



# NIGERIAN SOCIETY OF CHEMICAL ENGINEERS (NSChE) (A Division of NSE)



## Annual International Conference & Annual General Meeting/Exhibition



**THEME** ▶ Rejuvenation of the Nigerian Industrial Sector:  
The Chemical Engineering Perspectives



De Peace Hotel, Ilorin,  
Kwara State



Thursday 10 – Saturday 12  
November, 2022



# NIGERIAN SOCIETY OF CHEMICAL ENGINEERS (NSChE) 20<sup>th</sup> ANNUAL INTERNATIONAL CONFERENCE & AGM 2022

## CONFERENCE PROGRAMME

PERIOD

EVENT

Wednesday November 9 2022

DAY ZERO

Arrival of invited Guests and Delegates

08:00 - 23:59

Check-in to De Peace Hotel & Suites and other Designated Hotels  
(as applicable)

Thursday November 10 2022

DAY ONE

All Activities on Day One hold at De Peace Hotel and Ilorin Golf Club

08:00 - 18:00

Arrival/All Day Registration

Registration Desk at the De Peace Hotel & Suites

12:00 - 15:30

Golf Tournament

Ilorin Golf Club

16:00 - 18:00

Press Conference by the National President

Main Conference Hall

17:00 - 18:00

Rapporteurs Meeting

Main Conference Hall

18:00 - 19:30

Networking

19:30 - 21:00

Cocktail/Fellows Happy Hours  
De Peace Hotel & Suites Arena

Friday 11 November 2022

DAY TWO

07:30 - 18:00

Arrival & Registration/Accreditation

Registration desks at the De Peace Hotel & Suites

08:00 - 09:00

Breakout Technical Sessions I

**Session Chair:** Prof. T. J. Afolabi

**Rapporteur:** Dr. Olu Arotiowa

**Moderator:** Dr. Adeyinka Yusuf

**Venue:** Hall Room 01

08:10 - 08:20

**TS01 - Synthesis and Application of Clinoptilolite for the Purification of Biogas from Cow Dung**

Emmanuel Olufemi Ehinmitola, Olayinka Sanda, Elijah Adekunle Taiwo; Gbolahan Oseni, Azeez Raifu, Matuwo Oladele and Samuel Adebayo

08:20 - 08:30

**TS02 - Air Emissions from Co-Pyrolysis of Low-Density Polyethylene, Polystyrene and Polyethylene Terephthalate at Stepwise Increase in Temperature**

Atilade A. Oladunni, Oludare J. Odejebi and Jacob A. Sonibare

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

08:30 – 08:40

**TS03 - Characterization of Char Derived from Pyrolysis of Low-Density Polyethylene (LDPE) Waste**

Adebola Femi Ade-Ajayi, Aishat A. Osigbesan, Ephraim A. Audu, Zaharaddeen Sani Gano and Jeffery Barminas

08:40 – 08:50

**TS04 - Quantification of 5-Hydroxymethylfurfural and Lactic Acid from Hydrothermal Carbonization of Sugar Cane Bagasse and Corn Cob**

Opeoluwa O Fasanya, Dan Mallam Adamu, Abdulazeez Isa, Deborah C. Nwakuba, Elizabeth Winful, Olanikpekun Idowu, Elijah Adegbe, Saheed Ibraheem, Ephraim A. Audu, Mas'ud Musa, Boyce Agunwa and Jeffrey Barminas

**Session Chair:** Dr. Akinjide Akinola

**Rapporteur:** Dr. Abel Adeyi

**Moderator:** Dr. Aliyu Bello

**Venue:** Hall Room 02

08:10 – 08:20

**TS05 - Investigation of Langmuir Fitness on The Adsorption of Nitrophenol, Naphthalene and Methylene Blue Mixture from Aqueous Solution using Activated Bentonite Clay**

Ayobami O. Ajani, Wasiat O. Bello, Tinuade J. Afolabi, Funmilayo N. Osuolale, Olufunmilayo A. Aworanti, Mujidat O. Aremu, Victoria A. Adeyi, Adeola R. Amole, and Abass O. Alade\*

08:20 – 08:30

**TS06 - Simulation of Pyrolysis Reactor to Produce Biofuel from Selected Biomass**

Ebenezer O. Dada, Oluchukwu C. Oyeka, Ifeoluwa O. Gbolahan, Temitope S. Olawale, Victor O. Olaleye, Akinola, D. Ogunsola, Kamoru O. Oladosu, and Abass O. Alade

08:30 – 08:40

**TS07 - Bio-Electrochemical Treatment of Pharmaceutical Wastewater and Sustainable Bioelectricity Generation using Microbial Fuel Cell**

Odunayo D Akinwumi, Samuel Agarry, Mujidat Aremu, Abass O. Alade and Oluwafunmilayo Aworanti

08:40 – 08:50

**TS08 - An Approach to Scale up of Neem Seed Oil Solvent Extraction Pilot Plant**

John Goji Usman

**Session Chair:** Prof. J. A. Sonibare

**Rapporteur:** Dr. Akeem Arinkoola

**Moderator:** Dr. Aramide Adesina

**Venue:** Hall Room 03

08:10 – 08:20

**TS09 - Modelling of Gaseous Pollutant Emissions from Savannah Vegetation Fires**

Khadijat A Abdulraheem, Jamiu A Adeniran and Adeniyi Aremu

08:20 – 08:30

**TS10 - Three-box Sequential Modelling of the Emission, Decay and Transportation of Volatile Organic Compounds in Beauty Shops**

Sarat Ayodele Atanda, Jamiu Adeniran and Tunmise Adewoye

# CONFERENCE PROGRAMME

PERIOD	EVENT
08:30 – 08:40	<p><b>TS11 - Reduction of Chemical Oxygen Demand from Tannery Wastewater using Carbon Nanotubes modified Albizia Lebbeck Pods</b> Tunmise Adewoye, Salimah Omari, Sarat Ayodele Atanda, Oladipupo O Ogunleye, Taofeek Salawudeen, Ambali Abdulkareem and Sherif I. Mustapha</p>
08:40 – 08:50	<p><b>TS12 - Application of Palm Kernel Shell Ash in the Treatment of Multicomponent Dyes in Simulated Wastewater: Optimization of Removal Efficiency</b> Abass O. Alade*, Aduragbemi, G. Oyelade, Dauda O. Araromi, Taofik O. Salawudeen, Rebecca A. Olaoye, Temitope E. Odetoje, Monsur O. Dauda, and Tinuade J. Afolabi</p> <p><b>Session Chair:</b> Dr. William AlMorof <b>Rapporteur:</b> Dr. Adewale Adeniyi <b>Moderator:</b> Dr. Aminah Sulayman <b>Venue:</b> Hall Room 04</p>
08:10 – 08:20	<p><b>TS13 - Process Development for the Production of Lower Olefins from Levulinic Acid using 2 Sec-Butyl Phenol Recovery Strategy</b> Aramide A. Adesina, David Lokhat and Kamilu Oyedeko</p>
08:20 – 08:30	<p><b>TS14 - Thermodynamics Studies of Adsorption of Selected Antibiotics Mixture from Aqueous Solution using Delonix Regia Pod</b> Ilesanmi A. Ojo, Ayobami O. Ajani, Wasiat O. Bello, Tinuade J. Afolabi, Abdulrazaq, Abdullahi, Akeem O. Olayiwola, Ameen N. Akinsola, and Abass O. Alade*</p>
08:30 – 08:40	<p><b>TS15 - Response Modeling and Optimization of Produced Softwood Sawdust Particleboards using Optimized R7adh2 Adhesive</b> Lucas Hamidu and Umar Aroke</p>
08:40 – 08:50	<p><b>TS16 - Equilibrium Study of Methylene Blue Adsorption by Vitex Doniana Activated Carbon</b> Francis A. Oluwadayo, Otoikhian Kevin and Nworie Emeka</p>
<b>09:10 – 10:10</b>	<b>Plenary Session 1</b>
	<p><b>Chairman:</b> Engr. Onochie A. Anyaoku, FNSChE, Past President, NSChE <b>Moderator:</b> Prof. Omodele Eletta <b>Venue:</b> Main Conference Hall</p> <p><b>PS01 - Industrial Applications of Nanotechnology</b> Prof. Ambali Saka Abdulkareem, Department of Chemical Engineering, Federal University of Technology, Minna</p>
<b>10:10 – 10:40</b>	<b>Tea/Coffee Break/Networking</b>
	Tea/Coffee Corner/Online
<b>10:50 – 13:00</b>	<b>Opening Ceremony</b>
	<b>Main Conference Hall</b>
	<p><b>Chairman:</b> Engr. Dr. Johnson B. Adewumi Proprietor, Thomas Adewumi University, Oko Kwara</p>

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

**Moderator:** Prof. D. S. Ogunniyi

**Venue:** Main Conference Hall

**PS02: Raw Material development: Agro-Industry & Solid Raw materials**

**Presenter:** Prof. Oyebanji Oyelaran-Oyeyinka, Chief of Staff and Special Adviser to the President, African Development Bank (AfDB), Abidjan Côte d'Ivoire

**13:00 - 14:30**

**Lunch/Friday Prayers**

**Designated Dining Area**

**14:30 - 18:00**

**Spouse's Program/City Tour**

**Designated places**

**14:30 - 16:00**

**Plenary Session II**

**Chairman:** Dr. B. O. Makanjuola

Chairman, Vitafoam Industries Limited, Lagos

**Moderator:** Prof. O. O. Ogunleye

**Venue:** Main Conference Hall

14:50 - 15:40

**PS03 - Recent Development in the Oil and Gas Industry**

Engr. Gbenga Komolafe, Commission Chief Executive, Nigerian Upstream Petroleum Regulatory Commission (NUPRC), Abuja

**16:10 - 17:40**

**Breakout Technical Sessions II**

**Session Chair:** Prof. A. Giwa

**Rapporteur:** Dr. Esther Babatunde

**Moderator:** Dr. Atilade Oladunni

Venue: Hall Room 01

16:20 - 16:30

**TS17 - Fuzzy Logic Controller Design for Temperature Control of Servo Systems using Simulink**

Ajiboye S. Osunleke\*, Ayorinde Bamimore, Sunrise Ezekikwu, Ismail Oyehan and Nafees O. Sanni

16:30 - 16:40

**TS18 - Thermodynamic Activity Coefficient Modelling of Liquid-Liquid Equilibrium Data for Tropical Almond Oil Biodiesel System**

Kenneth Kennedy Adama

16:40 - 16:50

**TS19 - Fuzzy Logic Controller Design: A General Appraisal**

Ajiboye S. Osunleke, Ayorinde Bamimore, Ayodeji Ajani, Nafees O. Sanni and Ibrahim A. Badmus

16:50 - 17:00

**TS20 - A New Implicit Model for Predicting Economic Pipe Diameter in A Fully Developed Turbulent Pipe Flow**

Innocent O. Oboh, Emmanuela Ainerua and Anslem Igbafe

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

17:00 - 17:10	<p><b>TS21 - Modelling Natural Gas Liquefaction to Liquefied Natural Gas and Propane using Nonlinear Autoregressive with Exogenous Input Neural Network</b></p> <p>Azubuiké S. ASHINZE, Adekunle T. ADENIYI and Abdulwahab GIWA</p>
17:10 - 17:20	<p><b>TS22 - Evaluation of Natural Gas Liquefaction Process using Nonlinear Autoregressive Neural Network and Nonlinear Input-Output Neural Network: A Comparative Study</b></p> <p>Azubuiké S. ASHINZE, Adekunle T. ADENIYI and Abdulwahab GIWA</p> <p><b>Session Chair:</b> Prof. E. A. Taiwo  <b>Rapporteur:</b> Dr. Bamidele Fakinle  <b>Moderator:</b> Dr. Babatunde Adeoye  <b>Venue:</b> Hall Room 02</p>
16:20 - 16:30	<p><b>TS23 - Flow and Compaction Properties of Excipients Developed from Biopolymer Waste Snail Shell and Influencing Factors</b></p> <p>Babatunde K. Adeoye, Elizabeth F. Aransiola, Gbenga Alebiowu, Micheal O. Osungunna</p>
16:30 - 16:40	<p><b>TS24 - Adsorption of Nickel (II) Cation from Aqueous Solution using Maize Cob-Activated Carbon: Optimization and Kinetic Studies</b></p> <p>Mayowa A. Lala, Zainab Olomowewe, Adekunle T Adeniyi and Abdulwahab Giwa</p>
16:40 - 16:50	<p><b>TS25 - Extraction of Bioemulsifier from Candida Tropicalis Isolated from Banana (Musa X Paradisiaca L.)</b></p> <p>Abigail Omolara Adetoyese and Elizabeth Aransiola</p>
16:50 - 17:00	<p><b>TS26 - Application of Box-Behnken Design in the Leaching Kinetics of Dolomite in Hydrochloric Acid</b></p> <p>Isaac Adekunle Joseph, Elijah Ajala, El-Imam AHMED and Mary Ajala</p>
17:00 - 17:10	<p><b>TS27 - Analysis of Liquid Products of Pyrolysed Low Density Polyethylene</b></p> <p>Aishat A. Osigbesan, Adebola Femi Ade-Ajayi, Ephraim A Audu, Zaharaddeen S. and Jeffery Barminas</p>
17:10 - 17:20	<p><b>TS28 - Synthesis and Characterization of Fe Doped Mordenite as a Prospective Catalyst for Pyrolysis of Waste Plastics</b></p> <p>Ephraim Akuaden Audu, Zaharaddeen S. Gano, Aishat A. Osigbesan, Adebola Femi Ade-Ajayi and Jeffrey Barminas</p> <p><b>Session Chair:</b> Prof. O. O. Ogunleye  <b>Rapporteur:</b> Dr. Ebenezer Odekanle  <b>Moderator:</b> Dr. Yusuf Raji  <b>Venue:</b> Hall Room 03</p>
16:20 - 16:30	<p><b>TS29 - Investigation of Adsorption Capacity of Eggshell-Based Chitosan in The Treatment of Multicomponent Aromatic Organic Pollutants</b></p> <p>Azeez G. Akinyemi, Arinkoola O. Akeem, Shukurat B. Olabiyi, Monsuru O. Dauda, Monsurat O. Jimoh, Odunola D. Akinwumi, Sunday O. Oyekunle, Tinuade J. Afolabi and Abass O. Alade</p>

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

- | PERIOD        | EVENT   |
|---------------|---|
| 16:30 - 16:40 | <b>TS30 - Impacts of Metal Recycling Plant Operations on Ambient Air Quality</b><br>Bamidele S. Fakinle, Jacob A. Sonibare, Funso Akeredolu and Ebenezer Odekanle   |
| 16:40 - 16:50 | <b>TS31 - Suitability of Adsorptive Cellulose Derived from Tithonia Diversifolia Xylem for the Treatment of Multicomponent Pharmaceutical Wastewater: Adsorption Capacity Optimization</b><br>Olusesan A. Olu-Arotiowa, Abdulganiy O. Yusuf, Monsur O. Dauda, Omodele A.A. Eletta, Kazeem K. Salam, Rasheed O. Adetoro, Lekan T. Popoola, Tinuade J. Afolabi and Abass O. Alade |
| 16:50 - 17:00 | <b>TS32 - Air Quality Impacts of Lube Blending and Insecticide Production</b><br>Jacob A. Sonibare, Funso Akeredolu, Ebenezer Odekanle and Bamidele S. Fakinle  |
| 17:00 - 17:10 | <b>TS33 - Valourisation of Waste Parkia Pendula Inflorescence as Biosorbent for the Treatment of Synthetic Wastewater Containing Ternary Components of Pesticide</b><br>Tinuade J. Afolabi, Hekram, A. Sadiq, Adewemimo, O. Popoola, Sunday, O. Oladunni, O. Monsur, O. Dauda, Omotayo, S. Amuda, Abolaji, G. Farombi, Esther O. Awotona, and Abass O. Alade                    |
| 17:10 - 17:20 | <b>TS34 - Adsorption of Paracetamol from Pharmaceutical Wastewater using Groundnut (Arachis Hypogaea) Shell Activated Carbon</b><br>Idayat A. Olowonyo, K. K. Salam, Mujidat Aremu and Agbaje Lateef  |
|               | <b>Session Chair:</b> Prof. D. O. Araromi<br><b>Rapporteur:</b> Dr. Jamiu Adeniran<br><b>Moderator:</b> Dr. Jamiu Adeniran<br><b>Venue:</b> Hall Room 04  |
| 16:20 - 16:30 | <b>TS35 - Production Optimization of a Nigerian Oil Well</b><br>Ajiboye S. Osunleke, Ayorinde Bamimore, Francis Chukwunta, Nafees O. Sanni and Ibrahim A. Badmus  |
| 16:30 - 16:40 | <b>TS36 - Extraction of Keratin Protein from Chicken Feathers: An Optimization Study</b><br>Olayomi Abiodun Falowo, Favour Kayode and Benjamin Aderemi  |
| 16:40 - 16:50 | <b>TS37 - Modelling, Simulation and Optimization of a Reactive Distillation Column</b><br>Chinenye Ukpai, Mufliah G. Omofoyewa, Idowu Olateju, Saidat O. Giwa and Abdulwahab Giwa   |
| 16:50 - 17:00 | <b>TS38 - Process Simulation and Optimization of Palm Oil from Spent Bleaching Earth via Supercritical Extraction for Sustainable Development</b><br>Wasiu A. Oladosu, Mohammed S. Haruna, Alaba A. Salami  |
| 17:00 - 17:10 | <b>TS39 - Production of Fuels from Guinea-Corn Straw and Waste Plastics</b>   |

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

Adeola Grace Olugbenga, Rasheed Babalola

17:10 - 17:20

**TS40 - ANN Prediction of Selected Oleophilic Bacterial Growth in Crude Oil Bioremediation**

Ajiboye S. Osunleke, Nafees O. Sanni, Mumeenah O. Mustapha and Elizabeth Aransiola

**Saturday 12 November 2022**

**DAY THREE**

**07:30 - 08:00**

**Arrival & Registration/Accreditation**

Registration desks at the De Peace Hotel & Suites

**08:00 - 09:00**

**Breakout Sessions III**

**Session Chair:** Prof. Segun Ajayi

**Rapporteur:** Dr. Hambali Umar Hambali

**Moderator:** Dr. Opeoluwa O. Fasanya

**Venue:** Hall Room 01

08:10 - 08:20

**TS41 - Adsorption Studies on Waste Plantain Peel Ash as Adsorbent for Sorption of Pharmaceutical Mixtures Aqueous Medium**

Dauda O. Araromi, Sofiat O. Ganiyu, Ademola T. Adeniji, Damilola O. Adebukola, Ayobami O. Ajani, Oluseye O. Agbede, Kehinde A. Babatunde, Solomon O. Alagbe, Samuel E. Agarry, Taofik A, Adedosu, Ganiyu K. Latinwo, Abass O. Alade and Tinuade J. Afolabi

08:20 - 08:30

**TS42 - Emission Of Air Pollutants in the Paper Recycling Plants: Measurement Results from a Nigerian Major Paper Recycling Plant Production Floors**

Funso Akeredolu, Bamidele S. Fakinle, Ebenezer Odekanle and Jacob A. Sonibare

08:30 - 08:40

**TS43 - Elemental Characterization of Pollutants Emanated from Combustion of Selected Agricultural Remnants**

Temilade, T. Adebisi, Adejoke O. Alamu, Sunday A. Adebajo, Olusesan A. Olu-Arotiowa, Kazeem K. Salam, Lukuman, A. Jimoda and Abass O. Alade

08:40 - 08:50

**TS44 - Seasonal Variation and Health Risks of Particulates at And Around Traffic Hotpots in Ibadan - A Model African Metropolis**

Emmanuel T. Odediran, Jamiu A. Adeniran and Rafiu Yusuf

**Session Chair:** Prof. M.O. Aremu

**Rapporteur:** Dr. Oluseye O. Agbede

**Moderator:** Dr. K. Oyedeko

**Venue:** Hall Room 02

08:10 - 08:20

**TS45 - Isolation and Identification of Potential Hydrocarbon Degrading Microbes from Non-hydrocarbon Contaminated Sources for Crude Oil Spill Clean-up**



# CONFERENCE PROGRAMME

## PERIOD

## EVENT

Elizabeth Winful, Opeoluwa O Fasanya, Jibrin Abdulkadir, Balli Gauje, Ugochi Okoduwa, Simon Adamun, Ephraim A. Audu, Judy Adudu, Hauwa Mohammed, Olalekan Adesina and Jeffrey Barminas

**TS46 - Performance of Bio-Demulsifiers for Demulsification of Nigerian Crude Oils**

Aishat A. Osigbesan, Deborah C. Nwakuba, Ibrahim Mohammed-Dabo and Haruna Ibrahim

**TS47 - Digestate Valorization: A Value Addition to Anaerobic Biodigestion Technology**

Minister E. Obonukut, Alesander Jock and Kingsley Egemba

**TS48 - Performance of Deep Eutectic Solvents in the Extraction of Lactic Acid from Sugarcane bagasse and Corncob**

John Enemona OGUCHE, Alewo Opuada Ameh, Tajudeen Kolawole Bello and Nehemiah Samuel Maina

**Session Chair:** Prof. L. A. Jimoda

**Rapporteur:** Dr. Lekan Popoola.

**Moderator:** Dr. Wasiu Oladosu

**Venue:** Hall Room 03

**TS49 - Synthesis and Characterization of Zinc Chloride Activated Carbon Adsorbent from Vitex Doniana (Black Plum) Seed**

Francis A. Oluwadayo, Otoikhian Kevin and Nworie Emeka

**TS50 - Solvent Extraction of Acetic Acid from Aqueous Media Using Trioctyl Phosphine Oxide (TOPO) – Based Solvent Systems**

Olayinka Sanda, Emmanuel O. Ehinmitola, Bamidele S. Fakinle and Elijah Taiwo

**TS51 - Electrochemical and Thermodynamic Evaluation of Spondias Mombin Leaves Extract as Green Inhibitor for Mild Steel Corrosion in Acidic Medium**

Kenneth K. Adama, Benedict I. Onyeachu, Ebijuwa M. Igho

**TS52 - Production of Biodiesel from Orange Peel and Avocado Seed Oils. Effect of Reaction Parameters on Production Efficiency.**

Sylvester O. Anyikwa, Stanley M. Nwakaudu, Angela A. Nwakaudu, Boniface C. Ngolube and Chigoziri N. Njoku

**Session Chair:** Prof. Omodele Eletta

**Rapporteur:** Dr. K. K. Salam

**Moderator:** Dr. Haruna Ibrahim

**Venue:** Hall Room 04

**TS53 - Adsorption Behaviour of Naphthalene, Anthracene and Pyrene in Aqueous Medium onto Rice Husk Ash: Removal Efficiency Optimization**

Ayobami O. Ajani, Ismahil K. Sokunbi, Damilola I. Adebukola, Sofiat, O., Ganiyu, Haleema O. Adedosu, Elizabeth F. Aransiola, Tinuade J. Afolabi, and Abass O. Alade

# CONFERENCE PROGRAMME

## PERIOD

## EVENT

08:20 – 08:30 **TS54 - Further Study on Electrical and Thermal Conductivities of Optimized Rice Husk Particleboard**

Lucas Hamidu, Umar Aroke, Odeh Osha and Idris Muhammad

08:30 – 08:40 **TS55 - Investigation of Geochemical Properties of Subgrade (Laterite) Soil in Selected Areas In Jos-North as Engineering Materials for Sustainable Infrastructural Development**

Aliyuda Adamu, Lucas Hamidu, Apeh Friday, Zachariah Pyendang, Isheni Yakubu and Achema Felix

08:40 – 08:50 **TS56 - Utilization of COSMO-RS for Valuable Metal Extraction from Spent Lithium-ion Batteries**

Hussein K. Amusa

**09:10 - 10:10**

**Plenary Session III  
Main Conference Hall/Online**

**Chairman:** Engr. Prof. S. A. Abdulkareem  
Former VC, University of Ilorin, Kwara

**Moderator:** Prof. Segun Ajayi

**Venue:** Main Conference Hall

09:20 - 10:00

**PS05 - State of the Art and Recent Progresses in Water and Wastewater Treatment**

**Prof. Ir. Dr. Mohammed Saedi Jami**, CEng, FIChemE, HOD, Department of Chemical Engineering & Sustainability, Faculty of Engineering, International Islamic University Malaysia (IIUM), Kuala Lumpur, Malaysia

**10:20 - 10:50**

**Tea/Coffee Break/Networking  
Coffee Corner/Online**

**11:00 – 12:00**

**Breakout Technical Sessions IV**

**Session Chair:** Prof. Anselm Igbafe

**Rapporteur:** Dr. Francis Asokogene

**Moderator:** Dr. Sheriff Mustapha

**Venue:** Hall Room 01

11:10 – 11:20

**TS57 - Simulating the Safety Hazards due to Thermal Radiation from Refinery Flare System**

Shuaibu Musa and Usman Abubakar Zaria

11:20 – 11:30

**TS58 - Application of Quaternary Composite Adsorbents Prepared from Selected Waste Plastic for Removal of Pesticide Mixture from Wastewater**

Sunday O. Oladunni, Dauda O. Araromi, Akeem O. Arinkoola, Funmilayo N. Osuolale, Oladipupo, O. Ogunleye, Wasiat O. Bello, Victoria, A. Adeyi, Adeola, R. Amole, Tinuade J. Afolabi, Abass O. Alade

# CONFERENCE PROGRAMME

PERIOD	EVENT
11:30 – 11:40	<p><b>TS59 - Air Quality Implications of Some Solid Wastes Incineration in Lagos Nigeria</b> Jacob A. Sonibare and Abiodun J. Adewale</p>
11:40 – 11:50	<p><b>TS60 - Development of Ag<sub>2</sub>O-TiO<sub>2</sub>-Kaolinite Clay Hybrid Nanocomposite for Heavy Metal Laden Mining Wastewater Treatment</b> Mary A. Ajala, Abdulsalami Kovo, Jimoh Tijani, Ambali Abdulkareem and Olawale Ajala</p> <p><b>Session Chair:</b> Prof. S. E. Agarry <b>Rapporteur:</b> Dr. Olayinka Sanda <b>Moderator:</b> Dr. Mayowa Lala <b>Venue:</b> Hall Room 02</p>
11:10 – 11:20	<p><b>TS61 - Application of Machine Learning Xgboost Model for the Prediction of Dye Adsorption onto Agrowaste-Based Activated Carbons</b> Abass O. Alade, Christopher I. Oni, Oladipupo O. Ogunleye, Samuel E. Agarry, Ganiyu K. Latinwo, Aminah A. Sulayman, Monsur O. Dauda, Teslim B. Asafa, Tinuade J. Afolabi and Sanni, A.O. Ogirima</p>
11:20 – 11:30	<p><b>TS62 - Optimization of Avocado Seed Oil Extraction using Five-Level Response Surface Methodology Design</b> Saidat O. GIWA, Fatima ABDULLAHI, Olukayode OLOYEDE, Saidu IBRAHIM and Abdulwahab GIWA</p>
11:30 – 11:40	<p><b>TS63 - Design of Experiment as An Experimental Key in the Optimization of Oil Yield from Fluidized Catalytic Cracking of Oil Shale using Zsm-5 Catalyst</b> B. O. Umeh, P.E. Dim, A. G. Olugbenga and M.B. Baba</p>
11:40 – 11:50	<p><b>TS64 - Profit Making through Pinch Analysis of Feed Gas Circuit in Liquefaction System of Natural Gas..</b> Babatunde O. OLALEYE, Micheal S. OLAKUNLE, Adegboyega S. OLAWALE</p> <p><b>Session Chair:</b> Dr. Mutiu Amosa <b>Rapporteur:</b> Dr. O. J. Odejobi <b>Moderator:</b> Dr. Rafiu Yusuf <b>Venue:</b> Hall Room 03</p>
11:10 – 11:20	<p><b>TS65 - Valorization of Garcinia Kola Fruit Pod Extract as a Green Inhibitor for Mild Steel in Acidic Media</b> Innocent O. Oboh, Joshua Adam and Anslem Igbafe</p>
11:20 – 11:30	<p><b>TS66 - Adsorption of Malachite Green onto Cellulose Synthesized from Baobab Pod</b> Victoria A. Adeyi, Samuel E. Agarry, Adeola R. Amole, Wasiat O. Bello, Tinuade J. Afolabi, Azeez G. Akinyemi, Monsuru O. Dauda, Olufunmilayo A. Aworanti, Esther O. Awotona and Abass O. Alade</p>
11:30 – 11:40	<p><b>TS67 - Efficient High Temperature Acid Corrosion Protection of Ss 316l Stainless Steel using an Imidazole + Ki Inhibitor Mixture</b></p>

# CONFERENCE PROGRAMME

PERIOD	EVENT
	Kenneth K. Adama and Ikenna B. Onyeachu
11:40 – 11:50	<p><b>TS68 - Characterization of Bambu Clay: As A Potential Source for Zeolite Y Synthesis</b></p> <p>Abdullahi A. Musa, Haruna M. Sani, Mohammed U. Garba, Elizabeth J. Eterigho, Mohammed Alhassan</p> <p><b>Session Chair:</b> Prof. M. A. Olutoye  <b>Rapporteur:</b> Dr. Abass Alade  <b>Moderator:</b> Dr. Ayoade Adejumo  <b>Venue:</b> Hall Room 04</p>
11:10 – 11:20	<p><b>TS69 - Design and Development of Arduino-Based Temperature Monitoring System for a Portable Haemodialysis System</b></p> <p>Aminah A. Sulayman, Dauda D.O. Araromi and Olugbenga Ayodele</p>
11:20 – 11:30	<p><b>TS70 - Assessing the Risks Due to Liquefied Petroleum Gas Plants using both and Qualitative Techniques</b></p> <p>Charles C. Anigbogu, Usman Abubakar-Zaria, Saidu M. Waziri</p>
11:30 – 11:40	<p><b>TS71 - Fuzzy Logic Control of Tomato Conversion in a Triple-Effect Evaporator</b></p> <p>Mojirade M. Oloruntoba and Folahan Ibitoye</p>
11:40 – 11:50	<p><b>TS72 - Exergy Analysis of a Novel Biodiesel Production Process</b></p> <p>Gbolagade I.Olajide and Mohammed Usman</p>
12:10 - 13:10	<b>Sectorial Group Meetings</b>
	Main Conference Hall
	Students Session Hall Room
13:10 - 14:30	<p><b>Lunch</b></p> <p>Designated Dining Area</p>
14:30 – 15:00	<p><b>Preparation for AGM</b></p> <p>De Peace Hotel and other hotels (as applicable)</p>
15:00 - 18:00	<p><b>AGM</b></p> <p>Main Conference Hall</p>
19:00 – 21:00	<p><b>Dinner/Closing</b></p> <p>Main Conference Hall/Online</p>
<p><b>Sunday 13 November 2022</b></p> <p><b>DAY FOUR</b></p>	
06:00 - 12:00	<p><b>Departure of invited Guests &amp; Delegates</b></p>