DEPARTMENT OF MATHEMATICS
NATIONAL INSTITUTE OF TECHNOLOGY, SRINAGAR

Name: Dr. Abdul Liman
Designation : Professor
Qualification: M.Sc. , M. Phil., Ph. D

Field of specialization: Approximation Theory

Ph.D produced : 05

Dr. Tawheeda Rasool, 30th June, 2014
Dr. Irshad Ahmad Sheikh, .September , 2015
Dr. Idrees Qasim, 19th , April 2016
Dr. Lubna Wali Shah, January, 2018.
Mr. Infan Ahmad Faiq, May, 2018 .
Post Doc Fellows:
Dr Imtiyaz Hussain, NBHM Fellowship with Reference no. 0204/52/2019/R&D-11/315

Publication

1. Irshad Ahmad , Ab. Liman, Ruqia Mohammad, Extension of Bernstein Type Inequality to polar derivative of polynomial, Thai Journal of Mathematics, vol. 18, No. 2(2020).
2. Imtiyaz Hussain and A.Liman, Genralization of certain inequalities cocerning the polar derivative of a polynomial, Kragujevic Journal of Mathematics, 47(4) (2023), 613-625.
3. Irshad Ahmad , Ab. Liman, On Inequalities concerning the polar derivative of polynomials, Thai Journal of Mathematics, 2019 (accepted).
4. Irshad Ahmad , Ab. Liman, A note on rational functions with prescribed zeros, Thai Journal of Mathematics, 2019 (accepted).
5. Irshad Ahmad , Ab. Liman, On an integral estimate concerning the polar derivative of polynomials with restricted zeros, Filomat, 2019 (accepted).
6. Shah Lubna Wali and Abdul Liman, Integral estimates for a class Bn of operators, Stud. Univ. Babe ș-Bolyai Math. 63(2018), No. 2, 175–188.
7. Idrees Qasim, A. Liman and Tawheeda Rasool, Location of Zeros of Lacunary-type Polynomials, Journal of Mathematics and Applications, Nov., 2018.
8. . Idrees Qasim, Abdul Liman and Tawheeda Rasool, Number of zeros of a polynomial in a disk , Journal of Mathematics and Applications, Nov., 2018.
9. Irshad Ahmad abd Ab. Liman, Inequalities pertaining to rational functions with prescribed poles, Filomat 31:5 (2017), 1149-1165, DOI 10.2298/FIL1705149A. (Scopus, SCI).
10. Idrees Qasim, Abdul Liman , Tawheeda, Number of zeros of a polynomial in a disk, International Journal of Advance Research in Science and Engineering, 2017.
11. S. L. Wali and A. Liman, Applications of the Schwarz lemma to inequalities for polynomials with restricted zeros, Journal of Analysis (Accepted). 2017.
12. S. L. Wali and A. Liman, Some Inequalities for polynomials with a multiple zero at origin, Non. Func. Anal.Appl (Accepted) 2017.
13. S.L. Wali and A. Liman, An integral estimate for operators preserving inequalities between polynomials, Studia Mathematica . (Accepted) 2017.
14. Abdul Liman and Irfan Ahmed Faiq, Bernstein type inequalities between composite

polynomials, Southeast Asian Bulletin of Mathematics (Accepted) 2017.

15. Idrees Qasim, A. Liman, W. M. Shah, Refinement of some inequalities concerning to *Bn-* operator of polynomials with restricted zeros, DOI 10.1007/s10998-016-0150-3, (SCOPUS, SCI) .
16. A. Liman and S. L. Wali and W.M.Shah, Inequalituies concerning B-operator, Probl. Anal. Issues Anal. vol. 5 (23), No. 1, 2016, pp. 55-72. (Scopus).
17. Abdul Liman and Irfan Ahmed Faiq, Operators preserving inequalities between polynomials, Nonlinear Functional Analysis and Applications, 21 (4), 2016, pp. 573-5589.
18. Abdul Liman and Irfan Ahmed Faiq Operators preserving inequalities between polynomials, Vol. 21, No. 4 (2016), pp. 573-589. (Google Scholar)
19. Abdul Liman and Irfan Ahmed Faiq, Operators preserving inequalities between polynomials, Asian journal of Mathematics and Statistics, ISSN 1994-5418/DOI: 10.3923/ajms. 2015. (Scopus)
20. Abdul Liman and Irfan Ahmed Faiq, Bound for the Zeros of Polynomials, International Journal of Modern Mathematical Sciences , 2015, 13(1): 12-16, Florida, USA. (Google Scholar)
21. Abdul Liman and Irfan Ahmed Faiq, Inequalities Concerning Composite Polynomials International Journal of Modern Mathematical Sciences, 2015, 13(2): 178-186, Florida, USA. (Google Scholar).
22. Abdul Liman and Irfan Ahmed Faiq, On Inequalities Concerning Composite Polynomials. Nonlinear Functional Analysis and Applications, vol. 20, No. 4(2015), pp. 517-522. (SCOPUS)
23. A. Liman and S. L. Wali, An operator preserving inequality between polynomials Nonlinear Functional Analysis and Applications, 20(3), 2015, pp. 441-445. (SCOPUS)
24. Idrees Qasim and A. Liman, Bernstein type inequalities for rational functions, Indian J. Pure Appl. Math. (Springer), 10.1007/s13226-015-0133-8 (2015). (Scopus, SCI)
25. I Ahmed, A. Liman, W. M. Shah, A Note on Rational Functions with Prescribed Poles and Restricted Zeros , Vietnam Journal Of Mathematics, 2015,43, 159-162.(SCOPUS; Citation 1).
26. A Liman, WM Shah, I Ahmad, Generalization of Enestrom kakeya theorem, IJMMS, Vol. 13 No. 4 (2015). (Google Scholar, Citation 1)
27. A. Liman, I. Q. Peer, W. M. Shah On some inequalities concerning the polar derivative of a polynomial, Ramanujan J. (Springer), 35(3), (2014). (SCOPUS, SCI)
28. I Ahmad, T Rasool, A Liman , Zeros of certain polynomials and analytic functions with restricted coefficients, journal of classical Analysis, Volume 4, Number 2 (2014), 149–157. (Google scholar)
29. I Ahmad, A Liman, WM Shah, On the Inequalities Concerning to the Polar Derivative of a Polynomial with Restricted zeros, Thai Journal of Mathematics, ISSN 1686-0209, 2014 (SCOPUS, Citation 1)
30. I Ahmad, A Liman, WM Shah, SOME Lp INEQUALITIES FOR THE FAMILY OF B-OPERATORS, Acta Mathematica Academiae Paedagogicae Ny´ıregyh´aziensis, 30 (2014), 79–89. (Google Scholar)
31. I Ahmad , T. Rasool, A. Liman, Zeros of certain polynomials and analytic functions with restricted coefficients, Journal of Classical Analysis, Vol 4, Number 2(2014), 149-157. (SCOPUS)
32. Idrees Qasim and Abdul Liman, On Some Bernstein Type Inequalities (International Journal of Modern Mathematical Sciences, 2013, 8(2): 96-101, Florida, USA. (Google Scholar).
33. A. Liman, W.M.Shah and Irshad Ahmad, Generalizations of Enestrom Kakeya

Theorem-I, International Journal of Modern Mathematical Sciences, 8(3), (2013), 139-148. (Google Scholar)

34. Irshad Ahmad , A. Liman and W.M.Shah , Extension of some well known polynomial inequalities, Nonlinear Functional Analysis and Applications, 18(4), (2013), 453-472. (SCOPUS)
35. A. Liman, Tawheeda Rasool and W. M. Shah, Growth of Polynomials with prescribed zeros, International Journal of Modern Mathematical Sciences, 6(2), (2013), 68-76. (Google Scholar)
36. A. Liman and W.M.Shah, Extensions of Enestrom Kakeya Theorem, International Journal of Modern Mathematical Sciences, 8(2), (2013), 82-89. (Google Scholar).
37. Irshad, Tawheeda and A.Liman, On Integral Estimates for Polar derivative of a polynomial with restricted zeros, Nonlinear Functional Analysis and Applications,18(3), (2013), 397-409. (SCOPUS)
38. Irshad Ahmad, A.Liman and W.M.Shah, On some refinements of Bernstein type inequalities, Kathmandu University Journal of Science, Engineering and Technology, Vol. 9, No. I, July, (2013), 140-144. (SCOPUS; Citation :1)
39. Gulshan Singh, W.M.Shah and A.Liman, A generalized inequality for the polar derivative of a polynomial, Journal of Inequalities and Applications 2013, 2013:183 doi:10.1186/1029-242X-(2013)-183. (SCOPUS, SCI, Citation: 2)
40. Gulshan Singh, W.M.Shah and A.Liman, Generalizations of some polynomial inequalities for the family of B-Operators, Journal of Classical Analysis, vol. 2(1), (2013), 23-34. (SCOPUS ; Citation 1)
41. A. Liman, W.M.Shah and Irshad Ahmad Sheikh, Some generalizations of Bernstein type inequalities , International Journal of Modern Mathematical Sciences, 4(3), (2012), 96-105. (Google Scholar)
42. A. Liman, W.M.Shah and Irshad Ahmad Sheikh, On some inequalities concerning B-operators of polynomials, International Journal of Modern Mathematical Sciences, 3(3), (2012), 155-166. (Google Scholar)
43. A. Liman, W.M.Shah and Tawheeda Rasool, Some generalizations of Enestrom Kakeya Theorem, International Journal of Modern Mathematical Sciences, 4(2012) no. 1, 48-55. (Google Scholar)
44. A. Liman, R. N. Mohapatra and W. M. Shah, Inequalities for the Polar Derivative of a Polynomial, Complex Analysis and Operator Theory, 6(2012), 1199-1209. (SCOPUS, SCI, Citation :5).
45. W. M. Shah, A. Liman and S A Baba, Bounds for the Zeros of Polynomials with Restricted Coefficients, Matematicki Vesnik, 64(2012), no. 1, 73-78. (SCOPUS)
46. A. Liman, W.M.Shah and Tawheeda Rasool, Some new generalizations of Enestrom Kakeya Theorem, Nonlinear Functional Analysis and Applications,17(2), (2012), 235-248. (SCOPUS)
47. W.M. Shah and A. Liman, Integral Mean Estimates for Polynomials with Restricted Zeros, Tamsui Oxford Journal of Information and Mathematical Sciences,27(2) (2011),165-181. (SCOPUS)
48. N. K. Govil, A. Liman and W.M. Shah, Some Inequalities Concerning Derivative and Maximum Modulus of Polynomials, Australian Journal of Mathematical Analysis and Applications, 8(2011), no.1, Art. 7, 8pp. (SCOPUS; Citation :4)
49. A. Liman, R. N. Mohapatra and W.M. Shah, Inequalities For Polynomials Not Vanishing in a Disk, Applied Mathematics and Computation, 218(2011), no.3, 949-955, (SCOPUS; Citation :2)
50. W. M. Shah and A. Liman, Integral Estimates for the family of B-operators, Journal of Operators and Matrices, 5(1), (2011),79-87. (SCOPUS; Citation :12)

51. A . Liman ,W.M.Shah, and S. A. Bhat, Some Generalizations of Polynomial Inequalities, Non Linear Functional Analysis and Applications, 15(2010), no. 2, 247-260. (SCOPUS)
52. S.A.Baba and A.Liman, Short Note on Bernstein Inequality, TOM 7, cmp. 476-478(2010). (SCOPUS)
53. A. Liman and S A Baba, On Some results concerning growth of polynomials, PAMS, 3(2010), 285- 297. (Google Scholar)
54. A.Liman and Tawheeda Rasool, On Enestrom Kakeya Theorem, Pure and Applied Mathematika Sciences, 72 (2010). (SCOPUS)
55. W. M. Shah and A. Liman, An Operator Preserving Inequalities Between Polynomials, Journal of Inequalities in Pure and Applied Mathematics, 9(1) (2008), Art. 25, 8pp. (SCOPUS, SCI, CITATION: 6)
56. W. M. Shah, A. Liman and S. A. Bhat, On the Enestrom-Kakeya Theorem, International Journal of Mathematical Science,7(1-2) (2008),111-120. (SCOPUS)
57. W. M. Shah and A.Liman, Rate of growth of polynomials not vanishing inside a disk, Inequalities and Applications, (Themistocles M.RASSIAS and Dorin ANDRICA) CLUJ UNIVERSITY PRESS, ROMANIA, (2008). (SCOPUS, SCI).
58. A. Liman and S A Baba, Some results concerning growth of polynomials, Anal. Theory Appl. 24(2008), 351-363. (SCOPUS)
59. W. M. Shah and A. Liman, On the Zeros of a Class of Polynomials, J. Math. Inequal. Appl., 10(4) (2007), 733-744. (SCOPUS, SCI, Citation 3)
60. W. M. Shah and A. Liman, On Enestrom-Kakeya theorem and Related Analytic Functions, Proc. Indian Acad. Sci. (Math. Sci.) 117(3) (2007), 359-370. (SCOPUS, SCI, Citation :24)
61. A. Liman and S A Baba, Rate of growth of polynomials not vanishing inside a circle, Indian Soc. State. Opers. Res. XXVIII, No. 1-4, Dec. 2007, 57-63. (SCOPUS)
62. W. M. Shah and A. Liman, An Integral Mean Estimates for Polynomials, Non Linear Functional Analysis and Applications, 2 (2006), 87-95. (SCOPUS)
63. W. M. Shah and A. Liman, On the Zeros of Certain Class of Polynomials and Related Analytic Functions, Math. Balkanica, New Series, 19(2005), Fasc.3-4, 245-254. (SCOPUS, SCI, Citation:9)
64. W. M. Shah and A. Liman, Bounds for the zeros of polynomials; Analysis in Theory and Applications, 20(1) (2004), 16-27. (SCOPUS: Citation :6).

R&D Projects (Funding Organized)

1. Completed a Minor Research Project titled “Inequalities Concerning Polynomials in the Complex Domain” sponsored by UGC vide No. F.5.2.2 (Math) (21)/2005 (MRP/NRCB) with a research grant of Rs. 50,000.
2. Completed a Major Research Project titled “Extremal Properties and the Location of Zeros of Polynomials” sponsored by UGC, vide no. F.No.34-142/2008 (SR) with a research grant of Rs.6, 82,800.

Outreach Activities (Social and Professional)

1. Book Publication: Have published a book in two volumes MATHEMATICS FOR P.G. ENTRANCE ,

published by LAP Germany in January 2018.

2. Published a chapter titled "Rate of growth of polynomials not vanishing inside a disk" in the book Inequalities and Applications, edited by Themistocles M. RASSIAS and Dorin ANDRICA, published by CLUJ UNIVERSITY PRESS, ROMANIA, (2008).

3. Published a chapter titled "Integral Mean Estimates for a Polynomial with Restricted Zeros" in a book Current Topics in Pure and Computational Complex Analysis, edited by Santosh Joshi, Michael Dorff and Indrajit Lahiri published by Birkhauser., 2016.

STC/Workshops/Seminars Organized (Funding agency)

Work shop on Role of Mathematics in Engineering, science and Technology, 26th March, 2012

(Funding agency NIT Srinagar)

STC/Workshops/Seminars Attended (Funding agency)

1. 30th Annual Conference of Ramanujan Mathematical Society, IISER, Mohali, from 15 - 17 May, 2015.

2. Attended Conference on Advance Techniques and Devices in Mathematics & Physical Sciences (An International Meet) SRM University, Delhi, from 23 – 25 January, 2015.

3. Attended One week short term course on role of mathematical sciences in engineering and technology, Department of Mathematic, MNNIT, Allahabad, October, 19-23, 2016.

4. Attended One week workshop on MATHEMATICKA AND RELATED SOFTWARES, 24Feb. to 2nd March, 2014 Department of Mathematic, Jammu and Kashmir Institute of Mathematical Sciences , Srinagaer

5. Participated in short term training programme on "Mathematical Modeling and Numerical Techniques (MMNT)" conducted by Department of Mathematics , NIT Warangal from January 17-21, 2011.

6. Participated in Workshop on recent trends in Engineering and technology, Nov. 16th, 2011.

7. Participated in the International Workshop on Harmonic Mappings and Hyperbolic Metrics (IWHMHM-09) held on December 10-19, 2009 at Indian Institute of Technology Madras, Chennai Institute of Mathematical Sciences, Chennai and Chennai Mathematical Institute, Chennai.

8. Acted as a teacher coordinator for the event MATHEMATIKA in Institute Technical festival TECHVAGANZA-09, from 9-11 April, 2009.

9. Attended the Golden Jubilee National symposium on Mathematical Methods and Application held on 22nd Dec. 2008 at Dept. of Maths. IIT, Madras.

10. Participated in an Indo fresh Conference in Mathematics held at Institute of mathematics Sciences (IMSc) Chennai during Dec. 15-19, 2008.

11. Attended one day workshop on "Intellectual Property Rights" organized by Department of Humanities, NIT, Srinagar on April 9, 2008.

12. Delivered a talk in 14th Annual Conference of Jammu Mathematical Society conducted from 20-22 Feb, 2004.

13. Attended one day workshop on "Nanatechnology : Present and future Horizons" organized by Department of Chemistry, NIT, Srinagar on September 8, 2007.

14. Attended a Three week training programme on C-Programming in 2006

15. Attended a course on C++ Programming in 2008.

16. Attended one day workshop on "Micro-electronics" organized by Department of Electronics and Communication, NIT, Srinagar on November 5, 2007.

Conferences Organized :

National Conference on Analysis and Applications, 19-20 Nov, 2012

(Funding agency NIT Srinagar)

Conferences attended:

1.Presented a paper in 3rd International conference on Mathematics and Computing ICMC 2017, January 17-21, 2017, Haldia Institute of Technology, Haldia, West Bengal, India.

2. Presented a paper in International conference on differential geometry, algebra and analysis, Department of Mathematics, Jamia Millia Islamia, Nov. 15-17, 2016 .

3. Presented a paper in International Conference on Algebra, Geometry, Analysis and their Applications, Department of Mathematics, Jamia Millia Islamia, New Delhi, from November 27 – 29, 2014.

4. Presented a research paper in the 22^{nd} Annual Conference of Jammu Mathematical Society and National Seminar on recent developments in complex analysis and related areas Feb. 24-25, 2012.

5. Presented a paper "An operator preserving inequalities between polynomial" in International congress of ASIAM held at Jammu University from 31 March to 3^{rd} April 2007.