

NAME OF CANDIDATE: **AGBEBOH, Goddy Ujagbe**, Ph.D (Ekpoma), M.Sc. (Ekpoma),
B.Sc. (UNILAG), (OOSB)

E-MAIL ADDRESS: agbebohgoddy@gmail.com
PHONE: 08036587219.
OFFICE: Faculty of Physical Sciences,
Department of Mathematics,

BRIEF INTRODUCTION

Agbeboh Goddy U jagbe, is a Professor of Mathematics in the above Department. He has spent over 22 years as a lecturer in Mathematics and it related areas. He has vast experience in Differential Equations and computational Mathematics, with 29 publications in both international and national Journals. His research interest is both independent and collaborative as can be seen in his publications. Agbeboh Goddy Ujagbe hails from Ebudin, Esan Central Edo State Nigeria. A Christian (Leader, Central Oblates of St. Benedict. Ewu Monastery), Member, Sacred Heart of Jesus and Immaculate Heart of Mary Patron, Association of Lay readers, Mary the Queen Parish Ekpoma, Catholic Diocese of Uromi)

Area of Expertise:

1. Numerical Analysis
2. Scientific Computing

Research Interest

1. Runge –Kutta Methods
2. Stochastic Differential Equations

POST GRADUATE SUPERVISION

1. **Agbeboh G.U.** and Esekhaigbe Chris: On the Analysis of a 6th Order Runge- Kutta Method. M. Sc. (2007)
2. **Agbeboh G.U.** and Omokaro. B. “Implementation of a New Third- State Inverse Explicit Runge – Kutta Formula for Solving Initial Value Problems (ivps)” M. Sc. (2011)
3. **Agbeboh G.U.** and Ehiemua. M. “Error Analysis of 5th Order Runge-Kutta Method” M. Sc. (2013)
4. **Agbeboh G. U.** Akhanulu Gilbert. Analysis of a 5th stage 6th order Explicit Runge-Kutta method for solving initial value problems in ordinary differential equations (2016).
5. **Agbeboh G.U.** and Okoruwa G. O. Expansion of a Fourth Order Runge-Kutta formula for Solving Ordinary Differential Equations. PGD Maths (2007)
6. **Agbeboh G.U.** and Oghwephu O. Margaret. “The Real and Imaginary parts of A Rational Stability Function with $K=8$ ” PGD Maths (2008).
7. **Agbeboh G.U.** and Esekhaigbe Chris A. On the Transformation and Implementation of a Highly Efficient and Fully Implicit Fourth-Order Runge-Kutta Method. (Ph.D, 2017)
8. **Agbeboh G.U.** and Loko Perelah. On the Analysis of a Rational Integrator $K= 8$
9. **Agbeboh G.U.** and Esekhaigbe Chris: On the Application of Runge- Kutta Method in the Solution of Stochastic Differential Equations. (Ph. D 2017).
10. **Agbeboh G. U.** and Akhanolu Gilbert, “On the logistic Analysis of the unprecedented Spread of Pentecostal churches in Nigeria. (M.Sc. 2016).
11. Agbeboh G. U. and Loko O. Perelah: On the Analysis of a Rational Integrator with $k=8$ (2017).

PUBLICATIONS

(a) National Based Journal Publications

1. **Agbeboh G.U.** and Aashikpelokhai U.S.U. (2002); “An Analysis of Order Thirteen Rational

- Integrator”. (Journal of Science, Engineering and Technology. 9(2), PP 4128- 4145)
2. **Agbeboh G.U.** and Alabi Chris. (2003); “Survey of Industrial Mathematics and Self-Reliance in a Developing Economy”. (Journal of National Association for the Advancement of Knowledge NAFK). 7(4), pp 42-49)
 3. Aashikpelokhai U.S.U. and **Agbeboh G.U.** (2005). “On the Analysis of a Cubic Root Mean 4th Order Runge -Kutta Formula”. (African Journal of Science (AJS) 6(1), pp 1310- 1318)
 4. Aigbedion. I. and **Agbeboh G.U.** Iyayi S.E. (2005) “Surface Waves in Fermi Liquid”. (African Journal of Sciences AJS 6(1), pp 1221-1233)
 5. Aigbedion. I. and **Agbeboh G.U.** and Egwebe. O. (2006) Multiple Attenuation using Eigenvalues Decomposition (Global Journal of Pure Applied Sciences 12(2), pp 225-227).
 6. Aigbedion. I. and **Agbeboh G.U.** (2006) “Geometrical Spreading in Layered Transversely Isotropic Medium with Vertical Symmetry AXIS”. (Journal of Applied Sciences 9 (2): 6429-6438)
 7. Aigbedion. I. and **G.U. Agbeboh** and O. Egwebe (2006); “2D/3D Coherent Noise Attenuation by Locally Adaptive Modeling and Removal on Prestack Data”. (Journal of Research in physical sciences, 2(1), pp 71-72)
 8. **Agbeboh G.U.** Aashikpelokhai U.S.U and Aigbedion. I. (2007); “On the Performance of a New One Third 4th Order Runge- Kutta method”. (International Journal of Numerical Mathematics ISSN 1117-1812 IJNM 2 (1). Pp 374-398)
 9. Aashikpelokhai U.S.U. and **Agbeboh G.U.** (2007) “Analysis of an Exponential Numerical Integrator”. (International Journal of Numerical Mathematics. ISSN 1117-1812 2(2) pp 282-310).
 10. **Agbeboh G.U.** and Adanegbe. P. (2008), “Correlation Analysis of Oil Palm Production in Nigeria with Some Variable between 1970 And 2001” (Journal of Advance Natural and Applied Sciences Research 5. pp 123-135 Available Online @www.casjournal.org).
 11. **Agbeboh G.U.**, Esekhaigbe Chris and Ukpebor L.A. (2009) “On the Coefficient Analysis of a Modified Sixth-Order Runge-Kutta Method for Solving Differential Equations”. (International Journal of Numerical Mathematics. ISSN 1117-1812 IJNM .5(1) pp 204-221)
 12. Aashikpelokhai Ann, **Agbeboh G.U.** and .Aashikpelokhai U.S.U. (2010) “Construction of Real and Complex Idempotent in an L_2 [JXJ] Space.” (Journal of Academics 5(1) ISSN 1597-9083 Published by Association of Nigeria Academics (ANA))
 13. **Agbeboh G. U.** and Ehiemua (2012), “A New One-Fourth Kutta Method For Solving Initial Value Problems in Ordinary Differential Equations.” (Nigeria Annals Natural Sciences, Volume 12(1 2012) (pp 001-011)
 14. **Agbeboh G. U.** and Ehiemua M.(2013) “On the Convergence and Stability Analysis of a Modified Kutta’s Algorithm” Ambrose Alli University Postgraduate Journal (2013 AAUPGJ Vol. 1. NO. 1) Published by the School of Postgraduate Studies AAU Ekpoma, Nigeria. E-Mail: aaupgj@gmail.com
 15. **Agbeboh G. U. and Ehiemua Mike**, “**Modified Kutta’s Algorithm**” **Journal of the Nigerian Association of Mathematical Physics**; Volume 28, (November, 2014) pp 103-114 (c) J. of NAMP.
 16. **Agbeboh .G. U., Akhanolu G. A. and Esekhaigbe C. (2015)** “**Analysis of a sixth stage sixth-order Explicit Runge Kutta Method for the Solution of Initial Value Problems in Ordinary Differential Equations**”. (Journal of the Nigerian Association of Mathematical Physics. Volume 32, (November, 2015), PP153-168) (c) J. of NAMP.
 17. **Agbeboh .G. U., Esekhaigbe C. and Akhanolu G. A. (2015)** “On the Rooted Tree and Component Analysis of an Explicit Fourth-Stage Fourth- Order Runge Kutta Method”. (Journal of the Nigerian Association of Mathematical Physics. Volume 33, (January, 2016), PP 61-70) (c) J. of NAMP.
 18. **Agbeboh G. U.**, “On The Parametric Factorization And Analysis Of A Cubic Root Mean Fourth Order Runge – Kutta Formula” ABACUS, (The journal of the Mathematical Association of Nigeria) Vol. 43(2) Mathematics Series, (September 2016) Pp.25-38.

(b) Foreign Based Journal Publications

19. **Agbeboh G. U.**, Aashikpelokhai U.S.U. and Aigbedion. I. (2007) “Implementation of a New 4th order Runge-Kutta Formula for Solving Initial Value Problems (i.v.ps)” (International Journal of Physical Sciences. 2(4) pp.089-098). Available Online at <http://www.academicjournals.org/IJPS>. ISSN1992- 19950 Academic Journals).
20. **Agbeboh G. U.** and Aashikpelokhai U.S.U. (2007) “Implementation of an Order 26 Rational Integrator”. (Jour. of Inst. of Math. & Comp. Sci. (Math Ser.) 20(3) Pp 195-206).
21. Aigbedion. I., Iyayi S.E. and **Agbeboh G.U.** (2007); “Prospect Assessment and Risk Analysis: Example from Niger Delta, Nigeria Basin.” (World Applied Sciences Journal 2 (6); 569-574). ISSN 1818-4952 © IDOSI Publications, 2007.
22. **Agbeboh G.U.**, Ukpebor L.A. and Esekhaigbe C. A.,(2009) “A Modified Sixth-Order Runge-Kutta Method for Solving Problems in Differential Equations” (Journal of Mathematical Sciences 20(2) pp 97-110. International Centre for Advance Studies, Neadhoi School-Para, Dattapukur, North 24 Prgs West Bengal 743248, INDIA. Ref. No.ICFAS/M.16167 (241)/2008).
23. **Agbeboh G.U.**and Omonkaro B. (2010), “On the Solution of Initial Value Problems in Ordinary Differential Equations Using a New Third Order Inverse Runge-Kutta Method”. (International Journal of Physical Sciences 5(4) pp 299-307). Available Online at <http://www.academicjournals.org/IJPS>. ISSN1992- 19950 Academic Journals).
24. **Agbeboh G. U.** (2013), “On the Stability Analysis of a Geometric 4th Order Runge-Kutta Formula”. (Mathematical Theory and Modeling ISSN 2224-5804(Paper) ISSN 2225- 0522 (Online) Vol. 3, No. 4, 2013) WWW.iiste.org The International Institute for Science, Technology and Education (IISTE)
25. **Agbeboh G.U.** and Omonkaro B. (2013), “On the Stability of $\frac{1}{3}$ rd Inverse Rational Runge-Kutta Method” (International Journal of Research and Advancement in Physical Sciences, Volume 3, Number 1,2013). Copyright(c) 2013 Centre for Advance Training and Research ISSN; 2276-8521
26. **Agbeboh G. U.** and Osabuohien -Irahor Osarumwese, (2013). “Empirical Analysis of Road Traffic Accidents: a Case Study of Kogi State, North-Central Nigeria” International journal of physical sciences Vol. 8(40)pp.1923-1933 October, 2013.Dol:10,5897/IJPS2013, 3978. ISSN 1992-1950@2013 Academic Journals. [Http://www.academicjournals.org/IJPS](http://www.academicjournals.org/IJPS)
27. **Agbeboh G. U. Esekhaigbe A. C.** (2015), “On the Component Analysis and Transformation of an Explicit Fourth-Stage Fourth- Order Runge-Kutta Methods. (Journal of Natural Sciences Research ISSN 2224-3186(Paper), ISSN 2225-0921(Online) Vol. 5, No. 20, 2015) WWW.iiste.org the International Institute for Science, Technology and Education (IISTE)
28. **Agbeboh G. U. Esekhaigbe A. C.** (2015), “On the Component Analysis and Transformation of an Explicit Fifth-Stage Fourth- Order Runge-Kutta Methods. (International Journal of Mathematics Research), 2015, 4(2)76-100.
29. **Agbeboh G. U. Esekhaigbe A. C.** (2016), “ Transformation and Implementation of a Highly Efficient Fully Implicit Fourth- Order Runge-Kutta Method. (International Journal of Innovative Research and Development), Vol. 5 Issue 1,ISSN2278-0211(Online).

PARTICIPATION IN NATIONAL ASSIGNMENT: Member NUC Accreditation Panels to Sokoto State University and Federal University Dutsin Ma Kastina State; which took place from 23rd November -28th November 2017.

PROF. G. U. Agbeboh