AN ADDRESS OF WELCOME BY THE ACTING HEAD OF DEPARTMENT, ENGR. DR E. C. OKOROIGWE, TO THE ALUMNI OF THE DEPARTMENT OF MECHANICAL ENGINEERING DURING HER MAIDEN ALUMNI HOMECOMING ON FRIDAY 19 OCTOBER 2018 AT FACULTY OF ENGINEERING DRAWING HALL

The Vice Chancellor, Prof B. C. Ozumba

Principal Officers of the University present

The Chairman of the occasion, Engr Benjie Ezeagwu

MD/CEO, NelsonBenjamin Ltd, Enugu

Dean, Faculty of Engineering, Engr. Prof O.V. Ekechukwu

The Keynote Speaker, Engr Thomas Emetoh

MD/CEO

Our Distinguished Emeritus Professors

Eminent Professors and Senior Academic of the Department of Mechanical Engineering, UNN

Illustrious and distinguished Thermac Alumni

Members of the University Community

Lions and lionesses

It gives me joy and unfathomable gladness that the journey we started about a year ago has climaxed into what we are doing today. I am very delighted therefore to welcome you all who have, despite the challenges of our present political and economic terrain, decided to grace this occasion. Your sacrifice and presence speak volume of your love and concern towards your alma mater, the Department of Mechanical Engineering and the University of Nigeria in general. I can recount a number of you who have travelled from across the oceans to this remote town you left so many years ago. I am sure some of you may observe that the town and the university have changed since you left (depending on how long ago you did), while they may not have changed so much compared to how long they have been in existence. Although there have been series of transformations in the university, there still remains some remarkable landmarks that will help one recall the look of his alma mater. I'm sure some of you too may be disappointed with the level and rate of development as well as the level and rate of infrastructural decay in the first indigenous university in Nigeria. No matter the category where you belong, I will request you to hold your peace for a moment.

Our indefatigable, visionary 14<sup>th</sup> Vice-Chancellor has committed so much towards the visible ground-breaking landmarks of changes which have given the university very new looks especially around the central axes of the campus. One major vision of the present administration is to make the University of Nigeria, number one university in Nigeria, West Africa and entire Africa in addition to her ranking among the leading universities in the world. The vision and mandate of the Vice-Chancellor to upgrade the university is embraced by the Department of Mechanical Engineering and we are working towards maintaining our record in producing graduates who can hold their shoulders high when they meet their contemporaries

from other universities within Nigerian and African sub region. In addition our graduates should be able to compete favourably with their counterparts from the world leading universities in Europe and America. I am sure you can testify how you have distinguished yourselves where you work and do business. Even though we have tried to meet this goal over the years, the present economic and socio-political scenery in Nigeria is making it difficult to realize the vision. Permit me at this juncture to take you a bit down the memory lane of the Dept of Mech Eng, UNN.

# **1.2 History of the Department**

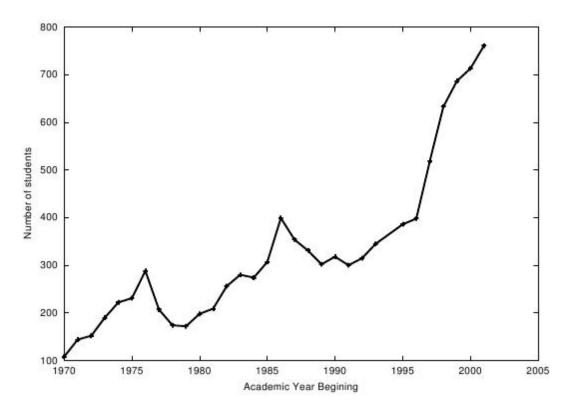
## **1.2.1 Establishment and growth**

The Department of Mechanical Engineering, University of Nigeria, Nsukka was founded in 1961 when she was carved out of Agbebi College of Engineering and thus is one of the premier Departments of Mechanical Engineering in the Nigerian University System. She produced her first 13 graduates in June 1966. In its formative years, 1961 – 1967, the core academic and senior technical staff, of the department were provided by the Michigan State University under USAID agreement and the Dutch Technical Assistance. They built and equipped a good workshop in 1964 for teaching workshop technology courses in fitting, machining, welding, etc. The first Nigerian senior academic staff joined the Department in 1964 and by the end of the 1966/67 academic year; the indigenous staff strength was five in number. During the Nigerian civil war of 1967-1970, the Department was closed down while most of her infrastructure and equipment were destroyed.

After the war in 1970, normal activities resumed with 4 senior academic staff and 3 senior technical staff, two of whom were from the Dutch Technical Aid. The Dutch presence ended in 1974, but the staff strength continued to grow. By 1980/81 session 12 senior academics were in the employment of the department with only 1 non Nigerian and all Nigerian technical/support staff. By 1984, the staff strength reached 24. With the exit of the expatriates around 1985 because of the bad economic situation in the country, the University embarked on a vigorous campaign to recruit very high calibre academic staff with solid academic background and broad professional experience from research and industry. The growth in staff population was also proportional to the rise in students' population. Currently the total staff strength is 81, comprising, 4 Emeritus Professors, 4 full Professors, 2 Visiting Professors (in diaspora), 42 Senior and Junior Academics, 26 Technical staff and 3 supporting (Administrative) staff. The 4 Emeritus Professors, Prof Anthony O Odukwe, Prof C. I. Ezekwe, Prof Samuel O. Onyegegbu and Prof Onwuamaeze Casmir Iloeje, still teach and coordinate some courses at undergraduate and postgraduate levels at NO COST to or DEMAND on the University. In fact they still spend their resources to ensure their lectures are well delivered without asking for refund. Professor D.C. Onyejekwe, although retired still find time to visit department to interact with the younger ones. They have passion for the department, the students and the courses they teach. The peace and cordial relationship we enjoy today in the department among staff members and the leadership of the department and the university in general is linked to their presence in the Dept. due to their fatherly advice and mentorship roles. We thank the University administration for honouring them and conferring on them the title of Emeritus Professor.

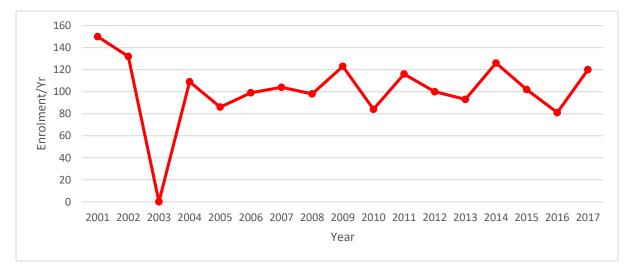
#### **1.2.2 Students enrolment**

The department is our factory while the students are our materials we transform into products (graduates). Without them we cease to be what we are. The students' enrolment has steadily grown from inception till date. In 1961 total number of students was 13 which continued to increase until 1967 when the war broke out. After the war, the 1970 enrolment was 89 (including surviving returning students), by 1974/75 the number reached 217 however, due to constraints in infrastructure the student population fluctuated between 180 and 230 by late 70s and early 1980. Figure 1 shows the student enrolment status up to the close of the 20<sup>th</sup> century.



Since the beginning of the 21<sup>st</sup> century, the student population has increased tremendously owing to national demographic changes and rise in financial status of the people in the society.

Figure 2 shows admission per year beginning from 2001 to 2017



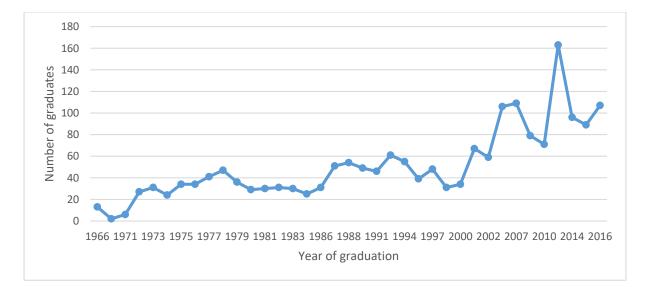
As at today, Table 1 shows at a glance of what population we have to battle with for 2017/2018 session.

| class              | Numb |
|--------------------|------|
| 1 <sup>st</sup> yr | 120  |
| 2 <sup>nd</sup> yr | 140  |
| 3 <sup>rd</sup> yr | 100  |
| 4 <sup>th</sup> yr | 117  |
| 5 <sup>th</sup> yr | 93   |
| Total              | 570  |

#### **Graduation statistics**

The first graduates of the department were the 13 graduates of the class of 1966 and by 1967 the number reached 15.

Post war graduates up to 1981, totalled 231 out of which 18 were First Class honours degrees. The record of Mr (now Engr Dr) Anthony Chibuzo Nebo who made 3.92 CGPA on a 4 point scale in June 1972 had not been broken in the entire university (probably till date). We have produced a little more than 58 First Class honours degrees in Mechanical Engineering. Figure 2 shows the breakdown of yearly graduation record of the department although there were no convocations during some years.



The number excludes external candidates who carried over lower years courses but will be returning to clear the courses. This adds to number we have to cater for in terms of teaching and provision of facilities to study. For 2018/2019 session, already we have recommended for provisional admission about 102 candidates through PUME as first year students excluding Direct Entry students.

Currently, the Postgraduate students enrolment is as in Table 2.

| Class | Numb |
|-------|------|
| PhD   | 32   |
| M.Eng | 60   |
| PGD   | 21   |
| Total | 113  |

There are so much challenges in handling these figures and characters. The modern decline in child discipline and social media influences have continued to affect the quality of graduates being turned out annually especially in the 21<sup>st</sup> century.

#### 1.3 Infrastructure

## 1.3.1 Departmental building

As has been enumerated previously, the population of both staff and students have continued to increase as the national demography soars also. Even though, UNN is one of the universities in Nigeria mandated to adopt 40:60 ratio of undergraduate: postgraduate students admission, the 40% still translates to high number of undergraduate population considering the number of applicants seeking admission. The space to accommodate these students for lectures and laboratory followed by teaching aids is quite limited and fixed. Whereas students expand geometrically the classroom and laboratories have been constant. In the early 2000, Agbebi classrooms in the building which served as pioneer faculty of engineering/college of engineering building, were expanded by the Department and the roofing undertaken by an alumnus, Engr Anthony Oguike. The desks were changed by the TetFund intervention after many years of dilapidation. These renovations notwithstanding, Agbebi classrooms are not up to the standard required for first generation and world class universities.

The administrative and staff offices in the present building does not befit the department. Professors' offices are not better than store rooms for archived documents in established companies not to talk of other lecturers offices where 4 - 8 staff squeeze themselves one or two tables like students in the refectory struggling with books and papers. Due to the number of staff we have now, we have to convert some rooms in the mechanical engineering workshop/labs into staff office which are not convenient for academic research when students do their workshop practice and experiments. The worse part of it is that during the rainy season, leakage from the roof creates flooding. Department of Mechanical Engineering deserves a brand new ultramodern building to serve as administrative offices, staff offices, lecture halls, seminar rooms PG classes and offices. The dilapidating state of the building has attracted the attention of one of us – Engr Tony Oguike who has commissioned an Architect to design a new building for the department which we present to you today for your kind assistance to realise the dream.

# 1.3.2 Laboratory

The building housing the laboratories and the main workshop is very old and the transparent roofing sheets need a change. We have in the past used locally available ones to replace due to the cost of industrial roofing sheets. The cost is also beyond our capability. The machines are constantly exposed to rains whenever it rains which aid deterioration of the heavy expensive equipment in the labs.

Some modern machines such as UTM needs a cubicle to protect it from dust and tampering from unauthorised persons. Estimate for the aluminium cubicle is N460, 000. This is beyond the department.

# 1.3.3 **Departmental car/bus**

Fifty seven (57) years after the establishment of the Thermac, the Department cannot boast of any car and bus for administrative services and students' tours. The staff uses their personal vehicles to run the department and becomes the full responsibility of whoever occupies the headship of the department to see to the day to day movement of goods and services as pertains the administration of the department. Students/ and staff do not frequently embark on field trips and academic conferences due to cost of hiring of vehicles.

## 1.3.4 Research funding and consultancy

As one of the measures to leverage the university administration from 100% funding of the departments, the Department of Mechanical Engineering has constituted a consultancy service unit to undertake the production of engineering services for clients. Presently, the job rate is slow and of low income due to lack of industrial presence in Nsukka. We have qualified manpower within the academic and technical units as well as equipment to handle good jobs. We solicit the patronage of Alumni who have their companies or occupy management positions in big conglomerates. We need research fund to solve your industry problems, jobs for your factories and contracts. Entrust us with your jobs/industrial problems for a fee to encourage research and development. We are capable to handle your subcontracts. We can partner/collaborate in your businesses

# 1.3.5 Running costs for the Department

It is very difficult to run the department now without cash advancement to the department. The university undertakes the responsibility of supplying stationaries and some office materials through contractors but the running of the department goes beyond paper and items. Cash is needed also. We need Alumni members with business ideas to assist us develop business models that will help the department to be financially self-sustaining. This may worth more than billion cash donations even though donations are welcome.

#### 1.3.6 Internet services

In the present world, ICT is needed to facilitate teaching and learning. Its importance in the day to day living outweighs its negative consequences. The internet system in the department handled by ICT unit of the university does not carry the department effectively. It is not accessible beyond some radius. In fact some staff offices and classroom don't experience internet network. It will interest you that the internet service on campus is funded partly by staff through monthly deduction from source (salaries). The department needs to expand the internet network coverage.

#### 1.3.7 Alumni association

From experience no institution functions effectively without strong Alumni Association. Our department is old and mature enough to have organized Thermac Alumni Association who will be committed to the development of the department. If you all come together once in a while you can discusses ways forward to empower and monitor the activities going on in the

department. Alumni body can assist to correct whatever is going wrong in the department. If there is organized Alumni body, it will be easy to furnish her with the information from the department. You need to know of our successes and only asking for help. There must be a ground/forum to do this. We are working towards having a desk officer in the department part of whose job it is to liaise with the Alumni on Thermac News. We can start today.

# 1.4 Conclusion

The staff and students of the Department of Mechanical Engineering are glad you answered this call to return after many years of leaving the Agbebi environment. The task of running the department to meet the challenges of this time in terms of quality of graduates we turn out, cost of things in the market and meeting the global competition is quite demanding. The department or the university cannot handle it alone except there is external assistance. We implore the good spirited Alumni to come to the aid of the department either by direct fund/material donation or by engaging the department on consultancy services for fund generation to run the department and maintain the infrastructure.

We appreciate the likes of Engr Anthony Uzoma Oguike who had re-roofed the existing building, built modern toilet facilities for the students, installed 4.0 KVA solar PV system for the department, cash donations for various services in the department and presently produced architectural drawing of the proposed new departmental building.

We wish you happy stay with us. We appreciate staff who contributed financially out of the meagre salaries to mount this event. The local organizing committee chaired by Prof S. O. Enibe is highly appreciated.

Thank you and God bless.