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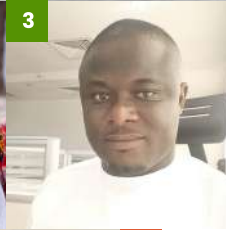
GPT

Ghana Petroleum Times



Ghana Section

An Annual Section Magazine



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- 11** Vincent Nana Boah Amponsah
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Obed Tibenye Tanlon
Editor

EDITOR'S REMARKS

Dear SPE Ghana Members,

Welcome to our maiden edition of the Society of Petroleum Engineers Ghana section newsletter for the year. We are excited to bring you the latest updates, conversations, and developments in our field of engineering.

Despite the unprecedented challenges brought about by the global pandemic, the SPE Ghana Section continued to work towards our mission of promoting the exchange of technical knowledge and advancing the oil and gas industry in Ghana.

Throughout the past year, we have organized a variety of virtual events and webinars featuring expert speakers on a range of topics, from exploration and production to health, safety, entrepreneurship, and the environment. We have also continued to support the development of young professionals through mentorship programs and social networking activities.

Looking ahead to this year, we are excited to continue this momentum and build on the successes of the past year. We are committed to providing valuable resources and networking opportunities for our members, and we are always looking for new ways to engage and support the oil and gas community in Ghana.

As always, I welcome your feedback and suggestions for how we can improve our programs and services. Please feel free to reach out to me or any member of the SPE Ghana executive committee with your ideas.

Finally, we would like to remind our readers that we are always on the lookout for new and exciting content. If you have a story or article that you would like to share with our community, please don't hesitate to reach out to us.

Best regards.

MESSAGE FROM SPE AFRICA REGIONAL DIRECTOR

Oghogho Effiom
Shell Nigeria



Dear readers,

It is my pleasure to address you on the topic of 15 years of oil exploration and production in Ghana and the lessons learned. The discovery of oil in commercial quantities in Ghana in 2007 marked a significant milestone in the country's economic development. Since then, the oil and gas industry has grown significantly, and Ghana has become a major player in the region.

As we reflect on 15 years of oil exploration and production in Ghana, it is important to take stock of the lessons learned. These lessons provide valuable insights into the challenges and opportunities of the oil and gas industry in Ghana and can guide future developments in the sector.

One of the most significant lessons learned is the importance of local content. Ghana has made significant strides in developing its local content policies to ensure that the oil and gas industry benefits the local economy. The country has established a Local Content and Participation Policy to ensure that Ghanaians have access to job opportunities, training, and business opportunities in the oil and gas industry.

Another important lesson learned is the importance of environmental management. The oil and gas industry can have significant environmental impacts, and it is important to manage these impacts to ensure that the environment is protected. Ghana has implemented environmental regulations and guidelines to mitigate the environmental impacts of oil and gas operations.

Revenue management and Infrastructure development are also two essential lessons learned during 15 years of oil exploration and production in Ghana. The country has implemented a Petroleum Revenue Management Act to ensure that the revenue generated from oil and gas production is managed transparently and efficiently. Also, the industry requires significant infrastructure, including pipelines, storage facilities, and processing facilities. Ghana has invested in infrastructure development to support the oil and gas industry.

Finally, due to the activities in the region that can have significant social and economic impacts on local communities, a crucial lesson has been to learn ways to engage with stakeholders to ensure that their concerns are addressed.

In conclusion, the lessons learned during 15 years of oil exploration and production in Ghana are invaluable and provide guidance for future developments in the sector. I invite you to read further on the topic in this magazine, as we explore the various aspects of the oil and gas industry in Ghana and the lessons learned over the years.

Thank you for your attention, and I hope you find this magazine informative and insightful.

SOLIDARITY MESSAGE TO **SPE GHANA**

Greetings to the distinguished members of the Society of Petroleum Engineers (SPE) Ghana,

As the CEO of Ghana Gas and also the Board Chair for SPE Ghana, I am privileged to extend my warmest wishes to you all. I hope this message finds you all in good health and high spirits. On behalf of the board and management, I wish SPE Ghana a successful 2023. May all the planned agendas and projects be executed with excellence and lead to the progress and growth of the organization.

I am delighted to take note of the remarkable initiatives undertaken by SPE Ghana over the years. The Beach Cleaning campaign, donations, and active engagement with SPE Branches in the universities across the country, amongst several other initiatives, are commendable. These initiatives go a long way in causing social change and making a positive impact, thereby making Ghana a better place for all.

I urge SPE Ghana to continue on this tangent and chalk up more successes. As we collectively strive towards a better Ghana, we must recognize and embrace the power of collaborative efforts. Together, we can achieve more significant feats that will impact our society positively.

Furthermore, I would like to encourage all SPE members to intentionally build their capacity in the oil and gas industry. This is a highly technical field, and it demands that we stay up-to-date with the latest technologies and developments. I urge you all to continually seek out opportunities for learning and growth so that you can deliver exceedingly in your line of duties.

As the board chair of SPE Ghana, I am open to having interactive sessions with members to share my experience and train them to become successful in their respective fields. My experience in the industry has taught me that knowledge sharing is a crucial aspect of growth and development. Together, we can achieve much more than we would as individuals.

In conclusion, I would like to reiterate my best wishes to SPE Ghana for a successful 2023. May we continue to work towards a better Ghana, and may our collective efforts bring about positive change in our society.

Best Regards.

Dr. Ben Asante

*CEO, Ghana National Gas Company
Board Chair, SPE Ghana*



NEW YEAR MESSAGE FROM SPE GHANA SECTION CHAIR

Dear Industry colleagues and student members,

On behalf of the section officers and board members, with great honour, I am pleased to welcome you to 2023, a year full of great potential and new opportunities. Having shelled out a wonderful year plugged with technical sections, health programs, membership build-up programs, diversity and inclusion activities, local content conferences, student chapter conferences, Energy programs, economic stabilization talks and a lot more activities, I am thankful to you all for your great input in making 2022 a successful, lively, and prosperous year.

It is without a doubt that last year was a very tough year, not only for the Ghanaian oil and gas industry but the world. Yet SPE Ghana section demonstrated concerns about the repeated cycles of high oil prices in a stab to transform it efficiently and innovatively in addressing related challenges to grow sustainably.

Nonetheless, this is a new year and a fresh beginning where we must collect and exchange technical knowledge concerning petroleum and related technologies to enhance our technical and professional competence.

I would like to take this opportunity to thank all of you for your persistence as we collectively and successfully waggled and

navigated our way through 2022. SPE Ghana recorded its highest professional membership in 2022, and we need to keep the spirit alive.

We have a new opportunity in 2023 to shape the future of the energy industry in Ghana and beyond. Thus, providing ample opportunities to share experiences, explore new technologies, and test innovative methodologies, and most importantly serve through the act and spirit of volunteerism.

Even as we look forward to hosting the Africa Student Congress in May; Our Monthly Technical Lectures for YPs and Student Lecture Series will spotlessly continue. We recently held a Beach Cleaning and Tree Planting Exercise under the SPECares project. Please note that there shall be a couple of Technical Workshops; our dynamic D&I Team will not be left out – as we expect exciting activities like Breast Cancer Awareness Walk, Time with Kids, Women in Engineering week, etc.; and we have initiated our Corporate Training and E-Mentoring Programs to support our Students and YPs in Ghana, just to mention a few.

Riverson Oppong, PhD.
Section Chair, SPE Ghana

I want to also challenge all members of SPE to think outside the box and be wholly involved in providing the industry with continued knowledge-sharing, professional development, technology showcases, training, and unmatched targeted networking opportunities.

I remain resolute to assisting you to unshackle your potential and my doors will stick around open to discuss great ideas. Through your optimistic attitude and endurance, I am convinced that we can collectively meet any challenges head-on and together make 2023 our best year ever.

I wish you a fruitful year filled with peace, joy, and growth in every aspect of your life.



WHO WE ARE



The Society of Petroleum Engineers (SPE) is a not-for-profit professional association with more than 119,000 members in 138 countries engaged in the exploration and production of oil and gas and related energy resources. SPE is a key technical and professional resource providing opportunities to exchange information at in-person and online events and through training, publications, and member programs. SPE maintains offices in Calgary, Dallas, Dubai, Houston, Kuala Lumpur, and London

GET CONNECTED.

**SPE SERVES
124,800 MEMBERS
IN 134 COUNTRIES.
JOIN SPE TODAY!**



Starting as a group that operated under the American Institute of Mining Engineers (AIME) during the early 1900s, SPE has expanded into an autonomous not-for-profit worldwide organization, comprising over 119,000 members located in 138 countries.

SPE has several in-house brands including One Petro, Energy Stream, Petro Wiki, Energy for Me, SPE Connect, and many more.



PROGRAMS & EVENTS

GHANA BI-CENTENNIAL INTERNATIONAL CONFERENCE AND EXHIBITION
15 YEARS OF GHANA'S OIL DISCOVERY
LESSONS LEARNT AND FUTURE OUTLOOK



20th OCT 11am - 2pm
Meeting ID: 893 5130 3235
Passcode: spgh

OCTOBER 22
Technical Meeting

"REPLACING GHANA'S DWINDLING RESERVES: A CASE FOR AGGRESSIVE FRONTIER BASIN EXPLORATION AND HARVESTING OF STRANDED RESOURCES"



20th OCT 11am - 2pm
Meeting ID: 893 5130 3235
Passcode: spgh

Schlumberger

SLB in collaboration with SPE Ghana is organizing a training.

07th OCTOBER, 2022
FOUNDATION OF FORMATION EVALUATION

24th OCTOBER, 2022
FORMATION TESTING & SAMPLING TECHNOLOGIES

SPE International
Ghana Section

STUDENTS LECTURE SERIES

EFFECTIVE TIME MANAGEMENT



24th OCTOBER, 2022
Time: 12:00PM - 1:00PM
Meeting ID: 830 2056 6371
Passcode: spgh

NOVEMBER 22
Technical Meeting

METHANE EMISSIONS
HOW CAN WE START THE REDUCTION PROCESS



09th NOV 11am - 2pm
Meeting ID: 842 0222 3886
Passcode: spgh

D&I
DIVERSITY & INCLUSION

Protecting Our Mental Space



FRI 18 NOV
1:00PM
Meeting ID: 895 5227 6228
Passcode: spgh

NETWORKING SESSION

09th NOV
8:00PM
Gazabo view

SPE International
Ghana Section

WHY I SHOULD BE A MEMBER OF SPE

25th NOV
10:00AM - 11:00AM
Meeting ID: 830 2056 6371
Passcode: spgh

DECEMBER 22
Technical Meeting

"ENERGY TRANSITION AND HOW SPE SUPPORTS MEMBERS IN CAREER DEVELOPMENT NOW AND IN THE FUTURE"



06th DEC 11am - 2pm
Meeting ID: 832 1742 3413
Passcode: spgh

HEALTH TALK ON PROSTATE CANCER



01 DEC
10:00PM
Meeting ID: 830 1423 9497
Passcode: spgh

STUDENTS TECHNICAL SESSION

LIFE AFTER SCHOOL

09 DEC
FRIDAY@1:00PM
Meeting ID: 830 2056 6371
Passcode: spgh

CHRISTMAS with The Kids

24 DEC 22
10:00AM - 12:00PM

FUNDRAISING
Join us to bring joy & health to the children of Power of Love Foundation, Tema

0243327020 0557970345


SPE DISTINGUISHED LECTURER

OMAR ABU-SAYED

Entrepreneurship in the Transitioning Oilfield: Starting and Building a Great Company during Tumultuous Times

20th JAN
1:00 PM
Petroleum Commission Conference Room

FEBRUARY 23
NATIONAL STUDENTS TECHNICAL WEBINAR



11th FEB 6pm
Meeting ID: 810 9280 9423
Passcode: spgh

D&I
DIVERSITY & INCLUSION

HEALTH TALK ON CERVICAL CANCER



15 FEB
WEDNESDAY@6PM
Meeting ID: 889 1924 6036
Passcode: 104268

BEACH CLEANING Exercise

25th FEB
Sakumono Beach
7am - 10am

MENTORSHIP TRAINING SESSION



WED 15 FEB
Trinidad & Tobago
Meeting ID: 891 1021 6228
Passcode: spgh

INTERNATIONAL DAY OF WOMEN AND GIRLS IN SCIENCE



11 FEB
SATURDAY@2:00PM
Meeting ID: 802 147 1052
Passcode: spgh

MENTORSHIP TRAINING SESSION



FRI 24 FEB
Time: 2:00PM
Meeting ID: 892 252 777
Passcode: spgh

DRIVING GENDER EQUALITY & EQUITY THROUGH TECHNOLOGY & INNOVATION



08 MAR
WED@12:00PM
Meeting ID: 891 1021 6228
Passcode: spgh



Kamel Ben-Naceur
President
SPE International

Friday, 2nd Sept

Ghana Section



FLAGSHIP EVENT

Guest Speakers			Event Chairperson
			
Kamel Ben-Naceur President SPE International	Oghogho Effiom Africa Regional Director, SPE Shell Nigeria	Hon. Matthew Opoku Prempeh Minister Ministry of Energy	Ato Aidoo Section Director SPE Ghana



GHANA'S BIENNIAL INTERNATIONAL CONFERENCE AND EXHIBITION
15 YEARS OF GHANA'S OIL DISCOVERY
LESSONS LEARNT AND FUTURE OUTLOOK



BIENNIAL INTERNATIONAL CONFERENCE AND EXHIBITION

SPE Ghana's debut Biennial International conference and exhibition was held on 5th September 2022 at the Ghana Academy of Arts and Sciences with the theme "15 Years of Ghana's Oil Discovery; Lessons Learnt and Future Outlook". This conference was organized by the SPE Ghana section in partnership with the Ministry of Energy, Ghana and the Ghana Upstream Petroleum Chamber. Our proud sponsors were MODEC, Petroleum commission, Baker Hughes, Halliburton, DeepOcean, Africa Center for Energy Policy, Ghana National Gas Company, and Kenyon International West Africa Limited. This conference had two themed panel discussions on the energy transition challenge among the student chapters of the SPE Ghana Section.

Ato Aidoo, SPE Ghana Section Director, Oghogho Effiom- SPE Africa Regional Director and Kamel ben- Nacuer- SPE International President gave their remarks. Ato Aidoo touched on the issues of energy transition and how Ghana can approach it; highlighting the need to attract more investors at this time. Oghogho Effiom, speaking on the theme indicated the need for Africa to ensure energy security before transitioning as we cannot transition from what we do not have. Kamel ben- Nacuer addressed the effect of the Russia -Ukraine war on all economies and indicated that the energy systems are being affected. It translates into a negative impact on access to supply and electricity. There is therefore the need for people to be at the centres of energy growth and must be driven by them. He also stressed the need for Africa to adopt homegrown solutions to all the menaces the continent is facing. Kamel finally encouraged active and fruitful deliberation among governments and the private sector and organisations to deal with job creation for young citizens.

The Petroleum Director of the Ministry of Energy, Kwame Ntow who represented the Energy Minister reiterated Government's policy on the Oil industry by stating that Government will continue with the open tendering of Oil blocks and that the gaps identified from the first one will be closed in the next licencing bid rounds. He said the government is open for negotiations and its doors are always open for further deliberations. He also bemoaned the lack of indigenous capacity and intreated local players to up their game



The first Panel Discussion was moderated by Dr Juliette Twumasi-Anokye an Independent Energy Consultant and held with panel members- Mark Owusu (Petroleum Commission), Victor Sunu-Attah (Ghana National Petroleum Corporation), Dr Riverson Oppong (Ghana National Gas Company), Dr Papa Benin(MODEC), Kodzo Yaotse (Africa Center for Energy Policy).

Victor Sunu-Attah said domestic gas can be a game changer in the transition to cleaner fuels and advocated for the growth of portfolios beyond oil and Gas alluding to the discussion ongoing on the energy transition. Mark Owusu from Petroleum Commission gave the regulator perspective, and indicated that Ghana has depleted at least 50% of our reserves and said there is the need to focus on the role of gas in the nation's energy need which is on the increase. Gas is expected to play a key role in Ghana's energy sector and its utilisation to reach 2.3bcf by 2034. He also stated that local participation in upstream has increased with foreign companies taking about 56% of the services. Dr Papa Benin from MODEC gave a perspective from the service providers specifically the production companies. He talked about the level of local content participation that increased from 27% to 55% in Jubilee FPSO before the arrival of the TEN FPSO with 91% of senior managers being locals. He also made mention of the MODEC training programme for capacity building which played a key role in skills development.

Dr Riverson Oppong from the Ghana National Gas Company gave some key milestones in the Gas sector. He said Ghanaians are fully running the gas processing facilities. The challenge, however, is the lack of capacity to process all raw materials from the field. He also spoke about data interpretation, GPP 2 plan and the national gas master plan. Kodzo Yaotse from ACEP who addressed the Petroleum Revenue management Act stressed on the need for players to adhere to the dictates of the Act. He talked about the Public Interest and Accountability Committee (PIAC) which is working to safeguard the oil revenues of the country. All panellists came to a consensus on the need for the government to do more to attract investments into the upstream space and secure the energy sector.

In the afternoon, an energy transition competition dubbed "Changellenge" was held between the student chapters – KNUST, UMAT, UNER, UG and All Nations with the University of Ghana emerging as the winner. The challenge sought to bring onboard innovative ideas for the energy transition and how Ghana can approach it. The conference continued with a second-panel discussion themed "Ghana at the Crossroads; How to balance Energy Poverty and Energy Transition". This discussion was moderated by Emmanuel Arthur (Zeal Environmental Technologies) and with the panel members, Fafa Tengey (DeepOcean), Nidra Araba Yebuah (Schlumberger), Michael Nyame (Halliburton), Graham Mensa-Wilmot (XCIDrill Technology), Yaw Owusu (Tenaris) and Ato Aidoo (Soluserv)

Emmanuel Arthur, the moderator started the discussion by introducing the theme. He stated that we are poor on the energy front and asked some questions. "How the government and operators will deal with the energy transition? how can energy become accessible and more affordable to the population?" Fafa Tengey talked about the need for new and efficient technologies to drive the energy transition agenda. Nidra Araba Yebuah also dealt with three subjects – Energy poverty, Energy Transition and Balancing the need for energy. She mentioned that Africa and Ghana can share a common goal regarding energy.



She also called for innovation, public-private partnerships and more funding to support our energy sustainability. She said the gas will be a game changer as it gives less emission compared to other sources of green energy. Micheal Nyame asked this question " what capacity does Ghana have as a nation to transition into green energy versus the payment tradeoffs, what are the tradeoffs?" He pointed to the fact that we need to have an answer to these questions before we think of transitioning fully into green energy. Graham Mensa-Wilmot posited that the dynamics of the energy transition are driven by several factors on different continents. He pointed out the fact that Europe and America are seeking solutions to energy transition based on their geopolitics and Africa also needs to have a clear energy transition policy with timelines to follow. He reiterated that Africa and Ghana at that should consider their circumstances and position to make decisions and provide solutions by themselves. They must not be driven by what other continents are doing.

Yao Owusu also asked that we consider a key challenge which is the timelines for the energy transition. He further stated that Africa is thinking about energy transition too early and that we need to focus more on closing the poverty gap- Africa produces too little GHED to be forced to push the energy transition agenda. He rather encouraged us to maximize the oil resources. Ato Aidoo submitted that energy poverty does not exist in Africa but rather is an issue of accessing and distributing energy. He stated that one hindrance is the lack of capacity to pay for the energy and so there is a growing pressure to grow/develop the energy sources. He also said we need to be proactive in dealing with energy issues and effectively utilize our oil resources for industrialization. Ato Aidoo also suggested some solutions which include shifting our focus from energy transition

to exploiting the existing resources and investing into research. He concluded by saying " If we don't expand our exploration activities, we won't stay in production for long. We must not wait till depletion occurs"

GH-BICE GALLERY



ENERGY TRANSITION INNOVATION CHALLENGE

The energy transition Innovation challenge was organised during the Biennial International Conference and exhibition (BICE) between the various student chapters from the tertiary institutions in Ghana. This challenge sought to identify, enhance, test and disseminate high potential policy ideas and technical solutions to address the issue to energy transition. The Challenge involved students from Kwame Nkrumah University of Science and Technology, University of Ghana, University of Mines and Technology, All Nations University and the University of Energy and Natural Resources. Our proud sponsors were Ghana Gas and Africa Centre for Energy Policy ,ACEP

UMaT Solution



Students from the University of Mines and Technology (UMaT) presented on Carbon Capture, Utilization and Storage (CCUS) as their innovative idea. They spoke about the fossil fuel value chain, its emissions, and effects currently on the environment. Their idea was focused on CO₂ reduction where all processing and consumption facilities must be retrofitted to carbon capture utilization and storage units which can also be extended to agriculture, construction and firefighting. They also encouraged the use of natural gas since it burns 30% and 50% of cleaner energy than oil and coal respectively due to its low carbon and sulphur content. They also reiterated on generation of other renewable energy such as hydrogen from the CCUS. They concluded with a projection that shows CO₂ emissions could be reduced from 33.5 to 10.0 Gt with at least 70% efficiency of the CUS process yearly.

KNUST Solution

KNUST Chapter presented exclusively on Renewable Energy Mix Systems (REMS) as their innovative plan. They commenced their presentation by analysing how gas turbines and internal combustion diesel engines were used to generate electricity offshore. Their proposal was an offshore energy hub made of REMS, Hydrogen production and carbon capture faculties. They also touched on a brilliant monitoring unit on the FPSO with onboard power stations, gas turbines, combination unit and gas separation unit reaching to offshore recycling unit. There will also be an electrolysis station to generate hydrogen and oxygen for commercial use, and a CO₂ capture station. They finally concluded stressing on the future prospect using REMS and its reliability.



UNIVERSITY OF GHANA *Solution*



University of Ghana chapter presented on Biomass as their transition plan that could be used in Ghana. They stated that Ghana's contribution to the global greenhouse gas emissions was 7.328 million tons. The students gave an in depth knowledge of how decarbonizing energy can be a solution by introducing bioenergy. They expounded on how most wastes (home, industrial, farmland wastes) can be converted into energy. They elaborated on how biomass can be used to deal with the sanitation issue in the environment, ocean and also provide energy for the nation and jobs for the citizens. They brilliantly proposed their transition plan and how it could be implemented. One prominent point they made was the need to revise existing policy barriers. They concluded by comparing the reliability of biomass to other forms of renewable energy and affirmed that it is a more just transition plan for the future.

UENR *Solution*

The students of the university of Energy and Natural Resources (UENR) presented on the topic; Green Maxing Project. They gave an insightful presentation on greening the environment in a fair and socially inclusive way and creating opportunities as well. They expounded on Community Energy Development Initiative (CEDI) and Clean Fuel for Transportation Initiative (CFTI) project models. The CEDI model deals with associations in the community forming partnerships to get solar panels to generate electricity. The CFTI was about extending natural gas pipelines to regional capitals, establishing substations and the need to educate the populace the more on the need for an alternate fuel. This will in effect generate jobs for the citizenry.



ALL NATIONS UNIVERSITY *Solution*



All Nations University chapter also presented on carbon capture systems for fossil fuels to achieve net zero emission. They began with an introduction on energy transition and the need for it; giving an analysis on CO₂ produced yearly. They explained energy transition as a change of primary energy supply and gradual shift from a pattern of energy provision to a new state of energy.

The Koforidua based University also discussed how carbon capture and storage can be seen as bridge technology until low carbon alternative fuels are fully integrated into the system. They presented a model showing the three phases in the CCS process. The first phase is the separation of gas from emissions, from which carbon is absorbed. Using an air separation unit where pre-combustion occurs in boilers, burning fuel with oxygen is separated from air. This is followed by transportation to storage unit. The third phase is the storage unit where the carbon is safely stored.

WINNERS

At the end of the presentations, the panel commended the students on their brilliant ideas and encouraged them to continue with more research on the topic. University of Ghana won the first position with University of Mines and Technology (UMaT) taking second position and University of Energy and Natural Resources (UNER) awarded the third position.



Students' Corner | Annual Students Conference

SPE Ghana section organised an annual students conference on 10th June 2022 at the University of Ghana with about 70 people in attendance. The theme was " Global Energy Diversification Agenda: The Impact and Opportunities for Young Professionals and Graduates". A paper contest, Technical and career presentations and a Petrobowl were the three main activities featured.

Mr James Allotey Okine facilitated the introduction of the various institutions followed by a keynote address given by Mr Philip Banini; the student Liaison officer. After the welcome address, the student's Paper contest was conducted among the various universities with Mr John Swatson from Baker Hughes and Mrs Dorcas Akrong of GNPC as the judges. An hour talk was later given by GNGC on the topic " how to land your first job". A panel discussion on the theme was held with Mrs Sheena Owusu Ansah as the moderator and Mr Eric Twum Osei. Prof. Akoto, Henry Osei Yaw and Derrick Klutsey as the panelists. Mr Kwadzo Adu Boahen also gave a lecture on "Subsea Production and Control Systems". providing participants with the background information. The last activity was the Petrobowl Quiz between the universities present with UNER emerging as the winner and taking over from UMaT; the three- time reigning champions.

Paper Contest

The paper contest was between six students who made presentations on their technical research papers to Mr John Swatson and Mrs Dorcas Akrong, the judges. Three papers were selected at the end of the presentation to be published by SPE. The Authors of these papers were Alexander Azumah (UMaT), Felix Boadi (ANU) and Clement Annor (ANU).

Technical and Career Presentations

The Human Resource Manager of Ghana National Gas Company, Mr Samuel Nii Laryea Stephen Adjei, gave a talk and presentation on how to secure a job after school. He stressed on the need for the system to provide the platform for students to implement and explore their skills in their professional fields. He concluded the presentation on Employment and employability which has to do with CV and interview skills, aptitude tests, networking, diversifying skills in the petroleum sector (core skill sets in the oil and Gas industry), Working on the FPSO (opportunities and skills required; operator jobs and required certifications).

There was also a panel discussion on the theme “Global Energy Diversification Agenda: The Impact and Opportunities for Young Professionals and Graduate”. The panel discussion was facilitated by Mad. Sheena Owusu Ansah and with panellists, Mr. Eric Twum Osei, Prof Akoto, Mr. Henry Osei Yaw and Mr. Derrick Klutse.



Topics discussed included recent activities in Ghana’s petroleum space and the future prospects (Onshore, Offshore, Upstream) (perspectives on graduate employment and job vacancies), energy transition (Gas as a transition fuel: Advances in gas operations in Ghana; Oil refinery- future direction during energy transition; Skills required to meet the energy transition), power generation using gas, local content (Encouraging participation in the industry: awareness creation; Indigenous participation and opportunities for the graduate engineers) and human asset development (Educational scholarship packages; Training programs for students and recent graduates; Internships, National service opportunities, graduate trainee programs).

REPLACING GHANA'S DWINDLING RESERVES



OCTOBER 22
Technical Meeting

"REPLACING GHANA'S DWINDLING RESERVES: A CASE FOR AGGRESSIVE FRONTIER BASIN EXPLORATION AND HARNESSING OF STRANDED RESOURCES" Theme

20TH OCT 2022 1:00 - 2:00 PM

Meeting ID: 893 5130 3235
Passcode: spegh



Michael N.A. Aryeetey
Manager, Exploration and PD, Northern Level, GNPC

SPE Ghana Section

As part of the SPE monthly technical meeting, the October edition was on the topic "replacing Ghana's dwindling reserves : a case for aggressive frontier basin exploration and harnessing of standard resources".

The meeting began with Dr Riverson Oppong giving the opening remarks and James Allotey Okine; the moderator giving an abstract of the topic of discussion; the National Petroleum oil and gas reserves is undergoing consistent deflation by the day due to the production of oil and exports of gas

from our three main fields .Jubilee is estimated to have already crossed the 50 mark. over the last 10 years the rate of exploration trailing globally and nationally have slowed down within the same period, several oil and gas discoveries offshore Ghana have remained undeveloped being either captured or stranded meanwhile an estimated 70 percent of Ghana sedimentary Basin cover can be classified as Frontier as against relatively very prospective basins within the Gulf of Guinea. The question then is " what can we do to ask a nation to turn the tide and improve the situation?". He then went on to introduced the speaker, Michael N.A Aryeetey.

Mr Michael N. A. Aryeetey is the manager for exploration and Appraisal of the Ghana National Petroleum Corporation. He started his career at GNPC as a geologist in 2004. He had worked as a teaching assistant at University of Ghana and as a mineral explorationist with a good exploration company in Ghana Michael. He holds a bachelor's degree in geology from the University of Ghana and an MSC degree in geological science from the Norwegian University of Science and Technology. He is also a part-time lecturer for the petroleum geoscience program at the same Department of the University of Ghana. Michael has served on various communities established by GNPC, the ministry of energy and the government of Ghana because of his knowledge of the Upstream industry in Ghana. He has presented technical papers and featured on several expert panel discussions in Ghana and on the international level.

To begin his presentation, Michael talked about the upstream sector and the role the Ministry of Energy, Petroleum Commission and Ghana National Petroleum Corporation played.

He also stated that our natural resources are depleting fast but we are being slow in catching up with replacing the reserves. He spoke about other countries that were in the same shoes Ghana is currently in and what they are doing. Taking Malaysia and Nigeria as examples, he took us through how they approached the situation. He delved deeper into how these countries first awarded their blocks ,ensured that companies that are awarded blocks do exploration and how they intend to replace the depleting reserves. He also gave some suggestions on things that we have to do as well as things that we are doing but we have to do it better in order for us to be able to remain an oil producing country well into the future

Using Nigeria as an example, he stated that, we needed to take a second look at our regulations and ensure that the gaps that are still outstanding and causing delays are closed. With regards to awarding blocks, he said we have to learn how the other countries did it. He pointed out that GNPC has a commercial role play to ensure that we bring up the prospectivity of our basins to the extent that investors appreciate exactly what we have. He stated that the idea of waiting for investors to assess the data and tell us what they believe it is, is not good enough. Like other countries, we have to change to fast track the process. The participants were really exposed to a lot of in-depth knowledge from the presentation and a lot of questions were asked making the session more interactive.

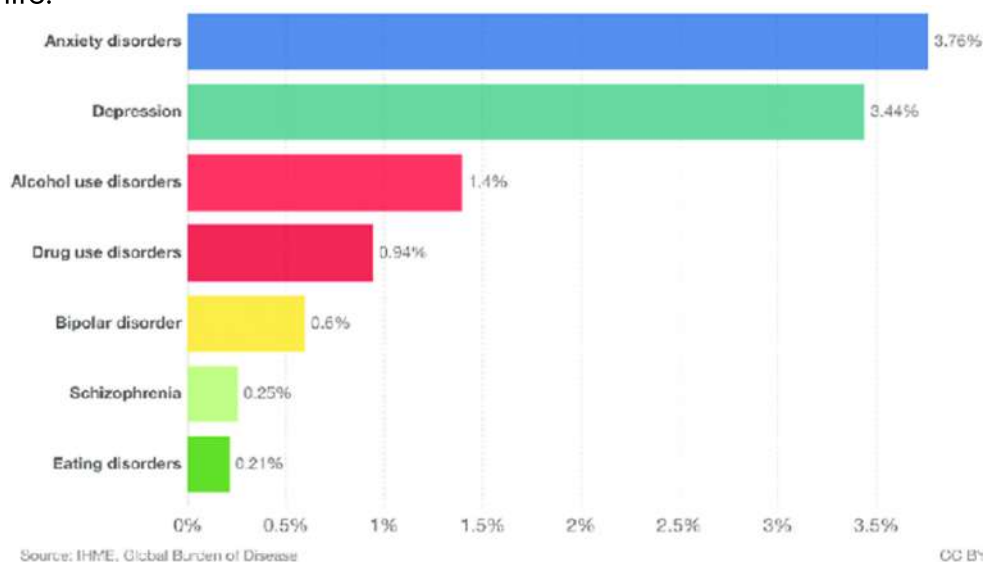
PROTECTING OUR MENTAL SPACE

The screenshot shows a Zoom meeting interface. At the top left, there are logos for SFE Ghana Section and D&I Diversity & Inclusion. The main title is 'Protecting Our Mental Space'. Below the title, there is a profile card for Dr Adwoa A Gyamera, Specialist Psychiatrist and Weight management coach. To the left, there is a profile card for the Moderator, Ama Osei-Sarpong, Exploration Team Lead, EMI Ghana and D&I Deputy Chair, SFE Ghana. At the bottom, the meeting details are displayed: FRI 18 NOV, 1:00PM, Meeting ID: 861 5021 6228, and Passcode: spegh.

Protecting our mental health was a very educative session with Ama Osei-Sarpong as the moderator and Dr Adwoa A. Gyamera as the speaker. Dr Adwoa, a specialist psychiatrist and weight management coach; gave the participants deep insights into mental health, common psychosocial stressors, ways of managing the stressors, ways of protecting our mental health and how our thoughts affects our behaviours.

Key Learnings

- Mental health is one's mental state at a particular point in time with the individuals being able to realise their abilities and cope with normal stress of life, work productively and fruitfully. Having unsound mental health is not the same as having mental illness.
- Mental health has to do with the emotional, psychological, social wellbeing of a person. It is fundamental for our ability to think, show emotion, interact with people and earn a living and enjoy life.

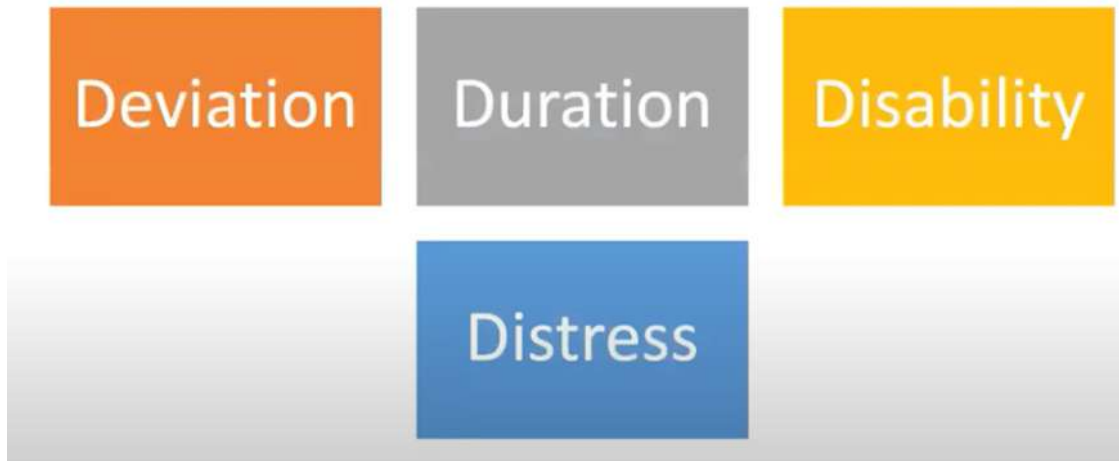


Statistics showing anxiety and depression as the highest mental health issues

Key Learnings

- A mental disorder/illness is a clear deviation from the normal (change in emotion, thinking, behaviour) over time which has been persistent in more than one setting (school, work, church). This in effect causes a significant distress to the person in society due to the disability it comes with.

What makes a mental disorder/mental illness



These four have to be in place for one to have a mental illness

- Psychological stressors can be emotional; reacting to occurrences (anger, sadness, confusion, fear), behavioural (lack of motivation/ interest for tasks or activities, aggression), physical (headache, muscle pain, back pain, sleep problems)
- Suicide is a complication of a mental disorder. According to WHO, 1 person dies from suicide every 40 seconds with 800,000 people dying yearly. We can get help for those with suicidal thoughts by asking them direct questions. An indirect question can make things worse as they may not open up to us when they feel we see it to be wrong. We must also keep them safe from lethal objects and places. It is key to listen to them carefully and acknowledge their feelings because it is about them. We should also try to get them to help with the national suicide prevention lifeline and stay in touch with them; following up even after their crisis.



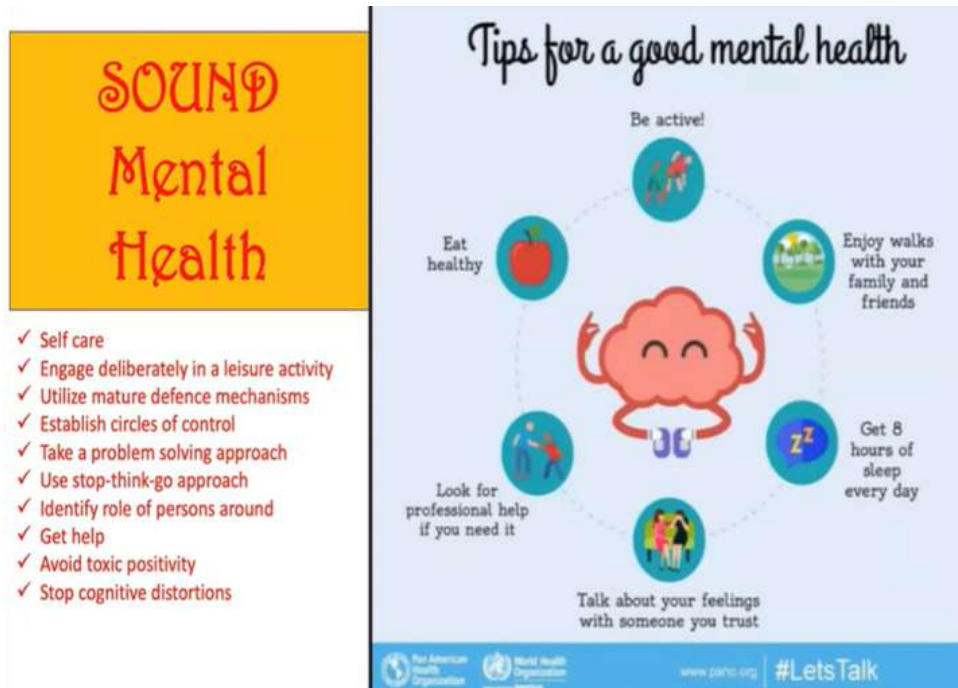
National Suicide Prevention Lifeline

☎ 0509497705 / 0558424645

☎ Crisis text code: *711*88#

Key Learnings

- To protect your mental health, practice self care; it is a responsibility not a luxury. Eat well and maintain good sleep schedule, exercise physically daily; it pumps blood to your brain for good mental health, do something you enjoy every day, establish daily routines and stick to them, minimise the use of -over the counter drugs, caffeine, sleeping pills, alcohol and nicotine. Their long term effects can be low mood, anxiety, sleep difficulty and aggression. Try activities that makes you relax- slow breathing, stretching, dancing etc



STOP-THINK-GO APPROACH TO SELF HELP



STOP Help the person to take a pause, and consider what problems are most urgent. Help the person to use the circles of control to identify and choose a problem which they can do something about.



THINK Encourage the person to think of ways to manage that problem.

The following questions may help:

- What have you done in the past to overcome problems like this?
- What have you already tried doing?
- Is there someone who can help with managing this problem (e.g. friends, loved ones or organizations)?
- Do other people you know have similar problems? How have they managed?



GO Help the person to choose a way to manage that problem and try it out. If it doesn't work, encourage the person to try another solution.

ENERGY TRANSITION AND HOW SPE SUPPORTS MEMBERS IN CAREER DEVELOPMENT NOW AND IN THE FUTURE

DECEMBER 22 Technical Meeting

"ENERGY TRANSITION AND HOW SPE SUPPORTS MEMBERS IN CAREER DEVELOPMENT NOW AND IN THE FUTURE"
Theme Theme

06TH DEC 2022

1:00 PM - 2:00 PM

Meeting ID
832 1742 3413
zoom Passcode: spegh



SPE continually find ways to impact technical knowledge to its members and is the reason for the December Technical meeting with the theme "energy transition and how SPE support members in career development now and in the future". We had Mr Simeon Eburi from USA as our speaker and James Allotey Okine as the moderator.

Simeon Eburi is currently serving as 2022 SPE ; North America Regional director. He is a reservoir management advisor in Chevron's Technical Centre in Houston Texas. At Chevron, he was a Frontier

exploration and new Ventures petroleum engineer production operation supervisor in Bakersfield California, decision and economic analysis advisor for deep water U.S Gulf of Mexico exploration and Reservoir simulation for shale and tight gas assets production and Reservoir engineering Oklahoma and East Texas. He was the 2021/2022 Chair of the SPE Golf Course session board, directors. He has received awards such as the SPE Golf Course North America Regional young member standing service award in 2019, SPE Golf Course session Committee of the Year award as the education committee chair in 2016. He was the SPE Gulf Course section young professionals committee chair in 2013 receiving the SPE Houston Young Engineer of the Year Award in 2014. He holds a masters and bachelor's degree in petroleum engineering from the Texas Tech University in Houston Texas.

Simeon shared deep insights on the topic with the participants from his perspective and that of others. He started his presentation giving an overview of energy transition and what it means for us in the oil and gas industry. He made mention of the fact that the energy transition is a topic we must be engaged and well- versed in and see how we can help our industry to thrive in the coming years. His presentation covered energy transition from the viewpoint of the international energy Agency's outlook, challenges with achieving the net zero carbon by 2050, SPE and your career. Simeon took us through three scenarios of energy transition. His submission after this was that, when it comes to energy transition, the oil and gas industry will still be needed; our expertise and skills will be needed. He supported this statement by saying that even with the transition, we will use our skills and expertise in the geothermal, hydrogen or carbon capture field. The work we need to do is to get more skills and start learning about other energy sources. He expounded on the role of SPE to help with our career development with regards to energy transition. He mentioned that SPE is a source of technical knowledge, expertise and professional skills development. SPE provides the platform through valuable talks to give insights into what is going on in the world and what the industry is doing. We are to make good use of these opportunities and figure out what is best for us professionally. He reiterated on technical sections (virtual meetings) organised by

SPE on specific technical topics that are to benefit us as members so we can learn new things and be abreast with these topics. He also made mention of the SPE energy transition symposium which is a global event that will be taking place in 2023. The session came to a successful end after the question and answers.

Key Learnings

The three scenarios of energy transition.

1. The first scenario was the State Policies Scenario (STEPS) – these are pledges currently made by governments and companies in public with regards to net zero by 2050. Governments are making more commitments to cleaner energy investments . Example : USA passing the inflation act , solar and wind capacity additions and electric car sales, China's commitment to clean energy by decreasing coal and oil consumption and Japan's green transformation and technology. Energy transition is a global concern to lower the temperature and each government has an action to take. This scenario is slow because we are not using a lot of cleaner energy to help reduce the average global temperature. We are only making commitments. It is the first step but more needs to be done to the net zero by 2050
2. Applied Pledges Scenarios (APS) – this is the second forecast where pledges made by governments towards the aspirational targets are met in time and in full. Promises made must be met. Here we need to see the near term peak of annual emissions followed by a faster decline of 12 Gt by 2050. The reduction in annual emissions mean people start changing their ways and improving the way they attack emission problems. We also have more countries and companies making pledges – India and Indonesia and industry sectors targets. This is scenario also shows clean energy supply chain for key technologies such as battery technology for electric vehicles, hydrogen production being deployed by 2030.
3. Net Zero Emissions (NZE) by 2050- this is the third forecast that will need a lot of investment into clean energy mapping out a way to achieve a 1.5degree Celsius stabilization of average temperature. This will come to a realization with universal access to modern technology by 2030. At net zero by 2050, every dollar spent on fossil fuel is a match by five dollars on clean energy. This means will need more money to sustain us on clean energy with our current lifestyle. With regards to the investments in clean energy, not every country can afford it and this is a challenge. Emerging and developing countries will not be able to afford to put more money into clean energy but the question is “ will the richer countries help?”. We are dealing with a global problem and so if some countries are not able to contribute as expected, it will be difficult to get a global solution.

If clean energy does not accelerate with higher investments, the oil and gas industry will still be needed to avoid further price volatility. The reality therefore is that, if much investment does not go into clean energy fast, we will still need to produce oil and gas because there is still not a replacement. Therefore, we may not transition fast to achieve the net zero by 2050.

CHRISTMAS WITH THE KIDS

DoctorsAct Ghana in collaboration with SPE Ghana Section presents

CHRISTMAS with The Kids

24 DEC. 22 10:00AM
SATURDAY

FUNDRAISING
Join us to bring joy & health to the Children at Power of Love Foundation Home, Tema
Please send contributions to the numbers below
0243327020 | 0557970345

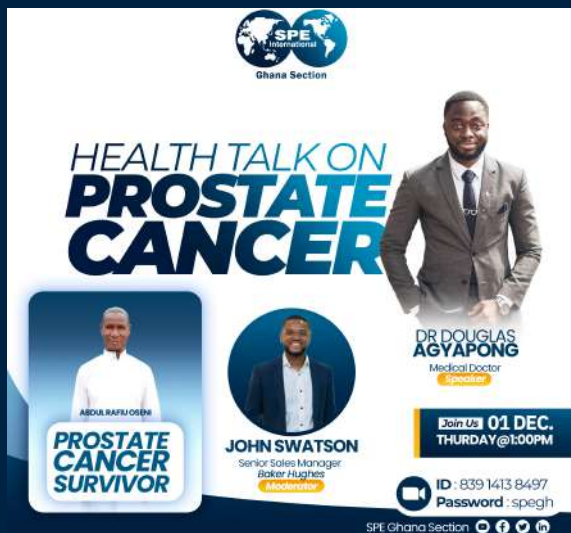
DONATE

SPE Ghana Section

Christmas is a season of love to share in the joy of the birth of Christ with our loved ones. SPE Ghana in collaboration with DoctorsAct Ghana celebrated Christmas with the children at the Power of love Foundation home in Tema. This happened on Saturday 24th December 2022. The team spent quality time interacting with the children. As part of the visit, donations of clothes, toys, school bags, first aid box, cash and many were donated. As part of the event, the children also put up a wonderful choreography to entertain and celebrate the Christmas with the team. It was a time of fulfilment and joy to put smiles on the faces of the young ones.



HEALTH TALK ON PROSTATE CANCER



D&I seeks the interest of members and once again as part of their awareness campaign, organised a health talk on prostate cancer, a second leading cause of death in men especially black men. This session held on 1st December 2022, was moderated by James Allotey Okine. The session began with a prostate cancer survivor Mr Abdul Rafiu Oseni sharing his experience. He started this journey in 2012, at age 64 when he started experiencing dribbling in his urine, urine retention even after urinating. Then, prostate cancer awareness was not common. His situation took a different turn one night

in 2013 when he could not urinate resulting in severe pains that made him cry like a baby. He had to be on catheter for 6 years which had to be changed every 3 weeks. He also detected blood in his urine in 2014. His condition worsened with painful urination and sometimes uncontrolled urination. He could also wake up about 15 to 20 times a night to urinate which mostly came in three counts. He has been on medication till now and finally stopped using the catheter in 2020. He stated that he had been to most hospitals in Accra, seeking solution and that most of his colleagues had died from this same illness. He encouraged his fellow men to do regular PSA (prostate specific antigen) test and consult the doctor if it is high.

Dr Douglas Agyapong gave a presentation on the topic. He began his session by saying that he was happy a survivor had shared his experience which makes his presentation more practical. He also stated that this makes his audience appreciate the topic because the survivor's story adds a human touch to whatever he will say. He proceeded by giving the participants an overview on the prostate and its function, cancer, symptoms of prostate cancer, risk factors and ways we could prevent prostate cancer. He concluded his presentation with the statement "since every female has an important male figure in their lives, prostate cancer is not only a concern to men but women as well". This presentation came to a successful end after the question and answer session.

Key Learnings

- Prostate cancer is the abnormal and uncontrolled growth of cells of the prostate that tends to put some pressure and restriction on the urethra; a tube through which urine flows through from the gall bladder.
- Some symptoms of prostate cancer include delay before urine starts coming out, poor streaming whiles urinating; where flow reduces due to resistance in the urethra, frequent urination at short intervals, dribbling; where residual urine left in the urethra dribs into your underwear after urination, painful urination and inability to urinate which comes with excruciating pain. The only way to be relieved off the pain is by inserting of catheter. Blood in urine and painful ejaculation are also symptoms of prostate cancer.

Key Learnings

- Men mostly black men are at higher risk to getting prostate cancer and so men from 40 years and above must do regular PSA test. A PSA greater than 4 calls for attention. Ultrasound scan can also be done to detect prostate cancer.
- To prevent prostate cancer, black men who are old or with family history must be cautious. A good lifestyle such as exercise, good diet are also ways to prevent prostate cancer.

HEALTH TALK ON CERVICAL CANCER

Once again, the D&I together with SPE Ghana held an awareness session on cervical cancer with Mad. Rubabat Oseni as the moderator. We were also honoured to have a cervical cancer survivor; Mrs Mira Wulff- Cochrane sharing her story with us. Mira began her presentation with the saying “cancer is not a death sentence and so we can act now and save our lives.” Her journey began in December 2021 when she started experiencing some symptoms after she had her last baby. She started experiencing very painful menstruation, blood spotting in between periods but was declared negative after a PAP smear test.

In September 2022, she was having discharges, waist pain and subsequently bleeding for 9 days which pushed her to visit the hospital. She was then admitted in the hospital with efforts made to stop the bleeding coupled with blood transfusion as her blood level reduced to 7.1. She then had a specialist doing further investigation using the speculum and the next thing she heard was “am sorry, you have gone passed the pap smear”. She had colposcopy done and samples taken for histology which confirmed she had cervical cancer. A CT Scan also showed it was locally advanced and so she had to undergo total abdominal hysterectomy-womb and cervix removed completely. Unfortunately, this surgery was not the end to this, traces of cancer were still found in her body with lymph nodes greater than 2cm were found. She went through 25 sessions of radiotherapy and in between, 6 sessions of chemotherapy and three sessions of brachy therapy. These treatments made her lose weight drastically, she had frequent diarrhoea, and loss of appetite. Luckily for her, the chemotherapy was not harsh on her and so she did not lose her hair. Aside all these, the process was really cost intensive. She mentioned that she had done research and read about the experience of others who went through treatment which made her prepare for any challenge.

Dr Emmanuel Gyimah Amankwah; CEO and specialist surgeon at Ridge Medical Centre was the speaker for the health talk. He began his presentation saying that cervical cancer unlike breast cancer is hidden and difficult to detect early. He commended Mira’s courage in making certain difficult decisions during her journey.

Key Learnings

- Cervical cancer is the second leading cause of cancer in women in Ghana after breast cancer and the 4th worldwide.
- Active / passive cigarette smokers, women with Human Papilloma Virus (HPV), bad genital hygiene and those who take drugs to suppress their immune system are risk to cervical cancer. HPV is a sexually transmitted disease common in women with multiple sex partners and those introduced to sex at an early age. It is the cause of 95% of cervical cancer.
- Common symptoms include painful urination, intermenstrual bleeding, prolonged menstrual periods, lower abdominal pain, frequent urination, vaginal discharge and weight loss.
- Cervical cancer can be prevented by taking the HPV vaccine which is available for females between age 9- 26, maintain good genital hygiene, having safe sex with condom and getting regular pap smear to help with early diagnosis.

CAREER GUIDANCE AND OUTREACH



The career guidance and outreach committee have the mentorship program from their first cohort in 2023 which commenced in February 2023. A callout for mentors and mentees were made in December after which pairing was done by the subcommittee. In a bid to educate both mentors and mentees on what is expected of them, a training session was organised with Mr Gideon Gyamfi Cobbinah Ahiliah Gajadhar as the speaker. Ahiliah was a former president of the University of the West Indies SPE student's chapter. She presented on the topic "Professional mentorship" where she talked about

what is mentorship, the mentee and mentor, dos and don'ts of mentorship, how to structure a good mentorship for a successful mentorship experience and crowned it all by sharing her experience as a mentor. In sharing her experience, Ahiliah mentioned that the experience taught her a lot which helped her to develop as a person; she was able to build on her leadership skills being able to direct others and work within our team this to execute different events. It also helped She was involved in learned to manage her time well because she was also a student at the time, pursuing her masters, working full-time and was in charge of SPE. It took a lot of time management skills and learning how to prioritize different tasks at different points to be able to successfully achieve all of this. Ahilia also shared an excel template with the participants at to how she was able to track her progress with her mentee.

Key Learnings

- Mentorship is the influence, guidance or direction given by a mentor to younger or less experienced person over a period of time especially at work or school. mentorship is about guidance, providing support, knowledge transference as well as sharing experiences.
- A mentee has the responsibility of ensuring regular contact with their mentor, creating a plan to help you to achieve goals. A mentee must respect the mentor's time and be very receptive to their feedback and coaching.
- As a benefit, a successful mentorship program helps to boost your interpersonal skills, strengthen your knowledge, expand your network, build on your leadership skills and gives you new perspectives.
- A mentor is responsible for sharing applicable information about their background, skills and their interests and must outline how or in what way they can be of assistance. They can guide the mentee in setting educational or career goals, encourage them to build their self-confidence and educate them on the expectations within the workplace.
- Mentors benefit from the program as it helps them improve their management skills and interpersonal skills. Being a mentor is a very big responsibility and you have to be able to allocate your time and resources to ensuring that your mentee gets the best out of you. The mentorship can also help to bridge our generational gap as the mentor may learn from a younger mentee- this includes exposure to new technologies, new ways of doing things.
- We must understand that a mentee is not supposed to complete work for the mentor, pay the mentor, boost the mentor's ego. The mentor is not meant to disciplined or penalized mentee, finish school projects or make decisions for the mentee but rather, guide them. A mentor is not responsible for providing job for mentee.
- To have a successful mentorship, it must be structured with SMART goals and objectives. Outline what success means to you, set rules and boundaries, note activities to engage in during the mentorship and define your communication approach and meeting times. An agreed schedule must be created with timelines to track progress of goals set.
- For each meeting, try to revisit initially outlined goals and note the work you have done towards achieving your goals and outline next set of action for upcoming meeting. It is key to keep the relationship professional and respectful at all times.

NATIONAL STUDENTS TECHNICAL WEBINAR – TECHNICAL PAPER WRITING



SPE provides a platform annually through student paper contest for students to present technical write up for review and publication, and to also contribute to the energy industry through various findings. This online conference was aimed at educating students in the section on how to correctly write and present technical papers for review. The conference began at 18:00 GMT with Mr. Philip Banini, the Section Student Laison Officer, as the moderator. There were two presentations after which participants were given the room to add contributions, ask questions, and seek clarification.

Prof Eric Broni-Bediako, Dean of School of Petroleum Studies of the University of Mines and Technology, presented on Writing and Presenting a Technical Paper. He took participants through the documentation process, right from the paper proposal (abstract) stage to the detailed work stage. He explained the dos and don'ts of each step in the process. From his presentation, he explained the characteristics of a good abstract, including the number of words accepted for technical paper proposals. He also highlighted how to develop the paper giving about five questions as guidelines during the planning stage. He exposed participants to some common mistakes often committed by authors and how to avoid them, to stand a higher chance of success.

The second presentation was on "Student paper Review" by Dr. Riverson Opong, the Section President. He provided an overview of the student paper contest.

He explained the key things the review teams look out for to be overall visual appeal, which entails quality of display, layout of figures and texts, oral which deals with knowledge of material, engagement of audience and content, also concerned with introduction, methods, results. He highlighted tips for presentation which focused mode of delivery and slide presentation.

During the Q&A session, participants had the opportunity to ask questions and seek clarification on any topic discussed during the presentations. Some of the questions focused on the paper review process and how to choose the appropriate topics and journal for their papers. The presenters provided detailed responses and also offered suggestions and recommendations.

Overall, the seminar was highly informative and beneficial for the participants. It provided a comprehensive understanding of technical paper writing and highlighted the importance of participating in the SPE Student Paper Contest. Participants gained insights on how to write a technical paper, avoid common mistakes, and prepare their papers for review. The seminar was well-organized, and the presenters were knowledgeable and engaging.

MENTORS TRAINING SESSION

MENTORSHIP TRAINING SESSION

SPEAKER
Mr Samuel Stephen
Nii Laryea Adjei
Dept. Career Guidance &
Outreach Chair
SPE Ghana

AKOSUA GYAN BANDO
Senior Well Integrity Engineer
Follow Oil
Moderator

FRI 24TH FEB
Time 2:00PM

Meeting ID: 899 5150 7117
Passcode: spegh

Being a mentor is a great responsibility and so the leadership of the career guidance and outreach team of the SPE Ghana took the next step to having a training session for mentors only with focus on the first-time mentors. The training took place on 24th February 2023 with Miss Akosua Gyan Bandoh moderating and Mr Samuel Stephen Nii Laryea Adjei as the speaker. Samuel is the deputy chair of the Career guidance and outreach team. He is a chartered senior professional in human resources (SPHRI) with over 12 years of HR experience. He is currently the HR Manager at Ghana National Gas Company.

The meeting took off as Akosua welcomed everyone and set some ground rules for the occasion. Samuel then took over, given the go ahead to give his presentation.

This training was specifically for the mentors to have a discussion on what to expect especially for first-time mentors and then to be able to ask questions that might arise. It was also to pre-empt some of the questions that our mentees will be asking us and answer them appropriately. Samuel reiterated that, mentorship is about providing guidance as more experienced people. The mentorship program is not an unending program it has but a timeline and so there's a limit to what you can do within the timeline. He stated that we need to follow a sequence of events and try and give the pointers that will help the mentee to move on without us to the next level. We must set the ground rules, and share our knowledge, skills and connections with them. The mentorship is a nurturing process and we are supposed to serve as role models to guide them as they navigate the road that we have already been. Therefore, the mentoring program must be carried out within the context of an ongoing caring relationship where the mentor aids the mentee in setting educational and career goals, educates the mentees on their expectations within the workspace, encourage them to build their self-confidence as it is key at the workplace.

He advised that we schedule and plan the program well so we don't spend too much time with the mentees to the neglect of our own work schedules. He also said that we need to set our objectives, ensure regular contact with our mentees, create a plan to achieve our goals as mentors and help the mentees to achieve theirs as well. We must be willing to give constructive feedback to our mentees. As mentors, we determine the meeting times and so must ensure that meeting times are when you are during our free times. Also, our meeting sessions should not exceed an hour. He also took us through the dos and don'ts of mentors and mentees.

We must also define what success looks like to us as mentors and the mentees, define the rules and boundaries for the of the mentorship. All of these and activities we will be engaging in must be documented down. For successful mentorship, we as mentors must

keep an active line of communication which must be maintained. There is the need to have a schedule so that everything is orderly and helps to achieve much and guides us as to what you are doing. It is key to always review previous meetings and assignments before the agenda for present meeting is discussed; and always make sure to be prepared for your meetings. Sam continued his presentation admonishing those with more than one mentee, not to schedule meetings with all mentees in one meeting. We must have a one-on-one meeting with each individual. A minimum of 2 meetings is required on monthly basis with at least one face to face meeting before the program ends.

In response to the question “professionally, how do you end the relationship with the mentee after the period?” Samuel pointed out the need for a close out session to for evaluation and exit survey between the mentor and mentee which is probably in the last month of the program. This is where you can ask for end of relationship in the exit survey or feedback session to formally end the process.

Derrick Klutsey also pointed out the need to clearly define what is to be done and set ground rules at the initially stages of the mentorship program and make sure not to break the rules ourselves. After the Q&A sessions Derrick Klutsey; the Career guidance and outreach Chair and Dr Riverson Oppong; the SPE Ghana section Chair expressed their profound gratitude to Samuel for the insightful presentation as well as participants who were present. Akosua concluded the session thanking the members of the mentorship committee for putting the training session together.

DRIVING GENDER EQUALITY & EQUITY THROUGH TECHNOLOGY & INNOVATION

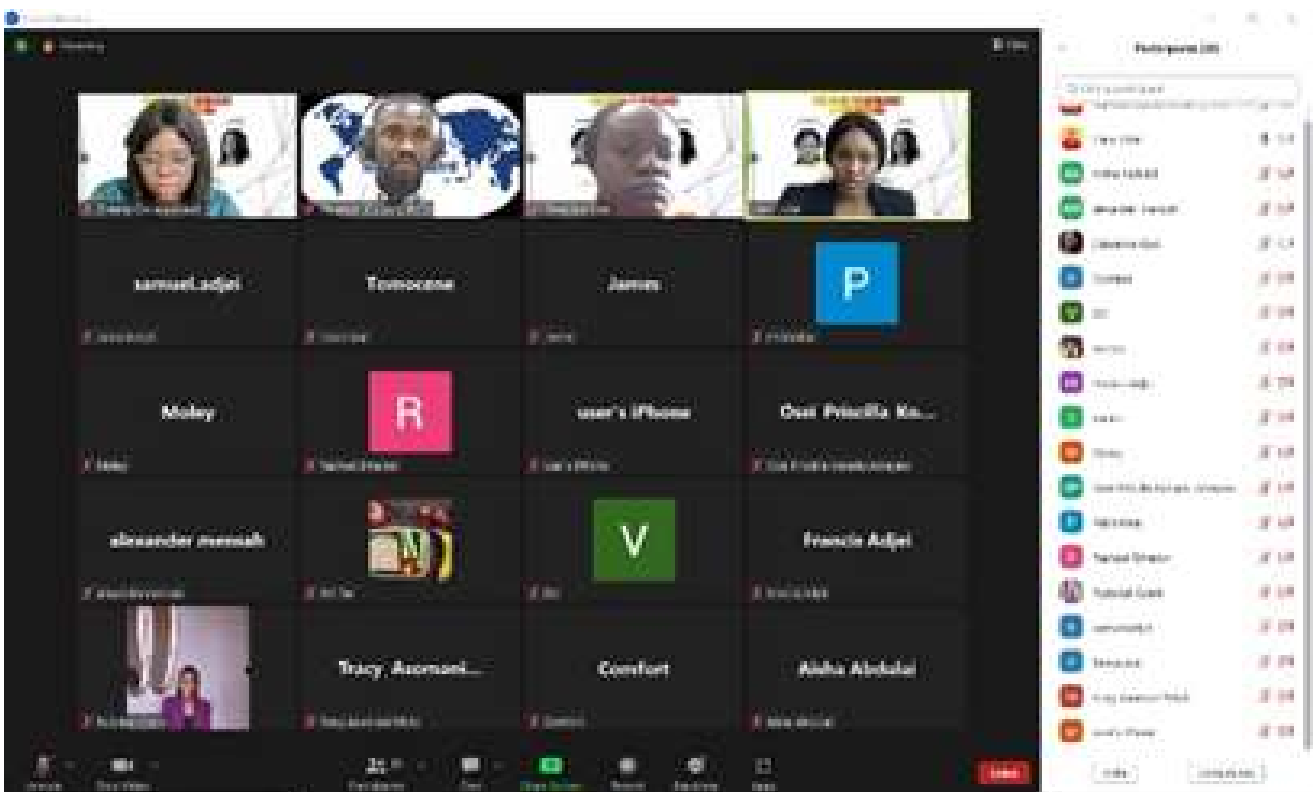


The International women’s day celebration was graced by SPE on the theme “driving gender equality and equity through technology and innovation. The webinar began with the SPE Ghana section Chair, Dr Riverson Oppong giving us the welcome address and handing over to Mad. Sheena Owusu Ansah to do the moderation for the event. Mr Samuel S.N.L. Adjei (HR for GNGC);the guest speaker for the occasion also gave a short address where he talked about providing the right opportunities and treating people right regardless of their gender.

This will go a long way to create fairness and promote inclusion and in effect increase the economic and social development. Sheena then gave a profile of the panellists who will be joining Samuel in the discussions for the day.

Cany Jobe is a dedicated and strategic Petroleum Engineer and an award-winning energy executive with passion for cleaner and renewable energy. She has worked on many energy projects in different continents over the past 15 years. She is a member of SPE and association of project managers. She was recognised recently in the Power list of 50 inspiring Pan African female leaders by LinkedIn Africa and Africa Oil Rig. She is currently a Director at the Gambian National Petroleum cooperation advising the government on oil and gas exploration projects and a member of a national team that structures, negotiates and oversees implementation of high value exploration activities.

Celestina Kissi is a chemical Engineer in Ghana with over 8 years experience as an offshore chemist and 14 years experience in downstream and upstream industry. She is currently the offshore chemist with ChampoinX Ghana Limited. She was the young professional chair from 2017 -2018 and then became the SPE Ghana section chair from 2019 to 2022.



Celestina began the discussion by answering the question, “What is gender equality and its importance?”. She gave the UN definition of gender equality which basically is about providing equal right and opportunity and treating people equally regardless of their gender. She stated that it is a fundamental human right and if implemented, promotes social and economic development. This is because when women and girls have access to education, healthcare and economic development, they can contribute more fully in their communities and country as a whole. This then helps reduce poverty and improve the standard of living as women have direct access to children and people who may benefit from the resources and economic benefit they have. She also expounded on the fact that gender equality helps promote peace and security in that there is more stability and peace in a society where the right of women are respected; creating a just and fair society. This consequentially promotes social development.

Canny Jobe expounded on gender equity and its importance. She began by saying that gender equity goes beyond fairness. Gender equality helps to ensure there are no restrictions or legal policies that stops women from having access to facilities and opportunities. Gender equity on the other hand looks at the respective needs of people the law and policies seek to address. She talked about the fact that there are legal and cultural barriers in nature that makes it almost impossible for the gender to have access. She sighted an example of girls in rural areas of Gambia who due to the social and cultural barriers are allowed education to a certain level only. They have limited access to advanced education even though there are policies on them having access to education. Equity is a consideration in policy making, decision making and organisational set up that ensures that we gout of our way to help recondition both conscious and unconscious biases.

Samuel dealt with the topic, "can technology bridge the gender gap with regards to gender equality and equity?" He mentioned that technology can bridge the gender gap if we first educate. We need to increase access to education be it formal or informal. He said technology today helps to breakdown things we learn and do not have direct access to. Technology gives us a global reach of what we are taught and also gives employment to many, giving equal opportunity to both genders as well as financial inclusion.

In the next topic of discussion which was "what do we do to get more females into the technology space or STEM?, Celestine said women play key roles and are able to see things in a different way others are not able to. She gave an example of a young lady who invented a hand powered washing machine because she was empowered through STEM education. She concluded by saying we need to empower more females in STEM education and with the skill set required to be innovative.

Cany spoke with regards to the gap in digital finance for women in business. She stated that we have more women in business but make significantly less than men and do not have access to funding. She also said most women in the rural areas do not have the traditional bank account talk less of using digital applications. This is because of structural and cultural barriers in equality. We have less women making use of the digital finance space, creating and coding and the few who break the barriers are not able to access funds. She pointed out on the need for government, organisational and personal interventions to re-engineer ourselves and our society on how we approach and think about businesses.

Samuel from the HR perspective talked about giving exclusive opportunities to women in certain positions. He said access comes with opportunities and providing opportunities for advancement, education and training, access to technology can help get more women into the technology space. He also stressed on the need to incentivise diversity that makes organisations look good for engaging females. He also said policies need to be amended in organisations to ensure they are intentional about the number of women they hire as HRs only act on organisational policies.

Cany from the viewpoint of someone in government, addressed that there are policies governments can put in place to drive gender equality. The first point she made was that, government need to develop explicit policies to bridge the digital gap in the gender policies

they already have. This should detail some steps to be taken. Secondly, government must ensure educational curriculums are revised in public schools as that is what most people have access to. The revised curriculum has to ensure introductions are made early for digital education and innovation. Thirdly, government must ensure there is access to the tools needed for the digital education. Also, there is the need for social advocacy and awareness to inculcate innovation (example coding) in ICT. In answering Sheena's question on who our allies are, Cany said the men around us are our allies and so we must not have these conversations among ourselves. We must involve the men in our conversations as well.

Celestina spoke about the role of SPE that is the provision of the platform for all these opportunities. She spoke about the Energy4me initiative that targets the children in the high schools to provide training for them. Trainings are also held for students and at the professional levels to bridge the educational gap. SPE also provides scholarships for young females in STEM as an incentive for more girls to venture into. The D&I committee also provides mentorship for young women in the industry. Samuel also added to her submission that SPE supports some research and development and presentation of papers.

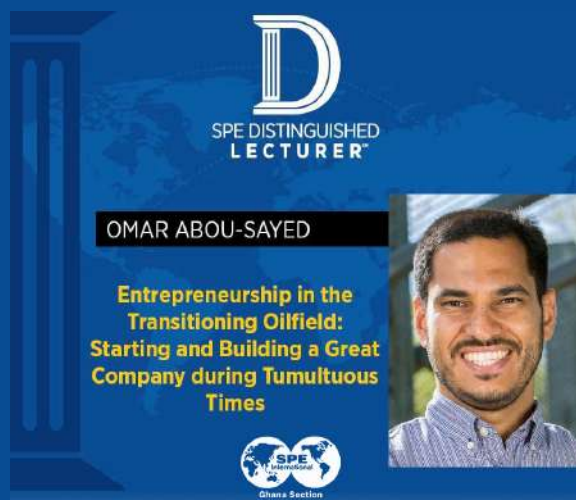
Samuel also gave a few pointers on what can be done to groom the next generation to get better with regards to digitization. He pointed to the need for digital literacy education and provision of access to technology. He also stressed on the need for partnership between the academia and the industry so that young graduates will be prepared to fit into their professional field without the need for reteaching them. Also, there must be policy interventions to ensure we are intentional about raising digital awareness.

In giving their final submissions, Celestina stated that women in STEM who want to progress must accept changes in the industry and equip themselves in the various digital tools to enable them to be competitive. They must also be resilient in the roles they hold and position and prepare for opportunities. Cany talked about the need to accelerate gender balance and make it a priority for everyone so all can benefit equally and fairly. Samuel supports the submissions given above and added that women should know where they are going so, they take the right road.

The session came to a successful end as Dr Riverson Oppong thanked everyone for being part of the discussion.



DISTINGUISH LECTURE PROGRAM



The SPE Distinguish Lecture program is to provide SPE sections with outstanding speakers for section meetings, and to recognize the professional contributions of the selected Distinguished Lecturers. The program promotes SPE's mission to connect a global community of engineers, scientists, and related energy professionals to exchange knowledge, innovate, and advance their technical and professional competence regarding the exploration, development, and production of oil and gas and related energy resources to achieve a safe, secure, and sustainable energy future.

On 20th January 2023 at 1:00 pm, SPE Ghana Section had its first in-person Distinguished Lecture (DL) at the Petroleum Commission Head Office in Accra, Ghana. In addition, this program was also held on a virtual platform to allow those who were not able to attend in person to participate. The Distinguished Lecturer for this event was Omar Abou-Sayed who presented on "Entrepreneurship in the Transition Oilfield: Starting and Building a Great Company during Tumultuous Times".

The program commenced with a welcome address by the Section Chair and Commercial Manager at Ghana National Gas Company, Dr Riverson Oppong encouraging members on the importance of being a member of SPE and informing all present to engage the Lecturer for additional knowledge. Mr Kwaku Boateng who is a Board Member of SPE Ghana Section and Director, Local Content at the Petroleum Commission also informed members, especially those who have set up companies or are about to set up a company to take advantage of the opportunity considering the impact of the Covid-19 and the industry in Ghana at large.

The Lecturer, Omar Abou-Sayed's experience spans the global energy, chemicals, oilfield services, and clean tech industries. He has worked in a variety of engineering, business, and leadership roles within Supermajors, management consulting firms, private equity funds, and venture-backed start-ups. He currently serves as CEO of Advantek Waste Management Services, a private equity-backed industrial waste management company. He advises or has invested in nearly a dozen early-stage companies and venture funds. Omar holds a Bachelor of Science degree in Mechanical Engineering from the University of Texas at Austin, and an MBA from the Harvard Business School.

His presentation touched on the fact that building an entrepreneurial venture, a challenge underestimated by most founders. During periods of stability within a given industry, founders face the normal stresses that come from building a start-up: a lack of resources, having to serve in multiple functional roles, powerful customers, unclear business models, loneliness, stress to personal finances, and more. During periods of substantial upheaval, as the oil and gas industry is facing today, the challenges – and the rewards – can be even greater.

This lecture equipped attendees with a thorough understanding of how to build a successful entrepreneurial venture during this time of energy transition. Core universal concepts applicable to creating a successful start-up will be presented, while industry-specific trends will be explored to highlight areas that are ripe for innovation.

During his presentation, Omar shared some experiences he acquired during his career as well as how his company survived during the COVID-19 pandemic period. In addition, he shared the additional assets and increase in cash flow which accorded the company to acquire other companies that were impacted by the pandemic. After the presentation, members were allowed to engage the Lecturer in a question and answers period where all questions were addressed and answered with real examples by the Lecturer. At the end of the lecture, attendees gained great knowledge of how to approach building a successful start-up during this period of intense transition in the oilfield. He also informed members to scan the bar code and undertake the review of the DL as per SPE requirements.



At the end of the program, Fiifi Otoo, Young Professional Chair of the Ghana Section and Subsea Engineer with the Petroleum Commission informed members of the benefits of renewing SPE membership and outlined the additional programs that have been arranged by the Ghana Section for the remaining months of the year 2023.





**BREAST
CANCER
SUPPORT**





BREAST CANCER RUN FOR CURE

As part of the breast cancer month celebration, D&I on October 29th 2022 took part in the breast cancer 5 kilometre run/walk organised by Run 4 cure, Ghana. The event began around 6:30 am with registration of participants and continued with a warm up session. Around 8:00 am, all participants embarked on the 5kilometer run/ walk. D&I on behalf of SPE donated 2,000 Ghana cedis to run 4 cure and a number of printed T-shirts for participants of the event.. In honour of two breast cancer survivors who had shared their stories with SPE Ghana, D&I sponsored them to a spa treatment each at Niobe Spa. In celebration of the breast cancer month,, a weeklong fact-sharing on 'breast cancer myths vs facts' was run on the SPE Ghana social media pages.

❌ MYTH

✅ FACT



Mammogram exposes women to large quantities of radiation and this can cause breast cancer.

The small quantity of radiation a woman is exposed to during a mammogram is safe and the benefit of the test far exceeds any danger (if any).



Women with small breasts do not get breast cancer.

Women with small breasts are also at risk as any other woman. Breast cancer is not influenced by breast size.



Women with breast implants cannot undergo mammograms.

Women with breast implants can have mammograms, but there will be a special plan for them. They should inform the technician about their breast implants before the session.



Wearing a push-up bra increases the risk of breast cancer.

It used to be thought that the metal supporter in push-up bras put pressure on the lymph node and cause cancer, but this has been proven wrong.



Breast cancer affects only old women

All women are at risk of breast cancer, but the incident rate increases with age



If a woman has a family history of breast cancer, she will also have it.

Most women with breast cancer have no family history, but may be higher risk if her mother, sister or daughter has had breast cancer.



A breast cancer diagnosis means a complete mastectomy (Removal of breast)

Many women with breast cancer undergo surgery of their treatment. However, this does not necessarily mean it's a complete removal of breast, especially if it's diagnosed early in which case only the tumor is removed.



Any lump or mass in the breast means cancer.

Generally speaking, 80% of breast tumors are benign. However, you should still consult your doctor, especially if you notice any changes in the breast.





ACADEMIC CITY 2023 CAREER FAIR

On the 1st of March 2023, delegates from the SPE Ghana Career guidance and outreach team and D&I fully represented and lead the section's engagement at Academic City University College in Accra for their 2023 Career fair. The program commenced at about 10:00 am with different companies and organisations set up and ready for the day. The SPE team arrived in printed T-shirts and set up at their table with brochures and souvenirs. They also had the banners displayed at vantage points on the fair arena. Dr Riverson Oppong and Ama Osei-Sarpong of the D&I team were there to provide full support for the representatives. Students started trooping in few minutes after 10:00am.



A lot of students came around to know about SPE and the team engaged them fully. The team informed the students about SPE which is for everyone in STEM and not just Petroleum engineers. They also educated the students on the benefits of being a member of SPE and how to become a member.



There were lots of positive feedbacks with majority being enthusiastic and ready to join the SPE chapter. Students who visited our booth were given souvenirs thanking them for passing by. Dr Riverson and team also went of their way to talk to and invite students who were hesitant to pass by because of the name Society of Petroleum Engineers since they were not offering any Petroleum program. The team also went the extra mile to review CVs of students who came around and the feedback was very impressive.



Not only did we have the well branded booth, but also the most visited. The team also met with the Dean of Engineering Faculty who is also willing to have us register the university's chapter soon.



Mrs Ama Osei- Sarpong also had a brief time with the ladies in the engineering faculty later in the day to have a discussion with them. Dr. Riverson Oppong started by briefing them about SPE and then invited Miss Dorothy Eyetsa, a female young profession to share a short story about herself and her experience with SPE.



Mrs Ama.O.S then lead the discussion. She started by entreating the young ladies to also look out for things that interest them outside studies and find ways to build on them and learn other skills outside the classroom to make them competitive and stand out when the opportunities come. She stated that, this will make them marketable on the global market. She also encouraged them to leverage on their networks and learn to take up leadership roles.



Taking leadership roles will help them relate well with people, manage them and build confidence in themselves. A lady asked what advised we had for her about having to do her national service or get job in an environment where she is not challenged to grow. Ama answered and told the girls to always ask themselves "what value can I bring".



Asking yourself this question will help you find a way to bring value wherever you find yourself. This will help you give your best irrespective of where you are working and develop yourself. She reiterated with the statement "Sell Yourself".

She continued to encourage them to never lose focus of what they want and that they should be ready to do the dirty work in their early years to build experience and learn a skill. She also addressed a question on time management as a student who is also doing a business on the side. Dr Riverson also gave his input sharing his story of how he had to also do business in school to support himself. In the end, it all points to prioritising what you want and since they are in school, nothing should be prioritised over studies as they are there just for a period of time. He stressed that they can do both if only they can manage their time well.

Dr Riverson also advised the ladies to be inquisitive wherever they find themselves, find ways to add value to their companies such there is something they can do that no one else can do. The session came to an end with a group picture with the ladies.





A R E P O R T O N **BEACH CLEANING EXERCISE**

**HELD ON THE 25TH FEBRUARY 2023 AT
SAKUMONO BEACH**

On 25th February, a beach cleaning exercise was held at the Sakumono beach which was scheduled between 7 o'clock to 9 o'clock AM. The event was organized by the SPE GHANA in collaboration with the PORT AND MARITIME AGENDA. Participants arrived at the beach in printed T-shirts and hand gloves were given for protection. The cleaning exercise started with a short meeting and division of the group into two. The groups began the cleaning by picking of sticks, pieces of plastic cups, polythene, straws and pieces of glass. Whiles others were collecting the trash from the beach, others were bagging and disposing the trash at the appropriate place. Interviews, short videos and photos were taken during the beach cleaning. The exercise ended after 45 minutes past 9 o'clock. Refreshments were served. The exercise was largely successful.





Pollution of our coastal environments limits our ability to use the beach for economical , aesthetic and recreational purposes. This also pose public health risks and can harm plants and animal life in the sea. The beach one of our natural resources, is filled with rubbish and other wastes posing a risk on human and marine health. This exercise saw a good turn out. The team worked together joyfully and in a cheerful atmosphere to collect and disposed off letterings and garbage on the seashore. Plastics which impede the aesthetic nature of the marine environment as well as other wastes were collected and disposed off.

DOWN *MEMORY* LANE



UNIVERSITY OF ENERGY & NATURAL RESOURCES



SPE UENR Chapter



energy4me®

energy4me.org

SPE-UENR chapter was thrilled to embark on an Energy4me Outreach program to various senior high schools in the Bono region of Ghana to educate students about the oil and gas industry and the need for them to consider pursuing degree programs related to this industry. Students from various levels in the department were selected together with SPE-UENR executives to embark on this outreach program. The goal of the program was to promote interest in the field of petroleum engineering and inspire the next generation of engineers.

The program began with a presentation about the petroleum industry and the role of petroleum engineers. We discussed the various stages of exploration, drilling, and production, as well as the different types of oil and gas reservoirs. We also explained the importance of safety in the oil and gas industry and the measures taken to prevent accidents.

After the presentation, the students were given the opportunity to ask questions and participate in hands-on activities. We set up various stations where the students

could learn about different aspects of the industry. One station focused on drilling, where the students were able to simulate drilling a well and learn about the equipment used. Another station focused on reservoir engineering, where the students learned about the different types of reservoirs and how to calculate the amount of oil or gas in a reservoir.



The students were also able to participate in a safety demonstration, where they learned about the safety measures taken in the industry and the importance of following procedures. We demonstrated the use of personal protective equipment (PPE) such as hard hats, safety glasses, and gloves.

Overall, the program was a great success. The students were engaged and enthusiastic, and many expressed interests in pursuing a career in petroleum engineering.



The program provided an opportunity to inspire and educate the next generation of engineers and promote the importance of the oil and gas industry.

In conclusion, the Energy4me Outreach to various senior high schools was an important initiative to promote interest in the field of petroleum engineering. The program provided students with a hands-on learning experience and the opportunity to learn about the industry from experts in the field. I believe that outreach programs like this are crucial in inspiring the next generation of engineers and ensuring the sustainability of the industry.





UNIVERSITY OF MINES & TECHNOLOGY

Mentorship & Networking

The Society of Petroleum Engineers UMaT Chapter (SPE-UMaT) hosted an exceptional mentorship and networking event on March 17th, 2023, which was aimed at connecting students with experienced professionals in the oil and gas industry. The event was a resounding success with high level of participation across various engineering disciplines. Students left with valuable insights, new connections, and a renewed enthusiasm for the industry.

The event, which was held in the GNPC School of Petroleum Studies Block on the University of Mines and Technology, Tarkwa campus, was attended by students from different departments in the university. The speakers and mentors were very seasoned drilling engineers Mr. Derrick Klutsey and Mr. Pierre Kumah. Also in attendance was Prof Richard Amorin, the UMaT Faculty Advisor. The programme started at 5:30 pm, with a brief introduction from the Chapter executives welcoming the students to the seminar.

The first segment of the programme featured a panel discussion, where the experts addressed the current state of the oil and gas industry and its future prospects. They shared their experiences and insights on a wide range of topics, including the latest trends, technologies, and innovations shaping the industry's future. They also shared some industry challenges, opportunities, and future direction. They also spoke on how one should prepare towards the world of work.

The panel discussion was followed by a networking session, where students had the opportunity to interact with the experts. The students were encouraged to share their ideas, ask questions, and seek guidance from the experts in the industry. The mentors provided valuable insights, advice, and guidance to the students, helping them understand the industry better and identify potential career paths.

The seminar's success was largely due to the enthusiasm and dedication of the mentors who

volunteered their time and expertise to help the students. The mentors were from different companies in the industry, and they brought a wealth of experience and knowledge to the seminar. The students appreciated the opportunity to learn from the mentors, with many leaving with new connections and potential job opportunities.

The seminar was not just about mentorship and networking. It was also an opportunity for the students to learn about the various initiatives and programmes that SPE offers to its members. The organisers shared information about scholarships, conferences, and other opportunities available to students interested in the oil and gas industry.



Overall, the seminar was a huge success, and the attendees left with a renewed sense of enthusiasm and excitement for the oil and gas industry. We are grateful to the mentors who volunteered their time and expertise and to the attendees who made the seminar a success. They hope that the event will inspire more students to pursue careers in the industry and that it will continue to be a platform for mentorship, networking, and learning in the future.



What if theories thought in class were backed with simple yet informative demonstrations? How would learning then be perceived by the elementary school children?

Energy4me was developed by the Society of Petroleum Engineers (SPE) to promote an energy

conscious and educated society and create interest in science, technology, engineering, and math (STEM) careers through classroom delivery and hands-on practicals. For these reasons, SPE-UMaT Chapter stormed the campus of Peace Royal Basic School to engage especially JHS 3 students on the energy of the world, specifically the Oil and Gas Industry. Presentations were made on the concept and types of engineering, activities in the oil and gas field, and a demonstration on production of oil.



Students were treated with stationery for their participation during the questions and answers session, and volunteering services offered during the practical demonstrations.

Students appreciated how engineers go through involving operations to produce petroleum products for their consumption.



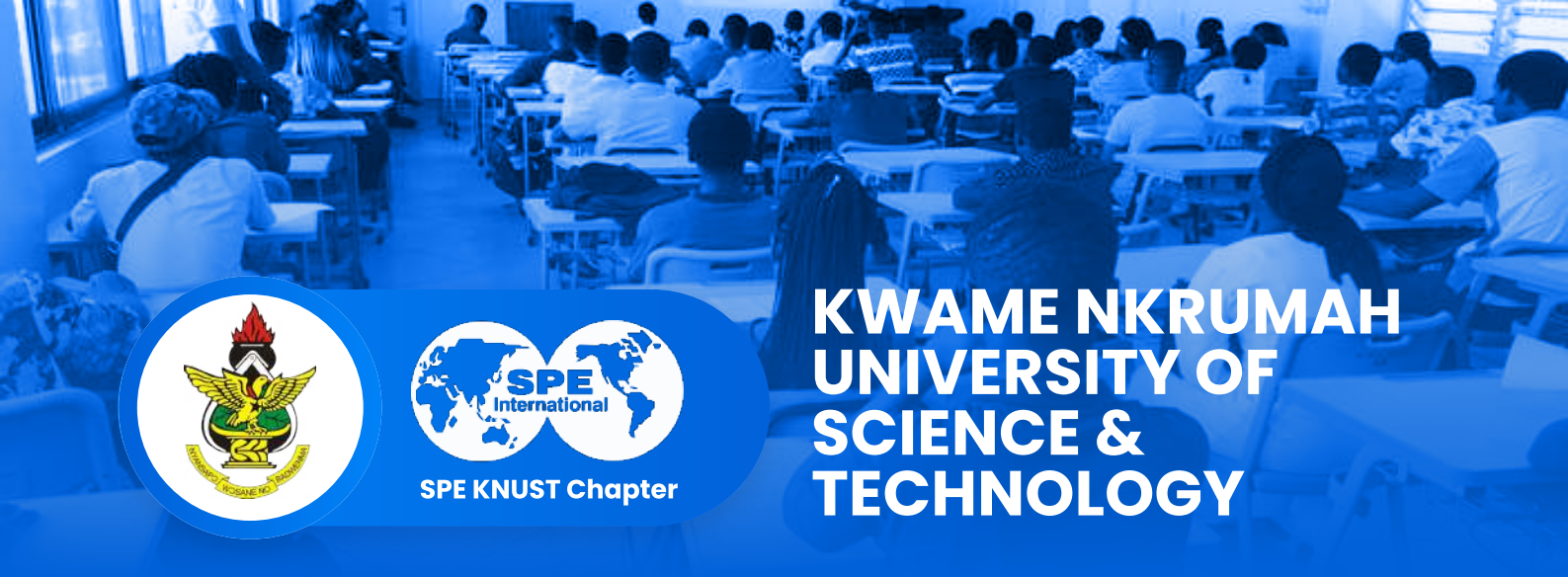
The concept of engineering explained science, mathematics, and technology and how their principles are applied to solve problems. Students were introduced to the various engineering fields in the oil and gas sector and how they work together. Activities like exploration, drilling, production, refining, transportation, and environmental management were explained with diagrams and videos to facilitate easy understanding of the question "what goes on in the petroleum industry?"

As part of the outreach programme, a practical session on how oil is produced to the surface, and how the understanding and principles of density are applied in the petroleum industry was demonstrated using domestic materials like water, disposable cups, drinking straw, sellotape, soft drink and water bottle.



This event provided an opportunity to meet students in the classroom with industry principles and practices, bridging the gap between classroom theories and field operations. The engagement with students laid out a platform for the SPE-UMaT Chapter to encourage the learning of science and mathematics and also gave an opportunity to inspire the next set of energy professionals.





KWAME NKURUMAH UNIVERSITY OF SCIENCE & TECHNOLOGY

SPE is a very educative society to be a member of, therefore, it is very necessary to participate fully in its activities where knowledge is exchanged, being innovative is crucial and more importantly gaining professional competence in the exploration and production of oil and gas in a safe manner.

To help foster undiluted participation in SPE activities in the chapter, a seminar was organized for our freshmen to introduce SPE to them and the need for them to join this amazing society.



In conclusion, Seminars and workshops are extremely significant in the lives of students. They are extremely beneficial to students since they enable them to evaluate, stay up to date on current events, comprehend concepts, and build their network. The seminars we have had so far has helped students gain more knowledge about SPE and the role it plays in contributing to the oil and gas industry. Students also got to know about the career journey of some top professional engineers in the industry which will go a long way in helping them in their journey as well. We believe that seminars like these will help keep students on their toes to be their best as the next generation of engineers. This helping us achieve a safe, secure and sustainable energy future.



Also, a seminar was held for the seniors on the theme: "Why renew your membership ". The Membership Chairperson (Miss Victoria Naa Momo Sampson) also registered everyone who was present. Moreover, an in-person seminar was organized on Saturday 18th March,2023 for the entire student association populace dubbed "Navigating the industrial ladder".

We had two speakers on board; Mr. Sarpong-Brenya Seth Kwadwo Kodua, a Chemical Engineer (Lead Product Process), Implementation and Support (PPIS) specialist, Orica Africa who spoke a lot on the need to have a skill and stressed on the fact that the SPE is one of the areas of acquiring such skills through its activities. Our second speaker, Mr. Daniel Addo the CEO of Crystal Continental Consult also made a presentation on CV and resume.



ABU DHABI SUSTAINABILITY WEEK 2023

Pius Theophilus Baidoo

Monitoring & Evaluation Officer (Office of the CEO)
Ghana National Gas Company Limited

I had the pleasure of attending the 2023 Abu Dhabi Sustainability Week, where I participated in several conferences, including the Ghana Investment Week Conference organized by the Ghana Investment Promotion Center (GIPC), the Launch of Africa Renewable Energy Manufacturing: Opportunities and Advancement, and the Green Hydrogen Technology Conference.

The Ghana Investment Week Conference (UAE-Ghana Business Forum), held on 17th January, 2023 at the Four Seasons Hotel, Abu Dhabi, which was graced by His Excellency the President, Nana Addo Dankwa Akufo-Addo, presented numerous investment opportunities available in Ghana for potential global investors. During his address, the President emphasized Ghana's commitment to promoting a sound business climate and forging strategic partnerships with the UAE and its partners.



At the launch of the Africa Renewable Energy Manufacturing Opportunity and Advancement also held on 17th January, 2023, we explored available opportunities in clean energy manufacturing and advancements, and how this could drive sustainable climate action. There were urgent calls made by Ghana's Energy Minister, Dr. Matthew Opoku Prempeh for the global energy transition agenda to offer Africa the opportunity to take concrete and decisive actions to redefine its economics model. This is particularly feasible, as the continent is endowed with rich critical metals such as Lithium, Cobalt, and Tantalite, which are essential for the manufacturing of clean energy technologies such as Lithium-ion batteries for both the power and e-mobility sectors.

It is essential to invest in building renewable energy manufacturing technology in Africa rather than in investors' home countries and later transferring the energy to Africa at a higher cost. Ghana, in particular, has numerous investment opportunities yet to be explored, especially in the renewable energy sector.



The Green Hydrogen Summit held on 18th January, 2023, at the Abu Dhabi National Exhibition Centre (ADNEC) discussed the potential and sustainability of Green Hydrogen as the future of renewable energy for global economies.

One particularly important topic discussed at the Green Hydrogen Technology conference was the significance of green hydrogen energy for Africa. It was emphasized that Africa has the potential to revolutionize the renewable energy sector with Green Hydrogen. Therefore, investing in building green hydrogen technology in Africa is crucial.

Developing Africa's green manufacturing capabilities is one of the key strategies to fostering growth, producing decent employment opportunities, and creating sustainable wealth.

The Abu Dhabi Sustainability Week 2023 provided an excellent platform for networking and learning from global investors, government officials, and actors in the renewable energy industry. I had the privilege of gaining valuable insights from Wale Shonibare of the African Development Bank from Nigeria.



Overall, my experience at the Abu Dhabi Sustainability Week was insightful, and I look forward to the continued growth and development of the renewable energy sector in Africa.

SPE GHANA'S PARTICIPATION IN THE NIGERIA ANNUAL INTERNATIONAL CONFERENCE & EXHIBITION (NAICE) & AFRICA YOUNG PROFESSIONALS' WORKSHOP

Introduction

The Society of Petroleum Engineers (SPE) is a not-for-profit professional organization whose stated mission is to collect, disseminate, and exchange technical knowledge concerning the exploration, development and production of oil and gas resources and related technologies for the public benefit; and to provide opportunities for professionals to enhance their technical and professional competence

The Nigeria Section of SPE is the largest in Africa. The Nigeria Annual International Conference and Exhibition (NAICE) is a yearly conference organized and hosted by the Society of Petroleum Engineers Nigerian Council. The conference provides a platform for oil and gas industry professionals to network, present technical papers as well as partake in training courses and discuss pertinent issues pertaining to the industry. The conference offers companies the opportunity to exhibit their products and services while attracting young talents. NAICE 2022 brought together 3000 attendees with 150 technical papers presented in person and online, 24 technical sessions, 100 exhibitors from across Africa with the Ghana section having participants from Ghana National Petroleum Authority (GNPC), Ghana National Gas Company (GNGC), Tullow Oil, Halliburton, and University of Cape Coast.

Key Activities

The following key activities took place from 30th July to 3rd August, 2022.

Day One - 30th July, 2022 : *Arrival of the various teams from Ghana and Security and Safety Brief.*

The Ghana Gas team congregated at the KIA for a scheduled flight at 11:30 GMT and arrived at the Murtala Muhammed International Airport at exactly 13:00 GMT. The team was conveyed to the Eko hotel given orientation on the security situation in Lagos and the hotel so as to guide movement throughout the stay in Lagos.

Day Two - 31st July, 2022 : *SPE Africa Breakfast Section Officers Workshop and Young Professional Away Day and Networking*

The day started with the SPE Africa Breakfast Section Officers Workshop under the theme "Why am I still a member of SPE". The 2022 SPE International (SPEI) President, Dr. Kamel Ben-Naceur and Africa Regional Director (ARD), Mrs. Oghogho Effiom shared their journey and experiences in SPE to encourage members to contribute immensely to the growth of their respective sections. The Lagos Section President, Mrs. Fanyama Okoli, also shared how she has made her section grow as a President.



The team participated in the YP away day. This event was organized by the Young Professionals wing of SPE to create a platform to network amongst young professionals in the African continent and beyond. It involved a visit to the Lekki Conservation Forest, a canopy walkway and fun games.



Day Three – 1st August, 2022: Morning Session

The Opening Ceremony kicked off at 10am at Eko Hotels and Suite at the Grand ballroom. There were addresses from leading members of SPE such as the SPE international President, Mr. Kamel Ben-Naceur, the Nigeria SPE council chairman, regulators and other industry players.

Notable in their addresses were;

- Energy transition is a reality given the recent negative effect of climate change on Africa and the world at large;
- Africa should adopt adaptive strategies in its energy transition journey as the continent has enormous fossil fuel resources to propel economic growth;
- The energy transition fuel being natural gas requires investment to be made to explore and make good use of Africa’s natural gas resources;
- Renewables only cannot provide the required energy for industries and other energy consuming sectors of the economy;
- Given that the global financial conditions have tightened; Africa requires innovative financial strategy to finance its natural gas projects;
- The other focus should be on carbon capture technologies and not total phase out of fossil fuels;
- Fossil fuel will be part of the global energy mix in the next 50years.

Day Three – 1st August, 2022: Afternoon Session

Topical Issue Workshop: This section focused on the value of Nigeria hydrocarbon in the global energy mix. It highlighted the need for investment in the Nigeria upstream sector, the exit of some oil and gas majors as well as oil theft reduced production of Nigeria to the market.

African Young Professionals Workshop: This workshop was on the theme “The Evolving Energy Mix in Africa: Prospects, Pathways and Opportunities for Young Professionals”. The panel featured Dr. Riverson Oppong of GNGC. Speakers spoke of the need to transition from higher carbon emitting fuels but recognized fossil fuel will still be relevant on the global energy mix in the next three decades and Africa’s energy transition fuel is natural gas. The new opportunities and pathways include hydrogen, renewables, and the technical skills required by young professionals to take full advantage of the new energy sources. The panelist indicated the need for SPE to create a new technical session to provide the needed skills for the young professionals. Technical papers were also presented.



Day Four – 2nd August, 2022: Morning Session

The morning session witnessed a panel discussion on the theme “Sustainable Energy Transition in Africa: The role of Legislative Framework and Investment Programs”. The session concluded that Africa requires a comprehensive review of its Legislative framework to ensure energy security, investor attractiveness and economic benefits of African’s hydrocarbons.

Further, Africa should focus on the development of technologies to decarbonize its hydrocarbons, identify the future skills set in the energy transition journey and build the capacity of its young professionals to take full advantage of it. Also, Africa should establish its energy transition narrative by focusing on natural gas and carbon decarbonization to diffuse the narrative of the environmentalist.

Day Four – 2nd August, 2022: Afternoon Session

This section was dedicated to women in Leadership on the theme “the future of oil and gas in Africa: Driving the Net-Zero Global Energy Transition in an Inclusive manner”. The exhibition pavilion ran simultaneously to other workshop and courses offered at the conference.

Day Five – 3rd August, 2022

This marked the climax of NAICE. The day began with technical sessions followed by a panel discussion on the topic “Operationalizing a Clean-Energy Transition for Sustainable Development in Africa” at 1000hrs. During the technical sessions, industry professionals who had authored or co-authored technical papers were given the opportunity to present their papers and have interactive discussions with the audience present through a Question and Answer (Q&A) session. During the panel session also, the various success factors and critical success factors that can contribute to a clean energy transition for sustainable development were discussed. Some success factors included the use of energy to develop the economy, energy security and financial security in Africa. Climate crisis, Economic development, good governance and purposeful leadership amongst others are some critical success factors that can impede a clean energy transition in Africa.

SPE Ghana Section members and leaders had a meeting with the SPEI President, Mr. Kamel Ben-Naceur, the ARD- Mrs. Oghogho Effiom, 2011 SPEI President, Mr. Egbert Imomoh (He was the first African to become the SPEI President) and some other distinguished and long serving members of SPE. The purpose of this meeting was to seek counsel and deliberate on how to promote the growth of the SPE Ghana Section.

There was an SPE Annual Banquet and Award Ceremony at 19:00hrs to reward and recognize SPE members that have contributed immensely to the growth of their various chapters, industry professionals, students and some SPE chapters. Some event sponsors and exhibitors were also acknowledged and awarded during the ceremony.



The SPEI noted the essential for Ghana section members to take advantage of the numerous platforms the society provides to develop themselves. He further advised on the various avenue to seek assistance from other sections and the need to engage the academic community if the section seeks to grow.

Other long serving members added their voices and the meeting ended with a group picture of representatives from the Ghana Section, SPEI and BOT members of the hosting Section.



Day Five – 3rd August, 2022: Morning Session

The morning session was a panel discussion on the theme “Operationalizing a Clean Energy Transition for Sustainable Development in Africa.

Day Five – 3rd August, 2022: Afternoon Session

Participants from Ghana Session had a meeting with SPE international President, African Region Director, Former SPE international President and former Nigeria Council Chairman on the means to revive the Ghana Section. The meeting revealed the challenges facing the Ghana Session and the plans of the 2022 Ghana session chairman and executives. The meeting proffer solutions to the challenges identified which the Ghana session will develop an action plan for its implementation.

Day Five – 3rd August, 2022: Evening Session

Annual Banquet and Awards: A dinner was organized for all participants and awards were conferred on outstanding members for past years. The SPE Ghana section was privilege to have two of its member Dr. Riverson Oppong (GNGC) and Mr. James Allotey-Okai(Hullington) receive awards for their contribution to SPE



Day Six – 4th August, 2022: Departure to Ghana

The GNGC delegates departed from Murtala Mohammed International Airport, Lagos at 16:30PM Nigeria time after a delay of the departing flight and arrived at Kotoka International airport at 16:40 GMT.

Conclusion and Recommendation

The conference was very impactful hence the need to encourage Ghana Gas to participate in subsequent years to add to the knowledge and experience of its members through sharing of ideas and networking. SPE Ghana should endeavor to research in the oil and gas issues affecting Ghana and create a platform to support preparation and presentation of Technical papers to highlights issues affecting the industry and energy transition journey.

Mentorship program should be developed by Ghana Gas and SPE to develop young professionals.

SPE EVENTS

SPE International holds several in-person and virtual events worldwide annually, including conferences, forums, symposiums, and online educational events.



SOME UPCOMING SPE INTERNATIONAL EVENTS

SPE Offshore Technology Conference (OTC)

The OTC is an annual conference and exhibition organized by the Society of Petroleum Engineers (SPE), the American Association of Drilling Engineers (AADE), the Marine Technology Society (MTS), and the Society of Exploration Geophysicists (SEG). The conference focuses on the development and exchange of knowledge and technology related to offshore resources and environmental matters.



The OTC features technical sessions, panel discussions, and exhibits related to the exploration, production, and environmental aspects of the offshore industry. It is attended by professionals from a wide range of disciplines including geology, engineering, environmental science, and more. The conference offers a platform for attendees to network, share knowledge, and discuss the latest advances in the industry. This year the OTC will be held from 1st–4th May 2023 in Houston, Texas.



Annual Technical Conference and Exhibition (ATCE)

The ATCE is one of the largest technical conferences in the oil and gas industry and is organized by the Society of Petroleum Engineers (SPE) annually. The conference provides a platform for professionals and experts in the industry to share their knowledge, experiences, and advancements in technology, processes, and practices.

The conference typically features technical sessions, plenary sessions, panel discussions, and keynote speeches from renowned experts in the industry. There is also an exhibition showcasing the latest technologies, products, and services related to the oil and gas sector.

The ATCE attracts professionals from around the world, including engineers, geologists, managers, executives, researchers, and students. It is a great opportunity for networking and learning about the latest developments in the industry.

This year's ATCE will be held from 16 – 18 October 2023 at Henry B. Gonzalez Convention Center. San Antonio Texas, USA.



SPE Africa

Annual Students' Congress 2023



The role of Africa in Global Energy Transition

The Students' Perspective

8th - 10th
May 2023

University of Ghana, Legon Campus

09:00-17:00
Daily

Main Programs

- Africa Students' Paper Contest (PhD, MSc, BSc)
- Africa Petrobowl Qualifiers

Adhoc Events

- SPE Cares
- Away Day
- Energy4Me
- Students' Career Fair

HOST



Riverson Oppong, PhD
Section Chair - SPE Ghana
Ghana National Gas Company

GUEST



Oghogho Effiom
Africa Regional Director - SPE
Shell Nigeria



SPEAfrica    

ADD TO YOUR CALENDAR

Make time to attend





SECTION OFFICERS

2022/23



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Section Chair



ATO DEBRAH
Treasurer



ING. DANIEL BOATENG AKUOKO
Deputy Treasurer



MAAME FOKUO A-YEBOAH
Head of Secretariat



YAW F KODUAH-SARPONG
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OBED TANLON
Communication Chair



JULIAN ASIEDU-AKROFI
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NICHOLAS ABAKAH ESHUN
Deputy Communication Chair



FIFI OTOO
Young Professionals Chair



MICHAEL SENA FIADOYOR
Deputy Young Professionals Chair



PROF. ENOCH AKOTO
Membership Chair



CLARENCE NII ARYEE ARYEEQUAYE
Deputy Membership Chair



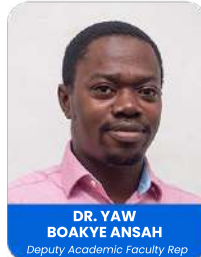
PHILIP KWASI BANINI
Students Liaison Officer



WILLIAMS BAKORKOR
Deputy Students Liaison officer



PROF. RICHARD AMORIN
Academic Faculty Rep



DR. YAW BOAKYE ANSAH
Deputy Academic Faculty Rep



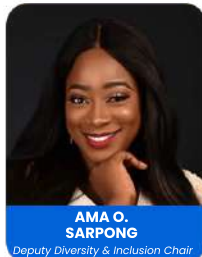
DERRICK EDEM KLUTSEY
Career Guidance & Outreach Chair



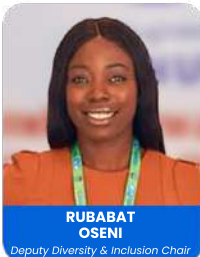
SAMUEL STEPHEN NII LARYEA ADJEI
Deputy Career Guidance & Outreach Chair



SHEENA OWUSU-ANSAH
Diversity & Inclusion Chair



AMA O. SARPONG
Deputy Diversity & Inclusion Chair



RUBABAT OSENI
Deputy Diversity & Inclusion Chair



CELESTINA YAABA KISSI
Past Section Chair

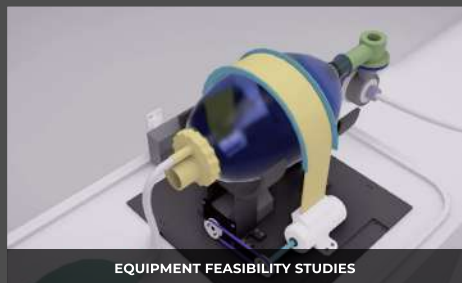
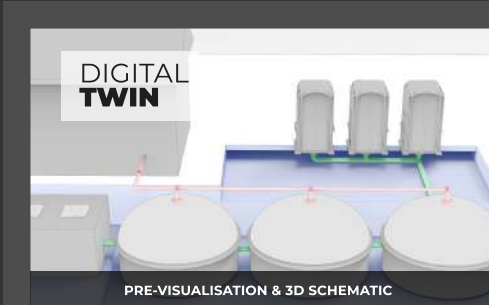
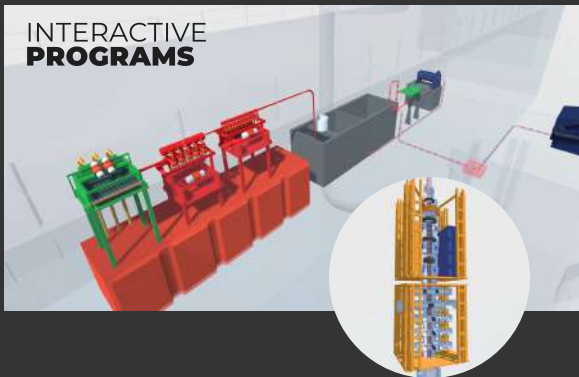


ATO AIDOO
Section Director

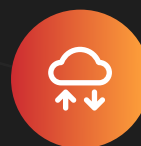
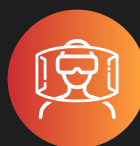
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Our team of experienced engineers and designers work closely with clients to create **customised software solutions** that **improve efficiency, reduce costs, and enhance productivity**.

At Relu, we are passionate about leveraging the latest technologies to solve complex engineering challenges and deliver superior results. From software development to 3D modelling and simulation, we are committed to providing the highest quality services to our clients in the engineering industry.



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