# #arabiansun

January 15, 2020 | Vol. LXXV, No. 3

a weekly Saudi Aramco publication for employees

# Amin Nasser named Energy Executive of the Year



president and CEO recognized for leadership through challenges

Dhahran — Saudi Aramco president and CEO Amin Nasser has been named the *Energy Intelligence* Energy Executive of the Year for 2020.

Nasser, who is the 24<sup>th</sup> winner of the highly prestigious award, received the most votes from past winners and top global industry executives.

"This is a recognition of the 70,000 employees of Saudi Aramco — the men and women, they are the winners," said Nasser. "I got the award because of their contribution and my leadership team."

Energy Intelligence recognized Nass-

er for excelling over the past year despite significant challenges.

"Nasser's leadership was put to the test in 2019 with a series of major challenges — launching the world's largest IPO, acquiring one of the world's largest petrochemical companies, SABIC, and responding to the attacks on Saudi oil facilities," said Alex Schindelar, president of *Energy Intelligence*.

"His steady hand and focus on execution helped steer Saudi Aramco through these often choppy waters, delivering results that many predicted

were impossible."

In a press release, Energy Intelligence stated that Nasser "distinguished himself by stewarding Saudi Aramco through the unprecedented attacks" at facilities in Abgaig and Khurais.

"Through his leadership, Saudi Aramco was able to swiftly restore output with minimal disruption to customers," stated the press release, which described the situation as an "industry defining incident."

Nasser will be presented with the award at the inaugural Energy Intelligence Forum later this year.



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# 'Vision to Prosperity: A New Energy Area Emerges'

by Michael Ives

Dhahran — Joining Saudi Aramco's president and CEO Amin Nasser were the respective CEOs of Petronas, Woodside Energy, Halliburton, and Baker Hughes for a plenary session that addressed key longterm challenges and opportunities for the industry in what was described by one panelist as an inflection point.

Nasser opened the panel session by noting that with such a huge amount going on — in the world, in the industry, and at Saudi Aramco — there was certainly no shortage of things to discuss.

#### despite challenges and complexity, we deliver

In his speech, he made two overarching points. The first was that despite the enormous complexity of the industry and the oil market, it always delivers. "Time after time, we have faced extraordinary challenges, and time after time, we have found extraordinary solutions, despite ever-present volatility and change," he said.

Secondly, Nasser added, the latest energy transition certainly adds to the complexity of our business. "But, we at Saudi Aramco look at this transition in a more pragmatic light because surely its foremost driver is the desire to move to a lower carbon energy mix or, more precisely, a lower greenhouse gas (GHG) energy mix.'

Nasser went on to observe that when it comes to transitioning the GHG footprint of oil and gas themselves, he believes we are not yet halfway.

"Seen like this, and combined with the gradual penetration of more complex but more expensive and complex alternative energy sources, I believe there is a more practical, more economic, and more GHG-impactful framework for transition worth discussing.'

#### harnessing technology to address climate challenge and attract talent

Several key observations were made by the esteemed panel, including the importance of harnessing advanced technology to address the climate challenge while highlighting the cutting-edge, technology-driven nature of the industry to attract, develop, and retain the talent needed. Noting people want 30-year careers and more, the panelists agreed that the industry must think in decades when it comes to talent (as it already does for investments and energy transition) to secure the best and brightest.

During the moderated session, Nasser highlighted that the world continues to need safe, reliable, and affordable energy, but that energy needs to be cleaner in this new energy era. He noted Saudi Aramco's industry-leading work included two dedicated research centers, in Europe and the United States, that are looking to drive energy efficiency in engines and fuels. He also highlighted the company's work in carbon sequestration.

#### 'we are part of the solution'

"We are part of the solution to the global challenges we all face," he said, noting that the company has spent 85 years driving down the energy intensity of its business.

The CEO highlighted the huge numbers of people who continue to lack access to electricity or are still using kerosene. He not ed that it is these billions of unheard voices that need to be heard as well, and they are relying on the energy our industry can deliver to secure their prosperity over the decades ahead

In the course of the session, Nasser was asked about the attacks on facilities at Khurais and Abgaig. He highlighted Saudi Aramco's unmatched ability to restart production, which was a real testament to the company's training and drills, with no interruption to customer supply and the company's excellence in reliability enhanced.

When asked about his perspective on the oil market, he noted the IEA and EIA are forecasting guite healthy 2020 growth of between 1.2 to 1.4 million barrels per day and that Saudi Aramco's outlook is posi-



Amin Nasser notes that despite the remarkable complexity of the industry and the oil market, it always delivers. Nasser made his remarks during a plenary session featuring the CEOs of Petronas, Woodside Energy, Halliburton, and Baker Hughes during Monday's session of the 12<sup>th</sup> International Petroleum Technology Conference in Dhahran. He further noted that the company has been dedicated to drive energy efficiency in engines and fuels, as well as carbon sequestration.

# Al Qahtani: 'Shaping the Upstream Ecosystem for a New Energy Era'

by Scott Baldauf

Dhahran — When it comes to "Shaping the Upstream Ecosystem for a New Energy Era," the topic of an executive plenary session on Tuesday, senior vice president of Upstream with Saudi Aramco Mohammed Y. Al Qahtani said new technologies will play a crucial role.

But technology is only one part of a broader solution that will require new approaches to research, the use of data, and to the development of the industry's greatest assets — its people.

"We must be smarter — and not just in terms of technology," Al Oahtani said.

#### changing the perception of the energy industry

He noted that the industry must use new technologies to change the game, but also must change the perception of the energy industry.

"We need to use emotional intelligence to better understand and meet society's ex-



In a panel session Tuesday, Mohammed Y. Al Qahtani notes that as the industry relies more on technology and digital solutions, that should be an advantage for Saudi Aramco, where approximately 70% of the workforce is below the age of 35.

pectations, particularly on the issue of the environment. The carbon intensity of Saudi Aramco is the lowest among our peers, and we are coming up with new technologies to lower our carbon footprint. We are part of

Al Qahtani said the industry has a unique opportunity to be at the epicenter of the Fourth Industrial Revolution, using artificial intelligence, advanced analytics, and machine learning to increase performance, safety, and efficiency.

#### attracting young talent

To ensure the success of that push toward technology solutions, the oil industry needs to attract and retain a talented younger workforce who "will carry the Fourth Industrial Revolution forward," said Al Qahtani.

"Our industry is going to be highly technological, and digital, and that is an area that appeals to the youth. High technology requires expertise, and we have to attract young people to help us," he said. "At Saudi Aramco, 70% of our workforce are below the age of 35 years old. This is a huge advantage to us, and we need to give them all the powerful tools and the empowerment to help us find solutions to our chal-





a Kingdom first

Saudi Aramco plays exclusive host to

International Petroleum Technology Conference

Dhahran — Saudi Aramco this week is playing host to the first multidisciplinary international conference and exhibition for oil and gas ever held in the Kingdom, with more than 17,000 participants, as of Tuesday, taking part in the landmark event.

The 12<sup>th</sup> edition of the International Petroleum Technology Conference (IPTC), the leading international oil and gas conference taking place from Jan. 13-15 at the Dhahran Expo, is being held under the patronage of HRH Prince Mohammed bin Salman, Crown Prince, Deputy Prime Minister and Minister of Defense.

With keynote addresses by HRH Prince Abdulaziz bin Salman, Minister of Energy, and HE Yasir O. Al-Rumayyan, Chairman of Saudi Aramco, the IPTC attracted delegates from at least 70 countries.

# seeking solutions to 'the challenge of our lives'

"I am delighted that for the first time such a major event for the oil and gas industry is occurring in the Kingdom," Prince Abdulaziz said in his welcoming remarks. "I'm particularly pleased that this esteemed conference is being hosted in the Middle East, in Saudi Arabia, in Dhahran, the global hub of the world energy industry."

Just as the Kingdom helped to drive transformative economic growth in the second half of the 20<sup>th</sup> century, pulling billions out of poverty and increasing life expectancy, Saudi Arabia today aspires to bring solutions to what he called "the challenge of our lives, to reduce our carbon footprint of the energy sector," he said. "We in the Kingdom share the global society goal of a low carbon future and see it as the key to a healthy, long-term future for the oil and gas industry. Science, technology, and innovation will really be the game changers, and I am proud that the Kingdom is already leading in intensification of the global effort."

Al-Rumayyan noted that science, technology, and innovation are crucial to the petroleum industry's twin goals of meeting global energy demands while reducing the carbon footprint of oil and gas.

"Only proven and affordable sources like oil and gas, supported by clean technology innovations and emerging sources, will deliver the sustainable energy future the world needs," Al-Rumayyan said. "That creates an incredible opportunity for us as an industry to make transformational progress in further cleaning our oil and gas products to meet society's climate aspirations."

# a perfect platform to showcase energy solutions

With the Kingdom hosting the G-20 summit later this year, Saudi Aramco president and CEO Amin Nasser congratulated Saudi government entities for their successful efforts in securing the prestigious industry conference to be held in the Kingdom.

Nasser emphasized the need to transition to a lower carbon energy mix and highlighted the role the energy industry has played in creating the economic prosperity the world enjoys today.

"With IPTC 2020, we have the perfect



Speaking on the opening day of the conference, HE Yasir O. Al-Rumayyan notes that science, technology, and innovation are crucial to the petroleum industry's twin goals of meeting global energy demands while reducing the carbon footprint of oil and gas. (Photo: Hasan AlMubarak/MPD)



Yasir O.
Al-Rumayyan
speaks on
the industry's
accelerated change



HRH Prince Abdulaziz speaks about the Kingdom's goal of a low carbon future and how it is the "key to a healthy, long-term future for the oil and gas industry." In his opening remarks, the Prince also took a moment to highlight the efforts of the many volunteers who helped make the 12th International Petroleum Technology Conference a success (see pages 6 and 7). (Photo: Ding/MPD)

platform to push forward in our efforts to demonstrate that our industry is an integral part of the long-term solution to global energy challenges. As part of the energy transition, I firmly believe, oil and gas will continue to play a significant role for a long time to come," said Nasser.

"We have the capability to be leaders when it comes to addressing the need for more energy with less emissions, and I am confident that our industry has the talent and the innovative mindset, which is required to find the best and most pragmatic solutions."

IPTC proves its value by helping Saudi Aramco and the oil and gas industry to share innovations that can meet some of the world's great challenges, he said.

"Technology is a key instrument that helps us address future challenges our industry faces, and we rely on IPTC and its constituent societies to continue playing a major role in promoting advanced technology and sharing best practices and experiences, as they have in the past."

# on the brink of a 'New Energy Era'

Mohammed Y. Al Qahtani, Saudi Aramco's senior vice president of Upstream, served as chairman of the IPTC Executive Committee and told attendees that the industry was at the brink of a new energy

"As I have the privilege of looking out across row upon row of some of the best and brightest minds in this industry, brought together in the spirit of collaboration, I am filled with great confidence," he said. "Confidence in our ability to enter a 'New Energy Era,' building an even stronger industry that the world will continue to depend upon for decades to come."

Nasser participated in a plenary session with industry CEOs from Exxon Mobil, Total, Petronas, and Woodside. Others speaking from Saudi Aramco included Al Qahtani; Nasir K. Al-Naimi, vice president of Petroleum Engineering and Development; and Nabil A. Al-Nuaim, chief digital officer.

Also for the first time, IPTC incorporated workshops examining the importance of diversity and inclusion in the sector — an area that Saudi Aramco has significantly advanced in recent years.



Mohammed Y. Al Qahtani speaks on what is possible for our industry

#### our presence at IPTC

Saudi Aramco's presence was felt at the IPTC conference, from the centerpiece booth in the Exhibit Hall to the participation of subject matter experts in panel discussions, knowledge sharing e-poster sessions, and technical presentations. Among those participating included:

- Abdullah S. Jum'ah, former Saudi Aramco president and CEO and current board chairman of the Saudi Investment Bank, participated in a panel discussion on diversity and inclusion
- Khalid M. Al-Abdul Qader, executive director of Unconventional Resources, participated in a panel discussion on the "Unconventional Business: Recycling the Know How"
- Nabeel I. Al-Afaleg, general manager of International Gas, participated in a panel discussion on "The Future of Gas, from Wellhead to Market"
- Khalid A. Zainalabedin, manager of Reservoir Description and Simulation, was co-chairman of the Host Committee
- Ali M. Al-Shahri, manager of Reservoir Management with the Northern Area Management Department, served as chairman of the Program Committee
- Thamer N. Al Olayet, an IT systems analyst, gave a presentation on the Upstream Professional Development Center
- Sami A. Alnuaim, manager of Petroleum Engineering Application Services, and president of the Society of Petroleum Engineers, gave a speech on the role of oil and gas industry in sustainable development and human prosperity
- Saleh A. Al-Dossary, an exploration systems consultant, participated in an Ask-the-Experts session
- Reem A. Al Ghanim, division head for Chemicals HR and Support Services, moderated a panel session on talent development and workforce diversity
- Ali H. Dogru, a Saudi Aramco Fellow, gave a speech on the company's groundbreaking work in the use of computer modeling for reservoir description
- Rusha K. Al Rawaf, director of Corporate Social Responsibility, moderated a panel session on "A Cross-Cultural Dialogue, Where East Meets West"
- Ayshah A. Alomair, a coordinator with the Young Leaders Advisory Board, participated in a debate on Generation X vs. Generation Y
- Najwa Al Azaimi, who works with Regulatory Affairs, served as chair of the Young Member Activities Committee.





# Al-Naimi: 'Emerging Technologies' will shape the future of oil and gas industry

by Michael Ives



Al-Naimi participated in a panel discussion on "Emerging Technologies and Challenges from Exploration to Development" with representatives from Eni, Schlumberger, Halliburton, and CGG on the second day of the International Petroleum Technology Conference at Dhahran Expo.

He emphasized that to remain competitive, the industry needs to transform. Central to this, added Al-Naimi, new technologies are leveraged to respond to challenges including reducing emissions — while exploring and developing resources.

#### technology unlocking value

He pointed out that much research and development is focused on short-term incremental solutions rather than on groundbreaking research. While noting that incremental improvements play a role, Saudi Aramco has a number of unique game changing technologies in development that, at full implementation, will change the landscape of the industry.

Al-Naimi said that Saudi Aramco has been capitalizing on Fourth Industrial Revolution (IR 4.0) technologies aimed at finding breakthroughs that increase discovery and recov-



Nasir K. Al-Naimi shared Saudi Aramco's vision for the future of the oil and gas industry, noting that "how we utilize technology, harness the skills of our talented people, and focus on the challenges that face us all" will determine the course of direction for industry players in the years

ery, reduce costs, and, at the same time, enhance safety and protect the environment.

"IR 4.0 is already unlocking new value across our entire Upstream operations," he said. "One example is Unconventional Gas, where we have applied our technologies in the form of an Advanced Geophysical Technology Suite to reduce drilling cost substantially while increasing well productivity several times over."

Ultimately, knowing that those in the industry face many of the same shared challenges in a carbon-constrained future, why would we not work together to meet them, asked Al-Naimi? It is particularly important as an industry with a sizeable environmental challenge to focus further on reducing carbon emissions, he added.

"At Saudi Aramco we are actively pursuing research and technologies to capture and sequester carbon. One example of this is the 'Uthmaniyah CO<sub>2</sub> enhanced oil recovery pilot. And we also have stepped up our

downstream research efforts on improving the internal combustion engine and mobile carbon capture."

Highlighting the central role that partnerships must play — regardless of future scenarios for the market and industry — Al-Naimi emphasized that no one player will be able to do it alone.

Most important of all is people. "We must continue to invest in our people. There are many misperceptions about ours being a "sunset" industry and these exert a negative influence on recruitment at the very time when our workforce is trending younger," he said, going on to note that approximately 70% of Upstream employees are under 35 years of age.

Al-Naimi left the panel and the audience with some key final challenges — to forge collaborations that will push technical limits, invest in and create the future of this industry boldly, and work to shape the energy landscape together.

# what international delegates are saying about IPTC and the Kingdom



This is my first visit to Saudi Arabia, and it has really opened my eyes to how friendly and welcoming everyone is. I visited Ithra, which is a beautiful building. I work in well intervention and stimulation, and at IPTC, I will be looking at how conventional technologies could be applicable to unconventionals.

> — Troy Williams Halliburton **United States**



I have visited Saudi Arabia many times; it is a real growth market for us. It is a very optimistic place to do business, friendly, and welcoming. With many innovative new projects and the move into unconventionals, there is a lot of opportunity here.

> — Dan Asher IRE United Kingdom and UAE



I am from Curitiba in southern Brazil and run an industrial optimization training business. This is my first visit to Saudi Arabia, and from my first encounter with the country at Dammam airport to throughout my time at IPTC, everyone has been so welcoming and hospitable. At the conference, I was impressed with the pride Saudi Aramco's CEO clearly had in his business and the industru.

— Geraldo Filho Unikuaa Training and Consulting



I was one of 100 student members of IPTC selected and sponsored to travel to the conference. I was picked from applicants across the world, after submitting an extensive application and video interview. This is my first visit to Saudi Arabia, and I have found it a beautiful country with lovely people.

— Fauziyyah Sadeeq Petroleum Engineering student Nigeria



# Al-Nuaim: we must act quickly on IR 4.0

by Michael Ives

Dhahran — Nabil A. Al-Nuaim, chief digital officer at Saudi Aramco, joined with representatives from Baker Hughes, Huawei, Microsoft, C3.ai, and Siemens Oil and Gas to discuss the significant impact the Fourth Industrial Revolution (IR 4.0) is bringing to the oil and gas industry.

In his opening address during a panel discussion on Monday, Al-Nuaim noted that the benefits that can flow from IR 4.0 into the oil and gas industry are more than financial, and when utilized effectively, will have real societal benefits as well.

The estimated financial and efficiency benefits are impressive. Al-Nuaim highlighted a study where the World Economic Forum estimated that digital transformation could unlock approximately \$1.6 trillion of value in the oil and gas industry, including approximately \$650 billion of societal impact in areas such as reducing emissions, efficient water usage, and addressing oil spills.

"The potential value in IR 4.0 is huge, and oil and gas companies must act quickly. However, it is important for us to understand technology trends and how to scale-up deployments to maximize benefits," Al-Nuaim said.

# the massive impact of artificial intelligence

Asked by the moderator which technology he thinks will have the biggest impact, Al-Nuaim unhesitatingly highlighted artificial intelligence (AI).

"Al is the real game changer," he said.
"Our industry produces a huge amount of data, but the key question is whether the oil and gas industry is ready to scale up and



integrate all this data."

Using the example of cutting maintenance costs, Al-Nuaim noted that effectively combining data and Al will reap significant benefits in costs and efficiency. And this does not include the opportunities to commercialize Al applications developed internally at Saudi Aramco.

Building on this observation, Al-Nuaim noted that under the computing and intelligence domain — one of the three main IR 4.0 domains that are advancing rapidly and also include connectivity and manufacturing — trends predict that by 2021, 80% of emerging technologies will have AI foundations.

In the manufacturing domain, the scale again is impressive, with an estimate that by 2025, the 3-D printing market will be worth \$42.9 billion. In connectivity, technologies such as mobility are estimated to provide access to 71% of the world's population within five years.

"And we are starting to see more mobility applications in the oil and gas industry,"

In speaking during a panel session featuring representatives from around the world. Nabil A. Al-Nuaim notes that the impact the Fourth Industrial Revolution brings not only financial benefits to the oil and gas industry, but when utilized effectively, can also produce real societal benefits as well.

said Al-Nuaim.

# Aramco.ai looks to leverage big data

The sheer speed of change is something to behold, with new technology platforms coming online every two or three years. And Saudi Aramco is not standing still.

For example, a major component of digital transformation is Aramco.ai. This comprehensive program has all of the elements to enable an accelerated deployment across the value chain.

"Aramco.ai will leverage the massive data Saudi Aramco generates from our operations to enable different businesses with Al insights for faster and smarter decisions," said Al-Nuaim.

In addition to work going on within the company, Al-Nuaim also highlighted the importance of building a local ecosystem, highlighting the development of the cloud in Saudi Arabia, which will help accelerate the numerous benefits IR 4.0 can bring to business and society.







I have visited Saudi Arabia many times, as our business is in pipe recovery and we work with Saudi Aramco as a third-party vendor. IPTC has exceeded my expectations. I didn't expect to see both so many people and old friends. Saudi Aramco is huge!

— Arthur Sam Daya Maxflo Kuala Lumpur, Malaysia



I have been pleased to see how important sustainability has been in all the presentations at this conference. This is an issue of great importance. Reducing the carbon footprint and improving sustainability is relevant to the oil and gas industry, and it is very important to see this knowledge is shared. The fact that Saudi Aramco is involved in membrane technology improvements is important because that is a key part in fuel cell research.

> Lucia Bonoldi, a physicist and materials scientist at Italian oil company ENI



It's good to be able to talk with other companies, and to network with them and to learn about new solutions in the industry. We can talk about what common technologies exist and how they might be helpful in facing common challenges.

 John Fletcher a sales and commercial manager for Schlumberger



This conference is a wonderful moment. I've met with many engineers from around the world, and this is a good chance to share knowledge about the oil and gas industry. Yesterday, I visited one of the booths that highlighted a new technology that utilizes grain science technology. This is useful to assess sediments very quickly, which is very useful for exploration.

— Satria Antoni, marine geologist at King Abdulaziz University and citizen of Indonesia







# the largest IPTC to date

photos: Musleh Al-Khathami/Publishing











#### employees play a prominent role at IPTC

Shaikha Aldossary, a petroleum engineer with the Reservoir Description and Simulation Department, served as a master of ceremonies at IPTC 2020. Aldossary joined Saudi Aramco as a CDPNE student in 2009. She graduated in 2013 from the University of Leeds with a degree in petroleum engineering, and also completed a master's degree in petroleum engineering at Imperial College London. Saudi Aramco's subject matter experts have played a prominent role throughout the IPTC event, which comes to a close today.

# the voice of youth on the energy industry: 'there is no other industry as important to the world right now'

Dhahran — Delegates and attendees at the 12<sup>th</sup> International Petroleum Technology Conference (IPTC) 2020 at Dhahran Expo were told that "there is no other industry as important to the world, and as crucial to its future, than our industry is right now."

Delivering a message on behalf of the youth in Saudi Aramco's Upstream organization at the opening ceremony Monday, petroleum engineer Rowa H. Tawfig said "what we do — and how we do it — has never meant more."

While she was speaking as the voice of youth, Tawfiq said it will take a collaborative effort from the entire oil and gas industry to overcome the challenges that lie ahead.

"We are forging powerful, technologically advanced tools only possible with the Fourth Industrial Revolution, but at the end of the day, we know it is our minds, our creativity, our dedication — and most importantly, our collaboration — that will serve as our most powerful tools," said Tawfig. "The decisions this industry makes — that we make together — will shape the decade before us, and the decades to come."

Working toward the development of energy solutions that are accessible and affordable for everyone, she said, is paramount to meeting the ever-increasing energy demands in the world while — at the same time — continuing to be mindful of climate change and the environment.

"When friends of mine ask why I chose geosciences as a career path, I tell them I chose geosciences because I want to test myself against challenges that matter," said Tawfiq. "I want to make a difference. This is a moment in time that demands our very best."



Rowa H. Tawfiq speaks on Monday about the importance of the energy industry on the global stage. "This is a moment in time that demands our very best," she said.









# volunteers provide a much welcomed boost to IPTC



Khalid A. Mughawi Mansoor Alharis



Sultan Mashyalchi



Ghadeer Yousef



Amal Algami and Shahad Alabbad

by Michael Ives

Dhahran — A welcoming smile greeted every delegate to the 12th International Petroleum Technology Conference (IPTC) courtesy of the helpful and courteous volunteers who took time out of their week to assist more than 17,000 people from across the world and the Kingdom who attended the event.

With the volunteers' hard work and dedication, delegates enjoyed ease of access as well as firsthand experience of the Kingdom's famous hospitality.

More than 300 volunteers, including approximately 200 women and 100 men, dedicated 2,025 hours to assisting organizers by supporting customer service, crowd management, guest relations, and media

Mansour Alharis, a student at Imam Abdulrahman Bin Faisal University studying management information systems, not only volunteered for IPTC, but he also volunteers at the King Abdulaziz Center for World Cul-

Alharis coordinated all of the student vol-

unteers from his university.

"I have had a wonderful time," he said. "The first day I worked in the VIP section, and I also worked in the exhibition hall. I have had the chance to meet so many people from so many different countries and cultures, welcoming the world to Saudi Ara-

Amal Algarni, a student in public health, and Shahad Alabbad, an engineering student, echoed Alharis' comments. Both also volunteer at Ithra and have thoroughly enjoyed their time helping delegates find their way through the Dhahran Expo facilities.

Ghadeer Yousef, who volunteered for

three days at the conference, also agreed. But not all volunteers were students. Khalid A. Mugahwi, a Saudi Aramco employee with the South Ghawar Producing Department, was volunteering side-by-side with Alharis. "I volunteer because when I make people happy, I am happy," Mugahwi said.

No doubt the same can be said for all the volunteers who gave up their time to help make IPTC the hugely successful conference that it was.

# iSecurity Center looks to revamp security training

by Dalia Darweesh

Dhahran — The Industrial Security Support Department (ISSD) recently inaugurated the new iSecurity Center at the ISO Academy, representing a major revamp of operations, transforming traditional training methods to new, improved, practical, and innovative ones.

"In a digitalized era with simulations and virtual reality technologies, trainees experience an environment that will allow them to take part in real life security situations," said Adel F. Al-Wuhaib, ISSD

#### using top technology, top qualifications to protect

With internationally accredited training programs delivered by qualified instructors — and an advanced technology-enabled learning environment — the center is using a fully integrated approach, providing interactive and innovative in-class and in-the-field training with a digitalized

"We prepare our security workforce to protect Saudi Aramco," said Mohammed S. Alghamdi, ISO Academy (ISOA) superintendent. "The academy was established to provide effective training programs that support security personnel in the development of knowledge, skills, physical abilities, and behavioral capabilities to sustain a resilient organization."

In addition to classrooms, the academy provides a fitness center with self-defense classes, a shooting range, and simulation zones resembling security functions at the company for the purpose of practicing. Short learning videos displayed on a hightech touch screen have been developed for every security function, describing the security practices of the areas within ISO ending with interactive questions.

Training supervisor Haifa A. Alfajhan, who contributed to building the iSecurity Center, spoke about the importance of demonstrating high intelligence real systems and technologies, allowing security personnel to get comprehensive training.



#### training for real-life situations with simulations

There are several learning experiences for trainees at the academy, replicating ISO operations throughout Saudi Aramco, includ-

Visitors center with an ID office showcasing issuance process and vehicle stickers, and demonstrating how visitors issue electronic stickers, in addition to an ISOA gate displaying how Saudi Aramco Dhahran gates function, through the use of radio frequency identification technology — a fully integrated intelligent-gate technology system that reads license plates and links them to digital stickers.

**Restricted access gate** displaying a protection-in-depth concept of a multi-layer security system to prevent intrusions. The asset protection strategy that refers to employing multiple layers of protection such that if one fails, others are available to provide backup protection.

911 emergency center to train 911 operators how to monitor company facilities through closed-circuit TV and responding to incidents using radio and hotlines to connect with employees and government agencies, and dispatch the nearest patrol to the incident location. The 911 response time at Saudi Aramco is 30 seconds, as opposed to the international standard of 60

**Aviation**, with a simulation zone consisting of practical training to experience security operations at Saudi Aramco airports such as ID screening, protection of airport infrastructure, baggage, and passenger screening.

**Driving simulation** with a live patrol simulation featuring different scenarios testing trainees' skills and response to incidents, from receiving the 911 emergency center incident report until arriving to the incident's location. Patrol response time is

less than five minutes, below the international response time key performance indi-

Technology and its advanced surveillance cameras, drones, and drone jammers, in addition to sensors that can be installed as security measures, including restricted areas. Security personnel are trained on the functions and use of devices.

**Shooting** with a virtual firing range, and live shooting simulations with over 250 scenarios, with detailed results of aiming skills, reactions, judgment, use of force, and accuracy. Specialists from the weapons department explain the various types of weapons and their uses.

The academy is designed to sustain security operations through using an integrated approach of qualified staff, comprehensive procedures, and high-tech welcoming security personnel and trainees to join them on a state-of-the-art learning journey.

### your voice —



by Mohammad Nefai Dhahran Mohammad.Nefai@aramco.com

Your Voice reflects the thoughts and opinions of the writer, and not necessarily those of the publication.

# common sense at every moment, day, and year

God has given humans five senses that are directly dependent on external inputs surrounding them.

According to these inputs, they are expected and repeated human reactions. These senses, of course, are taste, smell, touch, sight, and hearing.

Here we will not talk about the importance of the five senses or even the sixth sense, which is the intuition in achieving certain goals. But we will address what is known as common sense, which does not fall within these five senses, but we wish to exercise at every moment, every day, and throughout each year of our lives.

Common sense is what distinguishes individuals who act well and get an intuitive reaction as they experience situations and avoid public discontent around them, and may even escape an unexpected reaction.

The following are some examples of misconduct and the non application of the common sense principle that can possibly cause serious consequences:

- Someone who speeds up when he sees that a traffic light has turned yellow, and tries to catch up before it turns red. The consequences of this action could be deadly for not just the driver, but other motorists as well. This despite the wellknown fact common sense and logic tells us that the red signal will be followed by another green light in just a few minutes.
- At hospitals, there are patients who prefer to wait for their turn standing in the corridors, or in front of the doctor's room, with hope that this will change the reality of being able to enter the doctor's room more quickly than the queue suggests. This act is inconsistent with common sense, and may result in embarrassment for that patient and those around them. Hospitals provide comfortable waiting rooms equipped with the means to know the turn of the patients.
- Some people stand at the entrances to the elevators, or even rush to get in, as if there are no people inside the elevator

and will need to go out in peace — and safely. Again, it's as if some people think there won't be another elevator to come.

 In parking areas, you might find someone who stops his car during traffic congestion in places not designated for such stoppages, or double-parks, which impedes the smooth flow of traffic.

The important question is, can we develop common sense at the early stages of voungsters' lives? In my view, we can do so by practicing it in front of them, and explaining to them why we acted accordingly. This teaches them the benefit of using common sense to analyze things. and then act with proper behavior, which avoids foolish actions. Thinking too selfishly harms them before they harm those around them.

In conclusion, I hope that none of us are among those whom "the sage of Arabs." Aktham bin Saifi al-Tamimi, referred to when he said "If you exaggerate the advice, be prepared for the charges."

### solar powered golf carts bring a more sustainable form of mobility to Shaybah

by Musherf Alamri

Shaybah — Solar powered golf carts have made their debut in Saudi Aramco's most remote community — Shaybah.

Shaybah community maintenance technicians have converted seven golf carts to be powered and charged by solar panels instead of grid electricity. Golf carts are the main means of ferrying residents within the Shaybah community, due to the car ban in the small camp. It is the combination of the short distance and small loads that make the electric cart a good fit.

#### reducing emissions, improving efficiency

One of the benefits of using solar panels to charge the golf carts is reducing emissions. This supports the company's efforts to preserve energy and utilize clean energy resources, which is in alignment with the Kingdom's Vision 2030.

"This shows the level of commitment to protect the environment here in Shavbah, not only in the oil and gas business, but also in the community. We truly believe that every small contribution to reducing emissions counts," said Khalid H. Al Jamea, Shaybah Producing Department manager.

Solar powered carts are more efficient



In Shaybah, a switch to solar powered golf carts not only improves our sustainability efforts and reduces emissions, but they are also safe, as they don't need to be plugged in overnight to be charged.

because the drivers do not need to allocate time and effort to connect the cart to the grid. Instead, they only have to ensure that the solar panels are exposed to the sun during the day.

#### no more overnight charging

Saeed M. Al Ghamdi, head of the North-

ern Area Remote Camps Services Division, said the inspiration for switching to the solar panels came from noticing that the golf carts are connected to the electricity outlet and left to charge overnight.

Considering recent developments that showed that operators must be careful with the recharging process, he felt that there

must be a safer and more convenient alternative that will comply with Saudi Aramco safety standards. He searched online and found that a Dammam-based contractor has been successfully installing solar panels to power water pumps in farms.

To prove the concept, solar panels were first installed on the biggest golf carts, which has three rows of seats and the highest electricity requirement. For three months, the converted cart met the mobility requirements and was only recharged via the solar panels. So, more solar panels were procured and maintenance technicians of the Shaybah Community converted the remaining six golf carts to solar power.

The technicians completed the conversion process, removing the existing golf carts' roofs, installing frames, the solar panels, and then the required wiring to the battery.

The camp residents have been happy with the modified carts, and the common comment is that they are surprised that solar panels can power golf carts. After the success with the golf carts, the Shaybah community is already working toward solely powering its newly established greenhouse, dedicated to producing landscaping requirements, by solar energy.



# read it on the intranet

Saudi Aramco delivers value through automation at SPE workshop



Speaking at a drilling automation workshop conducted by the Society of Petroleum Engineers in Bahrain, Rami F. Saleh, general supervisor with the Gas Drilling Engineering Department, noted: "Drilling Automation Workshops such as this provide an excellent forum to advance automation in its many forms, such as drilling equipment to enhance safety and efficiency, or software that utilizes data analytics, machine learning and artificial intelligence to drill smarter and faster.

using technology, innovation, and the power of people to build a strong culture of reliability



Khalid Al-Mujaljal speaks about reliability being everyone's responsibility during the recent five-day Reliability Boot Camp, conducted by Corporate Maintenance Services, with sponsorship from the Khursaniyah Gas Plant Department.

North Ghawar Producing Department takes a stand against falls in Scaffolding, Fall Hazards and Lock-out Tag-out campaigns



Attendees gather around the scaffold during the practical session of the recently held safety campaign in Abgaig. The practical session tested the knowledge and experience of the employees in identifying discrepancies.

Northern Area Production Engineering and Well Services Department hosts contractor engagement workshop 'Toward Sustaining Excellence'



Management poses with participants and organizers of a Health, Safety, Security, and Environment (HSEE) workshop conducted in Ju'aymah recently by the Northern Area Production Engineering and Well Services Department. The goal of the workshop was to communicate company standards to contractors, share lessons learned and best practices related to contractor safety, and ensure that contractors deliver the highest in regard to HSSE performance. (Photo: Moayed Al-Qattan/MPD)

#### King Abdulaziz Center for World Culture

by saudi aramco

# Ithra movies



#### in cinema

#### **50 Thousand Photographs**

Jan. 16, 18, 20, 22

5 p.m.

#### A Plastic Ocean

Jan. 17, 18

5:40 p.m.



Jan. 15, 16, 20, 21, 22

5:40 p.m. 2 p.m.

#### **Ithra Heroes Adventure**

Jan. 16, 18

Jan. 17, 18

10:30 a.m.

#### Tale of Lake

Jan. 15, 16, 21, 22

3 p.m.

#### The Investor

Jan. 15, 17, 21

5 p.m.

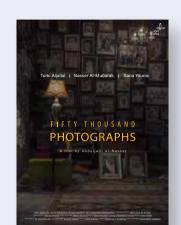
#### The Little Vampire

Jan. 15, 18 Jan. 16, 17 2 p.m. 7:45 p.m.









## 50 Thousand Photographs

In the current era, where he captures about two billion photos around the world daily, Turki lacks having one photo of his father after his family wasted all of his photos at the Burning Photos Wave that some people attended in the 1980s in the Kingdom. While searching for photos of his father, he recognizes the old man "Nasser," who owns in his house 50,000 photos of city people.



#### A Plastic Ocean

Journalist Craig Leeson, searching for the elusive blue whale, discovers plastic waste in what should be pristine ocean. In this adventure documentary, Leeson teams up with free diver Tanya Streeter and an international team of scientists and researchers, and they travel to 20 locations around the world over the next four years to explore the fragile state of our oceans, uncover alarming truths about plastic pollution, and reveal working solutions that can be put into immediate effect.



#### Tale of Lake

The story of the film is told through tales that are based around the myths, legends, and old beliefs that are part of Finnish mythology. The first-person narrator, who is the main character of the story, is the daughter of Ahti and Vellamo, the god and goddess of the sea. She is Ahitar, the maiden of water. This sea maiden is a spirit born in a spring who has her own tale in the Finnish mythology. There are five acts in the story, and the different times of year follow the different acts.



#### The Little Vampire

The story of Rudolph, a 13-year old vampire, whose clan is threatened by a notorious vampire hunter. He meets Tony, a mortal of the same age, who is fascinated by old castles, graveyards, and vampires.





The Arabian Sun is a weekly publication issued free of charge by the Corporate Communication Support Department for Saudi Aramco employees.

North Admin Building, Room AN-1080, C-05A, Dhahran, Saudi Arabia Telephone (013) 876-0374 Email: publishing@aramco.com ISSN: 1319-156X Articles may be reproduced provided The Arabian Sun is credited. Publishing director:
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Musherf Alamri, Eamonn Houston,
Scott Baldauf, and Shaistha Khan.
Designer: Husam Nasr.

Articles and coverage can be requested through the company's CRM system.

Correspondence may be addressed to the editor, North Admin Building, Room AN-1080, C-05A.





Saudi Arabian Oil Company (Saudi Aramco) is a joint stock company, with certificate of registration number 2052101105, having its principal office at P.O. Box 5000, Dhahran, Postal Code 31311, Kingdom of Saudi Arabia, and with fully paid capital of SAR 60,000,000,000,000.

# WSIS PRIZES

April 6-9, 2020 Geneva, Switzerland



Vote for Saudi Aramco projects to win the 2020 "World Summit on the Information Society (WSIS)" prizes.

Various Saudi national projects have been reviewed and selected by the United Nations (UN) Committee for the WSIS Prizes 2020. These include the following Saudi Aramco projects:

Project Name	Category
UAV-based RFID Inventory Manage- ment Technology	C7. E-science
Young Leaders Advisory Board (YLAB) Academy Application	C7. E-employment
e-Donation Application	C10. Ethical dimension of the Information Society
Contractor Safety Solution Project	C7. E-environment
Localization of Cybersecurity Solution — Data Diode Designing and Manufacturing	C5. Building confidence and security in use of ICTs
Information Technology Energy Efficiency Program	C6. Enabling environment



Scan to register and vote

Please note that all the submitted projects have been classified under several different categories. Your vote will not be valid unless you vote for a project under each category.

The voting deadline is Friday, Jan. 24, 2020.

#### How to vote:

- 1. Scan the QR Code.
- 2. Register as a new user.
- 3. Confirm your WSIS account.
- 4. Log in to your account.
- 5. Go to the "Voting Form."
- 6. Vote for one project under each category.