

## Dr. NASIR ALI



- +92-301-4422014
- D.O.B: 27-09-1995
- [nasirzawar@gmail.com](mailto:nasirzawar@gmail.com)
- [nasir.ali@cuivehari.edu.pk](mailto:nasir.ali@cuivehari.edu.pk)
- <http://www.linkedin.com/in/nasir786>
- <https://www.webofscience.com/wos/author/record/HGA-1318-2022>
- <https://orcid.org/0000-0003-4116-9673>
- <https://www.researchgate.net/profile/Nasir-Ali-68>
- <https://scholar.google.com.pk/citations?user=SAD2GUgAAAAJ&hl=en>
- <https://ww2.comsats.edu.pk/faculty/FacultyDetails.aspx?Uid=31854>
- CNIC: 36603-7175132-3

### ➤ Education

**COMSATS University Islamabad, Lahore Campus**  
*PhD Mathematics*

Lahore, Punjab  
Feb 2021 – April 2025

**COMSATS University Islamabad, Vehari Campus (3.56/4)**  
*MS Mathematics*

Vehari, Punjab  
Feb 2019 – Feb 2021

### ➤ Professional Experience

**COMSATS University Islamabad, Vehari Campus**

Vehari, Pakistan

COMSATS aims to reduce the ever-growing gap between the developed and developing world through useful applications of science and technology

Jan 2023-up to date

*Lecturer of Mathematics:*

- Enhancement of Teaching skills: Teaching in COMSATS enables me to learn and adopt modern teaching skills.

**AMAL ACADEMY**

Lahore, Pakistan

Education startup funded by Stanford University that teaches professional skills  
To students and corporations

Dec 2020 – Feb 2021

*Career-Prep Fellow:*

- *Communication:* Completed a competitive written application and interview process to be selected from over 4500 applicants for intensive 3-month Fellowship funded by Stanford University
- *Skills development:* Investing 150 hours in order to develop business skills (e.g., communication, leadership, problem solving, teamwork, etc.) that will help me make a deeper impact on the job

**University of Education**

Vehari, Pakistan

The University of Education is a public research university.

Oct 2018- Aug 2020

*Visiting Lecturer of Mathematics:*

- Advance Teaching skills: Teaching in research institute enable me to learn the advance mathematics computing skills and some software's (e.g., MS Office, MATLAB, MAPLE)

**Govt. Post Graduate College**

Vehari, Pakistan

Govt Post Graduate college is affiliated with BISE Multan.

Oct 2018 – Sep 2019

*CTI Mathematics:*

- *Skills development:* Spending almost a year with almost 70+ students in each class developed teaching skills (e.g., Pressure absorbing, leadership, problem solving, teamwork, etc.) that will help me make a deeper impact on the job.

### ➤ Academic Experience

**Ph.D. Thesis**

Vehari, Pakistan

COMSATS University Islamabad, Lahore Campus

Feb 2021 – Present

*Researcher:*

- *Area of Research:* Graph Theory
- *Research Topic:* On Study of some Distinguishing Parameters for Graphs Associated to Algebraic Structures

## MS Thesis

Completed 6 credit hours thesis work (COMSATS University Islamabad, Vehari Campus)

Vehari, Pakistan  
Jan 2020 – Jan 2021

### Researcher:

- *Area of Research:* Fractional Calculus
- *Research Topic:* Some Modified Numerical Method Using Fractional Derivative for Solving Nonlinear Equations
- *Computing Software and Research Skills:* During research learn many software's that are necessary for a mathematics teacher (e.g., Scientific Workplace, Latex, MS Word, etc.) and research skills (e.g., Books searching, Journals details, action research, etc.)

### ➤ Projects/Publications

---

## Research Paper

1. **Ali, N.**, Siddiqui, H. M. A., & Qureshi, M. I. (2025). Characterizing Rings Based on Resolvability in Associated Compressed Zero Divisor Graphs. *Journal of Algebra and its Applications*, doi: 10.1142/S021949882541004X.
2. **Ali, N.**, Siddiqui, H. M. A., Qureshi, M. I., Abdalla, M. E. M., EL-Gawaad, N. A., & Tolasa, F. T. (2024). On Study of Multiset Dimension in Fuzzy Zero Divisor Graphs Associated with Commutative Rings. *International Journal of Computational Intelligence Systems*, 17(1), 298.
3. **Ali, N.**, Sadiqa, A., Shahzad, M. A., Imran Qureshi, M., Siddiqui, H. M. A., ABDALLAH, S. A. O., & EL-Gawaad, A. Secure Communication in the Digital Age: A New Paradigm with Graph-Based Encryption Algorithms. *Frontiers in Computer Science*, 6, 1454094.
4. Shahzad, M. A., **Ali, N.**, Abdallah, S. A. O., & EL-Gawaad, N. A. (2024). On Study of Some Bounds for Fault-Tolerant Metric Dimension and Adjacency Fault-Tolerant Resolving Set of Corona Product Graphs. *Discrete Mathematics, Algorithms and Applications*.
5. **Ali, N.**; Siddiqui, H.M.A.; Qureshi, M.I.; Abdallah, S.A.O.; Almahri, A.; Asad, J.; Akgül, A. Exploring Ring Structures: Multiset Dimension Analysis in Compressed Zero-Divisor Graphs. *Symmetry* **2024**, 16, 930. <https://doi.org/10.3390/sym16070930>
6. Raji, T., **Ali, N.**, Hanchalu, G., Tolasa, F. T., & Seboka, B. (2024). Exploring  $\alpha$ -  $\Psi$ -  $\varphi$  contractive mapping: novel fixed point theorems in complete b-metric spaces. *F1000Research*, 13, 566.
7. **Ali, N.**, Siddiqui, H. M. A., Riaz, M. B., Qureshi, M. I., & Akgül, A. (2024). A graph-theoretic approach to ring analysis: dominant metric dimensions in zero-divisor graphs. *Helijon*.
8. **Ali, N.**, Kousar, Z., Safdar, M., Safdar, J., & Tolasa, F. T. (2024). A mathematical analysis of concealed non-Kekulean benzenoids and subdivided networks in associated line graphs. *Acadlore Trans. Appl Math. Stat.*, 2(2), 72-80.
9. **Ali, N.**, (2024). Algorithm for Visualization of Zero Divisor Graphs of the Ring  $\mathbb{Z}_n$  Using MAPLE Coding. *Open Journal of Discrete Mathematics*, 14(1), 1-8.
10. **Ali, N.**, Kousar, Z., Safdar, M., Tolasa, F. T., & Suleiman, E. (2023). Mapping Connectivity Patterns: Degree-Based Topological Indices of Corona Product Graphs. *Journal of Applied Mathematics*, 2023.
11. **Ali, N.**, Waseem, M., Safdar, M., Akgül, A., & Tolasa, F. T. (2024). Iterative solutions for nonlinear equations via fractional derivatives: adaptations and advances. *Applied Mathematics in Science and Engineering*, 32(1), 2333816.
12. Dharmalingam, K. M., Jeeva, N., **Ali, N.**, Al-Hamido, R. K., Fadugba, S. E., Malesela, K., ... & Qousini, M. (2024). Mathematical analysis of Zika virus transmission: exploring semi-analytical solutions and effective controls. *Commun. Math. Biol. Neurosci.*, 2024, Article-ID.
13. Jeeva, N., Dharmalingam, K. M., **Ali, N.**, Sayed-Ahmed, M. Z., Radwan, R. M., El-Bahkiry, H. S., ... & Tolasa, F. T. (2024). Epidemiology simulation: numerical techniques for analyzing type 2 diabetes model and its prevention measures. *Commun. Math. Biol. Neurosci.*, 2024, Article-ID.
14. Safdar, M., Mushtaq, T., **Ali, N.**, & Akgül, A. (2023). On study of flow features of hybrid nanofluid subjected to oscillatory disk. *International Journal of Modern Physics B*, 2450356.
15. Mahboob, A. B. I. D., Hussain, T. A. S. W. E. R., Akram, M. I. S. B. A. H., Mahboob, S. A. J. I. D., **Ali, N.**, A. S. I. R., & Raza, A. (2020). Characterizations of chevalley groups using order of the finite groups. *Journal of Prime Research in Mathematics*, 16(1), 46-51.

### ➤ Research Student List.

---

Following students have done the final year projects under my supervision

Vehari, Pakistan

i.	<i>Mubarrah Tariq and Shrish Riaz (Topic: On dominant metric dimension of graphs)</i>	2022-2023
ii.	<i>Riffat Nazir and Nabeela Zulfiqar (Topic: Studying algebraic structures)</i>	2022-2023
iii.	<i>Rimsha Munir and Ruqayya Bibi (Topic: Zero divisor graphs and their properties)</i>	2022-2023
iv.	<i>Gulam Yaseen and M. Asif (Topic: Study of Compressed zero divisor graphs)</i>	2023-2024
v.	<i>Samiya Yaseen, M. Irfan and Iqra Batool (Topic: A Survey on zero divisor graphs)</i>	2023-2024
vi.	<i>Ayesha Sadiqa and M. Amir (Topic: Cryptography with the help of graphs)</i>	2023-2024
vii.	<i>Gulam Yasin and M. Asif (Topic: Dominant metric dimension in CZDG)</i>	2023-2024
viii.	<i>Mazhar Ahmad and M. Touseef Haider (Topic: Graph Based Cryptography)</i>	2024-2025
ix.	<i>Muhammad Irfan and Abid Hussain (Topic: Matrix Based Cryptography)</i>	2024-2025
x.	<i>Iqbal Batool and Nusrat Bibi (Topic: Graph and Matrix Based Cryptography)</i>	2024-2025
xi.	<i>Ezza Shehzad and Fatima Parveen (Topic: RSA Based Cryptography)</i>	2024-2025

➤ Extracurricular & Volunteer Experience

---

**One Day Symposium on Pure and Applied Mathematics**

- *Secretary Symposium organizer: Managed the organizing work of symposium*

Vehari, Pakistan  
2019-2020

➤ Honors and Awards

---

**ACADEMIC SCHOLARSHIPS**

- Received Yearly merit-based academic scholarship from University of Education.

Vehari, Pakistan  
2014-2018

**ONLINE COURSES**

- Training Certificate in Digital Literacy and Freelancing

Vehari, Pakistan  
2019-2020

**JOURNALS REVIEWER**

- European Journal of Pure and Applied Mathematics
- Chaos Theory and Applications
- Alexandria Journal of Engineering
- Journal of Applied Mathematics
- Asian-European Journal of Mathematics (AEJM)
- Information Science
- Physica Scripta
- Discrete Mathematics, Algorithms and Applications (DMAA)
- Neural Computing and Applications (NCAA)
- 

International  
International

**AWARDS AND CERTIFICATIONS**

- E-Rozgar Graphic Designing Graduation certificate
- Received Certificate of Recognition presented to LSBE Graduate (Life skill-based education)
- Received merit-based Laptop Award from Chief Minister Punjab
- Received Excellence certificate, 2<sup>nd</sup> position in Chief Minister's speech contest.

Vehari, Pakistan  
2021  
2010  
2016  
2008