Curriculum Vitae of **Dr. Md. Ali Akbar**

Address:

Dr. Md. Ali Akbar
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1. Education

Sept. 04, 2005 (Degree Awarded)	**Ph. D. in Mathematics,** Department of Mathematics, University of Rajshahi, Rajshahi-6205, Bangladesh. • Thesis Title: **On Some New Approximate Solutions of Fourth Order Nonlinear Differential Equations.**
1995 – 1996	**M. Sc. in Mathematics,** University of Rajshahi, Bangladesh. • Result: **First Class (First position)**
1992 – 1995	**B. Sc. (Hons.) in Mathematics,** University of Rajshahi, Bangladesh. • Result: **First Class (Third position)**
1990 - 1992	Higher Secondary Certificate (H.S.C.), Shapahar Govt. Degree College, Naogaon, Bangladesh.
1985 - 1990	Secondary School Certificate (S.S.C.), Asharanda High School, Naogaon, Bangladesh.

2. Academic and Merit Awards

- Ministry of Science and Information & Communication Technology, Bangladesh for undertaking Ph. D Research.
- Suhrawardy Hall (Rajshahi University, Bangladesh) Gold Medal.
- Graduated with Honors and Scholarship in B.Sc. in Mathematics at Rajshahi University, Rajshahi, Bangladesh.
- Awarded a Scholarship for Studying M. Sc. in Mathematics at Rajshahi University, Rajshahi, Bangladesh.

3. Teaching/professional Experiences:

From January 22, 2007 to till now	**Assistant Professor,** Department of Applied Mathematics, University of Rajshahi, Rajshahi-6205, Bangladesh.
From January 05, 2006 to January 21, 2007.	**Assistant Professor,** Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh.
From August 02, 2005 to January 04, 2006	**Lecturer,** Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh.
From July 13, 2005 to August 01, 2005	**Assistant Professor,** Department of Mathematics, Rajshahi University of Engineering and Technology, Rajshahi-6204, Bangladesh.
From September 10, 2001 to July 12, 2005	**Lecturer**, Department of Mathematics, Rajshahi University of Engineering and Technology, Rajshahi-6204, Bangladesh.

4. Post-Doctoral Research:

- School of Mathematical Sciences, Universiti Sains Malaysia (USM), 11800 Penang, Malaysia (from 17-01-2011 to 16-01-2012).

5. Book: **M. Ali Akbar**, KBM method for fourth order nonlinear differential systems, Lambert Academic Publishing (**German**), **ISBN: 978-3-8465-1176-3**.

6. Research Articles:

44. **M. Ali Akbar**, Norhashidah Hj. Mohd. Ali and Sayed Tauseef Mohyud-Din, Some New Exact Traveling Wave Solutions to the (3+1)-dimensional Kadomtsev-Petviashvili equation, _World Appl. Sci. J._, Vol. 16(11), 1551-1558, 2012. **(Indexed: SCOPUS, ISI)**.

43. **M. Ali Akbar**, Norhashidah Hj. Mohd. Ali and E. M. E. Zayed, A generalized and improved (G'/G)-expansion method for nonlinear evolution equations, _Math. Prob. Engr._, Vol. 2012, 22 pages. doi: 10.1155/2012/459879. **(Indexed: SCOPUS, ISI; IF: 0.777)**.

42. **M. Ali Akbar**, Norhashidah Hj. Mohd. Ali and Syed Tauseef Mohyud-Din, The alternative (G'/G)-expansion method with generalized Riccati equation: Application to fifth order (1+1)-dimensional Caudrey-Dodd-Gibbon equation, _Int. J. Phys. Sci._, Vol. 7(5), 743-752, 2012. **(Indexed: SCOPUS, ISI; IF: 0.554)**.

41. **M. Ali Akbar**, Norhashidah Hj. Mohd. Ali and E. M. E. Zayed, Abundant exact traveling wave solutions of the generalized Bretherton equation via the improved (G'/G)-expansion method, _Commun. Theor. Phys._, Vol. 57, 173-178, 2012. **(Indexed: SCOPUS, ISI; IF: 0.747)**.

40. Hasibun Naher, Farah Aini Abdullah and **M. Ali Akbar**, New traveling wave solutions of the higher dimensional nonlinear evolution equation by the improved (G'/G)-expansion method, _World Appl. Sci. J._, Vol. 16(1), 11-21, 2012. **(Indexed: SCOPUS, ISI)**.

39. Hasibun Naher, Farah Aini Abdullah and **M. Ali Akbar**, New traveling wave solutions of the higher dimensional nonlinear partial differential equation by the Exp-function method, _J. Appl. Math._, Vol. 2012, 14 pages. doi: 10.1155/2012/575387. **(Indexed: SCOPUS, ISI; IF: 0.656)**.

38. **M. Ali Akbar** and Norhashidah Hj. Mohd. Ali, The alternative (G'/G)-expansion method and its applications to nonlinear partial differential equations, _Int. J. Phys. Sci._, Vol. 6(35), 7910-7920, 2011. **(Indexed: SCOPUS, ISI; IF: 0.554)**.

37. Hasibun Naher, Farah Aini Abdullah and **M. Ali Akbar**, The (G'/G)-expansion method for abundant traveling wave solutions of Caudrey-Dodd-Gibbon equation, _Math. Prob. Engr._, Vol. 2011, 11 pages. doi: 10.1155/2011/218216. **(Indexed: SCOPUS, ISI; IF: 0.777)**.

36. Hasibun Naher, Farah Aini Abdullah and **M. Ali Akbar**, The Exp-function method for new exact solutions of the nonlinear partial differential equations, _Int. J. Phys. Sci._, Vol. 6(29), 6706-6716, 2011. **(Indexed: ISI; IF: 0.554)**.

35. Sk. Tanzer Ahmed Siddiuqe and **M. Ali Akbar**, Asymptotic Solutions of Fifth Order Over-Damped Symmetrical Nonlinear Systems, _Stud. Math. Sci._, Vol. 3(1), 24-34, 2011.

34. **M. Ali Akbar** and Sk. Tanzer Ahmed Siddique, Perturbation Solutions of Fifth Order Oscillatory Nonlinear Systems, _Nonlinear Analysis: Modeling and Control_, Vol. 16(2), 123-134, 2011. **(Indexed: SCOPUS, ISI)**.

33. **M. Ali Akbar** and Norhashidah Hj. Mohd. Ali, Exp-function method for Duffing Equation and New Solutions of (2+1) Dimensional Dispersive Long Wave Equations, *Prog. Appl. Math.*, Vol. 1(2), 30-42, 2011.

32. Rabindra Nath Mondal, Md. Sharif Uddin, **M. Ali Akbar** and Bichakshan Mondal, Numerical Study of Dean Vortices and Unsteady Solutions Through a Curved Square Duct Flow, *Indian J. Math*., Vol. 53(1), 31-56, 2011.

31. Md. Ashraful Alom, Md. Habibur Rahman, B. M. Ikramul Haqueand **M. Ali Akbar**, Perturbation Technique for Analytical Solution of Fourth Order Near Critically Damped Nonlinear Systems, *Int. J. Basic Appl. Sci*., Vol. 11(1), 131-138, 2011.

30. Md. Habibur Rahman, B. M. Ikramul Haque and **M. Ali Akbar**, An Analytical Approximate Solution of Fourth Order Damped-Oscillatory Nonlinear Systems, *Res. J. Math. Stat.*, Vol. 3(1), 12-19, 2011.

29. M. Abul Kawser and **M. Ali Akbar**, An Asymptotic Solution for the Third Order Critically Damped Nonlinear Systems in the Case for Small Equal Eigenvalues, *Math. Forum*, Vol. 22, 52-68, 2010.

28. **M. Ali Akbar**, On Fourth Order More Critically Damped Nonlinear Differential Systems, *J. Mech. Continua Math. Sci.*, Vol. 5(1), 599-616, 2010.

27. M. Habibur Rahman, M. Abul Kalam Azad and **M. Ali Akbar**, An Asymptotic Method for Certain Fourth Order Damped Oscillatory Nonlinear Systems, *J. Engr. Sci.*, Vol. 1, 53-60, 2010.

26. B. M. Ikramul Haque, M. Habibur Rahman and **M. Ali Akbar**, Asymptotic Solution of Fourth Order Critically Damped Nonlinear Systems Under Some Special Conditions, *J. Engr. Sci.*, Vol. 1, 95-104, 2010.

25. M. Abul Kalam Azad, **M. Ali Akbar** and M. Abdus Sattar, Multiple Time Scale Method for Over-Damped Processes in Biological Systems, *J. Mech. Continua Math. Sci.*, Vol. 4(2), 472-484, 2010.

24. Zasmin Haque, **M. Ali Akbar** and Mo. Rokibul Islam, An Asymptotic Solution of a Class of Fourth Order Over Damped Quasi-linear Differential Equations, *Rajshahi Uni. J. Sci*., Vol. 37, 61-74, 2009.

23. Mo. Rokibul Islam, M. Habibur Rahman and **M. Ali Akbar,** An Analytical Approximate Solution of Fourth Order More Critically Damped Nonlinear Systems, *Indian J. Math*., Vol. 51(3), 611-626, 2009.

22. M. Habibur Rahman, B. M. Ikramul Haque and **M. Ali Akbar**, Asymptotic Solutions of Fourth Order Near Critically Damped Nonlinear Systems, *J. Inform. Math. Sci.*, Vol. 1(1), 61-73, 2009.

21. **M. Ali Akbar**, Anup Kumar Datta and Md. Elias Ali, Asymptotic Solutions of Fourth Order Over-Damped Symmetrical Nonlinear Systems, *J. Mech. Continua Math. Sci*., Vol. 4(1), 428-442, 2009.

20. Mo. Rokibul Islam and **M. Ali Akbar**, A New Asymptotic Solution for Third Order More Critically Damped Nonlinear Systems, *IAENG J. Appl. Math.*, Vol. 39(1), 2009. **(Indexed: SCOPUS)**.

19. Mo. Rokibul Islam, M. Sharif Uddin, **M. Ali Akbar**, M. Azmol Huda and S. H. S. Hossain, A New Technique for Fourth Order Critically Damped Non-linear Systems with Special Conditions, *Bull. Calcutta Math. Soc*., Vol. 100(5), 501-514, 2008.

18. **M. Ali Akbar** and M. Sharif Uddin, On Asymptotic Solutions of Fourth Order Over-Damped Nonlinear Systems in Presence on Certain Damping Forces, *J. Phy. Sci.*, Vol. 12, 83-96, 2008.

17. Mo. Rokibul Islam, M. Mizanur Rahman, **M. Ali Akbar** and M. Sharif Uddin, An Asymptotic Solution of Second Order Over-Damped Non-linear Systems for Small Ratio of the Eigenvalues, *Khulna Univ. Stud*., Vol. 9, 341-346, 2008.

16. Mo. Rokibul Islam, **M. Ali Akbar** and M. Samsuzzoha, A New Technique for Third Order Critically Damped Non-linear Systems, *J. Appl. Sci. Res.*, Vol. 4(6), 695-706, 2008. **(Indexed: SCOPUS)**.

15. Pinakee Dey, M. Zulfiker Ali, **M. Ali Akbar** and M. Shamsul Alam, Second Approximate Solutions of Second Order Damped Nonlinear Systems, *J. Appl. Sci. Res.*, Vol. 4(6), 731-741, 2008. **(Indexed: SCOPUS)**.

14. **M. Ali Akbar**, M. Sharif Uddin and Mo. Rokibul Islam, An Extension of the Krylov-Bogoliubov-Mitropolskii (KBM) Method for Third Order Critically Damped Nonlinear Systems, *J. Mech. Continua Math. Sci.*, Vol. 3(1), 264-279, 2008.

13. Zasmin Haque, **M. Ali Akbar**, Mo. Rokibul Islam and Mashbah Uddin, Asymptotic Solutions of Third Order Over-damped Non-linear Systems with Special Conditions, *J. Interdis. Math*., Vol. 11(3), 357-371, 2008.

12. **M. Ali Akbar**, M. Shamsul Alam, S. S. Shanta, M. Sharif Uddin and M. Samsuzzoha, Perturbation Method for Fourth Order Nonlinear Systems with Large Damping, *Bull. Calcutta Math. Soc*., Vol. 100(1), 85-92, 2008.

11. Mo. Rokibul Islam, **M. Ali Akbar**, B. M. Ikramul Haque, M. Samsuzzoha, Zasmin Haque and Afroza Ali Soma, On Fourth Order More Critically Damped Non-linear systems Under Some Conditions, *Khulna Univ. Stud.*, Vol. 8(1), 125-134, 2007.

10. M. Samsuzzoha, Mo. Rokibul Islam, **M. Ali Akbar,** Higher Order Improved Solution of Second Order Over-damped Nonlinear Systems, *Khulna Univ. Stud.*, Vol. 8(1), 135-142, 2007.

9. **M. Ali Akbar**, M. Sharif Uddin, Mo. Rokibul Islam and Afroza Ali Soma, Krylov-Bogoliubov-Mitropolskii (KBM) Method for Fourth Order More Critically Damped Nonlinear Systems, *J. Mech. Continua Math. Sci.*, Vol. 2(1), 91-107, 2007.

8. M. Mizanur Rahman, Mo. Rokibul Islam, **M. Ali Akbar** and M. Sharif Uddin, Bogoliubov's Asymptotic Method for Fourth Order More Critically Damped Differential Systems, *J. Appl. Sci. Tech.*, Vol. 5(1), 27-33, 2007.

7. **M. Ali Akbar**, M. Shamsul Alam and M. A. Sattar, Krylov-Bogoliubov-Mitropolskii Unified Method for Solving n-th Order Non-linear Differential Equation Under Some Special Conditions Including the Case of Internal Resonance, *Int. J. Non-linear Mech*., Vol. 41, 26-42, 2006. **(Indexed: SCOPUS, ISI; IF: 1.388)**.

6. M. Abul Kalam Azad, M. Samsuzzoha, **M. Ali Akbar** and M. Alhaj, KBM Asymptotic Method for Over-Damped Processes in Biological and Biochemical Systems, *Ganit: J. Bangladesh Math. Soc.,* Vol. 26, 1-10, 2006.

5. **M. Ali Akbar**, M. Shamsul Alam and M. A. Sattar, A Simple Technique for Obtaining Certain Over-damped Solutions of an *n*-th Order Nonlinear Differential Equation, *Soochow J. Math.*, Vol. 31(2), 291-299, 2005.

4. M. Shamsul Alam, **M. Ali Akbar**, and M. Zahurul Islam, A General Form of Krylov-Bogoliubov-Mitropolskii Method for Solving Nonlinear Partial Differential Equations, *J. Sound and Vib.*, Vol. 285, 173-185, 2005. **(Indexed: SCOPUS, ISI; IF: 1.338)**.

3. M. Shamsul Alam, M. B. Hossain and **M. Ali Akbar**, On a Special Condition of Over-damped Nonlinear Systems with Slowly Varying Coefficients, *J. Interdis. Math.*, Vol. 7, 255-260, 2004.

2. **M. Ali Akbar**, M. Shamsul Alam and M. A. Sattar, Asymptotic Method for Fourth Order Damped Nonlinear Systems, *Ganit: J. Bangladesh Math. Soc.*, Vol. 23, 41-49, 2003.

1. **M. Ali Akbar,** A. C. Paul and M. A. Sattar An Asymptotic Method of Krylov-Bogoliubov for Fourth Order Over-Damped Nonlinear systems, *Ganit: J. Bangladesh Math. Soc.*, Vol. 22, 83-96, 2002.

7. Submitted Research Articles: Ten research articles have been submitted in international (ISI and Scopus Indexed) journals.

8. M. Phil. Thesis Supervision:

(i) B. M. Ikramul Hoque, Student No.-0151504, Session 2003-2004, *Thesis Title*: On Some Asymptotic Solutions of Fourth Order Critically Damped Nonlinear Systems, (2008), Awarded.

9. M. Sc. Thesis Supervision:

(i) Mo. Rokibul Islam, Student No.-041201, Session 2003-2004. *Thesis Title*: **On Asymptotic Solutions of Critically Damped Nonlinear Systems,** Completed.

(ii) Zasmin Haque, Student No.-041209, Session 2003-2004. *Thesis Title*: **On Approximate Solutions of Over Damped Nonlinear Systems,** Completed.

(iii) Manoj Kumar Shikder, Student No.-051202, Session 2004-2005. *Thesis Title*: **On Approximate Solutions of Higher Order Nonlinear Systems,** Completed.

(iv) Sk. Tanzer Ahmed Siddique, Student No.-03114233, Session 2006-2007. *Thesis title*: **On Analytical Approximate Solutions of Fifth Order Nonlinear Differential equations**, Completed.

(v) Nayan Kumer, Student No.-04114151, Session 2007-2008. *Thesis title*: **KBM Asymptotic Method for Biological Systems**, Completed.

10. B. Sc. (Hons.) Project Supervision:

i. Anup Kumer Datta, Student No.-021220 and Md. Eliyas Karim, Student No.-021232, Session 2004-2005. *Project Title:* **On Asymptotic Solutions of Fourth Order-Over Damped Nonlinear Systems,** Completed.

11. Conferences:

- Fourteenth International Mathematical Conference, Bangladesh Mathematical Society, Dec. 27-29, 2003.
- Fifteenth International Mathematical Conference, Bangladesh Mathematical Society, Dec. 29-31, 2007.
- International Conference on Frontier Mathematics and its Application, Burdwan University, India, Jan. 16-18, 2008.

12. Editors:

- Editor: International Journal of Basic & Applied Sciences (IJBAS)
- Editor: International Journal of Computing, Communication and Networking Research (IJCCNet)
- Associate Editor: Research Journal of Mathematics and Statistics
- Technical Editor: (i) Journal of Applied Sciences

  (ii) Asian Journal of Scientific Research

  (iii) Asian Journal of Algebra

  (iv) Asian Journal of Mathematics and Statistics

  (v) Asian Journal of Applied Sciences

13. Reviewers:

- Journal of the Association of Arab Universities for Basic and Applied Sciences (Elsevier)
- International Journal of the Physical Sciences.
- Journal of Applied Sciences.
- Journal of Physical Sciences
- International Conference of Numerical Analysis and Applied Mathematics (ICNAAM) -2012.

14. Memberships:

- Life Member of Bangladesh Mathematical Society: Membership Number 280.
- Member of IAENG: Membership Number 65183 (Hong Kong).
- Life Member of Calcutta mathematical Society, West Bengal, India.

15. Computer Skills:

- C^{++}
- FORTRAN
- MAPLE
- MATHEMATICA
- MS Word, MS excel, Power Point.

16. Languages:

- Writing and speaking (fluently): English and Bengali.
- Bahasa Malaysia: Understand and can speak a little bit.

(Dr. Md. Ali Akbar)