

Local Chapter Activity Report

at the 10th UNISEC-Global Meeting

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History of Local Chapter Activities

- Established in 2012
- Participated in CLTP in 2011, 2011, and 2012
- Participated in MIC in 2024 where we emerged among the winners
- Attended UNISEC-Global Meeting for some years now
- Organized MIC Seminars, Workshops intermediately

History of Local Chapter Activities

- CanSat/Training Program/Competition in 2013
- Practical Space Projects



Capacity building in Tube Sat project, in collaboration with NISEng, 2023

UNISEC-Nigeria Activities in 2023-24

- Member Universities: 10
- Students: 45
- Professors : 10
- Corporative members: 2
- Organizing a Program, Training and meeting



UNISEC-Nigeria in Collaboration
with NISEng, November, 2023



Nigeria in Space @ 25
Celebrating Nigeria's 25 years in Space



PreMIC9



- Participated in PreMIC9, emerged one of the winners

PreMIC9 Presenters



YiYu Chang and Yuhsiu Tien
National Central University,
Taiwan



Rafli Rizaldi and M. Alief Nurvian
Institut Teknologi Bandung,
Indonesia



Viktoria Zlateva
Space Vision Ltd, Bulgaria



Onwuama Ihunanya Chukwuweike
National Space Research and
Development Agency, Nigeria

52nd Virtual UNISEC-Global Meeting Hosted by UNISEC-Global

Time: 22:00-24:00(JST) January 18, 2025

New Year's Greetings and Local Chapter Activity Report

Moderator
Max Berthel
The University of Tokyo

New Year's Greetings and IoT Constellation Mission Program in UNISEC-GLOBAL

Shinichi Nakasuka,
The University of Tokyo

Local Chapter Activity Report

 UNISEC-Italy Paolo Marzioli	 UNISEC-Zambia Faustin A.S. Banda
 UNISEC-Thailand Chayapat Songpipat	 UNISEC-Nigeria Essien Ewang
 POC of Belgium Jurgen Vanhamel	REGISTER NOW

- We Participated in several UNISEC-Global virtual meetings

On-going Practical Space Projects



- We collaborating with NASRDA in providing hand-on to DSA

Nano-Satellite Development

Cube Satellite Subsystems

BY Essien Ewang, PhD

DSA Training on Space Technology, Systems Development & Applications - 2024

		optimization			
	S5	<ul style="list-style-type: none"> Health, safety and environment Overview of rocket components Parachute design and usage Launch Recovery and re-entry 		7	<ul style="list-style-type: none"> Dr. Durojaye
B.5	S1	<ul style="list-style-type: none"> Cyber threat and mitigation Data encryption and network protection Introduction to artificial intelligence and space robotics Review of MATLAB, and Python programming 	DCyber,	13	<ul style="list-style-type: none"> Dr. Ale Felix Dr. Sausu Muhammad
B.6	S1	<ul style="list-style-type: none"> UAV design and development 	DCyber DMPT DLS	4	<ul style="list-style-type: none"> Dr. Soyinka Oluwale
	S2	<ul style="list-style-type: none"> Nanosatellite development 	DSaCum Dcyber	4	<ul style="list-style-type: none"> Dr. Essien Ewang
	S3	<ul style="list-style-type: none"> Spacecraft power generation and distribution 	DSaCum Dcyber	4	<ul style="list-style-type: none"> Dr. Ejirofor Chijioke
	S4	<ul style="list-style-type: none"> Network security, design and monitoring 	DSaCum Dcyber	4	<ul style="list-style-type: none"> Dr. Ale Felix
		Hours Sub-total		139	
		ADVANCED LEVEL/HANDS-ON PRACTICAL SESSION			
C.1	S1	<ul style="list-style-type: none"> LEO Satellite Orbit prediction MATLAB Review of algorithms for determining EOB satellite orbit Hands-on demonstration and testing with a ground antenna 	All except DFOS and DLS	8	<ul style="list-style-type: none"> Dr. John Mounch Dr. Ale Felix
C.2	S1	<ul style="list-style-type: none"> Rocket Development process and costal selection Rocket system integration and testing 	DLS	5	<ul style="list-style-type: none"> Dr. Durojaye

- We are Collaborating with NASRDA in the development of AIT Clean room

HEPTA-Sat Training



- We attended a day HEPTA-Sat training program

November 30

HEPTA-SAT TRAINING

at E&E Engineering building, Stellenbosch University



- We attended UNISEC-Global meeting
- Intermediately carrying on some training programs in our region

Plans for 2024-25 and beyond

- Complete the development of AIT Clean room project
- Collaborate with local/international institutions to develop Cube-sat for expansion of local chapter activities
- HEPTA-SAT Training (Training and host).

Thank you