

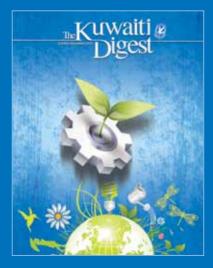
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## Letter from the Editor

As a new year approaches, we at KOC continue to ensure that the necessary programs and preparations are being made to turn the Company's 2030 Strategy into reality. From the implementation of new technologies throughout the Company to the construction of new homes for KOC employees, each passing day brings us closer to the realization of our production, environmental and social goals. In terms of our environmental efforts, I am happy to report that teams throughout the Company continue to work hard by implementing standards for efficiency and the reduction of waste. Socially, the Company continues to lead efforts which reach out to our local community in order to better understand and address the issues which affect us all.

I encourage readers to spend some time with the stories in the following pages so that they may become better acquainted with some of the happenings that have occurred throughout the Company over the past few months. Our lead story sheds light on some of the training initiatives KOC has invested in for new and young employees. As KOC's future leaders, their preparedness in being able to tackle tomorrow's challenges is of the utmost importance. From training initiatives to various health and safety campaigns, KOC is working hard to ensure that our employees are armed with the information and tools they require to succeed.

As a number of new projects begin to break ground around the Company, one of the most exciting new developments concerns the construction of new homes in Ahmadi for KOC employees. Much effort has gone into the planning and preparation of these



Saad Rashed Al-Azmi Deputy (EO (Administration & Finance)

new homes, and long-term residents of Ahmadi will be happy to learn that these new homes will retain the city's distinctive charm and architectural style.

While everyone here at KOC wishes that these pages could be filled with nothing but stories of triumph and achievement, it is with a heavy heart that I must acknowledge the fact that we must say goodbye to long serving employees who have reached retirement. These individuals have spent a lifetime of service with KOC, and without their contributions and sacrifices over the years, the Company would not be what it is today. We at KOC thank these individuals for their service and wish them the best of luck as they prepare for the next chapter of their lives.

As always, I would like to remind our readers that KOC continues to make strides in terms of our 2030 Strategy. From planning and career development to the implementation of new technologies and the protection of the environment, our Company marches on, ready and willing to face the challenges ahead.



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#### Internal Event

### New Beginnings A Roadmap for KOC's 2030 Strategy



#### Worldwide Results

CEO Hashem Hashem recently attended the two day "Compulsory Constituent Program" event, along with a number of the Company's Deputies, Group Managers, Team Leaders, and Senior staff. Under the patronage of Ayad Al-Kandari, Deputy CEO Drilling and Technology and head of the Training Implementation Unit, thirty trainees presented their most important achievements and the results of their work during their nearly 6-month training periods. The trainees showed great ambition, and their results exceeded expectations.

This ambition went so far as to cross the borders of Kuwait and into London, where KOC won the Getenery Award. In spite of the tough competition from other international oil companies, national training institutions, universities, and major specialized colleges, the KOC Team came out on top. The young professionals were seeking to develop an abundance of human resources within the framework of achieving the Company's 2030 Strategy.

#### **Future Leaders**

The CEO described the trainees who successfully completed a year-long training program as "The leaders of the future." The Chief Executive also shared his thoughts on the occasion, stating, "I am filled with happiness, and I am following the commitment of our young professionals who take initiative in the field of the most prominent activities of the Kuwait Oil Company. They have shown themselves to be valuable assets to the Company through building their skills and competitiveness during the training process."

The Chief Executive also stressed that the oil and gas industry is unique, in the sense that it bore witness to rapid technological changes and shifts in oil finding in the recent past, and has had to face such challenges head-on. New recruits must recognize the difficulties that may lie ahead, and remain firmly on the quest to achieve the Company's 2030 Strategy. He went on to state that overcoming these challenges requires the use of the latest technologies, tools, and techniques, meaning that a highly qualified and effective workforce is key to moving forward.

#### **Opportunities and Results**

Hashem affirmed the Company's commitment to providing the best training and development opportunities for its employees. He stressed that KOC is moving towards a stronger focus on performance indicators in human resources, and the Training Implementation Unit (TIU) proposes creative and innovative solutions to aid in achieving this goal.

Hashem explained that the TIU is a frontrunner in training and developmental activities, and has achieved various major accomplishments. They have received a great deal of praise for their success, not only from KOC and other oil sectors, but on an international level as well, as in the case of the Getenergy Award in London.

#### Appreciation

The CEO expressed the Management's appreciation toward the TIU committee, the technical labor team, and all stakeholders on their achievements in developing the Company's workforce. He voiced his deep gratitude to the Team Leaders, members of the Training Units, and senior staff, each in their respective roles, for their efforts and commitment. The trainers, who Hashem considered key players in achieving the outstanding results, were also praised for the growth of the trainees. These young trainees, he said, are "one of the most precious resources of the Company, and will be the leaders of the future."



e CEO presents awards to KOC employees.



#### **Development Never Stops**

In his welcoming speech, acting Deputy CEO (Development and Training) Naif Al-Enizi, expressed his gratitude to all those who contributed to the success of the program. Al-Enizi stated that all of them have played an integral role in the development of this progressive movement, and have successfully empowered the young team by helping them strengthen their skills and their sense of competitiveness. He noted that KOC is proud that this program earned international recognition in global conferences, and won the Getenergy Award in London.

Al-Enizi pointed out some of the benefits of introducing "new blood" in the Company. The following points, he said, are the positive effects of the resulting cultural shift:

• Fresh commitment and responsibility



- Worker's attentiveness while on the job
- Increase in productivity and a raise in the minimum rate level
- Desire to learn and improve
- Sense of pride to work for KOC

#### An Innovative Program

Al-Daihani revealed that the end of the tenth episode of the Mandatory Foundation Assignment (MFA) was a starting point for the new program, which launched in February 2014 and is scheduled to end in February 2015. The MFA is to be an integrated part of the training process.

He disclosed that the new program will end with a conference for employees with less than five years of training. The forum will be held in the State of Kuwait, under the name "KOC's First Young Professionals Conference." The Company's management has approved the proposal, and the conference has been scheduled for February 2015. Around 110 trainees from all of the Company's departments and sister-companies will attend the session.

#### **Getenergy Award**

In the ceremony held in London, KOC received the award in the "Learning at the Core" category, which recognizes the oil/ gas company that has made the most significant contribution to their staff learning and development in the past 12 months.

The award's Higher Advisory Committee praised the "New Engineers Development Project" initiated by the Company, and approved it for voting. As a result, the Company won first place with more than 8,000 votes, 4,000 votes more than the second placed company.



#### Local Event

## **KOC Housing Project**

#### The Modernization of Ahmadi City

KOC has launched one of the largest projects Kuwait is undertaking, which is the development of Ahmadi City, a project expected to make the city one of the most sophisticated cities in the country.

In a special ceremony organized for the occasion, the Company's CEO Hashem Sayed Hashem laid the cornerstones for the construction and completion of new houses in South Ahmadi.

Attending the event were CEO Deputies, several Group Managers and Team Leaders, as well as representatives from the companies that are executing the project. Manager of the Ahmadi projects group, Ismail Al-Khawary, spoke at the event. "The city of Ahmadi tells the story of Kuwait's modern renaissance, starting when it was just a group of tents in the desert, before the start of building and construction in 1949, to later become the City of Oil and the first economic interface of Kuwait," said Al-Khawary.

He added, "This city has gone through several stages to reach what it is today, and we don't exaggerate when we say that Ahmadi is chronicling the march of development in Kuwait, by conveying the details of its transition to a modern and advanced state. When we recall



Ahmadi, we necessarily point to KOC, this leading company which is proud of its status, as well as its economic and social roles."

He indicated that the city is currently experiencing, and will continue to see in the near future, a large-scale development process, which will include several ventures under the Development of the Ahmadi City Project. One of the State's vital projects, it aims to rehabilitate and develop the city, as well as honor its historical significance. As the City of Oil in





Kuwait, Ahmadi embraces the importance of the Company's headquarters and facilities.

Al-Khawary noted that the company's aim is to work on rebuilding the city while maintaining its unique architectural character. In order to achieve this vision, a 10-year plan consisting of several stages has been prepared to begin work on the populated city. The plan includes the establishment of more than 1,800 homes with all the required infrastructure projects and related utilities, which will allow Ahmadi to keep pace with the times as well as maintain its distinguished character.

He noted that the ceremony of laying the foundation for the construction of 160 new housing units in South of Ahmadi represents one of the first stages of this large project, following the contract signing in August 2013 and the start of implementation in October 2013. The completion of this project is expected by October 2017.





Al-Khawary concluded by stating that "this project will not be successful without the efforts of everybody, and in this regard we would like to extend our sincere thanks and gratitude to all the concerned parties for their cooperation in allowing us to achieve these objectives, and for helping this project see the light. May God guide us to the virtue and progress of our beloved country Kuwait."

He indicated that the design of new homes has taken into consideration fulfilling all basic requirements while maintaining the architectural character and distinctive heritage of the city. The company is eager to provide better benefits and services to its employees, and to keep up with the renewal and development process of the current facilities and services of the Oil Sector in general.





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After the ceremony, Al-Khawary, who is also Vice Chairman of the main committee for the project of rebuilding Ahmadi City, spoke to Kuwaiti Digest and emphasized that the city will be one of the best in the region after the completion of the project. The Company has formed the main committee in February 2014, chaired by Deputy CEO for Corporate Services Ismail Abdulla Ali, with the membership of several group managers, Team Leaders and related specialists.

Concerning the Company's vision for the future of Ahmadi, he pointed out that the project to rebuild the city stems from the desire of the Company to provide better benefits and services to its employees, and to keep up with the innovation and development of the oil sector's current facilities and services. Thus, KOC management aims through this project to raise the level of services in the city, and to provide more utilities and commercial establishments.

Al-Khawary said that in addition to starting the first phase of the project, building 160 houses in South Ahmadi, they are also establishing a new dual carriageway to connect the northern side of the city with King Fahad Highway Road 40 at the INTG 77 intersection of Al-Adan Hospital. He also mentioned other important projects such as modernizing the public park, establishing a small zoo, and developing the clay courts.

Al-Khawary said about the hopes and ambitions for this project, "I confidently assure all employees that they will admire what will be implemented under this project, as it serves their ambitions and hopes in a modern Oil City that contains all the modern requirements. All this will be executed while causing the community no harassment, noise, or nuisance, since the project will be implemented in vacant lands to avoid any problems that may result from the evacuation and resettlement of houses."

Detailing the stages and timeplan of the project, he disclosed "The project follows that, an accurate time-plan to be implemented in several stages, so that the city will be entirely rebuilt within 10 years," adding, "There is no doubt the project is one of the most important projects in Kuwait as a whole, as it will turn the city into a first-class, civilized, modern city to match the best cities in the world, while maintaining its architectural character and heritage."

He said that due to the magnitude, size, and importance of the project, they have decided first to start reconstructing the current homes of the Company, which have become old and rickety, and have led to high annual costs of maintenance. These houses do not correspond with the current standard of living and have become economically infeasible, making full restoration a necessity.

In terms of the new spaces that have been taken into account, he stated that the designs of new houses will be larger in size than the existing homes, and will meet all the requirements while maintaining the character and architectural tradition of the city. The exterior design also maintains this charm, while the interior design has all the highest technical specifications and international standards, with the provision of the latest information technology. The new housing project stems from the Company's desire to provide better benefits and services to its employees.

Al-Khawary expressed his gratitude to the former Governor of Ahmadi, saying, "I would like to thank **His Excellency Sheikh** Dr. Ibrahim Duaij Al-Sabah, for his unlimited and crucial support for this great project, and for his eagerness for the projects to be properly implemented while overcoming the difficulties and obstacles. Finally we would like to thank the company's senior management, which seeks to turn Ahmadi into a Global Oil City."

New homes will meet the Company's strict requirements while maintaining Ahmadi's character and architectural tradition.



Local Event WK Celebrates World Environment Day

#### History and significance of the Annual World Environment Day.

World Environment Day (WED) is the United Nations' main vehicle for encouraging worldwide awareness and positive actions for the environment. It is an event that is celebrated on the 5<sup>th</sup> of June every year by the UNEP, who announced that the theme of this year's World Environment Day would be Small Island Developing States or "SIDS." Island nations around the world are exposed to climate change, natural disasters, and rising sea levels. Some example of SIDS Islands are Pacific, Maldives, Caribbean, and Fiji, among others. These Small Islands face several environmental challenges, such as:

Climate change and natural disasters: Increased temperature causes changes in precipitation patterns. The resulting shift in sea levels can cause floods and droughts. Extreme natural disasters lead to habitat damage and affect the inhabitants of islands, both human and animal.

Degradation of natural resources: There is a large impact on water supplies, which is extremely detrimental to an island's forests and agriculture. Declining crop yields due to prolonged drought and high temperatures, especially in African regions, is devastating and life threatening.

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#### World Environment Day



#### KOC's initiatives and actions regarding environmental management

Emission Management
Resource (Energy & Water) Management
Waste Management
Sewage Management
Land (Pollution) Management
Environment Status Monitoring
Awareness and Participation

#### WK Projects to Reduce Air Emissions

West Kuwait (WK) has undertaken several initiatives to reduce emissions. The major projects initiated are listed below:

- Ahmadi flare up-gradation project (Air Assisted Smokeless Flares in GCs 17, 27, 28 & BS-170)
- Mid way separator at GMW-04 (Part of EF-1564)
- GC-28 revamping project (GC-28 Train-3 compressor installed during this project)
- 4. Gas Sweetening Facility (WK-GSF)
- Gas Compression Package & Gas Reinjection Package (GCP/GRIP) along with associated pipelines
- WK Export Gas spillover from GMW-04 to GMW-02 (Modification Project)
- Installation of multi-cyclone scrubber at GC-27 (LP), GC-28 (HP) and at GMW-04
- 8. BS-171
- 9. 10 New 24" WK gas export pipelines

### World Environment Day, 2014 Celebration in WK Fields

Under the patronage of Deputy CEO (WK) Hasan Ali Bunain, HSE (WK) Team recently organized the celebration of UNEP World Environment Day (WED).

This was in commemoration of the annual event celebrated every year around the world under the aegis of the United Nations Environment Program (UNEP) to stimulate worldwide awareness of environmental issues to increase attention and action.

The campaign followed the theme of WED-2014 - Small Island Developing States (SIDS), in the broader context of climate change, under the slogan, "Raise your Voice, Not the Sea Level."

The program was initiated by inviting KOC staff (through postmasters and roll-ups) to participate in a slogan competition. An extremely enthusiastic response was received with 58 employees submitting more than 100 slogans. Out of these, three slogans were selected as winners and posters displaying the slogans were prepared and printed by HSE (WK).

Rollup banners were displayed at prominent locations in WK Fields and Ahmadi, highlighting the theme of this year's World Environment Day.

The final celebration was held at the WK Cafeteria on June 5<sup>th</sup>, 2014. All WK Teams, Contractors, and other Asset/Directorate HSÉ Teams were invited. More than 65 KOC & Contractor employees attended the session.

#### Highlights of the day's program included the following:

- An introductory speech by TL HSE (WK)
- Plaque distribution to 3 winners of slogan competition
- 3 informative and enlightening awareness presentations by Environment Engineers of HSE (WK) Team, on topics which included:
- History & significance of Environment Day
  - This and previous year's theme
  - Plight of small island nations

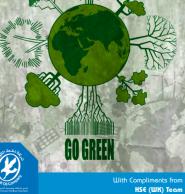
#### Winners of the Best Environmental Slogan Competition

Name	Team	Slogan
Ibrahim Al-Sayed	HSE Systems	KOC and Environment Go Hand in Hand
Reniel Dennis Ramos	Well Services Technical Team I	Caring For Our Planet, Now and Beyond
Ali Siddiqui Afzal	R&T Surface	Save The Environment For Future Generations

**Winning Posters** 

## KOC and the Environment Go Hand in Hand HSE (WK) Te Save The Environment Caring For Our Planet For Future Generations Now And Beyond

HSE (WK) 1



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#### **Global Warming**

- Introduction to global warmina
- Causes of global warming
- Effects of global warming
- **Solutions** to global warming
- Kuwait efforts to combat global warming
- Global Warming: Kuwait and KOC's sustainability effort
  - Global warming, causes, effects and contribution (with mention of oil & gas industry)
  - Kuwait's participation in environmental programs
  - KOC's commitment & efforts towards environmental management
- A 25 minute Video clip regarding the impacts on environment and inhabitants of Small Island Nations like 'Kiribati' in the Pacific Ocean, which is expected to be inundated in the near future as a result of rising sea levels due to global warming.





#### Awards were distributed during the ever

#### **Message from the** Team Leader, HSE (WK)

"It is a great accomplishment for KOC and West Kuwait Directorate to be recognized by the United Nations' Environment Program (UNEP) for the valuable contribution in celebrating the 2014 World Environment Day (WED 2014). I take this opportunity to thank and appreciate all KOC employees and contractors who contributed to achieve this accomplishment for the first time in KOC.

> Ahmed M. Qabazard Team Leader HSE (WK)

It is a matter of great pride for all of us that Kuwait Oil Company and West Kuwait Directorate have been recognized by the United Nations' Environment Program (UNEP) for our contribution in the celebration of 2014 World Environment Day (WED 2014). Therefore, UNEP has posted KOC's contribution under its UNEP-WED website, which can be accessed through the following hyper-link:

#### http://unep.org/wed/

#### Internal Report

## **D&T** Conducts Health Campaign

#### Event organized by HSE



The HSE (D&T) Team successfully completed a health campaign based on the concept of "Healthy Crew - Wealthy Operations" at drilling rig camps, with the support of the Medical Group (Ahmadi Hospital) and Deep & Development Drilling Groups. This was the first time such an event was conducted at rig camps.

Nayef Al-Anezi, Manager TSG, said that the main indicator for the success of the campaign was the large turnout by drilling crews, in addition to excellent preparation. He was pleased that the number of participants exceeded expectations.

Ali Dawood Al-Khaldy, Team Leader HSE (D&T), welcomed the attendees and encouraged everyone to participate in such campaigns in order to stay educated about their health, which he maintained is the greatest asset one can have.

The campaign was conducted at three different locations at the main rig camps (SEK, North



The team delivers informative health tips at a drilling site.

Kuwait and West Kuwait) in order to cover the groups of rig camps in various areas. The objective of this measure was to promote awareness about healthier lifestyles and wellbeing of the drilling crews.

The measure included minimum health checkup programs, such as monitoring of BMI (Body Mass Index), Blood Pressure, and Blood Sugar. They also discussed some common hygiene tips, like hand washing and sanitary eating habits, among other topics.

#### Introduction:

For the first time at KOC, the HSE (D&T) Team proactively initiated this Healthy Crew -Wealthy Operations Program in D&T Directorate with the aim to increase awareness of benefits associated with wellness and healthy lifestyle. This program mainly focused on Drilling Contractors Crew, as they have limited access to medical check-ups while on the job. This program was conducted in



Kuwaiti



TSG Manager Nayef Al-Anezi leads through example by conducting a check-up.

coordination with Development Drilling and Deep Drilling Groups, and with the support of Medical Group professionals in three phases. As part of this campaign, the Team conducted health awareness sessions and checking of Blood Pressure, Blood Sugar, and BMI, and offered the Drilling Rig crew professional advice from doctors.

HSE (D&T) Team follows PDCA (Plan, Do, Check, Act) quality cycle in organizing the Healthy Crew - Wealthy Operations Program in D&T Directorate.

Healthy Crew Wealthy Operations measure planning (PLAN):

HSE (D&T) Team initiated this measure to promote awareness about healthier lifestyle and wellness of the drilling crew. Subsequently, several consultations were held with the Medical Group to design a customized program suitable for the Drilling Rig Crew. A Working Group was established involving Deep Drilling, Development Drilling, and Medical Group

representatives. Several meetings were held during the course of planning up until the execution stage.

As part of this measure, the Team planned to conduct the BMI, Blood Pressure & Blood Sugar examinations at following three phases:

- 1. Phase I: December 29, 2013 - SE&K Rig Main Camps
- 2. Phase II: January 22, 2014 - North Kuwait Rig Main Camps
- 3. Phase III: February 19, 2014 - West Kuwait Rig Main Camps

#### **Healthy Crew – Wealthy Operation Program Implementation (DO):**

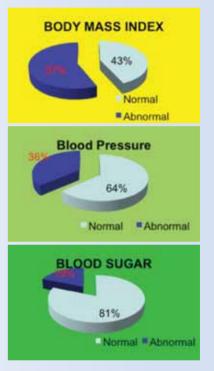
HSE (D&T) Team arranged the necessary facilities and resources to conduct the above mentioned health check-ups for the identified Rigs Crew with the support of Development Drilling & Deep Drilling Groups in all three phases. Medical professionals from the Medical Group conducted

BMI, Blood Sugar & Blood Pressure tests for Drilling Crews in the three phases.

Medical check-up details and their statistical analysis are given below, by phase:

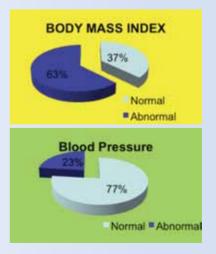
Phase I: December 29, 2013 -SE&K Rig Main Camps

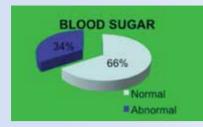
Total number of Rig Crew under the health check-up: 166.



Phase II: January 22, 2014 -North Kuwait Rig Main Camps

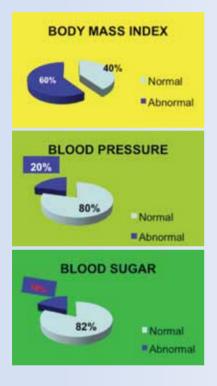
Total number of Rig Crew under the health check-up: 155





Phase III: Februaey 19, 2014 – West Kuwait Rig Main Camps

Total number of Rig Crew under the health check-up: 110



#### CHECK and ACT:

HSE (D&T) Team analyzed the crew health check-up results of three phases and summarized the information for the D&T Management to further take necessary actions. The summary details are given below:

- 1. 60% of the Rig Crew having Obesity issues (BMI)
- 2. 35% of Rig Crew having higher Blood Pressure (BP)
- 3. 24% of Rig Crew having higher Blood Sugar (BS)



The initiative was recognized by KOC during the 2014 HSSE Award.

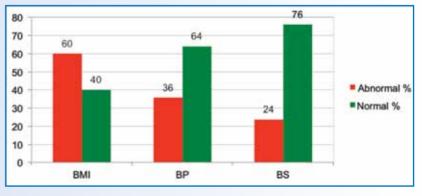


Awards of recognition were distributed during the campaign.

Based on analysis of this campaign in all three phases, a comprehensive post campaign activity "Designing Healthy Crew Lifestyle" is being planned in 2014-15 to develop the following:

- Balanced nutritious diet program (in consultation with Medical Group and Drilling Groups)
- Minimum fitness program in co-ordination with experts

HSE (D&T) Team will periodically assess the quality and effectiveness of the above proposed programs based on the feedback received from the target participants. The outcome of this assessment will be used as input for the next planning phase as part of continual improvement.





#### Internal Event

## **KOC Honors** Long Serving Employees

KOC recently honored long serving employees of the Company during two separate ceremonies that were held for this special occasion.



During a recent ceremony held to honor long serving KOC employees, CEO Hashem Hashem said that the Company takes pride in regularly holding these types of events to honor employees who contributed years of service to the Company. The CEO maintained that these employees were tireless in their efforts to help KOC achieve its strategic goals and plans over the years, and that their contributions were instrumental in the Company's many successes and achievements.

The CEO went on to say that some of the employees have already left the Company and were beginning a new phase of their lives, and in this regard he wished them the best of luck. Others, he said, remain at the Company and continue to work in service of KOC.

"It is fortunate that our celebration coincides with the 80 year anniversary of the establishment of the Company, which could not have made it this far without the help of Almighty Allah and the sincere efforts of each employee over the years since the founding of the Company," he said, adding, "Thanks to you, and the colleagues who have preceded you, your contributions will forever be recorded as milestones in the evolution and development of our beloved country Kuwait."

Hashem emphasized that over the years, the Company experienced continued arowth in in its developmental contributions to the welfare of all citizens. There is no doubt, he said, that the Company's employees have always been the cornerstone upon which the Company was founded in regard to how it conducts its business and achieves its successes.

#### The Values of Giving

In his address to the honorees, the CEO said, "Honoring you is a tribute to the values of work and giving and belonging, and also serves as encouragement to communicate between generations, as the new generation that joins our ranks needs such communication and will benefit from your experiences. Only then can our Company march strongly into the future so that it can serve our country."

On both occasions Hashem emphasized that the Company will remain faithful to each of its employees without discrimination. Their honoring stems from the belief that the Company's success



group photo of senior officials at the event.

is the result of their dedication and perseverance, and a direct result of their ideas and creativity. He also emphasized that honoring employees with long term service is a tribute to all the staff who work as loval employees who provide living examples of the extent of their association with the Company and their homeland. Through their dedication, these employees embody the values of honesty, perseverance and loyalty to a Company which sees its employees as its real capital.

The CEO then extended his sincere thanks and gratitude to the honorees and praised their efforts while wishing everyone future success.

#### **Professional Association**

In his speech on behalf of the honorees, Adel Al-Awadhi. an employee with more than 40 years of service with the Company, said, "The happiness I feel today is indescribable. We find ourselves in the midst of this special gathering among long serving employees and we can sense the many years of hard work and dedication we have all contributed to the Company."

He added, "This is also an opportunity to renew our promise to the Company that we remain loyal to it and help it achieve its various goals with committed



determination. Through our efforts, we can rest safe in the knowledge that we have served our country and created a bright future for our children and future generations."

#### Second Home

Those who have worked at KOC consider it their second home, Al-Awadhi said. "I am not exaggerating when I say that KOC was not just any job where we went to



during the day. The truth is KOC was our home, our colleagues were our family, and the whole Company was like an extended family or integrated community. This unique sense of unity and family is something that is rarely experienced at other companies," he said.

"We feel proud when we look at the years we spent in service of the Company, and we admire the achievements of those who came before us. We also hope and pray that our service to the Company can be used as an example to the new generation of KOC employees so that they can continue the growth and development of our beloved Company," he said.

Al-Awadhi concluded by saying, "It gives me indescribable pleasure to be able to address all of you, some of whom I have known for most of my life. I am overwhelmed with pleasure for being chosen by the organizing committee to address you today. I would also like to extend my thanks and appreciation to the organizing committee for the hard work it has put forth to make this event a reality, and I would like to also thank KOC's higher management for placing great emphasis on honoring long serving employees. It is my sincere hope that all of you continue to enjoy progress and success in your personal and professional lives."

In a statement he made, Samir Abu Hamad, Senior Specialist from the Water Handling Team in West Kuwait, said he was very happy to be honored directly by the CEO. He upheld the ceremony as a positive contribution by the Company which reflects KOC's attention to employees and their families.

Meanwhile, Abdullah Rashid, who started work at the Company in 1982, upheld his belief that the honoring from the senior management of the Company makes a man proud of his work. He then recalled the fraternal relations that existed within the Company, which he said was responsible for the great successes shared by KOC.



Jassem Al-Shatti, who spent 30 years of service with the Company, spoke on behalf of the honorees at the first ceremony. In an emotional speech, he said, "Our happiness today is indescribable. This is truly an emotional occasion which recalls many memories over the long years we have spent with the Company. Those memories are not only professional, but extend to the personal, familial relationships we have developed with our colleagues over the years."

Al-Shatti expressed his happiness for being among a wonderful compilation of colleagues. He then expressed his best wishes for them as they move on to new chapters or continue to perform their duties with the Company. Hosnia Hashem, Former Deputy Managing Director for North Kuwait, was among the honorees present during the ceremony. In a statement she made, Hashem recalled her 30 years of service with the Company, which she said went by too fast. She expressed her gratitude and pride in the Company's leadership over the years, which she said contributed to KOC becoming the leading company it is today. The Company, she said, was truly the "Heart of Kuwait." Over the years, KOC employees demonstrated their successful ability to overcome all challenges that faced the Company, and in this regard she expressed her pride in the hard work that has been put forth by her colleagues over the years through the spirit of teamwork.



#### Outlook

## Non-Man Entry Technology Revolutionizes Tank Maintenance

The Export Maintenance Team under the Export Operations Group recently accomplished a first of its kind achievement with respect to the maintenance and cleaning of oil tanks. The new procedure, referred to as "Non-Man Entry", uses an automated system that does not require employees to enter tanks.

To highlight the work that was recently carried out, an interview was conducted with Acting Team Leader of Export Maintenance, Sharian Al-Dousary. During the interview, Al-Dousary highlighted the benefits of the Non-Man Entry technology, which he said was made possible through the hard work of employees involved with its implementation, in addition to the relevant authorities who pushed for its adoption and successful use. At its core, Non-Man Entry serves as an indispensable means through which risks can be eliminated in the tank cleaning process. In addition, it allows tanks to be cleaned with less time and effort.

During the interview, Al-Dousary described the responsibilities of the Export Maintenance Team, which includes conducting preventive maintenance on the tanks every 10 years. In order to proceed with the maintenance, the Operations Team must first isolate tanks from all inlets and outlets before they submit the





The Export Maintenance Team has gone through great efforts to ensure the new technology is successful and effective at KOC.

tanks to the Maintenance Team so that it can provide the required maintenance.

The most important stage in the process of tank maintenance is the "Desludging and Cleaning" phase, which is based on removing the sludge and accumulated sediment from the tanks and cleaning them afterwards.

#### The Current Method

While discussing the "Desludging and Cleaning" phase, Al-Dousary pointed to the difficulty of implementing this process which is considered the first step of maintenance to oil tanks that contain hazardous gases such as the toxic and flammable  $H_2S$ , which creates an environment that is difficult and dangerous to operate in.

"Tank doors are opened to let workers in who are wearing protective clothing. Within this dark environment, the workers use manual tools like shovels and scrapers to remove semi-solid material. This method has the potential to result in dangerous accidents. Sludge is then disposed of outside the tank by way of a "vacuum tanker" and transported to places outside the tank area. Cleaning the tanks using this method can take up to two months depending on the size of the tank and amount of accumulated sludge in it," he said.

#### Change for the Better

The idea for the Non-Man Entry system was born out of the pressing need to protect workers from inhaling toxic and flammable gases, in addition to the added The Kuwaiti Digest



benefit of protecting the environment through the use of new technologies.

The Non-Man Entry technology operates within a completely enclosed and isolated automated system that deals with accumulated sludge in a safe and environmentally friendly manner. Through coordination with the relevant teams, this new system was utilized recently on KOC Tank No. 33. The decision to implement this new technology on this particular tank was made based on the fact that the tank in question contained heavy oil and a high concentration of H<sub>2</sub>S. Therefore, a sound assessment of the technology's efficacy could be made based on the results of its performance there. It is worth mentioning that this

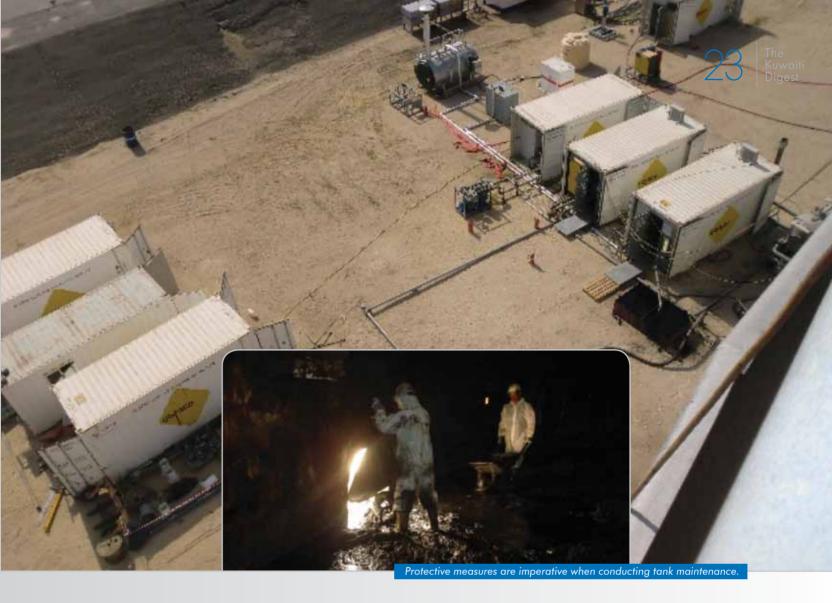
system brings the sludge accumulated in the tank to its initial state by rotation of the oil for a few weeks, where the sludge is then fragmented and converted into a liquid state, which makes it easier and safer to handle.

#### Advantages of the Technology

Through the application of this technique, the difficulties and challenges that were faced by the Maintenance Operations Team in the Desludging and Cleaning process were able to be overcome. In addition, the new system presented the added benefit of lessening the chances of pollution to the environment that could possibly result during the transportation phase of the procedure.

In addition, the number of workers required for the job has been reduced to just four or five individuals who continuously supervise the system remotely. This technology has also reduced the time required to clean the tank, which means speed of execution has been reduced by up to half. Through this technology, the safety of workers, their equipment and the environment has been upheld. Al-Dousary also pointed out that in addition to using the new system for periodic maintenance, it can also be utilized in the case of any type of emergency maintenance which needs to occur.

"We have successfully applied the Non-Man Entry Technology on Tank No. 33, which is the first technology of its kind in regard



to Desludging and Cleaning of oil tanks at the K-Company level. Not only did this achievement help reduce the maintenance period, but it also adds value by raising the HSE standards which reflect positively on KOC's image. I would like to thank all teams that contributed in the application and success of this technology," Al-Dousary said.

Al-Dousary upheld the role of the Group Manager and the Team Leader for their continuous support in achieving this initiative and for their keenness to keep up with progress on a daily basis. He also thanked them for their commitment to change, development and innovation in the Company's operations. He also upheld the possibility of using similar technologies at water treatment facilities, gathering centers and other facilities throughout KOC.

#### Al-Bucker: A Pioneering Experiment

Operations Export Group Yousef Al-Bucker Manager praised the pioneering experiment and upheld his belief that it was necessary that this achievement be further developed and perfected so that it can fall into the category of KOC's Best Practices. He also mentioned that the team is willing to adopt any idea that contributes to the development of this system.

In his statement about future plans, Al-Bucker confirmed that in the coming years, there will not be a single tank on the waiting list for maintenance. As soon as maintenance is due, it will be conducted immediately, he said. Furthermore, relevant contracts have increased, which means increased manpower which in turn translates to double the performance and the ability to overcome current obstacles.

The Group Manager congratulated all participating teams in the success of this initiative. He also thanked the Inspection and Corrosion Teams, Operation Teams, HSE Teams and Maintenance Teams for their upstanding efforts and their remarkable roles in bringing this initiative to success.

#### Internal Report

## Training Operational Staff

Through introduction of Visiting Instructor Concept (WK)





Mohammed Al-Otaibi (Manager Support Services Group, WK)

West Kuwait The Human Resources Team has put forward a concept for training employees in a new and proactive way, involving the use of experienced KOC employees to offer hands-on training sessions. The **Digest** interviewed Mohammed (Manager Al-Otaibi Support Services Group, WK), Nawaf Al-Qassar (Senior Training Officer HR Team, WK), and Eman Hamza (Team Leader HR Team, WK) to learn more about the initiative. Al-Otaibi compared this concept to existing training methods, stating, "We have started where others have left off, since this idea is already applicable in hospitals (e.g. Visiting Doctors), and specifically at KOC's Ahmadi Hospital." The following memo introduces their concept:

"The West Kuwait Human Resources Team is adopting an innovative approach of setting up a training module. The module is catering fully to the various needs for West Kuwait.

The training instructors have ample experience working in various fields and are very competent in imparting their practical knowledge to the trainees. Many of those trained employees now successfully handle their assigned tasks. However, the functions of this training module are now facing the threat of losing competent staff due to the upcoming retirement policy.

This type of threat can be expected in other areas as well. It is therefore proposed to introduce the criteria of short-term instructors visiting such areas (based on their availability), without obstructing the core functions of the visiting instructor at their base facilities."

The Team is excited about this new approach and the benefits that it will have for the Company. Al-Otaibi explained, "We have many people with more than 25 years of experience, and even though they were awarded by the Senior Management for their achievements, they can still share their knowledge and expertise with their younger colleagues, mainly the new comers," adding,





Nawaf Al-Qassar (Senior Training Officer HR Team, WK)

"In KOC we have the best competencies in Kuwait, so we should benefit from their presence." In addition to the memo, a PowerPoint presentation further details the recommended procedures behind their vision. The brief presentation below covers the key points regarding the Visiting Instructor Concept.

#### Introduction:

- Human Resources (WK) Team under Support Services (WK) Group is responsible for the training and development of existing Assets workforce and new recruits to further improve their knowledge and skills, thereby meeting corporate objectives.
- All operational staff in the 3 Assets areas should be continuously trained and developed comprehensively to obtain the knowledge and advanced skills required to ensure they perform

efficiently in their jobs and are able to manage all the facilities in field areas with safety.

 It is therefore necessary to establish a highly skilled and competent Instructors Workforce to ensure that the training & development of staff are continuously and efficiently delivered.

#### Reasons for Additional Instructors

- Most Instructors are now of retirement age.
- Recent developments such as facilities and equipment upgrade & improvements lead to a need for supplementary training necessities.
- The Operations, Water Handling & Maintenance workforce have significantly increased, resulting in a need for additional training sessions/classes.



Eman Hamza (TL HR Team, WK)

#### Proposal

- Competent, skilled and experienced employees in Operations, Maintenance and Project areas will be identified from all KOC operational areas.
- Their availability will be segregated in consultation with their parent Teams.
- The visitations as Instructor for a short period will be planned based on the training needs in various areas.
- Training Materials e.g. Course Outline, Course Handouts and other related materials will be provided to the Visiting Instructors as a guide for the training.
- Motivations will be provided to individual Visiting Instructors to boost their morale and willingness to volunteer in the program.

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#### Advantages & Benefits of Visiting Instructors

- Availability of the best Instructors with a long-standing, competent track record with KOC-owned facilities, machinery and equipment.
- Enhance the hands-on skills of employees being trained, focusing on plant requirements.
- Equal sharing of experiencebased knowledge amongst KOC family.
- Exchange of lessons learned between trainer and trainees.
- Conservation of in-house skills, which can have further scope of transpiring to other K-Companies.
- Highly cost effective and practice oriented, rather than theoretical training by external trainers.

 Trainers will remain in core functions, thereby at times adopting updated technologies.

#### How to Motivate Visiting Instructors

- Grant Spot Bonus
- Award Certificate of Appreciation/ Commendation
- Higher SOP rating

A pilot session was carried out in April of this year by Eid Al-Eid (Senior Engineer Instrument Maintenance, WK), and was shown to be successful. Al-Eid visited one of the Gathering Centers (GC-27, WK), where he focused on technical and electrical training. He personally prepared useful materials and provided the crew with expert advice. Appraisal forms were gathered after the training session, and the feedback was astonishingly positive. Al-Otaibi was happy to disclose that the

Senior Management has been backing the proposal since its initiation, as they encourage any innovative projects that could be beneficial to the Company.

"A benefit of the proposal is that would be almost zero-cost as it represents internal training, and has the advantage of keeping up interaction and follow-up between the trainers and the trainees," explained Al-Otaibi. The Team also noted that even KOC retirees who are interested in volunteering would be a welcomed addition to the team of trainers, since many of them have a lifetime's worth of valuable experience. The next step is to invite candidates for the training positions to be a part of the venture. "We can treat this as an academic process," said Al-Otaibi, "and it is a call for everyone in the Company, at any level, to come and share their experience in their particular field, whether operational, administrative, financial, etc."



**Regional Event** 

## KOC Hosts 34<sup>th</sup> Meeting of Gulf Oil Companies



The South & East Kuwait Directorate is currently implementing a range of important projects aimed at creating better efficiency when separating water from oil in order to maintain the 1.7 MBPD production level through 2020.

KOC recently hosted the 34th Meeting of Gulf Oil Companies, Abdullah Al-Sumaiti, where DCEO for South & East Kuwait and Operations Group (EK) Manager Hamed Al-Mutairi upheld the importance of communication among national oil companies throughout the Gulf. In a statement he made during the event, Al-Mutairi confirmed that KOC views the biannual event which is held in a different GCC member country every six months - as an important forum where national oil companies can come together to discuss their concerns and share best practices.

In a statement Al-Mutairi made to reporters on the sidelines of the meeting, the Operations Group Manager said the existence of this regular event helps national oil companies in the Gulf discuss problems, concerns and best practices in a supportive environment.

"Production and maintenance teams from various companies throughout the Gulf look forward to this biannual meeting because it serves as an invaluable forum where members can address solutions to various issues concerning their companies. In addition, members are also provided with an opportunity to learn from one another and share best practices, which is especially valuable," he said.

Al-Mutairi went on to say that before these meetings take place, a joint committee from all participating companies is formed in order to facilitate logistics and form the basis for an agenda for the event.

"Since 1999, GCC oil company members have worked together to facilitate regular communication via the Internet to address issues, find solutions, and exchange our experiences in regard to maintenance and production within our facilities," he said. During the 34<sup>th</sup> Meeting of Gulf Oil Companies, KOC officials confirmed that teams within the directorate are currently managing up to 50 projects of various sizes throughout Kuwait.

The Operation Group Manager went on to say that KOC was making great strides in its efforts toward the successful implementation of projects to reach the Company's stated goal of producing 4 million barrels of oil per day. In this regard, he said, the Company is involved with a range of projects that will help KOC attain this goal. Part of these projects include the building of new Gathering Centers, in addition to a wide range of new drilling activities and the recent completion of a new Gas Booster Station.

During the event, Mohammed Al-Otaibi, Operations Technical Services Team Leader for South & East Kuwait, discussed some of the projects that his team was involved in. These projects include various activities which his team manages in the fields of Burgan, Magwa and Ahmadi, where they specialize in technical support and deliver information to operation and maintenance teams. They also act as an intermediary between manufacturers and contractors and pave the way for the implementation of major projects which seek to help KOC achieve the goals of the Company's 2030 Strategy.

The Technical Services Team Leader also pointed out that during the meeting of the GCC national oil companies, production



OG (EK) Manager Hamed Al-Mutairi & DCEO Abdullah Al-Sumaiti



and maintenance teams from Aramco, Oman, and Qatar Petroleum benefitted greatly from the exchange of information, particularly information pertaining to new technologies that deal with separating oil from water during the production process.

Al-Otaibi added that The South & East Kuwait Directorate is currently implementing a range of important projects aimed at creating better efficiency when separating water from oil in order to maintain the 1.7 MBPD production level through 2020. In this regard, he said, the directorate is currently involved with up to 50 projects which seek to turn the Company's 2030 Strategy into a reality. Meanwhile, Production & Projects (Gas) Manager Ali Al-Kandari delivered a statement in which he upheld the cooperation that existed between national oil companies in the Gulf in terms of sharing information regarding project management.

In regard to activities aimed at implementing KOC's 2030 Strategy, Al-Kandari discussed a variety of aspects related to 14 Gathering Centers in South & East Kuwait, four Gathering Centers in West Kuwait and four more in North Kuwait, in addition to two stations which aim at enhancing gas operations. Also included in his explanation was information related to various water projects throughout the Company.



The Kuwaiti Digest



A group photo of KOC officials and the visiting delegations.





Visiting officials are seen pictured during the event.

Later, Director of Facilities and Oil Production from Abu Dhabi National Oil Company (ADNOC), Mona Al-Alawi, addressed the audience and explained that the committee was set up in the 1990s with the aim of exchanging experiences between national oil companies in the Gulf. This exchange of information, she said, pertained to technical information in the drilling, engineering, HSE and production fields.

"The subject of our last meeting was the relationship between projects and operations management in the fields, where we offered our expertise in the areas of onshore and offshore operations at ADNOC which is somewhat different from experiences in other Gulf companies."

Al-Alawi pointed out that field visits were organized for Gulf companies to oilfields in the UAE. During these visits, guests were able to learn more about the systems and methodologies implemented by international oil companies and partners, which they then could share within their own companies.

Nasser Al-Attar, Team Leader Maintenance Support & Reliability (S&EK), delivered a statement in which he said, "KOC is honored to host this meeting which is held every six months for the benefit of national oil companies throughout the Gulf. These meetings address many topics of interest related to the production and maintenance divisions through discussions and the transfer of information by professionals in their respective fields. The continued communication and consultation between our companies, who share common goals, plays a great part in helping us to achieve our stated targets. It is my hope that we continue to use all the means available to us to continue communicating and sharing our experiences."

Report

## A Cleaner, Greener Environment

Solar power plant to be built in West Kuwait

It is generally agreed that, despite its positive economic effects, all industrial production (including oil production) comes with some negative side effects to the environment. While these detriments to the environment are difficult to avoid in many cases, KOC has not pushed the subject aside. In fact, the Company works very hard to protect our environment and its inhabitants by being proactive, introducing initiatives, and forming agreements which contribute significantly to the reduction of the environmental impact of oil production.

Aanager Well Surveillance Group, Saeed Al-Shaheen

#### **Pioneering Project**

Among the environmental initiatives that KOC will undertake is a recently introduced pioneering project. The project aims to have a significant and positive impact on the environment of the State of Kuwait and boost the economy in general. The innovative project, to use solar energy in the production of oil, has already taken root in the "Um Qadir" field in West Kuwait. The project, which has already been awarded to a construction group, will be implemented by a team of the finest engineers and experts from within the Company, led by Team Leader Well Surveillance Support Rakan Al-Ajmi, and under the supervision of Group Manager Wells Surveillance Saeed Al-Shaheen. We wanted to learn more about the features and benefits of this project, so we visited the team to discuss these topics.





TL Well Surveillance Support, Rakan Al-Ajmi

One of the things that stood out most during the interview was the level of enthusiasm among the team members. They are highly motivated by a love for their homeland of Kuwait, and thus dedicate themselves to the task of preserving the environment. Their desire to complete this new addition to the Company's accomplishments goes far beyond simply doing a job; it stems from a deep sense of social responsibility.

#### The Foundations

Rakan Al-Ajmi indicated that the project comes within the framework of the United Nations Environment Program. One of the projects listed by the UN's Mechanism for Development is the reduction of emissions



and toxic gases. Team member Abdulaziz Najaf said that this notion has existed for a long time, but was revitalized in the momentous speech of His Highness the Amir Sheikh Sabah Al-Ahmad Al-Sabah during the 18<sup>th</sup> United Nations conference on climate change, which was held in Doha in December 2012. In his speech, the Amir emphasized that Kuwait places a great deal of importance on diversifying its energy sources, and that the designated authorities had started implementing an ambitious plan to increase the use of wind and solar power. The goal,



he stated, was to increase the of use alternative energy by 1% in 2015, rising steadily to 15% in 2030.

Najaf stated that this moment worked as a catalyst for the environmental movement within Kuwait, and gave such pilot projects the green light to get started. Within a day of the Amir's directives, and in light of studies showing that Kuwait was on the verge of an environmental problem by 2030, correspondence was sent to KPC subsidiaries to push for environmental initiatives to reduce emissions. "This was when serious discussions began," said Najaf, "and we as a team came up with this project."

#### **Major Characteristics**

Team member Laila Al-Bairami explained that one characteristic of the project is the provision of fuel burning, by which means the emission of gases can be limited. Limiting these gases could improve the environmental classification of Kuwait by improving its position in the United Nations' point system.

Al-Ajmi then went into further detail, stating that the project includes the establishment of a micro solar power plant in Um Qadir (WK). The solar plant will serve as a new energy source, and thus reduce the current level of gas consumption. It can be transformed for use anywhere in

#### **32,000** Panels

Ieam member Consultant Dr. Raed Sherif disclosed that the plant will consist of 32,000 panels made of Crystalline Silicon, with one axis tracker, which allows an increasing rate of energy production from each panel. The total production will be about 17,000 megawatts per year.

the country, he explained, however the current plant's energy will be used in the operation of the 50 submersible pumps in the WK field, and is expected to save 5 to 10 MW of electricity per day.

#### The Pilot Project

Al-Ajmi reaffirmed that the project is still in its pilot stage, which is intended to provide an idea of what is to come in the future. This gives the initiative and its usefulness time to circulate among the Company's fields, especially in areas where solar energy would be beneficial (such as areas without electricity, and areas with high temperatures).

As for why they chose the WK field specifically, team member Fahad Al-Abdulhadi explained that the decision was made based on strategic studies, in addition to the presence of a large number of artificial lift pumps in the area.

#### Solar Energy in the Fields

In regard to the mechanism of implementation, Al-Ajmi disclosed that after the signing of the contract (which took place in the first week of August), a meeting with all involved parties, both KOC members and those from the contractor, will soon take place.

What distinguishes this project from similar projects in the Gulf region is that it will be the first time that solar energy will be used in an oil field. In this way, Kuwait will be a pioneer in the region.



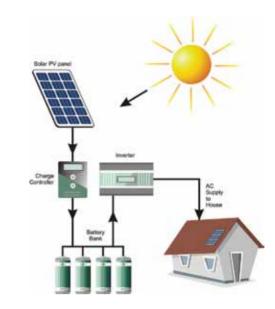
#### **65 Million Tons**

Studies prepared by the Kuwait Institute for Scientific Research showed that the share of the electricity and water sector in fuel oil will be about 500,000 barrels of oil equivalent per day by the year 2030, while the greenhouse gas carbon dioxide emissions from power plants will increase to 65 million tons by the same year - a very high proportion which is considered a serious threat to the environment.

Al-Ajmi noted that using solar energy has more benefits than simply protecting the environment. The use of solar energy can contribute to an increase in production, as electricity sometimes goes out in these areas and causes temporary shutdowns. If solar energy is used, then production may be continuously sustained. This is especially important in cases where wells are sensitive to such factors and may rupture during a halted period.

Information gained from the pilot project will provide a vision of what can be done in the future on a bigger scale. Al-Ajmi said that this venture would recover the total cost within 7 to 8 years, and then begin to benefit financially. This project makes the most efficient use of resources in terms of construction, and once assembled will yield many benefits. If the pilot project succeeds, then negotiations of selling the entire project to the contractor can take place.

Regarding the Company's cooperation with the United Nations guidelines, Al-Ajmi explained that various other projects concerning the environment have also been presented to KPC for consideration.



#### New Jobs

Al-Abdulhadi stressed that the project would create many new jobs, since additional recruits will be needed to keep everything running smoothly. He added that this will also benefit traders and companies.

Al-Ajmi then discussed the misguided belief that solar energy is more expensive than the use of gas, which he asserted is only true in terms of the initial construction. The field generators currently run on subsidized diesel, which is indeed low in cost. However, once the construction of the solar plant is complete, the cost of running the generators will be reduced by 50 to 60 percent, more than covering the cost of construction. Furthermore, solar plants have a lifespan of up to 25 years, compared to the mere 6 or 7 years of the current system. In the long run, the benefits clearly outweigh the costs.

#### A Million Trees

In terms of numbers, Najaf stated that the project is characterized by a huge environmental yielding. It is expected to contribute significantly to the reduction of emissions, which are estimated to drop by 250 million kiloarams of carbon dioxide the environmental equivalent of planting one million trees. A study prepared by the "Al Markaz" company, in cooperation with the French Institute of International Relations, revealed that 8.67% of Kuwait's oil is used for electricity alone. With a new source of power, we can see this percentage drop. Najaf concluded by reiterating that this project, and hopefully others like it, will play a vital role in making KOC, and Kuwait as a whole, a more eco-friendly place.



Report

## Understanding Eid Al-Adha

## A celebratory time of year for all Muslims

#### What is Eid Al-Adha?

Muslims throughout the world celebrate Eid Al-Adha at the end of Hajj. At the end of Hajj, the annual pilgrimage to Mecca, Muslims throughout the world celebrate the holiday of Eid Al-Adha (which translates to Festival of Sacrifice). Eid Al-Adha, which is the second most important date on the Islamic calendar, is a time where Muslim families throughout the world come together to commemorate one of the Prophet Ibrahim's trials.

Eid Al-Adha is also a time for Muslims to wear their best clothes and visit friends and family. The giving of gifts among family members, especially to the young, is widespread. In addition, the provision of charity to less fortunate Muslims is required so that all may enjoy this important event. In 2014, Eid Al-Adha will begin on or around October 4<sup>th</sup>, and will last for three days.

#### What is the significance behind Eid Al-Adha?

During Hajj, Muslims remember and commemorate the trials and triumphs of Prophet Ibrahim. The Holy Qur'an describes Ibrahim as follows:

"Surely Ibrahim was an example, obedient to Allah, by nature upright, and he was not of the polytheists. He was grateful for Our bounties. We chose him and guided him unto a right path. We gave him good in



this world, and in the next he will most surely be among the righteous." (Qur'an 16:120-121)

One of Ibrahim's toughest trials was to face a command from Allah to sacrifice his only son. Upon hearing this command, Ibrahim ignored the advice of the devil (who tried to tempt him not to abide), and bravely prepared to submit to Allah's will. Right at the moment when Ibrahim was ready to sacrifice his son, Allah revealed to him that his "sacrifice" was already fulfilled. By showing his love and devotion to Allah above all else, he had unknowingly spared his son's life.

### Why do we sacrifice an animal on this day?

Sacrificing an animal (usually a sheep or goat) in the name of Allah is a way to commemorate Ibrahim's trials and Allah's mercy. It is a sacred action that brings Muslims together as a community. The majority of the meat from a sacrifice is given away to others. Typically, one-third is given to friends and the community, one-third is eaten by family and relatives, and one-third is donated to the poor. The act symbolizes one's willingness to give up things that are valuable to them as a way of pleasing Allah and following his commands. It also strengthens family and societal bonds, and places an importance on giving to the poor.

The act shows a willingness to make sacrifices in one's life in order to stay on a righteous path. A true Muslim is willing to follow Allah's commands completely and obediently. Strength of heart, purity in faith, and willing obedience is what Allah desires from us, and Eid Al-Adha is an occasion on which Muslims can express and celebrate these characteristics as a unified community. Sacrificing an animal during Eid Al-Adha is a way to commemorate the Prophet Ibrahim's trials and Allah's mercy.

# Magnetizing Oil Spills

# Sugar Can Be Used as an Energy Source



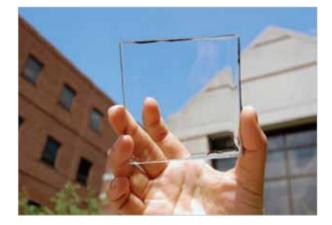
Physicist Arden Warner of Fermilab (a laboratory specializing in high-energy particle physics in Illinois, USA), has come up with a groundbreaking concept for oil spill cleanup using a method he calls "magnetizing oil." The idea came to him after he watched news coverage of the BP oil spill in 2010, and found himself frustrated by the inefficient cleanup procedures. To test out his idea, Warner simply shaved some bits of iron from a shovel and scattered them onto a small pool of engine oil. Using a refrigerator magnet, he was able to move the blob of oil in any direction. He then tested this technique on 100 other oils, including sweet crude and heavy crude. It turns out that iron particles mix better with oil than with water, so by using a small amount of magnetic iron dust, a loose colloidal suspension floats on top of the water. The thick pool can then be swiftly collected using large magnets. Arden found that crude oil is naturally viscous, making it easy to magnetize and lift out of water. As no harmful chemicals are used in the process, the magnetized oil technique is environmentally friendly. Furthermore, the iron particles can even be dried and re-used after the oil is collected. Warner has received patent approval for the method, and is continuing to expand on and test his original idea.



We all know that most living organisms break down sugar to produce energy, but can we get machines to simulate that biological process? According to Y-H Percival Zhang, chief science officer of Cell-Free BioInnovations and an associate professor of biological systems engineering at Virginia Tech, claims that it is possible. "Recently," he says, "my colleagues and I successfully demonstrated the concept of a sugar biobattery that can completely convert the chemical energy in sugar substrates into electricity." The team of scientists found that the energy density of sugar is actually much higher than the energy density in standard lithium-ion batteries. Their sugar-powered biobattery can store energy at a density of about 596 ampere-hours per kilogram (A-h/kg), while a lithium-ion battery can only achieve an energy-storage density of 42 A-h/kg. This means that sugar-powered biobatteries can last up to ten times longer than lithium-ion batteries. As for how exactly this works, Zhang explains, "We put specific thermostable enzymes into one vessel to constitute a synthetic enzymatic pathway that can perform a cascade of biological reactions to completely 'burn' the sugar, converting it into carbon dioxide, water, and electricity." With its superior energy density and relatively low cost, the biobattery could be the energy source of the future.



# Transparent Solar Cell Could Turn Windows and Screens into Power Sources



Researchers at Michigan State University (MSU) have managed to create a fully transparent solar cell that can turn any window or sheet of glass into a power source. Photovoltaic solar cells create energy by absorbing photons from sunlight and converting them into electrons (electricity). Most of the solar panels we see today look like metal tiles, which are not very aesthetically pleasing. Up until now, attempts at making transparent solar cells have come close to success, but not quite. Earlier models have only been partially transparent, and emitted colorful shadows. What makes this solar cell different is that the MSU team used a Transparent Luminescent Solar Concentrator (TLSC), which is made up of organic salts that absorb non-visible wavelengths of UV and infrared light. This light is then guided to the edges of the plastic and absorbed by thin strips of conventional photovoltaic cell, where it is converted into electricity. Richard Lunt, who headed the research, says that these new solar cells have a wide range of potential uses, including "tall buildings with lots of windows, or any kind of mobile device that demands high aesthetic quality like a phone or e-reader."

# **Apple Watch**



Apple recently debuted the long-awaited Apple Watch. The watch, which will be available early next year, will require an iPhone 5 or later to operate. Instead of interfacing with the watch by touching the screen, you can navigate through the menus and apps by touching the crown. Twist it to zoom in and out of screens and menus. Press it and you go back to the home screen (just like on the iPhone). The screen itself works much like a Retina display on iPhones and iPads, but it can also sense force. So the familiar two-dimensional touch input system gains a third, vertical dimension. On the back, there's a crystal with LEDs that can measure your heart rate - this adds health-tracking capability to the watch. Also on the back is a wireless, inductive charging mechanism. The charger attaches to the back of the watch via a magnet. There's also vibrating mechanism on the back so you can get notifications and haptic feedback for each of your finger taps. Apple's watch is the first mainstream wearable to support mobile payments: Apple Pay will be enabled, meaning you can swipe to pay at stores, and possibly pay for things online, too.

#### Health

# Ebola Outbreak: What is Being Done?

Hope in experimental drugs and vaccines



The deadly Ebola outbreak in West Africa has caught global attention, and world health agencies are struggling to stop its vicious spread. As of September 2014, there have been 3,069 cases and over 1,552 deaths reported in Guinea, Sierra Leone, Liberia, and Nigeria, making this the greatest Ebola outbreak ever recorded. The fatality rate of the virus can reach up to 90%, however the current rate rests at about 55%. Although there has never been a cure in the past, new and advanced scientific research from the United States and Canada may finally be able to tackle this fatal illness.

In August of this year, Canada promised to donate 1,000 doses of an experimental Ebola vaccine to the World Health Organization (WHO) in order to aid the West African countries. There has been some controversy surrounding this, as the vaccine has only been tested on animals. The National Institute of Health (NIH), in collaboration with the pharmaceutical company GlaxoSmithKline, have been developing a vaccine, and state that it has "performed extremely well" in primate studies. In the meantime, the WHO has stated that due to the severity of the current outbreak, it is ethical to start using experimental vaccines in the affected areas before human testing is complete.

Still, a human trial is set to begin in the first week of September at the NIH Clinical Center in Maryland, USA. Twenty subjects between the ages of 18 and 50



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have volunteered to be a part of the study. The subjects will not be infected with the Ebola virus, however their immune response to the vaccine will be studied to determine its safety. Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases at the NIH, released a statement saying, "There is an urgent need for a protective Ebola vaccine, and it is important to establish that a vaccine is safe and spurs the immune system to react in a way necessary to protect against infection."

Another experimental treatment, ZMapp, has also taken the news by storm. Developed by US company Mapp Biopharmaceutical, and based off years of Canadian and American research, it is a treatment rather than a vaccine. Unlike the vaccine, which aims to protect individuals from contracting the virus, the treatment can be used on those who have already been infected. In the early stages of animal testing (using Rhesus monkeys) all of the animals recovered from the Ebola virus after ZMapp was administered within an hour of becoming infected, and two-thirds recovered even when treatment was not given until 48 hours



after exposure. The first time that ZMapp was used on humans was after two US aid workers became infected while working in Liberia. Nancy Writebol, 59, and Dr. Kent Brantly, 33, saw their symptoms diminish and began to recover after receiving a dose of the drug.

This is all good news, but there will undoubtedly be some speed bumps along the way. First of all, the WHO has stated that there are only about 10 to 12 doses of ZMapp currently available, due to the extensive and expensive process of producing it. Similarly, creating more vaccines to protect against the virus, such as those donated by Canada, may not be ready for use until 2016. Coupled with questions regarding ethical use of the drugs and some pending government approval, there is still a long road ahead of us. Nonetheless, advancements like these are the first of their kind, and will likely play a key role in human history. Travel

# Rhodes: The Island of the Knights

The Greek island of Rhodes, which is renowned for its beautiful beaches and seemingly endless days of sunshine, is one of the most visited islands in Greece. In fact, Rhodes experiences more days of sunshine than any other Greek Island – 300 a year, to be precise. In July and August the average temperature hovers around the 28°C mark. The heat is manageable, though, thanks to cool breezes that blow over the island.

#### **Beaches**

Most people are drawn to Rhodes because of the island's beautiful beaches. The east coast is an area of virtually uninterrupted sand, and it is also where you will find all the main holiday resorts. There is Lindos, which is watched over by the ruins of an acropolis, and Faliraki, the legendary hangout of the 18 to 30s crowd. Then there is the sleepy Blue Flag beach at Pefkos, and the quiet coves in Kalithea and Kolymbia, where sunbathers go to get away from the trappings of tourism.

#### **Historical sites**

Thanks to its strategic position, Rhodes has been important since ancient times. Construction of the ancient city of Rhodes began in 407 BC, and it was was designed according to the city planning system devised by the greatest city planner of antiquity, Hippodamus of Miletus. Rhodes soon developed into one of the most important seafaring and trading centers in the Eastern Mediterranean. When it became a province of the Roman, and later the Byzantine Empire, it initially lost its ancient glory. In 1309 the Knights of Saint John of Jerusalem conquered Rhodes. They built strong fortifications to protect the island, turning it into an important administrative center and a thriving multinational medieval city. In 1523 Rhodes was conquered by the Ottoman Turks, and the Greeks had to settle outside the city walls. During the Ottoman occupation, new buildings were erected within the Old Town, mainly mosques and baths. In 1912 Rhodes and the rest of the Dodecanese, were seized by the Italians. The new rulers embellished the city with magnificent buildings, wide roads and squares. The Palace of the Grand Master was rebuilt and the Street





of the Knights was reconstructed in order to regain its medieval purity. It was not until 1948 that Rhodes officially became part of Greece. In 1988 the Medieval City of Rhodes was listed as a UNESCO World Heritage site.

#### Traditional villages

Rhodes' interior is a montage of traditional villages and chalky mountains. In the west, Apolakkia serves up scenery in big portions. The hamlet is home to whitewashed villas, old windmills, a monastery, and a shaded lake that is ideal for swimming.

Beautiful Sými is an hour away by boat from Mandráki, the port of Rhodes. An island of sponge

divers and seamen, Sými used to have 30,000 inhabitants before the Second World War and was the richest island in the Dodecanese, despite its small size. Today Sými attracts many visitors thanks to its beautifully preserved neo-classical buildings and the famous Archangel Michael monastery at Panormitis.

To the north west of Rhodes you will find Tílos, with its imposing mountains, rocky and steep coasts, beaches with crystal clear water and caves and medieval castles. The island's harbour is at Livadia, and from there you can visit the village of Micró Horió ("Small Village"), deserted since 1950. At Meyálo Horió (Big Village) visit the Palaeontology Museum, where you can see petrified skeletons of dwarf elephants.

By Plane: The airports in Athens and Thessaloniki offer flights to Rhodes. There are also connections to and from other Greek islands such as Kos, Leros, Mytilini, Karpathos, Kasos, Kastellorizo, Mykonos, Santorini and Crete. Flights are operated by Olympic Airways and Aegean Airlines. Ryanair also operates direct flights to Rhodes from Frankfurt, Brussels, Düsseldorf, Bologna, Cagliari, Milan, Pisa, Rome, Liverpool, London, Stockholm and Kaunas.

By ship: The Port of Rhodes has daily connections to the port of Piraeus. The trip lasts approximately 12 hours with intermediary stops at the islands of Patmos, Leros, Kalymnos and Kos. Rhodes is also connected directly to all the other islands of the Dodecanese and Crete.

# KOC Hosts "All for Youth Initiative"



#### The Initiative

All for Youth Initiative is a new enterprise for the development of our society and the way we care for individuals with disabilities. CEO Hashem Sayed Hashem said about the initiative, "Attention to people with special needs stems from the Company's commitment to social responsibility. We are dedicated to the development of young people, the hope of the future, and a commitment to those who carry a love for Kuwait and its people."

Hashem maintained that the seminar held to introduce the All for Youth Initiative was hosted by Kuwait Oil Company and served as a "new gesture in favor of the development of society, inclusive of all its areas and members." The Global Training Gate introduced inspiring models of young people with special needs who fought their way to success on more than one level, using a vast amount of determination and persistence. This initiative was one of many shining moments that reflect the Company's unwavering commitment to social responsibilities.

#### The Company's Commitment

Hashem Sayed Hashem asserted the Company's keenness to support community-based initiatives in various fields, especially those related to people with special needs. KOC aims to advance the development of society for the benefit all its individuals, regardless of their physical afflictions. During his speech at the ceremony, Hashem said, "KOC is the the most important pillar of the Kuwaiti economy, and its primary objective is the growth, development, and prosperity of this nation. KOC undoubtedly has a deep investment in people with special needs, as this is one of the foundations of social responsibility, as well as a part of service and development of the community." Representatives from Global Training Gate and the United States Embassy attended the event, as well as Senior Company officials.

He added that among the objectives was to raise awareness throughout society as a whole. Regardless of the challenges that we face as individuals, he stated that God has blessed us with the ability to overcome hardships when we stand together as a group. With will and determination, we can tackle any social issue, and KOC is always one of the first to offer aid and solutions.

The CEO went on to say, "We have in those bright faces a good example of joy and gratitude for what God has blessed us with.

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A group photo of senior officials at the event.

Not only have our children faced their challenges, but they have also made themselves a beacon of light guiding all others who sail toward a path of hope and ambition. Congratulations to you, my sons and daughters, for what God has blessed you with. You are truly a source of pride to us all."

Hashem praised the action taken by the youth with special needs, who represent strength and resolve by not allowing their disabilities to limit their roles in society. Their personal testimonies have become a source of inspiration to all those who struggle in any aspect of their lives, and have helped our country's youth to see that they can make a difference if they stay strong and speak out for what they believe in. The challenge that many of today's youth face is proving themselves and standing out in a changing and evolving society. This initiative helps them to pursue just that.

#### A Message from the Heart

Kefaya Al-Alban, founder and General Manager of Global Training Gate (from which the All for Youth Initiative was launched), and consultant in the Rights of People with Special Needs, also gave a heartwarming improvised speech at the event. She asserted

that individuals with special needs are willing and able to offer positive things and play important roles in society, contrary to the aeneral belief within some communities. Images of disabled individuals are commonly associated with melancholic music and tears, creating an unrealistic and unfair portrait of who these individuals actually are and what they are capable of. Al-Alban proclaimed that these young people are no different from any other individuals who happen to be ablebodied, and thus should not be treated as "others" within their own community.

She called on society to see disabilities simply as a will of God, like any other differences from human to human like skin color, height, or features. She asked why some people look at a person's wheelchair, but do not wonder about the talents of the person seated in it; why some look at the eyes of a blind person, but do not consider his creative capabilities. The shallow ideology present in today's society, like the need for luxury items and stylish clothing, have closed our eyes to what is truly important: the person inside.



faya Al-Alban addresses the audience

Al-Alban then went on to discuss the Global Training Gate, which has been registered as the first Kuwaiti non-profit company of its kind. This was covered in the Kuwait Today newspaper on March 30th of this year. The Global Training Gate offers its services to individuals with disabilities (as well as their families) completely free of charge. It is through contributions from generous donors, such as the Kuwait Oil Company, that allows the Global Training Gate to continue with its noble work.

#### **History Repeats Itself**

Nora Al-Othman, Partner and Deputy Manager of Global Training Gate, and president of the All for Youth Initiative, gave



an impromptu speech as well, in which she thanked KOC for organizing and hosting the event. She went on to explain that Kefaya Al-Alban is her mother, and that she was taught about empathy and understanding from an early age. Her mother also taught her that while empathy is the first step, action must always follow if a difference is to be made. Al-Othman, whose close friend suffers from a severe disability, devotes herself fully to the cause.

She then shared a brief biography of her mother, who initially worked as a kindergarten teacher. She kept a strong connection with her KG students throughout their lives, even up until graduating from university. After some time Al-Alban moved on to work specifically with disabled students, and later became the supervisor of special needs students in private tuition schools. She often took her daughter with her to meet the students she worked with, hence Al-Othman's deep understanding and passion for supporting the disabled.

Al-Othman graduated from the Gulf University of Science and Technology (GUST) with a specialization in Management Information Systems (MIS). She worked in the Kuwait Fund for Arab Economic Development while her mother taught. After her mother retired, Al-Othman encouraged her to continue her work with the disabled in some way. Thus, over the past two years, they got to work conducting surveys in Kuwait and around the Arab World about the rights of the disabled and the need for better services. They found that adequate training was the missing link in getting young people the proper care that they deserve. They decided to establish Global Training Gate, from which stemmed the All for Youth Initiative.

Al Othman reiterated at the end of her speech her immense gratitude towards the devotees of the Initiative, particularly the US Embassy and the Kuwait Oil Company, who have supported the Global Training Gate since its inception.

#### **Bright Pioneers**

After the speeches came a segment of presentations. Disabled mentors took the stage with true



stories of the struggles they face living with a disability, and success stories of their resolve to overcome them. The following persons are some of those who shared their personal testimonies at the event:

 Abdulaziz Al-Mutairi delivered a lecture titled "Value of Sharing." He is a motivational speaker with a physical disability, a trainer at Global Training Gate, and the first Kuwaiti to participate in the American-Middle Eastern Partnership Initiative "Leaders Fellowship for Democracy." He





works in administration at the Administrative Sciences Faculty at Kuwait University.

- Ali Tawari with a lecture titled "Value of Care." He is a motivational speaker with a physical disability, retiree from the Ministry of Electricity and Water, and is interested in communication via social media.
- Khaled Majed Sultan with a lecture titled "Value of Courage." He is a motivational speaker with a physical disability, a paragliding instructor, a professional trainer in Power Kite, a photographer, and a sports coach at the National Guard with a rank of Officer Agent.
- Eman Al-Khadli with a lecture titled "Value of Change." She is a motivational speaker and a certified physical trainer with a physical disability. She holds a Master's Degree in Education, and is a graduate of the Leadership Development Academy. She works in Administration at the Ministry of Education in the Hawally Educational Area.



notivational speaker addresses the audience

## A company specialized in human resources develop

ment, with the focus on training and skill-development for individuals with disabilities and their families, advocates, teachers, supervisors and related professional service providers in the public and private sectors.



- Assembly presided over by Kefaya Al-Alban.
- The association provides services for all types of disabilities and all age groups, and has no special requirements for the acceptance of people with disabilities.
- The integration of individuals with disabilities in the community.
- Development of the skills and capabilities of individuals with disabilities.
- Development of positive relationships between members of the community.
- To correct misconceptions about individuals with disabilities.
- Development of the skills of the community to deal with individuals with disabilities.
- Development of community awareness in regards to the importance of social integration in all aspects of life, without discrimination based on disability.

# Local Report Mirror House

What is the Mirror House?

The "Mirror House" is a little known wonder in the Kuwaiti suburb of Qadsiya. A house covered from top to bottom, inside and out, in a stunning mosaic of broken mirrors, it is practically impossible to miss when driving down the small street. While some people have heard about the Mirror House, most have never actually visited it. Home to Lidia Al Qattan, widow of the late Kuwaiti artist Khalifa Al Qattan, the house is a local attraction worth exploring.

#### About the artist

Born in 1934, renowned artist Khalifa Al Qattan was a pioneer in the early stages of the arts movement in Kuwait. He held his very first exhibition in 1953, just as Kuwait had started to embrace the significance of art. A few years later, in 1958, Khalifa married Italian artist Lidia Scagnolari and







they lived together in the modest Qadsiya home. While Khalifa excelled in painting and sculpting, Lidia expressed her creativity through painting, sculpting, writing, and jewelry making. It was during Khalifa's trips abroad for art exhibitions that Lidia, often bored in his absence, found herself taking on astonishing artistic projects around her home. Eventually, the entire house became an art piece in and of itself.

#### How it all started

The way the project began is actually quite a surprising story. Living in a timeworn house means having to deal with leaky pipes, creaking floors, or even termites (small insects that feed on wood; they are quite common and highly destructive to buildings). In Lidia's case, termites were eating away at one of the walls in her house. She realized that concrete would help battle the problem, and being the artist that she is, she decided to use a technique that she had previously used to create an art piece for her husband. She started the process in the small corner of the house where she first noticed the infestation. She cemented the area, then decorated it in some broken pieces of class that she had.

But the problem didn't end there. Lidia slowly began to notice more infested areas around the room, and she could not ignore the problem. In 1985, while her husband was attending a conference in outside of Kuwait, Lidia jumped at the chance to get some work done. Within the four short days of Khalifa's trip, she managed to cover the entire room, including the floor, in mosaic-embellished cement. Khalifa was surprised upon his arrival- not only at the speed in which Lidia completed the project, but also by the beauty of the masterpiece that was once their living room.

#### The rest is history

Before either of them knew it, Lidia was fluttering from room to room with her tools. Khalifa ordered large sheets of glass and mirrors for her, and Lidia took it from there. Along the way there were many instances of trial and error; at one point Lidia had to scrape down the mosaicked walls and re-make almost the entire house. However,



Examples of the mosaics the home is famous for.

she never stopped working. Driven by her own passion and creativity, as well as her husband's earnest encouragement, we now see the immense work of art before us today.

#### Guided tours of the Mirror House...

Lidia Al Qattan herself gives guided tours of the House, where she still resides. Guests are greeted by her warm hospitality as she offers cake, biscuits, and tea, before explaining the history of the House. The tour then takes the guests from room to room as Lidia shares her inspiration and thought-process behind each of the different themes. Each area in the house has a name, such as "The Beginning of the Journey," "Planet Earth," "Zodiac," and "Universe Hall," just to mention a few. Not even the restrooms or staircases have been overlooked, with images made of glass covering just about everything.

Upstairs is divided into sections of Lidia's eccentric mosaic's, sculptures, and paintings. The largest open area is dedicated to the stunning works of her late husband, with his paintings hanging all around the room. A small library where Khalifa used to paint is filled from floor to ceiling in old books, photo albums, and memorabilia. The area where he used to paint, a small stool facing a wooden easel, is adorned with photos of Khalifa working on his art. From beginning to end, the tour of the Mirror House is enchanting, informative, and at times even a little bizarre. Visitors will not be able to forget the dedication and hard work put into every wall, ceiling, and floor of the house, and will undoubtedly be moved by Lidia and Khalifa Al Qattan's devotion to promoting individuality and artistic expression in Kuwait.

#### **Curious?**

The two-hour tour must be booked in advance via telephone. For more information on location and tour prices, contact Lidia Al Qattan at 22518522.

# 1972

KOC metal smiths at work in a Company workshop





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