



Short Biography

Dr. Abubakar Adamu is an Assistant Professor of Mathematics at Near East University, with his research base at the Irfan Suat Günsel Operational Research Institute. He obtained his B.Sc. from Bayero University Kano and his M.Sc. and Ph.D. from African University of Science and Technology.

His research lies in fixed point theory, variational inequalities, and monotone inclusion problems, with applications in life sciences and engineering, particularly machine learning and medical image restoration. He has held a postdoctoral fellowship at King Mongkut's University of Technology Thonburi.

Dr. Adamu has published extensively in reputable international journals and is recognized for combining rigorous mathematical analysis with practical, application-driven research.

ACADEMIC

CURRICULUM VITAE

1. Name -Surname: Abubakar Adamu

2. Title: Assistant Professor

3. Educational Background:

Degree	Department/Program	University	Year
Bachelor's	Department of Pure and Applied Mathematics	Bayero University Kano , Kano, Nigeria.	2016
Master's	Department of Pure and Applied Mathematics	African University of Science and Technology, Abuja, Nigeria.	2017
PhD	Department of Pure and Applied Mathematics	African University of Science and Technology, Abuja, Nigeria.	2020

4. Master's / PhD Thesis

4.1. Master's Thesis Title and Thesis Advisor(s): A Krasnoselskii-type algorithm for approximating solutions of variational inequality problems and convex feasibility problems.

Advisor: Professor Charles Ejike Chidume

4.2. PhD Thesis / Medical Specialty Thesis Title and Advisor(s): Approximation of solutions of inclusion problems with applications to Hammerstein equation and image restoration.

Advisor: Professor Charles Ejike Chidume

5. Academic Titles:

Date of Assistant Professorship: 23/03/2024

Date of Associate Professorship:

Date of Professorship:

6. Supervised Master's and PhD Theses:

6.1. Master's Theses

6.2. PhD Theses

7. Publications

7.1. Articles Published in International Peer-Reviewed Journals (SCI, SSCI, AHCI, ESCI, Scopus)\

1. Okorie, O. K., Okeke, C. C., Izuchukwu, C., Ozsahin, D. U., & **Adamu, A.** (2026). A strongly convergent inertial reflected-forward-backward algorithm for monotone inclusion problems with applications. Communications in Nonlinear Science and Numerical Simulation, 154, 109562.
2. Okorie, O. K., Okeke, C. C., Izuchukwu, C., Ozsahin, D. U., & **Adamu, A.** (2026). Strong convergence results of two-step inertial projection algorithms for solving variational inequality problem. Rendiconti del Circolo Matematico di Palermo, 75, 50.
3. Peng, J. W., Han, L., Qiu, Y. M., & **Adamu, A.**, & Yao, J. C. (2026). A subgradient extragradient method for solving pseudo-monotone variational inequality problem. Computational and Applied Mathematics, 45, 20.

4. Peng, J. W., **Adamu, A.**, Shehu, Y., & Yao, J. C. (2026). Projection algorithm with extrapolations from the past for variational inequalities. *Journal of Optimization Theory and Applications*, 208, 61.
5. Sunthrayuth, P., **Adamu, A.**, Promkama, R., & Peng, J. W. (2026). Strong convergence of a parallel forward – backward – forward algorithm for monotone inclusion problems. *Applicable Analysis*, 1–28.
6. Shehu, Y., **Adamu, A.**, & Peng, Z. Y. (2026). New splitting algorithms for monotone inclusion problems of five operators without product space formulation. *Journal of Nonlinear and Convex Analysis*, 27(1), 99–118.
7. **Adamu, A.**, Kumam, P., Kitkuan, D., Yodjai, P., & Sitthithakerngkiet, K. (2025). A resolvent computational-free algorithm for solving monotone inclusion problems with applications. *Fixed Point Theory*, 26(2), 323–342.
8. Sunthrayuth, P., **Adamu, A.**, Muangchoo, K., & Ekvittayaniphon, S. (2025). Strongly convergent two-step inertial subgradient extragradient methods for solving quasi-monotone variational inequalities with applications. *Communications in Nonlinear Science and Numerical Simulation*, 108959.
9. Thong, D. V., **Adamu, A.**, & Huyen, P. T. H. (2025). Some conditions for approximating solutions to non-monotone variational inequality problems. *Computational and Applied Mathematics*, 44, 361.
10. Ceng, L. C., **Adamu, A.**, Shehu, Y., & Zhao, X. (2025). On subgradient extragradient rule with inertial correction for bilevel pseudomonotone variational inequality problems with constraints of equilibria system and split CFPP. *Filomat*, 39(6), 2039–2059.
11. Yao, Y., **Adamu, A.**, & Shehu, Y. (2025). Strongly convergent golden ratio algorithms for variational inequalities. *Mathematical Methods of Operations Research*, 1–39.
12. Yao, Y., **Adamu, A.**, Shehu, Y., & Yao, J. C. (2025). Forward-reflected-backward algorithms with double inertial extrapolations for variational inequalities with applications to image processing. *Numerical Algorithms*, 1–36.
13. Ibrahim, A. H., Phiangsungnoen, S., **Adamu, A.**, & Abubakar, A. B. (2025). Projection-based method for finding zeros of nonlinear equations. *Mathematical Methods in the Applied Sciences*.
14. Abass, H. A., **Adamu, A.**, & Aphane, M. (2025). A two-step inertial algorithm for solving equilibrium problems on Hadamard manifolds. *Carpathian Journal of Mathematics*, 41(2), 253–272.

15. Yao, Y., **Adamu, A.**, & Shehu, Y. (2025). A new numerically fast relaxed forward-backward-forward algorithm with applications to compressed sensing and image processing. *Journal of the Operations Research Society of China*.
16. Abass, H. A., **Adamu, A.**, Oyewole, O. K., & Aphane, M. (2025). A golden ratio technique for equilibrium problem in reflexive Banach spaces. *Demonstratio Mathematica*, 58(1), 20250178.
17. Mokaba, L., Abass, H. A., & **Adamu, A.** (2025). Two-step inertial Tseng method for solving monotone variational inclusion problem. *Results in Applied Mathematics*, 25, 100545.
18. Okeke, C. C., **Adamu, A.**, & Okorie, O. K. (2025). Strong convergence theorem involving two-step inertial technique without on-line rule for split feasibility problem. *Journal of Nonlinear Modeling and Analysis*, 7(4), 1307–1331.
19. Nnakwe, M. O., Mwanza, M., & **Adamu, A.** (2025). A self-adaptive two-subgradient extragradient algorithm for approximating solutions of generalized split feasibility problems with applications. *The Journal of Analysis*, 1–25.
20. Okeke, C. C., **Adamu, A.**, Kunene, T. E., & Ozsahin, D. U. (2025). Two-step inertial projection and contraction method for variational inequality with quasi-monotonicity. *Rendiconti del Circolo Matematico di Palermo Series 2*, 74(4), 1–33.
21. Abass, H. A., & **Adamu, A.** (2025). A new parallel inertial splitting algorithm for inclusion and fixed point problems in Banach spaces. *Bangmod International Journal of Mathematical and Computational Science*, 11, 429–449.
22. **Adamu, A.**, Ogwo, G. N., Okeke, C. C., & Zinsou, B. (2025). A two-step inertial CQ method for split feasibility problems with applications. *Bangmod International Journal of Mathematical and Computational Science*, 11, 23–50.
23. **Adamu, A.**, Umar, H., Akinade, S. E., & Ozsahin, D. U. (2024). Comparative analysis of FISTA and inertial Tseng algorithm for enhanced image restoration in prostate cancer imaging. *Applied Mathematics in Science and Engineering*, 32(1), 2388247.
24. Adam, A. A., **Adamu, A.**, Ibrahim, A. H., & Ozsahin, D. U. (2024). Inertial Halpern-type methods for variational inequality with application to medical image recovery. *Communications in Nonlinear Science and Numerical Simulation*, 139, 108315.
25. Yao, Y., **Adamu, A.**, & Shehu, Y. (2024). Strongly convergent inertial forward-backward-forward algorithm without on-line rule for variational inequalities. *Acta Mathematica Scientia*, 44B(2), 1–16.

26. Ozsahin, D. U., **Adamu, A.**, Aliyu, M. R., & Umar, H. (2024). A modified Tseng algorithm approach to restoring thoracic diseases' computerized tomography images. *PLOS ONE*, 19(7), e0305728.
27. Yao, Y., **Adamu, A.**, & Shehu, Y. (2024). Forward – reflected – backward splitting algorithms with momentum: Weak, linear and strong convergence results. *Journal of Optimization Theory and Applications*.
28. Yao, Y., **Adamu, A.**, Shehu, Y., & Yao, J. C. (2024). Simple proximal-type algorithm for equilibrium problems. *Journal of Global Optimization*.
29. Wang, Z. B., Sunthrayuth, P., **Adamu, A.**, & Chalamjiak, P. (2024). Modified accelerated Bregman projection methods for solving quasi-monotone variational inequalities. *Optimization*, 73(7), 2053–2087.
30. Ofem, A. E., Abuchu, J. A., Ugwunnadi, G. C., Nabwey, H. A., **Adamu, A.**, & Narain, O. K. (2024). Double inertial steps extragradient-type methods for solving optimal control and image restoration problems. *AIMS Mathematics*, 9(5), 12870–12905.
31. Wang, Z. B., Sunthrayuth, P., Promkam, R., & **Adamu, A.** (2024). Three novel inertial subgradient extragradient methods for quasi-monotone variational inequalities in Banach spaces. *Computational and Applied Mathematics*, 43, 421.
32. Abass, H. A., Oyewole, O. K., Moshokoa, S. P., & **Adamu, A.** (2024). An adapted proximal point algorithm utilizing the golden ratio technique for solving equilibrium problems in Banach spaces. *Mathematics*, 12, 3773.
33. **Adamu, A.**, Kumam, P., Kitkuan, D., & Padcharoen, A. (2023). Relaxed modified Tseng algorithm for solving variational inclusion problems in real Banach spaces with applications. *Carpathian Journal of Mathematics*, 39(1), 1-26.
34. **Adamu, A.**, Chidume, C.E., Kitkuan, D., & Kumam, P. (2023). Geometric inequalities for solving variational inequality problems in certain Banach spaces. *Journal of Nonlinear & Variational Analysis*, 7(2).
35. Chidume, C.E., Adam, A. A., & **Adamu, A.** (2023). An iterative method involving a class of quasi-phi-nonexpansive mappings for solving split equality fixed point problems. *Creative Mathematics & Informatics*, 32(1).
36. **Adamu, A.**, Kumam, P., Kitkuan, D., & Padcharoen, A. (2023). A Tseng-type algorithm for approximating zeros of monotone inclusion and J-fixed-point problems with applications. *Fixed Point Theory and Algorithms for Sciences and Engineering*, 2023(1).
37. **Adamu, A.**, Ozsahin, D. U., Ibrahim, A. H., & Sunthrayuth, P. (2023). A Technique with diminishing and non-summable step-size for monotone inclusion problems in Banach spaces. *Nonlinear Functional Analysis and Applications*, 1051-1067.

38. Wang, Z. B., Sunthrayuth, P., **Adamu, A.**, & Cholaamjiak, P. (2023). Modified accelerated Bregman projection methods for solving quasi-monotone variational inequalities. *Optimization*, 1-35.
39. Dechboon, P., **Adamu, A.**, & Kumam, P. (2023). A generalized Halpern-type forward-backward splitting algorithm for solving variational inclusion problems. *AIMS Mathematics*, 8(5), 11037-11056.
40. Okeke, C. C., & **Adamu, A.** (2023). Two-step inertial method for solving split common null point problem with multiple output sets in Hilbert spaces.
41. Deepho, J., **Adamu, A.**, Ibrahim, A. H., & Abubakar, A. B. (2023). Relaxed viscosity-type iterative methods with application to compressed sensing. *The Journal of Analysis*, 1-17.
42. Bashir Ali, A. A. A., & **Adamu, A.** (2023). An Accelerated Algorithm involving quasi- ϕ -nonexpansive operators for solving split. *Journal of Nonlinear Modeling and Analysis*, 5(1), 54-72.
43. **Adamu, A.**, Kitkuan, D., Kumam, P., Padcharoen, A., & Seangwattana, T. (2022). Approximation method for monotone inclusion problems in real Banach spaces with applications. *Journal of Inequalities and Applications*, 2022(1), 1-20.
44. **Adamu, A.**, Kitkuan, D., Padcharoen, A., Chidume, C. E., & Kumam, P. (2022). Inertial viscosity-type iterative method for solving inclusion problems with applications. *Mathematics and Computers in Simulation*, 194, 445-459.
45. Hassan Ibrahim, A., Kumam, P., Bala Abubakar, A., & **Adamu, A.** (2022). Accelerated derivative-free method for nonlinear monotone equations with an application. *Numerical Linear Algebra with Applications*, 29(3), e2424.
46. Muangchoo, K., **Adamu, A.**, Ibrahim, A. H., & Abubakar, A. B. (2022). An inertial Halpern-type algorithm involving monotone operators on real Banach spaces with application to image recovery problems. *Computational and Applied Mathematics*, 41(8), 364.
47. **Adamu, A.**, Kitkuan, D., & Seangwattana, T. (2022). An accelerated Halpern-type algorithm for solving variational inclusion problems with applications. *Bangmod International Journal of Mathematical and Computational Science*, 8, 37-55.
48. **Adamu, A.**, & Adam, A. A. (2021). Approximation of solutions of split equality fixed point problems with applications. *Carpathian Journal of Mathematics*, 37(3), 381-392.
49. **Adamu, A.**, Deepho, J., Ibrahim, A. H., & Abubakar, A. B. (2021). Approximation of zeros of sum of monotone mappings with applications to variational inequality and image restoration problems. *Nonlinear Funct. Anal. Appl*, 26(2), 411-432.
50. Chidume, C., & **Adamu, A.** (2021). A new iterative algorithms for split feasibility and fixed point problems, *J. Nonlinear Var. Anal*, 5(2), 201-210.
51. Chidume, C. E., **Adamu, A.**, Kumam, P., & Kitkuan, D. (2021). Generalized hybrid viscosity-type forward-backward splitting method with application to convex minimization and image restoration problems. *Numerical Functional Analysis and Optimization*, 42(13), 1586-1607.

52. Chidume, C. E., **Adamu, A.**, & Nnakwe, M. O. (2021). An inertial algorithm for solving Hammerstein equations. *Symmetry*, 13(3), 376.
53. Chidume, C. E., & **Adamu, A.** (2021). Solving split equality fixed point problem for quasi- ϕ -nonexpansive mappings. *Thai Journal of Mathematics*, 19(4), 1699-1717.
54. Ibrahim, A. H., Deepho, J., Abubakar, A. B., & **Adamu, A.** (2021). A three-term Polak-Ribière-Polyak derivative-free method and its application to image restoration. *Scientific African*, 13, e00880.
55. Chidume, C. E., **Adamu, A.**, Minjibir, M. S., & Nnyaba, U. V. (2020). On the strong convergence of the proximal point algorithm with an application to Hammerstein equations. *Journal of Fixed Point Theory and Applications*, 22(3), 61.
56. Chidume, C. E., & **Adamu, A.** (2020). On split generalized mixed equality equilibrium and split equality fixed point problems. *Appl. Set-Valued Anal. Optim.*, 2(3), 273-283.
57. Chidume, C. E., **Adamu, A.**, & Okereke, L. C. (2020). Iterative algorithms for solutions of Hammerstein equations in real Banach spaces. *Fixed Point Theory and Applications*, 2020(1), 1-23.
58. Chidume, C. E., **Adamu, A.**, & Nnakwe, M. O. (2020). Strong convergence of an inertial algorithm for maximal monotone inclusions with applications. *Fixed Point Theory and Applications*, 2020(1), 1-22.
59. Chidume, C. E., Kumam, P., & **Adamu, A.** (2020). A hybrid inertial algorithm for approximating solution of convex feasibility problems with applications. *Fixed Point Theory and Applications*, 2020, 1-17.
60. Chidume, C. E., De Souza, G. S., Nnyaba, U. V., Romanus, O. M., & **Adamu, A.** (2020). Approximation of zeros of m -accretive mappings, with applications to Hammerstein integral equations. *Carpathian Journal of Mathematics*, 36(1), 59-69.
61. Chidume, C. E., **Adamu, A.**, & Okereke, L. C. (2020). Strong convergence theorem for some nonexpansive-type mappings in certain Banach spaces. *Thai Journal of Mathematics*, 18(3), 1537-1548.
62. Chidume, C. E., **Adamu, A.**, & Okereke, L. C. (2019). Approximation of solutions of Hammerstein equations with monotone mappings in real Banach spaces. *Carpathian Journal of Mathematics*, 35(3), 305-316.
63. Chidume, C. E., Nnakwe, M. O., & **Adamu, A.** (2019). A strong convergence theorem for generalized- Φ -strongly monotone maps, with applications. *Fixed Point Theory and Applications*, 2019(1), 1-19.
64. Chidume, C. E., Ikechukwu, S. I., & **Adamu, A.** (2018). Inertial algorithm for approximating a common fixed point for a countable family of relatively nonexpansive maps. *Fixed Point Theory and Applications*, 2018(1), 1-9.
65. Chidume, C. E., Chinwendu, L. O., & **Adamu, A.** (2018). A hybrid algorithm for approximating solutions of a variational inequality problem and a convex feasibility problem. *Advances in Nonlinear Variational Inequalities*, 21(1), 46-64.

66. Chidume, C. E., **Adamu, A.**, & Okereke, L. C. (2018). A Krasnoselskii-type algorithm for approximating solutions of variational inequality problems and convex feasibility problems. *Nonlinear Var. Anal*, 2(2), 203-218.

7.2. ArticlesPublished in Other International Peer-ReviewedJournals

67. Peng, J. W., Luo, J. J., & Adamu, A. (2025). A two-step inertial method with a new step-size rule for quasimonotone variational inequalities in Hilbert spaces. *Optimization Eruditorum*, 2(3), 184–199.

7.3. PapersPresented at International ScientificConferencesandPublished in Conference Proceedings

- **1st International Symposium on Global Trends in Interdisciplinary Research in Mathematical Sciences, Gombe State University, Gombe, Nigeria: Paper presented: From Abstract Concepts to Tangible Impact: The Beauty of Fixed Point Theory.**

7.4.National/internationalBooksorBookChapters

7.5. ArticlesPublished in National Peer-ReviewedJournals

8. Art and Design Activities

9. Projects

10. AdministrativeResponsibilities

11. Memberships in Scientificand Professional Organizations: Nigerian Mathematical Society

12. Awards:

- **NEU Publication Award 2025**
- **NEU Young Researcher Award 2024**
- **Nigerian Mathematical Society Best PhD Thesis Award 2024**

13. Undergraduate and Graduate Courses Taught in the Last Two Years

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