ADENIJI ADEJIMI ADESOLA

adejimi.adeniji@gmail.com

EDUCATION

Tshwane University of Technology	PhD Applied Mathematics	(January 2017-March 2020)
National Teachers Institute	Postgraduate Diploma in Education (PGDE)	2014
University of Lagos, Nigeria.	M.sc Mathematics	2013
University of Ado-Ekiti, Nigeria.	B.sc Mathematics (Pure Mathematics)	2010
Open Universities Australia (OUA)	Strategic Management	2017
Icahn School of Medicine at Mount Sinai	Dynamical Modeling Methods for Systems Biology	2018

RESEARCH EXPERIENCE

TSHWANE UNIVERSITY OF TECHNOLOGY (Doctoral Student)   January 2017- March2020

Investigation of vector fields of annular habitat of Lotka-Volterra type.

FEDERAL UNIVERSITY OF OYE-EKITI (Dr Enoch O.O)

On the zero's of Riemann Zeta Hypothesis   2016, 2017

NATIONAL TEACHERS INSTITUTE   Graduate Research 2014

The Effect of Social Networking on the Behaviour of Secondary School Students in Lagos Metropolis.

UNIVERSITY OF LAGOS, NIGERIA.   Graduate Research, 2012

Extension of refinements of Riemann zeta function via two functional equations

UNIVERSITY OF ADO-EKITI, NIGERIA.   Research, 2010

Various Solutions to the Riemann Zeta Functions

RESEARCH INTEREST	***Mathematical Ecology *Mathematical Biology *Inverse Problems *Riemann Hypothesis**
SOFTWARE:	**Python®, Mathematica®, Mathcad®, LaTeX®**

SCHOLARSHIP/AWARD

Tshwane University of Technology Scholarship Award: (TUT Award)

- Scholarship for Doctoral Studies   2017 - 2019

Best supporting teacher of the year

- Surulere senior secondary school   2014

CONFERENCE CONTRIBUTION(S)

2019   *Estimation of Parameters of a Constrained Predator Prey Dynamical Model with Incomplete Data*

Adejimi A Adeniji*, Christopher Muzvondiwa, Igor A Fedotov, Michael Y Shatalov, Andrew C Mkolesia, V AMMCS 2019 (International conference on Applied Mathematics, Modeling and Computational Science), Wilfrid Laurier University, Waterloo, Canada. http://ammcs.wlu.ca/

2019   *Inverse problem of the Holling Tanner model identification with incomplete information about Model Parameters..*Igor A Fedotov, Michael Y Shatalov, **Adejimi A Adeniji***, AMiTaNS'19 (The Euro-American Consortium for Promotion of the Application of Mathematics in Technical and Natural Sciences), Bulgaria. http://2019.eac4amitans.eu/

2018   *Numerical investigation of diffusive predator-prey model with application to annular habitat.*.

Adejimi A Adeniji*, Igor A Fedotov, Michael Y Shatalov, Andrew C Mkolesia, **BIOMATH 2018 (International conference on Mathematical Methods and Models in Biosciences), Bulgaria.** http://www.biomath.bg/2018/

2018   *Inverse problems of the Holling-Tanner model with complete and incomplete information*.

Igor A Fedotov, Michael Y Shatalov, **Adejimi A Adeniji***, Andrew C Mkolesia. **BIOMATH 2018 (International conference on Mathematical Methods and Models in Biosciences), Bulgaria,** http://www.biomath.bg/2018/

PUBLICATION(S)

1. Christopher Muzvondiwa, **Adejimi A Adeniji***, Igor A Fedotov, Michael Y Shatalov, Andrew C Mkolesia. Estimation of Parameters of a Constrained Predator Prey Dynamical Model with Incomplete Data. (Discontinuity, Nonlinearity, and Complexity, June 2020) In Press.

2. **Adeniji A A,** Fedotov I, Shatalov M Y, Mkolesia A C. Inverse problems of the Holling-Tanner model with incomplete information. . (Discontinuity, Nonlinearity, and Complexity, May 2020), In Press.

3. S.A. Surulere, M.Y. Shatalov, A.C. Mkolesia, Malange T, **A.A. Adeniji** *The Integral-Differential and Integral approach for exact solution of the Hybrid functional forms of Morse potential.* (International Journal of Applied Mathematics, Vol. 50 Issue 2, p242-250, Jun2020).

4. S.A. Surulere, M.Y. Shatalov, A.C. Mkolesia, **A.A Adeniji**. A comparative investigation of complex conjugates eigenvalues of Generalized Morse and Classical Lennard-Jones potential. *Nanoscience & Nanotechnology – Asia, Bentham Publishers* Volume 9, 2019. http://dx.doi.org/10.2174/2210681209666190220125249

5. **Adejimi A Adeniji**, Igor A Fedotov, Michael Y Shatalov. Inverse problem of Holling-Tanner model and its solution. *Journal Biomath.* Volume 7, Number 2 (2018) http://dx.doi.org/10.11145/j.biomath.2018.12.057

6. **Adejimi A Adeniji**, Igor A Fedotov, Michael Y Shatalov, Andrew C Mkolesia. *Numerical investigation of diffusive predator-prey model with application to annular habitat.* Far East Journal of Mathematical Science. http://dx.doi.org/10.17654/MS109020343 Volume 109, Number 2, 2018, Pages 343-355

7. **Adeniji A.A**. Ekakitie E.A Mohammed M.A Amusa I.S, "*A redefined Riemann zeta function represented via functional equations using the Osborne's rule*". IOSR Journal of Mathematics (IOSR-JM) e-ISSN: 2278-5728,p-ISSN: 2319-765X, Volume 8, Issue 3 (Sep. - Oct. 2013), PP 33-35. http://dx.doi.org/10.9790/5728-0833335

8. Amusa I. Sesan1, Mohammed A. Modiu, Baiyeri J. Funso, Ekakitie E.T, **Adeniji A. Adesola**,
   "*A new version of the proof of gamma* $(1 - n)\Gamma(n)\Gamma(n - 1)$ IOSR Journal of Mathematics (IOSR-JM) e-ISSN: 2278-3008, p-ISSN: 2319-7676. Volume 10, Issue 2 , Ver. V (Mar-Apr. 2014), PP 14-16. http://dx.doi.org/ 10.9790/5728-10251416

PUBLICATIONS (Accepted)

9. Paper title: ***Modeling the mathematical control for the prevalence of disease outbreak.*** Authors: Akintunde A.O, Enoch O.O, Mkolesia A.C, **A.A Adeniji,** (Journal of Transylvanian, 2020).

10. Paper title: ***The development and implementation of a numerical integrator with varying order for the study of autonomous climatic change IVP models.*** Authors: Enoch O.O, Mkolesia A.C, A.A **Adeniji**, Kekana M.C, Surulere S.A (Journal of Transylvanian, 2019).

11. Paper title: ***The Nth Order Derivative of the Functions.*** Authors: Enoch O.O, Osalusi O.J, **A.A Adeniji***, Kekana M.C (Journal of Engineering and applied Sciences, 2019).

12. **Paper title: *A class of odd order numerical integrators and its application to the study of nature and Location of Singularity of Non-Autonomous initial value Problem and their applications to climate change.*** Authors: Enoch O.O, Mkolesia A.C, **Adeniji A.A**, Adeyefa E.O, Abolarin O.E. Akinola L.S, Alakofa C.O (Journal of Engineering and applied Sciences, 2019).

PUBLICATIONS (Submitted)

- Paper title: *The development and implementation of a numerical integrator with varying order Polynomial for the study of autonomous climatic change IVP models*. Authors: Enoch O.O, Kekana M.C, **A.A Adeniji**.

- Paper title: **A** *Differential Operator Needed in the generation of A numerical Integrator for Environmental Models* Enoch, O.O, **Adeniji, A.A**, Adeyeye F. J, Kekana M.C.

TEACHING AND OUTREACH EXPERIENCE

Tshwane University of Technology Department of Mathematics & Statistics Part Time Lecturer (Biomedical Students) (Mathematics and Statistics (MAS105X))	Pretoria, South Africa	January 2020– October 2020
Tshwane University of Technology Department of Mathematics & Statistics Part Time Lecturer (Biomedical Students) (Calculation and Statistics (CAL 101T))	Pretoria, South Africa	January 2020– October 2020
Tshwane University of Technology Department of Mathematics & Statistics Part Time Lecturer (Biomedical Students) (Calculation and Statistics (CAL 101T), Agricultural Calculation (AGA111T))	Pretoria, South Africa	July 2019– November 2019
Tshwane University of Technology Department of Mathematics & Statistics Part Time Lecturer (First Year Biomedical Students) (Calculation and Statistics (CAL 101T)) **Pass Rate: 100%, Average: 79.21%**	Pretoria, South Africa	January 2019– June 2019
Tshwane University of Technology Department of Mathematics & Statistics Part Time Lecturer (Final Year Biomedical Students) (Calculation and Statistics (CAL 101T)) **Pass Rate: 100%, Average: 73.4%**	Pretoria, South Africa	June 2018– November 2018

Tshwane University of Technology	Pretoria, South Africa	February 2018 – June 2018

Department of Mathematics & Statistics
(First Year Biomedical Students)
Part Time Lecturer
(Calculation and Statistics (CAL 101T))
Pass Rate: 94.68%, Average: 72.2%

Tshwane University of Technology	Pretoria, South Africa	February2018–October 2018

Department of Mathematics & Statistics
Graduate Assistant
Foundation Mathematics (FPMLS01)
Pass Rate: 96%, Average: 62.3 %

Tshwane University of Technology	Pretoria, South Africa	August 2017 – October 2017

Department of Mathematics & Statistics
Graduate Assistant
Foundation Mathematics (FPMLS01)
Pass Rate: 82%, Average: 62.26%

Surulere Senior Secondary School	Lagos State	July1st2013-December 2016

(Mathematics & Further-math Teacher)

ICT Coordination	Lagos State	July 1st 2013-December 2016

(Data Analyst, Microsoft Office, EduPack)

Mainland Senior Sec School	Lagos State	August 2012

(Teaching Practice with LASG)

Grace Christian College (NYSC)	Kogi State	October 2010–October 2011

SEMINARS/WORKSHOPS ATTENDED:

Curriculum Development and Support (License to Guide)	August 2017
Google training in conjunction with Eko-Project	May 2015
Training on Edu-Pack Software.	June 2014
End of the year student's assessment component of (Lagos Eko secondary school project)	June 2014
Seminar series on Software Development (Java) (Total I T Academy)	Nov 2013

PROFESSIONAL AFFILIATIONS

July 2019   INTERNATIONAL ASSOCIATION OF ENGINEERS (IAENG)
                             Membership number: 241159

Jan 2017   SOUTH AFRICAN MATHEMATICAL SOCIETY (SAMS)
                             Membership ID: ADEAF3

Jan 2018   INTERNATIONAL SOCIETY OF DIFFERENCE EQUATION