreams our ambitions, our knowledge, and the future of our country.

The last words and words of Allah Almighty have saved Kuwait, its people, its Emir from all hated things.

Title: Inclusion of the Solar House of KISR in the Kuwait Register of Historic Buildings



News:

The National Council for Culture, Arts and Literature has included the Solar House of the Energy and Construction Research Centre of the Kuwait Institute for Scientific Research in the Kuwait Register of Historic Buildings (KHBR), which is of historical significance and reflects the product's scientific and technical heritage.

In turn, Dr.futouh ALraqum the manager of the program energy efficiency stated that ' One of the most important research trends of (KISR) in 1976 was the establishment of the Solar Energy Program, which made KISR one of the first research institutions in the Arabian Gulf region and conducted extensive research on the potential applications of renewable energy systems in Kuwait and the GCC.

Dr.ALraqum cleared that KISR began conceptualizing the solar house in 1977 and was completed in 1979, when the concept of solar houses was spreading and evolving around the world. KISR was one of the pioneers in the Arabian Gulf region to explore and implement this concept, the establishment of the solar house on KISR's land was one of the first outstanding research work, which contributed to the development of local cadres in this field.

Dr.ALraqum added: While solar houses were often designed to suit the cold climate, KISR worked to apply the solar house concept specially designed for local hot climate requirements,

using intensive insulation materials, using high-performance glass, and using techniques to use thermal solar energy to reduce electrical load, which was available at the time, which contributed to the preparation of the energy conservation code for the Ministry of Electricity, Water and Renewable Energy.

Dr. ALraqum drew that in order to preserve this historical scientific legacy, KISR applied for the inclusion of the Solar House as a historic landmark in Kuwait's Register of Historic Buildings (KHBR) to remain a guide for future generations and to witness the KISR's leadership in applying and developing science in particular; Kuwait's vision is distinguished in the field of scientific progress, research, energy efficiency techniques and renewable energy in general. Kuwait Solar House will remain an important historical milestone reflecting Kuwait's scientific developments and early initiatives in solar research applications presented by the KISR for Kuwait and the Arabian Gulf.

It is worth mentioning that the heritage of the scientific and technical product is one of the branches of heritage, and a fundamental concept that is focused on in the global strategy for achieving a balanced representation of the World Heritage List.

Title: KISR Hosts IAEA Regional Training Course on Body Measurement



News:

The International Atomic Energy Agency (IAEA) organized a regional training course at the Kuwait Institute for Scientific Research entitled "Body Composition Assessment". The course aimed to train participants, on the joint research project titled "Application of Nuclear Techniques to Determine Fat Mass and Upper Limits of Body Measurements." The project was financed by the IAEA. It aimed at the safe use of standardized techniques for accurate measurement of body composition in adolescents in the region of ARASIA. It also aimed to determine the upper limit of fat mass, and body measurements; and estimate the likelihood of their association with metabolic syndrome (hypertension, diabetes, cholesterol, and triglycerides, and increased fat around the waist).

The training was supervised by IAEA experts, who successfully developed these techniques, and used them to monitor body change in children and adolescents, due to adopting healthy eating behavior, and increased physical activity in the UK, Morocco, and Lebanon.

This course reflects the keenness of the IAEA to strengthen technical and human capacities in the member states located in the ARASIA region. Specialists in the field of public health and obesity research from the Kingdom of Saudi Arabia, the Hashemite Kingdom of Jordan, and Lebanon, as

well as specialists from the Food and Nutrition Program of KISR's Environment and Life Sciences Research Center (ELSRC).

Dr. Tariq Al-Ati, a research associate at the Food and Nutrition Program and the national counterpart of the IAEA, explained the importance of this course in supporting obesity research in Kuwait. He clarified that organizing this course is an important step to train Kuwaiti personnel and participants on the most accurate techniques to face the problem of obesity, which represents the most important public health challenge in Kuwait. Obesity is one of the most important risk factors for chronic diseases and metabolic syndrome. All such diseases have very high and increasing rates, so their effects are present on the Kuwaiti individual and the quality of his/her health future. They represent a great burden on the health system and on the budget of the Ministry of Health, as well as on the state budget in the long term.

Dr. Al-Ati appreciated the efforts of Dr. Nader Al-Awadhi, the National Liaison Officer for the IAEA, in benefiting from the IAEA's programs and expertise in facing the most important health problems facing Kuwait and the countries of the region. Obesity is a global epidemic, however, it is more prevalent in Kuwait in particular, and the countries of the ARASIA region in general, which requires adopting realistic health policies based on scientific evidences, accurate measurement tools, and developing intervention programs that could be expanded to confront obesity in the all age groups.

Title: KISR Participates in the Science Summit during the 77th Session of the United Nations General Assembly with a Virtual Seminar Titled "The Role of Infrastructure in Sustainable Development"



News:

The Kuwait Institute for Scientific Research (KISR), represented by the Energy and Building Research Center, participated in the Science Summit during the Seventy-Seventh Session of the United Nations General Assembly. The summit was held from 13 to 30 September 2022.

A group of leaders, national and international scientists and experts from the discipline, participated in the symposium. Participants included the Secretary-General of the General Secretariat of the Supreme Council for Development and Planning, Dr. Khaled Mahdi, and a member of the Kuwaiti Municipal Council, Dr. Hassan Kamal, in addition to a group of researchers from KISR, the University of Texas, USA, and the University of Manchester. The symposium aimed to discuss the most prominent challenges and issues inspired by the current situation, and propose plans and solutions through research and development programs. In addition, the symposium aimed to present the latest research conducted globally, focusing on the impact of the infrastructure on sustainable development, in terms of basic access to infrastructure services, as well as the most advanced infrastructure.

Dr. Shaikha Al-Sanad, Manger, Sustainability and Reliability of Infrastructures Program, EBRC, pointed out that the goal of the summit is to demonstrate the role of science and its contributions for achieving sustainable development goals. In addition, the summit aims at developing mechanisms to facilitate scientific cooperation among global institutions, within the framework of achieving development goals. KISR chaired one of the summit's activities, a seminar entitled "The Role of Infrastructure in Sustainable Development", Dr. Al-Sanad stated that the event discussed a number of sustainable development topics related to infrastructure. Such topics included adaptive paths for flexible infrastructure, smart cities, flexible designs for roads and transport networks, effective management of infrastructure assets. They also included the role of digital technology in infrastructure, and the requirements of a sustainable energy system to meet the challenges of the global energy transition. Dr. Al-Sanad explained the importance of bringing together academia and the policymaking community to share knowledge and insights, regarding the roles that infrastructure can play in stimulating sustainable development.

Dr. Khaled Mahdi, Secretary-General of the General Secretariat of the Supreme Council for Planning and Development, pointed out that the infrastructure policy-making is affected by three main factors. Firstly, the government's readiness to deviate from the pattern of implementing infrastructure projects by targeting comparisons with international indicators with best practices. Secondly, the possibility of creating a platform that connects parties and competent authorities to have unified objectives to achieve a joint vision. Third, the use of modern and advanced technologies in the field of big data analysis through continuous analysis of infrastructure projects, so an integrated infrastructure policy is achieved with a standard target, integration of stakeholders and big data processing. Failure of many infrastructure policies is attributed, in particular, to the lack of these factors.

Dr. Hassan Kamal, member of the Municipal Council, explained that the seminar organized by the United Nations General Assembly, is to demonstrate the important role of the planned infrastructure projects in the country's structural plan on sustainable development. Structural plan sets the general framework for projects, and includes future urban goals and policies that reflect

the special political, economic, social, and environmental vision and objectives terms of various land uses during the coming 25 years. It also includes future development projects in line with the set plans, taking into account the expected population growth in the State of Kuwait, and the importance of matching the infrastructure projects in the structural plan with the projects of the country's development plan. Therefore, there is a need to speed up the implementation of infrastructure projects and housing projects, roads, electricity, education, and health, etc. in light of the rapid population growth of our young society.

Dr. Osama Al-Sayegh, a scientific researcher at EBRC, KISR participated in the seminar titled "The Role of Infrastructure in Sustainable Development." He gave a lecture titled "Sustainable Energy System: Facing Global Energy Transition Challenges", in which he pointed out to the importance of the energy sector, as one of the essential factors of infrastructure. He explained that The State of Kuwait depends on energy to develop most of the economic and social sectors. He clarified that the economies that depend on oil exports, like Kuwait, will face development opportunities and energy security challenges in the global energy transition process. Dr. Al Sayegh urged the adoption of the Circular Carbon Economy (CCE) Strategy, which is based on four main factors, namely efficient energy consumption, decarbonization of emissions, removal of waste from the environment, recycling of waste, and conversion of waste into usable products. He recommended the implementation of the economy and CCE Strategy in sectors of Electricity generation, water desalination, oil, petrochemicals, and industry in Kuwait. He stressed the key role of applied research in integrating the strategy of the economy and CCE with the operations of various sectors in Kuwait.

Dr. Jaafar Ali Parol, a scientific researcher, EBRC, KISR, pointed out to the importance of structural health monitoring technology, as it is one of the latest modern technologies that can be used immediately to determine the damage caused by earthquakes, or any other natural disasters, due to harsh environmental conditions. This technology contributes to the immediate assessment carried out by the relevant authorities (especially the country's Civil Defense authorities) to identify safe structures for operation during emergencies. It is, therefore, possible to automate disaster response incidents during or immediately after disaster occurrence.