

Financial Aspect of the Research Project Implementation

DESCRIPTION OF ITEM	EXPECTED FROM		OTHER	TOTAL
	TETFUND AND NRF	INSTITUTION		
1.0 Personnel Costs/Allowances	(N)			(N)
1.1 Principal Researcher	1,448,950.99			
1.2 4 Co-researchers @ N600,000.00/yr	2,400,000.00			
1.3 2 Mentees @ 309,595.00/yr	619,190.00			
Sub Total (not >20% of budget)	4,468,140.99			4,468,140.99
2.0 Equipment (List & Specification)				
2.1 Hydraulic Press Carver, 3894 4PROBOO 10tons	5,050,176.25			
2.2 Retsch Grinding Ball Zirconium Oxide 10mm Ø 05.368.0094	535,000.00			
Sub Total (not > 25% of budget)	5,585,176.25			5,585,176.25
3.0 Supplies/Consumables				
3.1 Rice Hush Ash and Palm Oil Fuel Ash	35,000.00			
3.2 Hydrochloric Acid (HCl)- 1L	84,670.00			
3.3 Hydrofluoric Acid (Hf) PN695068-25ML-1L PC	80,040.00			
3.4 Methanol @9,000.00 (QTY=5)		5,000.00		
3.5 Ethanol @9,000.00 (QTY=5)		5,000.00		
3.6 Feldspar and Clay powder	20,757.82			
3.7 Quartz Sand 400 Mesh 500g	206,332.00			
3.8 Aluminium Oxide, Al ₂ O ₃ Sigma-Aldrich (QTY=2) 50g	224,266.00			
3.9 Silicon Oxide (SiO ₂) 25- 50g	262,275.48			
3.10 Phosphorus Pent oxide high purity industrial grade @109,792 (QTY=2)	219,584.00			
3.11 Petri dish (L × W 55 mm × 16 mm){BR452015-1620EA} Sigma-Aldrich @ N 168,175.00 (QTY=1)	168,175.00			
3.12 Magnesium oxide (199443 Sigma-Aldrich) Molecular Weight:	102,489.90			

101.96 @ N102,489.90				
3.13 Iron Oxide (Fe ₂ O ₃) high purity industrial grade @197,148.10	197,148.10			
3.14 Calcium Oxide high purity industrial grade	197,148.10			
3.15 High-quality Laboratory Natural Agate Mortar and Pestle (QTY = 1)	238,624.00			
3.16 Alumina Crucible (Al ₂ O ₃), otoolworld 99.3% @ 142,000.00 (QTY = 5)	710,000.00			
3.17 Minitab Statistical/modeling Analysis software @ 2user access	861,987.89			
3.18 Hydraulic compact mould	189,420.26			
3.19 Filter Papers 11cm (Pack of 40)		5,000.00		
3.20 Glass beaker 250ml (QTY=25)		3,000.00		
3.21 Glass beaker 500ml (QTY=25)		5,000.00		
3.22 Glass conical flask 250ml (QTY=25)		10,000.00		
3.23 Measuring cylinder glass 500ml (QTY=10)		50,000.00		
3.24 Measuring cylinder glass 1000ml		6,000.00		
3.25 Buehler CarbiMet Silicon Carbide Paper		60,000.00		
3.26 Diamond polishing paper		10,000.00		
Sub Total	3,797,919.55	159,000.00		3,956,919.55
4.0 Data Collection & Analysis				
4.1 Scanning Electron Microscopy (SEM)/Energy Dispersive Spectroscopy (EDS) @ N 20,000.00 x 40 samples	800,000.00			
4.2 X-Ray Diffraction (XRD) @20,000.00 x 40 samples	800,000.00			
4.3 X-Ray Fluorescence Analysis (XRF) @20,000.00 x 40 samples	800,000.00			
4.4 Particle size Analysis @12,500.00 x 40 samples	312,500.00			

4.5 Thermogravimetric Analyses (TGA) @ 25,800.00 x 40 samples	1,032,000.00			
4.6. Compressive Strength Testing (UTM) @ 16,000.00 x 40 samples	640,000.00			
4.7 Vickers Microhardness @ 16,000.00 x 40 samples	640,000.00			
4.8. X-ray photoelectron spectroscopy (XPS) @ 80,000.00 x 5 samples	400,000.00			
4.9 CIP @ 80,000.00 x 5 samples	160,676.00			
4.10. Assistant Technical staff		60,000.00		
4.11. Research Informants		40,000.00		
4.12 Printer		97,689.21		
Sub Total	5,585,176.25	197,689.21		5,782,865.46
5.0 Travels				
5.1 Local travels for sample collection and characterization	1,117,035.25			
Sub Total (not > 5% of budget)	1,117,035.25			1,117,035.25
6.0 Dissemination				
6.1 Publication in Journal	190,000.00			
6.2 Conferences/Workshops	357,880.75			
6.3 Feeding	100,000.00			
6.4 Hotel accommodation		50,000.00		
Sub Total (not > 3% of budget)	647,880.75	50,000.00		697,880.75
Sub Total of All Direct Costs		406,689.21		
7.0 Indirect Costs (5% of TETFUND Component to Institution)	1,139,375.95			1,139,375.95
GRAND TOTAL	22,340,705.00	406,689.21		22,747,394.20

Budget Grand Total = 22,340,705.00

The proposed budget for the implementation of this proposal is as follows::

Item	Cost (₦)	(%)
Personnel Cost	4,468,141.00	20
Equipment	5,585,176.25	25
Supplies/Consumables	3,797,919.55	17
Characterization & Data Analysis	5,585,176.25	25
Travels	1,117,035.25	5
Dissemination	647,880.75	3
Indirect Cost to Institution	1,137,375.95	5
TOTAL	22,340,705.00	100