

ENGR. DR. VICTOR SUNDAY AIGBODION

B.Eng(met), M.Sc(met), Ph.D(met), R.COREN, MNSE, MNMS, MASM
Senior Lecturer/Researcher
DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING
FACULTY OF ENGINEERING

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Objective

To support a challenging and rewarding academic position in an accredited university that will involve teaching of undergraduate and graduate engineering courses, academic leadership in establishing unique and emerging multi-disciplinary research thrusts, teams and centers and attracting substantial multi-year research and educational funding and resources for the university and research institute.

Name: Engr. Dr. AIGBODION, Victor Sunday
 Date & Place of Birth: 22nd July, 1973/Sabongida-Ora, Edo State

Nationality: Nigerian
 Marital Status: Married
 Number of Children Three(3)
 State of Origin: Edo

7. Local Govt. of Origin: Owan West

8. Permanent Home address: No 1, Ebuge St, Sabo-Ora, Edo-State

9. **Current Contact Address:** Dept of Metallurgical & Materials Engineering,

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10. Present Employment and Rank, Salary: Dept of Metallurgical & Materials

and date Engineering, University of Nigeria,

Senior Lecturer

11. Present Position: Head of Department

12. EDUCATIONAL QUALIFICATION OBTAINED WITH DATES

INSTITUTION	YEAR	COURSE	DEREE / CLASS
AHAMDU BELLO UNIV.	2008-2010	METALLURGICAL	P.hd(METALLUGICAL)
ZARIA		ENGINEERIING	
AHAMDU BELLO UNIV.	2005-2007	METALLURGICAL	M.C. (METALLICICAL)
ZARIA	2005-2007	ENGINEERIING	M.Sc,(METALLUGICAL)
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AHAMDU BELLO UNIV.	1994-2000	METALLURGICAL	B-ENG (METALLUGICAL)
ZARIA		ENGINEERIING	SECOND CLASS UPPER (2-1)
SET-UP COMPUTER	2001-2002	COMPUTER	DIPLOMA
OSOGBO		STUDIES	
KADUNA REFINERY	1999	FIRE & SFAFETY	FIRE& SAFETY
		COURSE	CERTIFICATE
HOLY TRINITY	1987-1993	SCIENCE	S.S.C.E CERTIFICATE
GRAMMER SCHOOL,			
SABO-ORA-EDO STATE			
EVIOBE CENTRAL	1981-1986	PRIMARY	FIRST SCHOOL LEAVING
SCHOOL SABO-ORA,			CERTIFICATE
EDO STATE			

13. PUBLICATIONS

Published 116 papers (93 in peer-reviewed International and National Journals, 19 papers in peer-reviewed International and National conference proceedings, 6 papers in peer-reviewed micrographs and one chapter in peer-reviewed book).

A) PUBLISHED PEER REVIEWED JOURNAL ARTICLES

- 1. C.U. Atuanya, **V.S. Aigbodion**, S.C. Nwigbo study of the thermal and wear properties of recycled polyethylene/breadfruit seed hull ash particulate composites. <u>Materials and Design</u> 53 (2014) 65–7, **IF 2.913 Thomson Reuters Journal Citation Reports**
- S.B. Hassan, V.S.Aigbodion Effects of eggshell on the microstructures and properties of Al–Cu– Mg/eggshell particulate composites, Journal of King Saud University – Engineering Sciences (2015) 27, 49–56
- 3. U.D. Idris, **V.S. Aigbodion**, I.J. Abubakar, C.I. Nwoye Eco-friendly asbestos free brake-pad: Using banana peels, Journal of King Saud University Engineering Sciences, (2015) 27, 185–192
- 4. V. S. Aigbodion C. U. Atuanya S. O. Obiorah L. A. Isah S. I. Neife A. D. Omah Effect of Particle Size on the Fatigue Behaviour of Al-Cu-Mg/ Bean Pod Ash Particulate Composites, Trans Indian Inst Met DOI 10.1007/s12666-014-0474-8
- 5. O. S. I. Fayomi V. S. Aigbodion A. P. I. Popoola Properties of Tic/Tib Modified Zn-Tic/Tib Ceramic Composite Coating on Mild Steel, J Fail. Anal. and Preven. (2015) 15:54–64
- O.S.I. Fayomi, A.P.I. Popoola , V.S. Aigbodion Investigation on microstructural, anti-corrosion and mechanical properties of doped Zn–Al–SnO2 metal matrix composite coating on mild steel, Journal of Alloys and Compounds 623 (2015) 328–334

- 7. C. U. Atuanya & V. S. **Aigbodion** *Effect of Wear Parameter on Wear Behavior of Recycled Polyethylene/Snail Shell Waste Particulate Bio-composites*, Journal of Failure Analysis and Prevention, (2014) 14:509-518
- 8. S.B. Hassan , **V.S. Aigbodion** Effect coal ash on some refractory properties of aluminosilicate (Kankara) clay for furnace lining, Egyptain journal of basic and applied sciences (2014) 1 0 7-1 1 4
- 9. O.S.I. Fayomi, A.P.I. Popoola, **V.S. Aigbodion**, Effect of thermal treatment on the interfacial reaction, microstructural and mechanical properties of Zn–Al–SnO2/TiO2 functional coating alloys, Journal of Alloys and Compounds 617 (2014) 455–463
- 10. C.U. Atuanya, O.D .Onukwuli and **V.S. Aigbodion**, Experimental correlation of wear parameters in Al-Si-Fe alloy/breadfruit seed hull ash particulate composites, <u>Journal of Composites materials</u>, 2014, Vol. 48(12) 1487–1496 http://jcm.sagepub.com IF 0.936 Thomson Reuters Journal Citation Reports
- 11. N. Bouzayeni, M. Kchaou, R. Elleuch & V. S. Aigbodion Comparative Study of the Tribological Behavior of Brass Alloys Produced by Different Manufacturing Processes, Journal of Failure Analysis and Prevention, (2013) 13:584-594
- 12. F. Asuke, M. Abdulwahab, **V.S. Aigbodion**, O.S.I. Fayomi, O. Aponbiede, Effect of load on the wear behavior of polypropylene/carbonized bone ash particulate composite, EGY PTIANJOURNAL OF BASICAND APPLIED SCIENCES 1 (2014)67-70
- 13. C.U. Atuanya, **V.S. Aigbodion**, Evaluation of Al–Cu–Mg alloy/bean pod ash nanoparticles synthesis by double layer feeding–stir casting method, Journal of Alloys and Compounds 601 (2014) 251–259, IF 2.390 Thomson Reuters Journal Citation Reports
- 14. C.U. Atuanya, R.O. Edokpia, V.S. **Aigbodion,** The physio-mechanical properties of recycled low density polyethylene (RLDPE)/bean pod ash particulate composites Results in Physics 4 (2014) 88–95
- 15. V.S. Aigbodion, F. Asukeb, S.I. Neife, R.O Edokpia and A.D. Omah Production of Alumino-Silicate Clay-Bonded Bagasse Ash Composite Crucible by Slip Casting, *J. Mater. Environ. Sci.* 5 (5) (2014) 1658-166
- 16. Atuanya, C.U., E.O. Ebunoha, G.O. Isaac, and **V.S. Aigbodion**. 2013. "Characterization of the Thermo-Mechanical behavior of *Momordica angustisepala* Fibers intended for the Manufacturing of Polymer Composites". *Pacific Journal of Science and Technology*. 14(2):40-47.
- 17. **Aigbodion,** V.S. 2013. "Quantitative Interpretation of Differential Scanning Calorimetry Heat Effect in A2009 Aluminum Alloy". *Pacific Journal of Science and Technology*. 14(2):16-25.
- 18. J.O. Agunsoye, **V.S. Aigbodion**, 2013 Bagasse filled recycled polyethylene bio-composites: Morphological and mechanical properties study, Results in Physics 3 (2013) 187–194
- 19. C. I. Nwoye, S.O. Nwakpa, V. S. Aigbodion, P. C. Agu and F. Asuke, 2013 Empirical Analysis of Limit of Desulphurization of Iron Ore Based on Multi-Factorial Process Variables, Usak University Journal of Material Sciences 2 (2013) 166 183
- 20. Y. SULEIMAN, V. S. AIGBODION, L. SHUAIBU; and M. SHANGALO; Development of Eco-Friendly Particleboard Composites Using Rice Husk Particles and Gum Arabic, Journal of Materials Science and Engineering with Advanced Technology Volume 7, Number 1, 2013, Pages 75-91

- 21. J.O. Agunsoye, **V.S.Aigbodion**: Bagasse filled recycled polyethylene bio-composites: Morphologica and mechanical properties study, **Results in Physics**, 2013, www.journals.els evier.com/results-in-physics
- 22. Oghenevweta, J., R. Mohammed, V.S. Aigbodion, and F. Asuke. 2013. "The Viability of Water/Alumino-Silicate Solution as Quenchant for Medium Carbon Steels". <u>Pacific Journal of Science and Technology</u>. 14(1):9-1
- 23. Agunsoye. J. O, **Aigbodion. V. S**, Talabi S. I, Yibowei Eboiwei Moses and Properties of Low Density nPolyethylene Reinforced with Thaumatococcus Danielli Co mposites, Journal of Metallurgical Engineering (ME), Volume 2 Issue 3, July 2013, 107-114.
- 24. Aigbodion V. S., Atuanya.C.U., Igogori, E. A and Ihom .P: Development of High-Density Polyethylene /Orange Peels Particulate Bio-Composite, *Gazi University Journal of Science*, 26(1):107-117 (2013)
- 25. **Aigbodion V. S**; Thermal ageing on the microstructure and mechanical properties of Al–Cu–Mg alloy/bagasse ash particulate composite, Journal of King Saud University Engineering Sciences, 2013
- 26. Hassan, S.B. and **V.S. Aigbodion**. 2013. "Evaluation of Khaya Seed Oil (Mahogany Oil) as Quenchant in the Hardening Process of Plain Carbon Steel". Pacific Journal of Science and Technology. 14(1):19-30.
- 27. **Victor Sunday Aigbodion**, Clement Uche Atuanya, Chikaodi Cynthia Daniel-Mkpume, Effect of Tin Tailings on Some Refractory Properties of Alumino-Silicates (Alkaleri) Clay, Journal of Minerals and Materials Characterization and Engineering, 2013, 1, 29-32
- 28. Atuanya CU, Nwaigbo S.C, Igbokwe PK and **Aigbodion VS**; Effects of Breadfruit Seed Hull Ash Particles on Microstructures and Properties of Recycled Low Density Polyethylene/Breadfruit Seed Hull Ash Composites, Abdalla, J Material Sci Eng 2013, 2:1
- 29. **V.S.Aigbodion**; Development of Al-Si-Fe/Rice husk ash particulate composites synthesis by double stir casting method, **Usak University Journal of Material Sciences** 2 (2012) 187 197
- 30. F. Asuke, **V.S. Aigbodion**, M. Abdulwahab, O.S.I. Fayomi, A.P.I. Popoola, C.I. Nwoyi, B. Garba, Effects of bone particle on the properties and microstructure of polypropylene/bone ash particulate composites, **Results in Physics 2** (2012) 135–141
- 31. **Aigbodion. V. S.**, Hassan S. B, Atuanya. C. U(2012): Kinetics of Isothermal Degradation studies by Thermogravimetric Data: Effect of orange peels ash on thermal properties of High density polyethylene (HDPE), *J. Mater. Environ. Sci.* 3 (6), 1027-1036
- 32. Hassan S.B., Oghenevweta E.J, **Aigbodion V.S**(2012): Potentials of Maize Stalk Ash as Reinforcement in Polyster Composites, *Journal of Minerals & Materials Characterization & Engineering*, Vol. 11, No.4, pp.543-557.
- 33. Atuanya, C.U., **Aigbodion, V.S.**, Nwigbo, S.C(2012):Characterization of Breadfruit Seed Hull Ash for Potential Utilization in Metal Matrix Composites for Automotive Application, **Peoples Journal of Science & Technology**, Vol.1(2), June 2012
- 34. Hassan S.B., Oghenevweta E.J, **Aigbodion V.S**(2012):Morphological and mechanical properties of carbonized waste maize stalk as reinforcement for eco-composites, Composites: Part B 43 (2012) 2230–2236, **IF 2.143Thomson Reuters Journal Citation Reports**
- 35. Idris. U.D., **Aigbodion. V.S.**, Gadzama. R.M, Ahmed T.Y(2012): Suitability of maize cob particles and recycled low density polyethylene for particleboard manufacturing, *Materials Science*, MSAIJ, 8(1), 2012, 34-37

- 36. A. Apasi, P.B. Madakson, D.S. Yawas, **V.S. Aigbodion**, Wear Behaviour of Al-Si-Fe Alloy/Coconut Shell Ash Particulate Composites, Tribology in Industry, Vol. 34, No 1 (2012) 36-43, **IF=1.955**
- 37. **Aigbodion V. S**, Al-Si/SiC Nano-particles Composites Synthesized by Double Stir Casting, <u>Recent Patents on Nanotechnology</u> 2011, 5, 234-238 IF 1.08Thomson Reuters Journal Citation Reports
- 38. **V.S. Aigbodion**, S.B. Hassan, J.O. Agunsoye Effect of bagasse ash reinforcement on dry sliding wear behaviour of polymer matrix composites, <u>Materials and Design 33 (2011)</u> 322–327 **IF 2.913 Thomson Reuters Journal Citation Reports**
- 39. J. O. Agunsoye, **V. S. Aigbodion** and O. S. Sanni: Effect of Heat Treatment on Microstructure and Mechanical Properties of NF6357A Cast Alloy for Wear Resistance Application, *Journal of Minerals & Materials Characterization & Engineering*, Vol. 10, No.11, pp.1077-1086, 2011
- 40. U.D. Idris, **V.S. Aigbodion**; R.M. Gadzama; and J. Abdullahi: Eco-Friendly (Watermelon Peels) Alternatives to Wood-based Particleboard Composites, *The Pacific Journal of Science and Technology*, Volume 12. Number 2. November 2011 (Fall), 112-119
- 41. Ihom, A.P, Anbua, E.E, Onche, E. and **Aigbodion, V.S**: Assessment Of The Core Properties Of A Newly Developed Core Binder With Respect To Urea Formaldehyde Furfuryl Alcohol UFFA)-Benzene Sulphonic Acid (BSA) Binder System, <u>Continental J. Engineering Sciences 6</u> (1): 8-13, © Wilolud Journals, 2011
- 42. Hassan, S. B, Agboola. J.B, **Aigbodion, V.S.** and Williams, E.J, Hardening Characteristics of Plain Carbon Steel and Ductile Cast Iron Using Neem Oil as Quenchant, *Journal of Minerals & Materials Characterization & Engineering*, Vol. 10, No.2, pp.161-172, 2011
- 43. Sarki. J, Hassan S. B, **Aigbodion V. S** and Oghenevweta.J.E, Potential of using Coconut shell fillers in Eco-composites Materials, <u>Journal of Alloy & Compounds</u> 509 (2011) 2381–2385. **IF 2.390 Thomson Reuters Journal Citation Reports**
- 44. V. S. AIGBODION, S. B. HASSAN, E. T. DAUDA, R. A. MOHAMMED: Experimental Study of Ageing Behaviour of Al-Cu-Mg/Bagasse Ash Particulate Composites, <u>Tribology in industry</u>, Volume 33, No. 1, 2011, 28-35. **IF=1.955**
- 45. S.B.Hassan, V.S.Aigbodion, J.B.Agboola and S.M.Ologun: The effect Magnessium addition on microstructure and mechanical properties of as-cast Al–Si–Fe/Mg alloy, <u>Nigerian Journal of Materials Science and Engineering</u>, vol 2, number 1, 63-69.
- 46. U.D Idirs, **V.S Aigbodion**, and M.AShehu: Potential of using black palm kernel oil in austempering of ductile cast iron use in the production of agricultural implements, <u>Proc. IMechE Vol. Part L: J. Materials: Design and Applications 340-346 IF 0.560 Thomson Reuters Journal Citation Reports</u>
- 47. **V.S.** Aigbodion, S.B. Hassan, E.T. Dauda and R.A. Mohammed, The Development of Mathematical Model for the Prediction of Ageing Behaviour for Al-Cu-Mg/Bagasse Ash Particulate Composites, *Journal of Minerals & Materials Characterization & Engineering*, Vol. 9, No.10, pp.907-917, 2010
- 48. Hassan S. B. and **Aigbodion V. S:** The study of the Microstructure and Interfacial Reaction of Al-Cu-Mg/Bagasse Ash Particulate Composite, **Journal of Alloy & Compounds**, 491 (2010) 571–574 **IF 2.390 Thomson Reuters Journal Citation Reports**
- 49. **Aigbodion V. S.** and Hassan S. B: Effect Of Thermal Ageing Characteristics Of Al-Si-Fe/SiC Particulate Composite Synthesized By Double Stir Casting, the **journal of**

- engineering research(TJER), College of Engineering, Sultan Qaboos University, P.O. Box:33, Muscat 123, Sultanate of Oman, Vol. 7, No. 1, (2010) 53-61
- 50. **Aigbodion V. S.** and Hassan S. B: Experimental Correlations between Wear Rate and Wear Parameter of Al-Cu-Mg/Bagasse Ash Particulate Composite, Journal of <u>Materials & Design, Materials and Design</u> 31 (2010) 2177–2180) **IF 2.913 Thomson Reuters Journal Citation Reports**
- 51. V. S. Aigbodion, S. B. Hassan, T. Ause and G.B. Nyior, Potential Utilization of Solid Waste (Bagasse Ash), *Journal of Minerals & Materials Characterization & Engineering*, Vol. 9, No.1, pp.67-77, 2010
- 52. **V.S. Aigbodion**, S.B. Hassan, J.E. Oghenevweta, Microstructural analysis and properties of Al–Cu–Mg/bagasse ash particulate composites, <u>Journal of Alloys and Compounds</u> 497 (2010) 188–194. **IF 2.390 Thomson Reuters Journal Citation Reports**
- 53. V.S. Aigbodion, S.B. Hassan, G.B. Nyior and T. Ause, Effect of Bagasse ash reinforcement on the wear behavior of Al-Cu-Mg/Bagasse ash particulate composites, <u>Acta Metall. Sin.(Engl. Lett.)Vol.</u>23 No.2 pp81-89 April 2010
- 54. V.S. Aigbodion, A. AbdulRasheed, S.O. Olajide, J.O. Agunsoye, I.Y. Sulaiman, Potential of Tin Tailings an Industrial Waste for Refractory Materials, <u>Journal of Minerals & Materials Characterization & Engineering</u>, Vol. 9, No.2, pp.123-131, 2010
- 55. V.S. Aigbodion, J. O. Agunsoye, V. Kalu, F. Asuke, S. Ola, Microstructure and Mechanical Properties of Ceramic Composites, *Journal of Minerals & Materials Characterization & Engineering*, Vol. 9, No.6, pp.527-538, 2010
- 56. V.S. Aigbodion, S.B. Hassan, The study of the precipitation process in Al–Cu–Mg/bagasse ash particulate composites, <u>Journal of Alloys and Compounds</u> 501 (2010) 104–109, **IF** 2.390 Thomson Reuters Journal Citation Reports
- 57. E. G. OKAFOR, V. S. AIGBODION, Effect of Zircon Silicate Reinforcements on the Microstructure and Properties of as Cast Al-4.5Cu Matrix Particulate Composites Synthesized via Squeeze Cast Route, <u>Tribology in industry</u>, Volume 32, No. 2, 2010 IF=1.955
- 58. V. S. AIGBODION., U. AKADIKE, S.B. HASSAN, F. ASUKE, J.O. AGUNSOYE, Development of Asbestos -Free Brake Pad Using Bagasse, <u>Tribology in industry</u>, Volume 32, No. 1, 2010. IF=1.955
- 59. S.A. Yaro, and **V.S. Aigbodion,** chemical contents & foundry characteristics of Dorazo Sand deposit, , **Journal of metallurgy and materials engineering**, vol 4, No 2, April, 2009, 11-17.
- 60. **V.S. Aigbodion,** S.B.Hassan, S.O.Olajide, O.J.Agunsoye, A.S.AbdulRahman, E.Okafor: Use of rick husk ash as aggregate for foundry sand mould production, Journal <u>of</u> <u>metallurgy and materials engineering,</u> vol 4, No 2, April, 2009, 29-33
- 61. F.Asuke, S.A.Yaro, O.B, Oloche, **V.S.Aigbodion**: Potential of palm Exudate(palm wine) as corrosion inhibitor for Al-Si alloy in caustic soda solution, **Journal of metallurgy and materials engineering**, vol 4, No 2, Sept, 2009, 48-54.
- 62. S.B.Hassan, S.O.Balogun, **V.S.Aigbodion**:Hardening characteristics of medium carbon steel using fresh cassava liquid extract as Quenchant, , <u>Journal of metallurgy and materials engineering</u>, vol 4, No 2, Sept, 2009, 55-61
- 63. I.A .Magudu, M. Abdulwahab **V.S Aigbodion** Effect of iron fillings on the properties and microstructure of cast fiber-polyester/iron filings particulate composite **Journal of Alloys**

- <u>and Compounds,</u> 476(2009), 807-811 **IF 2.390 Thomson Reuters Journal Citation Reports**
- 64. S.B. Hassan, **V.S. Aigbodion**: The effect of thermal ageing on microstructure and mechanical properties of Al–Si–Fe/Mg alloys, <u>Journal of Alloys and Compounds</u> 486 (2009) 309–314 **IF 2.390 Thomson Reuters Journal Citation Reports**
- 65. Hassan .S.B, Aponbiede. O. & **Aigbodion .V.S** Precipitation hardening characteristics of Al-Si-Fe/SiC particulate composites **Journal of alloys & compounds** 466(2008), 268-272 **IF 2.390 Thomson Reuters Journal Citation Reports**
- 66. **Aigbodion V.S:** An Investigation Of The Effect Of Ile-Oluji Clay On Some Refractory Properties Of Alkaleri Clay, *Insights On Science And Technology*, © 2008 Afro-Euro Centre For Development Studies, Isbn: 978-84-612-8473-3, Printed In The Kingdom Of Spain, 21-29.
- 67. Yaro, S. A, And **Aigbodion, V. S:** the Effects Of Copper Addition On The Corrosion Susceptibility Of As-Cast Al-Si-Fe- Alloy System In Two Different Acidic Media, *Insights On Science And Technology*, © 2008 Afro-Euro Centre For Development Studies, Isbn: 978-84-612-8473-3, Printed In The Kingdom Of Spain, 53-59
- 68. S.A. Yaro and **V.S. Aigbodion** The Effect of Chromium and Manganese Addition on the Corrosion of As-cast Al-Si-Fe-Cu Alloy System in Caustic Soda, **Eurasian ChemTech Journal** 10 (2008) 1-31, al-Farabi Kazakh National University, Printed in Kazakhstan
- 69. **V.S. Aigbodion** O.Y. Mohammed, S.I. Yakubu, and J.O. Agunsoye, Corrosion Characteristics of Vanadium Alloyed Ductile Cast Iron in Nitric Acid, <u>Journal of Applied Sciences Research</u>, 4(10): 1267-1271, 2008, INSInet Publication
- 70. S.B.Hassan, R.A.Mohammed, G.B.Nyior, E.T.Dauada, **V.S.Aigbodion**, The of effect of nickel additions on microstructure and mechanical properties of as-cast and austempered ductile cast irons, **Nigeria Journal of Engineering**, vol. 14 No 1, march, 2008
- 71. Yaro .S. A, **Aigbodion. V. S**: The effect of heat-treatment on tensile and hardness produced Pb-Sn-Sb alloys, **African journal of Natural sciences**, 2008, vol 11, 59-64.
- 72. **Aigbodion V.S** & Hassan .S.B. Effects of silicon carbide reinforcement on microstructure and properties of cast Al-Si-Fe/SiC particulate composites, <u>Journal of materials science and Engineering A</u> 447(2007) 355-360, **IF 2.108 Thomson Reuters Journal Citation Reports**
- 73. **Aigbodion .V.S**, particulate-strengthened of Al-Si alloy/alumino-bilicate composite materials science and Engineering A 460-461 (2007) 574-578. **IF 2.108 Thomson Reuters Journal Citation Reports**
- 74. Hassan S.B. & **Aigbodion V.S**; Experimental correlation between varying silicon carbide and hardness values in heat-treated Al-Si-Fe/SiC particulate composites, <u>Materials Science</u> & Engineering A 454-455 (2007) 342-348 IF 2.108 © Thomson Reuters Journal Citation Reports
- 75. Ayeni .F.A. **Aigbodion, V.S**. & Yaro. S.A. Non-Toxic plant extract as corrosion inhibitor for Chill cast Al-Zn-mg alloy in caustic Soda solution, **Eurasion Chem Tech Journal** 9 (2007) 1-31
- 76. **Aigbodion.V.S** and Asuke.F, Effect of Kankara clay on some Refractory properties of Igbokoda Silica Sand, International research **Journal in Engineering**, science and **Engineering** Vol 4 N0 2, 2007, 66-73.

- 77. **Aigbodion.V.S**, AbdulRahman .A.S and Madugu.I.A, Characterisation study of the effect of Zircon sand on some Refractory properties of Alkaleri clay International research <u>Journal</u> in Engineering, science and Engineering Vol 4 No 2, 2007, 135-142
- 78. Abdulwahab .M. Yaro S.A, **Aigbodion.V.S** & Asuke .F; The effects of chromium addition the corrosion susceptibility of As-cast Al-Si-Fe alloy system in Hcl solution, **Journal of Research in Engineering**, Vol 14, Number 3, 2007 Pp45-49
- 79. Yaro .S. A, **Aigbodion. V. S**, Effect of Tempering on the mechanical properties of locally produced Aluminium bronze, **Journal of Engineering & Technology, New series** Vol. 2 No 1, 2007 Pp 55-62 ISSN. 1597-5835
- 80. Yaro .S. A, **Aigbodion. V. S**, Effect of copper addition on Amenability to precipitation hardening of Al-Si-Fe alloy, <u>Journal of the Mechanical Behavior of Materials</u>, vol 18, No 5-6 363-386, Freund Publishing House Ltd, P.O. Box 35010, Tel Aviv, Israel, http://www.freundpublishing.com
- 81. Yaro .S. A, **Aigbodion. V. S**, & Mohammed .Y.O The Effects of copper addition of the mechanical properties of Al-si-fe alloy, <u>International research Journal in Engineering</u>, science and Engineering Vol 3 No 2, 2006, 32-29
- 82. Yaro .S. A, **Aigbodion. V. S**, & Mohammed .Y.O comparative study of the corrosion characteristics of locally produced Gray and Ductile Irons in Metric acid, international research **journal in Engineering, science and Technology** Vol 3 No 2, 2006, Pp 20-25 ISSN I 597-5258
- 83. Yaro .S. A, **Aigbodion. V. S**, Aliyu.S. The effect of heat-treatment on the corrosion of locally produced aluminium bronze in HCl acid solution, **Nigerian Journal of renewable** energy, vol 14, No 1 & 2, 2006, 25-30
- 84. Yaro .S. A, **Aigbodion. V. S**. The effects Ageing Temperature and time on the hardness characteristics of Al-Si-Cu alloy system, **Journal of information, communication and computing Technologies** (JICCOTECH) Vol 2, Issue 1, 2006 Pp 137-139 ISSN 0794-6910
- 85. Ihom A.P, Yaro. S.A & **Aigbodion .V.S**. Application of multiple regression-model to the study of foundry clay Bonded sand mixtures; **journal of information, communication and computing Technologies** (JICCOTECH) Vol 2 Issue 1, 2006 Pp 161-168 ISSN 0794-6910
- 86. Ihom .A.P, Yaro S.A. & **Aigbodion.V.S**, Beneficiation of Bende- Ameru Bentonite Clay **IFE journal of technology** Vol. 15 N0 2 2006, Pp 93-98 ISSN 1115-9782
- 87. AbdulRahman .A.S & **Aigbodion .V.S**, The effects of Ageing Temperature on the corrosion characteristics of Al-Si-Cu alloy in Hcl acid <u>journal of Engineering science and</u> **Technology** Vol 1, Number 1, 2006 Pp 82-86
- 88. Yaro .S. A & **Aigbodion .V.S**, Suitability of Rayfield and Rukuba (Plateau state) Sand deposits for foundry applications, **African journal of Natural sciences**, 2006, 9, 167-176
- 89. Yaro .S. A, **Aigbodion. V. S**, Effects of corrosion in Acidic Media on the mechanical properties of As-Cast and Austempered Ductile Iron **Journal of Information**, **communication and computing Technologies (Jiccotech)** Maiden Edition, 2005, PP 99-103, ISSN 0794-6910
- 90. **Aigbodion .V.S** & Yaro S.A. Effects of Siliconizing and Aluminizing on the corrosion resistance of mild steel in HCL acid, **Journal of information communication and computing Technologies (JICCOTECH)** Maiden Edition, 2005, Pp 117-120 ISSN 0794-6910
- 91. **Aigbodion .V.S,** Yaro .S.A & AbdulRaham A.S; Used Engine Oil as Austempring medium for the Austempring of Ductile Iron use for the production of Agricultural machines & Farm

- Implements. <u>Journal of scientific and industrial studies</u>, vol 3 number 4 Pp 51-54 ISSN 1117-1693
- 92. Ihom P.A, Yaro S.A. & **Aigbodion. V.S**, The effect of carbonization on the corrosion resistance of mild steel in four different media; **journal of corrosion science & Technology**, Vol 3 (2005) Pp 18-21, ISBN 978-36725-0-9
- 93. Yaro .S.A. & **Aigbodion V.S,** Corrosion Susceptibility of As-cast locally produced Aluminium Bronze, **Journal of corrosion Science & Technology** Vol 1,3 (2005) Pp ISBN 978-36725-O-09

B. OFFICIAL CONFERENCE PROCEEDINGS

- 94. **Aigbodion V. S,** Hassan S. B and Agunsoye.J. O, Evaluation study of cast Al-Cu-Mg/Bagasse ash particulate Composites, Proceedings of the 3nd, International conference on engineering, research and development innovations
- 95. Oghenevweta, J.E, Mohammed, R.A., **Aigbodion, V.S.**, Asuke, F, The Potentials of UsingWater/Alumino-Silicate Solution as Quenchant for Medium Carbon Steels, Proceedings of the 3nd, International conference on engineering, research and development innovations
- 96. **Aigbodion .V.S,** Olajide.S.O, Agunsoye.J.O, Abdulwahab, M, Suleiman, Y.I, :Environmental Impact in Metal Casting: An Overview: Proceedings of the Nigerian Metallurgical society (NMS), 2009 Annual conference & Annual General meeting Pp 16-23
- 97. O. Ochuokpa, **V.S Aigbodion**, O.Aponbiede, & T. Ause: LOW-COST TECHNOLOGY A panacea for Achieving Sustainable Industrialization of Developing Countries, Proceedings of the Nigerian Metallurgical society (NMS), 2009 Annual conference & Annual General meeting Pp 79-84
- 98. Okafor E. G and **Aigbodion V. S**: Material Recycling: Analysis of Important Approaches for Sustainable Development in a Global Economic Meltdown, Proceedings of the Nigerian Metallurgical society (NMS), 2009 Annual conference & Annual General meeting Pp 69-78.
- 99. **V.S. Aigbodion**, A.F. Ayeni, J. Agunsoye, Comparative corrosion, characteristics of ductile, Grey cast iron and mild steel in different soils, 2nd, International conference on engineering, research and development innovations, 2008, 162-170
- 100. **Aigbodion, V.S,** S.B.Hassan, Olajide.S,O, Agunsoye.O.J. AbdulRahaman.A.S. Okafor.G.E, The use of rice husk ash as an aggregate for foundry sand production Nigeria, Proceedings of the Nigerian Metallurgical society (NMS), 2008 Annual conference & Annual General meeting Pp 16-22
- 101. Ochuokpa E.O, **Aigbodion .V.S**, O.Aponbiede, Small scale foundry industries, the bedrock for rural industrial development in developing nations Proceedings of the Nigerian Metallurgical society (NMS), 2008 Annual conference & Annual General meeting Pp 59-64
- 102. Okafor.G.E, **Aigbodion .V.S** I.Y. Sulieman, Solution to pollution and waste control in steel production, Proceedings of the Nigerian Metallurgical society (NMS), 2008 Annual conference & Annual General meeting Pp 59-64
- 103. Hassan.S.B, **Aigbodion.V.S**, Aponbiede, O, Development of Aluminium matrix composites as Advanced Engineering Materials, Challeges and opportunities in Nigeria, proceedings of the Nigeria Materials congress(NIMACON, 2007), 47-55

- 104. Ochuokpa E.O, Hassan S.B, **Aigbodion .V.S** & Abdulwahab .M. The role of Foundry industries in the Economic Development of Nigeria, Proceedings of the Nigerian Metallurgical society (NMS), 2007 Annual conference & Annual General meeting Pp 35-41
- 105. **Aigbodion V.S,** Yakubu .S.I, Abdulwahab, Asuke .F, Agunsoye .J.O, & Okafor E.G, , The role of metal industries in Oil & Gas sector of Nigerian Economy; Corrosion point of view Proceedings of the Nigerian Metallurgical society (NMS), 2007 Annual conference & Annual General meeting Pp 70-75
- 106. Ola .S.A, Ihom A.P & **Aigbodion .V.S** The role of Research in Needs; A case study of Itakpe Iron Ore Proceedings of the Nigerian Metallurgical society (NMS), 2007 Annual conference & Annual General meeting, Pp 100-107
- 107. Yaro S.A; Mohammed O.Y & Aigbodion .V.S The effect of low Vanadium addition on the corrosion of Ductile Iron in HCl Acid Solution Proceedings of the Nigerian Metallurgical society (NMS), 2007 Annual conference & Annual General meeting Pp 121-127
- 108. Ihom A.P, **Aigbodion V.S**, Anbua .E.E & Onche E.O, A critical Examination of the available source of finance for the Development of the metals industry, and the role of the professional, Proceedings of the Nigerian Metallurgical society (NMS), 2006 Annual conference & Annual General meeting Pp 25-30
- 109. Yaro S.A, Suleiman, M;U & **Aigbodion V.S** -Determination of the chemical composition & physical properties of Dorazo naturally Bonded Sand deposit, Proceedings of the Nigerian Metallurgical society (NMS), 2006 Annual conference & Annual General meeting Pp 66-70
- 110. Yaro S.A, Mohammed .O.Y; Aigbodion V.S, AbdulRahman & Ozigis S.O, Nodular cast Iron: An important material for Agricultural Mechanization Proceedings of the Nigerian Metallurgical society (NMS), 2006 Annual conference & Annual General meeting Pp 100-107
- 111. Suleiman .M.U & **Aigbodion V.S** Metallurgical Inputs in Agricultural Implements Development in Nigeria Proceedings of the Nigerian Metallurgical society (NMS), 2005, Annual conference & Annual General meeting Pp 76-81 (2006)
- 112. **Aigbodion V.S,** Yaro S.A. & AbdulRahman .A.S, Used Engine Oil as Austempering medium for the Austempring of Ductile Iron use for the production of Agricultural machines & Farm Implements Proceedings of the Nigerian Metallurgical society (NMS), 2005 Annual conference & Annual General meeting Pp 57-61

C. Peer-reviewed Micrographs

- 113. **V.S.Aigbodion**: Development of Aluminium matrix composites by double stir-casting, **LAP Lambert Academic Publishing** Germany, **ISBN 978-3-8433-6288-7.**
- 114. V.S.Aigbodion: Solid State Precipitation of Aluminium Alloys, LAP Lambert Academic Publishing Germany, ISBN 978-3-8433-7418-7.
- 115. V.S.Aigbodion: TIN TAILINGS AN INDUSTRIAL WASTE: AS REFRACTORY MATERIALS, LAP Lambert Academic Publishing, Germany, ISBN 978-3-8433-6780-6.
- 116. **V.S.Aigbodion** and J.O.Agunsoye; Bagasse(Sugarcane waste): Non-Asbestos Free Brake Pad Materials, LAP Lambert Academic Publishing, Germany, ISBN 978-3-8433-8194-9.

- V.S.Aigbodion, I.D.Usman, S.A. Mansur; Eco-Friendly(Agro-waste): Alternatives to Wood-based particleboard, , LAP Lambert Academic Publishing, Germany, ISBN 978-3-8433-0533-
- 118. V.S.Aigbodion, C.U.Atuanya and E. A. Jonah: Wear characteristics of Recycled Low Density Polyethylene composites, LAP Lambert Academic Publishing, Germany, ISBN 978-3-8443-9637

d. CHAPTER IN PEER-REVIEWED BOOK

119. **V.S.Aigbodion** and S.B.Hassan, Bagasse(Sugar cane waste): AS low cost reinforcement for metal matrix composites, **Engineered metal matrix composites**, Nova Publishers, New York

13. Research Interests

- a. Development of polymer and metal matrix composites (COMPOSITES ON MICRO- AND NANO- LEVEL)
- b. Heat Treatment of alloy and Composites
- c. Development of alloys and carryout failure analysis
- d. Corrosion characteristics of metals and composites
- e. Castings of metal and composites
- f. Development of Solid Minerals for the Metallurgical industries
- g. Development of process flow chart for our Solid Minerals
- h. Conversion of Waste to Wealth
- i. Environmental Impact Assessment
- j. Welding and Brazing of metals, alloy and composites

14. Courses Taught at the University Level

a) Undergraduate Teaching:

i.	MTEN 417 Metallurgy for Engineers-	400level
ii.	MMEN425 Metallography-	400level
iii.	MTEN 342 Metallurgical Analysis-	300level
iv.	MMEN 242 Biomaterials-	200level
٧.	MMEN 201 Materials Sciences	200level
vi.	MTEN 413 Corrosion Sciences	400level
vii.	MME541 Theory and design of alloy	500level
viii.	MME543 Metallurgical plant Design	500level
ix.	MME332 Heat treatment of alloy	300level

Post graduate Teaching:

- i. Advanced physical metallurgy
- ii. Environmental impact Assessment
- iii. Advanced Composites
- iv. Industrial Fabrication

Postgraduate Supervision

a) Masters Degree

Modeling of the production and testing of austempering ductile cast iron using rotary furnace as a case study(Minor Supervisor)

Development and Characterization of Al-Si alloy/nanokankara clay particles composites(Major Supervisor)

Development and Characterization of Al-Cu-Mg alloy/nanobagasse ash particles composites(Minor Supervisor)

Design and Fabrication of Pin on Disc Wear Testing machine(Major Supervisor)

b) Ph.D Degree

Advanced manufacturing method for austempering ductile cast iron production from scraps (Minor Supervisor)

Internal Examinership

M.Sc: Defense in Mechanical Engineering, A.B.U, Zaria, Potential of using Nigeria Coal for power generation

M.Sc: Defense in Metallurgical Engineering, A.B.U, Zaria, Potential of using coconut shell particle in epoxy matrix for car bumper

15. Review of Academic and Professional Journals

- a) Editorial Advisory Board: Recent Patents on Nanotechnology, ISSN: 1872-2105 Betham
 Science publishers
- b) International proposal review expert for National Center of Science and Technology Evaluation, Astana, Republic of Kazakhstan
- c) Reviewing of Journal papers(Journal of Materials and Design)
- d) Reviewing of Journal papers(Journal of Materials science and Engineering A)
- e) Reviewing of Journal papers (Recent Patents on Nanotechnology)
- f) Reviewing of Journal papers(Journal of Applied clay)
- g) Reviewing of Journal papers(Journal of Composites B)
- h) Reviewing of Journal papers(Nigeria Journal of Engineering)

COREN and NBTE accreditation team

- i) Resource accreditation, Federal polytechnic, Oko. Dept of Metallurgical and Materials Engineering, March, 2016.
- j) Resource accreditation, Akanu Ibiam Federal polytechnic, Unwana Dept of Metallurgical and Materials Engineering, April, 2015.

- k) Resource accreditation, Delta State polytechnic. Oghara. Dept of Welding and Fabrication, 2013
- 1) Coren accreditation, Kwara State University. Dept of Materials Science and Engineering, March, 2014.

m)

16. Design and Fabrication of Engineering Equipment

- i. Metallurgical Crucibles using sugar cane waste
- ii. Heat treatment furnaces
- iii. Froth flotation machine

17. EMPOLYMENT RECORDS:

2012 to Date	Senior Lecturer, Met & Mat Engineering University of Nigeria
2007-2012	Lecturer, Met & Mat Engineering, A.B.U, Zaria
2004-2007:	Research Metallurgical Engineer, NMDC, Jos
2002-2004:	Project Co-ordinator, Ochija & Co Ltd, Zaria
2001-2002:	Production Assistant, Osogbo Steel Company, Osogbo
2000-2001:	Production Assistant, Tri-System Kaduna
1999(SIWES)	Trainee engineer Kaduna refinery, Kaduna

18. Professional Service /Honor Society:

a) Professional Society

- i. Registered Engineer with Council for the Regulation of Engineering in Nigerian(COREN).R.13810
- ii. Member Nigeria Society of Nigeria (NSE) 17022
- iii. Member Nigeria Metallurgical Society (NMS) C586
- iv. Member Materials Society of Nigeria (MSN)
- v. Member Nigeria Corrosion Association (NICA)

b) Professional Responsibility

- i. Assistant Technical society, Nigerian Metallurgical society (2006 to 2009)
- ii. Member conference organizing committee (COC), Nigerian Metallurgical society, Annual conference and annual general meeting, tagged Akure, 2008.
- iii. Member conference organizing committee (COC), Nigerian Metallurgical society, Annual conference and annual general meeting, tagged Abuja, 2007.
- iv. Member conference organizing committee (COC), Nigerian Metallurgical society, Annual conference and annual general meeting, tagged Jos, 2006

- v. Member conference organizing committee (COC), Nigerian corrosion association, Annual conference and annual general meeting, tagged Jos, 2005
- vi. Member trade panel, on corrosion maintenance course, industrial training fund(ITF)
- vii. National Publicity Secretary, Nigerian Metallurgical society (2009 to date)

19. Position Held with Dates

2012 to Date: Departmental Project co-ordinator

2010 to 2012: Member, Faculty representative board of faculty of Environmental Design

2010 to 2012: Chairman, Editorial Board, Nigerian Metallurgical Society (NMS)

2010 to 2012: Member faculty examination malpractice committee

2010 to 2011: Vice-Chairman, Implementation committee, KHMS, Zaria

2008 to 2010: Member, Faculty representative University Library

2009 to Date: National Publicity Secretary, NMS

2006 2009: National Assistant Technical Secretary, NMS

2007 To **2012:** Departmental Library Officer

20. LABORATORY EXPERIENCE

- ✓ Mechanical Testing Of Metal Using Destructive Test;-
- Tensile Properties with Ultimate Testing Machine
- Hardness Test with Brinell, Vickers, Rockwell Machine
- Impact Properties with Izod and Charpy Machine
 - ✓ Heat-Treatment Operations for Ferrous and Non-Ferrous Metals to Modify the Mechanical Properties.
 - ✓ Interpretation of the Mechanical Properties of Metals with Microstructures
 - ✓ Comparing The Result Of Tests Obtained With That Of The Microstructures.
 - ✓ Materials Selection for Engineering Application
 - ✓ Corrosion testing
 - ✓ Casting of metals/composites

21. Community services

- i. Member trade panel, on corrosion maintenance course, industrial training fund(ITF)
- ii. Implementation committee, KHMS, Zaria
- iii. Reviewing of Journal papers
- iv. International linkage in research

22. Extra-Curricula Activities

a. With the University

Reading, Conducting research, leading research group, Games

b. Outside the University

- i. Member trade panel, on corrosion maintenance course, industrial training fund(ITF)
- ii. Implementation committee, KHMS, Zaria
- iii. Reviewing of Journal papers
- iv. Professional activities

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23. Names and Addresses of References

a) Engr.Prof. S.B.Hassan

Dept. of Metallurgical & Materials Engineering, University of Lagos, Lagos

b) Engr. Prof. D.O.N. Obikwelu

Dept. of Metallurgical & Materials Engineering, University of Nigeria, Nsukka

c) Engr. C.U. Atuanya

Dept. of Metallurgical & Materials Engineering, Nnamdi Azikiwe University of Akwa, Akwa