



ACS Chapter
Nigeria

AMERICAN CHEMICAL SOCIETY

Nigeria International Chemical Sciences Chapter

8th Annual Symposium 2023

THEME:

Innovation IN CHEMICAL SCIENCES:

FROM DISCOVERY TO COMMERCIALIZATION



Watbridge Hotel
& Suites

Uyo, Akwa Ibom State, Nigeria

On-site
— & —
Virtual

June 4 – 8
2023

Supporting/Collaborating Organizations:



Table of Contents

Executive Summary	-----
Introduction	-----
Opening & Awards Ceremony	-----
Keynote and Plenary sessions	-----
Technical Sessions	-----
Early Career Scientist and Students Workshop	-----
Conclusion	-----
Financial Report	-----
Appendixes	-----
Appendix 1 List of participants	-----
Appendix 2 Certificates	-----
Appendix 3 Receipts	-----

Executive Summary

The ACS Nigeria Chapter through extensive collaboration and strategic sponsorship, organised the 8th ACS Nigeria Chapter Symposium coupled with Early Career Scientists and Students Workshop to encourage innovation in chemical sciences by bridging the lacuna between discovery and commercialisation.

Themed: " Innovation in Chemical Sciences: From Discovery to Commercialization" The five-day event which held at Mandela Hall, Watbridge Hotel, Uyo, Akwa Ibom State, Nigeria aimed at fostering innovation through collaborations stimulate cross-pollination of ideas for a better future.

In this report, we capture the detailed activities of the pre-symposium event styled: Early Career Scientist and Students Workshop as well as keynote, plenary and technical sessions of the symposium. Also included are the list of the participants, photo gallery, certificates and receipts which were vital components of the events.

We are enormously grateful to our many sponsors: American Chemical Society (ACS), International Union of Pure and Applied Chemistry (IUPAC), Chemical Society of Nigeria (CSN), BAYER, Federation of African Societies of Chemistry (FASC), University of Uyo, International Center of Energy and Environmental Sustainability Research (ICEESR) etc, who shared in our vision of driving the future of science through meaningful engagements. We thank our Keynote Speaker and the Plenary and well as the Lead Speakers of the sessions for their willingness and commitment to science, and most importantly, their generosity in sharing their wealth of knowledge for the advancement of science.

Introduction

The thrilling exploration of 'Innovation in Chemical Sciences: from Discovery to Commercialization', affords the opportunity to mirror the odyssey of an idea from a scientist's eureka moment to its market launch. Also, envisage the gleaming brilliance of Thomas Edison's light bulb, a revolution born from a mere filament, embodying the raw potential of chemical sciences to revolutionize our lives.

The period from when a discovery is made to when it is commercially viable is often arduous and critical, which can take many years and considerable resources. For pharmaceuticals, for instance, the discovery-to-market process can take more than a decade and cost over a billion dollars, as only about 10% of drugs that enter clinical trials reach the market but for chemical technologies, the timeline can be somewhat shorter though still measured in years and substantial investment is required for scale-up, testing, and market penetration. This premise necessitated the theme of this symposium.

Opening & Awards Ceremony

The symposium received participation from key stakeholders that include, the Vice Chancellor and team from the University of Uyo, the Deputy Vice Chancellor of University of Uyo, International Union of Pure and Applied Chemistry (IUPAC), Bayer Nigeria Ltd, Notore Chemical Industries Plc, Federation of African Societies of Chemistry (FASC), Chemical Society of Nigeria (CSN), Jubilee Syringe Manufacturing, Network of Nigerian Women in STEM (NWISTEM), Science Teachers Association of Nigeria (STAN) and Academic Staff from Tertiary and Secondary Institutions across the country. Also in attendance were ExxonMobil Nigeria, International Centre for Energy and Environmental Sustainability Research, University of Uyo, American Chemical Society Nigeria International Science Chapter and students.



The Chairman, ACS Nigeria International Sciences Chapter, Prof. Joshua Obaleye gave a welcome speech where he thanked God, welcomed all participants and expressed warm appreciation to the sponsors and supporters. He re-echoed the theme of the symposium by underlining the need to foster innovation through collaborations by cross-pollination of ideas for a better future, both individually and as groups. He also congratulated Prof. Edu J. Inam and Prof. Tolulope M. Fasina for their new status as Professors of Chemistry. Similarly, he enjoined all non-members to take advantage of the membership fee discount window to register with the association while appealing to all members to renew their membership.



Goodwill messages were received from the International Union of Pure and Applied Chemistry (IUPAC), Bayer Nigeria Ltd, Notore Chemical Industries Plc, Federation of African Societies of Chemistry (FASC), Chemical Society of Nigeria (CSN), Jubilee Syringe Manufacturing, Network of Nigerian Women in STEM (NWiSTEM) and Science Teachers Association of Nigeria (STAN)

KEYNOTE/PLENARY LECTURES



Prof. Javier García-Martínez, President, International Union of Pure and Applied Chemistry (IUPAC) delivered the keynote lecture virtually. He emphasized that for the circular economy to become feasible, chemistry must be transformed into the science and industry of reuse. The current levels of extraction, emission, and disposal were noted as unsustainable and posing risks to the climate, environment, and health. The speaker further explained that rethinking chemistry for a circular economy requires significant changes, including the conception of molecules and the design of

processes to ensure traceability, recyclability, and reuse. Emphasis was placed on the opportunity to create a more resilient, competitive, and sustainable industry by turning chemistry towards the reuse of atoms and molecules. He also discussed how chemistry can adapt from linear to circular processes. This adaptation would include designing molecules to be disassembled and reconstructed to minimize waste and ensure recyclability. Additionally, Prof. Javier García-Martínez shared personal experiences as the President of IUPAC in promoting sustainable chemistry and student-centered education. Insights were given into the founding of Rive Technology, an MIT-based startup aimed at reducing CO₂ emissions in the chemical industry and also mentioned the potential for successful careers in both academia and industry, referencing a recent interview with Nature.

The first plenary lecture Professor Emeritus the topic Systems Sustainability in She posited that the Anthropocene Holocene period, a time induced changes to the weather systems since Revolution. central role of chemistry speaker pointed out that pursuing sustainable including in Africa. The Sustainable was highlighted, and the need for African early-career chemists to act. Special attention was to be paid to "Systems Thinking," a key competency often lacking in educational programs, and Professor Emeritus Potgieter shared information on efforts by IUPAC to address this gap.



was delivered by Marietjie Potgieter on Thinking and Chemistry Education. humanity has entered epoch, following the marked by human-Earth's surface and the Industrial Emphasizing the in sustainability, the chemists are vital in development, connection to the UN Development Goals speaker expressed the

Briefly followed by the lecture by Professor Hamza Abba titled: From Invention to Patenting and Commercialization of Chemical Sciences' Products: IP and Patent Law Issues in Nigeria. He discussed the growing importance of intellectual property (IP) in modern times due to advances in science and technology, and increased global competition. Professor Abba focused on the challenges related to IP and patent law in Nigeria, particularly concerning the patenting and commercialization of chemical products. Key concepts such as chemical science, product, invention, IP rights, and patents were defined, and the patentability of chemical products in Nigeria was extensively addressed. The challenges faced in this area were identified, and the need for Nigerian chemists to patent, protect, and commercialize their inventions in the global economy was emphasized, with recommendations made accordingly.



In the same vein, Prof. Gloria U. Obuzor, President, Federation of African Societies of Chemistry (FASC) made a presentation on The Impact of a Chemical Product and its Waste on Society: “Friend or Foe”? She emphasized that plastics, common in households for food and liquid packaging, are non-biodegradable and break down into harmful microplastics. These microplastics are dangerous to sea life and human health, as they can leach toxic substances like antimony trioxide, estrogen-mimicking chemicals, and suspected carcinogens. Prof. Obuzor advised that proper usage of specific types of plastics, however, can mitigate these risks.

Saviour A. Umoren, PhD, Professor/Senior Research Scientist at King Fahd University of Petroleum and Minerals in a livestream discussed Processes Involved from Discovery to Commercialization of Chemical Inventions. He discoursed the vital role of innovations in chemical sciences in addressing global challenges like energy and climate change. Also, emphasis were made on the importance of environmentally friendly energy methods and he mentioned the challenges in translating innovations into commercial products and rounded off by outlining the various stages in the technology development lifecycle, from discovery to commercialization.





Is Commercialization of Innovative Research Really, Really that Important in the Academia? This was the topic addressed by Professor Adelagun Ruth O. A from Federal University Wukari. She highlighted the recent shift in academic activities towards serving the public interest, emphasizing that the true value of academia lies in its impact on public good. Professor Adelagun called for a collaboration between innovation and commercialization, stressing that commercializing research results, rather than merely publishing them to contribute to societal economic growth and improve living standards.

TECHNICAL SESSIONS

The technical sessions were divided into ten subthemes with their respective session organisers and chairs as presented the table below.

Session I: Organic, natural products, pharmaceutical and medicinal chemistry

Session Organiser(s): Sampson D. Umoh, Faith M. Akwi, and Oluwatosin Y. Audu

Session Chair(s): Prof. Gloria U. Obuzor, Dr. Isaac O. Ibanaga, Dr. Christoper S. Archibong, Dr. Sunny C. Nwachukwu, Dr. Emmanuel E. Essien; Dr. Anyanime Akpan

Date: Monday, June 5, 2023 & Tuesday, June 6, 2023

Venue: Nelson Mandela Hall

Time	Abstract ID	Title & Authors
Part A: Monday, June 5, 2023		
16:00 – 16:10	151	<i>Binding study of Ag (I) ions to DNA nucleobases: A mechanistic approach</i> Hector Henry Oyem
16:10 – 16:20	154	<i>A novel pentacyclic triterpenoid from Combretum platypetalum inhibits sterol 14α-demethylase</i> Sampson D. Umoh , Gomotsang Bojase, Ishmael B. Masesane, Runner T. Majinda, Daniel Loeto, Taye B. Demissie

16:20 – 16:30	157	<i>A comprehensive review of Combretum flavonoids and their biological activities: An update between 1990 and 2022</i> Sampson D. Umoh, Gomotsang Bojase, Ishmael B. Masesane, Runner T. Majinda and Daniel Loeto
16:30 – 16:40	162	<i>Synthesis and antifungal activity of 7-hydroxy-4-phenyl-2H-chromen-2-one and analogs</i> Sampson D. Umoh, Gomotsang Bojase, Ishmael B. Masesane, Runner T. Majinda, Daniel Loeto, and Taye B. Demissie
16:40 – 16:50	163	<i>AMDIS, Metab R, and multivariate chemometric tools in the identification of bioactive compounds in Combretum platypetalum subsp. oatesii (Rolfe) Exell (Combretaceae)</i> Sampson D. Umoh, Gomotsang Bojase, Ishmael B. Masesane, Runner T. Majinda and Kwenga F. Sichilongo
16:50 – 17:00	164	<i>Combretum platypetalum subsp. oatesii (Rolfe) Exell (Combretaceae) Extracts display Antimicrobial and Antibiofilm Properties</i> Sampson D. Umoh; Gomotsang Bojase; Ishmael B. Masesane; Runner T. Majinda; Daniel Loeto; Kwanga F. Sichilongo and Mosimanegape Jongman
17:00 – 17:10	165	<i>A review of progress, challenges, and future directions in bioanalytical methods for adducing pharmacokinetic profiles of antimalarial drugs used in Africa</i> Sampson D. Umoh, Kwenga F. Sichilongo, Gomotsang Bojase, Ishmael B. Masesane and Runner T. Majinda
17:10 – 17:20	171	<i>Methoxycoronarin D diastereomers and C-15 epimeric coronarin D from rhizomes of Hedychium coronarium and their stereochemical assignment through NMR and DFT/VCD calculations</i> M. K. Gafar and F. Salim
17:20 – 17:30	172	<i>Labdane diterpenoids from rhizomes of Hedychium coronarium J. Koeing and their α-glucosidase inhibitory activity</i> M. K. Gafar and F. Salim
17:30 – 17:40	192	<i>Phytochemicals analysis and antibacterial activities of stem bark extracts of Vitellaria paradoxa C.F. GAERTA</i> Muhammad, Aminu Dinawa
17:40 – 17:50	200	<i>Endophytic cultural extracts exhibit antibiofilm potency in resistant bacterial pathogens</i> Victorine Lorette Yimgang, Rufin Marie Toghueo Kouipou, Michelle Ines Mbekou Kanko, Fabrice Fekam Boyom
17:50 – 18:00	203	<i>Phytochemistry and gas chromatography-mass spectrometry characterization of antisickling principles of the stem-bark extracts of Dacryodes edulis.</i> Itohowo Okon Akpan, Fatimah Folashade Oladejobi, Ozioma Achugasim, Regina Enyidiya Ogali

Part B: Tuesday, June 6, 2023

7:00 – 7:10	207	<i>Labdane diterpenoids from the rhizomes of Hedychium coronarium J. Koeing and their α-glucosidase inhibitory activity</i> M. K. Gafar and F. Salim
7:10 – 7:20	209	<i>Preparation and characterization of activated carbon using agricultural wastes (corn cobs)</i> Bodunrinde D.O, Odujebe, F.O. and Aderibigbe, S.A.
7:20 – 7:30	215	<i>New chloroquine derivatives: synthesis, characterisation, antiplasmodial, and antioxidant evaluations</i> Maduechesi Ebuka, Efeturi A. Onoabedje , Benjamin E. Ezema, David I. Ugwu, Florence Eze, James A. Ezugwu, Solomon Attah, Enoo Ojarikre, Mercy A. M. Ezeokonkwo, Uchechukwu C. Okoro
7:30 – 7:40	220	<i>Cycloartanes and pentacyclic triterpenes from Awka and Ijebuode propolis and evaluation of their antimicrobial activity</i> Iyen, S.I. , Anyam, J.V., Igoli, J.O. and Tor-Anyiin, T.A.
7:40 – 7:50	228	<i>Surface active and micellization properties of plant-based saponins of Balanite aegyptiaca (L.) Delile and Securidaca longepedunculata Fresen root extracts</i> Raymond Bwano Donatus , Oliver N. Maitera, Lee N. Polite, Peter M. Dass, Ayitou J. Anoklase, Erick D. Walts.
7:50 – 8:00	237	<i>In vitro and in vivo toxicological evaluation of isolated compounds from Aristolochia albida Dutch Roots</i> Bilkisu. A. Adedoyin , Sani Isyaka, Halima Abdulkareem, Adeniran Lateef Ariyo, and Rachid Touzani
8:00 – 8:10	241	<i>Extraction and characterization of some physicochemical properties of Solenostemon rotundifolius (hausa potato) starch</i> Aliyu A. , Muhammad, M.U., Adamu, M.S., Salihu M., and Gayyari, M.S
8:10 – 8:20	244	<i>Secondary metabolites of endophytic Alternaria alternata from leaves of Piliostigma thonningii: phytochemical analyses, antimicrobial and antioxidant activities</i> Ogbiko Cyril , Eboka Chukwuenweniwe Jonathan and Okoye Festus Basden Chiedu
8:20 – 8:30	245	<i>Potential antibacterial and phytochemical screening of stem bark methanol extract of Ficus ingens</i> Gayari, M.S. , Adamu S.M., Salihu M., and Boyi Y. M.
8:30 – 8:40	246	<i>Hematological profile of the methanol leaf extract of Piliostigma thonningii (Fabaceae) in aspirin induced gastric ulceration in rats</i> Ogbiko Cyril and Moore Somtochukwu
8:40 – 8:50	272	<i>Isolation of glycosylated stigmasterol and phytochemical constituents of essential oil from napoleonaea imperialis rind</i> Rachael EKONG , Gloria NDUKWE and Ibiba JACK
8:50 – 9:00	274	<i>Phytochemistry and antioxidants activities of four different solvent extracts of Justicia secunda stem extracts</i> Bako, Bulus , Ushie, O.A., and Malu, S.P.
9:00 – 9:10	277	<i>Synthesis, characterisation, crystal structure of novel scenidazole esters derivatives as potent cancer cell inhibitor</i> Ekpeno Josiah & Hina Siddiqui

9:10 – 9:20	278	<i>Phytochemical constituents and atheroprotective activity of aqueous extract of root bark of Salacia nitida against alcohol-induced hepatic injury in Wistar rats</i> Barine Innocent Nwilo
9:20 – 9:30	280	<i>Phytochemical Screening and in-vitro Antioxidant properties of synthesized Noni seed nanoparticles</i> Nnaoma, I.E. , Ezeibe Ndidi F., Enete, Uchenna O., Joseph, R.C. and Oguebie, R.N.
9:30 – 9:40	287	<i>Sugar profile in syrup of Date Palm (Phoenix dactylifera) Varieties</i> Umoh Augustina
9:40 – 9:50	296	<i>Fatty acid analysis of mixed cereal and nuts</i> Goodnews Samuel and Ephraim David Archibong
9:50 – 10:00	300	<i>Biosynthesis of Ag and TiO₂ nanoparticles and their evaluation for their antibacterial activities</i> Elias Emeka Elemike and Akpeji Bamidele Honesty
10:00 – 12:00		Plenary Lectures & Tea Break
12:15 – 12:25	303	<i>Synthesis of felbinac acid and felbinac ester via PEPPSI palladium Nheterocyclic carbene catalytic system</i> Mansur B. Ibrahim , Umar B. Suleiman and Sani M. Gumel.
12:25 – 12:35	309	<i>Isolation and characterization of compounds from the bioactive antidiabetic fractions of Costus igneus Nak (Costaceae)</i> Ime R. Ekanem , Bassey S. Antia, Emmanuel E. Essien, Paul S. Thomas, Marinella De Leo
12:35 – 12:45	312	<i>Phytochemistry and pharmacology of Anogeissus leiocarpus (DC.) Guill. & Perr. - a review</i> Ifeoluwa Samuel Adedotun , Mohammad Torequl Islam and Olubunmi Atolani
12:45 – 12:55	313	<i>Determination of the actual content of acetaminophen in different brands of paracetamol tablets and syrups</i> A. M. Isah, A. A. Adamu , S. Yahaya and A. U. Muhammad
12:55 – 13:05	317	<i>Parasitic protozoans: Exploring the potential of N,N'-bis[2-(5-bromo-7azabenzimidazol-1-yl)-2-oxoethyl]ethylene-1,3-diamine and its – cyclohexyl-1,2-diamine analogue as TryR and Pf-DHODH inhibitors</i> Kola A. Oluwafemi, Oluwatoba E. Oyeneyin, Damilare D. Babatunde, Eric B. Agbaffa, Jane A. Aigbogun, Oluwakayode O. Odeja, Abiodun V. Emmanuel
13:05 – 13:15	319	<i>Continuous flow drug manufacturing in Africa</i> Faith M. Akwi , Oluwatosin Y. Audu and Paul Watts
13:15 – 13:25	320	<i>Towards the flow synthesis of 4-(1H)-pyridone-based compounds</i> Oluwatosin Y. Audu, Faith M. Akwi , Natasha October and Paul Watts
13:25 – 13:35	329	<i>Bioactive compounds isolated from Vernonia ooecephala growing in Nigeria</i> Esther Baba , Abubakar B. Aliyu and Ogunkemi Risikat Agbeke Iyun
13:35 – 13:45	331	<i>Kinetics and reactions of bismuth, potassium and sodium salicylate complexes</i>

Session II: Inorganic chemistry and catalysis

Session Organiser(s): Thompson Izuagie; Hadiza A. Ari; Abdulbasit A. Aliyu; Usoro A. Ekpoudo

Session Chair(s): Prof. Joshua A. Obaleye, Prof. T. Fasina, Dr. Atim S. Johnson; Dr.

Chrysanthus Andrew **Date:** June 6, 2023

Venue: Shakespear Hall

Time	Abstract ID	Title & Authors
12:15 – 12:25	101	<i>Synthesis, characterization, antimicrobial activity and molecular docking studies of Zn(II) and Cu(II) complexes containing 4-methylbenzoic acid and 2-methylimidazole ligands</i> Hassan K. Busari , Luqmon A. Azeez, Harun K. Aremu, Saheed A. Adewinbi, Sheriff O. Ayinla, Ginikachukwu G. Nnabuike, Emmanuel A. Osuolale, Lukmon A. Jinadu, Joshua A. Obaleye
12:25 – 12:35	103	<i>Metal complexes of mixed ligands 6-mercaptopurine-nicotinamide: synthesis, characterization, DFT, biological studies and molecular docking</i> Ayinla, S.O. , Obaleye, J.A., Rajee. A. O., Yusuf. O.K., Nnabuike, G. G., Busari. H. K.
12:35 – 12:45	243	<i>Catalytic production and optimisation studies of biodiesel from Sclerocarya birrea (Marula) seeds oil using CaO/kaolin as catalyst</i> Idris B., Adamu, M.S., Gayyari, M.S., Salihu, M., Muhammad C., Almustapha, M.N., Hadi B., and Tambuwal, A.D.
12:45 – 12:55	250	<i>Larvicidal activity of N-(5-bromo-2-hydroxylbenzylidene)pyridine-2-amine against mosquito larvae (Anopheles Gambiae)</i> Dueke-Eze, Cordelia U. , Ajiboye, David D., Fasina, Tolulope M. and Kemabonta, Kehinde
12:55 – 13:05	273	<i>Synthesis, characterisation and antimicrobial activity study of quercetin derivatives and their metal (II) complexes</i> Idongesit Nathaniel UFOT , Nizkahyel Simon and Atim Sunday Johnson
13:05 – 13:15	322	Enhanced adsorptive-oxidative desulfurization of dibenzothiophene over Ti-MWW using cumene hydroperoxide as oxidant Xingye Zeng, Adeyemo Adesina, Ping Li, Hanlu Wang, and Rujin Zhou

Session III: Chemical and molecular biology

Session Organiser(s): Diana O. Odey; Okon G. Okon; Emmanuella E. Oyo-Ita; Emmanuel C. Ohaekenyem

Session Chair(s): Prof. Kehinde Kemabonta, Dr. Asabe Mercy Magomya, Dr. Emmanuel A. Kamda

Date: June 6, 2023

Venue: City View Hall

Time	Abstract ID	Title & Authors
7:00 – 7:10	187	<i>“What’s entering my body?!”: Shining light on vaccine classes, constituents, and production processes</i> Owolabi Emmanuel Sokefun and Grace I. Olasehinde
7:10 – 7:20	195	<i>Activity profiling of natural and synthetic SARS-COV-2 inhibitors</i> Emmanuel C. Ohaekenyem and Chukwuebuka T. Onyema

Session IV: Physical, theoretical and computational chemistry

Session Organiser(s): Emmanuel E. Etim; Louis M. Hitler; Collins O. Edet

Session Chair(s): Prof. Alfred I. Onen; Dr. Nkem B. Iroha, Dr. Ekerete Jackson BoEkom

Date: June 6, 2023

Venue: Shakespear Hall

Time	Abstract ID	Title & Authors
9:00 – 9:10	147	<i>Corrosion inhibition potential of two isoxazole derivatives: experimental and theoretical analyses</i> Kufre E. Essien , Ekerete J. BoEkom, Okon E. Okon, Idorenyin O. Ekpenyong, Nnabuk O. Eddy, Anduang O. Odiongenyi
9:10 – 9:20	148	<i>Deactivation of corrosion active sites in S275JR mild steel around sodium sesquicarbonate $\text{Na}_3\text{H}(\text{CO}_3)_2$ heavy deposits in Gamboru, Borno State, Nigeria using piperaquine as alternative inhibitor</i> B. U. Ugi1, V. M. Bassey, P. B. Ashishie, D. O. Nandi and F. B. Ugi
9:20 – 9:30	161	<i>Computational design of polyoxometalate (POM) nanoclusters as a drug-delivery systems for fluorouracil (5FU): An intuition from DFT calculations</i> Daniel Etiese , Lucy E. Afahanam, and Hitler Louis
9:30 – 9:40	170	<i>Computational study on nickel doped encapsulated Mg, K, Ca on pristine C_{24} nanocage for gas sensing applications</i> Adanna D. Nwagu , Hitler Louis, Henry O. Edet, Innocent Benjamin, Vincent N. Osabor, and Adedapo S. Adeyinka

9:40 – 9:50	177	<i>Tailoring of Ti_3C_2 MXene into Ti_3C_2Tx, $Tx = NO$ and alloying with $M = Al, Ga, In, Tl$ into MTi_3C_2NO as electrode materials for super-capacitor devices: A DFT Approach</i> Providence B. Ashishie , Louis Hitler, Offiong E. Offiong
9:50 – 10:00	189	<i>Computational Chemistry: More than just geometry optimization?</i> Hitler Louis
10:00 – 12:00		Plenary Lectures & Tea Break
12:15 – 12:25	190	<i>Inverted bi-layered opal photoanodes for dye sensitised solar cells (DSSCs)</i> Emmanuel Alhassan Kamba, Emmanuel A. Yerima and Emmanuel Ba'aku AttahDaniel
12:25 – 12:35	199	<i>Molecular designs of some explosive compounds</i> Usman Abdulfatai and Adetotro Ahmed
12:35 – 12:45	212	<i>Using machine learning algorithms for the prediction of new antinorovirus agent</i> Oluwakemi Ebenezer, Nkululeko Damoyi and Michael Shapi
12:45 – 12:55	213	<i>Structural and thermochemical investigation of in situ dehydrogenation of piperazine-diborane</i> Aliyu M. Ja'o and Sarah L. Masters
12:55 – 13:05	224	<i>New hydroxybenzylidene based pyridine derivative as efficient inhibitor for N80 steel dissolution in 1 M HCl environment: Experimental and theoretical approach</i> Nkem B. Iroha , Cordelia U. Dueke-Eze
13:05 – 13:15	238	<i>Utilization of avocado (<i>Persea americana</i>) peel pigment as sensitizer for dye-sensitized solar cells</i> Ukeme Donatus Archibong and Ekemini Bassey Ituen
13:15 – 13:25	239	<i>Computational design of polyoxometalate (POM) nanoclusters as a drug-delivery systems for fluorouracil (5FU): An intuition from DFT calculations</i> Daniel Etiese , Lucy E. Afahanam, and Hitler Louis
13:25 – 13:35	249	<i>Low-temperature electrodeposition of samarium using neutral ligandbased ionic liquid</i> C. Andrew and M. Jayakumar
13:35 – 13:45	261	<i>Molecular modeling, DFT studies and biological evaluation of methyl 2,8-dichloro-1,2-dihydroquinoline-3-carboxylate</i> John A. Agwupuye , Hitler Louis, Terkumbur E. Gber and Henry O. Edet
13:45 – 13:55	264	<i>Computational modelling and comparative analysis of a Schiff base ligand and its analog as inhibitors against mild steel corrosion in 1M HCl</i> Chimezie Peter Ozoemena
14:00 – 15:00		Lunck Break

15:00 – 15:10	266	<i>Quantum chemical studies on C₂H₂O isomeric species: astrophysical implications, and comparison of methods</i> J. P. Shinggu , E. E. Etim and A.I. Onen
15:10 – 15:20	282	Therapeutic potentials of B ₁₂ N ₁₂ -X (X = Au, Os, and Pt) nanostructured as effective fluorouracil (5Fu) drug delivery materials Kelechi Chukwuemeka, Hitler Louis, Innocent Benjamin, Peter A. Nyong, Emmanuel U. Ejiofor , Ededet A. Eno, and Amanda-Lee E. Manicum
15:20 – 15:30	306	<i>Citrus sinensis</i> seed extract as an eco-friendly corrosion inhibitor for aluminium in acidic medium Okon U. Abakedi and Akeem O. Anifowose
15:30 – 15:40	307	<i>Inhibitive effect of azo compounds as mild steel corrosion inhibitors in acidic medium: Experimental and quantum chemical studies</i> Okon U. Abakedi and Victor N. Mkpenie
15:40 – 15:50	333	In-silico design and evaluation of the anti-wolbachia potential of some boron-pleuromutilin analogs Fabian Audu Ugbe , Gideon Adamu Shallangwa, Emmanuel Israel Edache

Session V: Materials, polymer, petroleum and industrial chemistry

Session Organiser(s): Moses M. Solomon; Ubong J. Etim; Inime I. Udoh; Godwin J. Udoh

Session Chair(s): Prof. Alfred I. Onen; Prof. Hamza Abba, Dr. Nkem B. Iroha, Dr. Ekerete Jackson BoEkom

Date: June 6, 2023

Venue: Shakespear Hall

Time	Abstract ID	Title & Authors
7:00 – 7:10	150	<i>Microbiological influenced corrosion in concrete environments</i> Ini-Ibehe Nabuk Etim , Junhua Dong, Jie Wei, Chen Nan, Dake Xu, Mingzhong Su, Wei Ke
7:10 – 7:20	168	<i>The effect of engineered polymer based coatings on corrosion control of metal protection in harsh service environment</i> Okoh Frank Ehigiator
7:20 – 7:30	202	<i>Simulations and thermodynamic analysis of a typical multi-feed Crude oil distillation unit</i> Michael Oluwasegun Timothy , Michael Olakunle, Ojong Ojong Elias
7:30 – 7:40	222	Design and simulation of 30,000 tons per year of cumene plant from natural gas field OJONG, Ojong Elias ; EMENIKE, Aguma
7:40 – 7:50	268	<i>Tripartite magnetic montmorillonite nanocomposites for semi on-site removal of bisphenol A from simulated and real industrial effluents</i> Okon OKON , Edu INAM, Ukana AKPABIO

7:50 – 8:00	276	<i>Theoretical modelling of waste tyre pyrolysis for gas production using RSM and ANN</i> Odunayo T. Ore and Festus M. Adebisi
8:00 – 8:10	286	Versatility of cellulose stimuli responsive membranes in the detection of dimethylamine Edwin Shigwenya Madivoli
8:10 – 8:20	288	<i>Thermodynamics and electrochemical studies of chromolaena odorata and newbouldia laevis leaf extracts as corrosion inhibitors for copper in acidic environment</i> Ogofotha G.O. , Onen A.I, Ugye T.J, Abah, A.V
8:20 – 8:30	293	Azobenzene-based main-chain liquid crystalline polymers bearing periodically installed alkyl, polyethylene glycol (PEG), or fluoroalkyl segments and photoisomerization studies Gabriel O. Orodepo ; E. B. Gowd; S. Ramakrishnan
8:30 – 8:40	295	<i>Investigation of local cassava starch as a potential green and sustainable polymer binder for energy storage applications</i> Latifatu Mohammed, Rejart Adomah, Juliet Opoku, Wilson Tamakloe, Mohammed Nafiu Zainudeen, Kofi Ampomah Benefo, Trinity Ama Tagbo, David Doodo-Arhin , Yong Min Lee, Jang Myoun Ko
8:40 – 8:50	314	<i>Adsorption desorption studies of lead ion using acacia gum graft copolymer hydrogel</i> T.O. Esuola
8:50 – 9:00	325	Synthesis and characterization of monomethylol urea and expanded polystyrene waste as copolymer resin for emulsion paint formulation Christopher Sunday Archibong

Session VI: Green, renewable, environmental and sustainable chemistry

Session Organiser(s): Abisola O. Egbedina; Nnanake-Abasi O. Offiong; Thomas O. Magu
Session Chair(s): Prof. Edu J. Inam, Prof. Lami Nnamonu, Dr. Asabe Mercy Magomya, Dr. Emmanuel A. Kamda, Dr. Imeh J. Okop

Date: June 6, 2023
Venue: City View Hall

Time	Abstract ID	Title & Authors
9:00 – 9:10	158	<i>Green energy for environmental sustainability</i> A. Bello, M. Salihu and M.U. Muhammad
9:10 – 9:20	159	<i>Carbon capture and storage (CCS) technologies: an effective approach to climate crisis</i> M.U. Muhammad, M. Salihu and A. Bello
9:20 – 9:30	160	<i>Assesment of polycyclic aromatic hydrocarbon (PAH) in ambient air of oil producing communities of Egbema, Imo State</i> G.C. Anyanwu and C.N. Chinweuba

9:30 – 9:40	166	<i>Concentration, toxicity and health risk assessment of polychlorinated biphenyls (PCBs) in soils from Ugwuaji waste dumpsite in Enugu State, Nigeria</i> Victor C. Eze, Solomon I. Ogbuefi, Chiedozie C. Aralu, Charles I. Aghanwa, Miracle O. Muogbo
9:40 – 9:50	169	<i>Surface water remediation using zinc oxide/plantain peelings nanoparticles within Ogoni creek of Niger Delta, Nigeria</i> J.O. Obielumani
9:50 – 10:00	173	<i>Assessment of radiation levels and potential radiological hazards in soils of Riruwai Mining Area, Northwestern Nigeria</i> Hamza Badamasi, Umar Faruk Hassan, Harami Malgwi Adamu, Nasirudeen Mohammed Baba, Dahiru Ajiya Adamu, Haruna Baba
10:00 – 12:00		Plenary Lectures & Tea Break
12:15 – 12:25	175	<i>Comparative assessment of different brands of fresh and fried vegetable oils used for local snacks preparation</i> Alaekwe, I.O. and Lawal, M.O.
12:25 – 12:35	176	<i>Maximum energy, minimum emissions strategy</i> Nwachukwu C. S.
12:35 – 12:45	198	<i>Surface water quality of Ikpa River Basin: Geospatial approach and physicochemical assessment</i> Clement O. Obadimu, Solomon E. Shaibu, Benjamin O. Shaibu, Edidiong L. Udokang and Eric S. Archibong
12:45 – 12:55	201	<i>Low cost adsorbent to reduce pollutant in wastewater from oil flow station in Owa-Alidinma, Southern Nigeria</i> Umudi Ese Queen
12:55 – 13:05	204	<i>Water quality assessment of selected boreholes in Etinan LGA, Akwa Ibom State, Nigeria</i> Uwem U. Ubong, Akanimo D. Akpan, Ifiok O. Ekwere
13:05 – 13:15	208	<i>Source characterization and health risk assessments of polyaromatic hydrocarbons (PAHs) in mollusk from Ibeno, Nigeria</i> Etesin , Usoro M. and Ogbonna, Iniobong J.
13:15 – 13:25	210	<i>Modelling of heavy metals and hydrocarbons in faunas, Qua-Iboe River, Akwa Ibom State, Nigeria</i> E. E. Ikpe, U.U. Ubong, U.D. Archibong, J.N. Jacob
13:25 – 13:35	216	<i>Groundnut shells biomass a potential feedstock for renewable energy resources via pyrolysis technology</i> Opara Ifeoma Juliet, Ukoha Pius Oziri, Obasi Nnamdi Lawrence, Ekere Nwachukwu
13:35 – 13:45	217	<i>Carcinogenic risk assessment of heavy metals in commonly consumed children biscuit</i> Oketooto G. L., Rasheed-Adeleke, A. A., Olojo, F.O.; Azeez G.
13:45 – 13:55	227	<i>Removal of azo dyes from aqueous solutions using a bioadsorbent from Carica papaya peels</i> A.M. Magomya and U.V. Elisha
14:00 – 15:00		Lunch Break

15:00 – 15:10	240	<i>Removal of methylene blue dye from aqueous solution using chitosan obtained from fish (tilapia) scale</i> Okpaegbe, U.C., Azuaga, T.I. and Midah, M.
15:10 – 15:20	242	<i>Co-digestion of <i>Rothmannia longiflora</i> seed cake with glycerol for biogas production</i> Muhammad M.U., B. Idris, Adamu, M.S., Salihu, M., Gayyari, M.S.
15:20 – 15:30	254	<i>Desalination Technology: a viable option for developing economies</i> Essien. S. Nathaniel, Asukwo, O. Honour, Effiong, I. Abasifreke, Ijoma, A. Joy, Ibuotenang D. Nnamso and Shaibu, E. Solomon
15:30 – 15:40	271	<i>Self-Assembled (1D/2D/2D/3D) kaolinite/chitosan/ZnO/GO nanocomposite with enhanced adsorption-photocatalytic activities for the removal of an organic contaminant</i> Ajibola A. Bayode , Eny Maria Vieira
15:40 – 15:50	275	<i>Photocatalytic degradation of methylene blue using bismuth tungsten</i> Samuel, Humphrey Sam and Kamba, E.A.
15:50 – 16:00	279	<i>Phytochemical evaluation of <i>Terminalia catappa</i> for bioactivity and therapeutic purposes</i> Odega C. A., Fakorede C.O., Anguruwa G.T.
16:00 – 16:10	283	<i>Characterization and applicability of watermelon rind on dye removal in wastewater</i> Olawale Dabo , Deborah Aderibigbe and Abdur-Rahim Giwa
16:10 – 16:20	284	<i>Exploration of modified agrowaste for individual/simultaneous removal of malachite green from water sources and toxicity assessment of treated solution</i> Deborah Aderibigbe , Abdur-Rahim Giwa and Isah Bello
16:20 – 16:30	294	<i>Exploring ways of making self-sustenance of wastewater treatment plants</i> Zikhona Tshemese , Nirmala Deenadayalu
16:30 – 16:40	316	<i>Treatment of cassava wastewater from garri processing industry using groundnut shell as adsorbents</i> Oluwayemi Onawumi , Deborah Salako, A. Abimbola, Cecilia Adegbite, Joseph Olaniyan, Abigael Yusuf and Segun Ojo
16:40 – 16:50	323	<i>Investigation of the biosorption of manganese using tea leave and tea fibre (<i>Camillia sinensis</i>) as adsorbents</i> Undie, David Akpanke and Etim, E. E.
16:50 – 17:00	324	<i>Removal, recovery and reuse of resource in waste streams: challenges, management and solutions</i> Adelagun Ruth Olubukola AJOKE and Emmanuel Christopher Ajiduku
17:00 – 17:10	327	<i>Formulation of herbicides from readily available raw materials using response surface methodology</i> Nsiegbunam, John Chukwuemeka and Abutu David
17:10 – 17:20	334	<i>Quantification and risk assessment of polychlorinated biphenyls (PCBs) and trace metals in water, sediment and fish (<i>Clarias gariepinus</i>) from Eniong River, Nigeria</i> Udombeh, R. B. , Udosen, E. D. and Uwah, E. I.
17:20 – 17:30	335	<i>Health risk assessment of organochlorine pesticides and trace metals in water, sediment and Papyrus from Qua Iboe River, Nigeria</i>

Session VII: Food, agricultural and engineering chemistry

Session Organiser(s): John B. Edet

Session Chair(s): Prof. Lami Nnamonu, Dr. Asabe Mercy Magomya, Dr. Emmanuel A. Kamda, Dr. Imeh J. Okop

Date: June 6, 2023

Venue: City View Hall

Time	Abstract ID	Title & Authors
7:30 – 7:40	186	<i>Comparative analysis of cyanide concentration in processed cassava products</i> Adelagun R. O. A.; Aihkoje F.E. Igbaro O. J.; Fagbemi, J.O.; Berezi E.P.; Ngana O.; M, Garba, M, S. and Osondu G.
7:40 – 7:50	188	Evaluation of level of rancidity of edible oil in some fried snacks food Osondu Godswill
7:50 – 8:00	310	<i>Assessment of levels of chemical preservatives in common beans (<i>Vigna unguiculata</i> (L.) Walp.) in Wukari Local Government Area of Taraba State</i> Oluwabukola Olujide

Session VIII: Analytical and forensic chemistry / Regulatory science

Session Organiser(s): Olatunde Durowoju

Session Chair(s): Prof. Lami Nnamonu, Dr. Asabe Mercy Magomya, Dr. Emmanuel A. Kamda, Dr. Imeh J. Okop

Date: June 6, 2023

Venue: City View Hall

Time	Abstract ID	Title & Authors
7:00 – 7:10	291	<i>Anti –inflammatory effect of methanol, ethylacetate and n – hexane fraction of Combretum obanense stem bark using induced inflammatory rats models</i> Emmanuel. C. S. Onunze, Ifeoma Opara
7:10 – 7:20	298	<i>Occurrence of unmetabolized polycyclic aromatic hydrocarbons in the</i>

			<i>urine of occupationally exposed persons in Port-Harcourt, Nigeria</i> Godswill O. Tesi , Orji J. Orji, Jude C. Ossai, Rotu A. Rotu and Atuboyedia W. Obianime
7:20 – 7:30	305		Determination of heavy metals in smoked ice fish sold in Itam Market, Uyo, Akwa Ibom State Raphael, M.P. , Oruk, A.E., Monday, E.M., Asuquo, A.E.
7:30 – 7:40	315		<i>Evaluation of some chemical constituents of selected energy drinks marketed within Sokoto metropolis</i> A. M. Isah, A. O. Toyeeb, S. Yahaya and A. U. Muhammad
7:40 – 7:50	328		<i>UV-visible spectrophotometric determination of dietary iron in beans, egg, fish, and pork sold in Makurdi, Nigeria</i> Agada F.O. , Itodo A.U., Obinna O.O, Audu S.S, Shaibu B.
7:50 – 8:00	337		<i>Spatial distribution and seasonal variations of the physicochemical and elemental compositions of surface and ground water round Abakaliki Pb-Zn mining site, Southeastern Nigeria</i> N.C. Ani, J.N. Ihedioha, and H. O. Abugu

Session IX: Chemistry education

Session Organiser(s): Anyanime Akpan; Felicia I. Umanah; Aniefiok Udoh; Akwaowo Inyangudoh
Session Chair(s): Dr. Anyanime Akpan, Dr. Isaac O. Ibanaga, Dr. Christoper S. Archibong, Dr. Sunny C. Nwachukwu, Dr. Emmanuel E. Essien

Date: June 6, 2023

Venue: Nelson Mandela Hall

Time	Abstract ID	Title & Authors
13:45 – 13:55	111	Green chemistry approach: an innovative strategy for making the teaching of <i>Le Chatelier's</i> principle sustainable UMANAH, F. I. and SUNDAY, E. S.
13:55 – 14:05	214	Innovative strategy for teaching redox reaction using plantain peels extraction Usoro Okoko and Felicia Imeh Umanah
14:05 – 14:15	269	<i>Innovation in chemical sciences: from discovery to commercialization</i> Victor Ade Ekpennyong
14:15 – 14:25	321	<i>Digital teaching and learning in chemistry education: slack teaching tool and academic performance of chemistry education undergraduates</i> Chinda, Worokwu & Etokeren, Inibehe Sunday

Session X: Nanochemistry and technology

Session Organiser(s): Solomon E. Shaibu

Session Chair(s): Pro. Joshua A. Obaleye, Prof. T. Fasina, Dr. Atim S. Johnson, Dr. Chrysanthus Andrew

Date: June 6, 2023

Venue: Lugard Terrace Hall

Time	Abstract ID	Title & Authors
13:15 – 13:25	102	<i>Biofabrication, characterization, and biological activities of silver and iron nanoparticles using Musa paradisiaca peels extract</i> Ekpo, Patricia; Johnson, Atim; Ituen, Ekemini; Anweting, Idongesit and Nisar, Shazia
13:25 – 13:35	152	<i>Efficiency of green synthesised carbon nanotubes from Moringa Oleifera leaf extract as potential toxic metals in water adsorbent</i> Mansur Yahaya Ibrahim, and Zara'u Salihu
13:35 – 13:45	230	<i>Using a ternary nanofluid under a linear temperature wall profile</i> Ibrahim A Fetuga, Olabode T Olakoyejo., Sogo M Abolarin, Adekunle O Adelaja, Daniel E Ewim, Gbeminiyi M Sobomawo, Joshua K Gbegudu, Adrian U Onwuegbusi
13:45 – 13:55	252	<i>Detection of cyanogen (NCCN) on Ga, In, and Tl-doped aluminium nitride (AlN) nanotube</i> Obinna C. Ngana, Hitler Louis, Terkumbur E. Gber, Gideon E. Mathias, Ruth O. Adelagun, and Adedapo S. Adeyinka
14:00 – 15:00		Lunck Break
15:00 – 15:10	255	<i>Structure, morphology, and thermal characteristics of the natural fiber/polymer composites from waste pineapple leaf fibers</i> Zikhona TYWABI-NGEVA
15:10 – 15:20	256	<i>Green and facile synthesis and characterization of iron oxide nanopowders with high surface area for remediation of waste water</i> Bamidele M. Amos-Tautua, Samuel O. Oluwafemi and Sandile P. Songca
15:20 – 15:30	300	<i>Biosynthesis of Ag and TiO₂ nanoparticles and their evaluation for their antibacterial activities</i> Elias Emeka Elemike and Akpeji Bamidele Honesty
15:30 – 15:40	308	<i>Synthesis and application of carbon dots-ZnO-Fe₃O₄ nanocomposites incorporated into ceramic water filter for water purification</i> Doris Fovwe Ogeleka and Mildred Chukwuedum Emegha
15:40 – 15:50	311	<i>Green synthesis of copper oxide nanoparticles and its efficiency in degradation of rifampicin antibiotic</i> <u>Nzilu D. M.</u> , Madivoli E. S., Makhanu D. S., Wanakai S. I. and Kareru P. G.

Early Career Scientist and Students Workshop

The early career programme commenced with a virtual pre-workshop session on May 30, 2023 by Prof. Nsikak U. Benson of Institut des Sciences Analytiques, Université Claude Bernard Lyon 1, Villeurbanne, France on the theme: Climbing the Science Career Ladder: Initiation, Propagation, Impact and Legacy. He gave a detailed framework for climbing the science career ladder in the 21st century, outlining the process in four stages: initiation, propagation, impact, and legacy. He also emphasized critical components like education, mentoring, collaboration, and public engagement, concluding that dedication and hard work as vital recipe for a successful scientific career.



Also, Mr. Collins O. Edet, of the Universiti Malaysia Perlis made a presentation on Navigating Academic Publishing: Best Practices for Visibility and Success to provide perspective and guidance to budding early career scientist. This virtual session was wrapped up with interactive Q&A session.

On-site presentation took place June 6, 2023 prior to the start of the symposium. Opening Remarks/Brief Presentation about IUPAC was delivered by Dr. Oluseun E. Popoola (Member, IUPAC Division VI – Chemistry and the Environment).

This ushered the first presentation by Dr. Wisdom P. Enang, CEO Zzy Engineering Services on the topic: Soft Skills to Navigate Your Way to Industry after Graduation. This was targeted to stimulate the interest of early scientist to acquire and develop soft skills that will complement their degree after graduation.



Dr. Moses G. Udoisoh, of Gamma Data Analytics delivered an incisive lecture on Data Analytics & AI Tools for Researchers. This was equally followed by Q&A session and a short break.

Prior to the Breakout Session on Brainstorming for Innovative Project Ideas, the part two of the presentation was delivered in quick succession by Dr. Emmanuel E. Etim, Federal University Wukari, themed: Successful Grants and Scholarships Applications: Examining the Key Factors and Dr. Nnanake-Abasi O. Offiong, Topfaith University, titled: Fostering Collaborations that Work respectively.



The best poster presentation award was given to poster presentation by Bayode, Ajibola Abiodun, entitled "Self-assembled (1D/2D/2D/3D) kaolinite/chitosan/ZnO/GO nanocomposite with enhanced adsorption-photocatalytic activities for the removal of an organic contaminant" followed by poster presentation by Jemima Adwoa Misszento, on "(3 + 3) Cycloaddition reactions of oxyallyl cations with nitrones: A DFT mechanistic study", has earned you the prestigious Poster Presentation Award (2nd Position). The third positions went to both Nsiegbunam John Chukwuemeka, poster presentation entitled "Formulation of herbicides from readily available raw materials using response surface methodology" and Edidiong L. Udokang, with poster presentation titled "Biogenic synthesis and antimicrobial activities of silver-kaolinite nanocomposite using aqueous *Nymphaea lotus* extract". Group photograph was taken to close out the session.



CONCLUSION

The needed stimuli for transition of research findings to commercialisation was delivered from the Symposium which was rounded off by the ACS Nigeria Chapter Annual General Meeting. The LOC Chair, Dr. Offiong closed the on-site programme with appreciation to all the participants especially the keynote/plenary speakers and the sponsors with a desire that participants will put to good use information gathered from the Symposium.

Financial Report

SUMMARY OF INCOME AND EXPENDITURE FOR THE 8TH ANNUAL SYMPOSIUM OF THE AMERICAN CHEMICAL SOCIETY (ACS) NIGERIA CHAPTER

S/N	SOURCE OF INCOME	AMOUNT IN DOLLARS	NAIRA EQUIVALENT
1.	ACS Nigeria Chapter (EXCO)		600,000
2.	Bayer Crop Science (Bayer Nigeria Ltd)	10,000 USD	4,600,000 @ 460 NGN/USD
3.	ACS Global Innovation Grant	5,000 USD	3,650,000 @ 730 NGN/USD
4.	IUPAC	4,165 USD	3,040,450 @730NGN/USD
5.	ACS Corporate Associates International Chapter Grant	1,000 USD	730,000 @730NGN/USD
6.	Registration (i) Students 87 (ii) Members (6) (iii) Members & non-members (23) (iv) Members& non-members (18) (v) Accompanying persons (2)		609,000 @ 7,000 per student 90,000 @ 15,000 each 460,000 @ 20,000 each 450,000 @ 25,000 each 10,000 @ 5,000 each
			1,619,000
7.	The advert, Goodwill message & Donation (i) Advert by Nigerian Women in STEM (NWi STEM) (ii) Goodwill message (iii) Donation by one of the awardees		50, 000 25,000 50,000
			125,000
	TOTAL	20,165 USD	14, 364,450

EXPENDITURE

S/N	ITEM	AMOUNT (₦)
1.	Initial Expenses	
	(i) Part-payment for Reservation of venue	100,000
	(ii) 1-Year subscription to Zoom for online meetings and virtual sessions	164,502
	(iii) Online payment platform (Paystack) via ACS Website for registration	50,000
	iv) Advert on CSN Annual Conference Programme	50,000
	(v) Facebook Advert	25,000

	(vi) Design and printing of A4-size flyers distributed alongside sponsorship/invitation letters	16,000
	(vii) Design and printing of customized letterheads and envelopes for marketing communications	16,500
	(viii) Housing and Accommodations arrangements firmed up transportation	10,000
	(ix) Logistics (data/airtime for 11 months @ 10,000 per month	110,000
	(x) Fuel for power generation @ 5,000 for 11 months	55,000
	(xi) Two rims of paper @ 5,500	11,000
	(xii) Two printer toner cartridges @ 12,0	25,000
2.	Programme Book	580,000
3.	Screen	800,000
4.	Bags	500,000
5.	Live streaming for the virtual interface	130,000
6.	Venue (4 Halls) and 9 rooms	1,579,800
7.	Flights booked (return) (i) Accra/LOS (Jemima –sponsored early career) (ii) LOS/UYO (Dr. Enang) (iii) LOS/UYO (Jemima) (iv) ABJ/UYO (Prof. Abba)	690,000
8.	Zoom Webinar Add-in Subscription	80,000
9.	MTN Router	25,000
10.	Dr. Goodnews Samuel (LOC Meeting of May 1, 2023)	20,000
11.	Transport to follow-up sponsorship invitation letters (given to students	10,000
12.	Secretariat (car repair only)	125,000
13.	Entertainment during LOC Meeting on May 14, 2023	19,650
14.	Disbursement of Award Funds to 5 Nigerian Early Career Scientists @ NGN50,000 each	250,000
15.	8 award plaques @ NGN18,000, plus 1 @ 25K (emergency production for Shell)	151,000
16.	Graphics design for updated flyers and content for social media posts	20,000
17.	Data subscription for Social Media Team + Facebook Ad	40,000
18.	2 rims of paper	12,000
19.	2 toner cartridges	44,000
20.	Outsourced printing of 2 copies of draft programme	20,000
21.	Flights booked (return) (i) Johannesburg/LOS (Maria) (ii) LOS/UYO (Maria) (iii) LOS/UYO (Dr. Popoola) (+50k for change in flight schedule for Prof. Maria)	1,028,800
22.	Name tags, T-shirts, roll-up banners (1), printing of certificates, meal tickets, red carpet,	365,000
23.	Poster Boards (25K x 3)	75,000

24.	Media and News Promotion	305,000
25.	Food, Refreshments and Entertainment	1,000,000
26.	Honorarium for speakers: 1. Prof. Gloria O. Obuzor (120,000) 2. Dr. Ronke Oloidi (Rep. Dr. Oluseun Popoola) (50,000) 3. Prof. Hamza Abba (40,000) 4. Dr. Moses Udoisoh (40,000) 5. Dr. Emmanuel Etim (30,000) 6. Prof. Ruth Adelagun (100,000) 7. Prof. Nsikak U. Benson (50,000) 8. Mr Collins Edet (Not Paid) 9. Dr Nnanake-Abasi O. Offiong (Not paid) Notes: 1. Speakers have been paid honoraria based on the availability of funds. 2. Prof. Edu Inam contributed NGN50,000 to Prof. Benson. This is not captured in the figures.	430,000
27.	The hiring of 2 cameramen for 2 days and the production of the e-photo collection	100,000
28.	Engagement of a dedicated graphics designer	70,000
29.	Engagement of a dedicated social media team for 10 days countdown + data subscription (5 members)	50,000
30.	Hiring of Printer, Paper, Ink, etc. for the registration desk	50,000
31.	Registration desk personnel (2 x 15k)	30,000
32.	Ushers (10 x 11K)	110,000
33.	Security	100,000
34.	PA System	100,000
35.	100 USD for 3 FACES awardees who presented virtually + posting their symposium materials via courier service Notes: 1. Processing of wire transfer costs 26 USD as bank charge + VAT. 2. 1 USD in the black market is 800 NGN. 3. 35 USD Offshore charges for each transaction. 4. Total money needed to process is NGN386,400. 5. Shipment will cost approx. NGN 28,265 x 3 =. Total: NGN84,795	471,195
36.	Transportation (LOC transportation, transportation of guests/ speakers –airport/hotel/LOGISTICS/ Logistics for Meeting of Technical Committee on May 5, 2023	634,000
37.	Ball pen (3 packs), invitation cards, additional roll-up banners (3), design and printing of back-drop for the red carpet, logistics	52,884
38.	Procurement of an additional 10 souvenir bag	25,000
39.	Payment for 8 additional plates of food for participants	11,500
40.	Accommodation and Meals for 2 Speakers (Dr Moses Udoisoh and Dr Emmanuel Etim) for Early Career Workshop.	78,000
41.	Accommodation for 4 student volunteers for 2 nights for Secretariat Support	20,000

42.	Food for LOC Meeting on May 20, 2023	17,000
43.	Food for LOC Meeting on June 3, 2023 (No receipt)	12,000
44.	Food for Secretariat members on the eve of the conference	12,500
45.	Fueling cost prior to the hiring of daily transport service	95,200
46.	Phone airtime and data cost for 3 months	130,000
.	TOTAL EXPENDITURE	11,112,531
	TOTAL AMOUNT RECEIVED	10, 600, 000
	OUTSTANDING	512,531
	TOTAL INCOME	14,364,450
	INCOME LESS EXPENDITURE	3,251,919

Dr. Atim S. Johnson

Chairperson, Finance Sub-committee

APPENDIX 1

List of participants

AMERICAN CHEMICAL SOCIETY (ACS)

NIGERIA INTERNATIONAL CHEMICAL SCIENCES CHAPTER

8TH ANNUAL SYMPOSIUM

June 4 - 8, 2023 || Wathbridge Hotel & Suites, Uyo, Nigeria

Attendance/Registration Form

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks./Annu T.
1	DR UMUDI ESE QUEEN	UNIVERSITY DELTA, AIGBOE	DR	09057870967	unidel.edun@unidel.edu.ng	✓
2	Rachael Hugh Eke	UNIVERSITY DELTA, AIGBOE	PhD	08164730812	hugh.rachael@gmail.com	✓
3	Dr. Thesmachi Kalagbe	Kwara State Univ.	Ph.D	08033078873	thesmachi.kalagbe@gmail.com	✓
4	ELFETOY, EMMANUEL ANGELO	AKWA IBOM STATE UNIV.	STUDENT	0828552504	elfetoym@gmail.com	✓
5	Hanson, Goodnews Ito	Akwa Ibom state uni	STUDENT	0701553387	godnews.hanson@gmail.com	✓
6	Echobackwey Daniel Eke	AKSU	STUDENT	08130020873	echobackwey.daniel@gmail.com	✓
7	Sami, Abasiyake Edeem	AKSU	STUDENT	07052171933	abasiyake.sami@gmail.com	✓
8	Ukpe, Ekechere Jeremiah	AKSU	STUDENT	08124605729	ukpe.ekechere@gmail.com	✓
9	Sunday, Ekechere Solomon	AKSU	STUDENT	08166499648	ekesolomon35@gmail.com	✓
10	Ukpe, Ekechere Ifeok	AKSU	STUDENT	08059011150	ekpeifeok@gmail.com	✓
11	NIKEREUEM, Veronica edet	AKSU	STUDENT	09034653562	nikereuem.veronica@gmail.com	✓
12	SAMUEL HUMPHREY SAM	FUWUKARI	STUDENT	0810693374	humphrey.sam@gmail.com	✓
13	Nsiekubun, John	FUWUKARI	STUDENT	0907142056	johnnsiekubun@gmail.com	✓
14	UMPH AUGUSTINA M	FUWUKARI	STUDENT	08130787306	umph.augustina@gmail.com	✓
15	LINDIE DAVID AKPANKE	FUWUKARI	STUDENT	08146723428	lindie.david@gmail.com	✓
16	SHINGUN JOHN PAUL	FUWUKARI	STUDENT	0905499690	johnshingun@gmail.com	✓
17	JAPHET TIMOTHY	FUWUKARI	STUDENT	09039627937	timothy.japhet@gmail.com	✓
18	ELISHA VICTOR UTEN	FUWUKARI	STUDENT	09138719774	elishavictor@gmail.com	✓
19	ABAH ABRAHAM VICTOR	FUWUKARI	STUDENT	08132244579	abrahamvictor@gmail.com	✓
20	GABRIEL MISSION SAKU	FUWUKARI	STUDENT	0905845741	mission.saku@gmail.com	✓

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks.
1	Sunday Goodnews Idemest	Akwa Ibom state University	STUDENT	08075128749	godnews.sunday@gmail.com	M.C ✓
2	ANPANDU, EMMANUEL IME	AKSU	STUDENT	07016466837	anpandu.emmanuel@gmail.com	M.C ✓
3	DR HECTOR HENRY OYEM	UNIMET, Aigbo, Delta	Academic staff	08160291169	hectorhenryoyem@gmail.com	M.C ✓
4	DR OPARA IFOMA JULIET	FUWUKARI	Academic staff	08162791022	oparaifoma@gmail.com	M.C ✓
5	DR ASABE M MAGDMTA	FUWUKARI	Academic staff	08035873971	asabe.m@gmail.com	M.C ✓
6	MIR RAYMOND DONATUS	FUWUKARI	Academic staff	08030410755	mir.raymond@gmail.com	M.C ✓
7	PROF. A.I ONEN	FUWUKARI	Academic staff	07032819177	onen.a@gmail.com	M.C ✓
8	DR CRISTANTHUS ANDREW	FUWUKARI	Academic staff	07035070580	cristanthus.a@gmail.com	M.C ✓
9	PROF. RUTH ADELAGUN	FUWUKARI	GUEST SPEAKER	08065709024	ruthadelagun@gmail.com	M.C ✓
10	DR EMMANUEL E. ETIM	FUWUKARI	LOC	09099192231	emmanuel.etim@gmail.com	M.C ✓
11	OGOFOTHA GODWIN OGHENEMENO	FUWUKARI	STUDENT	08060201796	godwin.oghotha@gmail.com	M.C ✓
12	Archibong, Dawemi Akis	University of Uyo	STUDENT	09059412957	archibong.dawemi@gmail.com	M.C ✓
13	ESSIEN, Nathaniel	University of Uyo	STUDENT	09034740576	essen.nathaniel@gmail.com	M.C ✓
14	AWAK, Mbatidem	University of Uyo	STUDENT	08145654541	awak.mbatidem@gmail.com	M.C ✓
15	Jonathan, Promise Essien	University of Uyo	STUDENT		jonathan.promise@gmail.com	M.C ✓
16	Nyong Udruk Livinus	University of Uyo	STUDENT	08148815721	nyong.udruk@gmail.com	M.C ✓
17	Abasi-Ifeke Mfon Eyo	University of Uyo	STUDENT		abasiifeke.mfon@gmail.com	M.C ✓
18	Ekechere, Joseph	University of Uyo	STUDENT	07030764777	ekechere.joseph@gmail.com	M.C ✓
19	Efiong, Abasi-Ifeke	University of Uyo	STUDENT	09066257014	efiong.abasiifeke@gmail.com	M.C ✓
20	Imo, Imo-Frank	University of Uyo	STUDENT		imo.imo@gmail.com	M.C ✓
21	Okon, Okon Edeem	University of Uyo	STUDENT	08067487374	okon.okon@gmail.com	M.C ✓
22	Dr. Segun Samson	LAUTECH	STUDENT	08166581090	segun.samson@gmail.com	M.C ✓
23	Joseph, Olaniran	LAUTECH	STUDENT	08140052739	joseph.oladiran@gmail.com	M.C ✓
24	Oyedibu Boluwatife	LAUTECH	STUDENT	08109352522	oyedibu.boluwatife@gmail.com	M.C ✓
25	Babalola Babalola	LAUTECH	STUDENT	08078675368	babalola.babalola@gmail.com	M.C ✓
26	Iheme Ebenezer Chima MEREH	Niger Delta University	STUDENT	09072722927	iheme.ebenezer@gmail.com	M.C ✓
27	Cynthia Chinezah Ohoro	UNIVERSITY OF UYO	STUDENT	09035156446	cynthia.ohoro@gmail.com	M.C ✓
28	Olaniran, Jonathan Payomam	UNIVERSITY OF UYO	STUDENT	09028875633	olaniran.jonathan@gmail.com	M.C ✓
29	Toffan Grace Edinam	UNIVERSITY OF UYO	STUDENT	09022756042	toffan.grace@gmail.com	M.C ✓
30	Oworo Faith Bob	UNIVERSITY OF UYO	STUDENT	07042204156	oworo.faith@gmail.com	M.C ✓
31	Ihezie Wisdom Sapuru	UNIVERSITY OF UYO	STUDENT	07082577112	ihezie.wisdom@gmail.com	M.C ✓
32	Echendu Nkemjika Israel	UNIVERSITY OF UYO	STUDENT	08131239320	echendu.nkemjika@gmail.com	M.C ✓

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks.
1	Lilian Chinyere Orban	University of Ibadan	Student	07031812337	lilianchinyere@yahoo.com	✓
2	Raji, Mohammed	National Open University	Student	07684746774	07684746774@gmail.com	✓
3	Dr. Usoro M. E. Egin	AKSU	Lecturer	08066140406	usoroemmanuel@gmail.com	✓
4	DR. ITOH O. AKPAN	AKSU	Lecturer	08057121110	akpano@aksu.edu.ng	✓
5	George Akpan Robert	AKSU	Student	0813461461	spandanbert@yahoo.com	✓
6	Prof. B. S. Anib	UNILYO	Lecturer	0803780099	brunsonanib@yahoo.com	✓
7	Odunwale Essin	UNILYO	Student	08106974589	mailmeodunwale@gmail.com	✓
8	Ime Roten Eke	UNILYO	Student	0818462832	imedanroten@yahoo.com	✓
9	DR. NWILOH, BARINE I.	UNN	Lecturer	0803706867	barine.nwilohe@unn.edu.ng	✓
10	Umar Ibrahim Indagawa	ABU Zaria	Student	09030380370	Abshah	✓
11	Esther Babg	ABU Zaria	Student	08117887001	Estherbabg402@gmail.com	✓
12	Abubakar Babanda Aliyu	ABU Zaria	Lecturer	09098655974	Aliyubabanda@gmail.com	✓
13	Dr. Eugene Joshua	FCECT	Lecturer	0703130624	eugenejoshua@gmail.com	✓
14	Edem Umoren Emmanuel	AKSU	Student	08022671231		✓
15	Offor, Cecilia Anthony	NDU	Student	09165155714	offorcecilia@yahoo.com	✓
16	ASUQUO, AKANIMO ESTON	Atwa Poly	Student	0705581586	akanimoasqu@yahoo.com	✓
17	Dr. E. ADIUN'S E. IKPE	AKSU	Lecturer	08028881022	ikpeadiunse@yahoo.com	✓
18	Heller Louis	University of Calabar	Lecturer	08167748669	hellersmurray@gmail.com	✓
19	John Akwagboke Agwupye	Unical	Student	0910056340	agwupyejohn@yahoo.com	✓
20	Eke, Daniel	University of Calabar	Student	07084854194	danieloke@yahoo.com	✓
21	Nwagwu, Arlene Dora	University of Calabar	Student	08106749957	dorannwagwu@yahoo.com	✓
22	Scamper D. Umah	Federal Univ. of Makurdi	Lecturer	08078221810		✓
23	Mondaye Esther Mondaye	Akwu Ikrom State Poly	Student	08051525665	Mondayeesther@yahoo.com	✓
24	NSIUEK, Eke	Uniluo	Student	08067232	nsiuek@yahoo.com	✓
25	Dr. Okon Akaka	Univ. of Uyo	Lecturer	0802528104	okonakaka@yahoo.com	✓
26	Dr. Oke Oluwa Tinini	OAU	Lecturer	08064251133	oluwatins@yahoo.com	✓
27	ADDO, CHANGHA ADDO	UNILYO	Student	0815737791	changaaddo@yahoo.com	✓
28	Effiong, Abasiifreke Imo	Uniluo	Student	090783550	abasiifreke@yahoo.com	✓

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks.
21	OSUNDU Godswill	FULBARKI	STUDENT	09037129065		✓
22	Babatunde A. J. Akola	Redeemer's University	Lecturer	08115675782	akolabatunde@yahoo.com	✓
23	Ekerete Jackson Bakon	UNILYO	Lecturer	0802627649	ekerebakon@yahoo.com	✓
24	PROF LAMI NNAMONU	FED UNIV OF AGRIC MOK	FA	08054475757	lannamonn@yahoo.com	✓
25	ANERIBIGBE SONDEE, A	NATIONAL OPEN UNIV	C.F.A	08060767188	aneriabigbe@yahoo.com	✓
26	Jemima Adewale Mustapha	Kwame Nkrumah Univ. of Science	Student	0816133228	jemimaadewale@yahoo.com	✓
27	Olanipe, Dada Sam	Landed Oshosho	Student	0903724439	olanipeoladada@yahoo.com	✓
28	Marika Potgieter	University of Pretoria	Speaker	08103622571	olaseunpapoola@yahoo.com	✓
29	Dr. O. E. Papoola (Dr. Adeniyi Adigun)	Yabatech, Lagos	Speaker	08103622571	olaseunpapoola@yahoo.com	✓
30	Olumuyiwa David	UNILYO	Participant	08103622571	olaseunpapoola@yahoo.com	✓
31	Damini Mary Igwe			09154058589	marydamini@yahoo.com	✓
32	Emmanuel Thoma			07044967673	emmanuelthoma@yahoo.com	✓
33	Angela Nwankwili			09068737476	zibafunmi@yahoo.com	✓
34	Eiga Peace O.			08123670007	peaceoig@yahoo.com	✓
35	Chinyere Chiemela			08122613235	chinyerelch@yahoo.com	✓
36	Anne Chidinma			08167596257	aninchidinma@yahoo.com	✓
37	Emmanuel O. Okeke	UNILYO		08167596257	emmanueloke@yahoo.com	✓
38	Dr. Ubong Uwer	AKSU	Lecturer	07063717160	drubonguwer@yahoo.com	✓
39	Ojeme Precious	University of Nigeria	Student	08020957905	ojemeprecious@yahoo.com	✓
40	Osoko Chizaram	University of Nigeria	Student	09047488587	osokochizaram@yahoo.com	✓
41	Ezra Uzochukwu Emmanuel	University of Nigeria	Student	08169559670	ezrauzochukwu@yahoo.com	✓
42	Oyekeleoluwa Seena Chisimdi	University of Nigeria	Student	08146000520	seenaoyekeleoluwa@yahoo.com	✓
43	KAY STEPHEN	University of Nigeria	Student	08106712326	kaystephen@yahoo.com	✓
44	Okeke Chizaram	University of Nigeria	Student	08106712326	chizaramokeke@yahoo.com	✓
45	Assi Sylvia	University of Nigeria	Student	08106712326	assisylvia@yahoo.com	✓
46	Prof. Nwankwili David	University of Nigeria	Student	08106712326	profnwankwili@yahoo.com	✓
47	Uche Cosmas Chigojin	University of Nigeria	Student	08106712326	uche.cosmas@yahoo.com	✓
48	Amaka Olistewere E	University of Nigeria	Student	08106712326	amakaolistewere@yahoo.com	✓
49	Desmond Amachi	FUAM	Student	08106712326	desmondamachi@yahoo.com	✓
50	Adah Victoria Itoha			07053678960	adahiito@yahoo.com	✓
51	Ali Dabaguse Perpetual			0816363745	dabaguseali@yahoo.com	✓

LOC

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks.
1	Dr. Anyanwa Atpan	AKSU	Ph.D	08023319141	anyanwa@akhu.com	✓
2	David David Yakubu	FUAM	Student		derudayakubu@gmail.com	✓
3	Odah Elizabeth	FUAM	Student		elizabethodah@gmail.com	✓
4	Idahyom Enyam Jubilee	FUAM	Student		eryuanyubilee@gmail.com	✓
5	Tachom Gough Joseph	FUAM	Student		josephgough@gmail.com	✓
6	Ukwa Patricia Michael	Uniuyo	Student	07068015181		✓
7	Usman Abdulhadi	Nig. Army university	Ph.D	08062996142		✓
8	Dr. Omotola Fayomi	FUAM	Ph.D	08038291810	omotola.fayomi@gmail.com	✓
9	Dr. Cudde's Bucka-Ge	Unilag	Member	08037131202	Cudde-cudde@unilag.edu	✓
10	Mutapke Salter	UDHS	Student	08067731661	mutapke.salter@gmail.com	✓
11	Dr. M. U. Muhammed	SSCOE	Non-member	08021822335		✓
12	Buhan Ides	SSCOE	Non-member	08031844820		✓
13	Mary Idem Atpan	Uniuyo	Member	08023317125	maryidem@uniuyo.com	✓
14	Dr. Bamidele Amos-Tautua	NDU	Member	0703987566	bamidele.amos@gmail.com	✓
15	Melody Obereke	University of Iorin		08039209521	melodyobereke@gmail.com	✓
16	Dr. Anindang Otis Odungenn	AKSU	Non-member	08073231170	anindangot@gmail.com	✓
17	Emmanuel Paul Abo	University of Lagos	Member	0701872450	emmanuel.paul@gmail.com	✓
18	Dr. M. U. Barony	Uniuyo	Member	08036687761	mbarony@uniuyo.com	✓
19	Dr. G. G. G. G.	SISR/GTC, Abuja	Non-member	0818530202	gugg@gmail.com	✓
20	Peter Udensele	AKSU	Student	08160960409		✓
21	USORO OKOKO	I.C.S.S. Nkoko	Teacher	08094660000	usoro.okoko@gmail.com	✓
22	Dr. Chimezie Chimezie	Uniuyo	Ph.D	08064011551	chimeziechimezie@gmail.com	✓
23	Neema Amos Atpan	Uniuyo	Ph.D	08027657264	neema.amos@gmail.com	✓
24	Rosemary Udonmbe			08027657264		✓
25	Yusuf Maiman	Unilorin	M.Sc	08105057903	yusufmaiman@gmail.com	✓
26	Amos Chimezie Atpan	Unilorin	Ph.D	0803795487	amoschimezie@gmail.com	✓
27	Geoffrey M. M. M.	NDU	Student	08057164735	geoffrey.m@gmail.com	✓
28	M. S. Gayari	SSCOE	Student	0806773661		✓
29	Dr. G. G. G. G.	TPNO	Member	0706181780		✓
30	Dr. Genevieve Okok	Exxonmobil	Ph.D	08055457123	genevieve.okok@gmail.com	✓
31	JOSEPH RICH - C	TPNO	Student	08118793349	josephrich@gmail.com	✓
32	Dr. Nkem B. Iroha	FUO	Non-member	07038045286	nkemiroha@yahoo.com	✓

Page 6 of 11

S/N	Name	Affiliation	Position	Phone	E-mail	Rmks.
1	Dr. I. Udousoro	Uniuyo		08024416551		
2	Dr. E. E. E.			08036687761		
3	Borisana Amos Atpan			08102391117		
4	Dr. Donald Nyele	University of Iorin		08039209521	donaldnye@gmail.com	
5	Dr. Inni Umoh	Uniuyo		08023157520	inni.umoh@yahoo.com	
6	Dr. Sani Akintunde			08023157520	saniaakintunde@gmail.com	
7	Idemak Nathaniel	Uniuyo		08023157520	idemaknathaniel@gmail.com	
8	M. J. M. M.	Fed Poly. Akure		08023157520	mjm@gmail.com	
9	Bessy Victoria Amideke	Uniuyo		08023157520	bessyvictoria@gmail.com	
10	Israel Alimoh	Straitfordnews		07064711902	israelalimoh@yahoo.com	
11	Marigie Lydia Godwin	Uniuyo		08023157520	marigiegodwin@gmail.com	
12	Udoerke Madfred Akereke	Uniuyo		08023157520	udoerkeakereke@gmail.com	
13	Alkabo Akereke	Champion		08023157520	alkaboakereke@gmail.com	
14	Stephen David Jack	Uniuyo		08023157520	stephendavidjack@gmail.com	
15	Daniel Umakhan	Uniuyo		08023157520	danielumakhan@gmail.com	
16	Anthony Oparali			08023157520	anthonyoparali@yahoo.com	
17	Udo, Danielle Sylvester	Uniuyo		0708737283	danielluod090@gmail.com	
18	Dr. Wisdom Enang					Abstract
19	Ugbo, Onofre Oton	AKSU		0804026655	onofreugbo@gmail.com	
20	Adeniran Adeniran	Uniuyo		08157371071	adeniranadeniran@gmail.com	
21	Udo, B. B.	SAN		08063103311	udob@gmail.com	
22	Dr. Hon. E. Udo	Uniuyo		08136291804	etorudodo@uniuyo.com	

Page 7 of 11

APPENDIX 2

Samples of Certificate of Presentation and link

Certificate of presentation

<https://t.ly/zepe>



APPENDIX 3

Samples of Receipts and link

https://drive.google.com/drive/folders/11KmwKn3uxx_zTUbWVFBFeebj4EcsueDe?usp=drive_link