



AHMADU BELLO UNIVERSITY,
ZARIA - NIGERIA

Directorate of Research and Innovation

RESEARCH NEWSLETTER

Celebrating Research Excellence

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From the Vice-Chancellor's Desk...



In the last twelve months, Ahmadu Bello University has achieved giant strides in Research and Innovation, including its success as the best public university in the country with the release of the Times Higher Education (THE) World University Rankings for 2025 as well as successfully registering several patents and securing numerous grants at both local and international levels. As a core mandate my

administration, I aim to manage and increase this huge potential. I therefore implore you to peruse highlights of these milestones as presented in the succeeding pages of this newsletter. These should hopefully serve to inspire us all towards achieving greater research-related feats in the near future. Together we can.

Yours sincerely,
Professor Adamu Ahmed
Vice Chancellor

WORKSHOP ON INTELLECTUAL PROPERTY AND TECHNOLOGY TRANSFER



Participants at the 1-day IPTT Workshop

The Intellectual Property and Technology Transfer Office (IPTTO) of the Directorate of Research and Innovation, Ahmadu Bello University Zaria organised a workshop on Intellectual Property and Technology Transfer for researchers and students. The workshop took place at the Assembly Hall, Main Campus, Samaru Zaria on the 3rd of December 2024. Speaking at the occasion, the Director, Directorate of Research and Innovation (DRI), Prof. J. J. Maina, called for

collaborative researches between the Natural Sciences and Social Sciences. The Director stated that most of the researches the University presented at the recent Times Higher Education (THE) ranking are science based, hence the need for the Arts and Humanities to make their researches more visible. Prof. Maina disclosed that part of the mandate of the Directorate is to safeguard the intellectual property of research conducted by staff and students.



Professors MN Shuaibu, JJ Maina, DA Ameh and Sani Ibrahim at the 1-day IPTT Workshop

On Innovations in Genetically Modified Crops-Genome Editing, Prof. Valentine Ntui, a professor of Biotechnology at University Mohammed VI Polytechnic (UM6P) explained ways in which science was tackling the issue of severe food insecurity in Africa due to climate change, drought and conflicts using CRISPR, a revolutionary gene editing technology employed for precise changes to the DNA sequence of plants and animals.



Professor Valentine Otang Ntui making his presentation



Professor Emmanuel Oluwadare Balogun at the 1-day IPTT workshop

Unlike traditional genetic engineering which introduces foreign genes from other organisms, CRISPR works only with the organism's own DNA, acting like molecular scissors that cut specific parts of the DNA to improve plant characteristics like resistance to disease and adaptability to harsh conditions and environments. Professor Ntui explained that the final product contains no foreign gene, making it different from traditional genetic modified organisms (GMOs). Plants such as bananas which are susceptible to a wilting disease especially in East Africa were improved through CRISPR technology by removing the specific gene which helps the bacteria responsible for infecting the plants.

Following testing, CRISPR edited bananas resisted the disease while unedited ones became infected. Similar approaches have been employed to improve plantains in West Africa. Tomatoes which could lower blood pressure and promote relaxation have also been produced in Japan using similar technology. Prof. Ntui believes that such technology is valuable in Africa for reducing hunger and malnutrition, although the major challenge of public scepticism remains high as many people equate products from this technology with GMO produced food. It is

hoped that greater awareness of its benefits and policy adoption safeguarding the responsible deployment of CRISPR technology will go a long way towards improving its acceptability by the public.

In another presentation, titled "Entrepreneurship in Academic Setting", Prof. Sani Ibrahim a professor of Biochemistry at Ahmadu Bello University explained that academic entrepreneurship is the use of scientific research, creativity and innovation to create economic value. Prof. Ibrahim noted that academic entrepreneurship involves students, faculty and researchers and can include activities such as patenting or developing spin-off ventures, consulting or joint research with industry partners and writing books for a general audience. He said commercialization of research produced by universities constitutes a core facet of academic entrepreneurship. Prof. Ibrahim stated that academic entrepreneurship is framed by the economic and social mission of an Institution and its contribution to the social, economic and cultural development, stressing that it contributes to economic development and innovation by transferring research outcomes into commercial applications. According to

him, an academic entrepreneur is someone with niche expertise and a strong desire to use that expertise to make a difference in the world. Academics were strongly encouraged to pursue commercial application of research outputs.

Delivering a lecture on Intellectual Property and Technology Transfer, the Coordinator, Intellectual Property and Technology Transfer Office (IPTTO), Prof. Emmanuel Oluwadare Balogun noted that if one registers an intellectual property in Nigeria, it covers most African countries. Prof. Balogun maintained that intellectual property is protected by patent, trademark, copyright and trade secret and presented avenues for staff and students to register their research outcomes.

Featured at the event were round table discussions and questions and answers session. The event was attended by the Dean, School of Postgraduate Studies, (SPGS), Prof. M.N Shuaibu, former Deputy Vice-Chancellor Academic, Prof. Danladi Amodu Ameh, researchers and postgraduate students, among others.

DIRECTORATE OF RESEARCH AND INNOVATION FACULTY-WIDE TRAININGS

Faculty of Pharmaceutical Sciences, Faculty and Institute of Education

The Centre Leader of the Africa Centre of Excellence for Neglected Tropical Diseases and Forensic Biotechnology (ACENTDFB), Ahmadu Bello University, Prof YKE Ibrahim, has said that attracting research grants impacts positively on institutional rating and by implication, institutional ranking. Speaking at a two-day Research Grant Training workshop organised by the Directorate of Research and Innovation, Ahmadu Bello University on the 4th of

December 2025, the Centre Leader maintained that grant writing requires special skills, quality research and funding which cannot be provided solely by government. Prof Ibrahim's presentation, titled 'Hallmarks of Securing and Managing Grants', listed three phases in grants sourcing and management. The phases, according to the presentation, consist of pre-award, post-award and closeout. The expert also highlighted steps in grant proposal writing

which include team objectives, description of research activities, building of strong foundation and strengthening good ties with funders. The training workshop, took place at the Faculty of Pharmaceutical Sciences, Ahmadu Bello University, Zaria while a similar training took place at the Faculty of Education for staff of the faculty and Institute of Education.



Cross section of guests and dignitaries at the Directorate of Research and Innovation training workshop at the Faculty of Pharmaceutical Sciences

Earlier in an address of welcome, the Director, Directorate of Research and Innovation, Ahmadu Bello University, Prof J. J. Maina, said the training was part of the Directorate's mandates. According to her, the idea is essentially to push research and innovation and guide in securing research grants. Also speaking, the Vice-Chancellor, Ahmadu Bello University, Prof Kabiru Bala, stressed that the training is to equip academics on research skills and to improve strategies in securing grants. The Vice-Chancellor was represented by the Director, Directorate of Academic Planning and Monitoring, Prof Bello Muktar. In another presentation, Dr Abdurrashid Haruna, who spoke on 'Publishing in High Impact Journals: A Guide on Publication and Research Visibility', enumerated practical tips

and guidelines on how to successfully publish in high impact journals. Prof Clara Ladi Ejembi of the Department of Community Medicine, Ahmadu Bello University, presented a paper on how research can shape policy and organisational outcomes. She cited an example of a research from ABU that shaped National and WHO policy on the use of Misoprostol to prevent post-partum haemorrhage (PPH) at home births, contributing to maternal mortality reduction. Prof. Ejembi reiterated the fact that academia needs to frame research from the view of addressing community needs and solving societal problems.

Dr. Abdulmalik Salman, whose presentation focused on the need for a paradigm shift

among academia from publishing research findings in journals and conferences, reiterated this point made by Prof. Ejembi. While the default training of most academics aligned with the "publish or perish" syndrome, recent trends show that few policymakers and target audience for such research actually get to read and understand what is published in purely academic outlets. There is therefore the need to educate staff in the university of this issue, especially if research is to solve societal problems. In his presentation, the Deputy Director, Directorate of Research and Innovation, Dr Mohammed Auwal Ibrahim, talked on the place of grants in the global ranking of universities. Dr. Ibrahim also spoke on the impact of grants and the quality of research on university rankings.



TIMES HIGHER EDUCATION 2025 WORLD UNIVERSITY RANKINGS: ABU RANKED THE BEST PUBLIC UNIVERSITY IN NIGERIA

The Times Higher Education (THE) is one of the most reputable and acceptable university ranking institutions in the world. On 9 October 2024, the 2025 World University Ranking of the Times Higher Education was released, and Ahmadu Bello University was ranked second-best in Nigeria and Number 1 public University in the country. At the global stage, the University was ranked between 1000 – 1200 position. Ahmadu Bello University has never been ranked through this World University Ranking system and therefore, it is heart-warming the university achieved this feat at its first appearance. Indeed, part of a mail content from the Times Higher Education read that “I would like to congratulate you and the entire ABU community on this new milestone. This is quite an amazing feat for a previously unranked university. Your new position is evidence of a clear commitment to initiatives that cater to advancing the university's mission, while making it globally competitive.”

A brief analysis of the results indicated that

research quality is the university's strongest pillar, composed of citation impact, research strength, research influence and research excellence. On the other hand, industry remains the university's weakest pillar, and this is made up of research grants from industries and patents generated from the University. Going forward, the University needs to do more in the areas of attracting grants and patents.

Apart from the World University Ranking, the Times Higher Education also has a specific ranking for sub-Saharan African Universities where metrics most relevant to African Universities are measured. Ahmadu Bello University also subjected itself to this ranking. Results announced on, 27 October 2024 revealed that ABU was again ranked Number 1 public University and second-best University in Nigeria while occupying the 21st position in Sub-Saharan Africa. In 2024, ABU was ranked 46th in Africa and 11th in Nigeria by the Times Higher Education ranking. This indicates a remarkable improvement in the university's ranking status within the African

region. Highlights of the results indicated that our highest score came from ethical leadership which is composed of student union, business ownership, developing leadership skills and University Code of Ethics. On the other hand, the university's lowest score was from resources and finances made up of finance per student, funding sources, continuous professional development, mental health counselling and standard of accommodation.

This year, the Times Higher Education has also introduced a new ranking system called the Interdisciplinary Science Ranking (ISR) where world universities are ranked based on their promotion of Interdisciplinary Science Research. ABU also participated in the maiden edition of the ranking. Interestingly, the university emerged within the 401-500 bracket out of 749 globally ranked universities. Here again, the University did well in the areas of interdisciplinary science research outputs.



THE 2026 QU ACQUARELLI SYMONDS (QS) WORLD UNIVERSITY RANKINGS

Indicator Weighted Scores Based on methodology

Employment Outcomes	4.0
International Research Network	2.2
Academic Reputation	1.9
Employer Reputation	1.4
Sustainability	1.4
Faculty Student Ratio	1.0
Citations per Faculty	0.4
International Faculty	0.1
International Students	0.1

Overall Results

Ahmadu Bello University, Zaria

**Overall Rank
1201-1400**

QS Classification
Size
Very Large
Status
Focus
Comprehensive
Research Intensity
High

Learn more on support.qs.com

On 18th June 2025, Ahmadu Bello University was ranked for the first time in the 2026 QS World University Ranking. The QS ranking is one of the most reputable and highly competitive ranking bodies in the world. Ahmadu Bello University is now the third Nigerian University to receive ranking of the QS between 1201 – 1400 position in the world. A brief analysis of the results indicated that the University had its best performance in employment outcomes while citations per Faculty, international Faculty and Students were the weakest point as illustrated in Figure 1.

Figure 1: Overview of the QS World University Ranking Results of Ahmadu Bello University

ABU HOLDS MAIDEN RESEARCH FAIR TO SHOWCASE INNOVATION AND EXCELLENCE

Ahmadu Bello University (ABU), Zaria, hosted its inaugural Research Fair from January 23rd to 25th, 2025, as part of activities marking its 44th Convocation Ceremony. The three-day event, themed “Showcasing Innovation, Celebrating Excellence,” highlighted ground breaking research and innovative products developed across various units of the university. Held at the Old University Gymnasium adjacent to the Yusufu Bala Usman Hall (formerly Assembly

Hall) on the ABU Main Campus in Samaru, the fair opened at 11:00 a.m. on Thursday, January 23rd. The event attracted a wide range of participants and visitors, including students, faculty, industry stakeholders, and the general public.

Prominent university units such as the Institute for Agricultural Research (IAR), the National Agricultural Extension and Research Liaison Services (NAERLS), the

Faculty of Engineering, ACENTDFB, and the National Animal Production Research Institute (NAPRI) were among the exhibitors showcasing their innovative outputs

Speaking during the fair, the Deputy Vice-Chancellor (Administration), Professor Ahmed Doko Ibrahim, emphasized the importance of translating research into market-ready products. “It is high time we look into the commercialization of our



Guests and dignitaries at the Maiden edition of the Research Fair including the Deputy Vice Chancellor (Administration) Professor Ahmed Doko Ibrahim, Chairman of the Committee Professor Ken Okoli, Director Directorate of University Advancement and International Education Professor Sani Abba Aliyu, Director Public Affairs Directorate Mal. Auwalu Umar and the Ag. Chief Security Officer of the University, Mal. Ashiru Zango.

research and products. The potential within our university is enormous, and we must take deliberate steps to harness it for societal impact.”

The Chairman of the Organizing Committee, Professor Ken Okoli, noted that the maiden edition was a pilot event, featuring selected departments and centers. “For this first edition, we included a few units to test the

structure. In subsequent editions, we plan to accommodate a much larger number of departments and research centers from across the university,” he stated.

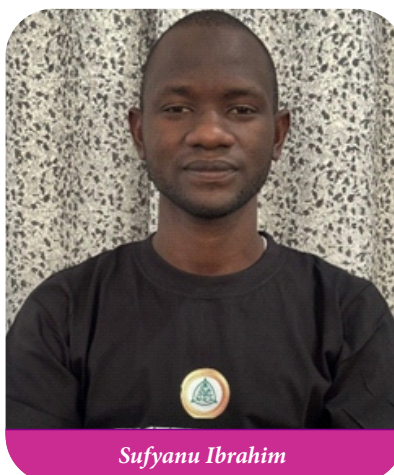
Opened daily from 9 a.m. to 5 p.m., the Research Fair served not only as a platform for knowledge exchange but also as a call for stronger linkages between academia and industry. Participants expressed optimism

that such initiatives would contribute significantly to national development through innovation and applied research. The event was widely seen as a milestone in ABU's effort to reposition itself as a hub for research, innovation, and enterprise. The fair was organised under the auspices of the Directorate of Research and Innovation.

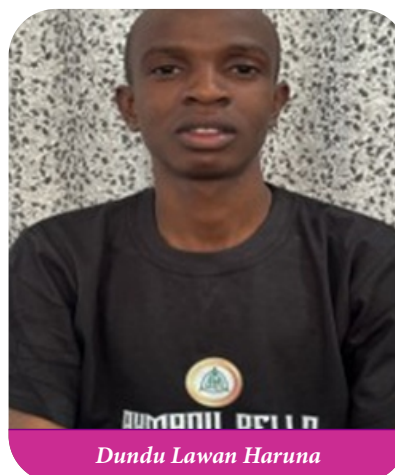
HUAWEI ICT AI INNOVATION COMPETITION TRACK 1st PRIZE WINNERS TeamABU2024 AT A GLANCE



Hadiza Mohammed



Sufyanu Ibrahim



Dundu Lawan Haruna



Dr. Zaharuddeen Haruna

The Huawei AI Innovation Track is one of the four tracks in which students can choose to participate during the Huawei ICT Competition. This innovation track involves identifying a local problem with global relevance within an immediate community and then developing solutions that can address the local issue while also being scalable to other countries and regions using AI and other Huawei technologies.

Team Formation

At the beginning of the competition, a call is

made for interested students to register through the platform provided. Thereafter, they pitched their proposals based on the problems they have identified, presenting the best solutions to address those problems before a panel of stakeholders. These stakeholders judge each proposal and grade all the students based on a guiding assessment template.

TEAMABU2024

Having undergone a rigorous selection process and meeting the requirements as

outlined in the selection guidelines, the trio of Sufyanu Ibrahim from the Department of Computer Engineering, Hadiza Mohammed from the Department of Computer Science, and Dundu Lawan Haruna from the Department of Computer Engineering were selected to represent ABU in the Huawei ICT AI Innovation Competition 2024–2025. Dr. Zaharuddeen Haruna of the Department of Computer Engineering served as the team's Instructor.

The Solution Developed: CropDiseaseDetector

CropDiseaseDetector is an AI-powered device designed to provide real-time (offline-capable, suitable for use in remote areas without internet access) crop disease detection and solutions to farmers. The solution supports both audio and text in English, Pidgin English, Hausa, Yoruba, and Igbo (major Nigerian languages), as well as text-only support for Afrikaans, Swahili,

Arabic, and French to ensure broader inclusivity across Africa. It is designed to assist farmers in the early detection of diseases affecting crops such as tomato, maize, rice, beans, potato, soybean, wheat, sorghum, cassava, and yam in Nigeria and other African countries. It is more than a disease detector—it is a full farm assistant. With advanced sensors, it not only analyzes plant health but also tests soils by reading NPK

levels and environmental data to recommend the best crops and fertilizers. The device also features a comprehensive plant disease dictionary with images, solutions, and prevention tips, alongside a step-by-step planting guide. For those who prefer a mobile solution, the CropDiseaseDetector app offers all these features, plus personalized alerts, real-time updates on disease outbreaks, and weather conditions.



Stages of the Competition

a. Preliminary stage:

At the first stage, each team from the participating universities submitted entries to a team of experts, including the Application Form, Project File, Presentation Slide and a Demo Video. A team of experts from China then reviewed all submissions to assess whether the mandatory Huawei technologies (such as MindSpore, ModelArts, and LiteOS) were integrated into the solution. After this assessment, shortlisted teams advanced to the National Finals. Having met the necessary criteria, TeamABU2024 was shortlisted and moved on to the Nigerian National Finals round.

HUAWEI ICT AI INNOVATION COMPETITION TRACK 1st PRIZE WINNERS TeamABU2024 AT A GLANCE



TeamABU2024 snapshots at various competition stages

b. National Finals Round

At the National Finals, six teams from various Nigerian universities qualified to compete. TeamABU2024 competed against these teams and emerged as the First Prize Winner with a landslide victory, scoring 81 marks, the highest among all teams.

Only two teams from this stage were selected to proceed to the African Regional Finals. TeamABU2024, along with the team from FUT Minna, which won the Second Prize, advanced to represent Nigeria at the regional level. The competition was done virtually.

c. African Regional Finals:

In the African Regional Finals, TeamABU2024 competed against nine teams from seven different Sub-Saharan African countries, again securing the First Prize Award, qualifying it to proceed to the Global Finals as the official representative of Nigeria and Africa in the AI Innovation Track of the Huawei ICT Competition 2024–2025. While the competition itself was conducted virtually, the Award Ceremony was held physically in Johannesburg, South Africa.

d. Global Finals:

At the Global Finals, TeamABU2024 contested against 40 teams from China and around the world. Each team was allotted 20 minutes to pitch its solution, play their demo video and answer questions from the panel of judges. After all teams had presented, the results were announced—TeamABU2024 won yet another First Prize Award at the Global Finals. This remarkable success validated the team's hard work, innovative approach, and the real-world potential of the solution. Both the competition and the Award Ceremony for the Global Finals took place physically in Shenzhen, China on May 24, 2025.

Congratulations TeamABU2024!



TeamABU2024 snapshots at various competition stages

REFINERY FLUID CATALYTIC CRACKING ZEOLITE-BASED CATALYST: ITS DEACTIVATION AND PASSIVATION

Summary of recent results by Professor Baba El-Yakubu,
former PTDF Chair (Department of Chemical Engineering)

Zeolites are aluminosilicate materials that occur in nature. Since the pioneering work of Robert Milton and Donald Breck about seven decades ago at Union Carbide Corporation, both natural and new zeolites have been synthesised. This led to the commercialisation and wide applications of zeolites as adsorbents and catalysts. Natural zeolites, such as clinoptilolite, mordenite, and chabazite, are known for their ion-exchange and adsorption properties. They have inherent limitations, such as undesired impurities and variations in chemical composition. Therefore, they must be optimised for catalytic applications. For the past six decades, the FCC catalyst has gained significant improvements. It has four major

components: crystalline zeolite (15% to 50%, by weight) and the balance consists of matrix, binder, and filler. Zeolite is the active component, and its amount varies to respond to specific demands, based on the quality of raw materials, desired products, attrition and deactivation.

For over two decades, the PTDF-Chair Research Group at ABU has made significant contributions to zeolite-based catalysts [1, 2]. This is due to the material's scientific importance and the potential for import substitution in a hydrocarbon-rich country like Nigeria. Recently, we have been working on three areas: developing cleaner or greener

alternative synthesis methods [3-7], modifying existing zeolites through hierarchicalization [8-10], and gaining insight into FCC catalysts deactivation/passivation [11-14] using a Fixed Bed flow reactor (Plate I). For example, our recent collaboration with Dangote Refinery focuses on the last subject. This research subject is important because the FCC unit is regarded as the most important catalytic conversion unit and the cash cow of the refinery. The gasoline produced from this unit accounts for 35 to 50% of the total globally [15]. The largest refineries in the world, in terms of FCC unit capacity, in 2020 included Baton Rouge (US) & Jamnagar I (India) [16].



Plate I: MicroActivity Reactor (MAT) for Testing Zeolites and other Catalysts

Plate I: MicroActivity Reactor (MAT) for Testing Zeolites and other Catalysts

The largest upcoming refineries with FCC units in the world (in 2021–2025) include the Dangote refinery (Nigeria) [17]. The ultimate objective of our work is to contribute further insights into the synthesis, deactivation, and passivation of zeolite-based catalysts. The recent increase in processing heavy feedstocks presents several challenges due to heteroatoms such as N, S, Fe, Na, Ni, and V, which are detrimental to catalysts as they either permanently or temporarily deactivate or poison the catalysts, thereby promoting undesirable reactions, including dehydrogenation and coke production.

In this presentation, we demonstrate our attempt to improve nickel deactivation by adding boron. Plate II shows the Nickel and Vanadium Deactivation Mechanisms of Zeolite-based Catalyst.

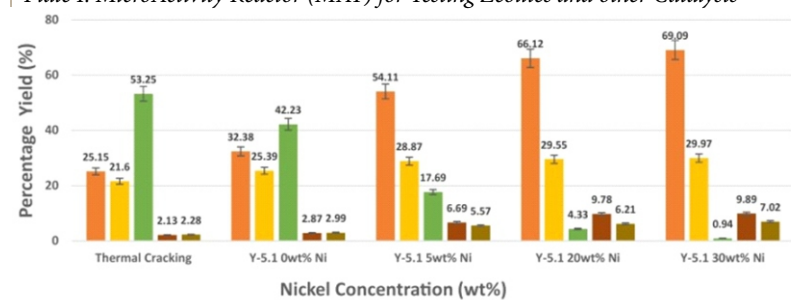


Figure 1: Product distribution of n-Heptane cracking over Ni/Zelite Y-5.1

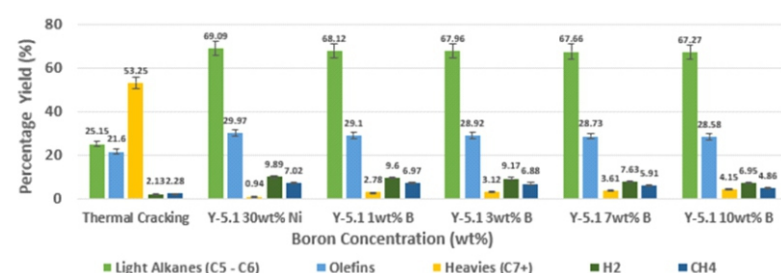


Figure 2: Product distribution of n-Heptane cracking over Ni/Zelite Y-5.1 at varying boron concentration

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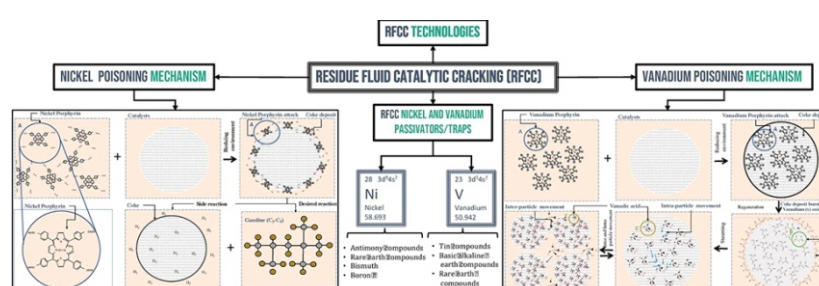


Plate II: Nickel and Vanadium Deactivation Mechanisms of Zeolite-based Catalyst

Conclusion

1. Boron improved the Bronsted acidity of the Ni-Zeolites and raised the reduction temperature of NiO from 450 oC to a more stable temperature of 650 oC across the three zeolite samples.

Recommendations

1. A computational approach should be employed to gain more insights.
2. Techno-economic and feasibility studies should be performed towards commercialisation of zeolite Y in Nigeria

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List of Patents Registered by the PTDF Chair Team

17. The Process of Production of Mesoporous Silica-Alginate/Chitosan for High Bioethanol Yield: Patent No. F/PT/O/2024/15601, Inventors: Atta, A.Y., Abdulmumin, B., Atta, H.I., El-Yakubu, B.J. (2025).
18. The Process of Batch Solvent Extraction of Artemisin as Active Pharmaceutical Ingredient from Artemisia Annua Leaves: Patent No. F/PT/C/2024/11519, Inventors: Ibrahim, H.D., Atta, A.Y., El-Yakubu, B.J., and Musa, S. (2024).

List of Patent Applications by the PTDF Chair Team

19. Selective Sorption-Enhanced Hierarchical ZSM5-supported Zn-Ni Catalysts developed for Enhanced Hydrogen and Bio-Oil Production from Rice Husk Pyrolysis, Inventors: Sulaiman Adamu, Fadimatu Nyako Dabai, Abdulazeez Yusuf Atta, Baba El-Yakubu Jibril.
20. System for upgrading heavy crude oil using bimetallic catalysts and method for saturates characterization using gas chromatography with mass spectroscopy and flame-ionization detectors, Inventors: Onoriode Paul Avbenake, Fadimatu Nyako Dabai, Auwal Aliyu, Baba El-Yakubu Jibril.

NEW PATENTS REGISTERED

S/ No	Title of Research Project	Patent holders	Lead Researcher/ contact	Patent/ Intellectual Property Rights No.	Year of Patency
1	Development of a system for ethanolic extract from <i>Anogeisus leiocarpus</i> and its use in the treatment of Diabetes Mellitus	Adamu Sani, Anefu Emmanuel Owoicho, Prof. Emmanuel Oluwadare Balogun, Prof. King A. N. Esievo	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2023 106 836	2023
2	Proof of healing activity of ethanolic extract of <i>Anogeissus leiocarpus</i> in surgically induced skin wounds	Prof. Emmanuel Oluwadare Balogun, Esievo King A. N., Num-Adom Sabina M.	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2023 106 837	2023
3	A system for the identification of methylpyridine-3-yl-4-ethoxy-3-{1-methyl-7-oxo-3-propyl-1h,6h,7h-pyrazolo[4,3-d]pyrimidine-5-yl}benzene-1-sulfonate as a potent phospholipase A2 inhibitor	Dr. Oluwafemi Abiodun Adepoju, Professor Emmanuel Oluwadare Balogun and Professor Geoffrey Chang	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 994	2024

S/ No	Title of Research Project	Patent holders	Lead Researcher/ contact	Patent/ Intellectual Property Rights No.	Year of Patency
4	A system for the identification of β -[2-[[2-butyl-4-oxo-3-{{4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl)methyl}-3H,4H,5H imidazo[4,5-c]pyridine-5-yl)methyl]benzoate as a potent inhibitor of phospholipase A2 (PLA2)	Dr. Oluwafemi Abiodun Adepoju, Professor Emmanuel Oluwadare Balogun and Professor Geoffrey Chang	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 911	2024
5	A system for the identification of β -[3-(4-fluorophenyl)propyl](methyl amino)propanoyl)-2,3,4,5,6,7-hexahydro-1,3-benzoxazole-2-one as a potent phospholipase A2 acti ator	Dr. Oluwafemi Abiodun Adepoju, Professor Emmanuel Oluwadare Balogun and Professor Geoffrey Chang	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 915	2024
6	A system for the identification of β -[{{2H-1,3-benzodioxol-5-ylmethyl}amino]-8-thia-4,6-diazatricyclo[7.4.0.0^{2,7}}]trideca-1(9),2(7),3,5-tetraene-5-yl}benzene-1-sulfonic acid as an inhibitor of phospholipase A2 (PLA2)	Dr. Oluwafemi Abiodun Adepoju, Professor Emmanuel Oluwadare Balogun and Professor Geoffrey Chang	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 904	2024
7	A system for the production of bacterial cellulose hydrogel (BCH) from agricultural residues using <i>Gluconacetobacter orientalis</i>	Prof. Emmanuel Oluwadare Balogun, Prof Yakubu Kokori Enevehe Ibrahim, Mr. Lockta Joel, Mr. Barde Yelwa Luka, Dr. Sa'adiya Halima Mahmud, Mr. Rabi Bukar Mohammed, Dr. Tahir Turaki Mohammed, Samuel Charles Olabode, Prof Abdullahi Balarabe Sallau, Prof Mohammed Nasir Shuaibu and Ibrahim Zubairu Waziri.	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 959	2024
8	A system for the identification of β -[{{2H-1,3-benzodioxol-5-ylmethyl} amino]-8-thia-4,6-diazatricyclo[7.4.0.0^{2,7}}]trideca-1(9),2(7),3,5-tetraen-5-yl}benzoic acid as an inhibitor of phospholipase A2 (PLA2)	Dr. Oluwafemi Abiodun Adepoju, Professor Emmanuel Oluwadare Balogun and Professor Geoffrey Chang	Prof. Emmanuel Oluwadare Balogun 0806 706 7609 oluwadareus@yahoo.com	20 2024 102 904	2024
9	The process of batch solvent extraction of Artemisinin as active pharmaceutical ingredient from <i>Artemisia Annua</i> Leaves	Prof. H. D. Ibrahim (RMRDC), Prof. Abdulazeez Yusuf Ata Prof. Baba El-Yakubu Jibril (ABU Chem. Engr), S. Musa, Dr. A. Bello (Natl. Biotechnology Res. & Dev. Council	c/o Prof. Abdulazeez Yusuf Ata 0706 336 5325 zeeoata@gmail.com , ayata@abu.edu.ng	F/PT/C/2024/11519	2024
10	The process of production of mesoporous Silica-Alginate/ Chitosan capsules for high bioethanol yield	Prof. Abdulazeez Yusuf Ata, Dr. Habiba Ilyasu Ata, Prof. Baba El-Yakubu Jibril	Prof. Abdulazeez Yusuf Ata 0706 336 5325 zeeoata@gmail.com , ayata@abu.edu.ng	NG/PT/NC/2024/15601	2025

NEW GRANTS AWARDED

S/No	PI	Title	Co-investigators	Department/ Unit	Faculty	Duration
<i>Barakat Trust Travel Grant</i>						
1	Yusuf Rabiu	Research in the museum of Archaeology, University of Ghana, Legon on Mamluk and Islamic Metal objects	_____	Archeology and Heritage Studies	Arts	2025-2026
<i>Mastercard Foundation/ Cambridge Africa Grant</i>						
2	Dr. Mohammed Talba Ahmad	Volarization of waste from fish into sustainable feed ingredients for African Catfish <i>Clarias gariepinus</i> (Burchell 1822)	_____	Aquatic & Wildlie Health	Veterinary Medicine	2025-2026
<i>Rufford FFoundationGrant</i>						
3	Arikpo Eteng (PG Student)	Monitoring and assessment Sea Turtles by catch in Artisinal and commercial fishing in the Gulf of Guinea, Nigeria	Supervisors: Professor IMK Gadzama, Professor DS Abolude, Dr. AB Alhassan, Dr. Andrew Agyejumhene	Biology	Life Sciences	2025-2026
<i>COMCEC</i>						
4	Professor Nafiu Abdu	Capacity building on organomineral fertiliers	Professor Ado Yusuf	Soil Science	Agriculture	2024-2025
<i>AstraZeneca</i>						
5	Dr. Akinyemi Omoniyi	Diabetic Neuopathy in Kaduna State: Paterns and risk factors among people with Diabetes	Professor Sunday Musa, Professor UE Umana	Human Anatomy	Basic Medical Sciences	2025-2026
<i>TETFund Institution Based Research Grants 2024 (Batch 8)</i>						
6	Dr. Mohammed Lawal	Enhanced Photocatalytic activity of Cu2O/TiO2 based heterstructures for pollutant absorption and degadaation: Surface and in-layer medications	Professor Sadiq Umar	Physics	Physical Sciences	2024-2025
7	Dr. Samuel Uche Ndidi	Characterization and tructural elucidation yrophosphatase activity of Glycerol Kinase from <i>Trypanosoma brucei gambiense</i>	Professor Emmanuel Oluwadare Balogun, Israel Ogwuche Ogra	Biochemistry	Life Sciences	2024-2025
8	Dr. Adama Adamu	COVID-19 messages in Social Media: Statistal Presentations respects and Implimentations or effffece health (Risk) communication	Dr. Ribadu Ayuba Muhammad	Mass Communication	Social Sciences	2024-2025
9	Professor Joy Joshua Maina	An Evaluation of the Near-Campus Housing Environment of Samaru and its relationship with the Quality of Life of Residents and Academic Performance of Students	Professor Musa Lawal Sagada	Architecture	Environmental Design	2024-2025
10	Dr. Abdulhamid Burour Ibrahim	Study on the diversity and abundance of Avifauna in relation o Habitat types in selected areas of Guinea Savanna Zone of Nigeria	Professor IS Ndams, Professor IMK Gadzama	Zoology	Life Sciences	2024-2025
11	Kehinde Usman Ahmed	Application of Spectal Analysis Technique in Evaluation of Geothermal Energy Resource	Professor M Kolawole Lawal	Physics	Physical Sciences	2024-2025

12	Baraka Umar	Evaluation of Ricinine Oal Administration on Contraception and other Reproductive Parameters in Adult Female Wistar Rats	Professor Ibrahim Gaya Bako	Human Physiology	Basic Medical Sciences	2024-2025
13	Professor Aliyu Danjuma Usman	Development of a Microcontroller based wireless pulse oximeter for COVID-19 detection and be ond	Dr. EO Ochia, Monday Francis	Electronics and Telecommunication Engineering	Engineering	2024-2025
14	Dr. Habeeb Bello	Design and Development of a Solar-Powered Magnetic Engine Tricycle for Intra -City Transportation in Ni eria	Dr. Abdullahi Shehu Yaro, M Sulaiman, EC Anotaenwere	Electronics and Telecommunication Engineering	Engineering	2024-2025
15	Dr. Abdullahi Shehu Yaro	Design of an Automated Quelea Bird Swarm-presence Detection, Lo alizaation and Scare Mechanism to Miti ate small Grains Farm Loss	Dr. Habeeb Bello, SP Bako, Engr. L Durojaiye	Telecommunication Engineering	Engineering	2024-2025
16	Salisu Nura	Induced Mutagenesis for Improved Yield, Nutritional and Oil content of Sesame (<i>Sesame Indicum</i> , L)	Aminu Yahaya	Biology	Life Sciences	2024-2025
17	Professor Maryam Aminu	Evaluative Assessment of Biomarkers as hallmark of Cervical Carcinogenesis in Human Papilloma Virus- <i>Chlamydia Trachomatis</i> Co-Infection among omen in Northern Nigeria	Sheba Joseph Magaji, Dr Hassan Mohammed Doko, Professor Adekunle O. Oguntayo, Dr. Sa'ad A. Ahmed, Ethni Elijah Ella	Microbiology	Life Sciences	2024-2025
18	Professor Abdulkadir Ibrahim	Effects of Synthesis Methods on the Electric, Magnetic and Photocatalytic rproperties of some Novel Doped Orthoferrites	Dr. Abdulrasheed Haruna, Salisu Abubakar	Chemistry	Physical Sciences	2024-2025
19	Dr. Mahmood Umar	Integrated Geophysical Investi ation of Subsurface Basement Structural Controls Associated with Alluvial Cassiterite-Columbite Mineralization with Barikin Ladi Tin Field, Plateau State	Dr. A. L. Ahmed, Dr. S. S. Magaji	Physics	Physical Sciences	2024-2025
20	Dr. Nura Ibrahim	Investi ation of aphene-like Silicon Carbide Layer(s) as Anode for Lithium-ion Battery: A First Principle Approach	Professor Abdulmalik Abdulgaffar Amoka, Dr. Mohammed Lawal	Physics	Physical Sciences	2024-2025
21	Dr. Abdulraheem Aliyu	Synthesis, Structural Evaluation and Compaaate Analysis (Mechanical/Electrical Characterization of Polyvinylidene Flouride (pvdf)/Alumina Nanocomposites	Dr Abdulsalam Ismai'l Galadima	Physics	Physical Sciences	2024-2025
22	Professor Solomon Okaiyeto	Molecular and Serological Studies of Small Ruminant Respiratory Disease Complex in Zaria and Environs	Dr. Mustapha Hussaini, Professor Hussaina Joan	Veterinary medicine	Veterinary Medicine	2024-2025

23	Professor Ibrahim Gaya Bako	Evaluation of prolactin Receptor (PRLR) and Oxytocin Receptor (OTR) mRNA Expression Using Real Time Quantiaate Polymerase Chain Reaction (Qpcr) in Lacaating Rats Treated with Hibiscus <i>Sabdariffa L.</i> Seed	Dr. Idris Mohammad Maje	Human Physiology	Basic Medical Sciences	2024-2025
24	Danraka Rabi	Anti-Inflamattory activity of Ethanol Leaf extract of <i>Hymenodictyon Flaribundum</i> (Hocst. & Stend) B. L. Rob in Rats: Impact on Inflammatory Biomakers	Dr. IM Maje, Professor JI Ejiofor	Phamacology and Thereapeutics	Basic Clinical Sciences	2024-2025
25	Dr. Zahatu Muhammad	Design, Synthesis and Anti cancer activity of ceain Novel Chalcone Analogous Compounds	Professor Jamilu Ya'u, Professor Abdulkadir Umar Zezi, Professor Mohammed Garba Magaji, Dr. Asmau Nasiru Hamza	Pharmacology and Therapeutics	Basic Clinical Sciences	2024-2025
26	Aliyu Umar Umar	Evaluation of Chemopreventi e Effects of some Nrf2 acti ators on Schistosoma Haematobium-Induced Bladder Carcinogenesis and their Antischitosomal potenntials	Professor Mohammed Auwal Ibrahim, Mahmud Ali Umar	Biochemistry	life Sciences	2024-2025
27	Professor Ibrahim Jimoh	Assessment of Newspaper Reportage of Environmental Issues in Northern Nigeria: A Study of Blue Print, Daily Trust and Leadership from January 2011 - December 2020	Habiba Sani Mohammed	Mass Communication	Social Sciences	2024-2025
28	Dr. Muhammad Ahmad Yahaya	Pre-Breeding of Sorghum (<i>Sorghum Bicolor L. Moench</i>) for Drought Tolerance in the Semi-Arid Zone of Nigeria	Professor MF Ishiyaku	Plant Science Department	Agriculture	2024-2025
29	Dr. Rukaiya Aliyu Sami	Micro Propagation of Gin er using Temporary Immersion Bioreactor System	Musa Luqman, Dr. Maimuna Mohammed Abdulmalik, Professor Inuwa Shehu Usman	Plant Science	Agriculture	2024-2025
30	Professor Inuwa Shehu Usman	Development of Model Soilless Culti aationystem for Nigeria	Dr Mansur Ahmed Yusuf, Dr Maimuna Mohammed Abdulmalik, Dr Aliyu Muhammad Yamusa, Dr MK Saleh	Plant Science	Agriculture	2024-2025
31	Dr Lateefat Bolanle Hassan	Extraction and Quantif acation of Artemisinin from different Artemisia Annua	Dr Grace Luka, Professor Inuwa Shehu Usman, A. Adamu	Plant Science	Agriculture	2024-2025

FUNDING OPPORTUNITIES

Collaboration for Inclusive Development Research

<https://cega.berkeley.edu/collection/collaboration-for-inclusive-development-research/>

Reducing Conflict and Improving Performance in the Economy (ReCIPE)

<https://recipe.cepr.org>

Compact Research Grants - open to all applicants

<https://recipe.cepr.org/funding/compact-research-grants>

PhD Research Grants

<https://recipe.cepr.org/phd-research-grants>

Structural Transformation And Economic Growth Grants

<https://steg.cepr.org/funding/open-upcoming-funding-calls>

NIH

Establishing the Integrated Food Safety System (IFSS) Regulatory and Laboratory Training System (RLTS) National Coordination Center (NCC) and Learning Management System (LMS)

(RFA-FD-25-005)

Food and Drug Administration

Applied Regulatory Science Research to Evaluate Cardiotoxicity of Oncology Therapeutics (U01) Clinical Trial Optional

(RFA-FD-25-015)

Food and Drug Administration

FDA's Integrated Food Safety System Training Delivery and Development

(RFA-FD-25-016)

Food and Drug Administration

Federal and State Integration Activities to Advance Cooperation and Regulatory Standards Among Animal Food Safety Regulatory Programs

(RFA-FD-25-022)

Food and Drug Administration

Reducing Fraud and Lowering Barriers to the Production of Drugs in Shortage by Outsourcing Facilities

(RFA-FD-25-023)

Food and Drug Administration

Global Young Academy Calls for Membership

<https://globalyoungacademy.net/call-for-new-members/>

Levante call for proposals 2025

<https://levante-network.org/open-call-for-proposals-2025/>

The Centre for the Study of African Economies (CSAE)

<https://www.csae.ox.ac.uk/csae-conference-2026>

ESCMID

<https://www.escmid.org/science-research/grants-awards/research-grants/>

HORIZON Europe Call Information links

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