

FEDERAL UNIVERSITY OF TECHNOLOGY, OVERRI

IMO STATE NIGERIA

.... Technology for Service



2021

ANNUAL REPORT



Website: www.futo.edu.ng

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CHAPTER ONE

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CHAPTER ONE

BRIEF HISTORY OF THE UNIVERSITY

The Federal University of Technology, Owerri was the first of the three Universities of Technology established by the Federal Government to admit students in the 1981/82 academic session, others being at Akure and Minna. The establishment of these three Universities and subsequent ones in later years was in direct response to the National need for the development of a Technology based economy.

The University was established in October, 1980 and started operating on November 28, 1980 in the premises of the Government Technical College Owerri, with a compliment of ten staff borrowed from the Imo State Civil Service. Professor Umaru Dechi Gomwalk, former Head of Chemistry Department and Dean of the Faculty of Science in Ahmadu Bello University, Zaria was appointed the first Vice-Chancellor of the Federal University of Technology, Owerri. The institution later moved to Lake Nwaebere temporary campus (then permanent site of Federal Government Girls College, Owerri) in Owerri town, 1980-1993. It then moved to its permanent site in Owerri West Local Government Area in 1992/1993 academic session. This site occupies a communal land originally owned by the following host communities- Ihiagwa, Okolochi, Eziobodo, Nekede and Obinze. This land measures over (4500) hectares.

During this period, only few infrastructural facilities were in place and the University needed some time and funds to raise more infrastructures and facilities before a mass movement to the site. After the complete movement to

the site, many landmark strides have been made in erecting more befitting infrastructural facilities for a University of its kind. Starting with Professor Umaru Dechi Gomwalk, as the first substantive Vice-Chancellor, other former Vice-Chancellors contributed immensely in developing and making FUTO one of the best Universities in the Federation today. The Vice-Chancellors were Professor Amagh Nduka, Engr. Prof. C.O.G. Obah, Prof. J. E. Njoku, late Prof. C. O. E. Onwuliri, Prof. C. C. Asiabaka, Prof. F. C. Eze and our present Vice-Chancellor, Prof. Mrs. N. N. Oti.

Academic activities started in the University in the 1981/1982 session with only one school, the School of Natural and Applied Science, which was later changed to the School of Earth, Mineral and Natural Sciences and finally to the School of Science. In the 1982/1983 academic session, three other undergraduate schools were added.

They are the School of Engineering and Engineering Technology, School of Agricultural and Agricultural Technology and School of Management Technology. Some academic support units were established within the period too. A Postgraduate School was established in 1989. Subsequently in 2004/2005 session, the School of Health Technology was established and in 2009 the School of Environmental Sciences was established. In 2015, the School of Sciences was split into School of Biological Science and School of Physical Sciences. In 2018, School of Information and Communication Technology (SICT) EMERGED, bringing the number of schools in the University to Nine (9) (Eight (8) undergraduate and one (1) Postgraduate school).

The University which started with an initial undergraduate intake of two hundred and twenty-five (225) students enrolled in its then School of Natural and Applied Science in the 1981/1982 session has shot up astronomically to twenty three thousand, eight hundred and sixty five (23,865) undergraduate students in the 2020/2021 academic session. The academic staff strength which was 28 at inception has increased to one thousand three hundred and ninety nine (1,399) in 2020/2021 academic session. At present, there are fifty seven (57) undergraduate degree programmes and thirty seven (37) Postgraduate programmes in the eleven Schools.

THE UNIVERSITY CREST

THEME

EXPLOITATION OF NATURAL RESOURCES THROUGH SCIENTIFIC AND TECHNOLOGICAL KNOW-HOW FOR THE BENEFIT OF THE NATION

DESCRIPTION OF THE LOGO

- | | |
|---------------------------------------|--------------------------------|
| a. Open book | Knowledge |
| b. Wheel | Technology |
| c. Balance & Microscope | Science |
| d. Green Colour | Agriculture & Forestry |
| Resources | |
| e. Black Colour | Mineral Resources (Coal & Oil) |
| f. Green, White and Yellow Background | National Colours and Glory |

UNIVERSITY SONG

Hur-rah! Our Great Fed-U-ni-tech,
O-werri town you've come to grace;
Hope of our land to Indus-tria-lize
And of Comfort for our people.

Here in O-Wer-ri U-ni-tech
The World's great minds and thin-kers meet
To teach and mould ta-lent-ed youths.
Who'll build Af-ri-ca's land of hope.

From North and South and East and West

Con-verge we wis-dom here to seek:
Fel-low-ship, en-dur-rance and skill
May we have these great virtues find
My Al-ma Mater.

MOTTO

Technology for Service

VISION

The Federal University of Technology, Owerri seeks to be a top-ranked first-class institution of excellence in technological knowledge production and dissemination, through teaching, research and service to humankind.

MISSION

The Federal University of Technology, Owerri was established as a corporate body with a definite mission; to operate practical and result-oriented Programmes and training geared towards transforming the nation's economy from consumer-oriented to production oriented, with a sound technological base.

OBJECTIVES

The Federal University of Technology, Owerri is empowered by the law establishing it to undertake responsibilities as follows:

- To encourage the advancement of learning and to hold out to all persons without distinction of race, creed, sex or political

conviction, the opportunity of acquiring a higher education in technology;

- To develop and offer academic and professional programmes leading to the award of diplomas, first degrees, postgraduate research and higher degrees which emphasize planning adaptive, technical, maintenance, developmental and productive skills in the engineering, scientific, agricultural, medical and allied professional disciplines with not only to understand, use and adapt existing technology, but also to improve on it and develop new ones;
- To act as agents and catalysts, through postgraduate training, research and innovation for the effective and economic utilization, exploitation and conservation of the country's natural, economic and human resources;
- To offer to the general population, as a form of public service, the results of training and research and to foster the practical application of these results;
- To establish appropriate relationships with other national institutions in training and research and development of technologies;
- To identify the technological problems and needs of society and to find solutions to them within the context of overall national development;
- To provide and promote sound basic-scientific training as a foundation
for the development of technology and applied sciences, taken into

account indigenous culture and the need to enhance national unity; and

- To undertake any other activities, appropriate for a University of Technology of the highest standard.

POLICY THRUST

The policy thrust of the current administration of Prof. F. C. Eze is to achieve excellence in all its ramifications in the University community. The policy directions are therefore as follows:

- To ensure relevance and competitiveness of academic programmes in the current era of knowledge economy.
- To focus on research in areas of core competence.
- To fully computerize all aspect of the University activities and to provide online access on campus
- To retrain staff for institutional efficiency at all levels of the university.
- To expand access to infrastructural facilities and to improve the
 - student/staff ratio.
- To facilitate concrete linkages with Universities in Africa and the rest of the world so as to attain an international outlook.
- To harness the Otamiri River for electricity, recreation, agriculture and water supply and
- To beautify and landscape the campus.

GENERAL ACTIVITIES OF THE UNIVERSITY

ADMISSION EXERCISE

The 39th Matriculation Ceremony of the University was successfully conducted on Friday, October 8, 2021 where a total of five thousand four hundred and forty two thousand (5,442) students were formally inducted as students of the University. The traditional pre-matriculation Parents and Management Forum (PMF) interaction was held in line with the University practice.

**NEW ENTRANTS (FRESH UNDERGRADUATES) ENROLMENT 2020/2021 (YR1
HEADCOUNT ENROLMENT)**

| YEAR | MALE | FEMALE | TOTAL |
|------------------|--------------|---------------|--------------|
| 2020/2021 | 3,794 | 1,648 | 5,442 |

The 33rd Convocation Ceremony

At the 33rd Convocation ceremony held on Saturday, December 4, 2021 a total number of 4,099 students convocated from our undergraduate programmes while 375 students graduated from our postgraduate school.

LIST OF SCHOOLS AND DEPARTMENTS, THEIR ACRONYMS AND YEAR OF COMMENCEMENT

| | SCHOOLS/DEPARTMENTS | ACRONYM | YEAR OF COMMENCEMENT |
|----------|--|----------------|-----------------------------|
| 1 | SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY | SAAT | |
| 1 | Agricultural Economics | AEC | 1982 |
| 2 | Agricultural Extension | AEX | 2003 |
| 3 | Animal Science & Technology | AST | 1982 |
| 4 | Crop Science & Technology | CST | 1982 |
| 5 | Fisheries & Aquaculture Technology | FAT | 2007 |
| 6 | Forestry & Wildlife Technology | FWT | 2007 |
| 7 | Soil Science Technology | SST | 1982 |
| 2 | COLLEGE OF MEDICINE SCHOOL OF BASIC MEDICAL SCIENCE | SBMS | |
| 8 | Anatomy | ANA | |
| 9 | Physiology | PHS | |
| 3 | SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY | SEET | |
| 10 | Agricultural & Bioresources Engineering | ABE | 1981 |
| 11 | Chemical Engineering | CHE | 1987 |
| 12 | Civil Engineering | CIE | 1982 |
| 13 | Electrical & Electronics Engineering | EEE | 1982 |
| 14 | Food Science & Technology | FST | 1981 |
| 15 | Materials & Metallurgical Engineering | MME | 1982 |
| 16 | Mechanical Engineering | MEE | 1982 |
| 17 | Mechatronics Engineering | MCE | 2018 |
| 18 | Petroleum Engineering | PET | 1982 |
| 19 | Polymer & Textile Engineering | PTE | 1991 |
| 4 | SCHOOL OF BIOLOGICAL SCIENCES | SOBS | |
| 20 | Biochemistry | BCH | 2003 |
| 21 | Biology | BIO | 2009 |
| 22 | Biotechnology | BTC | 2003 |

| | | | |
|----------|---|-------------|------|
| 23 | Microbiology | MCB | 2003 |
| 24 | Forensic Science | FOS | 2019 |
| 5 | SCHOOL OF HEALTH TECHNOLOGY | SOHT | |
| 24 | Biomedical Technology | BMT | 2004 |
| 25 | Dental Technology | DNT | 2004 |
| 26 | Environmental Health Science | EHT | 2018 |
| 27 | Optometry | OPT | 2004 |
| 28 | Prosthetics & Orthotics | POT | 2004 |
| 29 | Public Health | PUH | 2004 |
| 6 | SCHOOL OF ENVIRONMENTAL SCIENCES | SOES | |
| 30 | Architecture Technology | ARC | 2009 |
| 31 | Building Technology | BDT | 2009 |
| 32 | Environmental Technology | EVT | 1998 |
| 33 | Quantity Surveying | QST | 2009 |
| 34 | Survey & Geoinformatics Technology | SVG | 2009 |
| 35 | Urban and Regional Planning | URP | 2009 |
| 7 | SCHOOL OF MANAGEMENT TECHNOLOGY | SMAT | |
| 36 | Financial Management Technology | FMT | 2006 |
| 37 | Information Management Technology | IMT | 2005 |
| 38 | Management Technology | MGT | 2004 |
| 39 | Maritime Management Technology | MMT | 1982 |
| 40 | Project Management Technology | PMT | 1982 |
| 41 | Transport Management Technology | TMT | 1982 |
| 8 | SCHOOL OF PHYSICAL SCIENCES | SOPS | |
| 42 | Chemistry | ICH | 1981 |
| 43 | Computer Science | CSC | 2003 |
| 44 | Geosciences | GEO | 1981 |
| 45 | Mathematics | MTH | 1981 |
| 46 | Physics | PHY | 1981 |
| 47 | Science Laboratory Technology | SLT | 2009 |
| 48 | Statistics | STA | 2006 |

| | | | |
|---|--------------------------------|-----|------|
| 9 | POSTGRADUATE SCHOOL | PGS | 1989 |
| | Directorate of General Studies | DGS | 1981 |

E-MAIL ADDRESS OF SCHOOLS AND DEPARTMENTS

| | SCHOOLS/DEPARTMENTS | E-mail Address |
|----|--|--|
| 1 | SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY | agriculture@futo.edu.ng |
| 1 | Agricultural Economics (AEC) | agriceconomics@futo.edu.ng |
| 2 | Agricultural Extension (AEX) | agricextension@futo.edu.ng |
| 3 | Animal Science & Technology (AST) | animalscitech@futo.edu.ng |
| 4 | Crop Science & Technology (CST) | cropscitech@futo.edu.ng |
| 5 | Fisheries & Aquaculture Technology (FAT) | fishaquatech@futo.edu.ng |
| 6 | Forestry & Wildlife Technology (FWT) | forestrywildtech@futo.edu.ng |
| 7 | Soil Science Technology (SST) | soilscitech@futo.edu.ng |
| 2 | SCHOOL OF BASIC MEDICAL SCIENCE | basicmedsci@futo.edu.ng |
| 8 | Anatomy (ANA) | anatomy@futo.edu.ng |
| 9 | Physiology (PHS) | physiology@futo.edu.ng |
| 3 | SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY | engineering@futo.edu.ng |
| 10 | Agricultural & Bioresources Engineering (ABE) | agriceng@futo.edu.ng |
| 11 | Chemical Engineering (CHE) | chemicaleng@futo.edu.ng |
| 12 | Civil Engineering (CIE) | civileng@futo.edu.ng |
| 13 | Electrical & Electronics Engineering (EEE) | electelecteng@futo.edu.ng |
| 14 | Food Science & Technology (FST) | foodscitech@futo.edu.ng |
| 15 | Materials & Metallurgical Engineering (MME) | matmeteng@futo.edu.ng |
| 16 | Mechanical Engineering (MEE) | mecheng@futo.edu.ng |
| 17 | Mechatronics Engineering (MCE) | mechaeng@futo.edu.ng |
| 18 | Petroleum Engineering (PET) | peteng@futo.edu.ng |
| 19 | Polymer & Textile Engineering (PTE) | polytexeng@futo.edu.ng |

| | | |
|----------|--|--|
| 4 | SCHOOL OF BIOLOGICAL SCIENCES | biologicalsci@futo.edu.ng |
| 20 | Biochemistry (BCH) | biochem@futo.edu.ng |
| 21 | Biology (BIO) | biology@futo.edu.ng |
| 22 | Biotechnology (BTC) | biotech@futo.edu.ng |
| 23 | Microbiology (MCB) | microbiology@futo.edu.ng |
| 5 | SCHOOL OF HEALTH TECHNOLOGY | healthtech@futo.edu.ng |
| 24 | Biomedical Technology (BMT) | biomedtech@futo.edu.ng |
| 25 | Dental Technology (DNT) | dentech@futo.edu.ng |
| 26 | Environmental Health Technology (EHT) | envihealthtech@futo.edu.ng |
| 27 | Optometry (OPT) | optometry@futo.edu.ng |
| 28 | Prosthetics & Orthotics (POT) | prosthetics@futo.edu.ng |
| 29 | Public Health (PUH) | publichealth@futo.edu.ng |
| 6 | SCHOOL OF ENVIRONMENTAL SCIENCE | environmental@futo.edu.ng |
| 30 | Architecture (ARC) | architecture@futo.edu.ng |
| 31 | Building Technology (BDT) | buildingtech@futo.edu.ng |
| 32 | Environmental Technology (EVT) | environmentaltech@futo.edu.ng |
| 33 | Quantity Surveying (QST) | quantitysurveying@futo.edu.ng |
| 34 | Survey & Geoinformatics Technology (SVG) | surveygeoinfo@futo.edu.ng |
| 35 | Urban and Regional Planning (URP) | urban_regionalplan@futo.edu.ng |
| 7 | SCHOOL OF MANAGEMENT TECHNOLOGY | management@futo.edu.ng |
| 36 | Financial Management Technology (FMT) | financialmgt@futo.edu.ng |
| 37 | Information Management Technology (IMT) | infomanagement@futo.edu.ng |
| 38 | Management Technology (MGT) | mgttechnology@futo.edu.ng |
| 39 | Maritime Management Technology (MMT) | maritimemgt@futo.edu.ng |
| 40 | Project Management Technology (PMT) | projectmgt@futo.edu.ng |
| 41 | Transport Management Technology (TMT) | transportmgt@futo.edu.ng |
| 8 | SCHOOL OF PHYSICAL SCIENCE | physicalsci@futo.edu.ng |
| 42 | Chemistry (CHM) | chemistry@futo.edu.ng |
| 43 | Computer Science (CSC) | computersci@futo.edu.ng |
| 44 | Geology (GEO) | geology@futo.edu.ng |
| 45 | Mathematics (MTH) | Mathematics@futo.edu.ng |

| | | |
|----|-------------------------------------|--|
| 46 | Physics (PHY) | physics@futo.edu.ng |
| 47 | Science Laboratory Technology (SLT) | sciencelabtech@futo.edu.ng |
| 48 | Statistics (STA) | statistics@futo.edu.ng |

ACCREDITATION STATUS OF PROGRAMMES

School of Agriculture and Agricultural Technology

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|--------------------------|-----------------------|-----------------------------|------|-----------------------------------|--------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 1. | Agricultural Economics | 1982 | 1981 | 1982 | 2019 | FULL | |
| 2. | Agricultural Extension | 1982 | 1981 | 1982 | 2019 | FULL | 2024 |
| 3. | Animal Science &Tech | 1982 | 1981 | 1982 | 2019 | FULL | 2024 |
| 4. | Crop Science &Tech | 1982 | 1981 | 1982 | 2019 | FULL | 2024 |
| 5. | Soil Science &Tech | 1982 | 1981 | 1982 | 2019 | FULL | 2024 |
| 6. | Fisheries &Aquaculture | 2007 | 2007 | 2007 | 2015 | FULL | 2024 |
| 7. | Forestry& Wildlife Tech. | 2007 | 2007 | 2007 | 2017 | FULL | 2020 |
| 8. | Agribusiness | 2020 | 2020 | 2020 | 2020 | Awaiting Resource Verification | 2022 |

School of Engineering and Engineering Technology

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|----------------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 9. | Agricultural Engineering | 1981 | 1981 | 1981 | 2016 | FULL | 2021 |
| 10. | Chemical Engineering | 1987 | 1981 | 1981 | 2019 | FULL | 2024 |
| 11. | Civil Engineering | 1982 | 1981 | 1981 | 2016 | FULL | 2021 |
| 12. | Electrical/Electronic. Eng | 1982 | 1981 | 1981 | 2016 | FULL | 2021 |
| 13. | Food Science & Technology | 1981 | 1981 | 1981 | 2016 | FULL | 2021 |
| 14. | Mat. & Met. Engineering | 1982 | 1981 | 1981 | 2019 | FULL | 2024 |
| 15. | Mechanical Engineering | 1982 | 1981 | 1981 | 2016 | FULL | 2021 |
| 16. | Petroleum Engineering | 1982 | 1981 | 1981 | 2016 | FULL | 2021 |
| 17. | Polymer & Textile Eng. | 1981 | 1981 | 1981 | 2019 | INTERIM | 2021 |
| 18. | Mechatronics Eng. | 2018 | 2017 | 2019 | 2019 | RESOURCE VERIFICATION COMPLETED | 2023 |

School of Physical Sciences

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|------------------|-----------------------|-----------------------------|------|-----------------------------------|------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 19. | Chemistry | 1981 | 1981 | 1981 | 2019 | FULL | 2024 |
| 20. | Physics | 1981 | 1981 | 1981 | 2019 | FULL | 2024 |
| 21. | Mathematics | 1981 | 1981 | 1981 | 2015 | FULL | 2020 |
| 22. | Geology | 1982 | 1981 | 1981 | 2019 | FULL | 2024 |
| 23. | Statistics | 2006 | 1981 | 1981 | 2019 | FULL | 2024 |
| 24. | Science Lab.Tech | 2009 | 2008 | 2008 | 2016 | FULL | 2021 |

School of Biological Sciences

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 25. | Biology | 2009 | 2008 | 2008 | 2015 | FULL | 2020 |
| 26. | Biochemistry | 2002 | 2002 | 2002 | 2019 | FULL | 2024 |
| 27. | Biotechnology | 2002 | 2002 | 2002 | 2016 | FULL | 2021 |
| 28. | Microbiology | 2002 | 2002 | 2002 | 2016 | FULL | 2021 |
| 29. | Forensic Science | 2020 | 2020 | 2020 | 2020 | RESOURCE VERIFICATION COMPLETED | 2024 |

School of Information and Communication Technology

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|------------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 30. | Computer Science | 1981 | 1981 | 1981 | 2019 | INTERIM | 2021 |
| 31. | Information Technology | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |
| 32. | Cyber Security | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |
| 33. | Software Engineering | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |

School of Health Technology

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|-----------------------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 34. | Dental Technology | 2003 | 2002 | 2002 | 2017 | FULL | 2022 |
| 35. | Optometry | 2003 | 2002 | | 2015 | FULL | 2020 |
| 36. | Biomedical Technology | 2003 | 2002 | | 2017 | FULL | 2022 |
| 37. | Prosthetics & Orthotics | 2003 | 2002 | | 2017 | FULL | 2022 |
| 38. | Public Health | 2003 | 2002 | | 2015 | FULL | 2020 |
| 39. | Environmental Health Science | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |
| 40. | Radiography and Radiation Science | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |

School of Environmental Sciences

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|----------------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 41. | Building | 2007 | 2006 | 2007 | 2018 | FULL | 2024 |
| 42. | Architecture | 2007 | 2006 | 2007 | 2018 | FULL | 2024 |
| 43. | Quantity Survey | 2007 | 2006 | 2007 | 2017 | FULL | 2022 |
| 44. | Surveying & Geoinformatics | 2007 | 2006 | 2007 | 2015 | FULL | 2020 |
| 45. | Urban & Regional Planning | 2007 | 2006 | 2007 | 2017 | FULL | 2022 |
| 46. | Environmental Management | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2023 |

SCHOOL OF LOGISTICS & INNOVATION TECHNOLOGY

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|---------------------------------|-----------------------|-----------------------------|------|-----------------------------------|--------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 47. | Financial Management Technology | 2007 | 2003 | 2007 | 2017 | FULL | 2022 |
| 48. | Project Management Tech. | 1983 | 1981 | 1981 | 2016 | FULL | 2021 |
| 49. | Transport Management Tech. | 1983 | 1981 | 1981 | 2016 | FULL | 2021 |
| 50. | Management Tech. | 2007 | 2003 | 2007 | 2017 | AWAITING RESOURCE VERIFICATION | NIL |
| 51. | Maritime Management | 2004 | 2007 | 2007 | 2017 | FULL | 2022 |

School of Basic Medical Sciences

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|----------------------|-----------------------|-----------------------------|------|-----------------------------------|---------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 52. | Human Anatomy | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2024 |
| 53. | Physiology | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2024 |
| 54. | Medical Biochemistry | 2020 | 2020 | 2020 | 2021 | RESOURCE VERIFICATION COMPLETED | 2024 |

School of Basic Medical Sciences

| S/N | PROGRAMMES | YEAR OF ESTABLISHMENT | APPROVED OF STATUS AND YEAR | | LAST YEAR OF ACCREDITATION STATUS | PRESENT ACCREDITATION STATUS | MATURITY YEAR OF ACCREDITATION STATUS |
|-----|-------------------------------|-----------------------|-----------------------------|-----|-----------------------------------|--------------------------------|---------------------------------------|
| | | | SENATE | NUC | | | |
| 55. | ELECTRONIC ENGINEERING | | | | | AWAITING RESOURCE VERIFICATION | NIL |
| 56. | TELECOMMUNICATION ENGINEERING | | | | | AWAITING RESOURCE VERIFICATION | NIL |
| 57. | COMPUTER ENGINEERING | | | | | AWAITING RESOURCE VERIFICATION | NIL |

HISTORY AS FUTO ELECTED FIRST FEMALE VICE-CHANCELLOR

History was made on Tuesday, April 13, 2021 as Professor Nnenna Oti was appointed the 8th substantive Vice-Chancellor of the Federal University of Technology, Owerri (FUTO).

With this appointment, she becomes the first female to be elected in the capacity of VC in the prestigious Institution.

Prior to this height, she was the Deputy Vice-Chancellor (Academics) of FUTO and was a two-time Dean of the Post-Graduate School.



Prof. (Mrs.) Nnenna N. Oti.

Professor Oti was a three-time Head of the Department of Soil Science and Technology (SAAT) and the immediate past chairperson of the Gender Policy Unit (GPU).

With over 20 year lecturing experience, the new FUTO VC has 65 academic papers, 40 seminar and workshop papers, edited a handbook, 50 public lectures.

**INAUGURAL ADDRESS FROM THE 8TH SUBSTANTIVE VICE-CHANCELLOR TO
GENERAL ASSEMBLY
CONSOLIDATING THE CULTURE OF EXCELLENCE
BY PROF. (MRS) NNENNA NNANNAYA OTI JP, RSS.
FSS N, MASN, MIUSS, MASSA, MCSSA, MASA
JULY 26, 2021**

Protocol

Preamble

At the then University College Hospital (UCH) Ibadan, in the early 1960's, a baby died! and was placed inside the mortuary (nose stuffed With cotton wool) and tiny body covered with a white blanket. The wailing mother refused to leave the mortuary door or Hospital premises. About 6-8 hours later, as she was waiting for her husband and his Elder brother to arrive from Lagos and handle the burial rites, another death occurred in that hospital. As the adult deceased body was taken into the mortuary, the morgue attendant noticed the baby's body moving violently under the blanket, and quickly ran out Screaming in fear! The overwhelmed mother rushed into the mortuary, removed the cotton wool and blanket and took her baby home! That baby was ME! I am a child of Destiny, purpose and divine mandate.

What grace started! Grace will complete.

He has done great things (3X)

Praise His Holy Name.

You are God from beginning to the end

There's no place for argument

You are God all by yourself.

2.0 Introduction

I wish to respectfully start this inaugural address, by thanking the Chairman of the 11 Governing Council of the Federal University of Technology, Owerri, Prof. J.O. Offem, and indeed all the members of Council for appointing me the 8th Substantive Vice-Chancellor of Federal University of Technology, Owerri, on the 13 day of April, 2020 through a very peaceful and transparent process. May the good Lord bless you all.

My deep gratitude goes to Prof. F.C. Eze, the immediate past Vice-Chancellor, a trail-blazer, whose achievements in the last 5 years will be Written in gold! A simple, humble, unassuming, yet very focused administrator. He left the office,

a better man, than he went in. He managed to accomplish an unusual feat the Office did not change him. Your non-interference approach guaranteed a peaceful contest and outcome. You bear pressure with calm and grace. May the good Lord continue to bless you and your family.

I stand proudly on the solid foundation laid by all the previous Vice-Chancellors, namely Late Prof. U.D. Gomwalk, Late Prof. A. Nduka, Engr. Prof. G. O.C. Obah, Prof. J. E. Njoku, Late Prof. C. O. E. Onwuliri, Prof, C. C. Asiabaka, and Prof. F.C. Eze. you all, working in harmony with the previous Councils, and Management teams, built the enviable FUTO BRAND, a household name synonymous with excellence and global standards. I also salute all the other past Acting Vice-Chancellors (Late Prof. U. B. C. O. Ejike, Prof. J.O. Duru, Prof. C.C. Ntamere, Prof. IC. Ogwude and Engr. Prof. A. Nwachukwu) and Principal Officers. Your contributions were outstanding, and highly Valued.

I applaud the contributions of the Senate, Deans, Heads of Departments, Directors, all Members of ASUU, SSANU, NAAT and NASU. God bless you all.

I salute our Students and Alumni. You are simply the best! And you are the reason we are here! Continue to fly the flag of achievements very high! A million Gbozas!! To the highest heaven!

I thank all the Clergy and religious leaders whose continuous prayers and petitions keep Us safe , and teachings make us better persons and prepare us for life after here.

To the host communities I extend a hand of friendship, love and peace. We remain grateful and partners in progress. Ala Igbo ga di mma!

To my dear mother, siblings, extended family, well wishers and friends, my children and husband, thank you all for being the wind under my wings. Your love, support, prayers and encouragement are the reason I am standing here today, as the first female Vice-Chancellor of any Federal University in the 5 southeastern states, and the 8h Substantive Vice-Chancellor of the Federal University of Technology, Owerri.

Unu Jokwa ooo! To God alone be all the glory.

3.0 My Leadership Style

I have spent the last 30 years of my life in pursuit of the high ideals of good governance and inspirational leadership that works for the Common good, driven by my patriotic zeal and dream of a better Nigeria that works for all its citizens. The major differences between developed and non-developed nations, successful and unsuccessful societies, are the paradigms on which they build their ideologies and philosophies, the quality of leadership, how they run public institutions and governments, their core values and general attitudes, the application of the rule of law and respect for one-another. If we, as a people say yes to our better angels and apply ourselves to lofty and noble ideals, doing due diligence to our chosen vocations, applying ourselves to the quest for scholarship and excellence, our communities, universities and nation will meet global standards.

There is nothing wrong with Nigeria, but everything is wrong with the way we manage our affairs. We can all do better. Yes we can! The University system is a microcosm of the larger Nigerian society. It represents this country's last hope as incubators of Knowledge and technological skills, an oasis of very high moral standards and rectitude! Yes, the University is the Ivory Tower! It is the symbol and representation of our nation's best brains and minds.

3.1 Good Governance Principles

The following good governance and effective leadership principles will guide my general leadership style.

- **Participation by all Stakeholders:** I shall strive to engage and carry all key stakeholders along at all times.
- **Consensus Oriented:** Respect for the opinions and sensibilities of others. This means using the committee system already enshrined in our laws and regulations effectively.
- **Equity and Inclusiveness:** I will be consistent and fair-minded at all times. Similar cases will be treated in similar ways. Competence will be put above mediocrity. Same Standards for everyone, so that everyone will have a strong sense of belonging.
- **Transparency:** Openness, good communication and accountability, Decisions and their enforcement will follow laid down rules and regulations, Information will be freely available and directly accessible to those responsible for their implementation and those it will impact. However, all

classified information **MUST BE TREATED WITH RESPECT AND PRIVACY**. All violations will be sanctioned.

- **Responsiveness** : This is very important and implies sensitivity and quick reaction to needs. (We all know this is a major challenge in most institutions in this country) by being responsive to the needs of students and staff, we shall avoid internal meltdowns and industrial crisis. Students, in particular will be treated with compassion and parental oversight. They are the main reason universities exist, otherwise, universities become just Research institutes.

- **The Rule of Law:** I would want to be remembered as the **Rule-of-Law and**

Regulations Vice-Chancellor. It would be my strongest legacy ! The rule of law Protects us from arbitrariness! It means making the **Regulations and Laws governing the University our “Bible”** The Regulations listed below would be the operational reference manuals that would guide the day-to-day running of University matters.

a. The Federal University of Technology Act chapter F23

b. Federal University of Technology, Owerri Standing Orders

C. Regulations Governing the Condition of Appointments of Senior Staff

d. Regulations Governing the Condition of Appointments of Junior Staff

e. Handbook of Administrative Procedures

f. Schemes of Service for Junior Staff

g. Schemes of Service for Senior Staff

h. Several Specific Policy documents approved by Senate and Council e.g. Student

Handbooks, Research Policy, Anti-Plagiarism Policy, Sexual Harassment Policy, ICT

Policy, Financial Accounting Manual, etc.

- **Effectiveness and Efficiency:** This means to produce optimal results, at minimum costs and no wastages of resources-physical and intellectual capital.
- **Accountability:** I shall be very accountable to all stakeholders, putting the common good above self-interest at all times.

1.0. Mission of the Federal University of Technology, Owerri

The Federal Universities of Technology (Including FUTO) were established in the 1980s as corporate bodies with a definite mission: **to operate practical and result oriented Programmes and training geared towards transforming the nations economy From consumer-oriented to production-oriented, with a**

sound technological base.

This calls for, not merely understanding and using existing technology, but advancing and harnessing technology for the development of the immediate environs of each university, in particular, and the nation, in general.

The above mission has been fully elaborated and carefully embodied in the Federal Universities of Technology Act. CAP 13 (Laws of the Federal Government of Nigeria) establishing the FUTs with the following objectives:

- I. To encourage the advancement or learning and to hold out to all persons without distinction of race, creed, sex or political conviction, the opportunity of acquiring a higher education in technology.
- II. To develop and offer academic and professional Programmes leading to the award of diplomas, first degrees, postgraduate research and higher degrees which emphasize planning, adaptive, technical, maintenance, developmental and productive skills in he engineering, Scientific, agricultural, medical and allied professional disciplines with the aim of producing socially mature men and woman with capacity not only to understand, use and adapt existing technology, but also improve on it and develop new ones;
- III. To act as agents and catalysts, through postgraduate training, research and innovation for the effective and economic utilization, exploitation and conservation of the country's natural, economic and human resources.
- IV. To offer to the general population, as a form of public service, the results of training and research and to foster the practical application of these results;
- V. To establish the appropriate relationships with other institutions involved in training, research and development of technologies;
- VI. To identify technological problems and needs of the society and find solutions to them within the context of overall national development;
- VII. To provide and promote sound basic scientific training as a foundation for the development of technology and applied sciences, taking into account indigenous culture and the need to enhance national unity; and
- VIII. To undertake any other activities appropriate for universities of technology of the highest standards.

The above mission shall I uphold to the highest esteem.

5.0 My Mandate

5.1 Vision:

To” lead the scientific and technological transformation of our nation through excellence in teaching, research, innovation and community service, producing world class graduates, patents and indigenous solutions to local, national and global problems facing our world.”

My Vision is a FUTO:

- ...Full of highly competent, motivated and inspired staff.
- ...Brilliant, innovative students eager to learn with sound morals..
- ...Teachers ready to teach and transfer cutting-edge knowledge and skills, conduct relevant problem solving research, in a conducive environment devoid of strife and rancor.
- ...A Community of highly inspired and gifted workers from cleaners to professors.
- ...A workplace where staff would come to work everyday asking, how can I make FUTO better?
- Where students rush to class, sleep in laboratories and are mentored to become the Leaders and game changers of tomorrow...
- ...A management team that is focused, commands respect, is transparent, accountable, builds trust, and is responsive and responsible!

Mission Statement:

“To lead the technological transformation of Nigeria from its current status Into becoming a fire world economy by fulfilling our core objectives of skilled manpower training (production), relevant research and innovation that fully exploit our abundant natural resources to create wealth, jobs, and overall national development... to become the number one Centers of Excellence in our areas of competence- Engineering, Basic and Applied Sciences, ICT, Agriculture, Health and Management Sciences.”

5.3 Core Values

I shall promote the following core values

- Personal and academic integrity.
- Efficient resource management through financial responsibility and discipline.
- Accountability and transparency in all we do.

- Love and acceptance of all people through inclusiveness, a fairness and respect for diversity and different views.
- Thoroughness and diligence by being focused and committed to our corporate Objectives and values.
- Respect for rules, regulations and all persons.
- Professionalism and ethical behaviors at all times.
- Growing IGR through efficient management and expanded programs.
- Academic quality that creates jobs through quality content (curriculum) and delivery (teacher quality).
- Excellence in all we do- excellence is a process and lifestyle and not just an act!
- Solution-driven research.
- Patriotism and service we exist to serve humanity.
- Humility.
- Faith and the fear of God, guides all we do.
- Perseverance- we never, never give up. Every Goal is achievable!

6.0 Academic Matters

6.1 Improving Teaching and Learning Outcomes

- We shall promote excellence in teaching and learning by providing an enabling environment, support system and equipment.
- Curriculum upgrade by mainstreaming professional and vocational skills into our training modules.
- All programs must infuse the right set of technical skill, moral values and team spirit demanded by national and global markets to enhance employability, relevance and impact.
- Continuous ICT upgrade and training on hybrid teaching/learning models etc.
- We shall simplify the guidelines for conference attendance to ensure everyone benefits.
- Lecturers must be available, competent, professional, collegial, responsible and Responsive.
- Enhanced administrative skills, through rigorous regular trainings and provision of administrative documents and policies.

6.2 Research, Innovation and Entrepreneurship

Research is a core mandate of Universities. What we shall do to strengthen

research:

First, there would be a major paradigm shift in our research model to the Triple Helix

Model of Academia + Industry + Government partnership for enhance sponsorship, relevance and impact. The Triple Helix Model will further be expanded to the Quadruple Helix Model by including Society as the fourth pillar.

Goals

- To give national leadership in research in the areas of technology and sustainable developments, global competitiveness in ICT advancement, Artificial Intelligence (AI) ,medical and biotechnology breakthroughs, waste-to-wealth resource management, and environment conservation. We shall also emphasize basic research to expand the frontiers of knowledge.
- We shall expand our research infrastructure base by attracting at least 2 TETFund

National Research Fund (NRF) grants annually. Our target is to increase the number from the Current 2 to at least 10-15 in the next 5 years. TETFund recently increased the capital base of NRF from 5 Billion to 7.5 Billion annually.

- Maximally support the successful execution of all Centers of Excellence and TETFund National Research Fund (NRF) sponsored grant projects, etc.
- ✓ ACE-FUELS: African Centre of Excellence in Future Energies and Electrochemical Systems (2019, value: \$6 Million USD).
- ✓ CE-SPESS: Centre for Excellence in Sustainable Procurement, Environment and Social Standards Enhancement (2020, value: \$11 Million USD)
- ✓ COE-LOMAs: Centre of Excellence on Local Materials Substitution (2020, sponsored by the Nigeria Content Development Mobilization Board, NCDMB)
- Attract more Centers of Excellence.
- Strengthened collaboration with other institutions, government agencies, NGOs, and industries.
- Support DVC (RD&I) and CRID deliver on their mandate.
- 5% of IGR will be dedicated to funding value addition, solution-driven and innovative research, annually
- Awards for innovation, cutting-edge research and entrepreneurship. The University will help process and pay for patents, and sponsor winning teams

to national and international arenas to display products.

- Provide incentives for publishing in top rate journals.
- Improve the quantum and quality of our research output through quality publication in high impact (HI) journals.
- Win more research awards, increase number of patents and innovative products and Services.

7.0 Administrative Matters

7.1 Non-Teaching Staff

Same level of professionalism and ethics, will be expected and demanded. Effective, efficient, informed, professional, highly-motivated, responsible and responsive staff at all levels (administrative, technical/professional, secretarial and junior).

PEOPLE WILL COME TO WORK, STAY AT WORK AND DO THE WORK THEY ARE EMPLOYED TO DO.

- I will build bridges and consensus amongst all categories of staff who should see themselves as a vital and important part of the whole system.
- There will be regular trainings (in-house and national) for all staff, sponsorship to local and international conferences based on clear policy guidelines to Promote inclusiveness and reward, hard work and excellence.
- We shall follow due process at all times based on our regulations and Policies.

7.2 Relationship with Governing Council

We shall intentionally maintain a healthy, respectful, cooperative and harmonious relationship with Council that ensures not just peace, but growth and accelerated progress on all fronts: academic achievements, infrastructural development global visibility, improved staff and student morale, enhanced IGR and government funding, prudent financial management, securing our borders, release of Take-Off grant, improved national and internal ranking, consolidating the achievements of all previous councils.

7.3 Senate

Senate is the highest academic body of the University with oversight functions over

teaching, results, Degrees and Diplomas, academic quality, Curriculum new programs, student discipline, academic calendars etc. we have to ensure senate functions maximally, executive approvals will be minimized, and due

process ensured.

7.4 Congregation and Convocation

These bodies will be assisted to operate fully under the guidance of enabling laws. The vacant position of convocation representative at Council will be filled.

8.0 Dealing with Our Existential Challenges

8.1 Power

This has remained a daunting challenge to every administration from inception, but made much worse since the movement to the current permanent site in 1992.

Regular power supply will be achieved within the first few months of my administration.

The following are on ground already:

- Our recent reconnection to the National Grid through the goodwill of a special group of FUTU Alumni called FUTU Alumni Elders. God bless them.
- An audit of the current generators which litter every building.

Our focus will be to have clusters of buildings connected to a single giant generator to enhance efficiency and reduce cost of fuel and maintenance. Also to do all we can, to guarantee FUTU'S inclusion in the ongoing NUC/REA Abuja, Energizing Education Program Phase III. This is an African Development Bank Initiative and shall be a hybrid Solar and gas plant. We have gone through Baseline survey stage. We expect at least 5MW which will guarantee 24/7 power supply to FUTU. This will be my most important assignment in the first 100 days. I believe God for this breakthrough. And God said let there be light... And there was light in FUTU!!

8.2 Sustainable ICT Development

The 21 Century is the Information and Communication Technology age (ICT). ICT will therefore be the key driver of all our services and operations lectures, administration, admission, payments, registrations, results, transcripts, etc.

We will ensure the following goals and objectives are achieved:

- a. Hybrid/Blended Learning. At least 20%-30% of students learning experience should be through Virtual Learning Environment (VLE) and Learning

Management System (LMS), such as Blackboard, Canvas, Moodle, Google Classroom etc. The target in the first phase (next 2-3 years) is to require every course to maintain A COURSE ONLINE PAGE to feature class lists, course outlines, lecture videos and resources, recommended text books, announcements, assignments and quizzes etc. Next phase will be to upscale capacity for online lectures.

- b. Mounting Special Distance Learning Programs (Online Education Centers) through CCE and Academic Institutes.
- C. Digitalization of all records, results, archival materials, etc.
- d. Improved Webometrics.
- e. Upgrade of our website to global standards.
- f. Full digitization of all our processes and migration to paperless administration.
 - Internet availability on campus (complete coverage everywhere in FUTO).
 - Incisiveness – ICT training will be available to ALL (both Staff and students)!

8.2.1 Actualization Plan

- Develop an ICT Master Plan
- Full Implementation of our ICT Policy
- Installation of functional E-learning Platforms; including special recording studios
- Decentralized Computer Centers at School level
- Customized Mobile Applications to enable students register for courses, pay fees, get accommodation, check results, request for transcripts etc. directly from their smart Phones, laptops, notebooks, etc.
- Digitization of all students' result from first graduation class (1985/86). This will greatly reduce processing time for transcripts to within a week from request.
- Acquisition of extra STM-1 Internet Bandwidth
- Introduction of Personnel Database Records Management Information System.
- Liaising with Electronics Companies to provide customized handheld devices for students loaded with all required online learning application at highly subsidized costs.
- Intensive and continuous staff and students ICT-training.
- Explore alternative digital administrative systems like Stable Shield Solutions Technical Support Team (now used by some universities in Nigeria) to automate all registry Processes.

8.3 Land Encroachment And Security

The University Motto states: “Technology for Service”. Charity begins at home. We shall continue to positively impact not just our immediate host communities, but our entire catchment area.

We shall continue to work with the host communities, Imo State Government and Federal Government to recover every inch of the University Land. We shall however, not be shy to think ‘outside the box’ by considering viable alternatives!

8.3.1 Security, Fencing and Take-Off Grant

- The existing security architecture will be reviewed and repositioned for greater effectiveness. By its nature security strategies are not discussed in the open.
- While working with Council, we shall continue to pursue funding to complete the Perimeter fencing of the University. This will be one of. Our primary mandate.

9.0 Physical Infrastructure Development

Physical development will be based on the FUTU revised Master Plan. No indiscriminate siting of structures.

- Improved quality of buildings, roads, furniture.
- Improved maintenance culture.
- Systematic upgrade of all staff offices and furniture to befitting standards, and also building more departmental structures.
- Source funding for the already designed 6 storey magnificent e-library.
- Pursue staff housing schemes.
- Continue General Landscaping and Beautification of the campus.
- Emphasis will be on the completion and furnishing of existing structures, upgrading laboratories and office equipment, building more classrooms and lecture halls/theatres.

10.0 Students and Staff Welfare Matters

10.1 Students

- Increase the number of hostels, sporting and leisure facilities, promote healthy inter-school and inter-hostel competitions, in football, tennis, scrabble, choir etc. Currently only 10% of our estimated 25,000 students are housed in University-run hostels. Our target would be to increase this to 15 20% through PPP, Alumni, and BOT arrangement.

- Improve security, water and electricity supply, waste disposal management and hostel maintenance.
- Enhance medical services.
- Highly improve counseling services for educational, health, moral and psychological issues.
- Improve transportation' services and regulation of food vendors
- Improve assistance to indigent students through the Student Work Aid Scheme, more scholarships and grants, recognition for excellence in academics, sports and other national and global competitions.
- Improve surveillance against Cultism, Gender Based Violence (GBV), other violent acts, vandalism, harassments etc. using student volunteer vigilante groups, Man "O" War, community policing, etc.
- Establish easily accessible help lines and intervention, rescue and emergency services
- All students will be treated with respect and dignity at all times.
- Mentorship will be encouraged.

10.2 Staff

- Staff on-campus housing scheme will be pursued with renewed vigor and evaluation of diverse options.
- All existing welfare packages and schemes (retirement sendoff benefits, death benefits, etc.) will be reviewed upwards in line with current economic realities.
- Encourage staff clubs and recreational facilities. I will work with the unions to achieve this goal.
- Ensure efficient processing and payment of all staff emoluments, salaries, arrears, etc.
- Encourage co-operative society activities.
- Improve public transportation.
- Continue to support staff with difficult and expensive health challenges.
- We will promote healthy lifestyle changes through regular sensitization seminars and workshops by healthcare experts and monthly sporting events and competitions.

11.0 Union Matters

Unions are necessary partners in progress.

- I believe in responsible and responsive unionism based on a synergistic relationship between all the unions and management (ASUU, NASU, NAAT, SSANU, SUG).
- The fundamental principle of engagement shall be non-interference, mutual respect, dialogue, compromises and keeping the bigger objective of sustainable holistic development of FUTO in mind at all times.
- It is important here to note that FUTO Unions have rarely engaged in internal strikes. This culture will be maintained. Promoting industrial harmony will be priority.
- We will build strong team spirit amongst all staff, by emphasizing our common goals and objectives and minimizing antagonism between different staff categories.
- I shall promote the culture of mutual respect for all persons and keep the work environment conducive for maximum productivity.

12.0 Community Relations

The University Motto states: “Technology for Service”. Charity begins at home. We shall continue to positively impact not just our immediate host communities, but our entire catchment area.

- All Unions will be encouraged to reach out and engage in community service projects as part of their key annual functions.
- We shall continue to partner with FUTOWA through her many community-based Projects and services to have greater impact on the community, in particular vulnerable children, youth and women.
- We will target lifting at least 10 women from poverty each year through empowerment projects. (I have successfully run my private charity for more than 20 years raising millions of Naira for sick children, donating wheelchairs to hospitals and physically challenged people and giving seed money to empower the poor.)
- Establish community Scholarship Scheme in our Primary, Secondary and selected high impact departments in the University.
- SAAT, CARE, and FUTO farms will expand their services and impact on the community.
- Regular special sensitization programs on health and topical issues. We will work with all existing legitimate village groups to reach out to the most vulnerable people.
- Institute regular town hall meetings for peaceful dialogue and identification of areas of need and interventions.

- Regular targeted programs by the Health Centre, Departments of Optometry, Food Science, Public Health etc.

13.0 Alumni Relations

FUTO is a relatively young University with estimated alumni population of 80,000 – 100,000. This is a massive population of our products which can and should be leveraged as a significant growth and development partner.

- We shall encourage strong alumni associations in every state of the country and major regions of the world.
- They shall be encouraged to execute targeted projects to lift the FUTO brand nationally and internationally.
- The former Governor of Anambra State, Mr. Peter Obi recently (October 2020) inaugurated a N5 Billion infrastructure fund in the University of Nigeria, Nsukka (UNN), his alma mater. This is the kind of alumni relations we want going forward.

14.0 Value Re-orientation, Ethics and Discipline

- We shall engage in active value re-orientation for staff and students by working with all unions and running regular sensitization programs with internal and external resource persons.
- Code of conduct and ethics booklets will be produced, and made available to all staff. Staff will be required to sign code of conduct forms.
- We shall introduce the University pledge.
- Emphasis will be on deterrence of unacceptable conduct and reward for outstanding Performance.
- Faith-based and moral enhancing activities and programs will be promoted.
- Every School, Department and Unit will be encouraged to promote and highlight ethical Conduct.
- No form of indiscipline (lateness, absenteeism, etc.) will be condoned.
- Zero-tolerance policy for corruption, extortions, sales of unauthorized materials, Gender Based Violence (GBV), sexism, sexual harassment, cultism, examination malpractice, sorting etc. All such infractions will be sanctioned.
- We will work with all existing organs – SERVICOM, Quality Assurance, ACTU, to ensure full compliance with existing policies.

15.0 The Challenges Ahead

- To consolidate the culture of excellence in all we do – Teaching, Research, Administration, and Community outreach.
- To increase IGR to at least 3.5 Billion annually.
- To source and increase external funding for fencing, infrastructural development and research.
- To make all our business ventures profitable and establish new viable ones.
- Value re-orientation of staff and students, and build an enhanced culture of the core values of honesty, integrity, discipline, hard work, honor, duty and patriotism.
- To resolve our land encroachment challenges and recovery of FUTO land.
- To maintain peaceful and cordial, mutually beneficial relationships with all the Unions and the host Community.
- The Successful execution of the 3 Centers of Excellence, attracting at least 5 more and improving FUTO's national and global rankings and status.
- To minimize the disruptive impact of union strikes.
- To significantly improve the quality of physical infrastructure development, furniture, services and maintenance culture.
- To expand ICT infrastructure, to drive hybrid learning, full digitalization of all our Processes and archival material, free internet availability on campus, and intensive ICT trainings for staff and students

THE VICE CHANCELLOR'S ACHIEVEMENTS WITHIN ONE YEAR IN OFFICE

Following the VC's inaugural speech of July 26, 2021 which centred on her mantra "**Consolidating the Culture of Excellence**" she promised to make the regulations and laws governing the University our "**Bible**". And her ability to produce optimal results at minimum costs has shown within the short period of time as the VC.

The achievements are not limited to the outlined projects below;

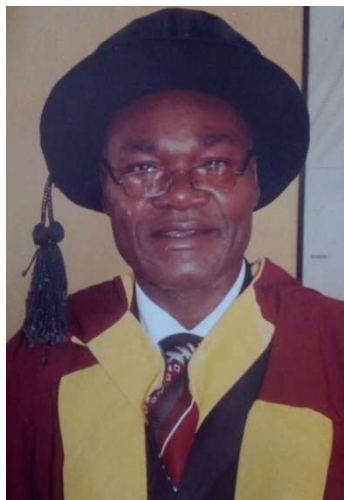
1. On her assumption of office, she visited all Units, Schools, Directorates etc., to encourage and motivate staff and students for greater productivity.
2. Lost and stolen University vast expanse of lands were fully recovered and fenced.
3. Electricity was restored on campus via FUTO ALUMNI ELDERS.
4. FUTO main entrance gate was totally reconstructed and remodeled.
5. Failed, dilapidated and impassable FUTO/OBINZE ROAD was rehabilitated via FERMA.
6. Promotion letters were released timely and arrears had been paid to concerned staff.
7. Staff, Heads of Departments, Units, Schools, Directorates and students were in their best.
8. Transcript Unit was accorded the urgent attention it deserved.
9. Arrangements were made to revolutionize agriculture in FUTO for the benefits of all.
10. Staff received payment of minimum wage arrears promptly unlike some other universities.
11. About 35 Concept notes approved for the University.

12. All the Departments that faced Accreditations were fully successful.
13. 100% success in resource verifications for new programmes.
14. Harmonious working relationship with all unions on campus.
15. Peaceful co-existence with host communities.
16. Assistant Lecturers to Senior Lectures were given brand new state of the art laptops.
17. Our Professors received gifts of brand new e-pads with one year data subscription for higher productivity and in appreciation for their services.
18. Staff welfare was her top priority as access to the Vice-Chancellor was unprecedented.
19. Repositioning of the University for greater service delivery and centre of excellence.
20. She refurbished and renovated our hostels within the short period.

CHAPTER TWO

SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY (SAAT)

DEAN'S OFFICE



Dean, Prof. P.C. Obasi



SAAT ADMINISTRATIVE BLOCK

INTRODUCTION:

The School of Agriculture and Agricultural Technology was one of the earliest Academic Units established at the inception of the University in 1981.

Having taken off with two programmes; Animal Production and Crop Production, a third programme, Agricultural Economics, was added in the 1982 /83 session.

Sequel to a re-organization of Academic Programmes in the Nation's Federal Universities of Technology in 1988 by the NUC, the University structured its programmes into Departments, and started operating three Departments as follows:

1. Agricultural Extension
2. Animal Production
3. Crop Production

A future addition of a fourth Department transferred the Department of Food Science and Technology (FST) from the then School of Natural and Applied Sciences into SAAT, but this addition was withdrawn in 1998 as the Department was later moved to the School of Engineering and Engineering Technology (SEET).

The University Senate also in 1998 approved a change of name and enlargement of the Department of Crop Production to the Department of Crop/Soil Science and Technology.

Further changes were effected in 2002/2003 session via Senate approval that gave SAAT its five Departments namely:

Department of:

- (Animal Science and Technology (AST)
- Agricultural Economics (AEC)
- Agricultural Extension (AEX)
- Crop Science and Technology (CST)
- Soil Science and Technology (SST)

The School has grown in the last decade to a seven Department structure as follows:

1. Agricultural Economics (AEC)
2. Agricultural Extension (AEX)
3. Animal Science and Technology (AST)

4. Crop Science and Technology (CST)
 5. Fisheries and Aquaculture Technology (FAT)
 6. Forestry and Wildlife Technology (FWT)
 7. Soil Science and Technology (SST)

**STUDENT ENROLLMENT
 SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY**

| SAAT | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL | |
|-------------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-----------------|-------------|------------|----------|------------|-----------|-------------|-----------|--------------------|--|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | | |
| Agric Economics | | | | | | | | | | | | | | | | | | | | |
| Agric Extension | 46 | 58 | 59 | 51 | 51 | 46 | 65 | 37 | 40 | 36 | 261 | 228 | 0 | 1 | 5 | 3 | 3 | 0 | 501 | |
| Animal Science & Tech. | 41 | 32 | 34 | 39 | 55 | 48 | 40 | 38 | 28 | 39 | 198 | 196 | 0 | 2 | 13 | 9 | 11 | 8 | 437 | |
| Crop Sc. & Tech. | 41 | 39 | 37 | 34 | 46 | 50 | 41 | 39 | 33 | 44 | 198 | 206 | 1 | 3 | 4 | 3 | 1 | 3 | 419 | |
| Fisheries & Aquaculture | 21 | 27 | 24 | 22 | 28 | 37 | 32 | 33 | 20 | 23 | 125 | 142 | 0 | 1 | 7 | 5 | 3 | 2 | 285 | |
| Forestry & Wildlife | 36 | 34 | 27 | 27 | 23 | 17 | 28 | 15 | 27 | 12 | 141 | 105 | 1 | 0 | 4 | 0 | 1 | 0 | 252 | |
| Soil Science & Tech. | 28 | 28 | 25 | 38 | 39 | 49 | 32 | 32 | 43 | 33 | 167 | 180 | 2 | 0 | 9 | 4 | 8 | 3 | 373 | |
| SUB TOTAL | 213 | 218 | 206 | 211 | 242 | 247 | 238 | 194 | 191 | 187 | 1090 | 1057 | 4 | 7 | 42 | 24 | 27 | 16 | 2267 | |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SAAT | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|---------------------------|------------------|----------|----------------------------|----------|-------------------------|----------|-------------------|----------|--------------------|----------|---------------------------|----------|---------------------------|----------|--------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Agric Economics | | | | | | | | | | | | | | | |
| Agric Extension | 4 | 1 | 1 | 2 | 3 | 0 | 3 | 2 | 2 | 1 | 2 | 0 | 2 | 0 | 23 |
| Animal Science & Tech. | 9 | 1 | 1 | 1 | 5 | 1 | 1 | 2 | 1 | 1 | 4 | 2 | 2 | 3 | 34 |
| Crop Sc. & Tech. | 10 | 2 | 3 | 1 | 4 | 4 | 3 | 1 | 2 | 0 | 1 | 0 | 4 | 0 | 35 |
| Fisheries & Aquaculture | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 2 | 1 | 13 |
| Forestry & Wildlife | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 3 | 3 | 3 | 1 | 17 |
| Soil Science & Tech. | 2 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 20 |
| SUB TOTAL | 28 | 5 | 7 | 5 | 19 | 6 | 12 | 7 | 8 | 5 | 13 | 7 | 14 | 6 | 142 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SAAT | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|----------------------------|----------------------------|----------|------------------------|-----------|------------------------------|-----------|--------------|-----------|-------------------|----------|------------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON- TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Agric Economics | 2 | 3 | 2 | 3 | 10 | 11 | 0 | 0 | 3 | 0 | 34 |
| Agric Extension | 2 | 1 | 1 | 3 | 7 | 13 | 0 | 0 | 0 | 0 | 27 |
| Animal Science & Tech. | 0 | 1 | 0 | 4 | 20 | 17 | 2 | 5 | 0 | 0 | 49 |
| Crop Sc. & Tech. | 2 | 0 | 1 | 0 | 6 | 8 | 2 | 2 | 0 | 0 | 21 |
| Fisheries & Aquaculture | 1 | 0 | 0 | 3 | 7 | 4 | 1 | 2 | 0 | 0 | 18 |
| Forestry & Wildlife | 0 | 1 | 0 | 0 | 11 | 7 | 4 | 5 | 1 | 2 | 31 |
| Soil Science & Tech. | 1 | 1 | 1 | 2 | 6 | 5 | 2 | 2 | 0 | 1 | 21 |
| SUB TOTAL | 8 | 7 | 5 | 15 | 67 | 65 | 11 | 16 | 4 | 3 | 201 |

OFFICE OF THE DEAN

The Annual Report of activities from the office of the Dean of Dean School of Agriculture and Agricultural Technology (SAAT) under review were as follows:

1. ACHIEVEMENTS OF THE SCHOOL

a. Election of New Dean:

During the period under review a new Dean was successfully elected from the School, hence a new vision for School began.

b. Accreditation of the Department of Fisheries and Aquaculture Technology:

The National University Commission (NUC) successfully conducted accreditation exercise in the Department of Fisheries and Aquaculture Technology within the period under review and earned full accreditation status thereafter.

2. STAFF DEVELOPEMENT CONFERENCES AND WORKSHOPS.

Conferences, workshops, seminars etc are staff developmental tools. Many staff in the School attended different levels of staff development programmes within the period. Some staff of the Department of Agricultural Economics attended the farm Management Conference, in Calabar and the 20th Nigeria Association of Agricultural Conference in the University of Lafia from October, 17th – 19th 2021, while the Department of Agricultural Extension conducted a seminar at Agbala with Emeke Agbala co-operative and Emghara Farms/ Multi, Purpose Cooperative Society. The farmers benefited a lot of things from the seminar such as fertilizers, improved cassava stems and plantain suckers.

3. FUTURE PLAN OF THE SCHOOL / DEPARTMENT

The future plan of the School are as follows:

- a. Landscaping and beautification of SAAT.
- b. Replacement and rectification of vandalized items.
- c. Organzation of New Year party for the School.
- d. Setting up of fund sourcing and work Committee.
- e. Holding of monthly Statutory Board Meetings.
- f. Holding of various committee meetings.
- g. Organising Agri-skill workshop.
- h. Holding of proposal / presentation, Internal and External defence of Students.

4. OTHER RELEVANT INFORMATION

Human capital development: Within the period under review some teaching and non-teaching staff who were due for promotion during the 2020/2021 appraisal year were promoted.

DEPARTMENT OF AGRICULTURAL ECONOMICS

INTRODUCTION

The first batch of seven (7) students opted for Agricultural Economics during the 1982/83 session. In 1983/84 session there were only two (2) academic staff; a Lecturer and one (1) Graduate Assistant. Currently, there are 34 Academic staff and five hundred and seventy four (574) students as at 2018/2019 session. The curricula is structured to cover all the relevant subject areas including Farm Management and Production Economics, Agricultural Project Appraisal, Agricultural Development and Policy, Agricultural Finance, Agricultural Cooperatives and Marketing, Rural Development and Agricultural Resource and Environmental Economics. Students are required to participate, before graduation, in the students Industrial Work Experience Scheme (SIWES) during their second and fourth years.

Currently the Head of Department is Prof. S.U.O Onyeagocha. He graduated from the University of Nigeria, Nsukka.(Agri-Econs), M.Sc. Agricultural Economics(Finance) (1986), and Ph.D. Agric-Econs (Finance and Projects) (2009).

DEPARTMENT OF CROP SCIENCE AND TECHNOLOGY

INTRODUCTION

Department of Crop Science and Technology started in 1982 as Crop Production program in the School of Agriculture and Agricultural Technology, Federal University of Technology, Owerri, until the 1987/88 session the students were admitted into the School and only went into their respective programs (now Departments) in the fourth year. This was so designed in order to afford all students training that will guarantee good depth in all aspects of agriculture. This is particularly so because of the degree awarded in the Bachelor of Agricultural Technology (B. Agric. Tech.). Beginning from the 1987/88 academic session, the Senate of the University approved the change of structure from Program to Departments and students were subsequently admitted into the Departments from year one.

In 1998, the Senate of the University approved the change of name to Department of Crop/Soil Science and Technology. The Department offered two Degree options namely: (i). B. Agric. Tech. in the Department of Crop/Soil Science and Technology (Crop Science and Technology option). (ii) B. Agric. Tech. in Department of Crop/Soil Science and Technology (Soil Science and Technology option). Under this arrangement, students offered common courses till final year when they elect to take courses in the major areas of Crop Science or Soil Science (option).

In 2001, the Department of Crop/Soil Science and Technology was splited into two Departments: Department of Crop Science and Technology and Department of Soil Science and Technology.

DEPARTMENT OF AGRICULTURAL EXTENSION

INTRODUCTION

The Department of Agricultural Extension was carved out from the then Department of Agricultural Economics and Extension. At the inception, Dr. Edna C. Mathews-Njoku coordinated the young Department until 2003 when she was appointed the 1st Ag. Head of Department to fully pilot the affairs of the Department. The first intake of students in the year 2001/2002 session were about 70 but today intake has risen and the Department has over 500 students. The Department has graduated more than seven sets of students. The Academic staff strength has also risen from 8 in the 2001/2002 session to

23 in the 2020/2021 session. The Department took part in all prescribed activities of the University as well as carried out its statutory academic and administrative functions creditably well in the period under review.

ANIMAL SCIENCE AND TECHNOLOGY

INTRODUCTION

Department of Animal Science and Technology is under School of Agriculture and Agricultural Technology (SAAT). The Department of Animal Science and Technology is working towards its mandate to become a Centre of excellence in Research and Training Animal Science and Technology as well as development of required expertise for the Animal Industry and in a wide range of related disciplines.

To produce manpower with a thorough professional background in general agriculture in addition to a very accomplished expertise and specialization in the art, science and Technologies of Animal Science and Technology through quality Research and Teaching.

To impart technical skills: the “know-how” and “how-to-do” required for successful operation of a modern day animal industry and to produce skilled man power in Animal Science and Technology through research and Teaching.

FORESTRY AND WILDLIFE TECHNOLOGY

INTRODUCTION

The Department of Forestry and Wildlife Technology was established in 2007 but the takeoff was delayed due to logistic problem and Administrative oversight. The Department was created to address problem of undue-utilisation of the natural resources in the arable land of Nigeria. This will also create employment and boost the national revenue.

DEPARTMENT OF FISHERIES AND AQUACULTURE TECHNOLOGY

INTRODUCTION

The Department of Fisheries and Aquaculture Technology is one of the two youngest Departments in SAAT. The Department received Senate approval in the 2006 and on November 2007, NUC gave their formal nod. The Department started with twelve students on inception that were admitted in the 2007/2008 academic session. At present, the Department has more than two hundred and fifty (250) students (undergraduates and Postgraduates).

DEPARTMENT OF SOIL SCIENCE AND TECHNOLOGY (SST)

INTRODUCTION

The Department was created in the 2001/2002 academic year. The young Department was carved out of the former Department of Crop and Soil Sciences Technology. First intake consisted of seventy six (76) students. Today, the Department has five (5) streams of undergraduate students with over three hundred (300) student's population. Over thirty (30) students are currently pursuing their postgraduate programmes' at the PGD, M.Sc and Ph.D levels.

The academic staff consists of four (4) Professors, two Readers, Senior Lecturer, one Lecturer I, and a host of other levels of academics with total academic staff strength of seventeen (17) and one (1) Graduate Assistant.

The Non-teaching staff consists of one Administrative Officer, one (1) Chief Laboratory Technologist, six (6) Agricultural Superintendents, two (2) Clerical Officers and Farm Hands.

The uniqueness of our Department lies in the fact that all agriculture has its basis and foundation on the soil. Thus in Nigeria, one can readily say No Soil No Agriculture.

PHILOSOPHY, MISSION AND VISION

The philosophy of the Department is to produce graduates with in-depth knowledge of both practical and theoretical aspects of our programme in a view to producing "well finished" product that are self-reliant, innovative and problem solving. The mission of the Department is to produce high quality

manpower at the graduate and postgraduate levels for the purpose of driving the agricultural and other related sectors of the Nigerian economy forward. The target is to produce first grade soil scientists who are confident, independent, efficient, visionary, innovative and problem solving through the creation of conducive study environment and excellent teaching and research. Our vision in the Department of the Soil Science and Technology is to empower our graduates through high quality and technology – based integrated Soil Science studies for sustainable food production.

DEPARTMENT OF SOIL SCIENCE

1. ACHIEVEMENTS

During the period in view, some of our credible staff were appointed by the University.

- a. The peak of our staff Development is a Soil Science Staff – Professor Nnennaya Oti, Emerging the Vice Chancellor of the Federal University of Technology, Owerri.
- b. Dr. Mrs. C.M. Ahukaemere – HOD, SST was appointed HOD, and Re-appointed again in 2021.
- c. Prof. I.I. Ekpe – Deputy Dean, Student Affairs
- d. Prof. E.U. Onweremadu – Director, IES (Institute of Erosion Studies)
- e. Dr. L.C Agim – Director, Center for Agricultural, Research and Extension (CARE).
- f. Dr. B.U. Uzoho a Reader promoted to Prof. B.U. Uzoho during the period in view.

2. STAFF DEVELOPMENT, CONFERENCES, WORKSHOPS

The Department witnessed increase in staff Development and Deployment, notably amongst them are:

- a. Dr. Mrs. E. D. Chukwu – Lecturer II
- b. Mrs Udo Ofonine Godswill – Graduate Assistant
- c. Mr. Orji Amarachi – Assistant Lecturer .

3. RESEARCH ACTIVITIES

Our Department will continue to embrace, innovations, research developments and will continue to consolidate on our teaching activities for improved performance.

4. FUTURE PLAN OF THE DEPARTMENT

More dedication to duty, increased determination to work, New Research and Innovations, Increased Corresponding Expectation for Increased Support from the University Management.

SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY (SEET)



SEET ADMIN BLOCK

DEAN'S OFFICE

1.1 INTRODUCTION

The School of Engineering and Engineering Technology (SEET) was established in 1982. The School, like other Schools in the University, has different Programme Areas with specific degree Programmes. At inception, the School of Engineering and Engineering Technology had six (6) Programmes, namely:

- i) Agricultural Engineering and Engineering Technology
- ii) Petroleum Engineering and Engineering Technology
- iii) Civil Engineering and Engineering Technology
- iv) Electrical/Electronic Engineering and Engineering Technology
- v) Mechanical Engineering and Engineering Technology
- vi) Materials and Metallurgical Engineering and Engineering Technology

The school was established with the aim of providing in-depth academic/practical training in the student's professional area of interest with extensive practical exposure to broad engineering discipline and practical engineering techniques so as to produce graduates that are sound in their professional field, while possessing easily identifiable and readily applicable expertise. In order to broaden and increase the horizon of their academic and

practical training, the students are exposed to courses in social science, humanities and management, during their stay in the university.

The School grew over the years to a capacity of ten (10) departments as listed below:

- 1) Agricultural & Bioresources Engineering
- 2) Chemical Engineering
- 3) Civil Engineering
- 4) Electrical and Electronic Engineering
- 5) Food Science and Technology
- 6) Materials and Metallurgical Engineering
- 7) Mechanical Engineering
- 8) Mechatronics Engineering
- 9) Petroleum Engineering
- 10) Polymer and Textile Engineering

However, in 2019, a new School (School of Electrical System and Engineering Technology) was established out of our current School leading to the exit of two (2) departments, namely:

1. Electrical and Electronic Engineering
2. Mechatronics Engineering

In the same year, the department of Biomedical Technology was moved to our School as Biomedical Engineering.

There are presently nine (9) programme areas/departments that make up the School of Engineering and Engineering Technology. They are as follows:

- 1) Agricultural & Bioresources Engineering
- 2) Biomedical Engineering
- 3) Chemical Engineering
- 4) Civil Engineering
- 5) Food Science and Technology
- 6) Materials and Metallurgical Engineering
- 7) Mechanical Engineering
- 8) Petroleum Engineering
- 9) Polymer and Textile Engineering

The various departments also offer Post Graduate Degrees such as PGD, M.Eng, M.Sc and PhD.

The school of engineering is currently housed in the Engineering complex building, though some departments like Chemical Engineering, Mechanical Engineering and Petroleum Engineering are resident in their own buildings.

Administratively, the school is headed by the Dean, who is assisted by the Associate Dean, with the Heads of the various Departments in the school coordinating the affairs of their department and reporting to the Dean. The Dean also has a retinue of administrative officers and their support staff in his team.

1.2 Philosophy of the School

The philosophy of the school is to produce self-reliant, self-motivated and versatile engineering (and science) graduates through sound engineering education that cuts across all the nine engineering disciplines, namely, Agricultural, Chemical, Civil, Biomedical, Food Science, Material and Metallurgical, Mechanical, Petroleum,

Polymer and Textile Engineering. This extends also to after-school applications and projections. Hence, prior to graduation, the students are exposed adequately to foundation science, computing, engineering and technology courses, in addition to stimulating entrepreneurial competency courses and general studies that also introduce the students to other professions outside science and engineering. The rich curriculum in SEET captures theories, concepts and techniques laced with detailed practical sessions, including a total of twelve months industrial training that aptly equips any student of the school.

1.3 Objectives of the School

In pursuit of the realization of national needs and aspirations vis-a-vis industrial development and technological advancement, and in consonance with the edict establishing FUTO and by extension SEET, the objectives of the school include, but not limited to:

1. To design and supervise engineering projects.
2. Design, develop and install components, machines and engineering systems.
3. Design and develop new products and production techniques in industries.
4. Adapt and adopt exogenous technologies to solve local engineering problems.
5. Contribute to knowledge at both national and international levels.

6. Establish appropriate linkages with the industry and other institutions involved in training, research and development both locally and internationally.
7. To produce sound engineering and engineering technology graduates who will be entrepreneurs and wealth creators.
8. To produce graduates that can sustain teaching, learning and engineering researches anywhere in the world.

1.4 Leadership from Inception

STUDENT ENROLLMENT

| | Names | Department | Periods |
|-----|---------------------------|-------------------|----------------|
| 1. | Engr. Prof. C.O.G Obah | EEE | 1981-1987 |
| 2. | Prof. J.O. Duru | AGE | 1987-1991 |
| 3. | Prof. V.O. Nwoko | MME | 1991-1992 |
| 4. | Engr. Prof. A.U. Chukwu | EEE | 1992-1996 |
| 5. | Engr. Prof. G.U. Ojiako | CIE | 1996-1999 |
| 6. | Engr. Prof. J.I. Ejimanya | EEE | 2000-2004 |
| 7. | Engr. Prof. O.O Onyemaobi | MME | 2004-2008 |
| 8. | Engr. Prof. O.N. Oguoma | MEE | 2008-2010 |
| 9. | Engr. Prof. E.E Anyanwu | MEE | 2010-2015 |
| 10. | Engr. Prof. | AGE | 2015-2019 |
| 11. | Engr. Prof. J. C. Ezeh | CIE | 2019-2023 |
| 12. | Engr. Prof. R. Uche | MEE | 2023 Till date |

SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY

| SEET | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|------------------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-----------------|------------|------------|----------|------------|-----------|-------------|----------|--------------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Agric. & Biores. Engineering | 114 | 8 | 105 | 7 | 137 | 12 | 132 | 12 | 112 | 13 | 600 | 52 | 0 | 0 | 17 | 3 | 4 | 2 | 678 |
| Chemical Engineering | 90 | 49 | 96 | 32 | 119 | 53 | 97 | 30 | 106 | 40 | 508 | 204 | 9 | 1 | 12 | 1 | 4 | 1 | 740 |
| Civil Engineering | 113 | 6 | 116 | 10 | 193 | 17 | 172 | 20 | 150 | 7 | 744 | 60 | 6 | 0 | 0 | 2 | 4 | 2 | 818 |
| Food Science & Tech. | 77 | 24 | 62 | 40 | 39 | 64 | 51 | 27 | 40 | 32 | 269 | 187 | 2 | 1 | 1 | 6 | 3 | 1 | 470 |
| Mat. & Met. Engineering | 93 | 10 | 113 | 11 | 172 | 10 | 149 | 19 | 124 | 9 | 651 | 59 | 0 | 0 | 7 | 0 | 3 | 0 | 720 |
| Mechanical Engineering | 158 | 11 | 175 | 14 | 181 | 12 | 194 | 13 | 197 | 4 | 905 | 54 | 0 | 0 | 17 | 0 | 6 | 0 | 982 |
| Petroleum Engineering | 133 | 21 | 111 | 19 | 197 | 24 | 184 | 23 | 137 | 50 | 762 | 137 | 4 | 1 | 12 | 4 | 2 | 0 | 922 |
| Polymer & Text. Eng. | 778 | 129 | 778 | 133 | 1038 | 192 | 979 | 144 | 866 | 155 | 4439 | 753 | 21 | 3 | 66 | 16 | 26 | 6 | 5330 |
| SUB TOTAL | 778 | 129 | 778 | 133 | 1038 | 192 | 979 | 144 | 866 | 155 | 4439 | 753 | 21 | 3 | 66 | 16 | 26 | 6 | 5330 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SEET | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|---------------------------------|-----------|----------|------------------------|----------|---------------------|-----------|------------|----------|-------------|-----------|-----------------------|----------|-----------------------|----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Agric. & Biores. Engineering | 5 | 0 | 1 | 0 | 4 | 0 | 5 | 2 | 2 | 2 | 5 | 0 | 3 | 0 | 29 |
| Chemical Engineering | 4 | 2 | 1 | 0 | 3 | 1 | 7 | 0 | 5 | 4 | 2 | 1 | 2 | 0 | 32 |
| Civil Engineering | 3 | 1 | 2 | 2 | 4 | 0 | 7 | 0 | 4 | 1 | 7 | 1 | 3 | 0 | 35 |
| Food Science & Tech. | 2 | 6 | 2 | 3 | 1 | 4 | 0 | 5 | 3 | 4 | 5 | 2 | 1 | 2 | 40 |
| Mat. & Met. Engineering | 2 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 1 | 0 | 3 | 0 | 2 | 0 | 20 |
| Mechanical Engineering | 6 | 0 | 2 | 0 | 2 | 0 | 5 | 0 | 5 | 1 | 2 | 0 | 5 | 1 | 29 |
| Petroleum Engineering | 2 | 0 | 3 | 0 | 7 | 2 | 5 | 0 | 3 | 0 | 2 | 1 | 3 | 0 | 28 |
| Polymer & Text. Eng. | 3 | 0 | 2 | 0 | 6 | 4 | 3 | 0 | 2 | 3 | 2 | 0 | 2 | 1 | 28 |
| SUB TOTAL | 22 | 9 | 12 | 5 | 23 | 11 | 38 | 6 | 23 | 13 | 23 | 5 | 18 | 4 | 212 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SEET | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|--------------------------|----------------------------|-----------|------------------------|-----------|---------------------------|-----------|--------------|----------|---------------|-----------|------------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Agric. & Biores. Eng. | 0 | 1 | 0 | 4 | 11 | 7 | 4 | 5 | 1 | 2 | 35 |
| Chemical Eng. | 1 | 1 | 0 | 3 | 8 | 6 | 0 | 0 | 0 | 2 | 21 |
| Civil Eng. | 4 | 1 | 1 | 5 | 8 | 0 | 0 | 0 | 1 | 3 | 23 |
| Elect. & Elect. Eng. | 0 | 2 | 3 | 0 | 19 | 5 | 1 | 0 | 1 | 1 | 32 |
| Food Science & Tech. | 2 | 0 | 0 | 1 | 5 | 11 | 0 | 0 | 1 | 1 | 21 |
| Mat. & Met. Eng. | 0 | 1 | 0 | 3 | 8 | 1 | 0 | 0 | 0 | 2 | 15 |
| Mechanical Eng. | 2 | 1 | 0 | 1 | 19 | 0 | 0 | 0 | 1 | 2 | 26 |
| Machatronics Eng. | 0 | 3 | 0 | 3 | 9 | 0 | 0 | 0 | 0 | 0 | 15 |
| Petroleum Eng. | 1 | 0 | 1 | 4 | 8 | 7 | 0 | 0 | 0 | 1 | 22 |
| Polymer & Text. Eng. | 1 | 0 | 1 | 3 | 5 | 2 | 0 | 0 | 0 | 2 | 14 |
| SUB-TOTAL | 11 | 10 | 6 | 27 | 100 | 39 | 5 | 5 | 5 | 16 | 224 |

DEPARTMENT OF AGRICULTURAL ENGINEERING

1. ACHIEVEMENTS

The Department recorded magnitude achievements in all spheres academically, physically, technically, practically, socially, economically and otherwise in order to produce highly skilled and quality students in Engineering and Researchers processes. As such, the Department achieved the following within the reporting period:

- i. The students admitted in 2015/2016 Academic session had their final year seminar on Wednesday, March 3, 2021.
- ii. The 2015/2016 final year students held the final Defense on Wednesday August 25, 2021.
- iii. The Department did their COREN Accreditation from Monday, March 22, to Thursday, March 25, 2021.
- iv. Engr. Mrs N.V. Ngwangwa was appointed as the Class Adviser for the 2020/2021 Academic Ssession.
- v. The Department organized an orientation programme for the 2019/2020 and 2020/2021 Academic Session students to educate them about how to locate lecture halls, register for courses and be of good behaviour.
- vi. The staff of the Department visited their member that was appointed as Deputy Vice Chancellor (DVC) Academic by name Engr. Prof. G.I. Nwandikom.
- vii. Engr. Dr. N.C. Ezeanya was re-appointed as the Acting Head of Department from June 1st, 2021.
- viii. The 2020/2021 appraisal exercise was carried out successfully in three categories:
 - a. Junior non- teaching staff: One (1) person was appraised but was not recommended for promotion.
 - b. Academic staff: Nine (9) people were appraised but only two (2) were recommended for promotion
 - c. Non-teaching staff: Eighteen (18) senior staff were appraisedbut only two (2) were recommended for promotion.

- ix. A member Engr. Dr. M.I. Chikwue successfully completed his Ph.D program at Rivers State University of Science and Technology Port Harcourt.
- x. The Departmental Secretary, Mrs. Agnes AdannaNti was elected to the position of Women Leader of Senior Staff Association of Nigeria University (SSANU)
- xi. Agricultural Engineering Board appointed Engr. Prof. N.A.A. Okereke as the new ENG 103/104 Coordinator to be assisted by Engr. Dr. N.R. Nwakuba.
- xii. Engr. Prof. C.D. Okereke was appointed the new Departmental PG Coordinator to be assisted by Engr. Dr. O.O. Okorafor by the Department Agricultural Engineering Board of Studies.
- xiii. The staff of the Department by names Mr. AkachukwuFavourNwaobi and Mr. NnamdiAlioha were deployed to the Department as Technologist II.
- xiv. A member Prof. C.C. Egwuonwu was promoted from the rank of a Reader to a Professor with effect from 1st October, 2019.
- xv. Engr. Mrs. N.V. Ngwangwa was upgraded from Assistant Lecturer to Lecturer II with effect from 7th October, 2020.
- xvi. Two staff members by names Engr. V.C. Okafor and Engr. Mrs. G.U. Asonye successfully had their P.hD external defense on 7th May, 2021
- xvii. A staff Engr. Prof. N.A.A. Okereke was appointed the Chairman of Governing Council of Federal Polytechnic Ekowe, Bayelsa State.
- xviii. A staff Engr. Dr. N.R. Nwakuba was promoted from lecturer I to senior lecturer with effect from November 14, 2019.
- xix. A staff Mr. VernatiusKosiosochukwuAnyanwu was converted from the rank of Senior Laboratory Technologist to the rank of Assistant Lecturer with effect from December 15th, 2020.
- xx. Two academic staff by names Engr. Mrs. P.C. Obumseli and Engr. U. Uzoh were upgraded from the ranks of Assistant lecturer to lecturer II with effect from March 29th and April 11th, 2021 respectively.
- xxi. The Departmental secretary Mrs. Agnes AdannaNti was promoted from the rank of Personal Secretary I to the rank of Senior Secretary with effect from October 1st 2020. Mrs. Virginia Obi was also promoted to the rank of Clerical Supervisor from October 1st, 2020.

- xxii. A staff Engr. Prof. G. I. Nwandikom was appointed the DVC (Academic) by Prof. Mrs. N.N. Oti the Vice Chancellor.
- xxiii. A staff Mr. Elochukwu Abbah was converted from the rank of Principal Laboratory Technologist to the rank of Assistant Lecturer.
- xxiv. A Technologist by name Mrs. Rufina Nwachukwu was deployed to the Department.
- xxv. A staff Engr. Dr. O.O. Okorafor was promoted from the rank of lecturer I to the rank of Senior Lecturer from Oct 1st, 2020.
- xxvi. A staff Engr. Mrs. A.N. Ofoma was upgraded from the rank of lecturer II to lecturer I from 24th, 2021
- xxvii. A staff by name Mrs. O. Ohaji was promoted from the rank of Laboratory Technologist I to senior Laboratory Technologist from Oct 1st 2020
- xxviii. A staff by name Mr. Vincent N. Ugwah was upgraded from the rank of Graduate Assistant to the rank of Assistant Lecturer from February 9, 2021.
- xxix. The Department successfully concluded their NUC Accreditation exercise from Tuesday, December 14th to Thursday 16th 2021, and the result is being awaited.
- xxx. The Department registered one hundred and forty three students for the 2020/2021 academic session during the university matriculation exercise held on Friday, October 8, 2021.
- xxxi. The Department graduated fifty one (51) undergraduate students, two (2) Ph.D and seven (7) M.Eng students during 2020/2021 academic session convocation ceremony held on Saturday, December 4, 2021.

2. **FUTURE PLAN OF THE DEPARTMENT**

The Department has the following future action plan:

- i. The Department has plans of patterning with some Agro Allied Industries and Research Institutes to improve the exposure of students to practical work through IT (SIWES) placements for her undergraduate students.

- ii. The Department has future plans of setting up an Automated Palm Oil processing mill for the production of FUTO Palm Oil. This will also serve as a research Centre for both staff and student of the Department.

6. **OTHER RELEVANT INFORMATION**

The Department suggested software application i.e. Matlab, Cosmol Multi Physics, Auto cap etc to be used for BRE courses and for computer E-training to enhance teaching and Academic research.

The Department formed and inaugurated the following committees for the development of BMAS:

- i. Committee for direct teaching laboratory
- ii. Committee on COREN Accreditation members
- iii. National University Commission (NUC) Accreditation Committee
- iv. Quality Assurance Committee

DEPARTMENT OF CHEMICAL ENGINEERING

Within the reporting period, the Department carried out the following activities:

1. **ACHIEVEMENTS OF THE DEPARTMENT**

- i) COREN Accreditation Exercise:
The Department successfully conducted COREN Accreditation exercise on Monday March 22 to Wednesday 24, 2021
- ii) 2019/2020 CHE 510 Seminar Defence
The 2019/2020 CHE 510 Seminar Defence was successfully conducted in the Department Tuesday, March 30, 2021
- iii) Ph.D/M.Eng External Examination in the Department
The Department successfully conducted Ph.D and M.Eng External Examination for her students on Wednesday February 24, 2021

- iv) The Department got donations of a computer set and one office cabinet from management.
- v) Staff strength:
The Department has been strengthened with additional 3 newly employed teaching staff and two redeployed non-teaching.
- vi) M.Eng CHE 813 Research Seminar and PGD Defence
The Department successfully conducted M.Eng CHE 813 Research Seminar at PGD Defence for her student, May 19, 2021.
- vii) Journal Donation
Engr. Dr. I.S. Ike, the Acting Head of Chemical Engineering on March 2021 donated 2,2 and 3 hard copies of Journals of Energy Storage Volume 35 to Chemical Engineering Department.
- viii) Appointments
Two (2) staff of the department, Engr. Prof. M.S. Nwakaudu and Engr. Prof. O.E. Onyelucheya were appointed by the Vice-Chancellor as Director, Centre for Industrial studies (CIS) and TETFund Desk Officers, respectively.
- ix) Donation of Office Table and Chair
The Department got donation of one office table and chair from the management.
- x) Postgraduate M.Eng Internal Examination
The Department successfully conducted her 2020/2021 postgraduate M.Eng Internal Examination on Thursday September 2, 2021 for a total number of six (6) students.
- xi) 2019/2020 Design and Research Project Defence
The Department successfully conducted 2019/2020 Design and Research Project Defence on August 5-6, 2021.
- xii) Reappointment of Head of Department
Engr. Dr. I.S. Ike was reappointed as acting Head of Department of Chemical Engineering

xiii) 33rd Convocation Ceremony of the University
At the University's 33rd convocation ceremony held on Saturday December 4, 2021, the department graduated 81 students (2018/2019) session and 114 students (2019/2020) session. The details of the student's class of degree are as follows:

xiv. 2020/2021 PG Admissions

* The department received the approved Postgraduate 2020/2021 academic session (first batch) admission list containing a total number of fifteen students offered provision admissions as follows:

| | | |
|----------------------------|---|------------|
| Doctoral Programme (Ph.D) | - | 5 students |
| Masters Programme (M.Eng) | - | 7 students |
| Postgraduate Diploma (PGD) | - | 3 students |

* The department received second batch application for 2020/2021 PG admission as follows:

| | | |
|----------------------------|---|------------|
| Doctoral Programme (Ph.D) | - | None |
| Masters Programme (M.Eng) | - | 2 students |
| Postgraduate Diploma (PGD) | - | 2 students |

* The Department received 3rd Batch application for 2020/2021 PG admission for recommendation and processing. The application list contains one applicant into Masters Programme (M.Eng)

a) 2018/2019 session:

| | | |
|-----------------------------|---|-----|
| First Class | - | NIL |
| Second Class Upper Division | - | NIL |
| Second Class Lower Division | - | 63 |
| Third Class | - | 17 |
| Pass | - | 1 |

b) 2019/2020 session:

| | | |
|-----------------------------|---|-----|
| First Class | - | 3 |
| Second Class Upper Division | - | 60 |
| Second Class Lower Division | - | 50 |
| Third Class | - | 1 |
| Pass | - | NIL |

xix) 39th Matriculation Ceremony

The university successfully held its 39th matriculation ceremony on Friday October 8, 2021. A total number of 148 students were offered provisional admission in the Department and officially inducted as class of 2020/2021 of the University to undergo a five year study programme that will lead to the award of Bachelor of Engineering (B.Eng) in Chemical Engineering.

xixx) PGD Plant Design and Project Defence Research Defence

Some PGD student from the Department successfully defended their plant design and research within the period under review Wednesday October 20, 2021.

2) STAFF DEVELOPMENT

One (1) staff of the Department Engr. Dr. (Mrs.) I.C. Ekeke received an approval to proceed on one year Post doctoral fellowship at Morgan University, USA under 2020 Academic Staff Training and Development (AST&D) of TETFund with effect from September 2021.

3) STAFF PUBLICATION

i. Engr. Dr. I.S. Ike, the acting Head of the Department with his colleagues from other schools published the following:

- Comparative studies of solutions of Homogeneous Electrochemical Capacitors Models. Journal of Energy Storages 35, 102221, 2021.
- Preparation and Characterization of Activated Carbon from agricultural waste (Musa-paradisiaca peels) for the remediation of crude oil contaminated water. Journal of Hazardous Materials Advances, 100010, 2021.
- Treatment of crude oil polluted water using stearic acid grafted mango seed shell (Mangifera indica) composite. Current Research in Green and Sustainable Chemistry 4, 100169, 2021.
- The place of Biomass-Based Electrode Materials in Next-Generation Energy Conversion and Storage. Electrode Materials for Energy Storage and Conversion, 229-261, 2021

- Role of Carbon Derivatives in Enhancing Metal Oxide Performances as Electrodes for Energy Storage Devices. Chemically Deposited Nanocrystalline Metal Oxide Thin Films, 469-488, 2021.
 - Development of an adsorbent for the remediation of crude oil polluted water using stearic acid grafted coconut husk (*Cocosnucifera*). Applied Surface Science Advances 6,100179, 2021.
 - A model on the effect of temperature Ph and Retention Time on the Co-Digestion of Cassava Peels and Cow-Dung. Ph and Retention Time on the Co-digestion of Cassava Peels and Cow-Dung, 0. 2021.
- ii. Engr. Dr. Njoku N. Chigozirim, a staff of the Department, with his colleagues from other schools published a Journal of Molecular Liquids: “Corrosion Protection of Q235 Steel in acidic-Chloride media using seed extracts of piper guineense”.

4) FUTURE PLANS OF THE DEPARTMENT

Talk show

The University management and the Pacegate Energy & Resources Limited scheduled a the talk show and official presentation of the Pacegate Energy & Resources Limited’s profiles to our institution and the graduating Chemical Engineering students who have been or will be mobilized for the NYSC on March 2022.

5) OTHER RELEVANT INFORMATION

- i. Appreciation from the delegate of 2019/2020 graduating students of the Chemical Engineering Department

Some delegates of 2019/2020 graduating students of the Department on behalf of the entire students of their class delightfully expressed their gratitude to all the lectures that taught them throughout the period of their programme in the Departmen. They presented a projector to the Department as a mark of appreciation.

They further presented award to the class adviser, Engr. Dr. E.C. Osoka and the following HOD’s that led the department within the periods of their studies:

- a. Engr. Prof. O.E. Onyelucheya
 - b. Engr. Prof. (Mrs.) F.L. Kamen
 - c. Engr. Dr. I.S. Ike
- li The Department inaugurated the following Committees:
- a. DEPARTMENTAL UNDERGRADUATE CURRICULUM REVIEW COMMITTEE
 - b. DEPARTMENTAL POSTGRADUATE CURRICULUM REVIEW COMMITTEE

DEPARTMENT OF CIVIL DEPARTMENT

1. ACHIEVEMENTS:

The Civil Engineering Department made remarkable achievements during the year 2021 Academic year both in Academics and Administration.

- i. Academic/Administrative Activities
 - a. The Department had its COREN Accreditation exercise from 22-24 March, 2021 and obtained full accreditation.
 - b. The following PG, M.ENG and Ph.D Internal/External Seminars and defenses were held:
 3. .Four (4) Ph.D seminar presentation, held on March 29, 2021
 4. Two (2) Ph.D Proposal and three (3) M.ENG. Seminar Presentation, held on March 31, 2021.
 5. Ph.D/M.ENG External Examination for three (3) students held on May 25, 2021.
 6. Ph.D Internal Examination and Ph.D Candidacy for four (4) students held on June 8, 2021.
 7. One (1) Ph.D and three (3) M.ENG Seminar presentation held on August 25, 2021.
 8. External examination for three (3) Ph.D candidates and one(1) M.ENG student held on August 31,2021
 9. M.ENG External Examination for four (4) students held on October 12, 2021
 - 10.The Department conductedPh.D/ M.Eng. Internal Defense for six (6) students on October 19, 2021.

- 11. Internal Examination and Ph.D proposal defense for four (4) students held on November 30, 2021.
- 12. Internal Examinations for four (4) students, two (2) M.Eng and two (2) Ph.D held on December 10, 2021.
- c. The Department conducted SIWES defense for 300L, 400L, and 500L students on August 24, 2021
- d. The Department obtained full NUC accreditation on December 15, 2021.
- vii) A total number of 75 students from the Department were dispatched for National Youth Service Corps.
- viii) The University management conducted Orientation programme for fresh students on October 29, 2021.
- ix) Three (3) academic staff and two technologists were redeployed to the Department within the period under review.

2. STAFF DEVELOPMENT

a. WORKSHOP

The under listed staff members had workshop training on effective procurement in March, 2021:

Engr. Prof. Mrs. B.U. Dike

Engr. Prof. J.C. Osuagwu.

Engr. Dr. H.U. Nwoke

Engr. Dr. F.C Njoku.

Mr. Onyedikachi .C. Ukachukwu.

b. CONFERENCES:

Two (2) member of staff Engr. Prof. J.C. Osuagwu and Engr. Dr. Mrs. C.E. Okere participated in the COREN outcome based education (OBE) in Engineering Evaluation held on November 26, 2021.

c. Engr. Dr. O.M. Ibearugbulem benefited from TetFund Institution Based Research Award on November 25, 2021.

d.

3. STAFF PUBLICATION

| S/N | Date | Name Of Staff | Title | Journal Publisher |
|-----|---------|------------------|-----------------|-------------------|
| 1. | January | I. C. Onyechere, | Pedological and | International |

| | | | | |
|----|-------------------|---|--|---|
| | 2021 | E.U Onweremadu, A. U. Onyechere and O.D. Ohaerilam. | Geotechnical Properties Of Soil Formed On Coastal Plain Sand Of Imo State Nigeria. | Journal Of Research And Innovation In Applied Science. Vol. 1 |
| 2. | February 2021. | I. C. Onyechere, I. Ezeiruaku, A. N. Nwachukwu, U.C. Anya, J. I. Enem, K. C. Igwilo and O.W Owom | An Investigation On The Compressive Strength Of Concrete Made From Three Different Coarse Aggregate. | International Journal Of Modernization In Engineering Technology And Science. Vol. 3 |
| 3. | February 2021. | I.C. Onyechere, A.N. Nwachukwu, U.C. Anya, S.C. Onyamerekwe And K.C. Igwilo | Properties Of High Performance Concrete Made With Crushed Granite And SP561 Super Plasticize. | International Journal Of Modernization In Engineering Technology And Science. Vol. 3 |
| 4. | March 2021 | I.C. Onyechere, U.C. Anya, O.M. Ibearugbulam, A.U. Igbojiaku, E.U. Ihemegbulem, K.C. Igwilo | Use Of Higher Order Plate Theory In Dynamic Analysis Of SSFS and CSFS Thick Rectangular Plates In Orthogolonal Polynomials | Nigeria Journal Of Technology. Vol. 39. |
| 5. | March 2021 | Anyaogu L., Ibearugbulam O.M., Christopher G.O. and Azie G.O | Pure Bending Analysis Of Thin Rectangular Flat Plate With Edges Simply Supported Carrying Uniformly Distributed Load Using Euler Bernoulli Residual Force Approach. | American Journal Of Science And Engineering Research. E-ISSN-2348-703x Vol. 4. |
| 6. | July 7, 2021 | Anyaogu L, L.O. Ettu and | Investigation Of The Tensile and Flexural | International Journal of Sciences |

| | | | | |
|----|------------------|--|--|---|
| | | I.D. Dibo-Yesuku | Strengths of Concrete Containing Rice Husk and Saw Dust Ashes. | and Engineering Vol. 12. ISSN2229-5518 |
| 7. | October 10, 2021 | LewechiAnyago, Chinenye Elizabeth Okere, And NnannaObiabuchi Martin. | Model For Predicting Compressive Strength Of Interlocking Tiles Using Recycled Plastic Bottles | International Journal Of Scientific And Research Vol. 1 Issue October 10, 2021 (pg. 99-103) |
| 8. | October 2021 | J.I. Arimanwa, L.O. Ettu, U.C. Anya, E.E. Effiongandl.C. Onyechere, | Mixture Experiment Design For The Workability Of High Performance Of Recycled Coarse Aggregate Concrete. | International Journal Of Engineering Research And Applications. |

4. FUTURE PLANS OF THE DEPARTMENT.

The Department is working towards becoming the highest ranked Civil Engineering Department in the country. It is also desiring to be rated the best Department in the world in terms of teaching and quality research, contributions, consultancy, outreach, man power training and Academic Leadership. The Departments plans to produce high grade entrepreneurs who are Job creators and not job seekers in their area of specialization.

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

1. ACHIEVEMENT OF THE DEPARTMENT

The Department successfully graduated eight (8) M.Sc students, one (1) PGD student, two (2) Ph.D students and eighty (80) undergraduate students during the period under review.

2. STAFF DEVELOPMENT

| S/N | Name of Staff | Conferences | Workshops | Venue | Date |
|-----|----------------------------|--|-----------|--------------------------------------|---|
| 1 | Prof. (Mrs.) J.N. Nwosu | 45 th Annual Conference and general meeting of Nigerian Institute of Food Science and Technology (NIFST) | Nil | Benue State University Makurdi | October 15 th -19 th 2021 |
| 2 | Ofoedum, A.F | 45 th Annual Conference and general meeting of Nigerian Institute of Food Science and Technology (NIFST) | Nil | Benue State University Makurdi | October 15 th -19 th 2021 |
| 3 | Dr. (Mrs.) A.E Uzoukwu | 45 th Annual Conference and general meeting of Nigerian Institute of Food Science and Technology (NIFST) | Nil | Benue State University Makurdi | October 15 th -19 th 2021 |

| | | | | | |
|---|-------------------------|---|-----|--|---|
| 4 | Mrs. I.M. Agunwah | 45 th Annual Conference and general meeting of Nigerian Institute of Food Science and Technology (NIFST) | Nil | Benue State University Makurdi | October 15 th -19 th 2021 |
| 5 | Dr. (Mrs.) E.N Odimegwu | NIFST Regional Conference | Nil | Rivers State University of Science and Technology, Port Harcourt | October 9 th - 11 th 2021 |
| 6 | Mrs. C.N. Eluchie | NIFST Regional Conference | Nil | Rivers State University of Science and Technology, Port Harcourt | October 9 th - 11 th 2021 |
| 7 | Prof. (Mrs.) J.N. Nwosu | NIFST Regional Conference | Nil | Rivers State University of Science and Technology, Port Harcourt | October 9 th - 11 th 2021 |

3. STAFF PUBLICATION

| S/N | Name of Staff | Title of Publication | Date |
|-----|---------------------------|---|--|
| 1 | MmuoasinamBelonwuChijioke | Kinetics and thermodynamics of heat inactivation of "Oha" (Pterocarpusmildraedii) Polyphenol oxidase activity | IOSR Journal of Environmental Science Toxicology and Food Technology. Volume 15, pp.16-22 July, 2021 |

| | | | |
|---|------------------------------|--|--|
| 2 | Ibeabuchi J.C. | Micronutrient and anti-nutritional composition of “Kpaaka” (Hudegardiarbler) seed flours | Research Journal of food Science and Nutrition. Volume 5(1) February, 2020 |
| 3 | Bede Evelyn Njideka | Maize cob as dietary fiber source for high-fiber biscuit | GSC Biological and Pharmaceutical Science Journal. July 2020 |
| 4 | ChijiokoMuoasinam Belonwu | Current perspective on the nutrient composition and health benefit of yams | Internal Journal on Environmental Food science. Vol 5(2). August 2021. |
| 5 | NdukaubaOnyekachi | Counting the cost: The effects of COVID-19 lockdown on household in South East Nigeria | Sustainability, Pp. 13-26. June, 2021. |

4. RESEARCH ACTIVITIES

During the period under review, the Department successfully conducted the following research activities:

- i Micronutrient and anti-nutritional composition of “Kpaaka” (Hudegardiarbler) seed flours.
- ii Kinetics and thermodynamics of heat inactivation of “Oha” (*Pterocarpus mildraedii*) Polyphenol oxidase activity.

5. FUTURE PLAN OF THE DEPARTMENT

- 11) The Department is planning to create School of Food Systems Technology
- 12) To Department intends commercialize research outputs from the Department

6. OTHER RELEVANT INFORMATION

During the period under review, the department successfully completed the 2020/2021 harmattan semester lectures and the examination for same period.

DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

1. ACHIEVEMENTS

I DEFENCE

a. STUDENTS INDUSTRIAL WORK EXPERIENCE (SIWES)

The Department successfully conducted her SIWES Defence on Wednesday, August 25, 2021

b. The Department successfully held Project Defence for one hundred and forty three (143) students on Wednesday, August 18, 2021.

ii YEAR ONE STUDENTS' ADMITTED

The Department has a total of one hundred and thirty five (135) students admitted into the Department of MME for the 2020/2021 Academic Session.

iii NATIONAL YOUTH SERVICE CORPS (NYSC) MOBILIZATION

The Department successfully mobilized a total of one (1) student for Batch 'A' NYSC programme, fifty seven (57) for Batch 'B' NYSC programme and eight (8) for Batch 'C' NYSC programme

iv ACADEMIC ACHIEVEMENTS

The Academic achievements of the Department within the period in review are as follow:

9. COMPLETION OF LECTURES AND EXAMINATIONS

The Department had successfully completed all lectures and examinations for the 2019/2020 Academic Session.

10. COREN RE-ACCREDITATION

The Department of Materials and Metallurgical Engineering got full COREN re-accreditation.

11. STAFF PhD DEFENCE

One of the MME staff members, Engr. Mrs. C.E. Njoku, has successfully defended her PhD thesis at the MME Department of the Federal University of Technology, Akure (FUTA).

2. STAFF DEVELOPMENT (WORKSHOPS/CONFERENCES)

- i. Engr. Dr. R.O. Medupin, an academic member of the Department attended “COREN Outcome-Based Education (OBE) Regional Training: Train the Trainer”.
- ii. Engr. Dr. R.O. Medupin, an academic member of the Department attended “i-Fair Innovation Fellowship for Aspiring Inventor and Researcher”.

3. STAFF PUBLICATIONS

- i. Modelling of Heat Transfer Characteristics around a Cylindrical-Barrier by Olalekan Adebayo Olayemi, AbdulganiyuSalaudeen, Khaled Al-Farhany, RasaqOlawaleMedupin, Isaac KayodeAdegun
- ii. C.P. Egole, H.E. Mgbemere, G.P. Sobamowo, G.I. Lawal “Micro-Macro Mode for the Transient Heat and Fluid Transport in Solidification Structure Evolution during Static Casting Processes”. *Journal of Materials Today Communication. ELSEVIER*
- iii. *Netherland*.G.C. Nzebuka, C.O. Ufodike, C.P. Egole “Influence of Various Aspect of Low-Reynolds Number Turbulance Models in Predicts Flow Characterization and Transport Variables in a Horizontal Direct –Chill Casting”. *International Journal of Heat and Mass Transfer, ELSEVIER, UK.*
- iv. G.C. Nzebuka, C.O. Ufodike, C.P. Egole“Numerical Modeling of the Effect of Cooling Conditions and Mould Size During Solidification of Al-45% Cu Alloy in Static Casting Process”. *Journal of Materials Science and Engineering, UK.*
- v. C.P. Egole, G.C. Nzebuka, J.U. Anaele, D.C. Ukonu“Experimental Investigation of Welding Parameters and Simulation of Heat and Fluid Flow in Weldments”. *Journal of Materials Science and Engineering, UK.*
- vi. C.P. Egole, G.P. Sobamowo, G.I. Lawal. “Micro-Macro Modeling of Solidification with Experimental Validation in Selected Eutectic Binary-

Aluminum Alloys". *Journal of Applied Physical Sciences International (Google Scholar)*.

- vii. C.H. Asogwa, C.N. Anyakwo, M. Ndochuckwu, C.P. Egole, C.S. Obayi, C.S. Madu "Corrosion Resistance of Heat-Treated and Cold –Worked SAE 1030 Mild Steel in Cassava Fluids Media". *Journal of Research in Mechanical Engineering (Google Scholar)*

5. RESEARCH ACTIVITIES

The ongoing researches in the Department within the period in review are:

1. Development of Eco-Friendly Nanoparticles Based Cutting Fluid for High Speed Machining of Carbon Fibre Reinforced Plastic by Engr. Dr. R.O. Medupin and his team.
2. Upgrade and Commercialization of Carbon Nanotube Reinforced Natural Rubber Composite Based Artificial Foot by Engr. Dr. R.O. Medupin and his team
3. Mild Steel Corrosion Inhibition Using Linear Polarization Resistant (LPR) Technique by Engr. P.C. Agu.
4. Micro-Macro Modeling of Thermal Evolution During Solidification in Static Casting Processes for Binary Equiaxed Eutectic Alloys.
5. Journal of Advances in Materials and Processing Technique, Taylor and Francis UK. C.P. Egole, H.E. Mgbemere, G.P. Sobamowo, G.I. Lawal.
6. Evaluation of Non-Asbestos Brake Pads Using Yates Analysis. *International Journal of Applied Sciences and Engineering Review*, 2(3), May-June, 2021, 63-70. Asotah W.A. and Dr. C. Onuoha.

6. FUTURE ACTION PLANS OF THE DEPARTMENT

The action planned by the Department for the next five (5) years are as follows:

- i. Acquiring of Materials and Metallurgical Engineering (MME) Departmental building.
- ii. Acquisition of more outside linkages.
- iii. Provision of ICT virtual laboratory centre.
- iv. Provision of standard foundry and welding workshop in the Department.
- v. Procurement of standard equipment and facilities for effective practical studies in the Department.
- vi. Acquisition of research grants and aids for staff and students of the Department.

DEPARTMENT OF MECHANICAL ENGINEERING

1. ACHIEVEMENTS

i. Academic Activities

All academic activities went smoothly in the Department within the period under review.

ii. NUC Accreditation Team Visitation

The Nigeria University Commission (NUC) in line with it's mandate of maintaining standard in Nigeria Universities visited the Department from Saturday, December 11 – Thursday, December 16, 2021 for accreditation exercise and it was a huge success.

iii. Students' Request

Within the reporting period, all cases of students request were duly processed to SEET Board of Studies for recommendation to Senate for approval.

iv. Routine Office Administration

In the Department, the routine administrative supervision were carried out accordingly for smooth running of the unit. Students documents like extra credit load, moderation, correction of registration number, re-admission etc. were all handled with dispatch.

v. Post Graduate Internal Defence

Within the period under review, the Department conducted internal defence for two (2) Ph.D students and two (2) M.Eng students.

vi. Siwes Defense

During the period under review, the Department conducted SIWES defense for 200 level, 300 level as well as 400 level students respectively.

vii. Convocation

Within the period, eighty four (84) students both postgraduate and undergraduates students from Mechanical Engineering Department did their convocation.

viii. Matriculation

A total of two hundred (200) students from the Department matriculated within the period under review.

2. RESEARCH ACTIVITIES

Under-listed are some of the research activities carried out by Mechanical Engineering staff.

- i. Servicing in the automobile industry.
- ii. Numerical study of temperature distribution and thermal stress in the cylinder liner of Biodiesel powered compression ignition engine.
- iii. Risk analysis and control in maintenance of solar centaur 50 turbine drive natural gas compressor.
- iv. Biomass powered natural convection kiln for timber drying.
- v. Combined direct and reversed absorbed thermo siphon water heater.
- vi. Improved evaporation cooler for food and vegetables preservation.

3 FUTURE ACTION PLAN OF THE DEPARTMENT

- i. Establishment of Automotive Workshop

The Department has set up machines in motion for the establishment of Mechanical Engineering automobile workshop.

- ii. Creation of Aeronautic Engineering Department. The Department has proposed modalities, research and curriculum review for setting-up of and take off of the Aeronautic Engineering Department from present Mechanical Engineering.
- iii. Creation of Industrial and Production Engineering Department from Present Mechanical Engineering Department.
The Mechanical Engineering Department has proposed the creation of Industrial and Production Engineering. This is in line with the modern trends in industrialization and manufacturing systems. Most Universities both local and international have adopted this idea now to run full academic degree programme in this area.
- iv. The Department also intends establish a “Professional Development Day” to increase interactions between students, staff, alumni and employers (students can talk with staff, industry reps, alumni, International Programmes reps, etc.).
- v. Proposed Synergies/Collaborations/MOUs
The Department also intends to seek collaborations with allied Departments internally and externally as well as professional associations or societies locally and abroad with a view to actualizing the strategic goals. We shall seek to collaborate with:

DEPARTMENT OF PETROLEUM ENGINEERING

1. Achievements of the Department

During this reporting period the Department has succeeded in achieving the following:

- i. COREN Accreditation
The Department had been commended for attaining full accreditation during the 2021 COREN accreditation exercise in SEET.
- ii. NUC Accreditation
The NUC accreditation team visited the Department for NUC Accreditation Exercise on 16th December, 2021.

- iii. The Department presented one hundred and fifty (152) students for 2020/2021 matriculation exercise while seven (7) postgraduate students were presented for convocation

2. Staff Development Conferences/Workshops

- i. Engr. Dr. N. Uwaezuoke attended COREN regional workshop on the implementation of outcome based education (OBE) in Engineering Programmes in Nigerian Universities. He also attended Nigeria Content Development and Monitoring Board (NCDMB) workshop at Emerald Institute, Uniport Rivers State. Also,
- ii. Some of the academic staff in the Department including the HOD, Engr. Dr. K.C. Igwilo attended Nigeria Annual International Conference and Exhibition (NAICE) at Lagos.

3 Staff Publication:

During the period under review the following Academic Staff made their publications.

| S/N | DATE | AUTHOR(S) | TITLE |
|-----|------|------------------------------|--|
| 1 | 2021 | N. Uwaezuoke and K.C. Igwilo | Rheological Evaluation of MucunaSolannie for non-aqueous mud additive in drilling operations. |
| 2 | 2021 | N. Uwaezuoke and K.C. Igwilo | Evaluation of Rheological and Fluid loss properties of Nigerian bentonite using penwinkle and mucunasolannie |
| 3 | 2021 | N. Uwaezuoke and K.C. Igwilo | Evaluation of Pleurotus as fluid loss control gent in synthetic base mud for oil and gas drilling operations. |
| 4 | 2021 | N. Uwaezuoke and K.C. Igwilo | Comparative Assessment of Mucunasolannie as an alternative Fluid loss control material in synthetic drilling fluid design. |

| | | | |
|----|------------|---|--|
| 5 | 2021 | N. Uwaezuoke, N.C. Izuwa, Nwankwo I.V, Nwachukwu A., Ohia N.P, Duru U.I | Suitability of Locally Sourced Surfactants for enhanced oil recovery (EOR) in the Niger Delta. |
| 6 | 2021 | N. Uwaezuoke, E.Essien, U. Onyejiaka, S. Onwukwe | Improving Water injectivity through Lateral Radial Drilling into the Reservoir. |
| 6 | 2021 | N. Uwaezuoke, I.M. onyejekwe, U.I. Duru, U.J. Obibuike | Prediction of Wax Precipitation Temperature in Petroleum Fluids. |
| 7 | Dec. 2021 | M.C. Udechukwu, B.Ohia, C. Iyke, S.Onwu, C.I.C Anyadiegwu, J. Obibuike | Modelling Flare Gas Recovery System for recovery and Utilization of Stranded Associated Gas in the Niger Delta. |
| 8 | Aug. 2021 | O.I Nwanwe, N.P Ohia, S.T. Ekwueme,. | A Comparative Study of Soft String VS Stiff String Models Application in Torgue and Drag Analysis. |
| 9 | Aug. 2021 | O.I. Nwanwe, N.P. Ohia, S.T Ekwueme | Analysis of Critical Buckling Loads for Tool. Jointed Drill Strings in Deviated Wellbores. |
| 10 | July 2021 | O.I. Nwanwe, S.G. Udeagbara, S.O. Isehunwa, N.U. Okereke, | Treatment of Produced Water from Niger Delta Oil Field using Sequential Mixture of Bio-Adsorbents. |
| 11 | March 2021 | O.I. Nwanwe, S.G. Udeagbara, N.U. Okereke, A. Kerunwa | Performance Evaluation of Oil Based Drilling Fluid Formulated with castor Oil. |
| 12 | 2021 | A.O. Chikwe, K.B. Oyoh, DuluAppah, S.I. Onwukwe | Comparative Study of Pipeline and Marine Transportation for Gas to-Liquid (GIL) Products from Nigeria to Overseas. Journal of Scientific and Engineering Research (JSAER). |
| 13 | 2021 | A.O. Chikwe, S.I. | Modeling of Wax Deposition in Crude |

| | | | |
|-----|------|--|--|
| | | Onwukwe, N.U. Ndubueze, M.O. Duruonyeaku, | Oil Pipeline using Simulation. |
| 14 | | A.O. Chikwe, L.U. Okoye, A.N.Ebue. | Comparison of Underground Natural Gas Storage Methods using the six Economic Indicators and the (AHP) Tool. (A case study of the Niger-Delta). |
| 15 | 2021 | Odo J.E, Onyejekwe I, Chikwe A.O, Nwachukwu A., Okereke N., Oguamah I., Obikaon A.C | Effect of the Application of Alumina Oxide on Recovery in Enhance Oil Recovery, Engineering and Applied Sciences. |
| 16 | 2021 | Oseh, J.O., Blkoo, S.O., Ismail, I., Selleyitoreea, S., MohdNorddin, M.N.A., Agi, A. and Gbadamosi, A.O. | Influence of polypropylene beads and sodium carbonate treated nanosilica in water-based muds for cuttings transport. Journal of Petroleum Science and Engineering, pp. 1-17. |
| 17 | 2021 | Oseh, J.O., Agi, A., Junin, R., Jaafar, M.Z., Yakasai, F., and Gbadamosi, A. | Formulation of bionanomaterials: A review of particle design towards oil recovery applications. Journal of Industrial and Engineering Chemistry pp. 1-21. |
| 18. | 2021 | Oseh, J.O, Lohrasb, S., Junin, R., Agi, A., Jaafar, M.Z., Gbadamosi, A., Sidek, M.A., Gbonhinbor, J.,. | Analytical Model for Estimation of Pore Volume to Breakthrough in Carbonate Acidizing with Organic and Mineral Acids. SPE-207158-MS. Nigeria Annual International Conference and Exhibition, Lagos, Nigeria. |
| 19 | 2021 | Oseh, J.O., Jaafar, M.Z., Gbadamosi, A., Gbonhinbor, J., Yakasai, | Decommissioning of Offshore Oil and Gas Facilities: A Comparative Study Between Malaysia Practices and |

| | | | |
|----|------|--|---|
| | | F. | International Standards. SPE-207178-MS. Nigeria Annual International Conference and Exhibition, Lagos, Nigeria. |
| 20 | 2021 | Oguamah I., Okereke, N.U., Udeagbara, S.G., Kerunwa, A., Nwanwe, O.I., Odo, J. E., Ikejimba, B. and Okeke, | Performance evaluation of oil based drilling fluid formulated with castor oil |
| 21 | 2021 | Oguamah, I. U., Okereke, N.U., Udeagbara, S.G., Isehunwa, S.O., Kerunwa, A., and Nwanwe O. | Treatment of produced water from Niger Delta oil fields using sequential mixture of bio-adsorbents, Cogent Engineering, 8:1 |
| 22 | 2021 | Oguamah I., Okereke, N.U., Odo J. E, Onyejekwe I., A. Chikwe, A.Nwachukwu, Obikaonu A. C., | Effect of the Application of Aluminum Oxide on Recovery in Enhanced Oil Recovery. |
| 23 | 2021 | Oguamah I., Udeagbara, S.G., Isehunwa, S.O., Nwanwe, O., Kerunwa, A | Management of produced water from Niger-Delta oil field using local material |
| 24 | 2021 | Okereke, N. U, Udeagbara, S. G., Isehunwa, S. O, Oguamah, I. U., Kerunwa, A., &Nwanwe, O. | Treatment of produced water from Niger Delta oil fields using sequential mixture of bio-adsorbents. |
| 25 | 2021 | Okereke, N. U., Izuwa, N. C., Nwogu, N. C., Williams, C. C., Ihekoronye, K. K., | Experimental investigation of impact of low salinity surfactant flooding for |

| | | | |
|----|------|--|--|
| | | &Onyejekwe, M. I. | enhance oil recovery: Niger Delta field application. |
| 26 | 2021 | Okereke, N. U, Udeagbara, S. G., Kerunwa, A., Oguamah, I., Nwanwe, O. I., Odo, J. E., &Okeke, R. (2021). | Performance evaluation of oil based drilling fluid formulated with castor oil. |
| 27 | 2021 | Ndubuisi, O., Emeka, O. J., Ifeanyi, O., Chikwe, A., Nwachukwu, A., Ifeanyi, O., &Chidiebere, O. A. | Effect of the Application of Aluminum Oxide on Recovery in Enhanced Oil Recovery |
| 28 | 2021 | Okereke, N. U., Ogazi, I. A., Umofia, A., Abili, N., Ohia, N. P., &Ekwueme, S. T. | Adopting Subsea Separation Technologies for Deepwater West-Africa: A Review Study. |
| 29 | 2021 | Okereke, N. O., Ohia, N. P., Ekwueme, S. T., Achumba, G. I., Nwankwo, I. V., &Nnwanwe, O. I. | A Comparative Study of Soft String Vs Stiff String Models Application in Torque and Drag Analysis. |
| 30 | 2021 | Okereke, N. O., Ohia, N. P., Ekwueme, S. T., Achumba, G. I., Nwankwo, I. V., &Nnwanwe, O. I. | Analysis of Critical Buckling Loads For Tool-Jointed Drillstrings in Deviated Wellbores. |

FUTURE ACTION PLAN

In future, the Departments intends to install internet facilities that will help the lecturers carry out research works and other academic activities effectively and also make learning easy for students of the Department.

The Departments intends to set a committee that will look into a way forward in raising money in the Department either by establishing a lucrative business or making proposals that will yield money for the day to day running of the Department.

SCHOOL OF BIOLOGICAL SCIENCE (SOBS)

DEAN'S OFFICE



Prof. C. S. Alisi
Dean, SOBS

1. BRIEF HISTORY OF THE SCHOOL AND RESUME OF THE CURRENT DEAN OF THE SCHOOL:

The School of Biological Sciences (SOBS) is an off-shoot of School of Sciences which was the second School in the University. It was carved out alongside with School of Physical Sciences (SOPS) from the former School of Sciences (SOSC) at its 338th meeting of Senate held on Thursday 26th February, 2005.

School of Biological Sciences is made up of the following Departments:

- a. Department of Biochemistry
- b. Department of Biology
- c. Department of Biotechnology
- d. Department Microbiology
- e. Department of Forensic Science.



SOB'S ADMINISTRATIVE BLOCK

The above listed Departments have both academic and administrative staff of different levels.

The Dean's Office is made up of staff of different categories Administrative, Executive, Secretariat, and Clerical Staff respectively.

School of Biological Sciences is endowed with Academic staff of high repute especially the Professors in the School.

The School which is not upto ten years old, has made very great impact in the growth and development of the University.

2. RESUME OF THE DEAN SCHOOL OF BIOLOGICAL SCIENCES:

The Dean, School of Biological Sciences is Prof. C. S. Alisi. He is a Professor of Biochemistry (Pharmacology) and third substantive Dean of School of Biological Sciences. As the current Dean, he has been carrying along all the Departments in the School.

3. ACHIEVEMENTS OF THE SCHOOL:

During the period under review, the School of Biological Sciences have made numerous achievements both academically and administratively.

The Academic activities within the period of 2020/2021 went on smoothly. Exams for the Harmattan and Rain Semester were successfully

conducted. Students going for NYSC were mobilized alongside with other students from other Schools. The first SOBS International Conference with the caption “**Biological Innovations: Sine Qua Non for Sustainable Economic Development**” was held between 10th to 13th of August, 2021. The Conference was unique, well attended and academically an intellectual harvest.

2021 PUBLICATIONS

| | | | |
|---|--|---|---|
| 1 | Anyalogbu Ernest A., Nweje – Anyalogbu Paul and Chigozie P. | Impact of Probiotic Fermentation on Proximate and Amino Acid Compositions and Energy Value of Soybean | World Journal of Pharmaceutical Research 10 (3) |
| 2 | Ugwu T. N. Nwachukwu, A. A., Ogbulie, T. E and Anyalogbu E. A. | Compositional Assessment of Selected Plant – Based Substrates for Biogas Production | Journal in Biology. |
| 3 | Okador S. O. and Anyalogbu, E. A. | Proximate and Shelf-Life Evaluation of Soymilk Yoghurt with added Saccharorcyces Boulardii | International Journal of Advanced Research |

4. STAFF DEVELOPMENT CONFERENCES

Within the period under review, the School of Biological Sciences (SOBS) held her first International Conference on “**Biological Innovations: Sine Qua Non for Sustainable Economic Development**” on 10th – 13 August 2021. SOBS academic staff and other academics benefited a lot from the Conference.

5. FUTURE PLANS:

The School of Biological Sciences plans to organize other training Workshops and Conferences for staff of the School to enhance productivity.

**STUDENT ENROLLMENT
SCHOOL OF BIOLOGICAL SCIENCE**

| SOBS | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-----------------|-------------|------------|----------|------------|-----------|-------------|-----------|--------------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Biochemistry | 100 | 124 | 70 | 110 | 69 | 87 | 69 | 78 | 69 | 87 | 377 | 486 | 3 | 2 | 13 | 17 | 5 | 9 | 905 |
| Biology | 42 | 80 | 38 | 86 | 42 | 80 | 33 | 86 | 26 | 76 | 181 | 408 | 0 | 2 | 10 | 4 | 4 | | 599 |
| Biotechnology | | | | | | | | | | | 0 | 0 | | | | | | | 0 |
| Forensic Science | 28 | 43 | 24 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 137 |
| Microbiology | 50 | 76 | 42 | 87 | 66 | 99 | 39 | 89 | 16 | 27 | 213 | 378 | 2 | 2 | 7 | 13 | 2 | 2 | 612 |
| SUB TOTAL | 220 | 323 | 174 | 325 | 177 | 266 | 141 | 253 | 111 | 190 | 823 | 1357 | 5 | 6 | 30 | 34 | 11 | 11 | 2253 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

SCHOOL OF BIOLOGICAL SCIENCE

| PROGRAMMES IN SOBS | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|---------------------------|------------------|----------|----------------------------|----------|-------------------------|----------|-------------------|----------|--------------------|----------|---------------------------|-----------|---------------------------|----------|--------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Biochemistry | 6 | 2 | 2 | 0 | 2 | 0 | 0 | 1 | 2 | 4 | 7 | 6 | 8 | 8 | 48 |
| Biology | 1 | 1 | 1 | 0 | 2 | 3 | 3 | 2 | 4 | 3 | 2 | 1 | 3 | 7 | 33 |
| Biotechnology | | | | | | | | | | | | | | | 0 |
| Forensic Science | 1 | 1 | 0 | 0 | 2 | 1 | 3 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 14 |
| Microbiology | 8 | 2 | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 2 | 10 | 8 | 4 | 6 | 51 |
| SUB TOTAL | 9 | 3 | 2 | 1 | 4 | 3 | 5 | 1 | 3 | 2 | 11 | 10 | 4 | 7 | 146 |

NON-TEACHING STAFF ACCORDING TO GRADE

SCHOOL OF BIOLOGICAL SCIENCE

| PROGRAMMES IN SOBS | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|---------------------------|--------------------------------|----------|----------------------------|----------|-------------------------------|-----------|---------------------|----------|----------------------|----------|--------------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Biochemistry | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 7 |
| Biology | 4 | 1 | 2 | 2 | 11 | 4 | 1 | 1 | 3 | 2 | 31 |
| Biotechnology | 1 | 0 | 1 | 1 | 7 | 6 | 0 | 0 | 0 | 2 | 18 |
| Forensic Science | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| Microbiology | 0 | 2 | 0 | 2 | 2 | 11 | 0 | 0 | 0 | 0 | 17 |
| SUB-TOTAL | 7 | 4 | 5 | 5 | 20 | 22 | 1 | 1 | 6 | 5 | 76 |

DEPARTMENT OF BIOCHEMISTRY

i. **ACHIEVEMENTS OF THE DEPARTMENT**

The Department of Biochemistry made a lot of achievements within the period under review. Firstly, the Head of Department (Prof. A.C. Ene) whose tenure as the HOD had elapsed, was retained on seat for another period of one year. Secondly, three of our lecturers were promoted on the rank of Lecturer II to the rank of Lecturer I in the persons of Dr. C.I. Iheme, Dr. (Mrs) P.C. Nzebude and Dr. (Mrs) D.I. Ukairo, while one of our readers, then Dr. (Mrs.) A.A. Emejulu was promoted to the rank of Professor and as well was made the HOD of Forensic Sciences. Thirdly, the Department produced fresh graduates with B.Tech degree, two of who made a first class honours and was able to mobilize and send most of her students for NYSC. Furthermore, the Department was able to graduate about 5 of her M.Sc students, one of whom was once a Graduate Assistant in the Department

ii. **STAFF DEVELOPMENT (CONFERENCES/WORKSHOPS)**

As at the year 2021, being the period under review, a good number of the Academic staff of Biochemistry Department attended a conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB) on 9th April 2021, at the Rhema University Aba, Abia State. Again, the Academic staff of Biochemistry Department attended a conference hosted by the institution, Federal University of Technology, Owerri (FUTO) titled Biological Innovations: **Sine Qua Non for Sustainable National Economic Development** held between 10th-13th August 2021. More so, the secretary of the Department (Mrs. C.U. Nze) attended a conference at Kwara State between 4th to 8th October, 2021 titled

protecting and enhancing the future of secretarial profession in Nigeria.

iii. **STAFF PUBLICATION**

| S/N | NAME | DEPT | TITLE PUBLICATION |
|-----|---|--------------|---|
| 1 | Dr. C.S. Chukwudoruo, and 5 other lecturers of biochemistry | Biochemistry | serum total protein concentration and liver enzymes activities in albino rats model administered with ethanolic leaf extract of ficuscapensis |
| 2 | Dr. (Mrs C.H. Onuoha and two others | Biochemistry | comparative evaluation of proximate composition and anti-sickling potential of Annona muricata seeds and leaves |
| 3 | Dr. (Mrs). C.H. Onuoha and 3 others | Biochemistry | Investigating the efficacy of potential diet derived phytochemicals on LNCaP cell lines under physiological conditions. |
| 4 | Dr. Cl. Iheme and 5 others | Biochemistry | volatile phytochemical compositions of Diodelle sarmentosa leaf and its total dehydrogenase inhibitory potential |

iv. **RESEARCH ACTIVITIES:** This include:

(a) The use of medicinal plants in the management and cure of contemporary health challenges.

(b) Research activities in Enzymology, Environment Biochemistry and Medical Biochemistry.

(c) Research activities on Nutritional studies and Toxicology and pharmacology

v. **FUTURE PLAN OF THE DEPARTMENT**

It is the plan of the Department to obtain basic facilities for the smooth running of the Department, especially equipping the Biochemistry laboratories so that research work at molecular level can be fully achieved in our laboratories; reason being that the contemporary research in Biochemistry internationally is at the contemporary level.

vi. **OTHER RELEVANT INFORMATION:**

We feel sad to mention that the Biochemistry Department lost one of her Professors (Prof. N. Nwachukwu) in the month of November 2021 as well as two of her undergraduate students.

May their souls rest in peace. Amen.

DEPARTMENT OF BIOTECHNOLOGY

ACHIEVEMENT

The Department recorded the following achievements:

Some Academic Staff were promoted to the next level.

The Department graduated 7 Postgraduate students and 25 undergraduate students respectively. The Department got a full accreditation in 2021.

STAFF DEVELOPMENT

Conference and Workshop

The following staff attended the following conferences and works:

Dr. (Mrs) A.C. Udebuani

Conference: Society of Environmental Toxicology and Chemistry (SETAC) African 10th

Bi-Annual Conference/Visual held from 20th – 22nd September, 2021.

School of Biological Sciences, Federal University of Technology, Owerri 2021. The International Conference of Biological Science 10th – 13th August, 2021.

DR. J. N. OKEREKE

A. Conference attended

International Conference of Biological sciences, FUTO 2021

Paper Presented: Properties of soil irrigated with palm oil mill effluent (POME) treated with activated carbon from agro wastes.

Dr. E.A.A. Anyalogbu

Conference: 1st SOBS International; Conference, Federal University of Technology, 2021.

The International Conference of Biological Science 10th – 13th August, 2021.

Dr. E.U. Ezeji

2021 Conference Attendance

International Conference of Biological Sciences, 10 – 13th August, 2021. Federal University of Technology, Owerri.

Dr. Okechi, R.N.

Conference: The International Conference of Biological Sciences 10th – 13th August, 2021.

7th Annual NSM South East Zonal Symposium, Federal University of Technology, Owerri, 2021 4 – 6th August, 2021.

Miss AhumibeNkenna

Conference: School of Biological Sciences, Federal University Technology, Owerri, 2021.

Miss Madubike, M.N.

Conference: 1st SOBS International; Conference, Federal University of Technology, 2021.

33rd Annual International Conference of Biotechnology Society of Nigeria (Ebonyi State), March 28th – April 1st, 2021.

46th Annual Conference of Nigeria Society for Plant protection (FUTO) on “PLANT HEALTH GLOBAL PANDEMIC AND FOOD SECURITY”, March 14th – 18th, 2021.

RESEARCH ACTIVITIES

Undergraduate and Postgraduate research activities were pursued in the Department. Some titles from the researches include:

- I. Study on Haccp Application on ogiri production and the effect of the various processing steps on its oligosaccharide content.
- II. The phytochemical and Antimalarial properties of the local medicinal plant *Azadirachta Indica* (NEEM)
- III. Phytochemical pharmacology of indigenous plants *Phyllanthus Amarus*, *Xylopiya Aethiopia* and *Cassia Occidentalis* in treatment of malaria
- IV. Quantitative Analysis of vitamin Contents of *Plukenetia conophora* *Canarium Scweinfurth* (African Elemi)
- V. Growth and Anatomy of *Talinum Triangular* (JACQ) wild as affected by Different concentration of crude oil.
- VI. The Impact of palm oil mill Effluent (Pome) on the Physico–chemical properties and total microbial population of soil at pome Dumpsites in Ohaji, Imo state, Nigeria.

One hundred and twenty undergraduates completed their research work and were examined.

STAFF PUBLICATIONS IN 2021

DR. (MRS) A.C. UDEBUANI

Arinze, I. Onwurah, Obinna A. Oje Victor Okpasili, Angela C. Udebuani, Chidiebere E. Ugwu and Ikechukwu N. Onwura (2021). Quantitative modeling of Ostracod bioassay assigning toxicity index to potentially chemical contaminant. Science and Pollution Research.

<https://doi.org/10.0071511356-021-17913-5>.

Angela Chika Udebuani, Ononuju Peace Michael Akharam, Olalekan S. Fatoki Beatrice O Opeolu (2021). Acute toxicity of Piggery effluent and Veterinary Pharmaceutical Cocktail on Fresh water organisms. Environmental monitoring and Assessment 193(5): 1-13.

Angela Chika Udebuani, Chidinma Ogochukwu Ukachukwu, Emmanuel Uzoma Onweremadu and Ifeanyi Charles Okoli (2021), Plant-microbe Interaction, in bioremediation of toxic waste in tropical environment, in Phizobiotech Bioremediation of Hazardous waste Foreign Singapore pp 163-194.

Azorgi, J.N. Okechukwu R.I., Udebuani, A.C. and Duru, C. M. (2021).

Evaluation of Physicochemical properties and heavy metal levels in Soils from selected auto mechanic workshop in Imo State Nigeria.

Asian Journal of Advance in Research 1.19-26.

B. Publications

1. Ginikanwa, R. C. and **Okereke, J. N.** (2021). Impact of treated palm oil mill effluents (POME) on soil microflora. *Elixir Biotechnology*, 156(2021), 55524 – 55531.
2. Ugochukwu, T. I., **Okereke, J. N.**, Chukwudi, P. and Nduka, C. A. (2021). Physico-chemical and microbial properties of dredged Oyibor river in Ehime Mbano, Imo State, Nigeria. *Elixir Biotechnology*, 159(2021), 55673 – 55686.

PROF. T.I.N. EZEJIOFOR

Stephen Chinedumije Korie, Tobias I Ndubuisi Ezejiofor (2021)

Determining the role of the Ethanolic leaf Extract of *Diodia Sarmetosa* as a Free Radical Scavenger, and an Antioxidant in High Fat Fed. Wistar Rats. New

visions in Biological Science Vol. 5, 29 October.Pp 108 – 118
<http://doi.org/10.9734/bpi/nvbs/v5/2881E>.

DR. E.A.A. ANYALOGBU

E.A.A. Anyalogbu, Nweje, Anyalowu Paul UbanieChigozie P. 2021.

Impact of Probiotic fermentation on Proximate and amino acid composition, and energy value of soya beans. World journal of Pharmaceutical Research 10 (3).

Ugwu T.N. Nwachukwu, A.A., Ogbulie T.E. and Anyalogbu, E.A.A. (2021)

Compositional Assessment of Selected Plant-based substrates for Biogas Production.

Journal of Advance in Biology and Biotechnology.

Nweje – Anyalowu P.C., Idakwoji, P.A., Momoh, T.B., Anyalogbu, E.A.A., Ako, A.C.

Neuropsychopharmacological Profice of Kaju, a popular Nigeria Polyherbal formulation. International Journal of Current Research in Medical Sciences.

Okafor, S.O. and Anyalogbu, E.A.A.

Proximate and Shelf-life evaluation of Soya milk Yoghurt with added saccharomycesboulardi.

International Journal of Advanced Research.

Dr. E.U. Ezeji

Ezeji, E.U. and Chukwudi, P. (2021).Assesment of Phytoremediation potential of Cowpea (*Vigna unguiculata* L Walp) on used motor oil contaminated soil. African Journal of Biological Sciences 3 (3): 29 – 36.

DR. OKECHI, R.N. - 2021

Okechi, R.N. Chukwurah E.I., Nweke, C.O.

Assessing the toxicities of Binary mixtures of Sodium Dodecylsulfate Marcescene (SERWOL), from Otamiri River. Ecotoxicology and Environmental contamination, 16 (1); 45-46.

Okechi, R.N. Chukwura, E.I., Nweke, C.O. (2021).

Inhibitory Effects of Termany mixtures of Sodium Dodecyl fate and Heavy metals to Acinetobacterseferti from otamiri River Sediment in South Eastern Nigeria.

Ecotoxicology and Environmental Contamination 16 (1) 1 – 11

Christian O. Nweke, Oluchukwu, R. NwangwuChukwudi, J. Ogbonna, Reuben N. Okechi (2021).

Statistical Modeling of Effective Doses in Hometric Dose-Reswpon se Relationahips by ReParameterization of Biological model for inverted 'U' Shape Curves. African Journal of Biotechnology, 20 (11), 451 – 457.

Miss Mercy NgoziMadubuike.

Ogwunga, C.C., Madubuike, M.N., Okechukwu, J.C., Nwakwasi, E.U. The review of Stem Cell Therapy in Nigeria. The way forward .Journal of Complemenmtary and Alternative Medical Research. 14 (3): 7 – 17.

Josephat, Okechukwu Charles (Sp: 4449)

Conferences Attended in 2021:

Biological Innovations: Sine Qua Non for Sustainable National Economic Development

Papers Published in 2021:

The Review of Stem Cell Therapy in Nigeria: The Way Forward

Journal of Complementary and Alternative medical Research:

14 (3): 7 – 17.

FUTURE PLAN:

The underlisted are the Future Plan of the Department.

- (1) To have a Biotechnology and Molecular biology Centre where Genes can be genetically engineered and new products formed.
- (2) Production of Genetically modified animals for disease resistance and better quality and quantity.
- (3) Production of genetically modified Plant for better quality.
- (4) Organizing training for Biotechnological and molecular biology techniques.

DEPARTMENT OF MICROBIOLOGY

ACHIEVEMENTS OF THE DEPARTMENT

The underlisted academic staff of the Department were appointed to occupy the various positions within the period under review

1. (i) Prof. S.I. Okorundu Commissioner for Education, Imo State

(ii) Prof. R.N. Nwabueze reappointed for the second tenure the Director
Centre for Continuing Education, FUTO

(iii) Prof. J.C. Orji reappointed for the 3rd tenure as the University Admission
Officer

(iv) Prof. J.N Ogbulie Director, Institute of Environmental Health and Justice
(IEHES) FUTO

(v) Prof. C.O Nweke Associate Dean, Post Graduate Studies, FUTO

(vi) Dr. I.N Nwachukwu Director, ACE-FUELS

(vii) Dr. C.I Chikwendu Associate Dean, School of Biological Sciences, FUTO

2. NUC Departmental Accreditation was held and the Department is hoping
for a positive response

STAFF DEVELOPMENT CONFERENCES/WORKSHOPS ATTENDED

- (i) All the academic staff in the Department participated in the 7th South East Annual Conference of the Nigerian Society for Microbiology (NSM) held in FUTO between 4th and 6th August, 2021 with the theme 'Biosafety and Biosecurity: Pandemic Preparedness'
- (ii) All the academic staff in the Department participated in the 1st School of Biological Sciences (SOBS) International Conference held in FUTO between 10th and 12th, August, 2021 with the theme 'Biological Innovations, Sine Qua Non for Sustainable National Economic Development.

STAFF PUBLICATIONS AND RESEARCH ACTIVITIES FOR THE YEAR, 2021

| S/N | Title of rticle | Authors/ Year | No. of Author s | Journal/index |
|-----|--|--|-----------------------|---|
| 1 | <i>In-Vitro</i> Examination Utilizing the Nested Multiplex PCR for Identification and Speciation of Human Non- <i>falciparum Plasmodium</i> Species in Owerri, Imo State Nigeria | Chibundu, N.O.1, Umeh, S.I.1, Braide, W. | 3 | <i>International Journal of Advanced Research in Biological Sciences</i> , 8(6) : 133-144, 2021. |
| 2 | Effect of preparation method on the proximate composition and microbial quality of processed/cooked fermented African oil bean seeds (<i>Ugba</i>). | Eluchie, C.N., Ogbulie, I.N., Braide, W and Nwachukwu, I.N | 4 | <i>Nigerian Journal of Microbiology</i> , 35(1) :5630-5638, 2021. |
| 3 | Isolation of Biosurfactant Bacteria from crude oil polluted soil. | Ayebabogha, M.N., Akujobi, C.O and Braide, W | 3 | <i>International Journal of Advanced Research in Biological Sciences</i> , 8(6) : 58-63, 2021. |
| 4 | Comparative production, analysis and shelf life studies of Fermented African oil bean seed. | Eluchie, C.N., Ogbulie, I.N., Braide, W and Nwachukwu, I.N | 4 | <i>Nigerian Journal of Microbiology</i> , 35(1) :5603-5613, 2021. |
| 5 | Phytochemical screening and antibacterial effects of wild <i>Ganoderma</i> species on selected foodborne bacteria. | Wood, T.T., Rowaiye, A.B., Okwu, C.O., Popoola, O.A., Unaeze, C.H., AkienAlli, I.J., Iheka, S.C and Braide, W | 8 | <i>International Journal of Advanced Research in Biological Sciences</i> , 8(1) : 128-137, 2021. |
| 6 | Molecular characterization of mycotoxin producing | Ohabughiro, N.B., Braide, W. , Okorundu, | 4 | <i>Asian Journal of Science and Technology</i> , 12(06) :11714-11719. 2021 |

| | | | | |
|----|--|---|---|---|
| | moulds isolated from stored products of grains (rice, maize, wheat and groundnut) | S.I and Nwanyanwu, C.E | | |
| 7 | Molecular characterization of bacteria isolated from some seafood's in Nembe community, Bayelsa State, Nigeria. | Justice-Alucho, C.H., Mike-Anosike, E.E and Braide, W | 3 | <i>Asian Journal of Applied Science and Technology</i> ,5(3):68-79.2021 |
| 8 | Mycotoxins and Mycotoxicoses, Detection and Analysis: A Review in Retrospect | Ajugwo, G., Opara, U.G., Wood, T.T., AkienAlli, I.J.& Braide, W. | 5 | <i>Asian Journal of Applied Science and Technology</i> , 5(3): 43-67. 2021 |
| 9 | Effects of Anthropogenic Activities on the Physicochemical and Microbiological Characteristics of Aba River and Sediment | Olaniru, G. S., Braide, W &Ogbulie, J. N. | 3 | <i>Asian Journal of Applied Science and Technology</i> , 5(3): 93-104. 2021 |
| 10 | Optimization of bioethanol synthesis from sugarcane bagasse using <i>Saccharomyces cerevisiae</i> | Offor-Emenike, I.U., Ibekwe, V.I., Akujobi, C.O and Braide, W | 4 | <i>Nigerian Journal of Microbiology</i> ,35(1):5659-5670. 2021 |
| 11 | Modelling the effects of local food spices on the growth of <i>Salmonella typhimurium</i> | Oyadougha, T.W., Chinakwe, E.V and Braide, W | 3 | <i>International Journal of Advanced Research in Biological Sciences</i> , 8(11): 46-54, 2021 |

- 12. Ewelike N.C,** Orji J.C, Adieze, I.E, Ogwudire, V.E, Uzoho B.U and Ukaoma, A (2021). Effect of palm oil mill Effluent on the Growth of Maize (*Zea mays*). *Indian Journal of Agricultural Research*, 55(6):761-764.
- 13. Ewelike N.C,** Okammadu J.C, Ogwudire V.E and Nnadozie I.N (2021). In-vitro antimicrobial activity of methanolic and aqueous leaf extracts of *Chrysophyllum albidum* (African star apple) and *Garcinia kola* (Bitter kola). *GSC Biological and Pharmaceutical Sciences*, 14(3):249-253.
- 14. Ewelike N.C, Ogbulie J.N, Orji J.C, Adieze I.E,** Ukaoma A and Ogwudire V.E (2021). Ameliorative effect of sodium carbonate on phytotoxicity of palm oil mill effluent. *World Journal of Advanced Research and Reviews*, 11:39-43.
- 15. Nnadozie R.I, Ewelike N.C,** Chinakwe E, Nnodim N.N, Anorue C.O, Ozer J.U and Eberendu G.I (2021). Parasitological and Bacteriological Survey of liquid wastes from Naze industrial clusters in Owerri, Imo State. *GSC Biological and Pharmaceutical Sciences*, 15(3):138-142.
- 16. Ishaku** (2021). Studies on Helminthic parasites associated with diarrhea among chicken (less than five years old) in two public health facilities in Makurdi metropolis, Benue State.
- 17. Ajugwo Gloria,** Opara U.G, Wood T.T, Akien Alli I.J and Braide W (2021). *Mycotoxins and Mycotoxicoses, Detection and Analysis: A Review in Retrospect.*
- 18. Ajugwo Gloria,** Eze Chinwe Catherine, Orume Abubakar Sani, Nweze Kenneth Emeka, Anaebonam Emeka, Onyemeka Regland Michael (2021). Prevalence and burden of symptomatic uterine leiomyomata among women in Imo State, South-Eastern, Nigeria.

19. Christian O.Nweke, **Oluchukwu R. Nwangwu**, Chukwudi J. Ogbonna and Reuben N. Okechi (2021). Statistical modeling of effective doses in hermetic dose-response relationships by reparameterization of a biologicistic model for inverted U-shaped curves.
20. **Imo E.O** and Ihejirika C.E (2021). Microbial load and biodegradation of palm oil mill effluent (POME) by microorganisms at different stages of discharge. *International Journal of Environmental Quality*, 44:7-9.
21. Ihejirika C.E, Ndubisi E.C, Njoku J.D, Emereibole E.I, Ebe T.E, Njoku-Tony R.F, Ihejirika O.C, **Imo E.O**, Nwachukwu I.N, Chinakwe E.C, Uyo C.N, Ezikeudu C.E and Ursula N.N (2021). Heavy metal contamination of cassava (*Manihotesculenta*) rantz grown in quarry soils in Umunneochi, Abia State and its healthy implications; *International Journal of Environmental Quality* 45:1-9.
22. **Imo E.O** and Nwokori R.C (2021). A review of fungal influence corrosion of metals, *Zastita material* 62:333-339.

FUTURE PLAN OF THE DEPARTMENT

It is the desire of the Department to have its own lecture halls for efficient and effective teaching and learning and also invigilation of examinations.

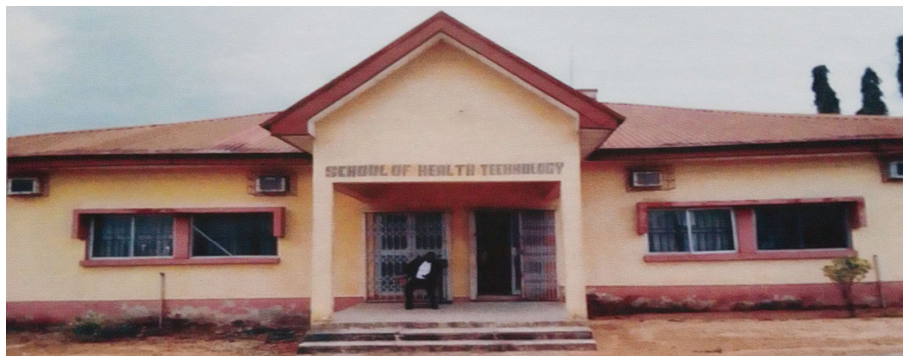
OTHER RELEVANT INFORMATION

Two corps members were posted to the Department for their National Youths Service Corps.

SCHOOL OF HEALTH TECHNOLOGY (SOHT)

INTRODUCTION

The School of Health Technology (SOHT) was established in 2003 with five programmes following the approval of the National Universities Commission.



SOHT Building Complex

Currently, the School has six Departments and they are as follows; Environmental Health Science, Dental Technology, Optometry, Public Health, Prosthetics and Orthotics and Radiography and Radiation Science. The School started with only few students and lecturers in each of its Department and had grown over the years. There are about one thousand, seven and fifty students in the whole school and more than one hundred lecturers. The School has produced five Deans since its inception among whom are Prof Mrs. B.N. Anyanwu (Retired) from 2005 to 2007, Prof. O.C .Abanobi from 2007 to 2012, Prof. I.N.S. Dozie from 2012 to 2017, Rev. Sr. Prof. E.T. Oparaocha 2017 to 2019 and Prof. P.U. Agbasi who is the present Dean of the School. Prof. P.U. Agbasi of the Department of Prosthetics and Orthotics was elected the six substantive Dean of SOHT with effect from July 1, 2021.

DEAN'S OFFICE



Prof. P. U. Agbasi
Dean, SOHT

STUDENT ENROLLMENT

SCHOOL OF HEALTH TECHNOLOGY

| SOHT | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|----------|----------|-----------|-----------|-----------|----------|-------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Biomedical Tech. | 42 | 33 | 29 | 34 | 25 | 32 | 22 | 14 | 25 | 31 | 143 | 144 | 0 | 0 | 23 | 28 | 9 | 2 | 349 |
| Dental Tech. | | | 23 | 34 | 20 | 37 | 26 | 47 | 24 | 36 | 93 | 154 | | | | | | | 247 |
| Enviromental Health Sc. | 14 | 51 | 10 | 50 | 18 | 41 | 0 | 6 | 4 | 25 | 46 | 173 | 0 | 0 | 0 | 0 | 0 | 0 | 219 |
| Optometry | 24 | 44 | 21 | 41 | 21 | 30 | 18 | 22 | 17 | 31 | 101 | 168 | 0 | 0 | 9 | 12 | 0 | 0 | 290 |
| Prosthetics & Orthotics | 27 | 39 | 25 | 32 | 26 | 36 | 19 | 17 | 13 | 31 | 110 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 265 |
| Public Health | 44 | 107 | 31 | 101 | 26 | 139 | 34 | 102 | 26 | 86 | 161 | 535 | 4 | 8 | 7 | 13 | 6 | 3 | 737 |
| Radiography & Radiation Sci. | 22 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| SUB TOTAL | 173 | 313 | 139 | 292 | 136 | 315 | 119 | 208 | 109 | 240 | 676 | 1368 | 4 | 8 | 39 | 53 | 15 | 5 | 1572 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SOHT | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|------------------------------|-----------|----------|---------------------|----------|------------------|----------|------------|----------|-------------|----------|--------------------|-----------|--------------------|-----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Biomedical Tech. | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 2 | 2 | 1 | 1 | 3 | 1 | 3 | 18 |
| Dental Tech. | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 4 | 9 |
| Enviromental Health Sc. | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 3 | 7 | 2 | 5 | 23 |
| Optometry | 1 | 1 | 0 | 0 | 2 | 0 | 3 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 14 |
| Prosthetics & Orthotics | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 3 | 2 | 13 |
| Public Health | 2 | 2 | 1 | 2 | 5 | 1 | 1 | 0 | 2 | 2 | 0 | 12 | 1 | 0 | 31 |
| Radiography & Radiation Sci. | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| SUB TOTAL | 6 | 3 | 4 | 3 | 12 | 3 | 8 | 4 | 7 | 7 | 6 | 26 | 9 | 14 | 112 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SOHT | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|----------------------------|----------------------------|-----------|------------------------|-----------|---------------------------|-----------|--------------|----------|---------------|----------|-----------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Biomedical Tech. | 0 | 3 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 7 |
| Dental Tech. | 1 | 1 | 0 | 1 | 1 | 3 | 0 | 0 | 1 | 1 | 9 |
| Enviromental Health Sc. | 0 | 2 | 1 | 1 | 3 | 7 | 0 | 1 | 0 | 0 | 15 |
| Optometry | 0 | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 6 |
| Prosthetics & Orthotics | 5 | 1 | 3 | 2 | 1 | 3 | 0 | 0 | 3 | 0 | 18 |
| Public Health | 0 | 3 | 0 | 2 | 2 | 11 | 0 | 0 | 1 | 2 | 21 |
| SUB-TOTAL | 6 | 11 | 6 | 10 | 7 | 26 | 1 | 1 | 5 | 3 | 76 |

1.0. ACHIEVEMENTS

a. New Deans' Office Complex

The office of the Dean, School of Health Technology packed into her new complex mainly built for the Dean's office. The School graduated a total number of three hundred and seventy one (371) students in the recent 2020/2021 Convocation Ceremony from her seven (7) Departments.

b. Promotions

Also during the time under review, the following staff in the office of Dean, SOHT were promoted to various ranks in the 2020/2021 promotions exercise.

- i. Udokporo Stella (Mrs) - Principal Assistant Registrar (PAR)
- ii. Anyaehie Bisi J. (Mrs) Senior Assistant Registrar (SAR)
- iii. Ugo-Onwukwe Judith (Mrs) - Assistant Chief Personal Secretary (ACPS)
- iv. Onuoha, N. I. (Mrs) - Computer Processor
- v. Egbujor Victoria (Mrs) - Chief Caretaker

c. FUTURE PLANS OF THE SCHOOL

School of Health Technology always aspire to produce good and effective students who would impact good knowledge and experience relevant to human life and its environment for future generation.

The school equally plans to expand by having additional Departments such as: Department of Social Works, Physiotherapy, Medical Laboratory, etc.

d. CHALLENGES

Some of the challenges facing the School include;

- Inadequate power supply
- Water
- Lack of furniture in the SOHT Conference Hall
- Lack of good Computer Sets in the Dean's Office, SOHT
- Security outfit in SOHT

DEPARTMENT OF BIOMEDICAL TECHNOLOGY



Dr. T. O. Azeez
H.O.D, Biomedical Technology

1.0. ACHIEVEMENTS OF THE DEPARTMENT:

- a. The Department had within the reporting period graduated sixty-five(65) undergraduates and six(6) Postgraduates at Masters level;

2021 GRADUATES OUTPUT IN BIOMEDICAL TECHNOLOGY

| FIRST CLASS | SECOND CLASS UPPER DIVISION | SECOND CLASS LOWER DIVISION | M.Sc DEGREES | TOTAL |
|----------------|--------------------------------------|--------------------------------------|-----------------|-------|
| Nil | 38 | 27 | 6 | 71 |

- b. The Department had a collaboration for students undergraduate industrial and Postgraduate internship training with **“Regions Health Care”**
- c. Four of the best graduating students in the Department got awards sponsored by an Alumnus of the Department, Mr Obinna Amah under the **“Victoria Nweke Foundation”** as follows; First position (N250,000), Odetunde Daniel and Egbuonu Amaka as best project students., Second position (N150,000) Ihetu Chimdinma Adaugo, Third position (N100,000) Osiyai Rachel.
- d. Engr. Dr. T.O. Azeez award sponsored by Mr. Ugochukwu Emmanuel, an Alumnus, CEO Hospital Mates Biomedics:
- 500 level – Ihetu Chimdinma Adaugo (N10,000)
 - 400 level – Declan Augusta Chinazom (N20,000).
 - 300 level – Duru Deborah Chisom (N20,0000)
 - 200 level – Bosah Somto Precious (N20,000).

2.0. **STAFF DEVELOPMENT:** Members of the staff and students in the Department within the period attended a NIBET conference with the topic **“Health and Safety”**.

3.0. **STAFF PUBLICATION:**

- a. Modifications and Physio-mechanical behaviours of Roselle fibre-HDPE, Biocomposites for Biomedical uses in Roselle production,

processing, products and Biocomposites by Taofik Oladimeji, Azeez, Rabboni Mike Government, Innocent Eze Ochiagha and Samuel Chidi Iwuji.

- b. Effect of Using Chemical Modified bread fruit Pell fiber in the reinforcement of LDPE by Engr. T.O.Azeez.
- c. Bioactive Constituents and potency of aqueous methanolic extract of *Asclepias syriaca* on plasmodium-falsparium infected albino rats, Journal of Biometrics, Biomaterials and Biomedical Engineering by Engr. T.O.Azeez.
- d. Chemical and Medicinal properties of *Rauwolfia vomitoria* (AFZEL) harvested from the South Eastern Nigeria, Asian Journal of Chemical Sciences 10(40: 56-71, Article no; A 10cs 78051, ISSN: 2456-7795 by Dr. S.C.Iwuji.
- e. Combined use of local and global features for classification of breast lesion using DCE-MRI images by Arukalam Felicity M.
- f. Miscellary of Hospital contact surfaces microbiome: Acase study of selected hospitals in Owerri, South Eastern Nigeria by Mr. S.A.Okafor.

4.0. **RESEARCH ACTIVITIES:** The Department had the following research activities within the period under review and they are categorized into three areas as seen below..

a. **BIO-INFORMATION AND ARTIFICIAL INTELLIGENCE;**

- Persistency of hospital acquired infections in Nigerian Hospital, contact surfaces roles as a reservoir of microbial species, development of nano-antimicrobial eluding contact surfaces by Okafor Sixtus. A.
- Internet of medical things in Nigeria Health care System step wise adoption of Technology to achieve the sustainable development goals by Engr, Dr. K.I. Nkuma-Udah.

b. CLINICAL AND REHABILITATION ENGINEERING;

- Biomedical Technology importation: A hindrance to Health Care Technology Development in Nigeria by Dr. S.C. Uzoechi.
- Fostering Health care advancement by developing 21st century skills, innovations and competences in Biomedical Engineering Education for Nigeria: The Singapore example by Engr. Dr. K.I. Nkuma-Udah.
- Poor Maintenance Culture and inadequate findings: Major hindrance to realizing the full impact of Biomedical Technology in Health care delivery in Nigeria: The way forward by Engr. K.O. Ejeta.

c. PHARMCEUTICAL ENGINEERING;

- Inadequacy or poor development and safety of indigenous therapeutic and nutraceutical for high prevalent or endemic disease in Nigeria by Dr. S.C. Iwuji.
- High cost importation, safety issues of modern drugs couple with unsafe state, improper formulation and purity level of therapeutic and nutraceutical of indigenous materials for health care delivery by Engr. Dr. T.O. Azeez.
- Synergistic effect of silver nano particle modified carica papaya and newbouldia laevis on infected wounds of wister albino rats by Dr. G.I.N. Ndubuka, Engr. Dr. T.O. Azeez and W.C. Okafor.

d. Development of high performance scaffolds from nano-biopolymers for faster regeneration of fracture bone and epithelial tissues by Arukalam Felicity. M.

e. The underlisted are the ongoing research activities in the Department;

- Potentials of chemically modified natural Biopolymer materials (Cissus Populnea and banana fibers) and hybridized with nano-particles of Engineering tissue repairs.

- Development of skin Cancer medicine using Ackee extract with nano-particle modification.
- Phyto-chemistry and formulation of a normoglycaemic medicine with anti-anaemic activity for combating the meance of diabetes.
- D. Phyto-medicine and electro chemistry of plant extract modifying nano-particles for cardiovascular disease therapy.

5.0. **FUTURE PLANS OF THE DEPARTMENT:**

- a. Change of nomenclature from Biomedical Technology (BMT) to Biomedical Engineering (BME).
- b. NUC Accreditation of BME.
- c. COREN Verification and Accreditation for BME.
- d. Establishment and furnishing of BME Laboratories and lecture halls.

DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE



Dr. Mrs. S. I. Umeh
H.O.D., EHS

1. **STAFF DEVELOPMENT:** Four staff members were sponsored through EHS Departmental code for conferences and workshops in their different areas of specialization.

2. **STAFF DEVELOPMENT:**
 - (i) Female Genital Mutilation: A Socio-cultural Myth on the rights of Nigerian Women (Medical Challenges). Samson Obi Umeh, Sarah I. Umeh, Aloy Ojikere and Anno Domini C. Samson-Umeh: A Carelar 2 (2021) 89-98.
 - (ii) Some Widowhood Practices as Violence against Nigerian Women Umeh, Umeh, Ojikere & Samson-Umeh (Health Challenges Associated with Widowhood Practices) AJLHR 5(2) 2021 pg. 123-139.
 - (iii) Molecular Identification and Specification of Human Non-Falciparum Plasmodium Species in Pregnant and Non-Pregnant Patients visiting Federal Medical Centre (FMS) Owerri, Imo State, Nigeria, Anumudu, B. E., Amadi E. S., & Umeh S. I., AJAS 5(3):80-92.
 - (iv) Isolation & Characterization of Multidrug Resistant Salmonella Species from Abattoir Wastewater in Abia State, Nigeria.

3. **RESEARCH ACTIVITIES:**
 - (a) Environmental Health Department successfully prepared and submitted a concept note on “Antimicrobial Resistance Surveillance/Monitoring in Nigeria Livestock Industry, Alternatives and the Way Forward” to the National Research Fund TETFUND presently awaiting for the concept note approval.
 - (b) The Department also successfully prepared and presented a Review paper on Antimicrobial Resistance Surveillance in Nigeria, current situation and way forward.

4. FUTURE PLAN: The Department is eagerly awaiting EHORECON's visit (Professional body for EHS) and Indexing of our students.

DEPARTMENT OF PROSTHETICS AND ORTHOTICS

1.0 ACHIEVEMENTS

I.2021 GRADUATE OUTPUT FOR POT

| S/N | FIRST CLASS | SECOND CLASS UPPER | SECOND CLASS LOWER | TOTAL |
|------------|--------------------|---------------------------|---------------------------|--------------|
| 1 | 2 | 16 | 3 | 21 |

II LAUDABLE INITIATIVE

The Department of Prosthetics and Orthotics produced the first Artificial Limb since its inception. This was achieved through students training by Mr Shedrach Ebosie on step by step fabrication of below the knee Prosthesis and it was donated to an Amputee from Enugu who promised to model the limb he got from FUTO to the general public

III The Laboratory and the cubicle as formally used by the Department of Public Health have now been acquired by the Department of Prosthetics and Orthotics. They are now used as mini lab and offices.

IV The Department engaged experienced graduates of the Department in the persons of Shedrach Ebosie and Mr Maxwell Edozie on one week Industrial Training of 200 level students. All of the present year 4 and 5 students also participated in the hands on training.

2.0 STAFF PUBLICATION

Underlisted staff of Department of Prosthetics and Orthotics made publication in the year under review as follows:

| Name of Authors | Title of Publication | Journal Name | Year | Vol | Issue | Pages | Lead Author |
|--|--|---|------|-----|-------|---------|---------------------|
| Daniel. J. A Okefenam, E, C. Ugorji, T N., Agbasi, P U., Onyido, D. C. Odoh,I. O., Fakorede, S. O., & Eghujo, S.M. | Challenges faced by Nigerian parents with Disabled children in Caring for them | Open Journal of Social Sciences | 2021 | 9 | 10 | 201-212 | Daneil. J. A |
| Daniel, J.A., Okoli, S.C. . Mbakwe, E.I. Udoaku, A.A. and Nzeribe E.A. | Acute Response of Heat Rate of Pregnant Woman to Aerobic Dance Exercise | Journal of Biosciences and Medicines, | 2021 | 9 | 10 | 117-723 | Daniel, J,A. |
| Adebayo Jamiu Isiaq, Chukwuemeka Christoper Ohagwu, Jovita Ada Daniel, Kelechi Kyrian Okwara and Tobenna Henry Okafor | How popular is X-ray hysterosalpingograghy in the investigation of infertility by radiograghers and radiologists in Nigeria? | International journal of Science and Research Archive | 2021 | 2 | 2 | 206-210 | Adebayo Jamiu Isiaq |
| Danie, J.A. Nzeribe, E and Udoaku, A.A. | Aerobic Training impacats on Blood Cholosterol of Women with Gestational Diabetes | Open journal of Obstetrics and Gynecology | 2021 | 11 | | 474-483 | Daniel, J.A. |
| Sola Ojo, F.E. Afolabi Balogun, | Molecular Sexing and Texonomic classification of | Journal of Animal Breeding | 2021 | 5 | 2 | 59-70 | Sola-Ojo, F.E |

| | | | | | | | |
|---|---|-------------------------------|--|--|--|--|--|
| N.B., Adeniyi C.A. Adeyemi, K.O Ay0rinda K.L., All,, O.I., Oni O.A.,Okeke, C.U, Momoh E.O, Adewara J. and Abdulkareem | Nigeria Guinea Fowl using Chromo Helicase DNA Binding Gene and 125 mitochondrial Rrna gene | and Genomics, 5[2]59-70 | | | | | |
|---|---|-------------------------------|--|--|--|--|--|

4.0 RESEARCH ACTIVITIES

Below are the Research activities carried out by staff of the Department of Prosthetics and Orthotics within the year under review.

| Name of Researcher | Title of Publication | Year |
|-----------------------|---|------|
| Dr. Mrs. J. A. Daniel | Comparism of Natural Fibre Reinforced composites over the synthetic composites in the production if Transtibial Prosthetic socket Applications. | 2021 |

5.0 FUTURE PLAN.

- i. The Department is seriously preparing for Nigerian University Commission (NUC) and Medical Rehabilitation Therapists Board of Nigeria (MRTBN) Accreditations.
- ii. The Department plans to mount postgraduate programme and the curriculum had been developed.
- iii. The Department is planning for the Induction and licensing of her graduates for the year 2022.

DEPARTMENT OF OPTOMETRY



H.O.D, PROSTHETICS AND ORTHOTICS

1.0. ACHIEVEMENTS:

- a. The Department got NUC Full Accreditation of her programme with a score of 88%
- b. The first set M.Sc Optometry Students were graduated and honoured at the convocation ceremony within the period under review.
- c. The curriculum for the mounting of Ph.D programme in Optometry got Senate approval with specialties in Clinical Optometry, Ocular Health and Vision Science.
- d. The Departmental Teaching Clinic had her annual 3-Day free Eye Treatment for FUTO staff and students, over 500 members of the University Community benefitted from this free service for the year 2021.
- e. The Department has on behalf of the University, in May 2021 hosted the 13th Annual General meeting /Induction of New Fellows of the Nigerian Postgraduate College of Optometrists. The Department also hosted the Optometrists and Dispensing Opticians Registration Board of Nigeria (ODORBN) professional Examination for Optometry graduates from other schools.

2.0. 2021 GRADUATE OUTPUT FOR OPTOMETRY

| PASS WITH DISTINCTION | PASS WITH CREDIT | PASS | TOTAL |
|-----------------------|------------------|------|-------|
| 1 | 10 | 25 | 36 |

- 3.0. **STAFF DEVELOPMENT:** Many Optometry staff attended the following conferences and seminars within the period under review;

- a. 44th Annual Conference of the Nigerian Optometric Association at Lagos, Nigeria, July 23rd-27th, 2021.
- b. N-Consult CPD Programme in Optometry; Theme: Role of Professionalism in delivering quality eye care services at Owerri November 13th, 2021.
- c. 13th Annual General meeting of the Nigerian Postgraduate College of Optometrists at the Hall of Excellence, Federal University of Technology, Owerri on May 8,2021.
- d. Virtual CPD Training Course on Person-Centered Optometric Care for people with Special Needs on December 26,2021.

4.0. **STAFF PUBLICATION:**

- a. Ugwuoke, G.I, Ikoro,N.C, Esenwah, E.C., Azuamah, Y.C, Megwas, A.U, Nwakamma, G.I, Ibe,C.N, Ogbonna, U.C and Umunnakwe, O.L. (2021), Comparative Analysis of the Antibacterial Effects of *Emilia sonchifolia*(Tassel flower) and Selected Antibiotics on Ocular Bacteria, in vitro. International Journal of Health Science and Research, 11(3): 61-68.

5.0. **RESEARCH ACTIVITIES:**

- a. The Department had within the period under review, created three Research focus groups to conduct researches in the three research areas as follows; Ocular Health, Cornea and Contact Lens, Low Vision and Rehabilitative Optometry.

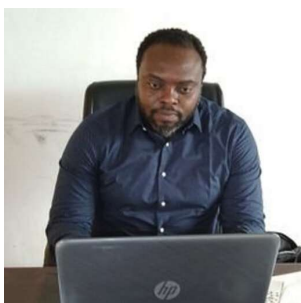
6.0. **FUTURE PLANS:** The Department will be facing Professional accreditation by the Optometrists and Dispensing Opticians Registration Board of Nigeria (ODORBN) in 2022. Preparations are ongoing to obtain full accreditation. The Department will continue to provide affordable free eye care services to the public and FUTO community as part of her community services.

7.0. **OTHER RELEVANT INFORMATION:**

- a. The Department has formed a committee to engage the Alumni of the Department and also created a Parents-Lecturers forum with the

aim of getting support to carry projects that would benefit the Department.

DEPARTMENT OF PUBLIC HEALTH



Dr. U. M. Chukwuocha
H.O.D, Public Health

1.0. ACHIEVEMENTS:

- a. Within the period under review, the Association of Public Health students FUTO Impact Executive held their APUNHS First Congress meeting for 2020/2021 Academic session.
- b. The Department had her Maiden “Chop and Chat” Interactive forum between Staff and students in the University.

2.0. 2021 GRADUATE OUTPUT FOR PUBLIC HEALTH

| S/N | FIRST CLASS | SECOND CLASS UPPER | SECOND CLASS LOWER | TOTAL |
|-----|-------------|--------------------|--------------------|-------|
| 1 | 1 | 63 | 9 | 73 |

3.0. STAFF DEVELOPMENT:

- a. Miss Ngozi V. Akam and Mrs Obi Judith attended the Nutrition Society of Nigeria Annual Scientific Conference at Enugu from September 21 to 24, 2021.
- b. Rev. Sr. Prof. E.T. Oparaocha, Mr. Gregory Iwuoha, Miss. C.O. Emerole and Miss Chukwu O. Rita also attended the Nigeria Centre

for Disease Control, Conference on Applied and Field Epidemiology from July 26 to 29, 2021.

- c. Dr. U.G. Ekeleme attended the Nigeria Society for Microbiology, South East Zonal Symposium General Meeting Preparedness held at the Federal University of Technology, Owerri, Nigeria from August 4, 2021.
- d. Dr. U.M Chukwuocha participated in the Parasitology and Public Health Society of Nigeria, Conference held at Abuja from October 4 to 8, 2021.

4.0. STAFF PUBLICATION:

| Name of Authors | Title of Publication | Journal Name | Year | Vol. | Issue | Pages | Lead Author |
|-----------------|---|--|------|------|-------|-------|--------------|
| U.G. Ekeleme | Public Health Implications of Prototype of Health Care Waste Management in Jos Metropolis, Plateau State, Nigeria | Nigeria Hospital Practice | 2021 | 27 | | 5-7 | U.G.Ekeleme |
| U.G. Ekeleme | Knowledge and Attitude on Diabetes Mellitus among residents of Jos Metropolis | African Journal of Health, Nursing and Midwife | 2021 | 4 | 2 | 26-37 | U.G. Ekeleme |

| | | | | | | | |
|--|---|---|-------|------------|--|-------------------------|------------|
| | s, Plateau State, Nigeria | | | | | | |
| U.W. Dozie, C.I.C. Ebirim, C.R.Dike, I.N.S. Dozie, S.N. Ibe, O.C. Abanobi | Determinants of Cervical Cancer Screening uptake among Female undergraduates in Tertiary Institution in South Eastern Nigeria, a Cross Sectional Study. | Doi:10, 1016/j.Ctare | 20 21 | 10039 2. | | | U.W. Dozie |
| U.W. Dozie, B.L. Elebari, C.J. Nwaokoro, G.N. Iwuoha, C. Emerole, A.J. Akawi, U.M. Chukwuocha and I.N.S. Dozie | Knowledge, Attitude and Perception on Cervical Cancer Screening among Women attending Antenatal Clinic in Owerri West L.G.A South Eastern | Nigeria Journal of Cancer Treatment and Research Communication. | 20 21 | 6.1.18 828 | | Doi:10.1516 7/2421-4248 | U.W. Dozie |

| | | | | | | | |
|--|---|--|----------|----|-----|-------|------------------|
| | Nigeria | | | | | | |
| E.C. Onwuchekwa, L.N. Chigbu, D.M. Gimbaso n, U.G. Ekeleme and Onuigbo C. M. | Knowledge and Attitude and Diabetes Mellitus and residents of Jos Metropolis, Plateau State. | Nigeria African Journal of Health, Nursing and Midwifery . | 20 21 | 4 | 2 | 26-37 | E.C. Onwuchekwa |
| E,C. Onwuchekwa, T. Reng, U.G. Ekeleme and C.M. Onuigbo. | Health Implications of Prototype of Health Care Waste Management in Jos Metropolis, Plateau State, Nigeria. | Nigeria Hospital Practice | 20 21 | 27 | 5-6 | 59-67 | E.C. Onwuchekwa. |

SCHOOL OF ENVIRONMENTAL SCIENCES (SOES)

BREAF HISTORY OF THE SCHOOL

The School of Environmental Science(SOES) was established in the year 2010/2011 academic session with six Departments namely:

1. Department of Architecture
2. Department of Building Technology (BLD)
3. Department of Environmental Management (EVM)
4. Department of Quantity Survey (QTS)
5. Department of Survey and Geo-Informatics (SVG)
6. Department of Urban and Regional Planning (URP)

The School was established to address the growing needs for improved knowledge base and manpower to tackle the myriads of challenges associated with the use of Environmental resources(land, water, plant and animal life form , land use, built environments, construction materials management. The School started as school of Environmental Technology (SOET). In 2015,the University Senate approved the change of School of Environmental Technology (SOET) to School of Environmental of Sciences.

PAST DEANS OF THE SCHOOL

NAMES

TENURE

- | | |
|------------------------------|--------------|
| 1. Prof. C.O Onuama | 2010-2011 |
| 2. Prof. N.N. Onu | 2011-2013 |
| 3. Prof. G.N Onuoha | 2013-2015 |
| 4. Prof. (Mrs) R.N. Nwabueze | 2015-2017 |
| 5. Prof. E.E.Oguzie | 2017-2019 |
| 6. Prof. I.J.Ogoke | 2019-2021 |
| 7. Prof. I.J. Njoku | 2021 to date |

DEAN'S OFFICE



SOES CLASSROOM COMPLEX

STUDENT ENROLLMENT SCHOOL OF ENVIRONMENTAL SCIENCES

| SOES | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|--------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-----------------|------------|------------|----------|------------|----------|-------------|----------|--------------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Architecture | 65 | 9 | 58 | 10 | 70 | 10 | 79 | 12 | 2 | 0 | 274 | 41 | 0 | 0 | 10 | 2 | 0 | 0 | 327 |
| Building | 91 | 4 | 77 | 6 | 73 | 7 | 78 | 4 | 51 | 2 | 370 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 393 |
| Environmental Management | 64 | 13 | 65 | 5 | 65 | 12 | 72 | 15 | 91 | 34 | 357 | 79 | 2 | 0 | 7 | 4 | 1 | 0 | 450 |
| Quantity Surveying | 70 | 9 | 73 | 11 | 68 | 9 | 65 | 7 | 47 | 7 | 323 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 366 |
| Survey & Geoinformatics | 89 | 8 | 84 | 11 | 78 | 8 | 62 | 15 | 62 | 5 | 375 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 422 |
| Urban and Reg. Planning | 62 | 14 | 70 | 11 | 67 | 11 | 49 | 12 | 45 | 8 | 293 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 349 |
| SUB TOTAL | 441 | 57 | 427 | 54 | 421 | 57 | 405 | 65 | 298 | 56 | 1992 | 289 | 2 | 0 | 17 | 6 | 1 | 0 | 2307 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SOES | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|----------------------------|-----------|----------|------------------------|----------|---------------------|----------|------------|----------|-------------|----------|-----------------------|----------|-----------------------|----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Architecture | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 10 | 0 | 1 | 0 | 18 |
| Building | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 6 | 1 | 2 | 0 | 14 |
| Enviromental Management | 6 | 0 | 1 | 1 | 8 | 2 | 5 | 5 | | | | | | | 28 |
| Quantity Surveying | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 2 | 3 | 2 | 3 | 1 | 14 |
| Survey & Geoinformatics | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 9 |
| Urban and Reg. Planning | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 1 | 0 | 6 | 5 | 5 | 2 | 25 |
| SUB TOTAL | 6 | 0 | 3 | 1 | 12 | 3 | 12 | 7 | 8 | 4 | 27 | 9 | 12 | 4 | 108 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SOES | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL | |
|----------------------------|----------------------------|----------|------------------------|-----------|---------------------------|-----------|--------------|----------|---------------|----------|----------|-----------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | | |
| | M | F | M | F | M | F | M | F | M | F | | |
| Architecture | 0 | 3 | 1 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 14 |
| Building | 1 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 9 |
| Enviromental Management | 2 | 1 | 0 | 0 | 8 | 5 | 0 | 1 | 0 | 0 | 4 | 21 |
| Quantity Surveying | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Survey.& Geoinformatics | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 7 |
| Urban and Reg. Planning | 0 | 2 | 0 | 3 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 17 |
| SUB-TOTAL | 4 | 9 | 1 | 13 | 27 | 10 | 0 | 1 | 2 | 6 | 0 | 73 |

SCHOOL OF INFORMATION & COMMUNICATION TECHNOLOGY (SICT)

DEAN'S OFFICE

INTRODUCTION

The School of Information and Communication Technology was approved on August 30th, 2018, at the 440th meeting of the Senate. It took with two existing Departments



namely, Department of Computer Science formerly resident in School of Physical Sciences, and Department of Information Technology formerly resident in School of Management Technology. The young school has two additional Departments which are Cyber Security and Software Engineering, whose first student's intake will commence in the 2019/2020. The School is headed by Dean who provides academic and administrative leadership and she is assisted by the Associate Dean and School Administrative Officer (SAO) alongside other staff in discharging the responsibilities of the Office

DEAN'S PROFILE



Engr. Prof. G. A. Chukwudebe
Dean, SICT

Mrs. Gloria Chukwudebe is a Professor of Electrical and Electronic Engineering. She has several publications and has presented many papers in National and International Conferences. She has also been an invited guest speaker for several Organizations in Nigeria and has more than twenty years teaching experience. She teaches courses in Electrical and Computer Engineering up to postgraduate level. She was the Head of Department of Electrical and Electronic Engineering, FUTO, 1999-2005. Gloria enjoys coaching and mentoring young people. She is married with five children. She has passion for books on personal development, her favorite magazine is IEEE Spectrum. To throw out, she watches Nigerian Comedies and local soaps-papa Ajasco and super story.

ACHIEVEMENTS

- (a) Integration of CISCO Academy Courses
CISCO Academy courses were integrated with relevant departmental courses to improve skills of the lecturers and provide them with state of art materials for teaching the students.
- (b) Training of Technologists
Technologists in the School received specialized training at CISCO Academy that will enable them to be more responsible to their duties.
- (c) Installation of Solar Panel
Solar Panels were installed at the NITDA building, bringing out steady supply of power for individual and administrative work.

(d) Procurement of Equipment

Some equipment needed in the Dean's office were procured and installed. They include: server, switch, solar, inverter system.

(e) Procurement of Fire Extinguishers

The School procured and mounted fire extinguishers in the two buildings of the School.

(f) Installation of Smart Board/Window Blinds

Through the leadership of the Dean, the School also installed a Smart Board in the Dean's Conference Room. Curtains were procured and fixed in all offices of the SICT Building to make the offices more befitting and conducive.

STAFF DEVELOPMENT (WORKSHOPS/CONFERENCES)

The following workshops were attended by staff within the period under review.

| S/NO. | NAME OF STAFF | RANK/UNIT | TITLE OF WORKSHOP | WORKSHOP DATE |
|-------|----------------------------------|------------|--|---|
| 1. | Engr Prof (Mrs) G. A. Chukwudebe | Dean, SICT | Train-the Trainers Workshop by World Bank on Executive Training for Procurement Management | March 3 – 9, 2021 |
| 2. | Engr Prof (Mrs) G.A. Chukwudebe | Dean, SICT | Training on FUTO CISCO Academy: IEEE Skill-UP HUB on Software Requirement and Testing | March 12,13,14,20 and 21 st , 2021 |

RESEARCH ACTIVITIES

| S/No. | Name of Research | Research Topic | Sponsor |
|-------|--------------------------|--|---------|
| 1. | TETFund Research Project | Web Sub-Team on "Design and Development of a Waste Management and a Hazard Alert System (WM-HAS) | TETFund |
| 2. | NCC Research Project | NCC Policy Framework and Licensing of Processing in Telecommunication | NCC |

- (a) A research team led by Dr. S.O. Diala of Computer Science Department in the School succeeded in producing Surveillance Drone with FVP Camera and GPRS.

FUTURE ACTION PLAN

- (a) Production of highly skilled graduates in the fast growing ICT fields through provision of requisite administrative leadership and framework.
- (b) Promotion of research activities and innovative culture for solving national and global problems through workshops, conferences, seminars, symposia and collaboration with relevant industry partners.
- (c) Sustenance of SICT Welfare Scheme.
- (d) Improvement of skills of lecturers and students.
- (e) Routine check of classrooms and lab spaces.

OTHER RELEVANT INFORMATION

1. The Dean, Engr Prof. (Mrs) G. A. Chukwudebe chaired NUC accreditation teams for two Nigerian Universities namely; Godfrey Okoye University, Enugu and Achievers University, Owo, Ondo State in March and April, 2021 respectively.

2. The Dean of the School, Engr Prof. (Mrs) G.A. Chukwudebe was one of the Speakers at the First TED^x FUTU Talk on Saturday, May 8, 2021. She spoke on the Topic: The Conundrum called Stress: Striking a Balance.

STUDENT ENROLLMENT
SCHOOL OF INFORMATION AND COMMUNICATION TECH.

| SICT | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|-----------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-----------------|------------|------------|----------|------------|----------|-------------|----------|--------------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Computer Science | 135 | 22 | 109 | 16 | 152 | 24 | 135 | 34 | 124 | 40 | 655 | 136 | 0 | 1 | 9 | 7 | 2 | 0 | 810 |
| Cyber Security | 66 | 8 | 64 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 143 |
| Information Tech. | 115 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 115 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 139 |
| Software Engineering | 69 | 10 | 65 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 134 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 150 |
| SUB TOTAL SICT | 385 | 64 | 238 | 27 | 152 | 24 | 135 | 34 | 124 | 40 | 1034 | 189 | 0 | 1 | 9 | 7 | 2 | 0 | 1242 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SICT | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|---------------------------|------------------|----------|----------------------------|----------|-------------------------|----------|-------------------|----------|--------------------|----------|---------------------------|----------|---------------------------|----------|--------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Computer Science | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 4 | 3 | 2 | 4 | 3 | 11 | 1 | 36 |
| Cyber Security | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 2 | 3 | 1 | 11 |
| Information Technology | 0 | 1 | 0 | 0 | 2 | 0 | 6 | 1 | 1 | 0 | 6 | 4 | 6 | 2 | 29 |
| Software Engineering | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 5 | 0 | 2 | 1 | 12 |
| SUB TOTAL | 0 | 1 | 0 | 0 | 4 | 2 | 11 | 5 | 9 | 3 | 17 | 9 | 22 | 5 | 88 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SICT | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|------------------------|----------------------------|----------|------------------------|----------|---------------------------|----------|--------------|----------|---------------|----------|-----------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Computer Science | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Cyber Security | 1 | 3 | 0 | 5 | 8 | 8 | 1 | 0 | 0 | 3 | 29 |
| Information Technology | 0 | 3 | 0 | 1 | 4 | 1 | 0 | 0 | 1 | 2 | 12 |
| Software Engineering | 1 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 1 | 1 | |
| SUB-TOTAL | 1 | 6 | 0 | 6 | 12 | 9 | 1 | 0 | 2 | 8 | 45 |

DEPARTMENT OF COMPUTER SCIENCE

INTRODUCTION

The Computer Science programme in FUTO evolved from the Department of Mathematics and Computer Science in 2007, subsequent to a successful resource verification exercise by the National Universities Commission (NUC). At the inception of the Federal University of Technology Owerri in October 1981, Industrial Mathematics was one of the pioneer programmes. In 2007, the former Department of Mathematics and Computer Science split into three Departments: Mathematics, Computer Science and Statistics. Since creation, the following have headed Computer Science Department: Dr. Fabian Uzoh. (2007 - 2011), Prof. Simeon Chioma Inyama (2012 - 2014), Prof. E. N. Erumaka. (2015 - 2018), Dr. (Mrs.) E. C. Nwokorie (2018 -).

DEPARTMENT OF INFORMATION TECHNOLOGY

INTRODUCTION

The Department was established in 2004 as Information Management Technology (IMT) in the school of Management Technology (SMAT). However, following the approval of the School of Computing and Information Technology on the 30th August, 2018 by the senate, it was moved and changed to the department of Information Technology to make it more responsive to the urgent need to bridge the knowledge gap in Information Technology critical to the development of the country and world at large.

The philosophy of the information Technology B.Techprogramme is to develop manpower to meet the Information Communication Technology needs of business organizations, government, health care, schools, etc.

Information Technology specialists are responsible for selecting hardware and software products appropriate for an organization, integrating, and maintaining the applications for the organization's users. They build computer networks or expand existing ones for the solution of business problems. The aim of the programme is to produce graduates with a broad and balanced Information Technology knowledge and practical skills to handle these responsibilities.

The department has staff with background in various fields such as Computer Engineering, Computer Science, Data Science and Security Systems. The department has well equipped laboratories which are actively utilized by both the staff and students for extensive research into the various areas of Information Technology.

DEPARTMENT OF CYBER SECURITY (CYB)

i. ACHIEVEMENTS

- Increment in the area of student enrolment.
- Registration into the NATIONAL CYBER WATCH CENTRE professional body.

STAFF DEVELOPMENT

- The department organized an in-house training/workshop program for lecturers and technologists in the department on the theme 'Ethical Hacking, Networking and Computer Maintenance'
- Four of our staff were involved in the FUTO CISCO Academy Program within the University.

STAFF PUBLICATION:

- Evaluation Of Spatial Distribution Of Rain Attenuation For Geosynchronous Satellite Links With Earth Station Location Across The Nation by Engr. N. C. Nnadi (Lecturer II) and Mr. IdongesitAsuquoOkon (Graduate Assistant)
- Comparative Cost Analysis For Autonomous Wireless Weather Station PV Power Installations In The Six Geopolitical Zones Of Nigeria by Engr. N. C. Nnadi (Lecturer II) and Mr. IdongesitAsuquoOkon (Graduate Assistant)
- Clustering Approaches in Device – to – Device Communication. By Ezeh I. H, Idigo V. E. and Okorogu V. N

SCHOOL OF PHYSICAL SCIENCES (SOPS)

DEAN'S OFFICE



Prof. C. C. Z. Akaolisa
Dean, School of Physical Sciences

The School of Physical Sciences was created on June 15, 2015 with seven Departments. They are:

- (i) Department of Chemistry
- (ii) Department of Computer Science
- (iii) Department of Geology
- (iv) Department of Mathematics
- (v) Department of Physics
- (vi) Department of Science Laboratory Technology
- (vii) Department of Statistics

Prof. B. C. Anusionwu was appointed Dean, School of Physical Sciences for a period of one year with effect from June 18, 2015.

STUDENT ENROLLMENT
SCHOOL OF PHYSICAL SCIENCES (SOPS)

| SOPS | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|----------|-----------|-----------|-----------|-----------|-----------|-------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Chemistry | 85 | 70 | 120 | 40 | 120 | 39 | 117 | 28 | 90 | 43 | 532 | 220 | 4 | 8 | 10 | 5 | 2 | 2 | 783 |
| Geology | 246 | 34 | 125 | 40 | 174 | 20 | 137 | 27 | 110 | 23 | 792 | 144 | 5 | 1 | 35 | 10 | 15 | 5 | 1007 |
| Mathematics | 91 | 20 | 98 | 20 | 86 | 20 | 91 | 12 | 97 | 21 | 463 | 93 | 0 | 0 | 12 | 2 | 4 | 4 | 578 |
| Physics | 141 | 21 | 150 | 11 | 131 | 11 | 123 | 11 | 103 | 17 | 648 | 71 | 0 | 2 | 16 | 10 | 10 | 2 | 759 |
| Science Lab. Tech. | 48 | 95 | 46 | 95 | 38 | 91 | 31 | 55 | 14 | 50 | 177 | 386 | 0 | 0 | 0 | 0 | 0 | 0 | 563 |
| Statistics | 160 | 13 | 120 | 24 | 124 | 14 | 114 | 18 | 122 | 26 | 640 | 95 | 0 | 0 | 3 | 2 | 1 | 1 | 742 |
| SUB TOTAL | 771 | 253 | 659 | 230 | 673 | 195 | 613 | 151 | 536 | 180 | 3252 | 1009 | 9 | 11 | 76 | 29 | 32 | 14 | 4432 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SOPS | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|--------------------|-----------|----------|---------------------|----------|------------------|----------|------------|----------|-------------|----------|--------------------|-----------|--------------------|----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Chemistry | 7 | 1 | 5 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 7 | 8 | 8 | 2 | 50 |
| Geology | 6 | 0 | 1 | 0 | 3 | 0 | 1 | 2 | 6 | 2 | 8 | 4 | 7 | 1 | 41 |
| Mathematics | 3 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 2 | 1 | 6 | 2 | 3 | 1 | 24 |
| Physics | 6 | 1 | 3 | 0 | 3 | 1 | 5 | 0 | 6 | 0 | 9 | 0 | 10 | 1 | 45 |
| Science Lab. Tech. | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 8 |
| Statistics | 3 | 1 | 3 | 0 | 1 | 0 | 2 | 1 | 2 | 2 | 5 | 2 | 4 | 0 | 26 |
| SUB TOTAL | 25 | 3 | 13 | 2 | 10 | 4 | 13 | 5 | 19 | 8 | 36 | 17 | 32 | 7 | 194 |

NON TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SOPS | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL |
|--------------------|-------------------------|----------|---------------------|-----------|------------------------|-----------|--------------|----------|---------------|----------|------------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | |
| | M | F | M | F | M | F | M | F | M | F | |
| Chemistry | 1 | 1 | 2 | 2 | 20 | 9 | 2 | 1 | 0 | 1 | 39 |
| Geology | 0 | 1 | 0 | 5 | 13 | 4 | 0 | 0 | 0 | 0 | 23 |
| Mathematics | 1 | 2 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| Physics | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| Science Lab. Tech. | 1 | 0 | 1 | 1 | 5 | 14 | 0 | 1 | 0 | 0 | 23 |
| Statistics | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| SUB-TOTAL | 6 | 5 | 5 | 17 | 38 | 28 | 2 | 2 | 0 | 1 | 103 |



SOPS BuildingComplex

The office of the Dean, School of Physical Sciences took off at temporary office situated in former Physics Department. Dr. R. A. Umana was appointed the Associate Dean, SOPS on September 9, 2015, for the period ending in June 4, 2016. The first Deanship election for School of Physical Sciences held on Wednesday, June 8, 2016 with Prof. B. C. Anusionwu emerging winner with effect from July 1, 2016. As at today, the School is left with six (6) Departments namely:

- (i) Department of Chemistry
- (ii) Department of Geology
- (iii) Department of Mathematics
- (iv) Department of Physics
- (v) Department of Science Laboratory Technology
- (vi) Department of Statistics
- (vii)

And Prof. C. C. Z. Akaolisa is the current Dean of the School.

DEPARTMENT OF CHEMISTRY

INTRODUCTION

Academic programme started in 1981 under the Chemical Sciences and Technology sub-discipline. This sub-discipline was one of the five programme areas in the School of Natural and Applied Sciences, SNAS. The Chemistry Department headed by Dr. C.I. Anunuso started Academic Activities in 1981/82 session with 18 students. These pioneer students graduated during the 1985/86 session with B.Sc (Hon) degree in Industrial Chemistry.

As consequence of reorganizations, the Industrial Chemistry programme area attained the status of an Academic Department in 1988/89 session. The academic curriculum was based on the NUC minimum academic standards, during the first Accreditation visitation by NUC between December 10th and 14th, 1990, the Department of Chemistry earned full accreditation status with options in B.Tech. (Pure Chemistry) and B.Tech. (Industrial Chemistry). In the 1997/98 session, the Department of Chemistry graduated seventy (70) candidates in these two degree options compared with eighteen (18) candidates in 1988/89. In 2005/2006 academic session the final year class contained 216 candidates out of which 111 candidates graduated.

DEPARTMENT OF MATHEMATICS

INTRODUCTION

Industrial Mathematics was one of the programmes which took off in October 1981 when the University started. It was headed by a Co-ordinator working under the supervision of the Director of the Physical Science programme in the School of Natural and Applied Sciences.

This school later became the school of Earth, Mineral and Natural Sciences but with the same structure. The Department Structure came into effect in 1988 and Mathematics operated under the new Department of Mathematics and Computer Science administered by a head of Department. The department was empowered by the University Senate to award B.Tech Degree in Mathematics with options in Pure Mathematics, Industrial and Applied Mathematics, Computer Science and Statistics following further restructuring of programme in the University in 2008. The Department of Mathematics and Computer Science was split into what is now known as Department of Mathematics, Department of Statistics and Department of Computer Science.

DEPARTMENT OF PHYSICS



Prof. D. D. Eya

The H.O.D, Physics Department

The Department of Physics at the Federal University of Technology, Owerri has distinguished herself as a major contributor to the research and teaching needs both regionally, nationally and internationally. The Department's strength lies in her well-established, research-based approaches to undergraduate physics teaching, which underpin our commitment to widening access. This has led to our success in fulfilling the national imperative to produce physics graduates to meet the needs of our country and society.

Through its unique approach and innovative way of teaching, the Department helped many students from historically disadvantaged backgrounds and poor School preparation to successfully invest in careers in Physics.

ACHIEVEMENTS

- i. The Department of Physics graduated 75 graduands from Industrial Physics and Materials Science options: 45 students in the 2019/2020 academic year and 30 graduands from previous years and these students have been properly mobilized for their National Youth Service.
- ii. The Department produced a first class student in the 33rd convocation ceremony of December, 2021.
- iii. Twelve (12) Post Graduate students of the Department delivered their seminar presentation in July, 2021 while the External Defense for her final year students was conducted in November 26, 2021.

ACADEMIC ACTIVITIES

- i. Dr. K. C. Ugochukwu bagged his Ph.D degree from Motash University, Australia in April, 2021 while Dr. S. C. Udensi bagged his Ph.D degree from University of Agriculture, Umudike, Abia State in September, 2021

STAFF DEVELOPMENT

- i. Academic Staff of the Department attended the 43rd NIP International Conference held in Nnamdi Azikiwe University (NAU) in September, 2021.
- ii. Dr. (Mrs) C. I. Onah attended the National Conference and Annual meeting of the Astronomical Society of Nigeria (ASN) held in Kogi State in November, 2021.
- iii. The following staff attended the 2021 JUBEP workshop at FUTA in October, 2021:
 - a. Dr. (Mrs) C. I. Onah
 - b. Mr. J. Ezihe
 - c. Mr. J. Echenodo

STAFF MATTERS

- i. **APPOINTMENT**

The underlisted staff of the Department served the University according to their respective appointments:

 - b. Prof. Mrs. C. A. Madu was reappointed as Deputy Director, African Centre of Excellence in Future Energies and Electrochemical Systems (ACE-FUELS).
 - c. Prof. D. D. O. Eya was re-appointed as Head, Department of Physics.
 - d. Prof. B. C. Anusionwu was appointed as the Director, Center of Excellence in Local Materials Substitution Studies (CoE-LoMaS)
 - e. Dr. E. C. Mbamala was appointed as Head, Department of Radiography
 - f. Mr. Fred Nwaozor was reappointed as Desk Officer, Social Media in Information and Public Relations Unit.
- ii. The Department concluded her 2020/2021 Appraisal for Academic staff, Senior and Junior Non Teaching staff in the period under review.

OTHER RELIVANT INFORMATION

- i. Mr. MaryMatha and Mr. Samuel Ajayi assumed duty in the Department of Physics as Assistant Lecturer and Graduate Assistant respectively in 2021.
- ii. Mr. Usman Jibreel assumed duty as a Technologist II in the Department.
- iii. Mr. James Ezihe was upgraded to the rank of Assisatnt Lecturer with effect from March 25, 2021.
- iv. Prof. Bede Anusionwu was on Sabbatical leave at the University of Agriculture Umuagwo, Imo State.

DEPARTMENT OF SCIENCE LAB. TECH.



Dr. Sylvia O. Anyadoh-Nwadike
The H.O.D., Department of Sc. Lab Tech.

The Senate of the Federal University of Technology, Owerri at its 291st meeting on Tuesday, August 30th, 2005 approved the offer of B.Tech degree programme in **Science Laboratory Technology** with five year duration, inclusive of one year Industrial Training exposure. The four areas of Science Laboratory technology Training Programme (**SLTTP**) previously offered at the Higher Diploma level (Geology Option, Microbiology Option, Biochemistry/Chemistry Option, and Physics Option) were approved for the Degree Programme. The Department has since then been admitting and graduating students successfully.

ACHIEVEMENTS OF THE DEPARTMENT

- i. The Department held her NUC Accreditation exercise in December 14 through 16, 2021.
- ii. The University presented one hundred and sixty eight (168) students for the 39th Matriculation ceremony held in October 8, 2021.
- iii. Eighty (80) students were presented at the 33rd convocation ceremony held in December 4, 2021.
- iv. Sixty five (65) students were mobilized for NYSC.

STAFF DEVELOPMENT

- i. Two staff of the Department, Mrs. Sandra Onu and Mr. Daniel Onyekuru attended a symposium organized by the Nigerian Society of Microbiology in FUTO.
- ii. Mr. Egwu Joseph Inya attended a symposium on the application of Biotechnology to Bioresources for Bioeconomy sustainability which lasted from December 22 – December 24, 2021.
- iii. Mr. Egwu Joseph Inya participated in a conference on Environmental Health Sciences (CEHS) held from 23rd – 25th November, 2021 at Ibadan.

STAFF PUBLICATION/RESEARCH ACTIVITIES

- i. Mine Kurtay, Husnu Gerengi, **Arinzechukwu chidiebere** & Mesut Yildiz (2021) Corrosion Inhibition of Reinforcement in Mixture Water by Caffeine and L-arginine. *Journal of Adhesion Science and Technology*, <https://doi:10.1080/01694243.2021.1916251>.
- ii. Okechukwu Dominic Onukwuli, Valentine Chikaodili Anadebe, Patrick Chukwudi Nnaji,, Nkechinyere Amaka Okafor, Fidelis Ebunta Abeng, **Maduabuchi Arinze Chidiebere**, Vitalis Ikenna Chukwuike, Chidebe Chijioke Uwaleke. Lei Guo, (2021). Effect of pigeon pea seed (isoflavone) molecules on corrosion inhibition of mild steel in oil field descaling solution: electro-kinetic, DFT modeling and optimization studies, *Journal of the Iranian Chemical Society* <https://doi.org/10.1007/s13738-021-02250-8>.
- iii. S. C. Nwanonyeni, E. O. Ezeani, C. M. Obele, C. V. Arinze, **M. A. Chidiebere**, E. E. Oguzie (2021). Protection of carbon steel surface in extreme environment using polymer mixture: effects of time, inhibitor concentration, mixing ratio and synergy, *Journal of Safety in Extreme Environments*, <https://doi.org/10.1007/s42797-021-00029-x>.

- iv. **Ezeugwunne I. P., Ogbodo E. C., Ezeuduji O. O, Iwuji J. C. Okwara N. A, Obi-Ezeani C. N, 199-205 Assessment of Alpha-Amah A. K, Odumodu I. O, Izuchukwu E. C. O. Advances in Bioresearch12(4):** Assessment of Alpha-Fetoprotein, Albumin, CD4 and some liver Enymes in HIV Infected Adult on Art in North Newwi, South Eastern Nigeria.

FUTURE PLAN

- i. The Department will optimize the glass blowing workshop for revenue generation.
 - ii. The Department will improve on the production and sale of Laboratory Equipment.
 - iii. Aims at providing and expanding Innovative and Technologically oriented person power.
- The Department will hold her maiden induction programme for her graduends on February 18, 2022.

DEPARTMENT OF STATISTICS

INTRODUCTION

Industrial Mathematics was one of the programmes which took off in October 1981 when the University started. It was headed by a Co-ordinator working under the supervision of the Director of the Physical Science programme in the School of Natural and Applied Sciences.

This school later became the school of Earth, Mineral and Natural Sciences but with the same structure. The Department Structure came into effect in 1988 and Mathematics operated under the new Department of Mathematics and Computer Science administered by a head of Department. The department was empowered by the University Senate to award B.Tech Degree in Mathematics with options in Pure Mathematics, Industrial and Applied Mathematics, Computer Science and Statistics following further restructuring of programme in the University in 2008. The Department of Mathematics and Computer Science was split into what is now known as Department of Mathematics, Department of Statistics and Department of Computer Science. The Department of Mathematics is currently headed by Dr. C. C. Nwigwe.

ACHIEVEMENTS OF THE DEPARTMENT

- i. Meetings:
 - a. The Department successfully held her 82nd – 91st Board of Studies meetings.
 - b. The 2018/2019 Academic Staff Appraisal and Senior/Junior staff Appraisal meetings were held on 29th September, 2021 12th October, 2021 respectively.
 - c. The following meetings were held successfully within the period under review:
 - The Statistics Postgraduate Committee meetings
 - The Statistics DLTC Committee meeting and
 - Emergency Departmental Board of Studies meeting

ACADEMIC ACTIVITIES

- i. The Department of Statistics successfully commenced teaching for 2019/2020 Harmattan, Rain and 2020/2021 Harmattan Semesters.
- ii. The students' results were successfully compiled and computed.
- iii. Students academic requests to SOPS Board were duly processed as follows:
 - a. Application to Registrar Extra Credit Units
 - b. Application for Voluntary Withdrawal
 - c. Application for Re-admission
 - d. Application for Change of Department

STAFF PUBLICATIONS

- i. **Ibrahim Adamu**, Chukwudi Justin Ogbonna, Yunusa Adamu and Yahaya Zakari (2021), Modeling Coronavirus Pandemic Using Univariate and Multivariate Models: The Nigerian Perspective. 15(4): 134-143, 2021; Article no.AJPAS.76820 ISSN: 2582-0230.
- ii. Muhammad Naziru Yahaya, **Ibrahim Adamu** and Usman Yahaya (2021). Statistical Evaluation of Surface Wind Method for Electrification in Kebbi State, Nigeria. *FUDMA Journal of Sciences (FJS) online: 2616-1370 ISSN print: 2645-2944 Vol. 5 No. 2, June, 2021, pp 212 – 216 DOI: <https://doi.org/10.33003/fjs-2021 - 0501 - 562>.*
- iii. Yahaya M. N, **Adamu I**, Abubakar M. Samaila B. Abubakar N. & Muhammad S.(2021), Analysis of Selected Meteorological Parameters in Kebbi State Using ARIMA Model, *Savanna Journal of Basic and Applied Sciences* (June,

2021), 3(1): 86-91 P:ISSN 2695-2335| E:ISSN 2705-3164 Available online at <http://www.sjbas.com.ng>.

- iv. Evaluation and comparison of three classes of Central Composite Designs, (June, 2021).
Akanno Felix C, L. C. Kiwu, D. C. Bartholomew, C. P. Obite.
- v. Modelling the Nigerian Bonny light crude oil price: The power of fuzzy Time Series, September, 2021. By Akanno Felix C., D. C. Batholomew, C. P. Obite
- vi. Evaluating percentage Rotatability for the small Box – Behcken Design. L. C. Kiwu
- vii. Likelihood of insurance coverage on dAMges due to level of insecurity in Nigeria logis modeling approach.
L. C. Kiwu.
- viii. The Optimal machine Learning Modeling of Brent Crude oil price L. C. Kiwu
- ix. Olewuezi, N. P., Onoghojobi, B., & Batholomew, D. C. (2016). Estimation of Nonorthogonal Problem Using Time Series Dataset. Journal of the Nigerian Association of Mathematical Physics, vol (34), pp 141-150.2.
- x. Egbo, M. N. & Bartholomew, D. C. (2017). A Discriminant function analysis approach to country's economy status. Journal of Advanced Statistics, Vol. 2, No. 4, December, 2017. 3.
- xi. Egbo M. N, Bartholomew, D. C. Okeke J. U. & Okeke E. N. (2018). Markov chain approach to projection of secondary school enrolment and projection of teachers. Open Journal of Statistics, 2018, 8, 533-555.4.
- xiii. Bartholomew D. C., Obite C. P. and Ismaila-Cosmos J. (2021). Scaled Prediction Variances of Equiradial Design under Chancing Design Sizes, Axial Distances and Center Runs Asian Journal of Probability and Statistics. 11(1). 1-13. <https://doi.org/10.9734/AJPAS/2021/viii30256>
- xiv. Bartholomew D. C., Orumie U. C., Obite C. P. Duru B. I. and Akanno F. C. (2021), Modeling the Nigerian Bonny Light Crude Oil Price: The Power of Fuzzy Time Series. Open Journal of Modelling and Simulation, 9, 370-390. <http://doi.org/10.4236/ojmsi.2021.94024>
- xv. Kiwu L. C. Bartholomew D. C., Kiwu-Lawrence F. C., Obite C. P. and Boniface O. I. (2021). Evaluating Percentage Rotatability for the Small Box-Behnken Design. Journal of Mathematics and Statistics Studies, 2(2), 16-24. [Hhttps://doi.org/10.32996/jmss.2021.2.2.3](https://doi.org/10.32996/jmss.2021.2.2.3)
- xvi. Kiwu-Lawrence F. C, Kiwu L. C., Bartholomew D. C., Obite C. P. and Chikereuba A. F. (2021). Evaluation and Comparison of Three Classes of

- Central Composite Designs. Asian Journal of Probability and Statistics. 13(2). 31-47. <https://doi.org/10.9734/AJPAS/2021/v13i230304>
- xvii. Nwosu U. I. and Obite C. P. (2021). Modeling Ivory Coast COVID-19 cases: identification of a high-performance model for utilization. Result in Physics 20. <https://doi.org/10.1016/j.rinp.2020.103763>
- xviii. Nwosu U. I., Obite C. P. and Bartholomew D. C. (2021). Modeling US Dollar and Nigerian Naira Exchange Rates During COVID-19 Pandemic Period: Identification of a High-performance Model for New Applications. Journal of Mathematics and Statistics Studies. 2(1), 40-52. <https://doi.org/10.32996/jmss.2021.2.1.5>
- xix. Nwosu U. I., Obite C. P., Osuagwu P. H. and Onukwube O. G. (2021). Modeling the British Pound Sterling to Nigerian Naira Exchange Rate during the Covid-19 Pandemic Journal of Mathematics and Statistics Studies, 2(2), 25-35. <https://doi.org/10.32996/jmss.2021.2.2.4>
- xx. Obite C. P., Bartholomew D. C., Nwosu U. I., Esiaba G. E. and Kiwu L. C. (2021). The Optimal Machine Learning Modeling of Brent Crude Oil Price. Quarterly Journal of Econometrics Research, 7(I). 31-43. <https://doi.org/10.18488/journal.88.2021.71.31.43>
- xxi. Obite C. P., Chukwu A., Bartholomew D. C., Nwosu U. I. and Esiaba G. E. (2021). Classical and Machine Learning of Crude Oil Production in Nigeria: Identification of an Eminent Model for Application. Energy Reports, 7, 3497-35. <https://doi.org/10.1016/j.egy.2021.06.005>
- xxii. Orumie U. C., Bartholomew D. C., Obite C. P. and Lawrence K. C. (2021). Likelihood of Insurance Coverage on Damages due to level of Insecurity in Nigeria: Logistic Modelling Approach, Financial Risk and Management Reviews, 7 (1), 50-59. <https://doi.org/10.18488/journal.89.2021.71.50.59>
- xxiii. Bartholomew, D. C., Biu, E. O. and Arimie, C. O. (2022). Hierarchical Regression Modelling of Some Factors Affecting Weight of Child at Birth, Asian Research Journal of Mathematics, 17(12): 11-27,2021.
- xxiv. Nwaigwe, C. C., Bartholomew, D. C. and Eze, P. A. (2021). Statistical Distribution of Lassa Fever in Edo State, Nigeria, Asian Journal of Probability and Statistics, 15(4): 88-96, 2021
- xxv. Obite, C. P., Olewuezi, N. P., Ugwuanyim, G. U. and Bartholomew, D. C. (2020). Multicollinearity Effect in Regression Analysis: A Feed Forward Artificial Neural Network Approach, Asian Journal of Probability and Statistics, 6(I): 22-33,2020.

- xxiv. Ugwuanyim G. U., Onwuegbuchulam, D. E., Bartholomew, D. C. and Anikpe, C. C. (2021). Performance Evaluation of Motor Insurance Companies: Panel Data Evidence from Nigeria, *Journal of Transportation Technologies*, 2021, 11,325-334
- xxvii. Ugwuanyim, G. U., Amuji, H. O., Bartholomew, D. C. and Wisdom, H. (2021). The Reliability of Art in the Control of Human Immune Virus (HIV), *Advances and Applications in Statistics*, Volume 67. Number 2. 2021, Pages 117-132.
- xxviii. Ugwuanyim G. U., Osuchukwu, C. O. Bartholomew, D. C. and Obite, C. P. (2020). Medical Choices for a Wealthy Nation – A Multinomial Logistic Model *Asian Journal of Probability and Statistics*, 6(3): 1-12, 2020
- xxix. Olewuezi, N. P, Onoghojobi, B. and Bartholomew, D. C. (2016). Estimation of Nonorthogonal Time Series Problem using Time Series Data Set, *Journal of the Nigerian Association of Mathematical Physics*, Vol. 3, pp. 141 – 150.
- xxx. Nduka U. C., Iheanyi S. I. and Nwaigwe C. C. (2021) Modeling Serially correlated heavy – tailed data with some missing response values using Stochastic EM algorithm *Communications in Statistics, case studies, Data Analysis and Application*.

OTHER RELIVANT INFORMATION

- i. Prof. E. C. Nworgu was appointed Associate Dean, School of Physical Sciences.
- ii. Prof. A. C. Onyeka was appointed as the Deputy Vice-Chancellor (Academics) of Ozumba Mbadiwe University, Ogboko.
- iii. Dr. C. C. Nwaigwe was reappointed as the Ag. Head of Statistics Department in June, 2021.

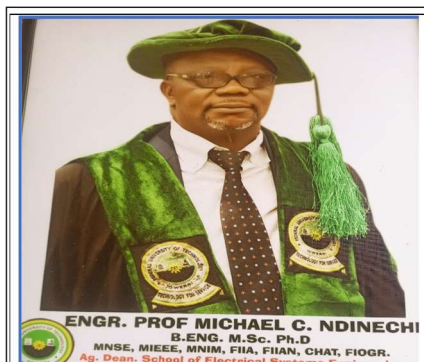
FUTURE PLAN OF THE DEPARTMENT

- i. To develop into a world class technology incubation centre where new ideas are formed, researched and congregated for the development of our local technology for the enormous benefits of enhancing intellectual capital, reducing unemployment, creation of wealth, increase production of goods & services and value to the economy.
- ii. To produce a new kind of manpower that possesses planning, adaptive, technical, developmental and productive skills in Statistics.

- iii. To facilitate the advancement of learning by offering academic programmes in Statistics.

SCHOOL OF ELECTRICAL AND SYSTEMS ENGINEERING TECHNOLOGY (SESET)

DEAN'S OFFICE



i) **BRIEF HISTORY OF ELECTRICAL SYSTEMS ENGINEERING AND TECHNOLOGY(SESET).**

Electrical and Electronic Engineering in the Federal University of Technology, Owerri started as a Programme Area in the 1982/1983 Academic year. It acquired the status of a Department in 1988 with specialization in three options namely – **COMMUNICATIONS ENGINEERING, ELECTRONICS AND COMPUTER ENGINEERING AND POWER ENGINEERING.** The philosophy of the department, in addition to the philosophy of the University was to produce self-reliant graduates who will use technology for service to humanity. Recently, the University Management, in view of the need for specialization and increasing demand for admissions into the department considered it necessary to establish a completely autonomous School from the School of Engineering and Engineering Technology (SEET) dedicated to the study of Electrical System related Engineering courses named School of Electrical Systems Engineering Technology(SESET).

As a full-fledged School, SESET will draw strength from the fact that FUTO is popular in Nigeria due to the excellent performance of graduates of Electrical and Electronic Engineering in the industries

and society at large. This has made applications for admissions into Electrical and Electronic Engineering to constantly be on the increase over the years. As a Department, Electrical and Electronic Engineering have limited carrying capacity in terms of the number of applicants that could be admitted. By creating School of Electrical Systems Engineering Technology with five (5) Departments, at least 20% of these candidates seeking admission into Electrical and Electronic Engineering departments will be offered admission. This will help the University to maintain its strength as a leading brand in Nigeria.

VISION STATEMENT: To attain excellence in all scholastic endeavours and establish the School as a front runner in producing globally competent Computer, Electrical, Electronic, Mechatronics and Telecommunications Engineers, Innovators, Researchers and Entrepreneurs that will make an impact in the world economy through disruptive research and innovation ecosystems.

MISSION: To provide the requisite technical and administrative leadership model for the Departments to achieve excellence in teaching, learning and research for the generation of competent and skilled graduates that will be readily employable.

STRENGTH: High calibre staff and manpower who are known locally and internationally. The school has the capacity of admitting 20% of the University carrying capacity if well enabled.

WEAKNESS: Lack of standard equipped laboratories, offices and classrooms, etc.

OPPORTUNITIES: Ability to carry out cutting-edge researches so as to attract quality students.

THREATS: In the past one year, more than 20 of our young academic staff have migrated abroad on study leave and in search of greener pastures.

STUDENT ENROLLMENT
SCHOOL OF ELECTRICAL AND SYSTEMS ENGINEERING TECHNOLOGY
(SESET)

| SESET | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL |
|-----------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|-------------|------------|----------|----------|-----------|----------|-----------|----------|-------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | | | |
| Elect. & Elect. Engineering | 152 | 17 | 155 | 18 | 242 | 18 | 194 | 31 | 173 | 22 | 916 | 106 | 4 | 1 | 4 | 2 | 5 | 0 | 1038 |
| Machatronic Engineering | 144 | 8 | 107 | 7 | 59 | 4 | 64 | 3 | 43 | 1 | 417 | 23 | 0 | 0 | 28 | 5 | 12 | 1 | 486 |
| SUB TOTAL SICT | 296 | 25 | 262 | 25 | 301 | 22 | 258 | 34 | 216 | 23 | 1333 | 129 | 4 | 1 | 32 | 7 | 17 | 1 | 1524 |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SESET | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|-----------------------------|-----------|----------|---------------------|----------|------------------|----------|------------|----------|-------------|----------|--------------------|----------|--------------------|----------|-----------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Elect. & Elect. Engineering | 4 | 3 | 5 | 0 | 7 | 0 | 2 | 1 | 4 | 3 | 10 | 1 | 6 | 1 | 47 |
| Machatronic Engineering | 1 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 15 |
| SUB-TOTAL | 5 | 3 | 7 | 0 | 9 | 0 | 6 | 1 | 7 | 3 | 10 | 1 | 9 | 1 | 62 |

ii) ACHIEVEMENTS:

The School has recorded some outstanding achievements among which are:

- a) COREN Accreditation of the Department of Electrical and Electronic Engineering (EEE) and Mechatronics Engineering (MCE).
- b) The Dean of SESET and his team got the 2020 National Research Fund from TETFUND.
- c) The Valedictorian for the 33rd Convocation ceremony in the University emerged from the Department of Electrical and Electronic Engineering in SESET. In addition to that, fifteen (15) 1st class honors also came from the School.
- d) The four new departments listed below witnessed NUC Resource Verification on January 31, 2022 and came out successful.
 - Computer Engineering (CPE)
 - Electrical Engineering (EPE)
 - Electronic Engineering (ELE)

- Telecommunications Engineering (TCE)
-
- e) The new departments also admitted their first set of students for the 2021/2022 Academic session as follows:
 - Computer Engineering - 62 Students
 - Electrical Engineering - 82 Students
 - Electronic Engineering - 87 Students
 - Telecommunications Engineering - 59 Students
- f) A high speed Internet connection was Installed in School of Electrical Systems Engineering and Technology at Okiro building. The project is aimed at providing ahigh speed Internet connectivity using fibre optics technology in the building.
- g) The School also elected her first Substantive Dean on June 14,2023. His election took effect from July 01,2023 to end of June 30,2025.

iii)



Temporary SESET Office (Okiro Building)

- iv) Academic activities, examinations, staff appraisals/promotions and other routine activities have been going on without hitches.

SCHOOL OF LOGISTICS AND INNOVATION TECHNOLOGY (SLIT)

DEAN'S OFFICE



Prof. T. O. Ebiringa
*The Dean, School of Logistics and Information
Technology*

Introduction

The ever increasing need for entrepreneurs and innovators that positively disrupts traditional technological and socioeconomic systems for transformative change and sustainable development especially in Nigeria, cannot be overemphasized. No wonder, International Labour Organisation (ILO) in 2016, predicted that global employment generation trends from 2020, will be more in the innovation and entrepreneurship ecosystem. This was the motivation of the proposal developed and presented to the Senate on October 2, 2020 by the now delisted School of Management Technology (SMAT), under the Deanship of Prof. O. T. Ebiringa for the establishment of School of Logistic and Innovation Technology (SLIT).

Philosophy of SLIT:

“To adopt multi-disciplinary approach, driven by excellence and international best practices in developing and offering academic and professional programmes in the application of cutting-edge Technology, Innovation and

Entrepreneurship to management of Complex Operations of business and public sector organisations”.

Mission of SLIT

“to develop and offer academic and professional skills development programmes with foundation in Science, Technology, Management and Entrepreneurship (STME), leading to production of knowledgeable and competent professionals and innovators; capable of designing, developing and managing logistics operations of business and public sector organisations; for jobs and wealth creation”.

Vision of SLIT

“to be a renowned Centre of excellence in teaching, research, knowledge production, human capital development and dissemination of research outcomes in logistics and innovation for operational efficiency and effectiveness of business and public sector organisations in Nigeria and the world at large”.

After due considerations and presentation by the Chairman Curriculum Committee of Senate, approval was granted for the request for establishment of the School of Logistics and Innovation Technology (SLIT) on December 16, 2020.

Senate Approved Undergraduates Programmes

The Senate approved the following undergraduate programmes to be offered through the corresponding five Departments:

| S/N | DEPARTMENTS | PROGRAMMES |
|------------|--|--|
| 1. | Project Management Technology (PMT) | B.Tech. Project Management Technology |
| 2 | Logistics & Transport Technology (LTT) | B.Tech. Logistics & Transport Technology |
| 3. | Maritime Technology & Logistics (MTL) | B.Tech. Maritime Technology & Logistics |
| 4. | Entrepreneurship & Innovation (ENI) | B.Tech. Entrepreneurship & Innovation |
| 5. | Supply Chain Management (SCM) | B.Tech. Supply Chain Management |

Formal application for the establishment of SLIT with her five Departments and undergraduates programmes was made by the 7thSubstative Vice Chancellor, Prof. F.C. Eze to the Executive Secretary National Universities Commission (NUC) through a letter (Ref:FUT/VC/GEN.31a/ VOL.XX1V) dated 30TH NOVEMBER,2020-; requesting Resources Verification Visits to the SLIT Departments and programmes.

Sequel to the above application, the NUC, through letter referenced Ref:FUT/VC/GEN.31A/VOL.XV addressed to the 8thSubstansive Vice Chancellor, Prof. (Mrs) N. N. Oti, scheduled Resources Verification Visits to four (4) of the five (5) programmes with exclusion of the B.Tech. Maritime Technology and Logistics, of which the Commission requested the University to work with its relevant units to develop a draft Basic Minimum Academic Standard (BMAS). The NUC Resources Verification Teams to the four (4) programme visited the University on 22nd DECEMBER, 2020 and assessed available human resources and physical infrastructure for starting the programmes.

To the glory of God almighty, the NUC via letter referenced Ref: NUC/AP/F14/VOL.1/81 dated 5th September,2021, communicated the approval, based on positive Resources Assessment Visits for the starting of the B.Tech. Project Management Technology, B.Tech. Logistics& Transport Technology, B.Tech. Maritime Technology & Logistics, B.Tech. Entrepreneurship & Innovation and B.Tech. Supply Chain Management programmes in the 2021/2022 academic session in the School of Logistics and Innovation Technology (SLIT).

As regards the B.Tech. Maritime Technology and Logistics, the draft BMAS has been developed as directed and resubmitted to NUC via letter referenced Ref: NUC/AP/F14/VOL.11/40 dated 29th October,2021, for which further communication is being awaited.

STUDENT ENROLLMENT
SCHOOL OF LOGISTICS AND INNOVATION TECHNOLOGY

| SLIT | 100L | | 200L | | 300L | | 400L | | 500L | | TOTAL UG | | PGD | | MSc | | Ph.D | | GRAND TOTAL | |
|------------------------------|-------------|-----------|-------------|----------|-------------|----------|-------------|----------|-------------|------------|-----------------|------------|------------|-----------|------------|-----------|-------------|----------|--------------------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | | |
| Financial Mgt. Technology | | | | | | | | | | | | | | | | | | | | |
| Logistics & Transport Tech. | 30 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 18 | 125 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 |
| Management Technology | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 41 | 6 | 43 | 6 | 7 | 2 | 19 | 6 | 12 | 0 | 95 | |
| Maritime Mgt. Technology | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 8 | 90 | 8 | 2 | 0 | 2 | 0 | 0 | 0 | 102 | |
| Project Mgt. & Technology | 56 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 34 | 156 | 40 | 41 | 3 | 41 | 3 | 2 | 1 | 287 | |
| Supply Chain Management | 44 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | |
| Tech. Entrepre. & Innovation | 43 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | |
| IMT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 36 | 130 | 36 | 10 | 11 | 21 | 13 | 6 | 4 | 231 | |
| SUB TOTAL | 173 | 19 | 0 | 0 | 0 | 0 | 2 | 0 | 456 | 102 | 631 | 121 | 60 | 16 | 83 | 22 | 20 | 5 | 958 | |

ACADEMIC STAFF STRENGTH ACCORDING TO RANK

| PROGRAMMES IN SMAT | PROFESSOR | | ASSOCIATE PROFESSOR | | SENIOR LECTURERS | | LECTURER I | | LECTURER II | | ASSISTANT LECTURER | | GRADUATE ASSISTANT | | TOTAL |
|---------------------------|------------------|----------|----------------------------|----------|-------------------------|----------|-------------------|----------|--------------------|----------|---------------------------|----------|---------------------------|----------|--------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| Financial Mgt. Tech. | 3 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 3 | 1 | 3 | 2 | 0 | 5 | 14 |
| Management Tech. | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| Maritime Mgt. Tech. | 1 | 0 | 0 | 1 | 5 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 10 |
| Project Mgt. Tech. | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 5 |
| Transport Mgt. Tech. | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 7 |
| SUB TOTAL | 6 | 5 | 3 | 8 | 6 | 1 | 0 | 0 | 3 | 8 | 6 | 5 | 3 | 8 | 40 |

NON-TEACHING STAFF ACCORDING TO GRADE

| PROGRAMMES IN SMAT | SENIOR ADMIN STAFF | | | | SENIOR TECHNICAL STAFF | | JUNIOR STAFF | | | | TOTAL | |
|-----------------------------------|----------------------------|----------|------------------------|----------|---------------------------|----------|--------------|----------|---------------|----------|-------|-----------|
| | NON-SECRE. ADMIN. STAFF | | SECRE. ADMIN. STAFF | | | | TECHNICAL | | NON-TECHNICAL | | | |
| | M | F | M | F | M | F | M | F | M | F | | |
| Financial Mgt. Technology | | | | | | | | | | | | |
| Logistics & Transport Tech. | 2 | 0 | 1 | 1 | 1 | 0 | 3 | 0 | 1 | 1 | | 17 |
| Management Technology | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | | 8 |
| Maritime Mgt. Technology | 3 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | | 11 |
| Project Mgt. & Technology | 4 | 0 | 3 | 0 | 1 | 1 | 4 | 1 | 0 | 3 | | 21 |
| Supply Chain Management | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | | 2 |
| Tech. Entrepre. & Innovation | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | | 6 |
| SUB-TOTAL | 11 | 1 | 5 | 1 | 7 | 1 | 9 | 1 | 6 | 5 | | 65 |

CHAPTER THREE

STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

ACHIEVEMENT OF THE UNIT:

The SIWES Unit has helped in the preparation of students for industrial work situation and experience through the organization of schools SIWES Orientation Exercise and University SIWES Orientation Exercise for 400 level students in collaboration with the Industrial Training Fund (ITF) on Monday, October 25, 2021.

STAFF DEVELOPMENT: CONFERENCES, WORKSHOPS:

The following members of staff attended workshop:

1. Dr. (Mrs.) N. O. Anyoha (Co-ordinator) attended "The Effective SIWES Supervision and Administration Skills" organized by Industrial Training Fund (ITF) Owerri Area Office from 9th – 11th August, 2021.
2. Mrs. Okoro Joy A. (SAR) attended "The Effective SIWES Supervision and Administration Skills" organized by Industrial Training Fund (IFT) Owerri Area Office from 9th – 11th August, 2021.

FUTURE PLAN OF THE UNIT:

The Unit has met with School/Departmental SIWES Co-ordinators in order to improve students' adherence and participation in the mandatory 400 level students' industrial attachment. It was agreed that members staff of the Unit will monitor the IT defense of all the departments in the University to ensure equitable award of grades to students. Also, we are waiting for the verification of 2020 students' logbooks by the ITF Jos headquarters.

CENTRE FOR CONTINUING EDUCATION (CCE)

ACHIEVEMENT OF THE UNIT:

1. **Admissions:** Within the reporting period the Centre for Continuing Education placed advert for 2020/2021 JUPEB and 2020/2021 CCE Undergraduate Weekend Programme admissions, the Centre also handled the registration of the JUPEB student and their biometric capture during the period under review.
2. **Examinations:** The Centre conducted 2020/2021 Harmattan and Rain Semester Examinations for its undergraduate students and 1st and 2nd semester examinations and the National Examination for the Joint Universities Preliminary Examination Board (JUPEB) candidates were also conducted with the reporting period.
3. **Transcripts:** Transcripts request for graduated students of the Centre were processed within the reporting period.
4. **Meetings:**
 - i. The Centre held the following within the period under review 27th, 28th and 29th meetings CCE of Board Directors
 - ii. The 41st and 42nd CCE Board of Studies was held during the period under review.
5. **Appointments:** Prof. B. A. Ozurumba was appointed as the new Deputy Director of the Centre for Continuing Education to replace Prof. Mrs A. A. Emejulu.
6. **Promotions:** The following staff were promoted during the period under review:
 - i. Ibekwe Chizoba (Mrs), Senior Assistant Registrar.
 - ii. Ezekwe Ebere (Mrs) Deputy Chief Clerical Supervisor.
 - iii. Anekwe Petience U. (Mrs) Deputy Chief Clerical Supervisor.
 - iv. Anyanwu Franca A. (Mrs) Assistant Chief Clerical Supervisor.
 - v. Ikpeama Michael Mercy C. (Mrs) Senior Computer Processor.

While, Okwara Chinedu, Anunuso Chibuzo Ukamaka, Opara Euphemia and Obi Pricilla received their confirmation of appointment letters.

FUTURE PLANS OF THE CENTRE:

The Centre has plans to improve on its service delivery for a more effective Centre for Continuing Education (CCE).

These include:

- a. Recovery of its viable programmes lost through NUC moratorium.
- b. Achievement of benchmark 90% pass in the Joint Universities Preliminary Examinations Board Final Examination to enable more candidates gain admissions through Direct Entry.
- c. Partnership with organizations for more skills acquisition programmes.
- d. Establishment of a standard Joint Universities Preliminary Examinations Board (JUPEB) complex with information and Communication Centre (ICT) gadgets and other necessary facilities as obtainable in other Joint Universities Preliminary Examinations Board (JUPEB) affiliate Universities.

OTHER RELEVANT INFORMATION:

The underlisted are other relevant information from the Centre:

- a. Forward of JUPEB successful candidates name for Direct Entry admission into the University.
- b. Forwarding of student's name to Information Communication Technology Centre (ICT) for matriculation numbers.
- c. The Centre handled routine request/correspondence from Corporate Bodies and individuals.

PUBLIC PROCUREMENT RESEARCH CENTRE (PPRC)

PREAMBLE:

The Public Procurement Research Centre, Federal University of Technology was commissioned on 8th October 2012 by the United Nations Development Programme Country Representative.

The mission of the PPRC is to provide to the Public Procurement Community quality research, advanced educational opportunities and continued

professional development by advancing theoretical and practical knowledge in Public Procurement.

ACHIEVEMENTS OF THE CENTRE:

The Public Procurement Research Centre was able to train a total number of Three Hundred and Seven (307) participants from various MDAs in Nigeria for the period under review. The Centre organized workshop trainings on various topics between the periods of February to December 2021. The workshop titles include

- Effective Public Procurement in Practice - February
- Public Procurement Solicitation Principles - February
- Effective Public Procurement in Practice - March
- Tenders and Contracts Management - March
- Technical and Financial Bid Evaluation for Goods Services and Works - April
- Public Procurement Planning - April
- Conflict Management in Public Procurement - April
- Public Procurement Bid Evaluations - May
- Public Procurement Methods - May
- Tenders and Contracts Management - May
- Effective Public Procurement in Practice - June
- Public Procurement Bid Evaluations - July
- Public Procurement Methods - July
- Technical and Financial Bid Evaluation for Goods, Services and Works - August
- Corruption Risk in Public Procurement - August
- Conflict Management in Public Procurement - August
- Public Procurement Risk Analysis and Management for Anti-Corruption Agencies - August
- Public Procurement Solicitation Principles - August
- Public Procurement Planning - September
- Public Procurement Risk Management for - September

Anti- Corruption Agencies

- Corruption Risk in Public Procurement - September
- Public Procurement Planning - September
- Public Procurement Risk Analysis and Management][
- for- October

Anti-Corruption Agencies

- Effective Public Procurement in Practice - October
- Conflict Management in Public Procurement - October
- Technical and Financial Bid Evaluation for Goods, Services and Works - November
- Tenders and Contracts Management - November
- Effective Public Procurement in Practice - December

FUTURE PLAN OF THE CENTRE:

The Centre plans to have the usual workshop trainings on Procurement for MDAs and Multinationals in Nigeria. The Workshop Trainings for 2022 are listed below:

- Effective Public Procurement in Practice - 21st -25th February
- Public Procurement Solicitation Principles - 21st -25th February
- Public Procurement Planning - 7th - 11th March
- Tenders and Contracts Management - 7th - 11th March
- Technical and Financial Bid Evaluation for Goods Services and Works - 4th - 8th April
- Public Procurement Planning - 4th - 8th April
- Public Procurement Bid Evaluations - 2th –6th May
- Conflict Management in Public Procurement - 2th –6th May
- Effective Public Procurement in Practice - 20th –24th June
- Technical and Financial Bid Evaluation for Goods, Services and Works - 20th –24th June
- Managing & Negotiating with Consultants and Contractors - 20th –24th June
- Public Procurement Bid Evaluations - 25th –29th July

- Public Procurement Methods and Tenders and Contracts Management - 25th –29th July
- Conflict Management in Public Procurement - 22nd – 26th August
- Corruption Risks in Public Procurement and Technical and Financial Bid Evaluation for Goods, Service and Works - 22nd – 26th August
- Public Procurement Planning - 19th – 23rd September
- Practical Guide to Public Procurement for Contractors and Service providers - 19th – 23rd September
- Public Procurement Risk Analysis & Management for Anti-Corruption Agencies - 24th - 28th October
- Effective Public Procurement in Practice and Conflict Management in Public Procurement - 24th – 28th October
- Technical and Financial Evaluation for Goods, Services and Works - 14th – 18th November
- Tenders and Contracts Management - 14th – 18th November
- Effective Public Procurement in Practice - 5th – 9th December
- Corruption Risks in Public Procurement and Public Procurement Solicitation Principles - 5th – 9th December

INTELLECTUAL PROPERTY AND TECHNOLOGY TRANSFER OFFICE (IPTTO)

ACHIEVEMENTS OF THE CENTRE:

1. **Awareness Roundtable and Sensitization Campaign:** FUTO IPTTO has consistently carried out monthly sensitization campaign and roundtable meetings with researchers and innovators in FUTO, using the platform of Faculty board meetings. This is geared towards inculcating in academics, the interest for innovative and cutting-edge research towards acquiring patents rather than hasty research and publication for promotion only. It is also geared towards resolving the low awareness among FUTO researchers in applying for intellectual property rights (IPR's), a problem

of culture and mind set built on “**mistrust**” and “**secrecy**” on the part of the researcher who is afraid of **theft** of his IP when declared.

2. **University Training Workshop for Researchers and Innovators in FUTO on IP Matters:** FUTO management has continued to graciously organize periodic training workshops for researchers in FUTO (for staff and students) on IP related matters. In early 2020 FUTO organized a virtual training workshop for researchers and innovators in FUTO with resource persons drawn from NOTAP Abuja, including the former DG Umar Bindir, Dr Smart Teudor, Engr. Enoch. I. Moghalu and Mr Kenny Shalom Ayoade. Again on December 8, 2021, FUTO organized another sensitization and training workshop for FUTO researchers on creation, management, enforcement of IPR’s and IPTTO operations. The resource persons drawn from NOTAP included Engr. E. I. Moghalu and Kenny Shalom Ayoade. The University intends to make this training workshop an annual event.
3. **Collation, Compilation and Documentation of Research Works in FUTO by IPTTO For Sieving And Evaluation:** The Intellectual Property and Technology Transfer Office (IPTTO) in FUTO has maintained its drive for the collation and evaluation of intellectual work carried out in FUTO on annual basis. These include research publications by academic staff and PhD dissertations by students. The data base is also utilized as data for the compendium of research results and innovations in Nigerian Universities (spread sheet summary) published periodically by NOTAP.
4. **Aggressive Drive for FUTO – Industry Collaboration for the Marketing of FUTO IP’s and Company-Sponsorship of Researches:** This aspect of the mandate of FUTO IPTTO is periodically captured in the annual blue-prints of the Centre. However, due to logistic problem, bordering on poor funding and lack of mobility (official vehicle) for the outreach programme, little has been achieved in the direction.

5. **Development of FUTO Intellectual Property (IP) Policy Framework:** FUTO IPTTO is now in the process of developing her intellectual property (IP) policy, adapted from the recently released draft copy of “**model intellectual property (IP) policy for Nigerian Universities**” by NOTAP, WIPO and NUC. It will be ready in few months time alongside with the constitution of the membership of the Intellectual Property Committee (IPC) and the Intellectual Property Management Office (IPMO). The University already has a university research policy.
6. **Creation of Database for Intellectual Property Rights/Patents so far granted to FUTO Researchers/Innovators:** The unit recently concluded work on the database of IPR’s and patents acquired by researchers and innovators in FUTO over the years between 2005 and 2021. It took painstaking efforts to dig out this information from the archives of NOTAP Abuja. IPTTO Unit is also currently documenting the R&D’s engagements going on in FUTO towards building a sustainable and updated R&D Database. (see the attached tables).

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI.

OFFICE OF THE VICE-CHANCELLOR

INTELLECTUAL PROPERTY AND TECHNOLOGY TRANSFER OFFICE (IPTTO)

FUTO PATENT/IP DATABASE

| S/N | PATENT / IPR NUMBER | NAME & CONTACT DETAILS OF THE INVENTOR | FACULTY/ DEPARTMENT | TITLE OF INVENTION | SECTOR OF RESEARCH | YEAR OF SUBMISSION | YEAR OF ACQUISITION | REMARKS |
|-----|---------------------|--|---|--|--------------------------------|--------------------|---------------------|--------------------|
| 1 | RP 16115 | Dr. C. N. Ubbaonu | Dept. Of Food Science And Technology, Owerri FUTO. | Puffable Cassava – Fruit Pulp Chips Which Pop In Hot Vegetable Oil | Agro-allied | 2005 | 2005 | Not commercialized |
| 2 | NG/P/2013/625 | Prof. C. N. Ubbaonu | Federal University Of Technology, Owerri FUTO, | Ubene (<i>Measobotrya bateri</i>) Berry Wines And Method Of Production | Beverages | 2011 | 2013 | Not commercialized |
| 3 | NG/P/2016/128 | FUTO | Federal University Of Technology, Owerri, FUTO. | An Integrated Tetrafluoroethane (R134a) Refrigerator-Waste Heat Recovery Dryer | Electrical | 2015 | 2016 | Not commercialized |
| 4 | NG/P/2013/750 | PRODA And FUTO | Project Development Institute (PRODA) Road , Emene Industrial Layout, PMB 01609, Enugu State) | Test Rig Of Integrated Bioreactors For Anaerobic Digestion Of Organic Waste | Waste Environmental Management | - | 2013 | Not commercialized |
| 5 | NG/P/2018/148 | DR. Igwilo Kevin, | Federal University Of Technology, Owerri FUTO. | <i>Persea Americana</i> And Pleurotus as Fluid Loss Control Additives During Drilling Of An Oil And Gas Well | Mechanical | 2017 | 2018 | Not commercialized |
| 6 | NG/P/2020/180 | Engr. Dr. Igwilo K. Chinwuba | Federal University Of Technology, Owerri FUTO. | <i>Mucuna Solannie</i> As Drilling Fluid And Cementing Additive | Mechanical | - | 2020 | Not commercialized |

| | | | | | | | | |
|----|---------------|-------------------------------------|---|---|-------------------------|------|------|--------------------|
| | | | | During Drilling Of Oil And Gas Wells | | | | |
| 7 | NG/P/2020/181 | FUTO | Federal University Of Technology, Owerri FUTO. | Biomass Corrosion Inhibitor For Water-Based Drilling Fluids | Mechanical | 2020 | 2020 | Not commercialized |
| 8 | NG/P/2001/89 | Dr. Akajiaku Chukwunyere Chukwuocha | Federal University Of Technology, Owerri (FUTO) Imo State | Multiline Traversing | Surveying Environmental | - | 2021 | Not commercialized |
| 9 | - | Dr. Igwuilo Kelvin | Federal University Of Technology Owerri (FUTO) | Pleurotus as a Fluid Loss Control Additive During Drilling Of An Oil And Gas Well | Mechanical | 2017 | - | Not patented |
| 10 | - | FUTO | Federal University Of Technology Owerri (FUTO) | Reactor For The Pyrolysis Of Water (Pure Water Sachet) | Mechanical | 2018 | - | Not patented |
| 11 | - | Adjobe A. S and Oguoma, O. N. | Federal University Of Technology Owerri (FUTO) | Pipeline Pitting Corrosion Extent Ultrasonic Detector | Mechanical | 2010 | - | Not patented |
| 12 | - | FUTO | Federal University Of Technology Owerri (FUTO) | Innovative Income Tax Table System | Finance System | 2014 | - | Not patented |

Prof. D. C. Njoku, Ffs

Director, IPTTO