



Nigerian Society of Chemical Engineers (NSChE)

A Division of NSE

54th International Conference, AGM & Exhibition



theme: VALUE ENHANCEMENT IN SOLID MINERALS AND
AGRO-ALLIED SECTORS FOR INDUSTRIAL DEVELOPMENT

@ YarAdua Center, Abuja

13th-16th November 2024

PROGRAMME

NSChE Vision

- *To be the center of excellence for the Chemical Engineering profession in Africa and the prime mover of industrialization in Nigeria*

NSChE Mission

- To organize the Nigerian Society of Chemical Engineers into a virile professional body capable of promoting the relevance and versatility of the profession, achieving better training and updating of Chemical Engineers through its activities. Fostering of relationships with the academia, research institutes, industries, other professional bodies and government will be the basis for stimulating accelerated industrialization of the country and improving the quality of life of the Nigerian people."

NATIONAL ANTHEM



Nigeria we hail thee
Our own dear native land
Though tribes and tongue may differ
In brotherhood, we stand
Nigerians all, are proud to serve

Our sovereign Motherland.
Our flag shall be a symbol
That truth and justice reign
In peace or battle honour'd,
And this we count as gain,
To hand on to our children
A banner without stain.

O God of all creation
Grant this our one request.
Help us to build a nation
Where no man is oppressed
And so with peace and plenty
Nigeria shall be blessed.



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LIST OF EXHIBITORS

Booth #	Exhibitor
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3	
4	
5	 Vitafoam
6	
7	Galaxy Backbone
8	Nasarawa State
9	Nasarawa State
10	Nasarawa State

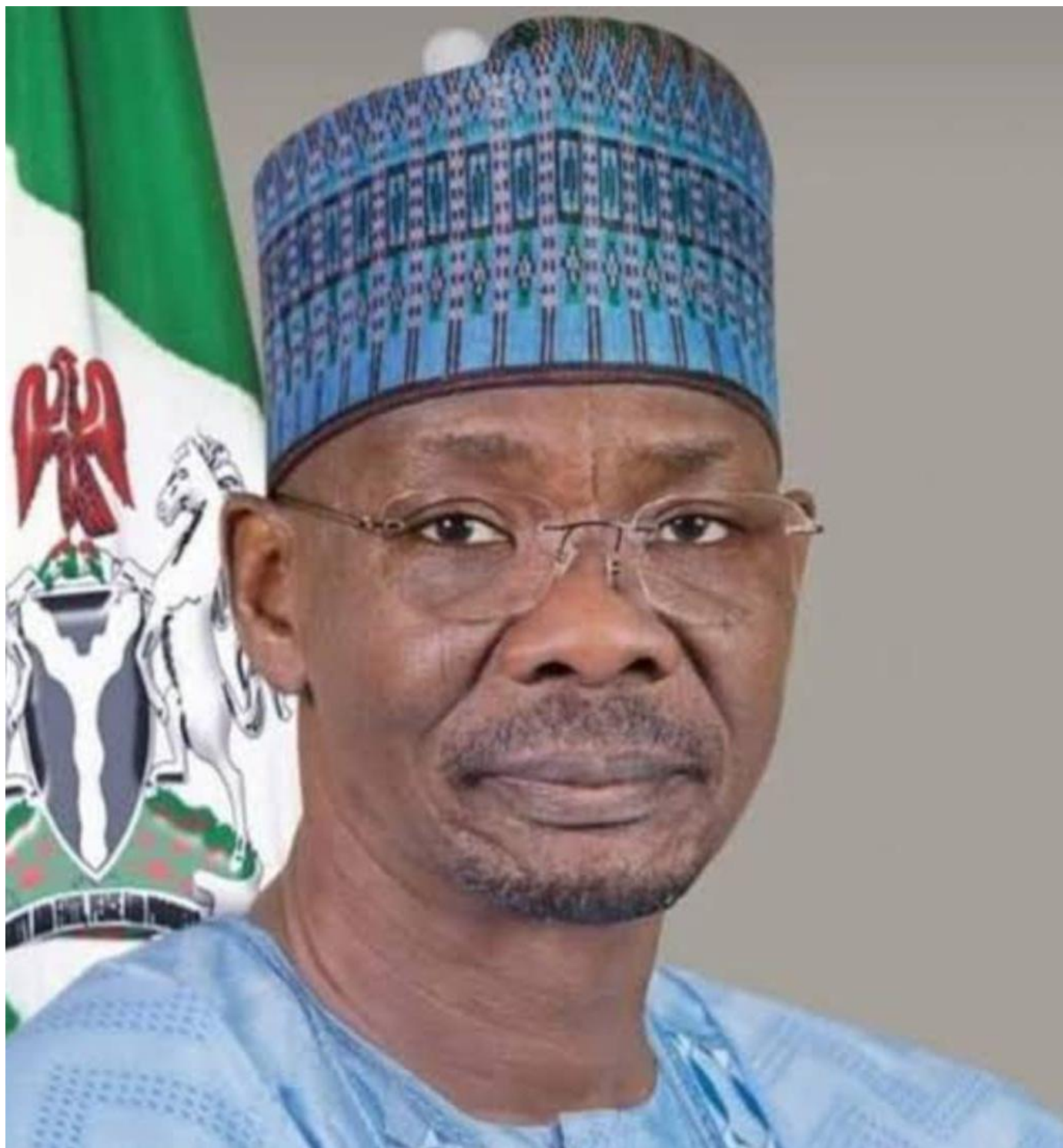
Booth #	Exhibitor
11	Nasarawa State
12	Nasarawa State
13	 EEMS Limited ISO 9001:2015 Certified Organisation
14	 NILE UNIVERSITY OF NIGERIA HONORIS UNITED UNIVERSITIES
15	NVL and NSChE Foundation
16	
17	Mensha Herbs
18	
19	
20	 Federal Polytechnic Nasarawa



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BOLA AHMED TINUBU GCFR
PRESIDENT, COMMANDER-IN-CHIEF OF THE ARMED FORCES
FEDERAL REPUBLIC OF NIGERIA.



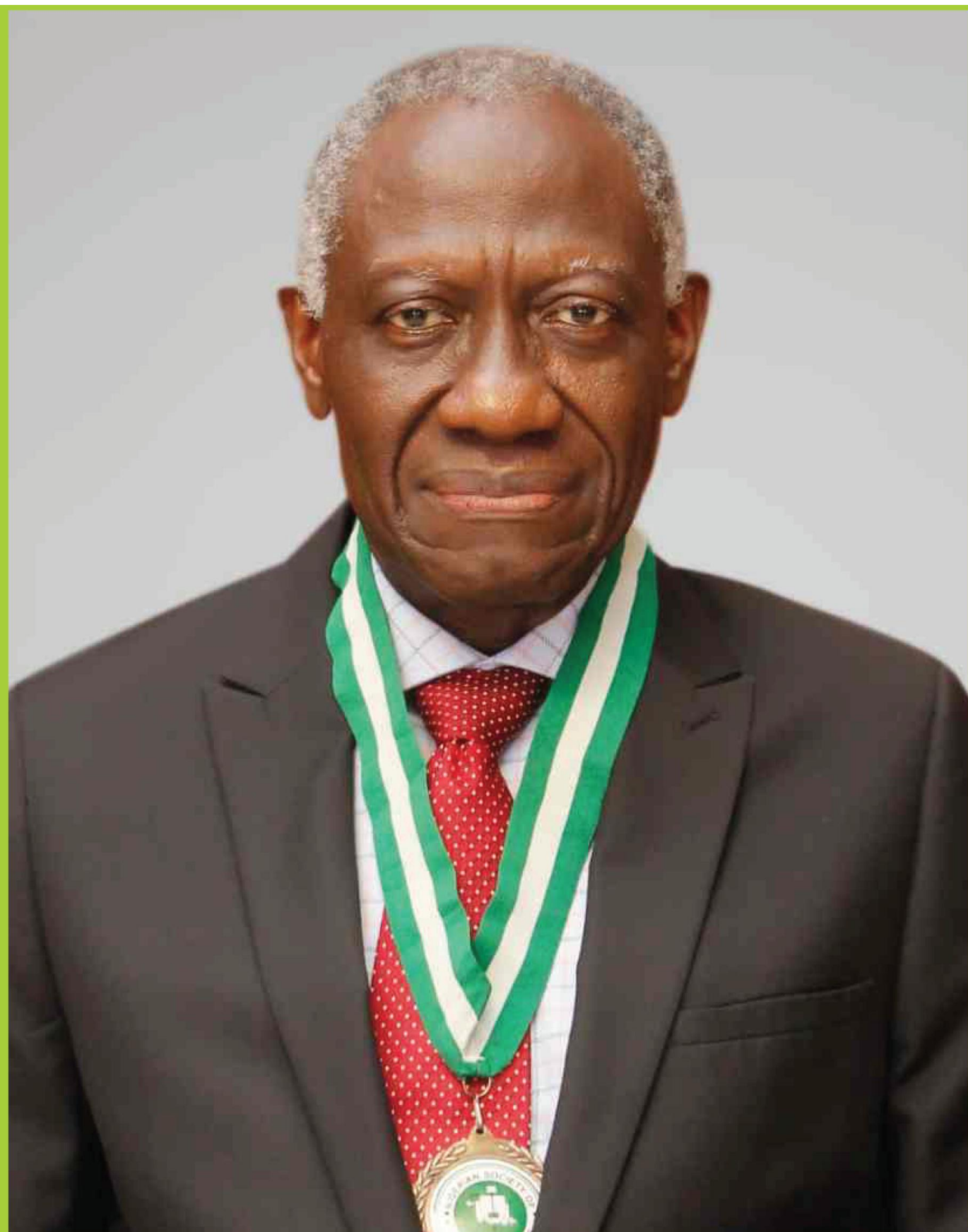
BARR. NYESOM EZENWO WIKE CON
HONOURABLE MINISTER, FEDERAL CAPITAL TERRITORY
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HIS EXCELLENCY
ENGR. ABDULLAHI SULE FNSE
EXECUTIVE GOVERNOR, NASARAWA STATE
CO-HOST



ENGR. MARGARET OGUNTALA FNSE, FNSChE
PRESIDENT, NIGERIAN SOCIETY OF ENGINEERS
CHAIR OF THE OCCASION

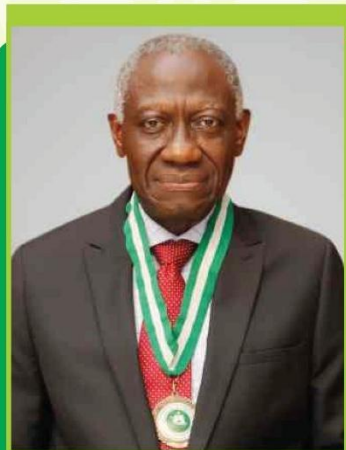


ENGR. ANTHONY U. OGBUIGWE FNSE FNSChE
NATIONAL PRESIDENT, NIGERIAN SOCIETY OF CHEMICAL ENGINEERS

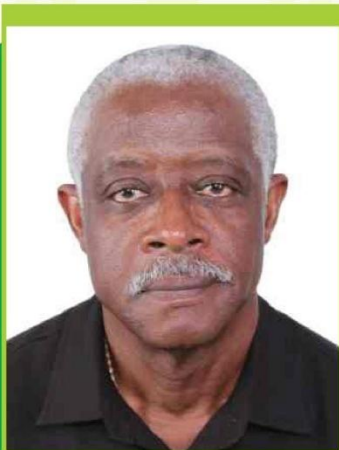


DR. AKINWUMI A. ADESINA CON
PRESIDENT OF THE AFRICAN DEVELOPMENT BANK GROUP
KEYNOTE SPEAKER

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PROGRAMME SUMMARY

START	FINISH	DAY1: Wednesday, 13/11/2024	DAY2: Thursday, 14/11/2024	DAY3: Friday, 15/11/2024	DAY4: Saturday, 16/11/2024
08:00	08:30		Accreditation and Registration	Accreditation and Registration	Accreditation and Registration
08:30	09:00				
09:00	09:30		Plenary Session 1 @YarAdua Center	Plenary Session 2 @YarAdua Center	Plenary Session 4 @YarAdua Center
09:30	10:00				
10:00	10:30		Networking/ Tea/Coffee	Networking/ Tea/Coffee	Networking/ Tea/Coffee
10:30	11:00				
11:00	11:30		Opening Session @YarAdua Center Auditorium	Plenary Session 3: Panel Discussions	Forums/ Sectoral Group Meetings [Concurrent]
11:30	12:00				
12:00	12:30		Tour Exhibition		Networking/ Lunch
12:30	13:00				
13:00	13:30		Networking/ Lunch	Networking/ Lunch	
13:30	14:00				
14:00	14:30		Concurrent Sessions 1	Concurrent Sessions 3	Closing Plenary and AGM
14:30	15:00				
15:00	15:30		Concurrent Sessions 2	Side Events	
15:30	16:00				
16:00	16:30				
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21:00	21:30				





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Energised For a Brighter Future

Aradel Holdings Plc is the foremost fully integrated independent energy company in Nigeria. Our business operations include oil & gas production, oil refining, self-generated power, and renewables.

We pioneered the development of marginal Oil and Gas field operations in Nigeria with the start of crude oil production in 2005 from Ogbele marginal field. To date, we are the first and only non-JV partner supplier of gas to Bonny NLNG Plant. We pioneered Modular Refinery development as well as the concept of Host Community Development Trust Fund.

Our vision is to be the leading company in Africa delivering sustainable energy solutions.

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KEYNOTE SPEAKERS



Dr. Akinwumi A. Adesina
President, AfDB Group

Often described as “Africa’s Optimist-in-Chief”, African Development Bank Group President Dr Akinwumi A. Adesina (1960) is widely lauded for his visionary leadership and passion for Africa’s transformation.

Formerly the Nigerian Agriculture Minister, Dr Adesina was first elected President of the African Development Bank Group on 28 May 2015. He was unanimously re-elected for a second five-year term on 27 August 2020. Dr

Adesina graduated with a bachelor’s degree in Agricultural Economics (First Class Honours) from the University of Ife (now Obafemi Awolowo University), Nigeria, in 1981. Dr Adesina holds a master’s degree (1985) and a PhD in Agricultural Economics (1988) from Purdue University, United States of America, where he won the Outstanding Ph.D. thesis award for that year. Dr Adesina won the prestigious Rockefeller Foundation Social Science Fellowship in 1988, which launched him into his international career.

A bold reformer, as Minister of Agriculture in Nigeria from 2011 to 2015 Dr Adesina turned the agriculture sector of Nigeria around within four years. Under his tenure, Nigeria ended 40 years of corruption in the fertilizer sector by developing and implementing an innovative electronic wallet system, which directly provides farmers with subsidized farm inputs at scale using their mobile phones. Within the first four years of its launch, this electronic wallet system reached 15 million farmers, dramatically transforming their lives.

With Dr Adesina at the helm, the African Development Bank Group achieved the highest capital increase since its establishment in 1964 when on 31 October 2019, shareholders from 80 member countries raised the general capital from \$93 billion to a historic \$208 billion. The African Development Bank Group responded boldly and swiftly to the Covid-19 pandemic. On 3 April 2020, the premier development finance institution launched a landmark \$3 billion Covid-19 Social Bond followed by a Crisis Response Facility of \$10 billion.

Dr Adesina has been recognized with numerous awards. On 19 October 2017, the President was conferred with the World Food Prize, also known as the “Nobel Prize for Agriculture”. On 29 February 2020, he was named African of the Year 2019 by one million readers of the African Leadership Magazine. On 14 December 2020, the Academy of Public Health, the flagship body of the West African Institute of Public Health, announced Dr Adesina as one of the winners of its 2020 Distinguished Fellowship Award for his successful efforts in helping Africa to curb the impact of the coronavirus pandemic.

On 2 February 2022, the President was conferred an Honorary Doctorate by the Federal University of Technology in Nigeria in recognition of his global leadership in agriculture, food security, development finance, and good governance.



Engr. Abdullahi Sule
Executive Governor,
Nasarawa State

Engr. Abdullahi A. Sule is a COREN registered mechanical engineer with BSc and MSc degrees in mechanical technology and industrial technology respectively from the Indiana State University Terre Haute, USA.

He started his career with the Plateau Electricity Corporation then Jos Steel Rolling Company Ltd. He returned to the US and worked in various capacities from workshop engineer, CNC programmer, CNC Operator, Facilities Engineer, and Project/ Production Engineer for Lancer Corporation, San Antonio; OEM Components, Houston; Morgan Performance, Houston; Drill-Quip incorporated, Houston; Osyka Corporation, Houston. He later became the Director of Business Development for Africa and the Middle East for Osyka Corporation.

He returned to Nigeria again in the year 2000 and along with some friends started a company called Sadiq Petroleum Nigeria Limited in Lagos and became the MD/CEO. Sadique Petroleum acquires a 30% stake in African Petroleum plc and Engr. Sule was appointed the Executive Director of Operations of AP in Nov. 2000 and the MD/CEO in April 2001 at a time when AP Plc had a negative balance sheet of over N22 million. By the time he resigned from Ap in July 2006, the company had a N5 billion positive balance sheet.

Before joining politics, he had a brief stint with an American Multinational oil service company called Tetra International as Director of Business Development / Country Manager and GMD of Dangote Sugar Refinery. He was also at different times during his career Director in IMB International Bank Plc, Ulti-Care Pharmaceutical and Chrismatel Holdings and the Chairman of AP Oilfield Service Ltd.

Engr. Abdullahi Sule is currently the executive governor of Nasarawa State (Home of Solid Minerals), where he is serving his second term.

LEAD SPEAKERS

Lead Paper (PL1): Nigeria in the Emerging Global Economy: Recommendations for National Policy on Hydrogen



Engr. Kanu Akachidike
Facilities Engineering Mngtr
Repsol S.A. Madrid, Spain

The education and research sectoral group of the NSChE considered the urgent need for Nigeria to have a policy on Hydrogen that will position Nigeria as a country to compete in the emerging global Hydrogen economy. To this end, a committee was set up to draft a white paper on Hydrogen by the sectoral group. The committee was headed by Engr. Kanu Akachidike with an array of competent professionals from the academics and industry within and outside Nigeria who are members of our great society.

The committee has completed their work and the final report is to be delivered as a lead paper titled "Nigeria in the Emerging Global Economy: Recommendations for National Policy on Hydrogen" during our annual 2024 national conference.

Akachidike Kanu is a Facilities Engineering Manager at Repsol S. A. based in Madrid, Spain. With over 20 years of professional experience in the petroleum and energy industries, he currently leads a multidisciplinary team of engineers in the design and construction of a major energy development project in North Africa. He had previously been involved in several energy and petrochemical asset development projects from opportunity identification to project development and operations management in several countries around the world. A member of the NSChE, AkaChi also serves as a volunteer Visiting Lecturer and External Supervisor at the Chemical Engineering Department, University of Port Harcourt, Nigeria. He holds a B.Eng. (Honours) degree in Chemical Engineering from the Federal University of Technology, Yola, Nigeria, and MS in Engineering Management from South Dakota School of Mines and Technology, USA.

Lead Paper (PL2): Gas Utilization to Enhance Food Security in Nigeria



Dr. Salihu Jamari
CIO, NNPC Gas and Power
Investment Service (NGPIS)

Dr Jamari has a Doctorate Degree in Flow Assurance Engineering from Imperial College London, Master's degree in Gas Engineering and Management from The University of Salford, and bachelor's degree in chemical engineering from Ahmadu Bello University (ABU) Zaria. He is a fellow of the Nigerian Society of Chemical Engineers, and Fellow of the Nigerian Society of Chemical Engineers.

He started his career as a Research Fellow at the Center for Energy Research, ABU Zaria in the renewable energy department and worked with Petroleum Training Institute (PTI) Warri before joining the Gas Development Department of NPDC (now NNPC E&P Limited). He managed the Oredo Integrated Gas Handling Facility (IGHF) project, which comprises a 100MMscfd gas processing plant, and LGP plant Storage and Dispensing Facility.

He also managed the Oredo-Ovade(POOC), which comprises a 10,000 BOBP flow station, 100mmcsfd wet gas compression station and 22km, 10"(inch) pipeline that supplies 100mmcsfd of raw gas to Ovade gas plant.

As the current Chief Gas and Power Investment Officer, he is overseeing the investment management arm of the Gas, Power, and New Energy Directorate (GP&NE) within NNPC Limited. The mandate is to unlock the full potential of Nigeria's abundant natural gas reserves and propel the promotion of domestic gas utilization, through strategic investments in power generation, petrochemicals and other Gas-Based Industries (GBIs), LNG and others across the gas and power value chains to ensure energy.

Lead Paper (PL3): Prospects and Challenges of Processing Solid Minerals in Nigeria



Dr. Kabiru Hassan YarAdua
GM, Nichi Mine Limited

Dr A seasoned engineering and management professional with extensive experience in energy, civil and environmental engineering, procurement, and project management. As the General Manager and Chief Operating Officer of NICHU MINE LTD, a prominent international mining corporation, he leads initiatives in exploration, mining, processing, and exporting of strategic minerals and rare earths elements, with a

focus on building Nigeria's lithium value chain and advancing battery production for sustainable growth. His educational credentials include a B.Eng. in Civil Engineering (University of Technology, Minna, Nigeria), an MBA in Project Management (Anglia Ruskin University, UK), MSc in Petroleum Engineering (Heriot-Watt University, UK), a PhD in Energy/Environmental Engineering (Atlantic International University, USA), and a PhD in Petroleum and Gas Engineering (University of Salford, UK), alongside professional diplomas in Project Management and Hardware Networking Engineering (CAAD & Phiri Centre, India). Dr. Yaradua is affiliated with leading professional organizations, including the Society of Petroleum Engineers (SPE), Council for the Regulation of Engineers in Nigeria (COREN), Nigerian Society of Engineers (MNSE), Chartered Institute of Purchasing & Supply Management (CIPMNS), and the Nigerian Institute of Management (MNIM) and Project Management Professional (PMP) with Chartered Engineer (CEng) certifications in view.

Lead Paper (PL4): Engineering Infrastructure as Bedrock for Value Enhancement in Agro-Allied and Solid Mineral Sectors



Khalil Suleiman Halilu
Exec. Vice Chairman, NASENI

Khalil has a Master of Science (M.Sc) in International Business and also a B.Sc in Business Administration from the University of Hertfordshire, Hatfield, United Kingdom respectively.

He served on the boards and advisor to leading companies/ organizations such as Kuming Power China Group, Nuli Foods Company, Sudabell Medical, Broadbased Communications, and Gongoni Company Limited, cementing his reputation as a trusted advisor in business and technology circles.

Presently, the chief executive of Nigeria's foremost technology transfer agency, Khalil's mission is to harness the power of modern science and engineering to propel Nigeria's industrialization agenda and position NASENI as a beacon of technological prowess on the national and global stage. He operates on creation, collaboration, and commercialization principles, ensuring that NASENI delivers world-class products and services. He has a track record of founding and investing in cutting-edge technology ventures across diverse sectors like Logistics, Agriculture, E-Commerce, and more, etc. Notable among his ventures are ShapShap Logistics Ltd., revolutionizing on-demand delivery services, and The CANs, West Africa's premier eco-friendly technological hub fostering innovation and sustainability.

His passion for closing the technology gap in Africa drives him to explore new frontiers in technology, with a relentless focus on improving lives and livelihoods across the continent.

ROUNT TABLE DISCUSSION PANELISTS

Lead Paper (PL5): Building Capacity across Agro-Allied and Solid Minerals Sectors to Enhance Nigerian Content



Prof. Idris Mohammed Bugaje
Executive Secretary NBTE
Lead Speaker and Moderator

Prof Idris Bugaje holds a Bachelor's and M.Sc. degrees in Chemical Engineering from the Ahmadu Bello University as well as a Ph.D. in Energy Engineering from the University of Newcastle-Upon- Tyne, UK.

A scholar of international standing, who is passionate about standardising Technical, Vocational Education and Training (TVET) as a tool for capacity development. A strong advocate for a paradigm shift to skills and entrepreneurship, with skill as the global labour currency for the 21st century economies.

With five patents to his name, Prof Bugaje, a COREN Registered Engineer is a Fellow of the Nigerian Society of Chemical Engineers (FNSChE), Fellow Solar Energy Society of Nigeria (FSESAN) and Fellow, Materials Society of Nigeria (FMSN).

He has headed four technological institutions including the National Research Institute for Chemical Technology (NARICT), Federal Polytechnic Nasarawa, Kaduna Polytechnic and currently the Executive Secretary of National Board for Technical Education (NBTE).



Engr. Yusuf Binji,
MD/CEO BUA Cement

Engr. Yusuf Haliru Binji, a Nigerian, is the Managing Director of BUA Cement Plc. He is a Chemical Engineer with degrees from Ahmadu Bello University and the University College, London. Yusuf is also a Fellow of the Nigerian Society of Engineers, the Solar Energy Society of Nigeria, the Nigerian Society of Chemical

Engineers and the Nigerian Society of Mining Engineers.

His contributions have been significant in the development of Nigeria's cement industry With a career spanning more than three decades in the manufacturing sector. Binji has been pivotal in the expansion of BUA Group's cement operations to become Nigeria's second largest cement company and the fifth most capitalised company on the Nigerian Exchange. He spearheaded the construction of six new production lines in the past eight years, increasing BUA Cement's installed capacity to 17 million tons per annum., including the establishment of the 6-million metric ton per annum Obu Cement Company and the Kalambaina cement plant in Sokoto, along with various expansions at the Cement Company of Northern Nigeria.



Prof. Adisa, Ademola Bello
Registrar, COREN

Engr. Adisa, a Fellow of the Nigerian Academy has a PhD in Mechanical Engineering and a graduate of ATBU Bauchi. He is a Professor at ATBU Bauchi and currently the Registrar of COREN.

At variuos times during his career, he the Director of Centre for Energy Research, Coordinator of Postgraduate Diploma in Mechanical Engineering Technology, Head of Department, Director of Centre for Industrial Studies, supervised to completion over 70 B. Eng theses, 8 PGDs and 19 M. Eng theses as well as 8 PhD dissertations.

Engr. Adisa has over seventy-five peer reviewed Journals and conference papers, eight Technical Reports and 15 Public Lectures delivered. He has been sponsoring two prizes at every convocation ceremony in the Department of Mechanical Engineering, ATBU since 2012. He has also served on the Governing Council of ATBU, the Council of the NSE and the Council of COREN.

He has been involved in many engineering trainings and projects, some of which include Lead Judge at the Royal Academy of Engineering Nigerian Institution of Mechanical Engineers FAFME Design & Creativity Competition, Yankari Resort and Safari Redevelopment, the SPIRE PROJECT with Centre for Space Technology Development (CSTD), the Renewable Energy Master Plan, National Energy Master Plan and the National Energy Policy. He is currently serving on the Energy Thematic group of The Research and Development Standing Committee of TETFund and Technical Board of Hydraulic Equipment Development Institute (HEDI) Kano, under The National Agency for Science and Engineering Infrastructure (NASENI).



Dele Ayankele
National President, Miners
Association of Nigeria

Dele Ayankele, the National President of Miners Association of Nigeria, a Member of NEITI Board and the Director of Operations of Topmost Minerals and Allied Resources Limited, which is an indigenous solid minerals exploration, exploitation and marketing outfit.

He was the National Secretary of Miners Association of Nigeria since June, 2014 before he was elected the National President on 3rd August, 2023.

The following lead paper presenters will also serve as panellists, their profiles are on page 15;

- ✓ Khalil Suleiman Halilu Exec. Vice Chairman, NASENI
- ✓ Dr. Kabiru Hassan YarAdua. GM, Nichi Mine Limited



BUA Cement Plc RC1193879



P1: Modelling and simulation of a counter current moving bed reactor for the direct reduction of iron ore to iron by the single particle model.

By: Chukwumela Eke and Engr. Joseph Alah,
chukwumela60@gmail.com
 +2347039882453; [Page 25](#)

P2: Boron-mediated mitigation of nickel-induced deactivation in zeolite catalysts: a temperature programmed reduction study

By: D. E. Adanenché, A., Atta, A. Aliyu, and B. J. El-Yakubu,
daniel.adanenché@dangoteprojects.com. [Page 25](#)

P3: Development and synthesis of Zeolite –Y from clay gotten from Ubulu-Uku Southern Nigeria

By: Patrick O. Nwosibe, Hawawu Salami, Ladi Gadzama,
patnwosibe@gmail.com. [Page 25](#)

P4: Enhanced gold recovery through optimizing the leaching process

By: I.K. Ajadi, A.Y. Atta, A.U. Zaria, S.S. Magaji, G. Tanimu, B.J. El-Yakubu, I. Garba, kazeemolawale634@gmail.com
 08146409681. [Page 25](#)

P5: Synthesis of Hierarchical ZSM-5 Zeolite Catalyst from Ahoko Kaolin Through Experiments

By: J. M., Gadin, E. A., Afolabi, A. S., Kovo, A. S., Abdulkareem and O. J., Moritiwon, eaafolabi@futminna.edu.ng. [Page 27](#)

P6: Building capacity across solid minerals value chains for industrial development in Nigeria

By: Rosemary Imhanwa, donrosel16@gmail.com
 +2347035525155. [Page 27](#)

P7: Assessment of Nigerian Natural Laumontite Zeolite In The Adsorption of Acid Red 27 And Brilliant Green Dye in Synthetic Wastewater

By: Kovo A.S., Faridat R., and Manko, H.,
kovo@futminna.edu.ng, 07013377258. [Page 27](#)

P8: Repositioning the Nigeria minerals sector into a destination for job creation and national prosperity

By: Engr. Abubakar Aliyu Aliyu,
Abubakar.aliyu77@yahoo.com
 07039209012. [Page 27](#)

P9: Effect of particle size, temperature and retention time on degree of reduction of Gujeni iron ore deposit of Kaduna State

By: Abdulaziz Aliyu and Tajudeen K. Bello,
abdulazizaliyu41@gmail.com. [Page 30](#)

P10: Comparative Study of Waste-Iron-Fillings (WIFC) And Analytical-Grade-Iron (AGIC) Intercalated with Kaolinite Clay for Mining Wastewater Treatment.

By: Mary A. Ajala; Olawale, E. Ajala; Joshua O. Ighalo; Idris Adetunji Ambali S. Abdulkareem, ajala.ma@unilorin.edu.ng. [Page 30](#)

P11: Development of Multipurpose Mixer for the Production of Standard Emulsion Paint Using Titanium Dioxide and Kaolin as Prime Pigment

By: Surajudeen Abdulsalam and Atiku Yakubu Musa,
sabdulsalam@atbu.edu.ng. [Page 30](#)

P12: Rate expression model from thermodynamics application and optimal kinetic parameters determination for urea synthesis and production process.

By: Ojong, O. E.; Akpa, J. G. and Dagde, K. K.,
ojong.ojong@unical.edu.ng. [Page 25](#)

P13: The use of banana stem extract as green inhibitor to mitigate corrosion in acidic environment: optimization approach

By: Olamide Olawale; Oluwatobiloba Enoch Fakola; Temitope Alaba Oshin, oshin.temitope@lmu.edu.ng,
 +2349066597165. [Page 25](#)

P14: Biosynthesis of Oleic Acid Amide from *Gmelina Arborea* Leaves Via Methanolysis

By: Haruna Ibrahim & Abubakar M. Ali,
ibrahimhauna@gmail.com. [Page 25](#)

P15: Determination Of Physicochemical Properties, Development Of Mathematical Models And Study Of Sorption Isotherms Of Cocoyam And Bitter Kola

By: Iji, Sunday Ibe, Oboh, Innocent Oseriboh, Ekpenyong, Abasiyake Uku, sunday.iji@fedpolyukana.edu.ng. [Page 25](#)

P16: Multi-objectives optimization of agro-waste application in biodiesel synthesis: waste mutton conversion to biodiesel using waste goat bone as catalyst

By: Esonye Chizoo, Abonyi Christopher Ifeanyi, Ukah Samuel Otah, Mgbudemobi Oluebube Ferdinand, Okahu Alpheus Chijindu, Chukwu Ekene Gabriel and Oko Ukie Emmanuel, esonye.chizoo@funai.edu.ng;
 0803 872 5463. [Page 26](#)

P17: Enhancing Lignocellulose for Oil Spill Cleanup: Response Surface Methodology Optimisation of Cotton Fibre Acetylation

By: O. J. Momoh, A. S. Olawale, O. A Ajayi and M. S. Olakunle, ojamesmomoh@gmail.com. [Page 26](#)

P18: Economic Conversion of Agricultural And Solid Wastes To Energy: Possible Exploration of Farm and Solid Waste Products

By: M. N. Idris, Y. Ding and M. A. Dungu,
idrismn@hotmail.com
idrismn1@gmail.com. [Page 26](#)

P19: Optimising the Production of Biodegradable Chitosan-Glycerol Bioplastics From Waste Potato Peels

Akomah Ugochukwu Chibuzo; Obiora Chibueze Paul,
ugochukwuakomah8@gmail.com. [Page 26](#)

P20: Application of Agricultural Wastes as Bio-stimulants in Petroleum Polluted Soil Remediation

Alexander Sixtus, Abdullahi Mohammed Evuti, Bala Isah Abdulkarim, Stephen Yakubu and Zakari Abdullahi,
alexsixalex784@gmail.com. [Page 27](#)

P21: Green synthesis and characterization of graphene oxide from *vitex doniana* seed

Francis Asokogene Oluwadayo; Momoh Solomon, Abiakwe Esther Chidinma,
francis.asokogene@edouniversity.edu.ng;
 08035811024. [Page 27](#)

P22: Characterization of Bio-waste Materials from Animal Sources for Biodiesel Catalyst Development

ADAMA Kenneth Kennedy and UKEGBU Chiamaka Anita-Tamarauebi, adama.kenneth@edouniversity.edu.ng. [Page 27](#)

P23: Enhancing Industrial Development through Membrane Pervaporation: Sustainable Wastewater Treatment in Solid Minerals and Agro-Allied Industries
Faruq B. Owoyale and Jimoh K. Adewole,
jimohadewole@nu.edu.com. **Page 27**

P24: Development of a pilot plant for the extraction of artemisinin active pharmaceutical ingredient from artemisia annua leaves. BY: **Bello Abdullahi, Sirajo Musa, Abdulazeez Yusuf Atta, Hussein Doko Ibrahim, Baba Jibril El-Yakubu,**
babdallah@gmail.com, **08030801320. Page 28**

P25: Removal of lead from textile waste water using chitosan produced from snail shell
Oyedeko K. F. K., Akinyanju A. S., Lasisi-Amokun M. K.,
mlasisi@unilag.edu.ng (+234-7055047648). **Page 28**

P26: Extraction of Oil from Osteoglossid Scale for Biodiesel Production Using Zeolite as Heterogeneous Catalyst
Akor, H.I; Bello F.O.; Akor A.O., hillaryai@custech.edu.ng
07037276717. Page 28

P27: One-pot Solid Acid Catalytic ($\text{Fe}^{3+}/\text{TiO}_2$) Depolymerisation of Sawdust (*Chlorophora excelsa*) Lignin into Aromatics
Thomas A., Dabai F.N., Aderemi B.O., Sani Y.M.,
abrahamthomas033@gmail.com, +2348158804822.
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P28: Characterization and Comparison of Solvent Extracted and Traditional Mechanically Extracted Shea Butter
Isa R. O., Enaholo A. H, Muhammad A. and Uloh B.,
rabionline@futminna.edu.ng. **08030520175. Page 28**

P29: Techno-economic and sensitivity analysis of bioethanol simulation from lignocellulosic multi-feedstocks
Ubani Oluwaseun Amune, Omade Khalifa, Kevin S. Otoikhian, khalifaomade25@gmail.com,
+2348131094743. **Page 28**

P30: Proximate, Ultimate, Raman Spectrometric and Thermal Analyses of Desert Date Shell
Zainab SHITTU, Saidat Olanipekun GIWA, Olumide Olu OLUBAJO and Abdulwahab GIWA, zshittu416@gmail.com.
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P31: Optimization of the Removal Efficiency of Melon Husk as a Bio-adsorbent for Lead (Pb) Using Response Surface Methodology and Pyomo
Azubuogu Peace Udoka,; Loveday Izuchukwu Emmanuel,
azubuogupeace1@gmail.com, **08062020118. Page 28**

P32: Biosorption of Chromium and Nickel from industrial Oil Mill Wastewater Using Groundnut Pod Waste Activated Carbon
Nanret Liba Yaceh, Michael Sunday Olakunle, Nehemiah Samuel Maina 07030076778, libananret@gmail.com.
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P33: Agricultural Wastes to Biofuels: A Strategy for Sustainable Energy and Industrial Development
Adizue Favour Chukwudumebi, Anifowose Daniel Olatunbosun, Eze Lotachukwu ErnestFortafric Energy Limited, Sismo Tutors, olumidemidaniel001@gmail.com,
08108724947. Page 30

P34: Natural gas utilization: a pathway to strengthening food security
A.E. Ochayi, E.E. Willie, C. Adakole, O.T. Ejoh,
anitaochayi2017@gmail.com +2348107820391. **Page 30**

P35: Effluent Water Treatment Methods from Drilling Operations Using Moringa Leaves: A Review
Patience Ikenyiri, Elechi Onodioma Graceland,
elechionodioma@gmail.com. **Page 30**

P36: Bioplastics: A Promising Solution to Plastic Pollution
Chinedu Lewis Anyalewechi,
chineduanyalewechi@gmail.com **08033331635. Page 31**

P37: Utilization of Cow Bones as Precursor for Eco-Friendly Liquid Fertilizer Production
Adewale George Adeniyi, Kingsley O. Iwuozor, Ebuka Chizitere Emenike, Mary A. Ajala, Folasade Morayo Oladipo-Emmanuel, Comfort Abidemi Adeyanju, Ogunniyi Samuel,
adeniyi.ag@unilorin.edu.ng. **Page 31**

P38: Liquid-liquid extraction of lactic acid from aqueous medium using thymol-lauric acid deep eutectic solvent
Mercy Ijeoma Obisike, Tajudeen Kolawole Bello, Alewo Opuada Ameh, obisikemercy09@gmail.com. **Page 26**

P39: Thermogravimetric And Thermal Differential Of Compressed Stabilized Earth Block And Spectroscopy Characterization
Lucas Albert Jerome HAMIDU, Aliyuda Yohanna ADAMU,
Lucadohamidu@Yahoo.Com. **Page 26**

P40: Enhancing Carbon (iv) Oxide Adsorption from Flue Gas Mixture at Elevated Temperature using Composite of Nanoparticles
OJONG, Ojong Elias; OSHA, Odey Adey; ABAM, Fidelis Ibiang and SAMUEL, Silas Shamaye, ojong.ojong@unical.edu.ng.
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P41: Efficiency Optimization Of Thermal Plasma Treatment of Petroleum Oily Sludge Using
Abubakar M. Ali, Haruna Ibrahim and Mohammed D. Jibrin, abulimoh67@gmail.com Response Surface Methodology (RSM). **Page 26**

P42: Biological Approaches for Eliminating VOCs and Heavy Metals - (A Review)
Abdulrahman Mukhtar Bashar, Salihu Hassan Mohammed, Muhammad Kamil Abdulazeez, Muhammad Alhasan Gabi,
abdurrahmanmukhtarbasha@gmail.com. **Page 31**

P43: Refinery Off-Gas Energy Recovery Strategy for Power Generation: Case Study of KRPC
Salihu M. Suleiman, Bello Abdulhanan, Jibril A. Ahmed, Abdulazeez A. Abdulazeez, Fatima A. Salihu, Hamza S. Odaudu, ssalihum@gmail.com; **09019110605. Page 31**

P44: Remediation and pyrolytic oil recovery from contaminated soil obtained from mechanic workshop
Mohammed Kabir Abdullahi, Lamido Sani Inuwa, and Shuaibu Musa, i.lamido@kadunapolytechnic.edu.ng.
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P45: Kinetics and thermodynamics studies of methylene blue adsorption onto green synthesized graphene oxide
Francis Asokogene Oluwadayo, Momoh Solomon, Abiakwe Esther Chidinma,
francis.asokogene@edouniversity.edu.ng; **08035811024. Page 31**

P46: Recovery of Propene from Catalytic Hydrothermal Conversion of Polypropylene
Fatima Abubakar Muhammad, Nura Makwashi, Anas Idris, famuhammad.cpe@buk.edu.ng (+234 806 734 9741).
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P47: Influence of Polyurethane Top Coat on Adhesion and Water absorption of Epoxy Based Coating Systems on Mining Vessels
Izionworu, Vincent Onuegbu; Charles, Watiminyo James, Orji Charles U., Wan Nik, Wan Mohd Norsani,
vincent.izionworu@ust.edu.ng. **Page 31**

P48: Assessment of chitosan and Nano-chitosan for phenol removal from refinery wastewater
Abubakar Abubakar Ibrahim Abdulfatai Jimoh, Ismail Babatunde Adefeso and Ibrahim Shaba Mohammed,
aabrahim.cpe@buk.edu.ng. **Page 30**

Welcome to



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PROGRAMME DETAILS

DAY1: Wednesday, 13/11/2024 (GOLF, PRESS CONFERENCE AND WELCOME RECEPTION)

09:00-15:00	Golf Tournament @IBB Golf Club
12:00-18:00	Accreditation and Registration @NSE HQ
16:00-18:00	Press Conference @NSE HQ
18:00-19:30	Welcome Reception @NSE HQ

DAY2: Thursday, 14/11/2024 (PLENARY AND OPENING SESSION)

PLENARY SESSION I; 09:00 to 10:30

CHAIR: Engr. Onochie Anyaoku, FNSChE, FNSE

START	FINISH	DURATION	ID	LEAD PAPER	SPEAKER
09:00	09:45	00:45	PL1	Nigeria in the Emerging Global Economy: Recommendations for National Policy on Hydrogen	Engr. Akachidike Kanu Education and Research Sectorial Group
09:45	10:30	00:45	PL2	Gas Utilization to Enhance Food Security in Nigeria	Dr. Salihu Jamari, FNSChE Chief Gas & Power Investment Officer NNPC Limited
10:30	11:00	00:30		TEA BREAK 1	

11:00 to 13:00 OPENING PLENARY

ANCHORES: Engr. David Engr. Adeyemo, FNSChE and Engr. (Mrs) Doris Okozor, MNSChE

START	FROM	DURATION	ACTIVITY	SPEAKER
11:00	11:10	00:10	National Anthem, Prayers and Safety moment	All Participants
11:10	11:25	00:15	Recognitions	Anchors
11:25	11:35	00:10	Welcome Address	Engr. Anthony Ogbuigwe, FNSChE, FNSE, FIChemE, FAEng (<i>National President, NSChE</i>)
11:35	11:45	00:10	Chairman Opening Address	Engr. Margaret Oguntala, FNSChE, FNSE (<i>President, NSE</i>)
11:45	12:05	00:20	Keynote Address: Value Enhancement in Solid Minerals and Agro-Allied Sectors for Industrial Development	Dr. Akinwumi Adesina, CON (<i>President, AfDB Group</i>)
12:05	12:25	00:20	Keynote Address: Investment Opportunities in The Solid Mineral Sector in Nasarawa State	Engr. Abdullahi Sule, FIMechE, FNSE (<i>Executive Governor, Nasarawa State</i>)
12:25	12:45	00:20	Goodwill Message	Engr Abubakar Momoh (<i>Honourable Minister Niger Delta</i>) Barr. Nyesom Wike (<i>Honourable Minister, FCT</i>)
12:45	12:55	00:10	Closing Remarks and Vote of Thanks!	Engr. Bayo Olarewaju-Alo, FNSChE (<i>Deputy National President, NSChE</i>)
12:55	13:15	00:20	Tour of Exhibition	All participants, led by the Chairman
13:15	14:15	01:00	LUNCH 1	

DAY2: Thursday, 14/11/2024; CONCURRENT SESSIONS 1

CONCURRENT SESSION 1A; 14:15 to 15:45

VENUE: Auditorium

SESSION CHAIR: Engr. Abba Bukar, FNSChE, FNSE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
14:15	14:30	00:15	P1	Modelling and simulation of a counter-current moving bed reactor for the direct reduction of iron ore to iron by the single particle model	Chukwumela Eke and Engr. Joseph Alah, chukwumela60@gmail.com +2347039882453
14:30	14:45	00:15	P2	Boron-mediated mitigation of nickel-induced deactivation in zeolite catalysts: a temperature programmed reduction study	D. E. Adananche, A., Atta, A. Aliyu, and B. J. El-Yakubu, daniel.adananche@dangoteprojects.com
14:45	15:00	00:15	P3	Development and synthesis of Zeolite –Y from clay gotten from Ubulu-Uku Southern Nigeria	Patrick O. Nwosibe, Hawawu Salami, Ladi Gadzama, patnwosibe@gmail.com
15:00	15:15	00:15	P4	Enhanced gold recovery through optimizing the leaching process	I.K. Ajadi, A.Y. Atta, A.U. Zaria, S.S. Magaji, G. Tanimu, B.J. El-Yakubu, I. Garba, kazeemolawale634@gmail.com 08146409681
15:15	15:45	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 1B

VENUE: Meeting Room B

SESSION CHAIR: Prof. Mohammed Dabo, FNSE, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
14:15	14:30	00:15	P12	Rate expression model from thermodynamics application and optimal kinetic parameters determination for urea synthesis and production process	Ojong, O. E.; Akpa, J. G. and Dagde, K. K., ojong.ojong@unical.edu.ng
14:30	14:45	00:15	P13	The use of banana stem extract as green inhibitor to mitigate corrosion in acidic environment: optimization approach	Olamide Olawale; Oluwatobiloba Enoch Fakola; Temitope Alaba Oshin, oshin.temitope@lmu.edu.ng, +2349066597165
14:45	15:00	00:15	P14	Biosynthesis of Oleic Acid Amide from <i>Gmelina Arborea</i> Leaves Via Methanolysis	Haruna Ibrahim & Abubakar M. Ali, ibrahimhauna@gmail.com
15:00	15:15	00:15	P15	Determination Of Physicochemical Properties, Development Of Mathematical Models And Study Of Sorption Isotherms Of Cocoyam And Bitter Kola	Iji, Sunday Ibe, Oboh, Innocent Oseriboh, Ekpenyong, Abasiyake Uku, sunday.iji@fedpolyukana.edu.ng
15:15	15:45	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 1C

VENUE: Board Room

SESSION CHAIR: Dr. Amosa Mutiu Kolade, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
14:15	14:30	00:15	P16	Multi-objectives optimization of agro-waste application in biodiesel synthesis: waste mutton conversion to biodiesel using waste goat bone as catalyst	Esonye Chizoo, Abonyi Christopher Ifeanyi, Ukah Samuel Otah, Mgbudemobi Oluebube Ferdinand, Okahu Alpheus Chijindu, Chukwu Ekene Gabriel and Oko Ukie Emmanuel, esonye.chizoo@funai.edu.ng ; 0803 872 5463
14:30	14:45	00:15	P17	Enhancing Lignocellulose for Oil Spill Cleanup: Response Surface Methodology Optimisation of Cotton Fibre Acetylation	O. J. Momoh, A. S. Olawale, O. A Ajayi and M. S. Olakunle, ojamesmomoh@gmail.com
14:45	15:00	00:15	P18	Economic Conversion of Agricultural And Solid Wastes To Energy: Possible Exploration of Farm and Solid Waste Products	M. N. Idris, Y. Ding and M. A. Dungu, idrismn@hotmail.com idrismn1@gmail.com
15:00	15:15	00:15	P19	Optimising the Production of Biodegradable Chitosan-Glycerol Bioplastics From Waste Potato Peels	Akomah Ugochukwu Chibuzo; Obiora Chibueze Paul, ugochukwuakomah8@gmail.com
15:15	15:45	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 1D

VENUE: Meeting Room A

SESSION CHAIR: Dr Lucas Hamidu

START	FINISH	DURATION	ID	TITLE	PRESENTERS
14:15	14:30	00:15	P38	Liquid-liquid extraction of lactic acid from aqueous medium using thymol-lauric acid deep eutectic solvent	Mercy Ijeoma Obisike, Tajudeen Kolawole Bello, Alewo Opuada Ameh, obisikemercy09@gmail.com
14:30	14:45	00:15	P39	Thermogravimetric And Thermal Differential Of Compressed Stabilized Earth Block And Spectroscopy Characterization	Lucas Albert Jerome HAMIDU, Aliyuda Yohanna ADAMU, lucadohamidu@yahoo.com
14:45	15:00	00:15	P40	Enhancing Carbon (iv) Oxide Adsorption from Flue Gas Mixture at Elevated Temperature using Composite of Nanoparticles	OJONG, Ojong Elias; OSHA, Odey Adey; ABAM, Fidelis Ibiang and SAMUEL, Silas Shamaye, ojong.ojong@unical.edu.ng
15:00	15:15	00:15	P41	Efficiency Optimization Of Thermal Plasma Treatment of Petroleum Oily Sludge Using Response Surface Methodology (RSM)	Abubakar M. Ali, Haruna Ibrahim and Mohammed D. Jibrin, abualimoh67@gmail.com
15:15	15:45	00:30	D	DISCUSSIONS AND Q&A	

DAY2: Thursday, 14/11/2024; CONCURRENT SESSIONS 2

CONCURRENT SESSION 2A; 15:50 to 17:20

VENUE: Auditorium

SESSION CHAIR: Dr. Fred Enjugu, FNSE, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:50	16:05	00:15	P5	Synthesis of Hierarchical ZSM-5 Zeolite Catalyst from Ahoko Kaolin Through Experiments	J. M., Gadin, E. A., Afolabi, A. S., Kovo, A. S., Abdulkareem and O. J., Moritiwon, eaafolabi@futminna.edu.ng
16:05	16:20	00:15	P6	Building capacity across solid minerals value chains for industrial development in Nigeria	Rosemary Imhanwa, donrosel16@gmail.com +2347035525155
16:20	16:35	00:15	P7	Assessment of Nigerian Natural Laumontite Zeolite In The Adsorption of Acid Red 27 And Brilliant Green Dye in Synthetic Wastewater	Kovo A.S., Faridat R., and Manko, H., kovo@futminna.edu.ng, 07013377258
16:35	16:50	00:15	P8	Repositioning the Nigeria minerals sector into a destination for job creation and national prosperity	Engr.abubakar Aliyu Aliyu, Abubakar.aliyu77@yahoo.com 07039209012
16:50	17:20	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 2B; 15:50 to 17:20

VENUE: Meeting Room B

SESSION CHAIR: Prof. Olusegun Ajayi, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:50	16:05	00:15	P20	Application of Agricultural Wastes as Bio-stimulants in Petroleum Polluted Soil Remediation	Alexander Sixtus, Abdullahi Mohammed Evuti, Bala Isah Abdulkarim, Stephen Yakubu and Zakari Abdullahi, alexsixalex784@gmail.com
16:05	16:20	00:15	P21	Green synthesis and characterization of graphene oxide from <i>vitex doniana</i> seed	Francis Asokogene Oluwadayo Momoh Solomon, Abiakwe Esther Chidinma, francis.asokogene@edouniversity.edu.ng; 08035811024
16:20	16:35	00:15	P22	Characterization of Bio-waste Materials from Animal Sources for Biodiesel Catalyst Development	ADAMA Kenneth Kennedy and UKEGBU Chiamaka Anita-Tamarauebi, adama.kenneth@edouniversity.edu.ng
16:35	16:50	00:15	P23	Enhancing Industrial Development through Membrane Pervaporation: Sustainable Wastewater Treatment in Solid Minerals and Agro-Allied Industries	Faruq B. Owoyale and Jimoh K. Adewole, jimohadewole@nu.edu.com
16:50	17:20	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 2C; 15:50 to 17:20

VENUE: Boardroom

SESSION CHAIR: Dr. Mohammed Kabir Abdullahi, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:50	16:05	00:15	P24	Development of a pilot plant for the extraction of artemisinin active pharmaceutical ingredient from artemisia annua leaves	Bello Abdullahi, Sirajo Musa, Abdulazeez Yusuf Atta, Hussein Doko Ibrahim, Baba Jibril El-Yakubu, babdallah@gmail.com, 08030801320
16:05	16:20	00:15	P25	Removal of lead from textile waste water using chitosan produced from snail shell	OYEDEKO K. F. K., AKINYANJU A. S., Lasisi-Amokun M. K., mlasisi@unilag.edu.ng (+234-7055047648)
16:20	16:35	00:15	P26	Extraction of Oil from Osteoglossid Scale for Biodiesel Production Using Zeolite as Heterogeneous Catalyst	Akor, H.I; Bello F.O.; Akor A.O., hillaryai@custech.edu.ng 07037276717
16:35	16:50	00:15	P27	One-pot Solid Acid Catalytic ($\text{Fe}^{3+}/\text{TiO}_2$) Depolymerisation of Sawdust (<i>Chlorophora excelsa</i>) Lignin into Aromatics	Thomas A., Dabai F.N., Aderemi B.O., Sani Y.M., abrahamthomas033@gmail.com, +2348158804822
16:50	17:20	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 2D; 15:50 to 17:20

VENUE: Meeting Room A

SESSION CHAIR: Engr. Ben Akaakar, FNSE, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:50	16:05	00:15	P28	Characterization and Comparison of Solvent Extracted and Traditional Mechanically Extracted Shea Butter	Isa R. O., Enaholo A. H, Muhammad A. and Uloh B., rabionline@futminna.edu.ng. 08030520175
16:05	16:20	00:15	P29	Techno-economic and sensitivity analysis of bioethanol simulation from lignocellulosic multi-feedstocks	Ubani Oluwaseun Amune, Omade Khalifa, Kevin S. Otoikhian, khalifaomade25@gmail.com, +2348131094743
16:20	16:35	00:15	P30	Proximate, Ultimate, Raman Spectrometric and Thermal Analyses of Desert Date Shell	Zainab SHITTU, Saidat Olanipekun GIWA, Olumide Olu OLUBAJO and Abdulwahab GIWA, zshittu416@gmail.com
16:35	16:50	00:15	P31	Optimization of the Removal Efficiency of Melon Husk as a Bio-adsorbent for Lead (Pb) Using Response Surface Methodology and Pyomo	Azubuogu Peace Udoka,; Loveday Izuchukwu Emmanuel, azubuogupeace1@gmail.com, 08062020118
16:50	17:20	00:30	D	DISCUSSIONS AND Q&A	

DAY3: Friday, 15/11/2024; PLENARY SESSION, PANEL DISCUSSIONS AND CONCURRENT SESSIONS

PLENARY SESSION II; 09:00 to 10:30

CHAIR: Dr. NJD Erinne, FNSChE, FNSE

START	FINISH	DURATION	ID	LEAD PAPER	SPEAKER
09:00	09:45	00:45	PL3	Prospects and Challenges of Processing Solid Minerals in Nigeria	Dr. Kabiru Hassan YarAdua GM, Nichi Mine Limited
09:45	10:30	00:45	PL4	Engineering Infrastructure as Bedrock for Value Enhancement in Agro-Allied and Solid Mineral Sectors	Khalil Suleiman Halilu Executive Vice Chairman, NASENI
10:30	11:00	00:30		TEA BREAK 2	

PANEL DISCUSSIONS; 11:00 to 13:00

VENUE: Auditorium

MODERATOR AND LEAD PRESENTER: Prof. Idris Mohammed Bugaje, FNSChE Executive Secretary, NBTE

PL5: Building Capacity across Agro-Allied and Solid Minerals Sectors to Enhance Nigerian Content

PANELISTS

1. Mr. Dele Ayankele, President Miners Association of Nigeria
2. Engr. Yusuf Binji, MD/CEO BUA Cement
3. Khalil Suleiman Halilu , Executive Vice Chairman, NASENI
4. Prof. Ademola Bello Adisa, Registrar COREN
5. Dr. Hassan Kabir YarAdua, Managing Director, NICH I Mine Ltd
6. Prof. Rahmon A Bello, President Nigerian Academy of Engineering

LUNCH 2 13:00 to 15:00

DAY3: Friday, 15/11/2024; CONCURRENT SESSIONS 3

CONCURRENT SESSION 3A; 15:00 to 16:30

VENUE: Auditorium

SESSION CHAIR: Dr. Layi Oyeleye

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:00	15:15	00:15	P9	Effect of particle size, temperature and retention time on degree of reduction of Gujeni iron ore deposit of Kaduna State	Abdulaziz Aliyu and Tajudeen K. Bello, abdulazizaliyu41@gmail.com
15:15	15:30	00:15	P10	Comparative Study of Waste-Iron-Fillings (WIFC) And Analytical-Grade-Iron (AGIC) Intercalated with Kaolinite Clay for Mining Wastewater Treatment.	Mary A. Ajala; Olawale, E. Ajala; Joshua O. Ighalo; Idris Adetunji Ambali S. Abdulkareem, ajala.ma@unilorin.edu.ng
15:30	15:45	00:15	P11	Development of Multipurpose Mixer for the Production of Standard Emulsion Paint Using Titanium Dioxide and Kaolin as Prime Pigment	Surajudeen Abdulsalam and Atiku Yakubu Musa, sabdulsalam@atbu.edu.ng
15:45	16:00	00:15	P48	Assessment of chitosan and Nano-chitosan for phenol removal from refinery wastewater	Abubakar Abubakar Ibrahim Abdulfatai Jimoh, Ismail Babatunde Adefeso and Ibrahim Shaba Mohammed, aaibrahim.cpe@buk.edu.ng,
16:00	16:30	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 3B; 15:00 to 16:30

VENUE: Meeting Room B

SESSION CHAIR: Engr Aminu Hamisu Kura

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:00	15:15	00:15	P32	Biosorption of Chromium and Nickel from industrial Oil Mill Wastewater Using Groundnut Pod Waste Activated Carbon	Nanret Liba Yaceh, Michael Sunday Olakunle, Nehemiah Samuel Maina 07030076778, libananret@gmail.com
15:15	15:30	00:15	P33	Agricultural Wastes to Biofuels: A Strategy for Sustainable Energy and Industrial Development	Adizue Favour Chukwudumebi, Anifowose Daniel Olatunbosun, Eze Lotachukwu ErnestFortafric Energy Limited, Sismo Tutors, olumidemidaniel001@gmail.com, 08108724947
15:30	15:45	00:15	P34	Natural gas utilization: a pathway to strengthening food security	A.E. Ochayi, E.E. Willie, C. Adakole, O.T. Ejoh, anitaochayi2017@gmail.com +2348107820391
15:45	16:00	00:15	P35	Effluent Water Treatment Methods from Drilling Operations Using Moringa Leaves: A Review	Patience Ikenyiri, Elechi Onodioma Graceland, elechionodioma@gmail.com
15:45	16:15	00:30	D	DISCUSSIONS AND Q&A	

CONCURRENT SESSION 3C; 15:00 to 16:30

VENUE: Boardroom

SESSION CHAIR: Prof. K.F. Oyedeko, FNSChE

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:00	15:15	00:15	P36	Bioplastics: A Promising Solution to Plastic Pollution	Chinedu Lewis Anyalewechi, chineduanyalewechi@gmail.com 08033331635
15:15	15:30	00:15	P37	Utilization of Cow Bones as Precursor for Eco-Friendly Liquid Fertilizer Production	Adewale George Adeniyi, Kingsley O. Iwuozor, Ebuka Chizitere Emenike, Mary A. Ajala, Folasade Morayo Oladipo-Emmanuel, Comfort Abidemi Adeyanju, Ogunniyi Samuel, adeniyi.ag@unilorin.edu.ng
15:15	15:30	00:15	P46	Recovery of Propene from Catalytic Hydrothermal Conversion of Polypropylene	Fatima Abubakar Muhammad, Nura Makwashi, Anas Idris, famuhammad.cpe@buk.edu.ng (+234 806 734 9741)
15:30	15:45	00:15	P47	Influence of Polyurethane Top Coat on Adhesion and Water absorption of Epoxy Based Coating Systems on Mining Vessels	Izionworu, Vincent Onuegbu; Charles, Watiminyo James, Orji Charles U., Wan Nik, Wan Mohd Norsani, vincent.izionworu@ust.edu.ng
15:45	16:15	00:30	D	DISCUSSIONS Q&A	

CONCURRENT SESSION 3D; 15:00 to 16:30

VENUE: Meeting Room A

SESSION CHAIR: Prof. Abdulazeez Atta

START	FINISH	DURATION	ID	TITLE	PRESENTERS
15:00	15:15	00:15	P42	Biological Approaches for Eliminating VOCs and Heavy Metals - (A Review)	Abdulrahman Mukhtar Bashar, Salihu Hassan Mohammed, Muhammad Kamil Abdulazeez, Muhammad Alhasan Gabi, abdurrahmanmukhtarbashar@gmail.com
15:15	15:30	00:15	P43	Refinery Off-Gas Energy Recovery Strategy for Power Generation: Case Study of KRPC	Salihu M. Suleiman, Bello Abdulhanan, Jibril A. Ahmed, Abdulazeez A. Abdulazeez, Fatima A. Salihu, Hamza S. Odaudu, ssalihum@gmail.com; 09019110605
15:30	15:45	00:15	P44	Remediation and pyrolytic oil recovery from contaminated soil obtained from mechanic workshop	Mohammed Kabir Abdullahi, Lamido Sani Inuwa, and Shuaibu Musa, i.lamido@kadunapolytechnic.edu.ng,
15:45	16:00	00:15	P45	Kinetics and thermodynamics studies of methylene blue adsorption onto green synthesized graphene oxide	Francis Asokogene Oluwadayo, Momoh Solomon, Abiakwe Esther Chidinma, francis.asokogene@edouniversity.edu.ng 08035811024
16:00	16:30	00:30	D	DISCUSSIONS AND Q&A	

DAY4: Saturday, 16/11/2024; PLENARY SESSION, SECTORAL GROUP MEETINGS, AGM AND DINNER

PLENARY SESSION III; 09:00 to 10:30

CHAIR: Prof. S.S. Adefila, FNSChE, FNSE, FNAEng

START	FINISH	DURATION	ID	LEAD PAPER	SPEAKER
09:00	09:45	00:45	PL6	LEAD PAPER 6: TBA	Nasarawa State Government
09:45	10:30	00:45	PL7	LEAD PAPER 7: Application of Nuclear Science and Technology in Food Preservation	Chairman, Nigerian Atomic Energy Agency (NAEC)
10:30	11:00	00:30		TEA BREAK 3	

SECTORAL GROUP MEETINGS

START	FINISH	DURATION	VENUE	SECTORAL GROUP	COORDINATOR
11:00	12:30	01:30	Auditorium	Education And Research Sectoral Group	Prof. Funmilayo Osuolale
11:00	12:30	01:30	Meeting Room B	HSE Sectoral Group	Engr. Wilson Dadet
11:00	12:30	01:30	Board Room	Solid Minerals Sectoral Group	Engr. Rosemary Imhanwa
11:00	12:30	01:30	Meeting Room A	Editorial Board of The JNSChE	Engr. Dr. Steve Momoh
12:30	13:30	01:00		LUNCH 3	

CLOSING PLENARY AND ANNUAL GENERAL MEETING; 13:30 to 16:30

ANNUAL DINNER/AWARDS; 19:00 to 21:00 @NSE HQ AUDITORIUM (see Dinner/Awards Brochure for Details)



EEMS LIMITED

ISO 9001: 2015 CERTIFIED ORGANIZATION

Engineering and Environmental Management Services Limited

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...Exceptional Solutions, Service Excellence

ENVIRONMENTAL SERVICES:

- ❖ Environmental & Social Impact Assessment
- ❖ Resettlement Action Plan (RAP)
- ❖ Environmental Audit & Compliance Monitoring
- ❖ Air Quality, Noise & Pollution Monitoring
- ❖ Geoinformatics (GIS, Geotech, Mapping & Topo Surveys, etc)
- ❖ Spill Sites Clean Up & Remediation
- ❖ Oil Absorbent Solutions (Land & Water)

MANAGEMENT SYSTEM SERVICES:

- ❖ ISO 9001 - Quality Management System
- ❖ ISO 14001 - Environmental Management System
- ❖ ISO 50001 - Energy Management System
- ❖ ISO 45001 - Occupational Health & Safety Management System
- ❖ ISO 22001 - Food Safety Management System
- ❖ ISO 27001 - Information Security Management System
- ❖ Training & Capacity Building

ENGINEERING SERVICES:

- ❖ Project Management
- ❖ Engineering & Feasibility Studies
- ❖ Energy Audit
- ❖ Process Engineering
- ❖ Electricity Transmission Line Route Studies & Installation
- ❖ Pipeline Route Studies