



Africa Center of Excellence on New Pedagogies
in Engineering Education (ACENPEE),
Ahmadu Bello University, Zaria, Nigeria

Present

ACENPEE Innovation Week

Theme:

**Embracing Applied
Engineering Education
Research**

Sub-Themes:

- Products of applied Engineering Research
- New Pedagogies in Engineering Education
- IOT, Smart System and Machine Learning in Engineering Research

Highlights:

- Keynote Presentations from Experts
- Team Up and Make a Difference
- Exhibition of Innovations
- Recognition and Awards

Prize Awards

- 1st Prize: ₦500,000
- 2nd Prize: ₦300,000
- 3rd Prize: ₦200,000
- and other consolation prizes

 acenpee@abu.edu.ng
acenpee1@gmail.com



September 9 - 13, 2024

ACENPEE Building, ABU



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AFRICA CENTRE OF EXCELLENCE ON NEW PEDAGOGIES IN ENGINEERING EDUCATION

INNOVATOR OF THE YEAR AWARD 2024

LIST OF PARTICIPANTS AND TITLE OF PROJECTS

S/N	Applicant Name	Title of Innovation
1	Salma Muhammed Kabir	NaOH Catalysed Waste Polyethylene Terephthalate Production of 2 Bis-(hydroxyethyle terephthalate (BHET)
2	Mubarak Hamza	AI Driven waste sorting system
3	YUSUF KABIRU	DEVELOPMENT OF A CALL LOCATION TRACKING SYSTEM TAILORED FOR ENHANCING THE EFFICIENCY OF POLICE RESPONSES TO DISTRESS SIGNALS
4	Kogi Hepzibah Beulah	Design and Development of an IoT Smart Temperature Monitoring System for Cold Supply Chain Storage and Transportation
5	Ajikanle Abdulbasit	Development of Smart Garbage Monitoring System using Internet of Things (IoT)
6	Abubakar, Muhammad	Effect of Mode of Treatment of Lateritic Soil With Brevibacillus Brevis in Bio-stabilization of Road Construction Material
7	IBRAHIM IBRAHIM	DEVELOPMENT OF A RULE-BASED CHATBOT FOR SCHOOL GUIDANCE AND HISTORICAL INFORMATION
8	Onah Keziah Ehi	DEVELOPMENT OF FREEZE-DRIED POLYMERIC HYDROGEL FOR WOUND DRESSING
9	IDRISS MUHAMMAD TUKUR	DEVELOPMENT OF FINGERPRINT BASED BIOMETRIC IDENTIFICATION SYSTEM
10	KABIRU BELLO	MULTIMODAL KNOWLEDGE TRANSLATION IN INFRASTRUCTURE DEVELOPMENT: EVALUATING THE EFFECTIVENESS OF TEXT-IMAGE-VIDEO INTEGRATION IN ENHANCING SCHOLARS' UNDERSTANDING AND APPLICATION OF VOLCANIC ASH-BASED RIGID PAVEMENT STABILIZATION AND CONCRETE SURFACING IN NIGERIA
11	BASHIR YUSUF BUGAJE	DEVELOPMENT OF A PLANT DISEASE DETECTION CLASSIFICATION AND RECOMMENDATION SYSTEM
12	YUSUF IBRAHIM	PURIFICATION OF WATER IN RURAL COMMUNITIES USING LOCALLY SOURCED MATERIALS
13	Mohammed Shafie	Solved Generative Ai
14	Owoseni Yusuf	ECO-FRIENDLY PLASTIC WASTES RECYCLING MACHINE FOR THE PRODUCTION OF BUILDING BRICKS
15	Busari Taiwo Saheed	Getting portable water from the atmosphere
16	Ajayi Victor Kolawole	BICYCLE POWERED GRINDING MACHINE
17	Odili, U. Cynthia	Production of bio-filters from the valorization of waste cassava peels for water filtration applications.
18	HAUWA AMINU JALINGO	DEVELOPMENT OF A UGV FOR INTRA-FLOOR DELIVERY FOR THE DEPARTMENT OF COMPUTER ENGINEERING
19	Umaru Emmanuel Setduwasunom	Real Time Blood Pressure Monitoring Device with GPS Tracking
20	DAYYABU JIBRIL	DESIGN AND IMPLEMENTATION OF IOT BASED SMART AGRICULTURE MONITORING SYSTEM
21	Erasmus E Obeth	Development of a Learning Management System (LMS) with Integrated 3D Model Interaction

22	LATIFAT OVAIYOZA YUSUF	COMPREHENSIVE IMPLEMENTATION OF THE NOVEL CACPLA PEDAGOGY IN TEACHING ASPECTS OF A PRODUCTION MANAGEMENT MODULE
23	Mahmud S.	Signify
24	Faith James	Eco-Friendly Roof Solutions: Innovating Corrosion-Resistant Coatings for Sustainable Healthy Rainwater Harvesting
25	Stanley Nnamani	Glycobuddy
26	Abdulsalam Sa-ad	STEAMForge: Empowering Innovation and Growth in STEAM
27	Abdulmajid Mohammed	E-commerce platform with an AI powered disease detection system
28	OWUNO, Ochoyare Sarah	Design And Implementation of an Automatic Irrigation System Based on Soil Moisture Levels
29	Wanjuu Assumpta	DESIGN, FABRICATION AND TESTING OF COLD SINTERING DEVICE
30	SUFIYANU IBRAHIM	Crop Diseases Detector
31	Omodiagbe Daniel Onosetale	Development of an automated-ridger using ultrasonic sensor
32	Nasir Ismaila	DEVELOPMENT OF AN AUTOMATIC PILL DISPENSING AND HEALTH VITALS MEASURING SYSTEM FOR HYPERTENSIVE PATIENTS.
33	Naftali Joshua Ngai	DEVELOPMENT AND DEPLOYMENT OF AN INTELLIGENT EYEGGLASS SYSTEM FOR THE VISUALLY IMPAIRED
34	SANI SULEIMAN HARUNA	SMART RFID-BASED ATTENDANCE SYSTEM
35	Mubarak Hamza	AI Driven waste sorting system
36	Ifeoma Mercy Egbe	Prioritization of Domestic Needs and Local Resources in Optimally Structured Applied Engineering Education and Research Programs in Africa – The Key to Long-Term Economic and Societal Impact
37	Alayande Daniel	On-Campus Drone Delivery System
38	WALEOLA JOSHUA	MULTIPURPOSE UNINTERRUPTED POWER SUPPLY POWER BANK
39	Sadeeq Abdullahi Dahuwa	SMART INVENTORY MANAGEMENT SYSTEM WITH IOT INTEGRATION
40	MUKHTAR ALIYU	Development of online Teaching and Learning Website for National and Entrepreneurship Development
41	HENRY ANENE	EXPANDING ACCESS TO QUALITY HEALTHCARE: BRINGING SMART TELEMEDICINE TO UNDERSERVED AND RURAL AREAS
42	Umar Ibrahim Nass	The Impact of Banning Sign-out Celebrations on Students Morale and Mental Health
43	ABDULRAHMAN MUHAMMAD ALIYU	Development a 3D model of a four Wheel Obstacle Avoidance Robot
44	Sadiq Ja'afar	ABU NAVIGATION MOBILE APP
45	Adavele, Tajudeen Muhammad	Design and Simulation of Autonomous Path Planning Pick and Place Color Box Sorting Robot Using V-REP and Python
46	Mohammed Abdulmumin Nda	Effect of Nanoclay on Strength and Durability Properties of Ultra High Performance Concrete (UHPC)
47	NWOBI MARTIN OBIEZE	AUTOMATED FISH POND
48	Sakinah Muhammad	Revolutionizing Engineering Education through Exploration Hubs
49	Ibraheem Kazeem Ajadi	Fostering Food Security through Organic Fertilizer Innovation in Nigeria
50	Adam Abubakar	AI-Integrated Healthcare for Rural Nigeria

PICTURES



Opening Ceremony of the Innovation Week at the Africa Center of Excellence on New Pedagogies in Engineering Education (ACENPEE)



Members of the high table during the opening ceremony of the innovation week



Cross-section of participants during the opening ceremony of the innovation week



Student presentation to the team of judges during the innovation week



Student presentation to the team of judges during the innovation week



Panel of Judges responsible for the selection of the best Innovators during the Innovation week at The Africa Center of Excellence on New Pedagogies in Engineering Education (ACENPEE).



Panel of Judges and ACENPEE Innovation week organizing committee



1st Prize presentation during ACENPEE Innovation week 2024



2nd Prize presentation during ACENPEE Innovation week 2024



3rd Prize presentation during ACENPEE Innovation week 2024



One of thirteen Consolation Prize presentation during ACENPEE Innovation week 2024

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*INNOVATION WEEK 2024***



This is to certify that

Stanley Nnamani

has participated and won Frst Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

Centre Director

Academic /Research coordinator

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Participation*



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This is to certify that

Owoseni Yusuf

has participated and won Second Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

Centre Director

Academic /Research coordinator

Certificate of Participation



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This is to certify that

Mahmud Shamsudeen.

has participated and won Third Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

Centre Director

Academic /Research coordinator

Certificate of Participation



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This is to certify that

Yusuf Kabiru

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

Centre Director

Academic /Research coordinator

Certificate of Participation



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This is to certify that

Nasir Ismaila

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

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This is to certify that

Fatima Idris

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

Dated: 9th - 13th September, 2024

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This is to certify that

Umaru Emmanuel Setduwasunom

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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This is to certify that

Alayande Daniel

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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This is to certify that

Wanjuu Assumpta

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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This is to certify that

Onah Keziah Ehi

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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This is to certify that

Sufiyanu Ibrahim

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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This is to certify that

Abdulrahman Muhammad Aliyu

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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Faith James

has participated and won a Consolation Price in the ACENPEE Innovation Week competition

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Odili, U. Cynthia

has attended and participated in the ACENPEE Innovation Week competition

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Abubakar, Muhammad

has attended and participated in the ACENPEE Innovation Week competition

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Ibrahim Ibrahim

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Ibraheem Kazeem Ajadi

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This is to certify that

Salma Muhammed Kabir

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Ajikanle Abdulbasit

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Bashir Yusuf Bugaje

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This is to certify that

Abdulmajid Mohammed

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This is to certify that

Omodiagbe Daniel Onosetale

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Mukhtar Aliyu

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This is to certify that

Owuno, Ochoyare Sarah

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Hauwa Aminu Jalingo

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Erasmus E Obeth

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Naftali Joshua Ngai

has attended and participated in the ACENPEE Innovation Week competition

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This is to certify that

Mubarak Hamza

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This is to certify that

Idriss Muhammad Tukur

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Adam Abubakar

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This is to certify that

Adavele, Tajudeen Muhammad
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This is to certify that

Sani Suleiman Haruna

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This is to certify that

Sadeeq Abdullahi Dahuwa

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This is to certify that

Abdulsalam Sa-ad

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Henry Anene

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This is to certify that

Umar Ibrahim Nass

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This is to certify that

Kabiru Bello

has attended and participated in the ACENPEE Innovation Week competition

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Mohammed Shafie

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This is to certify that

Latifat Ovaiyoza Yusuf

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