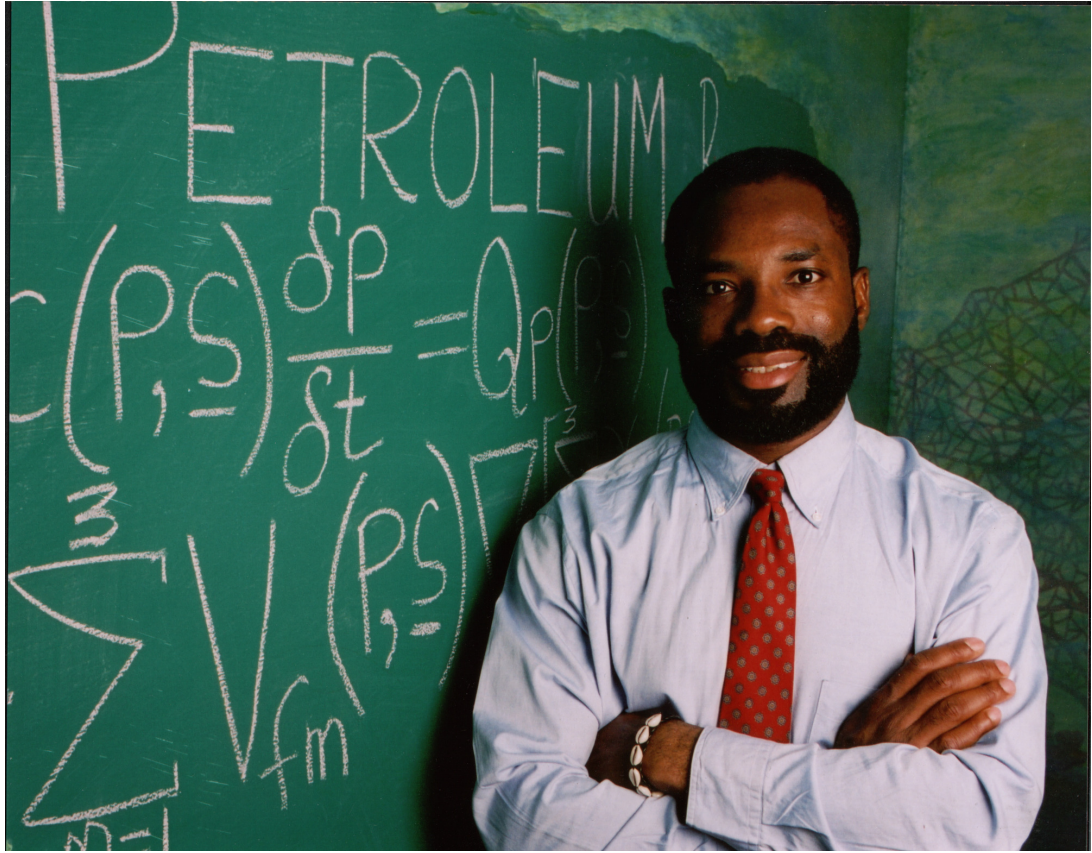


Review of the Inaugural PHILIP EMEAGWALI CONFERENCE



EMEAGWALI CENTRE FOR RESEARCH, RENEWABLE ENERGY AND MATERIAL SCIENCE (ERREMS)

Anambra State University Uli hosted a three day Inaugural Conference of Emeagwali Centre for Research, Renewable Energy and Material Science (ERREMS) from Wednesday 11th – Friday 13th March 2009, at the New Lecture Theatre (NLT) building of Anambra State University Uli (ANSU).



Emeagwali Centre for Research, Renewable Energy and Material Science which was named after Professor Philip Emeagwali intends to contribute its quota to the society towards capacity building and human development in the areas of Science and Technology.



The epoch-making event began on Wednesday, March 11, 2009 with the theme 'New Technologies for an Emerging Economy,' and registered the presence of Professor Mrs. C. A. Oyeka (Deputy Vice Chancellor, Anambra State University Uli), Professor Alex I. Menkiti (University of Calabar) and Wife, Professor R.E. Enemuo, Professor C.E. Okeke (Anambra State University Uli), Professor E.L.C. Nnabuife (Dean, Faculty of Agriculture, ANSU), Professor Akuzoba, Professor Michael I. Akaigwe (Civil Engineering Technology) Federal Polytechnic Oko, Anambra State. Engineer Ugochukwu Okonkwo (Department of Mechanical Engineering) Nnamdi Azikiwe University Awka; and Rev. Sister Dr. Felicia Opara, Coordinator; Weekend and Part – time Programme ANSU, Uli, F.C. Ntomchukwu – Protocol and publicity (ERREMS), I.U.E. Udechukwu Secretary, (ERREMS).



Professor Ifeancha P Orajaka, the Vice Chancellor of Anambra State University Uli (ANSU) was represented by Professor Mrs. Oyeka. She presented a Keynote Address which states that the aim of the Conference was to galvanize and bring together Renowned Researchers, Academics, Scholars and Institutes to exchange ideas and work together towards capacity building in human development, Science and Technology. It further state that the Conference will feature New Technologies in Engineering, Medicine, Science, Information and Communication, Solar and Renewable Energy.

Speaking at the occasion, Professor Nnabuike said that ERREMS will enhance the approach in the field of Science and Technology, and urged all the Students of Science and Technology to embrace ERREMS.

Uche V. Okpala (Department of Industrial Physics, ANSU and the Coordinator, Emeagwali Centre), said that Students of Science and Technology need to meet up with the present day challenges, that the aim of ERREMS is to see that the challenges are met. He expressed dismay over the nonchalant attitude displayed by some Scientists who were oppertuned to participate and benefit in the Inaugural Conference.



Speaking further, he said that the Centre if established will work in conjunction with Solar Energy Company of China in making available Solar Energy appliances and consumables to Nigerians and consumers beyond; adding that this would tackle the problem of power withholding as a result of under-generation of power.

He emphasized that Research and Development are the bedrock of learning in Tertiary Institution and pleaded all well-meaning Nigerians at home and in the Diaspora, and the Government to come together and contribute to this epoch-making capital intensive project, in order to build a better future for our Society.

Highlight of the occasion was the introduction of Nano-Technology by Professor Menkiti. He said that human standard of living depends on Science and Technology, and that Nano-Technology in Engineering, Medicine, Science, Information and Communication, Solar Energy and Renewable Energy source will bring enhancement in the field of Science and Technology; adding that Nano-Technology would realize its objectives if ERREMS is established.



Professor Menkiti when interviewed expressed satisfaction for being present at the Conference, he said that the concept of establishing Emeagwali Centre for Research, Renewable Energy and Material Science is a step in the right direction. He advised the Organizing Committee of ERREMS to nurture it to grow; and called on fellow Professors and well-meaning Nigerians to be committed and assist in making ERREMS to become a reality.

Professor Akaigwe developed and presented a Computer Soft-ware program that is capable of solving simultaneous equation and matrix, he urged Students of Science and Technology to be serious with their studies, and be optimistic that they will excel. He promised to inculcate the knowledge to any who is ready and willing to learn.

Engineer Okonkwo presented a Computer program on 'Development of Multi-Purpose Computer Queueing Model Simulator in a Maintenance Workshop.' The objective was to improve the poor Vehicle Maintenance method in the field of Engineering. He said that the structure of the software is flexible and robust enough to accommodate any value of maximum simulation time and number of crew size as the storage capacity of the Computer allows. He listed the advantages as being user friendly, faster, equipped with post object oriented animation and digital

tracing for each discrete step of the simulation run, and can be an effective queuing model teaching aid.



Elekalachi C.I., a senior Lecturer in the department of Industrial Physics ANSU., presented Quiz on Science, some Students of Abbot Girls' Secondary School Ihiala, and Community High School Umuoma Uli participated and performed excellently. He encouraged them to exercise patience for the emerging ERREMS which will help them to improve in the field of Science and Technology.

Professor Nnabuife, the Chairman LOC., Emeagwali Centre called on the youths to embrace ERREMS and accept what it has to offer so as to be efficient in the field of Science and Technology.

Tuesday March 12, 2009 marked the second day of the Inaugural Conference and recorded the presence of Professor Alex Animalu, Professor Caroline Mba (Department of Crop Science, ANSU, Uli), Professor Sam O. Enibe, all from University of Nigeria Nsukka; Nwozor K.K (Department of Geology, ANSU), and Wansah I.F. (Department of Physics, University of Uyo).

Professor Animalu while speaking on Energy and Nano-Technology in Science said that Nigerians have suffered epileptic power supply over the years because of over dependent on non-renewable fossil (fuel). Death of intellects, geniuses, nobles and others have been recorded over the years due to wars generated by fuel dividends. Ethnic and tribal wars also have been recorded because Nigerians focus on non-renewable energy (fuel). He cited Arab Country which the crisis and wars caused by fuel dividends from 1965 to 1973 claimed thousands of lives, froze their economy, discouraged investors and created an alarming unemployment rate.



Speaking further on the need to establish a Research Centre which will help us to develop a steady energy, he said that Nigerians' Economy, Science and Technology will not improve, and unemployment rate will continue to increase, until we develop an alternative to non-renewable energy source.

He added that if Nigerians can establish a Research and functional Centre, spending money traveling abroad to research will stop, thereby improving our economy, and the financially poor gurus in the areas of Science and Technology, who could not afford to travel abroad for research, would be encouraged. Also that if we develop a steady energy, it will encourage indigenous private sectors to go into manufacturing,

rate of importation will reduce, and foreign investors would be attracted; and cost of commodities will be cheap.

Speaking further he said that energy demand in Nigeria has been on the increase since 1977, that unless we turn to renewable energy, our economy and health cannot improve because human development depends on energy. He added that Emeagwali Centre for Research, Renewable Energy and Material Science if established, would encourage Scientists.



“Not all Nigerians who were Science and Technological inclined can afford to travel abroad to develop their talent.” Professor Animalu said, expressing sadness over most Nigerians who were gifted in the field of Science and Technology but could not go further because we do not have adequate and functional Scientific Research Centre. He recalled Nigerians geniuses who were able to develop Air-Plane, Cars, Vehicles etc, but were discouraged by lack of research Centre. He added that Professor Philip Emeagwali could have wasted his talent and skill could it be that he remained in Nigeria his father-land.

Professor Animalu in an interview said that the concept of ERREMS made him happy, but its realization would give him satisfaction and fulfillment in life. He said that our youths are the future hope, and need

to be well galvanized in the field of Science and Technology so that our economy will not crumble, and our standard of living and health will improve.

He further said that Africa in future might be the only conducive place of habitation, and that if we did not improve in our Science and Technology, that foreigners would eventually take over and we would become aliens in our father-land.



He adjured the Organizing Committee to treasure and nurture the idea of ERREMS by creating centre for its functioning; solicit for the financial and moral assistance of Renowned Scientists and well-meaning Nigerians, legislate and organize quality lectures.

Professor Enibe while speaking at the Conference said that we should not neglect the day of small beginning, that most developed Countries today began somewhere before they attain the height they were today. He called on Nigerians small and great to be part of ERREMS, adding that we would improve in the areas of Science and Technology when we have functional research centre. He recalled 1990s when some Scientists in Nigeria developed Computer software program but could not sustain it due to lack of research centre.

Professor Enibe saw the need to have a research centre when he was solving his Refrigeration problem. Another problem that came up could not be solved with the General Purpose Program; he has to develop a Special Purpose Program to solve the problem and that is why research centre is sine-qua-non to Scientists. He then called on Nigerians to do their utmost best to see that ERREMS becomes a reality.

Professor Mrs. Caroline Mba who spoke on Nigerians' Natural Resources said that Research Centre is highly needed so that Scientists within and across the Country can experiment and develop in the areas of Science and Technology to improve health standard and increase our economy. She said that Nigeria is blessed with numerous things of the nature which can be harnessed to better our health and economy, but lack of Research Centre has been the major discouraging factor.

Professor Mba as a result of no functional Research Centre in Nigeria went to Institute of Biology France to research on 'Agronomic Resources of Pontoscolex Corethrurus, a Nigerian Earthworm.' She discovered that species of Nigerian Earthworm to be 10 times better than that of France. She also noticed that Central and Western Africa use Nigerian natural resources in their Agriculture and Industrial activities, but we reject and do not value them.



Professor Mba also discovered that among the tropical earthworm and associated microbes, that Nigerian *Pontoscolex Corethrurus* Earthworm has enormous potential which could be harnessed to evolve effective eco-farming system including bio-ploughing in order to address the sustainable soil fertility and productivity of tropical soils, foster bio-remediation of structure and soil organic matter which have been impaired by application of deleterious inorganic fertilizer, pesticides and wrong cultural practices.

She expressed dissatisfaction for Nigerians inability to have a functional and well equipped Research Centre. She said that non-availability of such research centres not only discourage Science oriented Students, but sap our economy. She condemned the attitudes of some Nigerians who were not environmental conscious and kills the nature resources with imported Agricultural materials which produce environmental hazard and endangers our health.

Professor Mrs. Mba enjoins Nigerians to focus on natural Agricultural resources and harness them rather than importing artificial Agricultural materials. She suggested minimum tillage approach to enable the soil and natural organism to settle and enrich the soil. She said that it takes *Pontoscolex Corethrurus* Earthworm four days to bio-plough one hectare of land, and two weeks to bio-plough clay soil. She encouraged the Organizers of ERREMS to see that it becomes a reality to help researchers realize their objectives for the benefit of the masses.



Dr Wansah enlightened those present at the Conference on 'Development of Wind Energy.' He said that Wind Energy is a renewable

energy which if well harnessed will enhance our health and economy. He enumerated some of the advantages of Wind Energy such as – human and environmental friendly, no green house gasses, no toxic products, no radioactive waste, and cheaper. He also said that electricity generated from Wind Energy could be used to power homes, recreation facilities, pump water et cetera.

Dr Wansah further spoke on how Oil Pipelines could be protected using Solar Energy. He said that Pipeline gets protection from Solar energy because of the electron in the Solar, and hence solar energy is renewable, that Oil Pipeline would remain ever protected.

Nwozor K.K. highlighting on Computer Iteration in the field of Geology said that Computer Iteration technique is modern, easy and quicker than the traditional curve-machine method to interpret and simulate reliable sub-surface in Geology. He added that with the efficiency of Computer Iteration that Vertical Electrical Sounding (VES) data could be used to establish subsurface geological models and parameters especially in combination with reliable strati-graphic controls. He also said that with Computer Iteration in Geology, it is possible to manipulate the Global Positioning System (GPS) which gives Longitude and Latitude that will help one to position himself in any part of the world at a particular time.

Friday, March 13, 2009, the last day of the Inaugural Conference of Emeagwali Centre for Research, Renewable Energy and Material Science recorded the presence of Professor Philip Emeagwali (USA) who spoke via the web cam, Senator Chief Ndi Ben Obi (Ojeligbo), Orajaka Ifeanacho P. (Vice Chancellor of ANSU), Professor Anene, Professor Nnabuiife E.L.C., Engineer Chief Ezemba M.S.C. (Ogworogodo of Amorka), Dr Sam Chukwujekwu, Sam Ofeegbu, Barrister Thomas Ogueruno who represented Igwe Nwabueze Ohazulike, the entourage of Red-Cap Chiefs, Force Men and numerous honest hearted well-meaning Nigerians.

Senator Obi and his entourage made a brief courtesy call to ANSU V.C. Professor Orajaka before proceeding to the Conference arena. He expressed great joy and happiness for being present at the Inaugural Conference. He said that it was his first time of visiting Anambra State University Uli, and was happy that he visited. In appreciation for the warmth welcome and kind gestures extended to him and his entourage, he promised to reciprocate, revisit and financially support the concept of

ERREMS to become a reality. He encouraged the Students to be patient and do their utmost to push ERREMS forward.

Senator Obi mentioned late Chief Dr. Nnamdi Azikiwe, Professor Philip Emeagwali, Professor Chinua Achebe, late Professor Chike Obi; few geniuses from Anambra State, as those who have contributed positively to the growth and development of mankind and assured the Students that Anambra State is a great State and will continue to be, not minding the incompetency in the Nigerian Political Sector and Economy. He was optimistic that Anambra State will again record the establishment of a functional Research Centre, and that it is no other than the 'Emeagwali Centre for Research, Renewable Energy and Material Science.'



Professor Philip Emeagwali speaking via the web cam said that what have been nurtured in the areas of Science and Technology years ago have withered due to non-availability of a functional Science and Technology Research Centre. He also said that Africa as a whole will be stranded, remain in perpetual darkness, abject poverty and superstition in the near future if nothing is done to improve the Science and Technology sector. Speaking further, he said that Nigerian Hospitals will soon replace Doctors and Nurses with blocks and bricks if there is no improvement in the areas of Science and Technology. He expressed confidence in the establishment of the 'Emeagwali Centre for Research, Renewable Energy and Material Science'; and said that it will increase

the number of Intellectuals and move Nigerians from poverty to posterity.

Igwe Nwabueze Ohazuluike who was represented by Barrister Thomas expressed happiness for the concept of ERREMS, and promised to contribute financially to support it.

"Greatest event is what you failed to do," Barrister Thomas quoted the words of Professor Nnabuife, his mentor during his school days. He said that ERREMS is an interesting concept that will bring improvement in the field of Science and Technology in Nigerian; he said that he would not fail to do what he ought to do to support ERREMS.

Obagbuwa Ibudun Christiana, participant of the Inaugural Conference (Department of Computer Science) Lagos State University discussed on the theme – "Data Warehouse, an IT Tool for Information Access by Decision Makers of Organizations." She states that a Data Warehouse (DW) is a database that stores information oriented to satisfy decision-making requests. That such Data Warehouse should exist because of the frequent problem in enterprises which make it impossible to access to corporate, complete and integrate information of the enterprise that can satisfy decision-making request. Further speaking, she said that the primary objective of Data Warehouse is to bring together information from disparate sources and put the information into a format that is conducive to making business decisions. Highlighting on the advantages of Information Technology (IT), she said that IT has made the Globe a village, makes the Organization members to be close-knit no matter where they are, and helps Organizations or Individuals to meet up with current information. She said that lack of privacy is the major risk of Information Technology.

Obagbuwa Christiana while speaking on Information Technology Governance and Risk Management, pointed out that it is imperative that Organizations make use of IT to maximize their efficiency, effectiveness and reliability. The challenges of Board of Directors and Corporate Officers to provide more accountability, transparency, disclosure and independent verification of activities within their organizations demand that Information Technology should be put to use, she added.

Ezigbo V.U. (Department of Pure and Industrial Chemistry, ANSU) delivered a speech on "An Investigation into the level of Heavy Metal

Concentration in 16 samples of four selected fresh water fish species sold in Onitsha market.” She said that pesticides, insecticides and herbicides have poisoned the aquatic, and that the degree of the concentration of the heavy metal depends on the specie of the fish. She then suggested low consumption of fish hence no amount of cleansing will entirely remove the heavy metal concentration.

Ezigbo also made an “Analytical Studies of Waste Water Effluents from Fast Foods Industries in Awka, Anambra State and discovered that the effluent had higher values than the limits set as standard by the Federal Environment Protection Agency (FEPA). She suggested treating the effluents from the fast food industries before discharging into public drains and local water bodies; or, setting up an Internal Body to regularly check the various food industries to make sure that there is little or no waste to reduce the risk of polluting the entire environment.

Okoye E.I. enlightened the audience on the use of ‘Local Plants for Human Health.’ She explained two types of plants and their uses. The particular plant which she called in Igbo language ‘Ogwu-Ugwa’ is used for the treatment of scabies, eczema and other skin infections due to the presence of anti-microbial element in it. She said that to treat the skin infection, the leaves of the plant should be well squeezed, the water drained; the affected areas of the skin scraped with sharp and clean object like razor, then the squeezed water should be applied for some days.

She also explained that the leaves of the plant which is called in Igbo language ‘Nchuanwu’ could be used to manufacture mosquito coil.

Students turned up in mass and benefited from the exhibitions and talks. Questions were asked and answered. The Inaugural Conference ended peacefully.



Uche and Azuka Okpala



Uche Okpala, Coordinator of Emeagwali Center and author of this review.