

# The Nigerian Society of Engineers, LAGOS BRANCH

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February 2024 eNewsletter

**Dear Lagos Engineers, we present for your reading pleasure this month edition of our e-newsletter containing the branch activities in February 2024**

The Nigerian Society of Engineers Southwest Zone organized Night of Tributes and Service of Songs in Honour of the Late Engr. Ven. P.B. Oyebolu, FNSE, FAEng a past chairman of the branch on Monday 5<sup>th</sup> February, 2024 at Oyebolu Engineering Resource Centre, NSE-Lagos Branch Secretariat, University of Lagos, Akoka, Lagos. In attendance at the event were the NSE president, past presidents, branch chairmen from southwest, fellows, members and invited guests



Burial ceremony of late Engr Pa Oyebolu was held on 8<sup>th</sup> February 2024 at Cathedral Church Ake, Abepkuta, Ogun state



**NSE Lagos Branch Executive members held her February meeting on Tuesday 13th February, 2024 at the office of Federal controller of works, Lagos Engr (Mrs) O Keshia FNSE, The host is member of exco, and the opportunity was used to held the february meeting at her office.**



**NSE Lagos Branch held the monthly General meeting on Tuesday 20th February, 2024 with Technical Session topic ” Constructal Theory in Design Algorithm and Optimization of Structural Performance” by Engr. Dr. Olusegun Afolabi, MNSE.**

The facilitator Engr Dr Afolabi introduced the topic with brief explanation constructal theory, which states that generalization of design in nature is a phenomenon in physics involving the principles (eg, construal law) that “for finite-size flow system to persist in time” it must evolve such that it provides greater and greater access to current flowing through it. He then stated that engineering design requires the ability of a system to perform work which requires consumption of energy depending on extent of activities and also indicated that the theory is comparatively similar to the general work-energy principle (ie,  $\Delta U = U_i - U_f$ ). These necessitate adequate provision of safety mechanism during engineering design to ensure reliability during service period. He then discussed the topic further under the following subtopics,  
Design of engineering systems

Dynamical change in structural lifecycle

Computer algorithm and Construct-algorithm for structural optimization

Structural performance optimization

Structural deformation and failure

Structural integrity tests

In conclusion, he expressed that structural appraisal and engineering reliability are two important parameters with similar outcome that defines specific characteristics performance of engineering systems, for example, if an appraisal is conducted with satisfactory results implies the systems reliability is good and encourages functionality



**The Executive Committee members of Lagos Branch paid a courtesy visit to the Dean, Faculty of Engineering, University of Lagos in his office on Thursday 15th February, 2024.**



**NSELB Fellows and members were in the company of NSE President Engr (Mrs) M Oguntala, Past President Olorunfemi FNSE and Lagos zone chairmen for a condolence visit to Engr. Dr. Olusegun Ajayi FNSE, FAEng (Past President of Nigerian Society of Engineers) on the demise of his wife Mrs. Funmilayo Ajayi (FNSE) at his residence Shittu Animashaun Street, Gbagada Phase II on Monday 26th, February 2024.**



