COMPARATIVE STUDY OF THE CALORIFIC VALUES AND COST OF PETROL AND DIESEL OF SELECTED MARKETERS WITHIN KADUNA METROPOLIS

D. M. Kulla, D. S. Yawas, R. B. O. Suleiman, A. A. Alabi and O. Adejo

Department of Mechanical Engineering Ahmadu Bello University, Zaria

ABSTRACT
The uncertainty often encountered by consumers in getting good fuel prompted this investigation. Six filling stations comprising major and independent marketers as well as black marketers from four different locations were used for the study. 6100 parr Oxygen bomb calorimeter was used to get the calorific values of diesel and petrol from the different marketers and these values were compared with NNPC standard value of 0.825g/m$^3$ for diesel and 0.763g/m$^3$ for petrol respectively. Simple percentages and bar charts were used in analizing and interpreting the data collected. From the analysis, Oando petrol has the highest calorific value which is 96% of the NNPC value, while that of the black marketers are all within 80-87% of NNPC standard value. Total diesel has the highest calorific value, which is 93.1% of the NNPC value while Oando diesel follows with 91% of NNPC standard value. The diesel at Tudun Wada has the least calorific value which is 74% of NNPC value.