Curriculum Vitae

Dr. MD SHAMIM AKHTER

Contact Information

Assistant Professor (Mathematics)
Department of Computer Sciences & Engineering
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Career Objective

My goal is to pursue a career in mathematics, dedicating my potential to both research and teaching, thereby enhancing my professional growth while contributing to humanity.

Employment History

Assistant Professor (Mathematics) at Department of Computer Science and Engineering, Jamia Hamdard, New Delhi, India from February 16, 2024 till date.

Courses Taught

Sets and Logic; Probability & Statistics; Discrete Mathematics; 2D & 3D Geometry; Differential Calculus, Integral Calculus, Advanced Calculus; Linear Algebra; Ordinary Differential Equations; Partial Differential Equations.

Academic Record

2019 –2024 **Doctor of Philosophy (Ph.D.)**

Title of Thesis: On nonlinear mappings of certain classes of algebras

Supervisor: Prof. Mohammad Ashraf

Institute: Aligarh Muslim University, Aligarh, India

2016 – 2018 **Master of Science (M.Sc.)**

Institute: Aligarh Muslim University, Aligarh, India

Subject: Mathematics.

Percentage of Marks Obtained: 84.60 %.

2013 – 2016 **Bachelor of Science (B.Sc.)**

Institute: Aligarh Muslim University, Aligarh, India

Subject: Mathematics.

Percentage of Marks Obtained: 73.88 %.

Qualified National/State level Examinations

- Qualified for the **WBSET** (2023) exam.
- Qualified for the **CSIR-NET** (2021) exam with All India Rank -56
- Qualified for the **IIT-GATE** (2019) exam with All India Rank-354

Awards /Fellowships/Scholarships

- INSC Young Achiever Award (2024)
- Young Scientist (SERB-ITS) Award, SERB, Govt. of India (2023)
- Maulana Azad National Fellowship, UGC, Govt. of India (2021)
- NBHM (DAE, Govt. of India) Project Junior Research Fellowship (2020)
- INSPIRE (DST, Govt. of India) Scholarship for Master of Science (2016-2018)
- INSPIRE (DST, Govt. of India) Scholarship for Bachelor of Science (2013-2016)

Projects

■ **Title**: Nonlinear higher derivations on unital algebras with applications (2020-2023)

(Ref. no. 02011/5/2020 NBHM (R.P.) R&D II/6243)

Project Type: Research project by NBHM, DAE, Govt. of India.

Principle Investigator: Prof. Mohammad Ashraf **My Role**: I worked as a Junior Research Fellow.

■ **Title**: Certain Properties of the Generalized Hypergeometric Functions

Project Type: Partial fulfillment requirement for the award of the degree of M.Sc.

Supervisor: Prof. Subuhi Khan, Department of Mathematics, Aligarh Muslim University,

Aligarh, India

Areas of Expertise

- Derivations of Rings / Algebras
- Matrix algebras, Matrix Theory
- Operator algebras

Languages Known

- **ENGLISH, HINDI, URDU:** Fluent in reading, writing and speaking.
- **BENGALI:** Fluent in reading and speaking.
- **ARABIC:** Read Only.

Research Publications

Published Papers

- 1. Nonlinear bi-skew Lie-type derivations on factor von Neumann algebras, Communications in Algebra, 50(11) (2022) 4766—4780 https://doi.org/10.1080/00927872.2022.2074027 (SCIE), Q3
- 2. Non-global nonlinear skew Lie n-derivations on α 0 \$\ast\$-algebras, Communications in Algebra, 52(09) 3734—49 (2024) \$\alpha\$ttps://doi.org/10.1080/00927872.2024.2328802 (SCIE), Q3
- 3. Jordan-type derivations on trivial extension algebras, Journal of Algebra and its Applications, 23 (08), 2550039 (2024) https://doi.org/10.1142/S0219498825500392 (SCIE), Q3
- 4. Nonlinear generalized bi-skew Jordan-type derivations on *-algebras, Bulletin of Malaysian Mathematics Society, 47 (18) (2024) https://doi.org/10.1007/s40840-023-01611-1 (SCIE), Q1
- 5. Nonlinear bi-skew Jordan-type derivations on factor von Neumann algebras, Filomat, 37(7)(2023), 5591—5599 https://doi.org/10.2298/FIL2317591A (SCIE), Q2
- 6. Non-global nonlinear Lie n-derivations on unital algebras with idempotents, Filomat, 37(30) (2023), 10323—10339 https://doi.org/10.2298/FIL2330323A (SCIE), Q2

- 7. Multiplicative Lie-type derivations on standard operator algebras, Georgian Math. J., 30(5) (2023), 659—669 https://doi.org/10.1515/gmj-2023-2030 (SCIE), Q2
- 8. Characterization of Lie-type higher derivations of triangular algebras, Georgian Mathematical Journal, 30(1) (2022), 33—46 https://doi.org/10.1515/gmj-2022-2195 (SCIE), Q2
- 9. Generalized Lie triple derivations on trivial extension algebras, Applied Linear Algebra, Probability and Statistics, (2023), Indian Statistical Series. Springer, Singapore. https://doi.org/10.1007/978-981-99-2310-6-23 (Scopus)
- 10. Non-global nonlinear Lie triple derivations on rings, In: Associative rings & algebras with additional structures (WARA-22), Springer Proceedings in Mathematics & Statistics Springer, Singapore (2024) https://doi.org/10.1007/978-3-031-50795-3 15 (Scopus)
- 11. Nonlinear generalized bi-skew Lie-type derivations on *-algebra, In: Topics in Algebra, Analysis and Topology, CRC Press Taylor & Francis Group (2024) https://doi.org/10.1201/9781032634142 (Scopus)
- 12. Nonlinear *-Lie Higher Derivations of Unital *-Algebras, In: Algebra and Its Applications. ICAA 2023. Springer Proceedings in Mathematics & Statistics, vol 474. Springer, Singapore. https://doi.org/10.1007/978-981-97-6798-4 26 (Scopus)

Accepted Papers

- 1. Nonlinear mixed bi-skew Lie triple derivations on *-algebras, Bulletin of Iranian Mathematical Society, (2023) (SCIE), Q2
- 2. On the Characterization of nonlinear mixed Jordan triple derivations on *-algebras, Kragujevac Journal of Mathematics (2024), (Scopus), Q3
- 3. Multiplicative skew Lie-type derivations on prime *-rings, Springer Proceedings, (2024), (Scopus)

Communicated Papers

- 1. Nonlinear mixed bi-skew Jordan triple derivations on \$\ast\$-algebras, Mathematical Reports.
- 2. Generalized Lie n-derivations on unital rings at zero products, Journal of Algebra and its Applications.
- 3. Mixed skew Jordan-type derivations on *-algebras, Georgian Mathematical Journal.

Conferences / Summer Schools

- Presented a research article at the International Conference on Algebra and its Applications(ICAA-2023) held at the Sidi Mohamed Ben Abdellah University, Fez, Morocco from July 12—15, 2023
- Presented a research article at the **International Conference on Recent Developments in Mathematical Sciences, Artificial Intelligence Machine Learning (ICRMAM-2023)** held at Sri Guru Teg Bahadur Khalsa College, Rupnagar, Punjab from March 14—15, 2023
- Presented a research article at the 88th Annual Conference of the Indian Mathematical Society: An international Meet held at Department of Mathematics, Birla Institute of Technology, Mesra, Ranchi from December 27—30, 2022
- Presented a research article at the **International Conference on evolution in Pure & Applied Mathematics (ICEPAM-2022)** held at Department of Mathematics, Akal University, Bhatinda,
 Punjab from November 16—18, 2022

Participated in "Mathematics Training and Talent Search Program (MTTS-O-Level)" (June 01—27, 2015), a summer program funded by NBHM (DAE, Govt. of India), held at Shiv Nadar University, Noida, India

References

■ **Dr. Mohammad Ashraf (**Retired Professor, Ex-Chairman & Ex-Dean)
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Declaration

I, Dr. Md Shamim Akhter, hereby declare that the information contained herein is true and correct to the best of my knowledge and belief.

New Delhi, India. December 27, 2024. Md Shamim Akhter Ph.D., Mathematics

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