Dr. MD SHAMIM AKHTER

Contact Information

Assistant Professor (Mathematics) Department of Computer Sciences & Engineering Jamia Hamdard, New Delhi-110062, India

1 (+91) 9997289460

☑ <u>akhter2805@gmail.com</u>; <u>msakhter@myamu.ac.in</u>

0000-0001-7524-0613

https://www.linkedin.com/in/md-shamim-akhter/

https://www.researchgate.net/profile/Md-Akhter-7

SC <u>57705856800</u>

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

- Nonlinear bi-skew Lie-type derivations on factor von Neumann algebras, Communications in Algebra, 50(11) (2022) 4766—4780 <u>https://doi.org/10.1080/00927872.2022.2074027</u> (SCIE), Q3
- 2. Non-global nonlinear skew Lie n-derivations on \$\ast\$-algebras, Communications in Algebra, 52(09) 3734—49 (2024) https://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) <u>https://doi.org/10.1142/S0219498825500392</u> (SCIE), Q3
- 4. Nonlinear generalized bi-skew Jordan-type derivations on *-algebras, Bulletin of Malaysian Mathematics Society, 47 (18) (2024) <u>https://doi.org/10.1007/s40840-023-01611-1</u> (SCIE), Q1
- 5. Nonlinear bi-skew Jordan-type derivations on factor von Neumann algebras, Filomat,

37(7)(2023), 5591—5599 <u>https://doi.org/10.2298/FIL2317591A</u> (SCIE), Q2

- 6. Non-global nonlinear Lie n-derivations on unital algebras with idempotents, Filomat, 37(30) (2023), 10323—10339 <u>https://doi.org/10.2298/FIL2330323A</u> (SCIE), Q2
- Multiplicative Lie-type derivations on standard operator algebras, Georgian Math. J., 30(5) (2023), 659—669 <u>https://doi.org/10.1515/gmj-2023-2030</u> (SCIE), Q2
- 8. Characterization of Lie-type higher derivations of triangular algebras, Georgian Mathematical Journal, 30(1) (2022), 33—46 <u>https://doi.org/10.1515/gmj-2022-2195</u> (SCIE), Q2
- 9. Generalized Lie triple derivations on trivial extension algebras, Applied Linear Algebra, Probability and Statistics, (2023), Indian Statistical Series. Springer, Singapore. <u>https://doi.org/10.1007/978-981-99-2310-6-23</u> (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) <u>https://doi.org/10.1007/978-3-031-50795-3_15</u> (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) Department of Mathematics, Aligarh Muslim University, Aligarh, India E-mail: <u>mashraf80@hotmail.com</u> Phone No. (+91) 9412519274
- Dr. Farheen Siddiqui (Professor) Department of Computer Science & Engineeing Jamia Hamdard, New Delhi, India E-mail : <u>fsiddiqui@jamiahamdard.ac.in</u>
- Dr. Nadeem Ur Rahman (Professor) Department of Mathematics, Aligarh Muslim University, Aligarh, India E-mail: <u>rehman100@gmail.com</u> Phone No. (+91) 9411981427
- Dr. Shakir Ali (Professor) Department of Mathematics, Aligarh Muslim University, Aligarh, India. E-mail: <u>shakir.ali.mm@amu.ac.in</u> Phone No. (+91)-9027163134

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.

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New Delhi, India. December 27, 2024.

Md Shamim Akhter Ph.D., Mathematics