ADENIRAN Olusola John

Degree: B.Sc., M.Sc., Ph.D.

Email: adeniranoj@unaab.edu.ng

                   ekenedilichineke@yahoo.com

Telephone   +234-803-319-4406

                   +234-39-206539

Fax: 234-39-243-045

Department: Mathematics

Academic Rank: Reader

Current position: Deputy Dean, COLNAS

Research Interest:

- Non Associative algebras
- Conjugacy closed loops
- Theory of K-loops
- Construction and Algebraic studies of properties of central loops
- Universal properties of Osborn loops
- Cryptography/Cryptology

ACADEMIC DEGREES WITH DATE

- B.Sc. (Hons)   Mathematics   - 1993
- M.Sc. Mathematics   - 1997
- Ph.D.   - 2002

INSTITUTIONS ATTENDED WITH DATE

- Obafemi Awolowo University, Ile-Ife   –   1989 - 1993
- Obafemi Awolowo University, Ile-Ife   –   1995 - 1997
- University of Agriculture, Abeokuta   –   1997 - 2002

MEMBERSHIP OF PROFESSIONAL BODIES

- Nigerian Mathematical Society
- Society for African Physicists and Mathematicians
- American Mathematical Society
- London Mathematical Society

PRIZES, HONOURS, NATIONAL AND INTERNATIONAL RECOGNITIONS.

- Obafemi Awolowo University's Scholarship for M.Sc. degree in Mathematics
- Junior Associateship of the International Centre for Theoretical Physics
- Reviewer – Fasculi Matematici   (2006 – date)
- AMMSI Research/Teaching Fellowship   (2008)
- ANSTI Scholar to University for Delopment Studies, Ghana. Jan – Mar. 2009
- AAU Staff Exchange Fellowship to the University for Development Studies, Ghana.   2009

COURSES TAUGHT

1. Commutative Algebra (undergraduate & postgraduate level)
2. Galois Theory (undergraduate level)
3. Non-Associative Algebraic Systems (Postgraduate level)
4. Mathematical Methods (undergraduate levels)
5. Theory of Modules
6. Introductory Algebra
7. Linear Algebra (second and third year undergraduate levels)
8. Metric spaces
9. Introductory Vectors and Mechanics
10. General Topology (Undergraduate level)
11. Theory of Groups and Rings
12. Calculus
13. Galois Theory

Supervision of Dissertations/Theses

1. **Completed Supervision**

1. Oni, Adesoji Theophilus – A modification of Data Encryption Standard (Cryptography) – M.Sc. Dissertation in Computer Science, University of Agriculture, Abeokuta. December 2003

2. Adeleke, Imram Ademola – Enhancing the efficiency of Broadcast encryption methods (Cryptography) – M.Sc. Dissertation in Computer Science, University of Agriculture, Abeokuta. May 2004

3. Akinmoyewa, Oluwatoyin – On isomorphism of Generalized groups. M.Sc. Dissertation in Mathematics. University of Agriculture, Abeokuta. August 2004

4. Jaiyeola, Temitope Gbolahan – An isotopic study of properties of Central loops. M.Sc. Dissertation, University of Agriculture, Abeokuta. July 2005.

5. Oyebo, Yunde Yacub – On holomorphy and embedding of Central loops. M.Sc. Mathematics. University of Agriculture, Abeokuta. February 2007

6. Ikuomola, Aderounke Justina – Designing and testing of an expert system-based site security officer (Cryptography) – M.Sc. Computer Science, University of Agriculture, Abeokuta. February 2007.

7. Jaiyeola, Temitope Gbolahan – The Study of the Universality of Osborn loops. Ph.D. Mathematics, University of Agriculture Abeokuta. December 2008

8. Araromi Olufunmilayo A. – A combine Biometric approach to user authentication, M.Sc. Computer Science, University of Agriculture, Abeokuta, June 2009

2. Current Supervision

1. Oyebo Y.T.   - Ph.D. Mathematics – On literature search, University of Agriculture, Abeokuta

2. Sowumi A.O.   – M.Sc. Mathematics – Preparing for Pre data Seminar University of Agriculture, Abeokuta

3. Mengue, David   - Ph.D. Mathematics - On literature search (Joint supervision With Dr. S. O. Ajala, University of Lagos, Lagos where the candidate is registered)

4. Alhazan Elvis   - M.Sc. Pure Mathematics – Proposal writing, University for Development Studies, Ghana.

RESEARCH CONDUCTED

PUBLICATIONS

1. Theses

[1]   On generalized Bol identity and related loops identities – M.Sc. Thesis, Obafemi Awolowo University, Ile-Ife 1997

[2]   The study of certain class of loops via their Bryant-Schneider groups – Ph.D. Thesis, University of Agriculture, Abeokuta, 2002

2.   Journal Articles

[1]   **J.O. Adeniran**: *On certain anti-commutative algebras*, **Zb. Rad.** ISSN 1450-9628 20(1998), 41-46

[2]   **J.O. Adeniran** & A.R.T. Solarin: *A note on automorphic inverse property loops*, **Zb. Rad.** ISSN 1450-9628 20(1998), 47-52.

[3]   A.R.T. Solarin, T.F. Omole & **J.O. Adeniran**: *On Aktivis algebra of Bol-Moufang type*, **An. Stiint. Univ. "Al.I.Cuza", Iasi, (Romania)** ISSN 0041-9109 44(1998) no. 1,161-168,*MR1719797 (2001B:17006)http://www.math.uaic.ro/~annalsmath//pdf-uri%20anale/f1-998/SOLARI1.pdf*

[4]   **J.O. Adeniran**: *On certain anticommutative algebras II*, **Zb. Rad. (Yugoslavia)** ISSN 1450-9628 21(1999), 17 -24, *MR1716324 (2000m:20821)*

[5]   A.R.T. Solarin, **J.O. Adeniran** & S.A. Akinleye: *A further generalization of the Aktivis Identities*, **Int. Jour. of Math. Sc. (Nigeria)** (1999), 101-107.

[6]   **J.O. Adeniran**: *On the Bryant-Schneider group of a conjugacy closed loop*, **Hard. Jour. (U.S.A)** ISSN 0741-9937 22(1999), 17-24, *MR1725380 (2000H:20821).*

[7]   **J.O. Adeniran** & A.R.T. Solarin: *A note on the generalized Bol identity*, **An. Stiint Univ. "Al.I.Cuza", Iasi, (Romania)** ISSN 0041-9109   45(1999)   no.1,   99-103, **http://www.math.uaic.ro/~annalsmath//pdf-uri%20anale/f1-1999/4ADENIR.pdf.**

[8]   **J.O. Adeniran** & J.A. Oguntuase: *A contribution to the study of Bol-Moufang type algebra*, **An. Stiint Univ. "Al.I.Cuza", Iasi, (Romania)** ISSN 0041-9109 45(1999) no. 2, 225-230 **http://www.math.uaic.ro/~annalsmath/pdf-uri%20anale/f2-1999/1ADENIRA.pdf**

[9]   **J.O. Adeniran**, E.O. Adeleke, A.A.A. Agboola, J.A. Oguntuase & A.R.T. Solarin: *On quadratic loops of Bol-Moufang type*, **Krag. Jour. Math., (Yugoslavia)** ISSN 1450-9628 24(2000), 41-48

[10] **J.O. Adeniran** & S.A. Akinleye; *Some properties of generalized Bol loops*, **Nig. Jour. Sci.** ISSN 0029-0114 2001, 101-107

[11] **J.O. Adeniran**: *On Bol loops of cardinality 2pq (q not a divisor of p^2 – 1).* **Proc. Jangjeon Math. Soc. (South Korea)** ISSN 1229-3067 4(2002), 31-36 *MR1905572 (2003E:20078)*

[12]   **J. O. Adeniran**: *More on the Bryant-Schneider group of a conjugacy closed loop*,

 Proc. Jangjeon Math. Soc. (South Korea) ISSN 1229-3067 5(2002), 35-46

[13] **J.O. Adeniran**: *Some properties of the Bryant-Schneider groups of certain Bol loops.* **Proc. Jangjeon Math. Soc.** 6(2002), **(South Korea)** ISSN 1229-3067 71-80, *MR1980307 (2004C:20115)*

[14] A.T. Akinwale, **J.O. Adeniran** & T. Arogundade: *Exploiting semantic schema model for interactive query transformation using mix function*, **ASSET B** (2003)**,** Vol. 2(1), 73-82

[15] **J.O. Adeniran**: *On some maps of conjugacy closed loops*, **An. Stiint. Univ.**

 "Al.I.Cuza", Iasi (Romania) ISSN 0041-9109 50 No. 2(2004), 267-272, *MR2131936 (2005K:20115) http://www.math.uaic.ro/~annalsmath/pdf-uri%anale/f2-2004/adeniran.pdf*

[16] **J.O. Adeniran***: On holomorphic theory of a class of left Bol loops*, **An. Stiint. Univ. "Al.I.Cuza" Iasi, (Romania)** ISSN 0041-9109 51 No. 1 (2005), 23-28, *MR2187353 (2007C:20171) http://www.math.uaic.ro/~annalsmath/pdf-uri%20anale/f1-2005/Adeniran.pdf*

[17] T.G. Jaiyeola & **J.O. Adeniran**: *On the derivatives of central loops*, **Adv. Theor. Appl. Math. (India)** ISSN 0973-4554 3(1) (2006); 233-244, *MR2330756 (2008C:20121) http://www.ripublication.com/atam/atamv1n3_8.pdf*

[18] **J.O. Adeniran** & T.G. Jaiyeola: *On central loops and central square property*, **Quasigroups and related systems, (Poland/Moldova)** ISSN 1561-2848 Vol. 15(2) (2007), 191-200, *MR2383946 (2008K:20148)*

[19] A.S. Sodiya, **J.O. Adeniran** & R. Ikuomola: *An expert System-based site Security officer,* **Jour. of Comp. & Info. Tech. (Croatia)** Vol. 15(3) (2007), 227-235

[20] T.G. Jaiyeola & **J.O. Adeniran**: *Algebraic properties of some varieties of central loops*, **Quasigroups and related systems, (Poland/Moldova)** ISSN 1561-2848 Vol. 16(1) (2008), 37-54 [MR2435526](#) **(2009G:20147)**

[21] T.G. Jaiyeola & **J.O. Adeniran**: *On some autotopisms of non-Steiner central loops.* **Jour. Nig. Math. Soc. ,**Vol. 27 (2008), ISSN 0189-8965 53-67, *MR2421795*. **(2009D:20152)**

[22] T.G. Jaiyeola & **J.O. Adeniran:** *On isotopic characterization of central loops,* **Creative Math. & Info. (Romania),** ISSN 1584 286X Vol. 18(1) (2009), 39-45

[23] T.G. Jaiyeola & **J.O. Adeniran**: *New Identities in Universal Osborn loops.* **Quasigroups and Related systems, (Poland/Moldova)** ISSN 1561-2848 Vol. 17(1)(2009), 31-54

[24] T.G. Jaiyeola & **J.O. Adeniran**: *Weak Inverse Property Loops and Some Isotopy-Isomorphy Properties,* **Acta Universitatis Apulensis, (Romania)** ISSN 1582-5329 Vol. 18(2009), 19-33

[25] T.G. Jaiyeola & **J.O. Adeniran**: *On the existence of A-loops with some commutative inner mappings and others of order 2,* **Southeast Asian Bulletin of Mathematics (Hong Kong/China)** ISSN 0129-2021 2009 Vol. 33, 853-864 http://seams-bull-math.scnu.edu.cn/qikan/manage/wenzhang/p5_97067.pdf,

[26] T.G. Jaiyeola, **J.O. Adeniran** & A.A.A. Agboola: On the second Bryant-Schneider group of an Osborn loop, J. Adv. Math. Studies, (Romania) ISSN 2065-3506 – to appear

[27] T.G. Jaiyeola & **J.O. Adeniran**: Not every Osborn loop is Universal, Acta Math. Acad. Paed. Nyiregyhaziensis, (Hungary) – (to appear in 25(2), 2009)

[28] **J.O. Adeniran**, J.T. Akinmoyewa, A.R.T. Solarin & T.G. Jaiyeola: On some properties of generalized groups, Octo. Maths. Mag. (ISSN 1222-5657) – (to appear)

[29] T.G. Jaiyeola & **J.O. Adeniran**: On Another Two Cryptographic Identities In Universal Osborn Loops, Surv. Maths. & Appl. (ISSN 1843-7265) – (To appear)

[30] **J.O.Adeniran**: On group of right representations of certain finite loop (submitted for publication)

3.   Refereed Conference Proceedings

[1]   **J.O. Adeniran**: *A note on right central loops*, **Directions in Mathematics**, 1999, 249- 254, A Conference Proceedings in Honour of Professor H.O. Tejumola on his Retirement from The Department of Mathematics, University of Ibadan, Ibadan. 1997. Edited by Ekhaguere, G.O.S., Ugbebor, O. O. & Ajayi, D.O. A.

[2]   **J.O. Adeniran:** *On Bessel Differential Equations*, **Proceedings of the National Mathematical Centre,** Abuja in Ordinary Differential Equations, Vol. 1 no. 1 2000, 125-128 Edited by Tejumola, H.O., Ezeilo, J.O.C and Afuwape, A.U.

[3]   T.G. Jaiyeola & **J.O. Adeniran**: *Isotopic characterization of C-loops*, **Appreciating Mathematics in the contemporary world**, Proceedings of conference in honour of Professor E.O. Oshobi on his retirement. Obafemi Awolowo University, Ile-Ife, December 2004, 33-37, Edited by A.U. Afuwape & S. Adeyemi

[4]   T.G. Jaiyeola & **J.O. Adeniran**: *Weak inverse property loops and some Isotopy-Isomorphy properties,* **Appreciating the future Mathematics**, Proceedings of International Conference in honour of Professor E.A. Akinrelere on his retirement, Obafemi Awolowo University, Ile-Ife, July 2006, 71-84, edited by Y.A.S. Aregbesola & O.A. Adesina

CONFERENCES, SEMINARS & WORKSHOPS ATTENDED

1.   16th Annual Conference of the Nigerian Mathematical Society, Obafemi Awolowo University, Ile-Ife, Nigeria, 16-25th April, 1995

2.   8th Seminar of Group of African Researchers in Geometry, Analysis and Applications, Lokossa, Republique du Benin, December 1996

3.   Conference on Algebra, Computer Science & Applications, Universite De Ouagadougou, Burkina Faso, April 1997

4.   Conference in Honour of Prof. H.O. Tejumola – (Directions in Mathematics), University of Ibadan, Nigeria, July 1997

5.   9th Seminar of Group of African Researchers in Geometry, Analysis and Applications, Universite de Yaounde I, September 1998

6.   Memorial Conference in Honour of Prof. R.F.A. Abiodun – (Publish or Perish), University of Agriculture, Abeokuta. November 1998

7. 18th Annual Conference of the Nigerian Mathematical Society, University of Agriculture, Abeokuta. April 1999

8. Workshop on Computer Algebra, National Mathematical Centre, Abuja, Nigeria. July – August 1999

9. Conference on Functional Analysis, Differential Equations and Applications, National Center for Mathematical Sciences in conjunction with Ghana Atomic Energy Agency, Kwabenya, Ghana. July 2001

10. CIMPA School on Algebraic Geometry and Applications, Universite de Niamey, Republique de Niger. January 2002

11. School and Conference on Algebraic K-Theory, International Center for Theoretical Physics, Trieste, Italy. 8th-26th July, 2002

12. Conference on Irreversible Quantum Dynamics, International Center for Theoretical Physics, Trieste, Italy 29th July – 2nd August 2002.

13. 11th Seminar of Group of African Researchers in Geometry, Analysis and Applications, Universite de Yaounde I, September 2002

14. African Mathematical Union Conference, University of Agriculture, Abeokuta. Nigeria. November 2003

15. School and Conference on Commutative Algebra and Interaction with Algebraic Geometry and Combinatorics, International Center for Theoretical Physics, Trieste, Italy. 24th May – 11th June, 2004

16. Workshop on Random Matrix Theory: Condensed Matter, Statistical Physics and Combinatorics, International Center for Theoretical Physics, Trieste, Italy. 28th June – 2nd July, 2004

17. 26th Annual Conference of the Nigerian Mathematical Society, Olabisi Onabanjo University, Ago-Iwoye, Nigeria. April, 2005

18. 3rd East African Workshop on Topics in Algebra, Geometry and Combinatorics, Makerere University, Kampala, Uganda, 19-30th June, 2006.

19. School and Conferences on Nonlinear Differential Equations, International Center for Theoretical Physics, Trieste, Italy, 9-27th October, 2006.

20. Annual Faculty Seminar Series of the University for Development Studies, Ghana, 28-29th August, 2009.

21.   Workshop on Geometry and Algebra Applied to Development, 30th Nov. to 8th December, 2009, National Mathematical Center, Abuja. (Gave invited two two-hour lectures on Non-Associative Binary Systems)