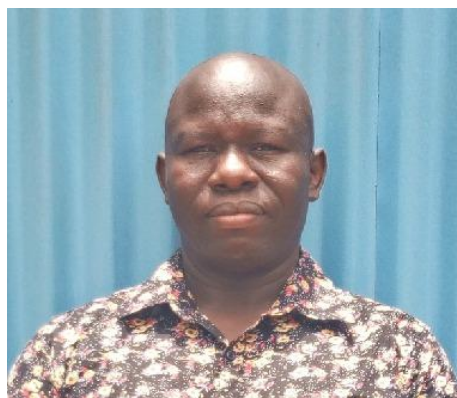


CURRICULUM VITAE



PERSONAL INFORMATION

- (i) **Name** : Prof. Benard Okelo, **PhD, MKNAS, MTWAS**
- (ii) **Date of Birth** : 19th June, 1981
- (iii) **Place of Birth** : Rachuonyo, Homabay County
- (iv) **Sex** : Male
- (v) **Marital Status** : Married
- (vi) **Nationality** : Kenyan
- (vii) **Contact Address** : School of Biological, Physical, Mathematics
and Actuarial Sciences,
Jaramogi Oginga Odinga University of Science and
Technology, P. O. Box 210-40601, Bondo, Kenya
- (viii) **Phone Number** : +254 -723397455 OR +254732678066
- (ix) **E-mail Address** : bokello@jooust.ac.ke, bnyaare@yahoo.com
- (x) **Present Employer** : Jaramogi Oginga Odinga University of Science and
Technology, P. O. Box 210-40601, Bondo, Kenya
- (xi) **Languages** : English, Kiswahili, French (Basic), German (Basic)

EDUCATIONAL BACKGROUND

<u>INSTITUTION</u>	<u>DATE</u>	<u>EXAM/GRADE</u>
1. University of Prince Edward Island, Canada	2017	Post Doctorate
Title: <i>Infinitesimal generators in Stochastic Optimal Control and Applications</i>		
2. Maseno University	2010 - 2013	PhD - Pure Mathematics
Thesis Title: <i>Elementary operators and their orthogonality in normed spaces</i>		
3. Maseno University	2007 - 2010	MSc - Pure Mathematics
Thesis Title: <i>On norms of elementary operators</i>		
4. Egerton University	2002 - 2007	BED (Science) (1 st Class Honours)
5. Saye Secondary School	1996 - 2000	KCSE –Mean Grade A-(Minus)
6. Aolo Primary School	1988 -1995	KCPE - 451/700 Marks

WORK EXPERIENCE

1. 01-04-2021- Date Associate Professor, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya.
2. 08-11-2016 to 04-03-2021 Senior Lecturer, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya.
3. 01-11-2013 to 07-11-2016 Lecturer, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya.
4. 09-8- 2010 to 30-10-2013 Assistant Lecturer, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya

PERSONAL STATEMENT

I'm a pure mathematician by profession and prolific researcher in mathematical sciences and applications to other fields. My research interest is in functional analysis, particularly, operator theory. I endeavour to do research that has applications to other areas like Quantum Mechanics, Mathematical Modelling and Analysis, Contemporary Issues in Special Needs Education, Business and Economics, Computing and Information Technology. The output of my research is for solving real life problems of socio-economic nature in Kenya (and other developing countries), Africa and Globally.

MEMBERSHIP IN PROFESSIONAL BODIES AND SOCIETIES

1. American Mathematical Society (**AMS**)
2. The World Academy of Sciences (**TWAS**)
3. International Center for Pure and Applied Mathematics (**CIMPA**)
4. Southern Africa Mathematical Sciences Association (**SAMSA**)
5. Kenya DAAD Scholars Association (**KDSA**)
6. Mathematics Association of Kenya (**MAK**)
7. Kenya National Academy of Sciences (**KNAS**)
8. African Institute for Mathematical Sciences (**AIMS**)
9. Lindau Nobel Laureates Meetings (**LNLM**)
10. Society of Industrial and Applied Mathematics (**SIAM**)
11. International Biometric Society (**IBS**)
12. European Alliance for Innovation (**EAI**)

LEADERSHIP ROLES/APPOINTMENTS

1. **Sept-2022: Dean**, School of Biological, Physical, Mathematics and Actuarial Sciences
2. **July 2020- Sept 2022: Associate Dean**, School of Biological, Physical, Mathematics and Actuarial Sciences
3. **2022- Date:** MSc and PhD Pure Mathematics Programs External Reviewer, Kaimosi Friends University
4. **2022- Date:** External Examiner, Chuka University.
5. **2017-2019:** Examination moderator in the School of Mathematics and Actuarial Science
6. **2016-Date:** JOOUST Senate Member -Representative of the School of Mathematics and Actuarial Science
7. **2016- date:** External Examiner, Kisii University.
8. **2015-Date:** JOOUST International Scientific conferences committee Member-Abstract sub-committee.
9. **2014-Date:** In-charge of Pure Mathematics programs (BSc, MSc and PhD)
10. **Jan 2012-Dec 2020:** Coordinator of Postgraduate research activities and examinations in the School of Mathematics and Actuarial Science.
11. **Aug 2010-Dec 2011:** Ag. Head of Mathematics Department
12. **2011- Date:** Teaching practice assessor.

PUBLICATIONS

YEAR 2022

1. N. C. Nyamwaya, R. K. Obogi & **N. B. Okelo**, On supraposinormality of operators in Norm-attainable operators, *Int. J. Open Problems Compt. Math.*, 15(2), (2022), 59-77.
2. **N. B. Okelo**, Francis Odhiambo and Jeffar Oburu, On Sharp Estimates of Coefficients for Polynomials in Norm-Attainable Classes, *Pan-American Journal of Mathematics*, 1 (2022), 1-6. <https://doi.org/10.28919/cpr-pajm/1-1>.
3. **N. B. Okelo** and Jeffar Oburu, Norm-attainable operators on involutive stereotype tubes with algebraically connected component of the identity, *Open Journal of Mathematical Analysis*, 6 (1), (2022), 70-75. DOI: 10.30538/psrp-oma2022.0107
4. **N. B. Okelo** and Allan Onyango, Characterization of Topological Fuzzy Sets in Hausdorff Spaces, *Transactions on Fuzzy Sets and Systems*, 1(2), (2022), pp-pp doi: [10.30495/TFSS.2022.1955757.1020](https://doi.org/10.30495/TFSS.2022.1955757.1020)
5. **N. B. Okelo**, Maximal Chain Properties for Mappings in Bitopological Spaces, *Int. J. Open Problems Compt. Math.*, 15(1), (2022), 34-38.
6. W. C. Akatch, **N. B. Okelo**, & O. Ong'ati, On equality of complete positivity and complete copositivity of positive map, *Journal of Linear and Topological Algebra*, 11(2), (2022), 93-108. <http://dx.doi.org/10.30495/jlta.2022.1949354.1458>
7. W. C. Akatch, **N. B. Okelo**, & O. Ong'ati, Completely positive map from $M_4(\mathbb{C})$ to $M_5(\mathbb{C})$ on positive semidefinite Matrices, *Journal of Mathematical Analysis and Modeling*, 3(1), (2022), 15-29. <https://doi.org/10.48185/jmam.v3i1.441>
8. **N. B. Okelo** and J. Oburu, Norm-attainable Operators on Involutive Stereotype Tubes with Algebraically Connected Component of the Identity, (2022), 1-7. <https://arxiv.org/abs/4171095>
9. I.O. Okwany, **N. B. Okelo**, O. Ongati, Characterization of derivations implemented by orthogonal projections in Hilbert Spaces, *Int. j. adv. multidisc. res. stud.*, 2(2), (2022), 149-160.

10. I.O. Okwany, **N. B. Okelo**, O. Ongati, Numerical Radius Power Bounds and Norms of derivations in Banach Algebras, *Int. j. adv. multidisc. res. stud.*, 2(2), (2022), 161-170.
11. **N. B. Okelo**, J. M. Ngigi, Characterization of Numerical ranges of Matrix Operators in Hilbert Spaces, *Int. j. adv. multidisc. res. stud.*, 2(2), (2022), 171-183.
12. J. M. Ngigi, **N. B. Okelo**, Bounds of Analytic Functions of Matrices in Banach Algebras, *Int. j. adv. multidisc. res. stud.*, 2(2), (2022), 184-192.

YEAR 2021

13. **N. B. Okelo**, Fixed points approximation for nonexpansive operators in Hilbert spaces, *Int. J. Open Problems Compt. Math.*, 14(1), (2021), 1-5.
14. B. Ogola, **N. B. Okelo**, and O. Ongati Certain Notions of Continuity in Bitopological Spaces, *Int. J. Open Problems Compt. Math.*, Vol. 14, No. 4, (2021), 48-67.
15. O. Ogola, **N. B. Okelo**, O. Ongati, On separability criteria for continuous Bitopological spaces, , *Open Journal of Mathematical Analysis*, 5(1), (2021), 31-45.
16. Joseph Owuor Owino, **N. B. Okelo**, Lie Group Analysis of a Nonlinear Coupled System of Korteweg-de Vries Equations, *European Journal of Mathematical Analysis*, 1 (2021), 133-150.
17. W. L. Otae, **N. B. Okelo**, O. Ongati, Characterization of orthogonality conditions in certain classes of normed spaces, *Open Journal of Mathematical Analysis*, 5(1) (2021), 98-104.
18. W. Kangogo, **N. B. Okelo**, Omolo Ongati, Properties of spectrally bounded compact elementary operators, *Contrib. Math.* 3 (2021), 19-28. DOI: [10.47443/cm.2021.0012](https://doi.org/10.47443/cm.2021.0012)
19. W. Kangogo, **N. B. Okelo**, Omolo Ongati, On closure conditions of dense irreducible subalgebras of compact elementary operators, *Asia Pac. J. Math.* 8(2021), 1-15.
20. W. L. Otae, **N. B. Okelo**, O. Ongati, Notions of Norm-Attainability and Orthogonality in Banach Spaces, *Asia Pac. J. Math.* 8(16), (2021), 1-10. doi:[10.28924/APJM/8-16](https://doi.org/10.28924/APJM/8-16)
21. **N. B. Okelo**, Stability analysis of COVID-19 Model under certain constraints, *IJMCICT*, 4(6), (2021), 18-24.
22. **N. B. Okelo**, Fixed Point Approximations for Norm-Attainable Operators, *Asia Pac. J. Math.*, 8(3) (2021), 1-5.
23. P. W. Mulongo, S. Aywa, **N. B. Okelo**, On Isometrically Equivalent Norms in Banach Spaces, *IJMCICT*, 4(4)(2021), 13-74.
24. A. M. Nyongesa, S. Aywa, **N. B. Okelo**, Algebra Automorphism Modulus Additive Conditions for Surjective Maps on Unital C*-Algebras, *IJMCICT*, 4(2)(2021), 1-6.
25. I. O. Okwany, **N. B. Okelo**, O. Ongati, Numerical radii inequalities for derivations induced by orthogonal projections, *IJMCICT*, 4(3)(2021), 7-14.
26. W. L. Otae, **N. B. Okelo**, M. B. Nzimbi, O. Ongati, On Orthogonality Conditions for the Range and Kernel of Generalized Derivations, *IJMST*, 6(7)(2021), 101-104.

YEAR 2020

27. **N. B. Okelo**, On orthogonality of elementary operators in Norm-attainable classes, *Taiwanese Journal of Mathematics*, 24[01]: (2020), 119-130.
28. **N. B. Okelo**, On norm-attainable operators in Banach spaces, *Journal of function Spaces*, (2020), 1-6, <https://doi.org/10.1155/2020/8926214>
29. **N. B. Okelo**, On norm-attainable Functionals in Banach spaces, *Asia Pac. J. Math.*, 7, (2020), 1-7. doi: [10.28924/APJM/7-27](https://doi.org/10.28924/APJM/7-27)
30. **N. B. Okelo**, Characterization of Absolutely Norm Attaining Compact Hyponormal Operators, *Proceedings of International Mathematical Sciences*, 2(2) (2020), 96-102. Doi: 10.47086/pims.689633

31. **N. B. Okelo**, On Properties of Inner Product Type Integral Transformers, *Open J. Math. Anal.*, 4(2) (2020), 160-169.
32. **N. B. Okelo**, P. O. Mogotu, On Norm Inequalities and Orthogonality of Commutators of Derivations, *Italian Journal of Pure and Applied Mathematics*, 44 (2020), 163-169.
33. W. Kangogo, **N. B. Okelo** and O. Ongati, On centre properties of irreducible subalgebras of compact elementary operators, *Open Journal of Mathematical Analysis*, 4[2], (2020), 80-88.
34. **N. B. Okelo**, Norms of Self-Adjoint Two-Sided Multiplication Operators in Norm-Attainable Classes, *MATLAB Journal*, 6, (2020), 77-79.
35. N. B. Okelo, On properties of derivations in normed spaces, *AJAMS*, 5 (2020), 12-22.
36. **N. B. Okelo**, Various notions of Norm-attainability in normed spaces, 2020. Preprint <https://arxiv.org/abs/2004.05496>
37. **N. B. Okelo**, A note on approximations of fixed points of nonexpansive mappings in norm-attainable classes, 2020. Preprint <https://arxiv.org/abs/2005.03069>
38. **N. B. Okelo**, Mathematical Modelling for transmissibility of COVID-19 via motorcycles, 2020. <https://medrxiv.org/cgi/content/short/2020.04.18.20070797v1>
39. C. A. Winda, **N. B. Okelo** and Omolo Ongati, Characterization of Maps on Positive Semidefinite Choi Matrices, *MATLAB Journal*, 6, (2020), 17-27.
40. C. W. Otulo, Z. M. Muga, **N. B. Okelo**, J. O. Nyakinda, Relative Efficiency of Sum Constructed Automorphic Symmetric Balanced Incomplete Block Designs, *IJMCICT*, 3(7), (2020), 56-63.
41. C. W. Otulo, Z. M. Muga, **N. B. Okelo**, J. O. Nyakinda, Sum Construction of Automorphic Symmetric Balanced Incomplete Block Designs, *IJSRMSS*, 7[4], (2020), 10-13.
42. K. W. Nyaluke, **N. B. Okelo** and Omolo Ongati, Orthogonal idempotents and continuous Fredholm operators under perturbations, *IJMCICT*, 3(5-6), (2020), 42-47.
43. J. J. Oburu, R. Simwa and **N. B. Okelo**, Survival Analysis in Estimation of Attrition Rates among Policyholders in Jubilee and UAP Insurance Companies, *IJMCICT*, 3(5-6), (2020), 47-55.
44. K. W. Nyaluke, **N. B. Okelo** and Omolo Ongati, Fredholmness conditions for operators perturbed by orthogonal idempotents in banach spaces, *IJMCICT*, 3(3-4), (2020), 30-35.
45. I. O. Okwany, **N. B. Okelo** and Judith J. E. J. Ogal, Characterization of Properties of Aluthge Transforms in Banach Algebras, *IJMCICT*, 3(2), (2020), 19-23.
46. **N. B. Okelo**, Judith J. E. J. Ogal, Properties of Norm-attainable Classes and Applications to Signal Processing, *IJMST*, 5(2), (2020), 40-44.
47. S. O. Asamba, C. M. Kaunda and **N. B. Okelo**, Analysis of Convex Optimization and Applications to Financial Engineering, *IJMST*, 5(3), (2020), 78-83.
48. Judith J. E. J. Ogal, **N. B. Okelo**, Prey-Predator Mathematical System Analysis through Lyapunov Function, *IJMCICT*, 3(1), (2020), 5-11.

YEAR 2019

49. **N. B. Okelo**, On Certain Conditions for Convex Optimization in Hilbert Spaces, *Khayyam J. Math*, 05[02]: (2019), 108-112. DOI:10.22034/kjm.2019.88084
50. **N. B. Okelo**, On Convex Optimization in Hilbert Spaces, *Maltepe Journal of Mathematics*, Vol. 1 No. 2 (2019), 89-95.
51. **N. B. Okelo**, Norm Inequalities for Inner Product Type Integral Transformers, 2019. Preprint <https://arxiv.org/abs/1904.02078>
52. **N. B. Okelo**, P. O. Mogotu, On Norm Inequalities and Orthogonality of Commutators of Derivations, 2019. Preprint <https://arxiv.org/abs/1903.10358>
53. **N. B. Okelo**, On Certain Conditions for Convex Optimization in Hilbert Spaces, 2019. Preprint <https://arxiv.org/abs/1903.10177>

54. **N. B. Okelo**, Characterization of Absolutely Norm Attaining Compact Hyponormal Operators, 2019. Preprint <https://arxiv.org/abs/1903.11948>
55. **N. B. Okelo**, α -Supraposinormality of Operators in Dense Norm-Attainable Classes, *Universal Journal of Mathematics and Applications*, 02[01]: (2019), 24-25.
56. P. O. Mogotu, **N. B. Okelo** and Omolo Ongati, On Compactness of Similarity Orbits of Norm-attainable Operators, *International Journal of Advances in Applied Mathematics and Mechanics*, 06[04]: (2019), 14-21.
57. P. O. Mogotu, **N. B. Okelo** and Omolo Ongati, On Denseness of Similarity Orbits of Norm-attainable Operators, *International Journal of Mathematics and its Applications*, 07[02]: (2019), 13-21.
58. **N. B. Okelo**, Characterization of Fuzzy Soft Sets in Topological Spaces, *International Journal of Modern Science and Technology*, 04[01]: (2019), 9-18.
59. D. O. Owego, **N. B. Okelo** and Omolo Ongati, Essential Numerical Ranges and Davis-Wielandt Shell of Hilbert space Operators, *International Journal of Science and Research* 08[01] (2019), 836-838.
60. K. O. Onyango, O. Ongati and **N. B. Okelo**, Graphs of Continuous Functions in Topological Spaces, *International Journal of Modern Computation, Information and Communication Technology*, 2(3):(2019), 14-20.
61. A. O. Wanjara, **N. B. Okelo**, and O. Ongati, On Characterization of Midpoint Locally Uniformly Rotund Norms in Frechet Spaces, *International Journal of Modern Computation, Information and Communication Technology*, 02[01]: (2019), 1-4.
62. **N. B. Okelo**, Certain Open Sets in Hereditary Generalized Topological Spaces, *International Journal of Modern Science and Technology*, 04[03]: (2019), 75-78.
63. **N. B. Okelo**, Notions of Connectedness in Fuzzy Soft Topological Spaces, *International Journal of Modern Science and Technology*, 02[02]: (2019), 5-9.
64. A. Okoth and **N. B. Okelo**, Arnold's Digitized Summation Technique and Generalized Notion of the Collatz Conjecture, *International Journal of Modern Computation, Information and Communication Technology*, 02[5-6]: (2019), 36-42.
65. M. E. O. Wegulo, S. Aywa and **N. B. Okelo**, On spectra of n -hyponormal operators in Hilbert space, *International Journal of Modern Computation, Information and Communication Technology*, 02[7]: (2019), 53-58.
66. Jackline Ondimu, ArvinLucy Onditi, and **N. B. Okelo**, Influence of Entrepreneurship Training on Financial Performance of Small and Medium Enterprises in Kisii Town, Kenya, *International Journal of Industrial Engineering*, 03[7]: (2019), 57-61.
67. Charles Omondi, **N. B. Okelo**, and Vitalis Mogwambo, Influence of Management Style on Financial Performance of Saccos in Kisumu County, Kenya, *International Journal of Industrial Engineering*, 03[7]: (2019), 62-68.
68. Jerotich Sirma, Silvanice O. Abeka, **N. B. Okelo**, To Investigate the Strength of Existing Information Security Policies among SACCOS in Kenya, *IJSR*, Vol. 8 No. 9, (2019), 1014-2013.
69. Jerotich Sirma, Silvanice O. Abeka, **N. B. Okelo**, Assessing the Current Status of Information Security Policies Among Saccos in Kenya, *EJBM*, Vol. 11 No. 27, (2019), 83-92.
70. V. Shagwila, N. B. Okelo, R. K. Obogi and O. P. Sakwa, On Norms of Derivations Implemented by Self-Adjoint Operators, *International Journal of Multidisciplinary Sciences and Engineering*, 10[3], (2019), 11-14.

YEAR 2018

71. **N. B. Okelo**, Norms of inner automorphisms and extremal functions, *South Asian J. Math.*, 8(2), (2018), 194-204.

72. **N. B. Okelo**, Norm-Attainability and Range-Kernel Orthogonality of Elementary Operators, *Communications in Advanced Mathematical Sciences*, 01[03]: (2018), 91-98.
73. Otieno E. Achieng, **N. B. Okelo**, Omolo Ongati, On Tensor Products and Elementary Operators, *MATHLAB Journal*, Vol. 1, No. 3, (2018), 286-295.
74. **N. B. Okelo**, Theoretical Analysis of Mixed-effects Models with minimized Measurement Error, *International Journal of Mathematics and Soft Computing*, Vol. 8, No. 1, (2018), 55-67.
75. **N. B. Okelo**, Certain properties of Hilbert space operators operators, *International Journal of Modern Science and Technology*, 03[06]: (2018), 126-132.
76. **N. B. Okelo**, Certain Aspects of Normal Classes of Hilbert Space Operators, *International Journal of Modern Science and Technology*, 03[10]: (2018), 203-207.
77. **N. B. Okelo**, Characterization of Numbers using Methods of Staircase and Modified Detachment of Coefficients, *International Journal of Modern Computation, Information and Communication Technology*, 01[04]: (2018), 88-92.
78. **N. B. Okelo**, On Characterization of Various Finite Subgroups of Abelian Groups, *International Journal of Modern Computation, Information and Communication Technology*, 01[05]: (2018), 93-98.
79. **N. B. Okelo**, On Normal Intersection Conjugacy Functions in Finite Groups, *International Journal of Modern Computation, Information and Communication Technology*, 01[06]: (2018), 111-115.
80. O. E. Achieng, D. Odongo and **N. B. Okelo**, On Certain Properties of Identification Topological Subspaces, *International Journal of Modern Science and Technology*, 03[11]: (2018), 238-240.
81. Blasus Ogola and **N. B. Okelo**, Characterization of Insertion Property in Topological Spaces, *International Journal of Modern Science and Technology*, 03[12]: (2018), 258-261.
82. I. Okwany, D. Odongo and **N. B. Okelo**, Characterizations of Finite Semigroups of Multiple Operators, *International Journal of Modern Computation, Information and Communication Technology*, 01[06]: (2018), 116-120.
83. Kaunda C. Matoke, D. Odongo and **N. B. Okelo**, Characterizations of Derivations on Prime Rings, *International Journal of Modern Computation, Information and Communication Technology*, 01[07]: (2018), 121-125.
84. A. O. Wanjara, **N. B. Okelo**, O. Ongati, On Characterization of Very Rotund Banach Spaces, *International Journal of Modern Computation, Information and Communication Technology*, 01[05]: (2018), 99-102.
85. J. O. Awino, T. J. O. Aminer, T. M. Onyango and **N. B. Okelo**, Mathematical Analysis of Carbon Pollution in Roads with Ventilated Embankments using Godunov FVM, *International Journal of Engineering and Mathematical Sciences*, Vol. 13, No. 1, (2018), 25-36.
86. J. O. Awino, T. J. O. Aminer, T. M. Onyango and **N. B. Okelo**, Mathematical Analysis of Carbon Pollution in Roads with Ventilated Embankments in Presence and Absence of Forced Convection, *International Journal of Multidisciplinary Sciences and Engineering*, Vol. 9, No. 10, (2018), 06-11.
87. J. N. Kinyanjui, **N. B. Okelo**, O. Ongati and S. W. Musundi, Norm Estimates for Norm-Attainable Elementary Operators, *International Journal of Mathematical Analysis*, Vol. 12, No. 3, (2018), 137 – 144.
88. J. N. Kinyanjui, **N. B. Okelo**, O. Ongati and S. W. Musundi, Characterization of Norm-Attainable Operators, *International Journal of Mathematical Archives*, Vol. 9, No. 7, (2018), 124-129.
89. J. N. Owino, **N. B. Okelo** and Omolo Ongati, On Compact Operators whose Norms are Eigenvalues and Completeness, *IJCMS*, Vol. 13, No. 2, (2018), 49-57.

90. J. N. Owino, **N. B. Okelo** and Omolo Ongati, Characterization of Tensor Norms and Convergence in C^* -algebras, *JGRMA*, 5(9)(2018), 09-19.
91. A. W. Wafula, **N. B. Okelo** and Omolo Ongati, Norms of Normally Represented Elementary operators, *International Journal of Modern Science and Technology*, 03[01]: (2018), 10-16.
92. A. W. Wafula, **N. B. Okelo** and Omolo Ongati, Necessary and Sufficient conditions for Normality of Operators in Hilbert spaces, *International Journal of Modern Science and Technology*, 03[02]: (2018), 27-32.
93. Rono Sharon, **N. B. Okelo** and Omolo Ongati, Spectral Characterization of Jordan Homomorphisms on Semisimple Banach Algebras, *IJMCICT*, 1(3), (2018), 61-68.
94. M. O. Oyake, **N. B. Okelo** and Omolo Ongati, Characterization of Inner Derivations induced by Norm-attainable Operators, *International Journal of Modern Science and Technology*, 03[01], (2018), 6-9.
95. James O. Onyango B. Okong'a and **N. B. Okelo**, Effect of customer relationship management on Performance of Commercial Banks in Kenya, *International Journal of Industrial Engineering*, 2 [07], (2018), 155-159.
96. James O. Onyango B. Okong'a and **N. B. Okelo**, Effect of employee service training on Performance of Commercial Banks in Kenya: A Case of Tier I Banks, *International Journal of Industrial Engineering*, 2 [02], (2018), 36-40.

YEAR 2017

97. Benard O. Owino, **N. B. Okelo** and Omolo Ongati, Orthogonality of the Range and Kernel of Normal Derivations, *International Journal of Academic Studies*, 03[02]: (2017), 52-57.
98. **N. B. Okelo**, J. N. Owino and Omolo Ongati, Strict Characterization of Completely Positive Maps, *JGRMA*, Vol. 4, No. 3, (2017), 1-5.
99. **N. B. Okelo**, J. N. Owino and Omolo Ongati, On Boundedness and Complete Positivity of Maps on Banach Algebras, *JGRMA*, Vo. 4, No. 5, (2017), 8-11.
100. **N. B. Okelo** and P. O. Mogotu, New Conditions for Contractivity of Normaloid Operators, *JGRMA*, Vol. 4, No. 9, (2017), 1-6.
101. **N. B. Okelo** and P. O. Mogotu, New Bounds for Contractive Normaloid Operators, *JGRMA*, Vol. 4, No. 9, (2017), 7-12.
102. Sabasi Omaoro, J. Kerongo, R. K. Obogi and **N.B. Okelo**, Generalizations on Normal self-adjoint operators, *JGRMA*, Vol. 4, No. 9, (2017), 24-28.
103. Moses N. Odhiambo, **N. B. Okelo** and Omolo Ongati, On Spectrum of Bilateral Shift Operators, *JGRMA*, Vol. 4, No. 5, (2017), 1-7.
104. S. Asamba, R. K. Obogi and **N. B. Okelo**, Characterization of Numerical Ranges of Posinormal Operator, *International Journal of Modern Science and Technology*, 02[03]: (2017), 85-89.
105. B. O. Owino, **N. B. Okelo** and O. Ongati, On Local Minimum and Orthogonality of Normal Derivations in C_p -Classes, *International Journal of Modern Science and Technology*, 02 [02]: (2017), 70-73.
106. B. O. Owino, **N. B. Okelo** and O. Ongati, On Characterization of Normal Derivations, *International Journal of Modern Science and Technology*, 02 [10]: (2017), 337-340.
107. B. O. Okello, **N. B. Okelo** and O. Ongati, Characterization of Norm Inequalities for Elementary Operators, *International Journal of Modern Science and Technology*, 02 [03]: (2017), 81-84.

108. B. O. Okello, **N. B. Okelo** and O. Ongati, Maximal Numerical Range of Jordan Elementary Operator, *International Journal of Modern Science and Technology*, 02 [10]: (2017), 341-344.
109. R. O. Omollo, G. O. Raburu, Omolo-Ongati and **N. B. Okelo**, Enhancing Data Security in Cloud Computation Using AdditionComposition Fully Homomorphic Encryption Scheme, *Journal of Engineering*, Vol. 1 No. 10, (2017), 20-29.
110. C. Osuwo, M. Anyango and **N. B. Okelo**, Influence of Organizational Resources on Performance of Public Universities on Kisumu County, Kenya, *International Journal of Industrial Engineering*, 02 [02]: (2017), 62-66.
111. Charity Osuwo, Maria Anyango and **N. B. Okelo**, Influence of Access to Professional Development on Organizational Performance of Public Universities in Kisumu County, Kenya, *International Journal of Modern Science and Technology*, 02 [01]: (2017), 8-12.
112. J. A. Otieno, **N. B. Okelo** and O. Ongati, On Numerical Ranges of Convexoid Operators, *International Journal of Modern Science and Technology* 02 [02] (2017), 56-60.
113. A. K. Mandi, M. Onyango and **N. B. Okelo**, Influence of Service Quality on Performance of Hotel Industry in Busia Town, Kenya, *International Journal of Industrial Engineering* 01 [03] (2017), 92-96.
114. M. A. Rajula, M. Onyango and **N. B. Okelo**, Influence of Remuneration on Performance of Referral Hospital in Busia County, Kenya, *International Journal of Industrial Engineering* 01 [03] (2017), 97-103.
115. D. O. Owego, **N. B. Okelo** and Omolo Ongati, On the Similarities in properties of Essential Numerical Ranges and Davis-Wielandt Shell of Hilbert space Operators, *International journal of innovative Research and Advanced Studies* 04[07] (2017), 10-12.
116. F. Ogambi, M. Onyango and **N. B. Okelo**, Influence of Technology on Streamlining Traffic Flow in Nairobi Central Business District *International Journal of Modern Science and Technology* 02 [05] (2017), 205-211.

YEAR 2016

117. Gladys Kabutiei, Harriet Kidombo and **N. B. Okelo**, Influence of Women's Access to Credit on their Decision-Making Roles in the Community among the Njemps in Baringo County – Kenya, *International Journal of Modern Science and Technology*, 01[05] :(2016), 173-177.
118. Gladys Kabutiei, Harriet Kidombo and **N. B. Okelo**, Assessment of Women's Mobility in Public Space on Their Decision-Making Roles in the Community among the Njemps in Baringo County – Kenya, *International Journal of Modern Science and Technology* 01 [06] (2016), 193-198
119. Priscah Mogotu Omoke and **N. B. Okelo**, Estimates of norms of contractive normaloid operators, *Journal of Advanced Mathematics*, 2(3): (2016), 26-28.
120. Nyaluke Kiprono Wesley; **N. B. Okelo**; Omolo Ongati; Characterizing (α, β) - normal transaloid operators in Hilbert spaces; *Inter. J. Acad. Stud.* 2(1): (2016) 12-20
121. Sabasi Omaoro, R. K. Obogi, **N. B. Okelo**; On certain norms and numerical radius attainability conditions for normal operators; *Inter. J. Acad. Stud.* 2(1): (2016) 21-27
122. **N. B. Okelo** and Richard Omollo, Fully Homomorphic Encryption for Cloud Computing and Applications in ICT, *International Journal of Advanced Computer Science and Technology (IJACST)*, Vol. 6, No. 1 (2016), 11-17.
123. Judith J. E. J. Ogal, **N. B. Okelo**, Roy Kiogora and Thomas Onyango, Numerical solutions of mathematical model on effects of biological control on cereal aphid

- population dynamics, *International Journal of Modern Science and Technology*, 01 [04]: (2016), 138-143.
124. Judith J. E. J. Ogal, **N. B. Okelo**, Roy Kiogora and Thomas Onyango, Construction and Qualitative Analysis of Mathematical Model for Biological Control on Cereal Aphid Population Dynamics, *International Journal of Modern Science and Technology*, 01 [05]: (2016), 150-158.
 125. **N.B. Okelo**, Priscah Mogotu, Sabasi Omaoro and Conrad Rwenyo, Generalizations of metric spaces, *General Scientific Researches*, 4(1): (2016), 1-4.
 126. Andrew Ondiek Achola, E.M. W. Simatwa, T.M. O. Ayodo and **N. B. Okelo**, Challenges facing boda boda operators and their perception of the business in Nyatike sub-county, *International Journal of Academic Studies*, 02[01]: (2016), 37-48.
 127. Nyongesa Abraham Matayo, **N. B. Okelo** and George Mwangi, Numerical ranges of classes of Hilbert space operators, *International Journal of Academic Studies*, 02[01] : (2016), 49-60.
 128. B. A. Ohanga, Maria Onyango and **N. B. Okelo**, Assessment of effects of customer focus on the quality of service delivery – a case of Jaramogi Oginga Odinga University of Science and Technology, *International Journal of Academic Studies*, 02[03]: (2016), 151-166.
 129. Ibrahim Ngoge Gekondea, Maria Anyango and **N. B. Okelo**, Influence of leadership styles on staff retention in state corporations in Kisii county, Kenya, *International Journal of Academic Studies*, 02[03]: (2016), 175-182.
 130. Kangogo Willy, **N. B. Okelo** and Omolo Ongati, On norm preserving conditions for local automorphisms of commutative banach algebras, *Journal of Advanced Mathematics*, 02[01]: (2016), 4-5.
 131. Nyaluke Kiprono Wesley, **N. B. Okelo** and Omolo Ongati, Norms and numerical radii inequalities for (α, β) - Normal transaloid operators, *Journal of Advanced Mathematics*, 02[02]: (2016), 10-11.
 132. James O. Yambo, Fredrick Odoyo and **N. B. Okelo**, Relationship between supplier appraisal and procurement performance in public universities in western Kenya, *International Journal of Academic Studies*, 02[04]: (2016), 196-206.
 133. James O. Yambo, Fredrick Odoyo and **N. B. Okelo**, Relationship between supplier appraisal and procurement performance in public universities in western Kenya, *International Journal of Academic Studies*, 02[04]: (2016), 196-206.
 134. Richard O. Omollo and **N. B. Okelo**, On theory and applications of mathematics to security in cloud computing: a case of addition-composition fully homomorphic encryption scheme, *International Journal of Academic Studies*, 02[04]: (2016), 207-217.
 135. John Obiero Abuto, Adrian Mukhebi and **N. B. Okelo**, Influence of Modern Technology on Cost Optimization of Sugar Processing in Kenya, *International Journal of Modern Science and Technology*, 01 [06]: (2016), 218-223.
 136. John Obiero Abuto, Adrian Mukhebi and **N. B. Okelo**, Cost Drivers Analysis for Sugar Processing in Kenya using Optimization Models with Adoption of Goal Programming, *International Journal of Modern Science and Technology*, 01 [07]: (2016), 237-241.
 137. D. M. Onsasea, Maria Anyango, Fredrick Odoyo, and **N. B. Okelo**, Influence of performance contracting on performance in public institutions, a case of kisii University, kisii county, Kenya, *International Journal of Academic Studies*, 02[06]: (2016), 309-314.
 138. Nyaluke Kiprono Wesley, **N. B. Okelo** and Omolo Ongati, Characterizing (α, β) - normal transaloid operators in Hilbert spaces, *International Journal of Academic Studies*, 2(1): (2016), 12-20.

139. Sabasi Omaoro, R. K. Obogi and **N. B. Okelo**, On certain norms and numerical radius attainability conditions for normal operators, *International Journal of Academic Studies*, 2[1]: (2016), 21-27.
140. Andrew Ondiek Achola , E.M. W. Simatwa , T.M. O. Ayodo and **N. B. Okelo**, Attitude of boda boda operators towards primary school education in nyatike sub-county, *International Journal of Academic Studies*, 02[01]: (2016), 28-36.
141. Shadrack Ochieng Owitia, George Raburua and **N. B. Okelo**, Testing and implementation of e-leave management system in banking sector, *International Journal of Academic Studies*, 02[02]: (2016), 89-102.
142. Leonard Jabera, Maria Onyango and **N. B. Okelo**, Assessment of use of human resource procurement policies in procurement and management of human resources in Kenyan universities, *International Journal of Academic Studies*, 2(3): (2016) 144-150.

YEAR 2015

143. **N. B. Okelo**, Jean Ezeudub, Kezzy Omunwab and Sarah Ojukwub, Influence of human capital development on the quality of financial reports and project planning in non-governmental organizations, *International Journal of Academic Studies* , 01[01]: (2015), 27-45.
144. Sabasi Omaoro, J. Kerongo, R. K. Obogi and **N. B. Okelo**, On reflexivity, denseness and compactness of numerical radius attainable operators, *Bulletin of Advanced Scientific Research*, 1(1): (2015), 10-11.
145. Kangogo Willy, **N. B. Okelo** and Omolo Ongati, Properties of local automorphisms of commutative Banach algebras, *International Journal of Academic Studies*, 1(1): (2015), 7-13.
146. Nyongesa Abraham Matayo and **N. B. Okelo**, A review of geometrical properties of the numerical range and Davis-Wielandt shell of Hilbert space operators, *International Journal of Academic Studies*, 1(1): (2015), 14-26.
147. Nyongesa Abraham Matayo a and **N. B. Okelo**, Certain aspects of the numerical range and Davis-Wielandt shell of Hilbert space operators, *International Journal of Academic Studies*, 01[01]: (2015), 46-55.
148. P. O. Mogotu and **N. B. Okelo**, Reverse inequalities for the Normaloid operators, *International Journal of Academic Studies*, 01[01]: (2015), 56-59.
149. Nyaluke Kiprono Wesley, **N. B. Okelo** and Omolo Ongati , Certain inequalities for (α, β) - normal transaloid operators in Hilbert spaces, *International Journal of Academic Studies*, 01[01]: (2015) ,60-65.
150. **N. B. Okelo**, P. O. Mogotu and Sabasi Omaoro, Generalizations on contractive mappings in metric spaces, *Journal of Advanced Mathematics* 01[01] (2015), 1-3.
151. Mollen Akinyi Odero, Nancy Odero and **N. B. Okelo**, Minimization of confounding in research in medical sciences, *Acta Medica Scientia*, 02 [01]: (2015), 13-15.
152. **N. B. Okelo**, Peter Odhiambo Ogada, George Raburu and S. Liyala, Original Article Deployment of honeypots as proactive detection tools for monitoring cyber related incidences and their applications to information technology, *Bulletin of Advanced Scientific Research*, 01 [02]: (2015), 57-59.
153. **N. B. Okelo**, Peter Odhiambo Ogada, George Raburu and S. Liyala, Role of ICT and usability of Honeypots in Kenet member institutions in Western Kenya as proactive detection tools for monitoring cyber related incidences, *Bulletin of Advanced Scientific Research*, 01 [02]: (2015), 65-69.

154. **N. B. Okelo**, Characterization of the fitting class of subgroups of finite groups and applications to algebraic representation theory, *Bulletin of Advanced Scientific Research*, 01 [03]: (2015), 90-92.
155. Martin M. N. Musyoka, George Raburu, Castro Yoga and **N. B. Okelo**, Confidentiality and availability of security measures for information systems in universities in Kisumu and Siaya counties, Kenya, *International journal of research and development organisation* ,02 [08]: (2015), 56-64.
156. John Otieno Awino, Thomas Onyango and **N. B. Okelo**, Development and analysis of a mathematical model of carbon pollution level on Kenyan highways with huge embankments, *International journal of research and development organisation*, 02[09]: (2015), 11-34.
157. John Otieno Awino, Thomas Onyango and **N. B. Okelo**, A review of mathematical modeling of carbon pollution by vehicles on highways with huge embankments *International journal of research and development organisation*, 02[09]: (2015), 35-44.
158. D. O. Owego and **N. B. Okelo**, Relationship between the classical numerical range and essential numerical ranges, *Journal Of Math International journal of research and development organisation*, 02[09]: (2015), 45-52.
159. Andrew masibayi, O. S Cyprian and **N. B. Okelo**, Curvilinear co-ordinates and expression of motion equations from vector form to cylindrical co-ordinates, *International journal of research and development organisation* ,01[01]: (2015), 1-15.
160. Andrew masibayi, O. S Cyprian and **N. B. Okelo**, Expression of motion equations from vector form to spherical coordinates, *International journal of research and development organisation*, 01[01]: (2015), 16-22.
161. O. S Cyprian, Andrew masibayi, and **N. B. Okelo**, On the convexity of the joint essential numerical ranges, *International journal of research and development organisation*, 01 [01]: (2015), 23-28.
162. Jackline Bochere Barongo, Maria Anyango and **N. B. Okelo**, Influence of entrepreneurship on small and medium enterprises: A case study of SMES owned by females in Kisii Town, Kisii County, Kenya, *Current Research Journal of Commerce and Management*, 01 [01]: (2015), 29-30.
163. David Maranga Areri, Maria Anyango and **N. B. Okelo**, Effects of strategic planning on organizational efficiency of Tea factories in Kisii County-Kenya, *Current Research Journal of Commerce and Management*, 01 [01]: (2015), 16-19.
164. Nancy Odero¹, Mollen Akinyi Odero¹ and **N. B. Okelo**, Assessment of diarrheal diseases among children under the age of five and its impacts in health sciences, *Acta Medica Scientia*, 02 [01]: (2015), 21-23.
165. **N. B. Okelo**, Norms and Norm-Attainability of normal operators and their applications, *Proceedings of JKUAT Scientific Conference*, (2015), 83-86.
166. **N. B. Okelo** and Robert Obogi Karioko, On convergences of contractive maps in metric spaces, *Journal of Advanced Mathematics*, 01[01]: (2015), 10-14.
167. P.O Mogotu, J Kerongo, R. K Obogi¹ and **N. B. Okelo**, Certain properties of normaloid operators, *Journal of Advanced Mathematics*, 01[01]: (2015), 16-18.
168. I.O. Okwany and **N. B. Okelo**, On analytic functions and characterization of Schwarz Norms in Banach spaces, *Bulletin of Advanced Scientific Research*, 01 [03]: (2015), 99-101.
169. **N. B. Okelo**, Characterization of the fitting class of subgroups of finite groups and applications to algebraic representation theory, *Bulletin of Advanced Scientific Review*, Vol. 1, No. 3(2015), 90-92.
170. R. K. Obogi, J. N. Bosire, **N. B. Okelo** and Omolo Ongati, Conditions for Positivity of Operators in Non-unital C^* -algebras, *International Journal of Mathematical Analysis*, Vol. 9, No. 2 (2015), 91-94.

171. **N. B. Okelo**. Properties of Operator Systems in Hilbert Spaces. *Open Science Journal of Mathematics and Application*. Vol. 3, No. 5 (2015), 167-171.
172. J. O. Awino, Thomas Onyango and **N. B. Okelo**, Development and analysis of a mathematical model of carbon pollution level on kenyan highways with huge embankments, *Journal of Mathematics*, Vol. 2. No. 9 (2015), 11-34.
173. J. O. Awino, Thomas Onyango and **N. B. Okelo**, A review of mathematical modeling of carbon pollution by vehicles on highways with huge embankments, *Journal of Mathematics*, Vol. 2. No. 9 (2015), 35-44
174. Sabasi Omaoro, J. Kerongo, R. K. Obogi and **N. B. Okelo**, On reflexivity, denseness and compactness of numerical radius attainable operators, *Bulletin of Advanced Scientific Review*, Vol. 1, No. 1 (2015), 10-11.
175. **N. B. Okelo**, On Mathematical Operator Systems and applications to information technology, *IJEART*, Vol. 1 No. 1 (2015), 13-17.
176. M. K. Mukhwana, Romanus O. Otieno, Orwa O. George , Mung'atu K. Joseph and **N. B. Okelo**, On Minimax Risk of Non-Smooth Functional, its Asymptotic Properties and Polynomial Estimation, *Journal of Mathematics*, Vol. 1. No. 2 (2015), 58-64.
177. **N. B. Okelo**, P. O. Mogotu and Sabasi Omaoro, Generalizations on contractive mappings in metric spaces, *Journal of Advanced Mathematics*, Vol. 1 No. 1 (2015), 1-3.
178. P. O. Mogotu, J. Kerongo, R. K. Obogi, and **N. B. Okelo**, Certain properties of normaloid operators, *Journal of Advanced Mathematics*, Vol. 1 No. 1 (2015), 16-18.
179. **N. B. Okelo**, On cloud computing and applications to IT and economics, *IJEART*, Vol. 1 No. 1 (2015), 18-22.
180. **N. B. Okelo**, and R. K. Obogi, On convergences of contractive maps in metric spaces, *Journal of Advanced Mathematics*, Vol. 1 No. 1 (2015), 10-14.
181. I. O. Okwany and **N. B. Okelo**, Characterization of Schwarz Norms in Banach Spaces, *Journal of Mathematics*, Vol. 1. No. 2 (2015), 40-48.
182. I. O. Okwany, G. K. R. Rao, Alfred Manyonge and **N. B. Okelo**, New Schwarz Norms in $B(H)$, *Journal of Mathematics*, Vol. 1. No. 2 (2015), 49-56.
183. Moses Kololi Mukhwana, Romanus O. Otieno, Orwa O. George , Mung'atu K. Joseph and **N. B. Okelo**, On Chebyshev's Polynomials Of Non-Smooth Functional and its Nonparametric Estimation, *Journal of Mathematics*, Vol. 1. No. 2 (2015), 65-71.
184. **N. B. Okelo**, Properties of commutators and Schroedinger operators and applications to quantum computing, *IJEART*, Vol. 1 No. 1 (2015), 23-27.
185. R. K. Obogi, **N. B. Okelo** and Omolo Ongati, New Conditions for Positivity of Operators in Non-unital C^* -algebras, *Pure Mathematical Sciences*, Vol. 4, No. 2 (2015), 77-81.
186. Andrew Masibayi, O. S. Cyprian, and **N. B. Okelo**, Curvilinear co-ordinates and expression of motion equations from vector form to cylindrical co-ordinates, *Journal of mathematics, Vol.1, No. 1 (2015), 1-15*.
187. Andrew Masibayi, O. S. Cyprian, and **N. B. Okelo**, Expression of motion equations from vector form to spherical coordinates, *Journal of mathematics, Vol.1, No. 1 (2015), 16-22*.
188. O. S. Cyprian, Andrew Masibayi **N. B. Okelo**, On the convexity of the joint essential numerical ranges, *Journal of mathematics, Vol.1, No. 1(2015), 23-28*.
189. O. S. Cyprian, Andrew Masibayi **N. B. Okelo**, On the joint essential maximal numerical ranges, *Journal of mathematics, Vol.1, No. 1(2015), 29-33*.
190. I. O. Okwany and **N. B. Okelo**, On analytic functions and Characterization of Schwarz Norms in Banach Spaces, *Bulletin of Advanced Scientific Review*, Vol. 1, No. 3 (2015), 99-101.
191. **N. B. Okelo**, Peter Odhiambo Ogada, George Raburu, S. Liyala, Deployment of Honey pots as Proactive Detection Tools for Monitoring Cyber Related Incidences and

their application to information technology, *Bulletin of Advance Scientific Research*, Vol. 1, No. 2 (2015), 57-59.

192. **N. B. Okelo**, Peter Odhiambo Ogada, George Raburu, S. Liyala, Role of ICT and Usability of Honeypots in KENET Member Institutions in Western Kenya as Proactive Detection Tools for Monitoring Cyber Related Incidences, *Bulletin of Advance Scientific Research*, Vol. 1, No. 2 (2015), 65-69.
193. Jerotich Sirma, George Raburu and **N. B. Okelo**, Information security policy updates and information security breach incidents of SACCOS in Kenya, *JCSE*, Vol. 2, No. 3 (2015), Paper 15, ISSN 3785-0855.
194. Jackline Bochere Barongo, Maria Anyango and **N. B. Okelo**, Influence of entrepreneurship on small and medium enterprises: A case study of SMES owned by females in Kisii Town, Kisii County, Kenya, *Current Research Journal of Commerce and Management*, Vol. 1 No.2 (2015), 29-30.
195. David Maranga Areri, Maria Anyango and **N. B. Okelo**, Effects of strategic planning on organizational efficiency of tea factories , Kisii County, Kenya, *Current Research Journal of Commerce and Management*, Vol. 1 No.2 (2015), 16-19.
196. Jerotich Sirma, George Raburu and **N. B. Okelo**, Relationship between industry best practices and information security breach incidents of SACCOS in Kenya, *JCSE*, Vol. 2, No. 3 (2015), Paper 16, ISSN 3785-0855.
197. Jerotich Sirma, George Raburu and **N. B. Okelo**, Security breach incidences of SACCOS with or without security policy with a broad scope: a case of SACCOS in Kenya, *JCSE*, Vol. 2 No. 3 (2015), Paper 19, ISSN 3785-0855.
198. Peter Odhiambo Ogada, George Raburu, S. Liyala and **N. B. Okelo**, Deployment of Honeypots as Proactive Detection Tools for Monitoring Cyber Related Incidences, *JCSE*, Vol. 2, No. 6 (2015), 59-69.
199. Peter Odhiambo Ogada, George Raburu, S. Liyala and **N. B. Okelo**, Usability of Honeypots in KENET Member Institutions in Western Kenya as Proactive Detection Tools for Monitoring Cyber Related Incidences, *JCSE*, Vol. 2, No. 6 (2015), 70-90.
200. Martin M. N. Musyoka, George Raburu, Castro Yoga and **N. B. Okelo**, Assessment of Security Measures in Universities for Enforcement of Integrity of Information Systems in Kisumu and Siaya Counties, Kenya, *JCSE*, Vol. 2, No. 6 (2015), 49-58.
201. Martin M. N. Musyoka, George Raburu, Castro Yoga and **N. B. Okelo**, Confidentiality and availability of Security Measures for Information Systems in Universities Kisumu and Siaya Counties, Kenya, *JCSE*, Vol. 2, No. 8 (2015), 56-64.
202. Mollen Akinyi Odero, Nancy Odero and **N. B. Okelo**, Minimization of confounding in research in medical sciences, *Acta Medica Scientia*, Vol. 2, No. 1 (2015), 13-15.
203. Nancy Odero, Mollen Akinyi Odero and **N. B. Okelo**, Assessment of diarrheal diseases among children under the age of five and its impacts in health sciences, *Acta Medica Scientia*, Vol. 2, No. 1 (2015), 21-23.

YEAR 2014

204. **N. B. Okelo**, Omolo Ongati and Obogi Robert Karioko, Norm inequalities for positive elementary operators and entanglement of states, *JGRMA*, Vol.2 No. 5 (2014), 18-26.
205. **N. B. Okelo**, Omolo Ongati and Obogi Robert Karioko, Norm inequalities of norm-attainable operators and their orthogonal extensions, *JGRMA*, Vol.2 No. 5 (2014), 1-9.
206. **N. B. Okelo**, Omolo Ongati and Obogi Robert Karioko, Projective norms and convergence of norm-attainable operators, *JGRMA*, Vol.2 No. 5 (2014), 10-16.

207. A. C. Winda, P. O. Oleche and **N. B. Okelo**, Odd roots of $(\alpha, \alpha + 1)$ -type R operators, *JGRMA*, Vol.2 No. 5 (2014), 27-37.
208. Titus J. O. Aminer and **N. B. Okelo**, *Wilson-Theta Algorithm Approach to solution of Dynamic Vibration Equations*, *International Journal of Mathematics and Soft Computing*, Vol.4, No.1 (2014), 7-15.
209. P. G. Khumba and **N. B. Okelo**, *A review of operator theory in quantum mechanics: a case of microwaves, electricity and magnetism*, *Evolving Trends in Engineering and Technology*, Vol. 1 No. 1(2014), 01-17.
210. **N. B. Okelo**, Properties of complete metric spaces and their applications to computer security, information and communication technology, *Evolving Trends in Engineering and Technology*, Vol. 1 No. 1(2014), 28-36.
211. G. S. Duggal and **N. B. Okelo**, Generalised sum construction of automorphic BIBDS and their applications in experimental designs and technology, *Advanced Trends in Mathematics*, Vol. 1 No. 1(2014), 48-60.
212. G. S. Duggal and **N. B. Okelo**, Sum construction of automorphic BIBDS and their applications in experimental designs, *Advanced Trends in Mathematics*, Vol. 1 No. 1(2014), 1-16.
213. G. T Rawal and **N. B. Okelo**, On the Cauchy property in Metric spaces, *Advanced Trends in Mathematics*, Vol. 1 No. 1(2014), 40-47.
214. Walter Arthur Nondi, Thomas Onyango, S. N. Muthiga and **N. B. Okelo**, *Determination of Solutions Of One-Dimensional Transient Heat Transfer Problem By Dual Reciprocity Boundary Element Method*, *IJMIE*, Vol. 4 , No. 2 (2014) , 96-106.
215. Walter Arthur Nondi, Thomas Onyango, S. N. Muthiga and **N. B. Okelo**, *The Dual Reciprocity Boundary Element Method And Numerical Solutions Of One-Dimensional Transient Heat Transfer Problem*, *IJESR*, Vol. 2, No. 2 (2014), 26-36.
216. F. R. Kennedy, T. G. Kiuna and **N. B. Okelo**, *Determination of velocity and temperature in an unstable surface*, *JGAR*, Vol. 1 No. 2 (2014), 188-199.
217. F. R. Punjal, T. G. Rawal and **N. B. Okelo**, *Characterizations in metric spaces and applications to hardware engineering*, *JGAR*, Vol. 1 No. 2 (2014), 200-211.
218. John P. Akello, C. Rwenyo, Sabasi Omaoro, P. O. Mogotu and **N. B. Okelo**, On characterization of posinormal operators and their applications in quantum mechanics, *JGAR*, Vol. 1 No. 2 (2014), 212-221.
219. **N. B. Okelo** and Mollen Akinyi Odero, *A review of the significance of ICT in pharmaceutical and Healthcare systems*, *JOBPCR*, Vol. 1 No. 1 (2014), 32-38.
220. T. K. Motsumi, and **N. B. Okelo**, *A mathematical review of Automorphisms for BIBD designs and applications*, *IJASM*, Vol. 1, No. 2 (2014),28-32.
221. J. P. Patel and K. R. Sundra and **N. B. Okelo**, Mathematical analysis of resilience during the global financial fragility, *IJASM*, Vol. 1, No. 2 (2014), 33-35.
222. **N. B. Okelo**, P. O. Mogotu, Sabasi Omaoro and C. O. Rwenyo, On semigroup of operators and dynamical systems, *IJASM* Vol. 1, No. 2 (2014), 36-39.
223. *Beatrice Akinyi Miseda and N. B. Okelo*, Assessment of the Level of Community Participation in Marketing of Njaa Marufuku Kenya Products and Sustainability of their Food Security Projects in Kisumu West County, Kenya, *IJPSS*, Vol. 4 No. 12 (2014), 74-85.

224. *Beatrice Akinyi Miseda and N. B. Okelo*, Financing and Community Participation in Njaa Marufuku Kenya Projects In Kisumu West County, Kenya, , *IJPSS*, Vol. 4 No. 12 (2014), 86-101.
225. Margaret Ulaka Apondi, **N. B. Okelo** and Moses Oginda, *Assessment of the Contribution of Income Generating Activities On Performance of Maseno University – Kenya*, , *IJMT*. Vol. 4(8) (2014), 45-56.
226. Margaret Ulaka Apondi, **N. B. Okelo** and Moses Oginda, *Role Of Income Generating Activities On Performance Of Human Resource And Physical Development Of Maseno University – Kenya*, *IJMT*. Vol. 4(8) (2014), 57-73.
227. Tom Mboya Awiti, Adrian Mukhebi, Maria Onyango and **N. B. Okelo**, *Challenges and opportunities of youth enterprise development fund in employment creation in Kisumu west sub-county*, *IJMT*. Vol. 4(3) (2014), 123 –136.
228. **N. B. Okelo** and J. O. Agure, *New characteristic conditions for amenability of Banach algebras and their duals*, *Quaestiones Mathematicae*, 37 (2014), 1-12.

YEAR 2013

229. **N. B. Okelo**, J. O. Agure and P. O. Oleche, *Various Notions Of Orthogonality in Normed Spaces*, *Acta Mathematica Scientia*, Vol.33 No. 5 (2013), 1387-1397 .
230. O. T. Mewomo and **N. B. Okelo**, *On Approximate Character Amenability of Banach Algebras*, *JNMS*, Vol. 32, (2013), 303-315.
231. **N. B. Okelo**, *The norm-attainability of some elementary operators*, *Applied Mathematics E-Notes*, Vol.13 (2013), 1-7.
232. **N. B. Okelo**, J. O. Agure and P. O. Oleche, *Strict characterizations for amenability in Banach algebras and certain subclasses*, *International Journal of Mathematics and Soft Computing*, Vol.3, No.1 (2013), 1 - 11.
233. **N. B. Okelo**, J. O. Agure and P. O. Oleche, *Certain conditions for norm-attainability of elementary operators and derivations*, *International Journal of Mathematics and Soft Computing*, Vol.3, No.1 (2013), 53 - 59.
234. **N. B. Okelo**, J. O. Agure and P. O. Oleche, *On norm-attainability of elementary operators*, *International Journal of Science Research and Technology*, Vol.1, No.1 (2013), 6-10.
235. P. A. Onyango, W. H. Odiwuor, J. O. Agak and **N. B. Okelo**, *Perception of teachers and students on corporal punishment in secondary schools in Bondo district, Kenya*, *Int. Journal of Physical and Social Sciences*, Vol. 3 No. 5 (2013), 114-132.
236. P. A. Onyango, W. H. Odiwuor, J. O. Agak and **N. B. Okelo**, *Perception of Deputy Principals and Board of Governors on corporal punishment in secondary schools in Bondo district, Kenya*, *Int. Journal of Physical and Social Sciences*, Vol. 3 No. 5 (2013), 133-149.

YEAR 2012

237. **N. B. Okelo** and J. O. Agure, *Orthogonality of elementary operators in normed spaces and their applications*, *SAMSA 2012 mathematics conference proceedings*, (2012), 120 - 132.
238. **N. B. Okelo** and J. O. Agure, *Conditions for norm-attainability of elementary operators and their applications to quantum mechanics*, *International conference*

- proceedings of Jomo Kenyatta University of Agriculture and Technology, (2012), 776 - 781.
239. D. B. Oduor, N. Omolo Ongati, **N. B. Okelo** and Silas N. Onyango, *Estimation of market volatility- A case of Logistic Brownian Motion*, IJMT. Vol. 2(1) (2012), 32 – 48.
240. Henry Onderi, Getrude Malala and **N. B. Okelo**, *Mathematics education and use of mathematical language in enhancing understanding of mathematics in secondary schools*, IJPSS. Vol. 2(4) (2012), 135 – 151.
241. **N. B. Okelo** and O. T. Mewomo, *Boundedness of continuous functionals in sequence spaces*, TheSciTech Journal of Science and Technology, Vol. 1(1) (2012), 61-66.
242. **N. B. Okelo** and T. G. Motsumi, *Mathematical applications in image processing and analysis: A survey on medical imaging*, TheSciTech Journal of Science and Technology, Vol. 1(1) (2012), 67-73.
243. **N. B. Okelo**, S. K. Kisengo and O. T. Mewomo, *Orthogonality of order bounded finite rank operators in Banach spaces*, TheSciTech Journal of Science and Technology, Vol. 1(1) (2012), 74-80.
244. **N. B. Okelo** and S. K. Kisengo, *On the numerical range and spectrum of normal operators on Hilbert spaces*, TheSciTech Journal of Science and Technology, Special Issue, Vol. 1, (2012), 59-65.

YEAR 2011

245. **N. B. Okelo** and J. O. Agure, *A two-sided multiplication operator norm*, *Gen. Math. Notes*, Vol. 2, No. 1, (2011), 18-23.
246. **N. B. Okelo**, *On Dvoretzky's theorem and Norms of elementary operators*, *Int. Journal of pure and applied Sciences and technology*, Vol 2. NO. 2 (2011), 46-53.
247. F. O. Odundo and **N. B. Okelo**, *Deterministic Model for Tuberculosis and HIV/AIDS*, *Int. Journal of Math. Archive*, Vol. 2, no. 5 (2011), 710 - 715.
248. F. O. Odundo and **N. B. Okelo**, *Determination of TB induced death rate for HIV + and HIV- people*, *Int. Journal of Math. Archive*, Vol. 2, no. 5 (2011), 733 – 739.
249. F. O. Odundo and **N. B. Okelo**, *Relationship between detection rate of tuberculosis in HIV positive and HIV negative individuals*, *Int. Journal of Math. Archive*, Vol. 2, no. 8 (2011), 1262 – 1265.
250. **N. B. Okelo**, *A survey of developments in operator theory on various classes of operators with applications in quantum physics*, *Global journal of Pure and Applied Sci. and tech.* Vol. 1 (2011), 1-9.
251. **N. B. Okelo**, *Investigating saline intrusion in the coastal region of Mombasa, Kenya*, *Global journal of Pure and Applied Sci. and tech.* Vol. 1, (2011), 18-27.
252. T. J. O Aminer, **N. B. Okelo**, N. Omolo Ongati and M. E. Oduor, *Numerical Solution of Dynamic Vibration Equations*, *Int. Journal of Math. Archive*, Vol.2, No.9, (2011), 1489-1494.
253. **N. B. Okelo** and J. K. Toure, *Analysis of diversity and drug susceptibility profiles of yeast isolates and their biofilm production characteristics among HIV and AIDS patients presenting with TB*, *BCAIJ Vol 5(6) (2011)*, 323-330.
254. **N. B. Okelo** and J. K. Toure, *A patent biochemical analysis of characteristics of TB patients- a survey on clinical and demographic features*, *BCAIJ Vol 5(6) (2011)*, 331-336.
255. **N. B. Okelo** and J. K. Toure, *Complex determination of immunogenicity of Mycobacterium-Proactive and genetic overview and analysis*, *BCAIJ Vol 5(6) (2011)*, 346-351.

256. **N. B. Okelo**, *Investigating mathematical model for saline intrusion in the coastal region of Mombasa, Kenya*, International Journal of Research and Reviews in Applicable Mathematics and Computer Science. Vol. 1, (2011), 32 - 41.
257. **N. B. Okelo**, *A survey of developments in operator theory on various classes of operators with applications in quantum physics II*, International Journal of Research and Reviews in Applicable Mathematics and Computer Science. Vol. 1, (2011), 1-8.

YEAR 2010

258. **N. B. Okelo**, J. O. Agure and D. O. Ambogo, *Norms of elementary operators and characterization of norm-attainable operators*, Int. Journal of Math. Analysis, Vol. 4, no. **24** (2010), 1197-1204.
259. **N. B. Okelo**, M. O. Okongo and S. A. Nyakiti, *On Projective Tensor Norm and Norm-Attainable α -Derivations*, Int. J. Contemp. Math. Sciences, Vol. 5, no. **40** (2010), 1969-1975.
260. **N. B. Okelo**, D. O. Ambogo and S. A. Nyakiti, *On the Constants $C(\Omega)$ and $C_s(\Omega)$ of a C^* -algebra and Norms of Derivations*, International Mathematical Forum, Vol. 5, no. **53** (2010), 2647-2653.

PUBLISHED BOOKS

1. **Okelo B.**, *Advances in Operator Theory and Applications*, The Bloom Publications, 2023, *to appear*
2. **Okelo B.**, Munlev C. and Miletto J., *Advanced global analysis*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-847340416.
3. **Okelo B.**, Boston S. and Minchev D., *Advanced mathematics*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-847349365.
4. **Okelo B.**, Toure D., and Arvios C., *Education in developing countries*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-847322665.
5. **Okelo B.**, Davison B. and Daniel L., *Advanced analysis*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-847340386.
6. Pamela Onyango, Wycliffe Odiwuor and **Benard Okelo**, *Educational psychology*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-659-24483-4.
7. Ombese S. Nyaboke, George Juma and **Benard Okelo**, *Educational Issues in Africa*, LAP Lambert Academic Publishing, Germany, 2012. ISBN: 978-3-659-26929-5.
8. **Okelo B.**, *A concise Introduction to Tensor Products and Elementary operators*, LAP Lambert Academic Publishing, Germany, 2011. ISBN: 978-3-8465-1511-2.
9. Aminer T. and **Okelo B.**, *Differential equations and applications*, LAP Lambert Academic Publishing, Germany, 2011. ISBN: 978-3-8465-2609-5.
10. Kisengo K. S. and **Okelo B.**, *Operator theory: Properties of Hilbert space operators*, LAP Lambert Academic Publishing, Germany, 2011. ISBN: 978-3-8465-3252-2.
11. Odundo F. O., **Okelo B.** and Simwa R., *Advanced applied statistics*, LAP Lambert Academic Publishing, Germany, 2011. ISBN: 978-3-8465-3451-9.
12. Oduor B. D., **Okelo B.**, *Financial mathematics*, LAP Lambert Academic Publishing, Germany, 2011. ISBN: 978-3-8465-3398-7.

RESEARCH FUNDS ATTRACTED

GRANTS, SCHOLARSHIPS, FELLOWSHIPS AND AWARDS

1. National Research Fund(NRF) PhD Research Grant Awards for the financial year 2020/2021

(i).**Title:** Orthogonality and Boundary of Numerical Range of Algebraic Elementary operators

Student : James Njoroge Mwangi, JOOUST, Kenya (**KES 880,425**).

(ii).**Title:** On Range-Kernel Orthogonality of Elementary Operators in Normed Spaces

Student : Otae Lameck Wasonga, JOOUST, Kenya (**KES 856,260**).

(iii).**Title:** Norm Preserving Conditions for Unital C*-Algebra Automorphisms

Student : Abraham Nyongesa, Kibabii University, Kenya (**KES 800, 000**).

2. National Research Fund(NRF) MSC Research Grant Awards for the financial year 2020/2021

(i).**Title:** Characterization of Quasinilpotent Operators Perturbed by Infinitesimal Summands of Orthogonal Projections

Student : Hussein Ali, JOOUST, Kenya (**Amount to be announced**).

(ii).**Title:** Spectral Characterization of Jordan Homomorphisms on Semisimple Banach Algebras

Student : Sharon Rono, JOOUST, Kenya (**Amount to be announced**).

3. Dr. Benard Okelo, TWAS-DFG Postdoctorate Research Grant, 2018 (10, 000 EURO=KES 1,200,000)

Title: Characterization of normal elements in C*-algebras, University of Muenster, Germany, Sept-Dec, 2018.

4. Dr. Benard Okelo-Co-Investigator(Principal Investigator-Simeo Otieno), JOOUST Small Research Grant, 2018 (KES 82,721)

Title: Enhancing Financial Management for Service Delivery at County Governments in Kenya

5. L' OREAL-UNESCO for Women in Science in Sub-Saharan Africa Regional Fellowship, 2017

Title: Characterization of Similarity Orbits of Invariant Subspaces of Norm-Attainable Operators

Student : Priscah Omoke , JOOUST, Kenya (**5000EURO= KES645, 000**).

6. AMMSI PhD Scholarship 2017

Title: Characterization of Similarity Orbits of Invariant Subspaces of Norm-Attainable Operators

Student : Priscah Omoke , JOOUST, Kenya (US\$1000= KES100, 000).

7. AMMSI PhD Scholarship 2016

Title: On compact operators whose norms are eigenvalues

Student : Julia Nonga, JOOUST, Kenya (US\$1000= KES100, 000).

8. National Research Fund(NRF) PhD Research Grant Awards for the financial year 2016/2017

(i).Title: On compact operators whose norms are eigenvalues

Student : Julia Ndonga, JOOUST, Kenya (KES 1,252,950).

(ii).Title: Orthogonality of finite rank generalized derivations

Student : Collins Kaunda, JOOUST, Kenya (KES 1,166,600).

(iii).Title: Norms and numerical radii inequalities induced by orthogonal projections

Student : Isaac Okwany, JOOUST, Kenya (KES 981,000).

(iv). Title: Characterization of Similarity Orbits of Invariant Subspaces of Norm-Attainable Operators

Student : Priscah Mogotu, JOOUST, Kenya (KES 1,190,930).

(v).Title: Mathematical Modelling of Airflow and Carbon Pollution by Vehicles on Roads with Embankments in the Absence and Presence of Forced Convection

Student : John Awino, JOOUST, Kenya (KES 890,200).

9. National Research Fund(NRF) MSc Research Grant Awards for the financial year 2016/2017

(i).Title: Bilateral shifts and spectrum of compact operators

Student : Moses Nyabola Odhiambo , JOOUST, Kenya (KES 228,000).

(ii).Title: Gateaux derivatives and orthogonality of normal derivations in C_p -classes

Student : Benard Owino , JOOUST, Kenya (KES 308,000).

(iii).Title: Norms of inner derivation induced by norm-attainable operators

Student : Maurice Oyake , JOOUST, Kenya (KES 290,000).

(iv).Title: Norms and Maximal numerical range of elementary operators

Student : Boaz Okello , JOOUST, Kenya (KES 237,000).

(v).Title: On numerical ranges and spectra of convexoid operators

Student : Jacqueline Otieno , JOOUST, Kenya (KES174, 625).

(vi).Title : On numerical ranges and spectra of normal operators

Student : Samwel Asamba , Kisii University, Kenya (KES 280,000).

10.NACOSTI Innovations Research Grant Awards for the financial year 2015/2016

Principal Investigator: Dr. Benard Okelo, JOOUST, Kenya

Title of Innovation: An Electronic Abacus for Effective and Efficient Teaching of Mathematics to Learners with Visual Impairment (KES 500,000).

11.NACOSTI PhD Research Grant awards for the financial year 2015/2016

(i).Title: Norm Estimates for Norm-Attainable Operators

Student : Jeremiah Kinyanjui, JOOUST, Kenya **(KES 500,000)**

(ii).Title: Automorphisms of Unitary Groups of $B(H)$ and Norm-Attainable Elementary Operators

Student : Esther Otieno, JOOUST, Kenya **(KES 400,000)**

(iii).Title: Characterization of the essential numerical range and Wiedtland shells of Hilbert space operators

Student : Dancun Owego, JOOUST, Kenya **(KES 400,000)**

(iv).Title: Circularity of Numerical Ranges of Isometrically Bounded Operators on Hilbert Spaces

Student : Joel Barasa, Kibabii University, Kenya . **(KES 500,000)**

12.NACOSTI Msc Research Grant awards for the financial year 2015/2016

(i).Title: Norms of derivations associated with orthogonal idempotents and unitary operators

Student : Moses Ochola, JOOUST, Kenya **(KES 115,000).**

(ii).Title: On norm preserving conditions for local automorphisms of commutative Banach algebras

Student : Willy Kangogo, JOOUST, Kenya **(KES 110,000).**

(iii).Title: On norms and numerical Radii inequalities for (α,β) -normal transaloid operators

Student : Wesley Nyaluke, JOOUST, Kenya **(KES 120,000).**

13. 2nd West African Women in Mathematics Pre-Conference School in Mathematical Finance, University of Ibadan, 18-23, June, 2018, Partial grant **(1000 EURO)**
14. African Mathematical School travel grant by CIMPA for two weeks to Angola, 15th -26th January, 2018. **(450 EURO)**
15. Volkswagen Foundation Fellowship fund to participate in Introduction to Orthogonal Polynomials and Applications Workshop in Cameroon, 5th -12th October, 2018.**(3500 EURO)**
16. Volkswagen Foundation Fellowship fund to participate in Computer algebra and applications Research school in Cameroon, 6th -13th October, 2017.**(3500 EURO)**
17. Research school travel grant by CIMPA for two weeks to Senegal, 19th Nov -2nd December, 2017. **(750 EURO)**
18. AARMS research grant to carry out Post Doctoral Research At The University Of Prince Edward Island, Canada From 3rd July -28th July, 2017 **(US\$ 5000)**
19. Humboldt Travel grant to attend SOCA workshop and conference at AIMS Ghana 14-19th August , 2017
20. ICTP research grant to attend ICTP-EAUMP School On Modern Functional Analysis 19 June - 7 July 2017 Nairobi, Kenya **(700 EURO)**
21. Horst Koller Fellowship to attend 66th Lindau Nobel Laureates Meeting dedicated to Physics, Lindau Germany 26th June -1st July, 2016 **(5000 EURO)**
Link: <https://thenerveafrica.com/5638/three-young-african-scientists-selected-participate-lindau-nobel-laureate-meeting-germany/>
22. Research school travel grant by CIMPA for two weeks to African Institute for Mathematical Sciences, Cape Town, **South Africa**, 19th July-31st July, 2015 **(700 EURO)**

23. African Union/**The World Academy of Sciences (AU-TWAS) Young Scientists Awards** Winner 2013. **(US\$ 5000)**
24. Travel grant to Minneapolis- Baltimore, USA to attend SIAM mathematics conference, June , 2014. **(US\$ 1000)**
25. Travel grant to Stanford University, USA to attend SIAM mathematics conference, June , 2015. **(US\$ 800)**
26. Research school travel grant by CIMPA for two weeks to Meknes, Morocco 8th -17th September, 2014. **(900 EURO)**
27. Research school travel grant by CIMPA for two weeks to Abidjan, Ivory Coast, 17th -28th March, 2014. **(800 EURO)**
28. Research school travel grant by CIMPA for two weeks to African Institute for Mathematical Sciences, Cape Town, **South Africa**, 22nd July-2nd Aug, 2013. **(900 EURO)**
29. CIMPA travel grant to attend SAMSA 2012 conference in Lilongwe **Malawi**. **(900 EURO)**
30. DAAD In-country PhD Scholarship for a period of 3 years, 2011- 2013. **(Tuition fee + Ksh. 31,000 monthly for 3 years)**
31. Research Grant by National Council for Science and Technology of Kenya (NCST) for 3 years. 2010-2013. **(Ksh. 1. 2 Million)**
32. Research Fellowship grant by DAAD for 2 months in **Germany**, May-June, 2013. **(2000 EURO)**
33. Visiting Research fellowship grant by AIMS for 3 months to AIMS **South Africa**. Feb-April, 2012. **(18000 RAND)**
34. CIMPA Research School travel grant by ICTP for two weeks to University of Buea, **Cameroon**. 2nd-13th May, 2011. **(900 EURO)**

PAPERS PRESENTED IN WORKSHOPS, **SEMINARS AND CONFERENCES**

1. The First Edition of the Namibian International Spring School in Mathematics Windhoek, Namibia from October 23-28, 2022.
2. The 25th Internet Seminar, Sarlino, Italy, October 2021-June 2022.
Title: On Spectral theory for Operators and Semigroups.
3. Kirinyaga University 5th Annual International Virtual Conference, 24-25, March 2022
Title: On Measure Preserving Transformations and Random Interlacements
4. 14th Virtual International Conference at Egerton University, 23rd-25th March, 2022.
Title: On Lipschitz Functions and Optimization in Hilbert Spaces
5. Wellcome 2021 Virtual Hackathon 17th December 2021
6. Southern Africa Mathematical Sciences Association (SAMSA) Virtual conference, from 22nd - 24th November, 2021.
Title: Characterization of norm-attainable functionals in Banach Spaces.
7. Kirinyaga University, 6th Alexander von-Humboldt-Kenya “kollegs” conference, 6th-8th October, 2021
Title: Enhancement of Capacity Building for People with Special Needs through Utilization of Abacus as a Mathematical Tool

8. YMC*A 2021 Virtual conference, at University of Muenster, August 2-13, 2021
Title: Careers in operator algebras and surrounding areas (round table panelist).
9. Strathmore University, Strathmore International Mathematics Conference
Date: 28th June 2021-2nd July 2021.
Title: Notions of Norm-attainability and Orthogonality in Banach Spaces
10. Mathematics Department, University of Rwanda, Monthly seminars on 19-05-2021
Title: On properties of elementary operators and applications
11. 14th International Multi-disciplinary Virtual Conference, Masinde Muliro University of Science And Technology, 19-21 May, 2021.
Title: On Semi Continuous Functions and Optimization in Hilbert Spaces
12. Kirinyaga University 4th Annual International Virtual Conference, 24-25, March 2021
Title: Properties of Operators in Norm-Attainable Algebras and their applications
13. Southern Africa Mathematical Sciences Association (SAMSA) Virtual conference, from 23rd -28th November, 2020.
Title: Fixed Point Approximations for Norm-Attainable Operators.
14. 13th Virtual International Conference at Egerton University, 25th-27th October, 2020.
Title: Optimization in Hilbert Spaces
15. 3rd edition of the Stochastic and Applications, Research and Training (START) workshop at AIMS Ghana, Accra, 16th to 22nd February, 2020.
Title: optimization in Hilbert spaces and Applications to Stochastic Control.
16. Probability, Analysis, and Applications (PAA) workshop, African Institute for Mathematical Sciences (AIMS), Ghana from 30th September to 4th October, 2019.
Title: Application of Functional Analysis to optimal control.
17. Southern Africa Mathematical Sciences Association (SAMSA) 2019 conference, Malawi Sun Hotel in Blantyre, Malawi, from 25-28 November 2019.
Title: Convex optimization in Hilbert spaces
18. 5th International Strathmore University Mathematics Conference, 12-16th, August, 2019
Title: On Norm-attainability and orthogonality of elementary operators.
19. Maseno University workshop 5th-9th August, 2019.
Title: Teaching and assessment of 1st year mathematics courses using digital technologies
20. Masinde Muliro University of Science and Technology conference in Biophysics, 3rd-4th July, 2019.
Title: Exploring biophysics diversity for sustainable industrial and economic development.
21. Moi University DAAD Training workshop on, *Scientific Data Collection, Data Analytics and Quality Report Writing*, 9th-10th May, 2019 at Sirikwa Hotel in Eldoret, Kenya.

22. Machakos University 2nd International Annual Conference, 24-26th April, 2019, Machakos University Hotel and Conference Centre.
Title: On Characterization of Classes of Hilbert Space Operators and Applications
23. 2nd JOOUST International Conference, 26th Feb-1st March, 2019. Grand Royal Swiss Hotel, Kisumu- Kenya
Title: Certain Properties of Hilbert Space Operators
24. Institute of Mathematics, University of Muenster, Germany, 6-11-2018, Oberseminar C*-algebras. Link:
https://www.unimuenster.de/FB10/Service/show_article.shtml?id=7290&brettid=48
Title: Elementary operators on C*-algebras.
25. Introduction to Orthogonal Polynomials and Applications Workshop in at AIMS, Cameroon, 5th -12th October, 2018
Title: Orthogonal Polynomials related to normal operators
26. 2nd West African Women in Mathematics Pre-Conference School in Mathematical Finance, University of Ibadan, 18-27, June, 2018.
Title: *Portfolio Optimization of Convex Cost Functions under Certain Constraints*
27. 12TH International conference, Egerton University, Kenya, 27-29, March, 2018.
Title: *Characterization of Self-Adjoint and Norm-Attainable Operators on Banach Spaces and their Applications.*
28. Kenya DAAD scholars Association conference and Annual Meeting, Sarova Panafric Hotel, Nairobi, 14-15, June, 2018.
Title: *State of the art at DAAD JOOUST chapter, 2017-2018.*
29. CIMPA Research School on Complex Geometry and Applications, Ziguinchor -Senegal, November 20th -December 2nd, 2017.
Title: *Tracial Geometric mean of Complex matrices.*
30. The 12th JKUAT Scientific, Technological and Industrialisation Conference and Exhibitions, Kenya, 16th -17th November, 2017.
Title: *Relationship between Normal and Norm-Attainable Operators on Banach Spaces and their Applications.*
31. An Introduction to Computer algebras and Applications Workshop, at AIMS, Douala-Cameroon from 6th-13th October, 2017.
Title: *Norms of Elementary operators and Implicitization of Hypersurfaces via predicted support.*
32. Summer School at the University of Prince Edward Island, Canada on 27th July, 2017.
Title: *Infinitesimal generators in Stochastic Optimal Control and Applications.*
33. 1st International Conference at Kirinyaga University, Kenya From 28th -30th, June, 2017.
Title: *Characterizations of Normal Operators in Banach Algebras.*
34. Lake Victoria Basin Conference from 15th -16th February, 2017, Mwanza Tanzania
Title: *Mathematical Model for Eradication of Water Hyacinth from Lake Victoria and its Productive Utilization for Socio-Economic Development*
35. Kenya DAAD scholars Association conference and Annual Meeting, Kisumu Hotel, Kisumu, 2017
Title: *State of the art at DAAD JOOUST chapter, 2016-2017.*

36. 4th International Mathematics Conference at Strathmore University, Kenya From 19th - 23rd June, 2017.
Title: *On Self Adjoint Norm-Attainable Operators*
37. ICTP-EAUMP School on Modern Functional Analysis 19 June - 7 July 2017 Nairobi, Kenya.
Title: *On norms of operators on Complex Hilbert Spaces.*
38. 11th International Conference at Egerton University, 29th-31st March, 2017.
Title: *Characterizations of Properties of Normal Operators on Hilbert Spaces.*
39. 1st International Interdisciplinary Conference Kirinyaga University, Kenya June 29th-30th, 2017
Title: *Characterizations of Normal Operators in Banach Algebras*
40. International Scientific 66th Lindau Nobel Laureate Meeting, Germany From 26th June-1st July, 2016.
Title: *Hilbert spaces and Schrodinger operators*
41. The Technical University Of Kenya For 3 Days From 23rd -25th February, 2016.
Title: *On Positivity and Norms of Norm-Attainable Normal Operators and their Applications to Quantum Mechanics And Computing.*
42. 11th International Conference at JKUAT 10th -11th November, 2016.
Title: *Hyponormal Operators in Banach Algebras*
43. International Conference on Indigenous Knowledge Systems for Sustainable Development, Kisii University, Kenya 12th – 15th July 2016.
Title: *Characterization Of Certain Properties Of Normal Operators in C*-Algebras*
44. International CIMPA Research School at AIMS South Africa 19th -31st July, 2015.
Title: *Characterization Of The Fitting Class Of Subgroups Of Finite Groups And Applications To Algebraic Representation Theory*
45. 10th International Conference at JKUAT 12th -13th November, 2015.
Title: *Norms and Norm-Attainability of Normal Operators and their Applications*
46. 1st International conference at JOOUST, Kenya, 24th -26th June 2015
Title: *Tensor Products and Norms of Norm-Attainable Self-Adjoint Operators in C*-Algebras*
47. 3rd Strathmore International Mathematics Conference From 3rd -7th , August, 2015
Title: *Properties of Normally Represented Elementary Operators and Tensor Products in Hilbert Space Operator Systems*
48. 3rd Electronic International Interdisciplinary Conference, September, 1st-5th, 2014 (www.eiic.cz).
Title: *Certain Properties of transformations in Banach spaces*
49. Dedan Kimathi University of Science and Technology conference, 4th -7th November, 2014.
Title: *On Properties of Normal Operators and their applications to Quantum Mechanics*
50. Maasai Mara University Conference, 11th -14th November, 2014.
Title: *Suitability of Fully Homomorphic Encryption for Securing Cloud Computation*
51. 2nd international virtual Scientific Conference 2014 (SCIECONF) held at (www.scieconf.com) during 9th-13th, June 2014.
Title: *Various notions of sequences of transformations in Banach spaces*
52. Maasai Mara University conference, 11-14 November, 2014.
Title: *Conditions for positivity of operators in non-Unital C*- algebras*

53. Maasai Mara University Conference, 11-14 November, 2014.
Title: On characterization of posinormal operators and their applications in quantum mechanics
54. University of Eastern Africa, Baraton Annual Interdisciplinary Research Conference 15th -17th April, 2014.
Title: *Various Notions of Sequences of Transformations in Banach Spaces and their Applications to Data Security, Networks and Dynamical Systems*
55. Interdisciplinary Conference, June 2014, Maseno University, Kenya.
56. **Title:** *Properties of complete metric spaces and their applications to computer security, information and communication technology.*
57. Institute of Mathematics Seminar, University of Muenster, Germany, Tuesday 18th July, 2013.
Title: *Properties of elementary operators and their applications*
58. International mathematics SAMSA 2012 conference in Lilongwe, Malawi from 26th -29th November, 2012.
Title: *Orthogonality of elementary operators in normed spaces and their applications*
59. 12th HAK workshop on sustainable horticultural production in the tropics, Bondo University College, Bondo-Kenya, December, 4th – 7th, 2012.
Title: *Assesment of the role of mathematical sciences and their enhancement in horticulture curriculum*
60. National OSSREA Workshop Moi University, between 22nd- 23rd, November 2012.
Title: *Wastewater reuse, its sustainability and management*
61. Conference on role of science and technology for devolved governance in the new constitution dispensation in Kenya, at Bondo University College on 20th November 2012.
Title: *Properties of elementary operators, derivations and their applications*
62. International conference at Jomo Kenyatta University of Agriculture and Technology, 14th -16th November, 2012.
Title: *Conditions for norm-attainability of elementary operators and their applications to quantum mechanics*
63. International conference on sustainable water management in African countries, 2nd October, 2012, Maseno University, Kenya.
Title: *Sustainable approaches and techniques to the management and reuse of wastewater*
64. Strathmore University International Mathematics Research Meeting, Kenya, 2^{3rd} July, 2012
Title: *Properties of Elementary operators: Norm-attainability and Orthogonality*
65. Seminar at African Institute for Mathematical Sciences (AIMS), 10th April, 2012. (<http://users.aims.ac.za/~raouf/AIMS-JournalClub.html>)
Title: *On elementary operators and their properties*
66. International Conference at Bondo University College, 20th -23rd February, 2011.
Title: *Maps on matrices of norm-attainable operators in C^* -algebras*

67. Second Buea International Conference on Mathematical Sciences and CIMPA Summer School on, University of Buea, Cameroon, May 2nd – 13th, 2011.
Title: *On norm-attainable operators*
68. Maseno University(Workshop) Topic: Modern problems in Pure Mathematics, Oct -Dec 2010.
Title: *Recent progress in operator theory*
69. Maseno University (Workshop) Topic: Problems faced in teaching Linear Algebra, April 2010.
Title: *Computation of determinants of higher order matrices*
70. Egerton University Career Development Seminar, June 2007.
Title: *Careers in mathematics and other sciences.*

JOURNALS' EDITORSHIP AND REVIEW

1. **Reviewer:** Mathematical reviews Journal (*American Mathematical Society, USA*)
2. **Editor:** International journal of Pure Algebra
(www.rjpa.info/index.php/rjpa/pages/view/editorial)
3. **Editor:** International Journal of Vocational and Technical Education
(www.academicjournals.org/ijvte/Email.htm)
4. **Editor:** Signpost open access journal of theoretical sciences
(http://www.journals.academicpursuits.us/index.php/SOAJ_Theoretical/about/editorialTeam)
5. **Editor:** Research Publish Journals: International Journal of Mathematics and Physical Sciences Research (<http://www.researchpublish.com/editorial-board.php>)
6. **Editor:** Green Earth Research Network ([www.gejournal.net/Editorial Board.html](http://www.gejournal.net/Editorial_Board.html))
7. **Scientific Committee member/Reviewer:** Virtual Scientific Conference, 2014.
(<http://www.scieconf.com/scieconf-scientific-and-organizing-committee/>)
8. **Editor:** Associated Asia Research Foundation (<http://www.aarf.asia/editorial-board.php>)
9. **Scientific Committee member/Reviewer:** 3rd Electronic International Interdisciplinary Conference 2014. (<http://www.eiic.cz/reviewers-committee/>)
10. **Reviewer** DergiPark journals

COMPETENCY IN COMPUTER SOFTWARES USAGE

Latex, R, Python, Maxima, ApCoCoA, Mathematica, GAP, Sage, Java, Maple, C, C++, MATLAB, SPSS

POSTGRADUATE SUPERVISION

Summary of graduated students:

1. PhD=16 students
2. Masters > 25 students

NOTE: The details of students' supervision for both completed and continuing are given below.

PHD SUPERVISION

1. John Abuto

Thesis Title: Stochastic Optimization Modelling with Goal Programming On Managing Cost of Sugar Production.

Program: PhD in Management Science

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

2. Obogi Robert Karioko

Thesis Title: On complete positivity and boundedness of operators in non-unital C^* -algebras

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

3. Priscah Mogotu

Thesis Title: Characterization of Similarity Orbits of Invariant Subspaces of Norm-attainable Operators

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

4. Willy Kangogo

Thesis Title: Centrality and Spectral Boundedness of Compact Elementary Operators on Dense Irreducible Subalgebras

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

5. Wesley Nyaluke

Thesis Title: Characterization of Continuity and Convergence of Fredholm Operators Perturbed by Spectrally Infinitesimal Orthogonal Idempotents in Banach Spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

6. Julia Ndonga

Thesis Title: On Compact Operators whose norms are Eigenvalues

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

7. Owego Dancun

Thesis Title: Characterization of Essential Numerical Ranges and Davis-Wielandt Shells of Hilbert Space Operators

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

8. Kaunda Collins Matoke

Thesis Title: Orthogonality of Finite Rank Generalized Derivations

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

9. John Awino

Thesis Title: Mathematical Modelling of Airflow and Carbon Pollution by Vehicles on Roads with Ventilated Embankments in the Absence and Presence of Forced Convection

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

10. Amos Wanjara

Thesis Title: Rotundity of norms in Banach spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

11. Jeremiah Kinyanjui

Title: Norm estimates for norm-attainable elementary operators

Program: PhD in Pure Mathematics

Institution: Chuka University, Kenya

Status: Completed

12. Candidate: Jerotich Sirma

Thesis Title: Impact of Information Security Policies on Security Breach Incidences in Kenyan Savings and Credit Cooperatives Societies (SACCOS)

Program: PhD in Information Systems

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

13. Richard Omollo

Thesis Title: Addition-Composition Fully Homomorphic Encryption Scheme for enhancement of security for cloud computing

Program: PhD in Information Systems

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

14. Isaac Okwany

Thesis Title: Norms and Numerical Radii Inequalities of Derivations Induced by Orthogonal Projections

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

15. Cyrilus Wandera

Thesis Title: Sum Construction of Automorphic Symmetric Balanced Incomplete Block Design

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

16. Abraham Nyongesa

Thesis Title: Norm Preserving Conditions for Unital C^* -Algebra Automorphisms

Program: PhD in Pure Mathematics

Institution: Kibabii University, Kenya

Status: Completed.

17. Esther Achieng

Thesis Title: Automorphisms of Unitary Groups of $B(H)$ and Norm-Attainable Elementary Operators

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

18. Joel Barasa

Thesis Title: Circularity of Numerical Ranges of Isometrically Bounded Operators on Hilbert Spaces

Program: PhD in Pure Mathematics

Institution: Kibabii University, Kenya

Status: Continuing.

19. Sabasi Omaoro

Thesis Title: Characterization of Norm-attaining operators in C^* -algebras

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

20. Jacob Kiboi Muchemi

Thesis Title: Characterization of hypercyclic operators in normed spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

21. Njoroge James Mwangi

Thesis Title: Orthogonality and boundary of the numerical range of algebraic elementary operators

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

22. Jacob Kimani Gachago

Thesis Title: Characterization of Spectra of Symmetrized Two Sided Multiplication Operators Induced by Orthogonal Isometries

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

23. Lameck Otae

Thesis Title: On Range-Kernel Orthogonality of Elementary operators in Normed Spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

24. Jacqueline Akinyi Otieno

Thesis Title: On Finite Rank Preserving linear Maps of Normal Operators

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

25. Candidate: Noela Jemutai Kipyegen

Thesis Title: ICT Invention Framework For Rural Development: A community learning system for rural Kenya

Program: PhD in Information Systems

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Ongoing.

26. David Onyinge

Thesis Title: Tumor-HIV Immunodeficiency model with treatment and switched time delay

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

27. Forence Adongo

Thesis Title: Mathematical modelling of COVID-19 and diabetes comorbidity under vaccination

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

28. Anthony Wafula

Thesis Title: Characterization of Spectra and Norm bounds for Inner product type integral transformers

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

29. Blasus Ogola

Thesis Title: On continuity of bitopological spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

30. Samuel Asamba

Thesis Title: On semi-continuous functions and convex optimization in L^p -spaces

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

31. Joseph Owuor

Thesis Title: On density and dentability in norm-attainable classes

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

32. Francis Muli

Thesis Title: Mathematical modelling of Transmission and re-infection Dynamics for COVID-19 under Optimal control strategies

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

33. Francis Odhiambo

Thesis Title: Dynamical analysis of four-species food web system with prey refuge and holling type III functional response

Program: PhD in Applied Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

34. Effie Adhiambo Oyugi

Thesis Title: On Automatic continuity and Codimensionality of Homomorphisms in Dense Maximal Semisimple Banach Algebras

Program: PhD in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Continuing.

MASTERS SUPERVISION

1. Willy Kangogo

Thesis Title: On Norm Preserving Conditions for Local Automorphisms of Commutative Banach Algebras

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

2. Wesley Nyaluke

Thesis Title: Norms And Numerical Radii Inequalities For (α, β) -Normal Transaloid Operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

3. Priscah Mogotu

Title: Norm inequalities for contractive normaloid operators

Program: Msc in pure mathematics

Institution: Kisii University, Kenya.

Status: Completed

4. Sabasi Omaoro

Title: On numerical radius attainability for normal self-adjoint operators

Program: Msc in pure mathematics

Institution: Kisii University, Kenya.

Status: Completed

5. Samwel Asamba

Title: On Numerical Ranges and Spectra of Posinormal operators

Program: Msc in pure mathematics

Institution: Kisii University, Kenya.

Status: Completed

6. Victor Shagwila

Title: Norms and orthogonality of derivations implemented by self-adjoint operators

Program: Msc in pure mathematics

Institution: Kisii University, Kenya.

Status: Completed.

7. Maurice Oyake

Thesis Title: Norms of Inner Derivations Induced by Norm-attainable operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

8. Jacqueline Akinyi Otieno

Thesis Title: On Numerical Ranges and Spectra of Convexoid Operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

9. Boaz Okello

Thesis Title: Norms and Maximal Numerical Range of Elementary operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

10. Moses Odhiambo

Thesis Title: Bilateral Shifts and Spectrum of Compact Operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

11. Benard Owino

Thesis Title: Gateaux Derivatives and Orthogonality of Normal Derivations in C_p -Classes

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

12. Anthony Wafula

Thesis Title: Norms of Normally Represented Elementary Operators

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

13. Blasus Ogola

Thesis Title: On normality and compactness of dense topological subspaces

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

14. Sharon Rono

Thesis Title: Spectral Characterization of Jordan Homomorphisms on Semisimple Banach Algebras

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

15. Phillip Wafula

Thesis Title: On Normal Operators in Banach Spaces

Program: Msc in Pure Mathematics

Institution: Kibabii University, Kenya

Status: Ongoing

16. Martin Wegulo

Thesis Title: On Weighted Shifts and Spectra of Hyponormal Operators

Program: Msc in Pure Mathematics

Institution: Kibabii University, Kenya

Status: Completed

17. Orina Moraa

Thesis Title: Orthogonality of finite operators in normed spaces

Program: Msc in Pure Mathematics

Institution: Kisii University, Kenya

Status: Completed

18. Janes Nyabonyi Zachary

Thesis Title: Norm estimates for Norm-attainable derivations in Banach algebras

Program: Msc in Pure Mathematics

Institution: Kisii University, Kenya

Status: Completed

19. Cornel Nyangaresi

Thesis Title: On Characterization of Supraposinormal Operators in Norm-Attainable Classes

Program: Msc in Pure Mathematics

Institution: Kisii University, Kenya

Status: Completed

20. Allan Onyango

Thesis Title: Characterization of topological points in big data sets of Hausdorff spaces

Program: Msc in Pure Mathematics

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

21. Ibrahim Gekonde

Project Title: Influence of Leadership Styles on Staff Retention in State Corporations in Kisii County, Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

22. Jackline Kerongo

Project Title: Influence of Entrepreneurship on Small and Medium Enterprises: A case Study of SMES Owned by Females in Kisii Town, Kisii County, Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

23. Charity Osuwo

Project Title: Influence of Human Resource Empowerment on Organizational Performance: A Comparative Analysis of Public Universities in Western Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

24. Leonard Jaber

Project Title: Influence of Human Resource Procurement Policies on Performance of Public Universities Employees: A Case of Jaramogi Oginga Odinga University of Science and Technology

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Ongoing

25. Aileen Mandi

Project Title: Influence of Strategy Options Implementation on Performance of Hotel Industry in Busia Town Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

26. Rajula Millicent Atieno

Project Title: Influence of Employee Motivation on Performance of Busia County Referral Hospital, Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

27. Liventrix Wabwire

Project Title: Influence of Human resource planning on organizational performance on the Busia county government

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Ongoing

28. Fred Ogambi

Project Title: Influence of Strategic Options on Streamlining Traffic Flow in Nairobi Central Business District

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed

29. Charles Ramaina

Project Title: Influence of Funding on Quality of Graduates for Job Market: A Case Study of Jaramogi Oginga Odinga University of Science and Technology, Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Ongoing

30. Jackline Ondimu

Project Title: Effect of Microfinance Services on Financial Performance of Small and Medium Enterprises in Kenya: A Case Study of Kisii Town, Kisii County, Kenya

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Completed.

31. Charles Omondi

Project Title: Influence of Corporate Governance Practices on Financial performance of Microfinance institutions

Program: MBA

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

Status: Ongoing

EXTERNAL THESES/PROJECTS EXAMINATION

1. Candidate: Kiprono David Kipkorir

Project Title: Utility Analysis of an Intensive Care Unit Medical service Model Using Queuing Theory with Improved Taguchi Loss Function

Program: MSc

Institution: Kisii University

2. Candidate: Pius Kirwa

Project Title: A mathematical Model of the Effect of Immunostimulants on the Immune Response to HIV Infections

Program: MSc

Institution: Kisii University

3. Candidate: Mukudi Fidelis Musena

Project Title: Spectral and Commutativity Properties of Unbounded Positive Self-Adjoint Operators on a Hilbert Space.

Program: PhD

Institution: Kibabii University

INTERNAL THESES/PROJECTS EXAMINATION

1. Candidate: Odongo Peter Miginjjo

Project Title: Lie Symmetry Analysis of Third Order Nonlinear Ordinary Differential Equation

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

2. Candidate: Apaka Boniface Rangita

Project Title: Jumps and Mean Reversion in the Kenyan Interest Rates

Program: PhD

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

3. Candidate: Ogongo George Ochieng'

Project Title: Finite difference solution of a parabolic advection-diffusion equation with constant coefficients

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

4. Candidate: Joel Achieng'a

Project Title: Mathematical Model for Drug Therapy in Asthmatics

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

5. Candidate: Joel Odongo Olielo

Project Title: Mathematical Model for Nutrient Exchange across the Placenta

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

6. Candidate: Kevin Odundo Wambura

Project Title: Solution of Parabolic Partial Differential Equation of the Form $u_t = u_{xx} + f(x, t)u$ using Lie Symmetry Analysis

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

7. Candidate: Hellen Atieno Ochieng'

Project Title: Numerical solution of dynamic vibration equation with restoring force

Program: MSc

Institution: Jaramogi Oginga Odinga University of Science and Technology, Kenya

RESEARCH INTERESTS

Main Research Area: Functional Analysis/Operator theory,

Other research areas: Quantum Mechanics, Mathematical Modelling and Analysis, Contemporary Issues in Special Needs Education, Business and Economics, Computing and Information Technology.

COMMUNITY SERVICE

1. Member, Board of Governors, Saye Mixed Secondary School, 2022- date.
2. Member, Board of Governors, Aolo Girls Secondary School, 2011- date.
3. Member, Aolo Education CBO, 2011- date.
4. Assistant Secretary General, Oyieko Draft Group, Bondo, 2020- Date

EXTRA CURRICULA ACTIVITIES

Playing netball and Draught; Cycling; Swimming; Reading novels, spiritual and motivational books

REFEREES

1. PROF. OMOLO ONGATI, PhD.
DEPARTMENT OF PURE AND APPLIED MATHEMATICS
SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE,
JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY,
P. O. BOX 210 – 40601, BONDO, KENYA.
2. PROF. JOHN OGONJI, PhD.
DEPARTMENT OF PURE AND APPLIED MATHEMATICS
SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE,
MASENO UNIVERSITY,
P. O. BOX 333, MASENO, KENYA
3. PROF. MICHAEL ODUOR, PhD.
DEPARTMENT OF PURE AND APPLIED MATHEMATICS
SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE,
JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY,
P. O. BOX 210 – 40601, BONDO, KENYA