

CURRICULUM VITAE

(A) Personal Data

NAME: Dr. Mohammad Iqbal
MATITAL STATUS: Married
Sex: Male
Date of first appointment in the P.U.,
Lahore, 27-11-1963

Father's Name: Nawab Ali
Date of Birth: 5-4-1941

ADDRESS:

(a) POSTAL:

Associate Professor
Department of Mathematical Sciences
King Fahd University of Petroleum & Minerals,
Dhahran, Saudi Arabia

(b) PERMANENT:

Associate Professor
Department of Mathematics
Punjab University
New Campus, Lahore, Pakistan

(c) Home Address:

100 K1 Wapda Town Colony, Lahore, Pakistan.

Education and Qualifications

NAME OF THE INSTITUTION	YEAR	SUBJECTS	CERTIFICATE/CLASS DEGREE
University of Wales (U.K.)	1989	Numerical Analysis (Applied Math)I	Ph.D.
Dundee University Scotland (U.K.)	1973	Numerical Analysis and Programming	M.Sc.
Punjab University Lahore, Pakistan	1963	Mathematics	M.A. I (Stood Second in the University).
-do-	1961	Mathematics, English	B.A. I
B.O.S.E. Lahore, Pakistan.	1959	Math. Physics, English, Chemistry, Arabic	F.Sc. I (Won Scholarship)
-do-	1957	Matriculation I	I

(B) Topics Studied in M.Sc. Dundee (Scotland) U.K.

1. Linear Algebra
2. Linear Programming
3. Programming Languages
4. Approximation Theory
5. Optimization
6. Numerical Solution of O.D.Es.
7. Numerical Solutions of P.D.Es
8. Numerical Solutions of Integral Equations

Over 27 year teaching experience to post graduate classes at P.U. Lahore, Pakistan and over 11 (eleven) years teaching experience at KUPM, Dhahran, Saudi Arabia.

Topics Taught so far to Post Graduate and Honours Classes

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| 1. Complex Variables | 2. Mathematical Statistics |
| 3. Numerical Analysis | 4. Differential Geometry |
| 5. Tensor Analysis | 6. Differential Equations |
| 7. Laplace Transforms | 8. Fourier Transforms |
| 9. Projective Geometry | 10. Mathematical Methods |
| 11. Differential and Integral Calculus | 12. Computer Language FORTRAN and BASIC |

Courses taught at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

1. Preparatory Mathematics I and II.
2. Finite Mathematics I and II.
3. Calculus I, II and III.
4. Differential equations.
5. Introduction to Linear Algebra and Differential Equations.
6. Advanced Mathematics for Engineers.
7. Numerical Analysis I.

Post Held: Whether Temporary or Permanent

Associate Professor Permanent: (At Punjab University Lahore and Took Early Retirement on September 1999).

Over (30) publications. Most of these have been reviewed by eminent scholars of American Math. Society (Review Nos. are given).

(C) Extra Mural Activities

1. Warden Hall Nos. 8 and 19 New University Campus Lahore (1976-1981).
2. Member Board of Studies in Mathematics and Computer. Center of Engineering University, Lahore (1974-1976).
3. Student Advisor, Department of Mathematics, University of the Punjab, Lahore (1974-1981, 1985-1991).
4. Member, Board of Studies in Mathematics and Astronomy, University of the Punjab, Lahore (1974-1981, 1986-1991).
5. Acted as external examiner in Applied Mathematics, Makerere University, Kampala, Uganda for March 1979 Examination.
6. Managing Editor, PUJM, Department of Mathematics, Punjab University, New Camps, Lahore, Pakistan.
7. Member, London Mathematical Society, 1982-1984.
8. Reviewer, Mathematical Reviews, American Mathematical Society from 1989 to date.
9. Life Member, Punjab Math. Society, Pakistan.

(D) Books Written

1. An Introduction to Programming in Fortran 66 and Fortran 77, published by Gill Sons, Regal Chowk, Lahore, Pakistan (1989).
2. Programming in Basic, Published byILMI Kitab Khana, Urdu Bazar, Lahore (1989).
3. An Introduction to Numerical Analysis, Published by ILMI Kitab Khana, Kabir Street, Urdu Bazar, Lahore (1990).
4. Fundamentals of Complex Analysis, Published by ILM Kitab Khana, Kabir Street, Urdu Bazar, Lahore (1991) and revised in 1995.

(E) Research Publications

1. Davies, A.R., Iqbal, M., Maleknejad, K and Redshaw, T.C. "A comparison of statistical regularizations and Fourier extrapolation methods for numerical deconvolution in Numerical Treatment of Inverse Problems in Differential and Integral Equation". Eds: P. Deuflheld and E. Hairer. Birkhauser Verlag, July1983, pp. 330-334 (Math. Reiews 85th 65269).
2. Iqbal, M. "On the generalzed cross validation method to first kind Fredholm integral equations of convolution type" P.U.J.M. vol. XVI (1983), 99-112 (ath. Reviews 87C 65164(B)).
3. Iqbal, M. "On the Kleins, regularization (using splines) for the numerical solution of certain Fredholm convolution equations of the first kind". P.U.J.M. voll XVI (1983), 53-72. (Math. Reviews 87C 65164(A)).
4. Iqbal, M. "Numerical solution of a Fredholm convolution type integral equation of the first kind with maximum likelihood method using cardinal cubic B-splines". Journal of Natural Sciences and Mathematics, vol. 24, no.2 (October 1984), 201-232. (Math Reviews 86G 65232).
5. Iqbal, M. "Maximum likelihood method for solving Fredholm convolution type of equations of the first kind using trigonometric approximations". P.U.J.M., vol. (XVII-XVIII) (1984, 1985), 119-132. (Math Reviews 874651).
6. Habibullah, G.M. and Iqbal, M. "A mixed norm estimate for Bessel potentials". Journal of Natural Sciences and Mathematics, vol. 25, No.2 (October 1985 87-M 42011).
7. Iqbal, M. "Estimating solutions of first kind integral equation of convolution type using generalized cross validation method with trigonometric polynomial approximation, P.U.J.M., vol. (XVII-XVII) (1985), 133-150. (Math Reviews 847652).
8. Iqbal, M. "Numerical solution of ill-posed problems by regularization methods", P.U.J.M., vol. XIX, (1986), 59-82) (Math Reviews 88th 65243).
9. Iqbal, M. "Numerical Laplace transform inversion by a regularization method". P.U.J.M., vol. XX, 1987, 71-96. (Math Reviews 89G65162).
10. Iqbal, M. "Numerical inversion of Laplace transform using cross-validation method". Journal of Natural Sciences and Mathematics, vol. 28, No.1 (April 1988), 141-152.
11. Iqbal, M. "Comparison of methods of solving ill-posed problems in the form of Fredholm integral equations of the first kind with or without non-negativity constraints". P.U.J.M., vol. XXI (1988), 29-59, (Math Reviews 90J 65159).
12. Iqbal, M. Turchin Klein regularization method using B-splines for ill-posed problems". P.U.J.M., vol. XXII (198). (Math Reviews 91G 65305).
13. Iqbal, M. "Regularization methods for the solution of Fredholm integral equations of the first kind of convolution type". Journal of Research (Science) of Bahauddin Zakariya University, Multan, Pakistan, vol. 2 No.3 (1990), 45-49.
14. Iqbal, M. "Numerical solutions of some highly improperly posed problems". P.U.J.M., vol. XXIII (1990), 1-22 (Math Reviews 92-e-65178).

15. Iqbal, M. "Comparison of regularization methods proposed for the numerical solution of ill-posed problems". P.U.J.M., vol. XXIV (1991), 25-51.
16. Bokhari, M.A. and Iqbal, M. "Asymptotic distribution of the zeros of certain Lagrange interpolants". The Proceedings of the Edinburgh Mathematical Society (U.K.), vol. 38(1995), 99-106.
17. Iqbal, M. "On a numerical technique regarding inversion of Laplace transform". Journal of Computational and Applied Mathematics, Netherlands, vol. 59 (1995), 145-154.
18. Iqbal, M. "On comparison of spline regularization and exponential sampling for Laplace transform inversion". Computer Physics Communications, vol. 88 (1995), 43-50.
19. Iqbal, M. "On regularized numerical inversion of Mellin transform". Computer Physics Comm., vol. 90 (1995), 293-300.
20. Bokhari, M.A. and Iqbal, M. " L_2 -approximation of real valued functions with interpolatory constraints". J. of Computational and Applied Mathematics, vol. 70 (1996), 201-205.
21. Iqbal, M. "On the maximum likelihood regularization of inversion of Laplace transform". P.U.J.M., vol. 29 (1996), 100-111.
22. Iqbal, M. "Maximum likelihood method for numerical inversion of Mellin transform". J. II-Nouvo Cimento, vol. 112B, N5 (1997), 687-699.
23. Iqbal, M. "On spline regularized inversion of noisy Laplace transform". J. of Computational and Applied Mathematics, vol. 83 (1997), 39-54.
24. Iqbal, M. "A statistical perspective on numerical inversion of Laplace transform". J. of the Physical Society of Japan, vol. 67, No.3, (1998), p. 767-771.
25. Iqbal, M. "Numerical solutions of Nagumos Equation". Journal of Applied Mathematics and Decision Sciences (JAMDS), vol. 3, No.2 (1999), 189-193.
26. Iqbal, M. "Spline Regularization of Numerical Inversion of Mellin Transform", Journal Foundation of Computing and Decision Sciences., vol.25, No.1 (2000), 49-64.
27. Iqbal, M. "On photone correlation measurements of colloidal size distributions using Bayesian strategies", Journal of Computational ad Applied Mathematics, vol. 126 (2000), pp. 77-89.
28. Iqbal, M. "Fourier method for numerical inversion of Laplace transform", Journal of Applied Mathematics and Decision Sciences", vol.5, no.3 (2001), 239-246.
29. Iqbal, M. "Constrained regularization method for stable solutions of ill-posed problems". Int. Mathematical Journal, vol.1, No.4 (2002), Japan, 2002.
30. Iqbal, M. "Bayesian regularization of Num. Inv. Of Mellin Transform". International Mathematical Journal, vol.2 No.7, Japan, (2002), 671-693.
31. Iqbal, M. "Numerical inversion of Laplace transform reproducing Kernal Hilbert Space". Accepted for publication in IJMEST, vol.33, (2002), U.K.
32. Al-Shuaibi, Abdul Aziz ad M. Iqbal. "ON comparison of operator theoretic method with regularization method of ill-posed problems". Accepted for publication in International Journal of Pure and Applied Mathematics (2002).
33. Iqbal, M. "Deconvolution and regularization for numerical solutions of incorrectly posed problems". Accepted for publication in Computational and Applied Mathematics (CAM). Netherlands.

(F) International Conferences

1. A paper 'On the spline regularized inversion of the Laplace transform', had been selected for 15 minutes presentation at ICPAM 95. (International Conference on Pure and Applied Mathematics).

2. A paper 'Comparison of constrained regularization and Fourier extrapolation methods for ill-posed problems', was accepted for being presented at the Eight International Congress on Computational and Applied Mathematics held on July 27-Aug 1 (1998) at the University of Leuven (Belgium).

(G) M.S. Theses

1. External Examiner of an MS thesis 'Computational techniques for obstacle problems' by an MS student Abeer Abdullah Al-Shajari Department of Mathematics, College of Science, King Saud University, June 2, 1998 (Riyadh).
2. A Committee Member of an MS thesis 'Bayesian prediction for the multiple linear regression model with first order auto-correlation', by Al-Baiyat Abdul Khaleq, Department of Mathematics KFUPM, Dhahran, December 1998.
3. External Examiner of an MS thesis, 'Numerical inversion of Laplace transform' by an MS student Fatima Abdul Rehman of Govt. Girls College, Dammam, Saudi Arabia.

(H) Ph.D Thesis

1. External Examiner for a Ph.D thesis 'Variational in equalities', by Mrs. Khudija Albani, Girls College, King Saud University, Riyadh, 1992.
2. A committee member for Ph.D thesis 'Numerical inversion of laplace transform' by Abdul-Aziz Al-Shuaibi, Department of Mathematics, KFUPM, Dhahran 1992.
3. A committee member for Ph.D thesis 'Galerkin method for solution of PDE's', by Ghulam Kabir Beg, Department of Mathematics, KFUPM, Dhahran 1994.

(J) Invited Lectures

1. Invited speaker, The International Conference on Biomathematics held on July 14- July 19, 1999 at Akdeniz University, Antalya, Turkey.

(K) Conferences and Seminars Attended

1. Attended a computer science education seminar at Karachi from 11th to 15th December 1973 organized by I.B.M. company, Karachi.
2. Attended a two week Seminar in Mathematics at Khanaspur Ayubia Murree in 1974 organized by Quaid-e-Azam University, Islamabad, Pakistan
3. Attended a summer school in Mathematics at education extension center Abbotabad organized by Ministry of Education in collaboration with British Council from 23rd July 1977 to 11th August 1977.
4. Attended a Bilinial conference in Numerical Analysis at Dundee University Scotland U.K. from 30th June 1983 to 4th July 1983.

5. Attended All Pakistan Mathematical Conference at Quaid-e-Azam University Islamabad from 2nd to 5th October 1985 and presented a paper.
6. Attended All Pakistan Mathematical Conference at Sindh University Jam-Shoro Hyderabad from 15th to 17th February 1986 and presented a paper.
7. Attended All Pakistan Urdu Science Conference at N.E.D. University Karachi from 16th to 20th February 1991.
8. Participated in Ramadhan Seminar at Umm-ul-Qura University Makkah, Saudi Arabia from 21st March to 23rd March, 1992 and presented a paper.
9. Participated in Ramadhan seminar at Umm-ul-Qura University, Makkah from March 10 to March 12 1993 and presented a paper.
10. Participated in the first Annual Conference of Saudi Association for Mathematical Sciences at King Saud University Riyadh from 5 – 7 April 1994 and presented a paper.
11. Participated and presented a paper in Saudi Association for Mathematical Sciences Conference held at King Saud University, Riyadh from 8 – 9 April 2002.

Technical Reports

1. M.A. Bokhari and M. Iqbal
‘Two Computational Problems in Interpolation and Approximation’
Technical Report No. 134
February 1993.
2. M. Iqbal
‘On the Spline Regularized Inversion of the Laplace transform’
Technical Report No. 155
November 1993
3. M. Iqbal
‘Maximum Likelihood Method for Numerical Inversion of Mellin Transform’
Technical Report No. 214
January 1997
4. M. Iqbal
‘Statistical Regularization Methods for Numerical Inversion of Ill-posed Inverse Problems’
Technical Report No. 226
January 1998
5. M. Iqbal
‘Constrained Regularization Method for Stable Solutions of Ill-posed Problems’
Technical Report No. 265
May 2001