

Curriculum Vitae
 Dr. Muhammad Ashfaq Bokhari
Associate Professor
Department of Mathematical Sciences
KFUPM

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Curriculum Vitae

Muhammad Ashfaq Bokhari, PhD

1. Personal Data

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2. Education

University of Alberta, Canada:

Ph.D. Approximation Theory (1986).

Advisor: Professor A. Sharma

Title of Thesis: "Equiconvergence of Approximation Processes"

Univ. of Western Ontario, Canada:

M.A. Analysis (1980).

Concentration: Differential Equations, Functional Analysis, Real Analysis.

Quaid-e-Azam University, Pakistan:

M.Sc. Pure Mathematics (1975)

Concentration: Algebra, Topology, Differential Equations, Real Analysis.

University of the Punjab, Pakistan:

B.A. (1972)

Concentration: Mathematics, English

3. Employment History

- 1998- : *Associate Professor of Mathematics*
King Fahd University of Petroleum & Minerals, Saudi Arabia.
- 1997-98: *Associate Professor of Mathematics*
National University of Sciences & Technology, Pakistan.
- 1992-98: *Associate Professor of Mathematics*
King Fahd University of Petroleum & Minerals, Saudi Arabia.
- 1988-92: *Assistant Professor of Mathematics*
King Fahd University of Petroleum & Minerals, Saudi Arabia.
- 1985-88: *Assistant Professor of Mathematics*
Bahauddin Zakariya University, Pakistan.
- 1980-85: *Teaching Assistant*
University of Alberta, Canada.
- 1979-80: *Teaching Assistant*
University of Western Ontario, Canada.
- 1975-79: *Lecturer of Mathematics*
Bahauddin Zakariya University, Pakistan.

4. Teaching

I. List of courses taught at KFUPM

A. Prep Math & Undergraduate Courses

- i. Preparatory Mathematic I
- ii. Preparatory Mathematic I
- iii. Calculus I
- iv. Calculus II
- v. Calculus III
- vi. Elements of Differential Equations
- vii. Introduction to Differential Equations & Linear Algebra
- viii. Introduction to Linear Algebra
- ix. Engineering Mathematics
- x. Advanced Calculus I
- xi. Advanced Calculus II
- xii. Advanced Calculus III
- xiii. Introduction to Topology
- xiv. Introduction to Complex Variable
- xv. Numerical Analysis II
- xvi. Linear & Nonlinear Programming
- xvii. Seminars in Mathematics

B. Graduate Courses

- i. Real Analysis
- ii. Functional Analysis I
- iii. Linear Algebra
- iv. Introduction to Approximation Theory

II. Courses taught at NUST¹ (Pakistan)

A. BS (Computer & Engineering Programs)

- Calculus
- Methods of Applied Mathematics (Fourier Analysis, Partial Differential Equation, Vector Calculus)
- Complex Analysis.

B. MS (Computer & Engineering Programs)

Numerical Analysis with C-Language

III. Courses taught at BZU², Pakistan

A. MS (Mathematics Program)

- Group Theory
- Real & Complex Analysis
- Linear Algebra
- Topology
- Measure Theory.

B. M. Phil (Mathematics Program)

Approximation Theory.

IV. University of Alberta, Canada

- Calculus
- Introduction to Differential Equations.

V. Course coordination/Exam committee

- MATH 001 Exam Committee (Term 001-012)
- MATH 002 Exam Committee (Term 993-011)
- MATH 102 Exam Committee (Term 092)
- MATH 260 Syllabus Coordinator (Term 992)
- MATH 101 Exam Committee (Term 061)
- MATH 102 Exam Committee (Term 062)

VI. Course development/revision responsibilities

- “Introduction to Functional Analysis and Measure Theory”
[MATH 431: a new course in the Revised BS Program
adopted in the Undergraduate Bulletin 2001-03]

¹ National University of Sciences & Technology (Electrical & Mechanical Engineering College)

² Bahauddin Zakariya University (Centre for Applied & Pure mathematics)

- ii. "Introduction to Approximation Theory
[MATH 575: Revised Contents adopted in the Graduate Bulletin 2003-05]
- iii. Participated in the revision/development of following Graduate Courses as a committee member of PhD Program on Algebra & Analysis which were adopted in the Graduate Bulletin 2003-05:
 - a. Functional Analysis I [MATH 535: Revised contents]
 - b. Functional Analysis II [MATH 536: New course]
 - c. Topological Vector Spaces [MATH 537: New course]
 - d. Harmonic Analysis [MATH 540: New course]
- iv. Prep-Year Math Contents (revision of program)
- v. Calculus sequence courses (Reorganization of the contents)

VII. Participation in short courses

No.	Title	Organizer	Year
1	Good Evaluation: A Critical Part of Good Teaching.	KFUPM	1991
2	The Dynamics of Teaching Excellence	KFUPM	1992
3	Motivating Students to Learn.	KFUPM	1993
4	Instructional Technology	DAD	1998
5	Teaching, Learning, Curriculum & Assessment	DAD	1999
6	Preparing to Teach: Instructional Development Program	DAD	2001
7	Introduction to WebCT	DAD	2002
8	Introduction to MATLAB	Math Sc	2003
9	Outcome based Program Assessment	DAD	2004
10	Peer Evaluation	DAD	2006

VIII. Participation in workshops/discussion forums

No.	Title	Organizer	Year
1	Students Learning at KFUPM: Challenges and Opportunities	DAD	1999
2	First Saudi Workshop on University Preparatory Programs	KFUPM	2000
3	Faculty Evaluation by Students Discussion Forum	DAD	2000
4	Striving for Excellence in University Teaching and Learning	DAD	2001
5	Increasing Effectiveness as a University Teacher	DAD	2002

6	Enhancing Student Learning at KFUPM Discussion Forum	DAD	2002
7	Outcome Assessment	DAD	2003
8	Research KFUPM: Challenges and Opportunities Discussion Forum	DAD	2003
9	Faculty and Student Motivation	DAD	2004
10	Using Course Design to Create more Significant Learning Experiences for Students.	DAD	2006
11	Good Learning and Good Teaching: How to promote more of it	DAD	2006
12	Teaching Mathematics in the Prep-Year	Prep-YEAR	2006
13	Developing Assessment Plan to enhance Students learning	DAD	2007

IX. Presentations at MATH Education Forum (KFUPM)

- i. **Bokhari, M. A.**, “MATH 202 “Elementary Differential Equations: A Course amid Expectations & Obligations,” Math Education Seminar (October 2002)
- ii. **Bokhari, M. A.**, “Appropriate Utilization of Recitation Hour in MATH 101/102: *Group Activity-An Experience*,” Math Education Seminar (October 2003)
- iii. **Bokhari, M. A.**, Al-Assar, R. and Ibrahim, S., “On freshman calculus recitation hour: A panel discussion I,” Math Education Seminar (March 2004)
- iv. **Bokhari, M. A.**, Al-Assar, R., Ibrahim and S., Laradji, A., “On freshman calculus recitation hour: A panel discussion II,” Math Education Seminar (April 2004)
- v. **Bokhari, M. A.**, “An alternative way to define limit of one variable function,” Math Education Seminar (February 2005)
- vi. **Bokhari, M. A.**, “MATH 202 “Elementary Differential Equations: A Course amid Expectations & Obligations,” Math Education Seminar (October 2002)
- vii. **Bokhari, M. A.**, “Appropriate Utilization of Recitation Hour in MATH 101/102: *Group Activity-An Experience*,” Math Education Seminar (October 2003)
- viii. **Bokhari, M. A.**, Al-Assar, R. and Ibrahim, S., “On freshman calculus recitation hour: A panel discussion I,” Math Education Seminar (March 2004)

- ix. **Bokhari, M. A.**, Al-Assar, R., Ibrahim and S., Laradji, A., “On freshman calculus recitation hour: A panel discussion II,” Math Education Seminar (April 2004)
- x. **Bokhari, M. A.**, “An alternative way to define limit of one variable function,” Math Education Seminar (February 2005)

5. Research

I. Research interests

- Constrained Approximation
- Numerical Quadrature
- Optimal Control Theory
- Mathematics Education.

II. Journal Publications

After Promotion to the Rank of Associate Professor: (Jan. 1992)

- JP1** **Bokhari, M. A.**, and Iqbal, M., “Asymptotic distribution of the zeros of certain Lagrange interpolants”, *Proc. Edinburgh Math. Soc.*, Vol. 38 (1995), pp. 99-106.
- JP2** Zaman, F. D., and **Bokhari, M. A.**, “Diffraction of SH-waves at a mixed interface”, *Il Nuovo Cimento*, Vol. 18 C (1995), 473-482
- JP3** **Bokhari, M. A.**, “On constrained L^2 -approximation of complex functions,” *Canad. Math. Bull.* Vol. 38 (1995), pp. 149-155.
- JP4** **Bokhari, M. A.**, “Interpolation mixed with ℓ_2 - approximation”, *J. Approx. Th.*,” Vol. 83 (1995), pp. 255-265.
- JP5** **Bokhari, M. A.**, and Iqbal, M., “ L_2 - approximation of real valued functions with interpolatory constraints”, *J. Comp. & Appl. Math.*, Vol. 70 (1996), pp. 201-205.
- JP6** **Bokhari, M. A.**, Chaudhry, M. A. and Qadir, A., “Approximate solution of integral equations and convolution integrals using Legendre polynomials”, *J. Approx. Th. & Appl.*, Vol. 13(1997), pp. 1-9.
- JP7** Sadek, I. and **Bokhari, M. A.**, “Optimal control of a parabolic distributed parametric system via interpolating orthogonal polynomials,” *Optimal Contr. Appl. & Methods*, Vol. 19 (1998), pp. 205-213.

- JP8** Bokhari, M. A., Dikshit, H. P. and Sharma, A., “Birkhoff interpolation on some perturbed roots of unity: Revisited,” *Numerical Algorithms*, Vol. 25 (2000), pp. 47-62.
- JP9** Bokhari, M. A., “On constrained uniform approximation”, *Intern. J. of Math and Math. Sc.* Vol 31 (2002), pp. 103-108.
- JP10** Yushau, B., Bokhari M. A. and Wessels D. C. J., “Computer Aided Learning of Mathematics: Software Evaluation,” *Journal of Mathematics and Computer Education*, Volume 38 (2004), 165-182.
- JP11** Yushau, B. and Bokhari, M. A., “Language and Mathematics: A mediational approach to bilingual Arabs,” *International Journal of Mathematics Teaching and Learning*, (April issue, 2005) pp. 1-18, <http://www.ex.ac.uk/cimt/ijmtl/ijmenu.htm>.
- JP12** Bokhari, M. A. and Yushau, B., “Local (L, ε) -approximation of a function of single variable: an alternative way to define limit,” *Intern. J. Math. Educ. in Sciences and Technology*, Vol. 37 (2006) pp. 515-526.
- JP13** Bokhari, M. A., “Gauss quadrature formula: An extension via interpolating orthogonal polynomials”, *J. Franklin Institute* (in press)
- JP14** Bokhari, M. A., “On Hermite interpolating L_2 -approximants,” *Dynamic Systems and Applications*, Vol 16 (2007), pp. 203-216.

Before Promotion to the Rank of Associate Professor

- JP15** Bokhari, M. A., “Perturbation of nodes and poles in certain rational interpolants,” *Bull. Austral. Math. Soc.*, 36 (1987), pp. 177-185. (*Extracted from Ph.D. thesis*)
- JP16** Bokhari, M. A., “On certain sequences of least square approximants,” *Bull. Austral. Math. Soc.*, 37 (1988), pp. 415-422. (*Extracted from Ph.D. thesis*)
- JP17** Bokhari, M. A., “Equiconvergence of some sequences of complex interpolating rational functions (Quantitative estimates and sharpness),” *J. Approx. Theory*, 55 (1988), pp. 205-219. (*Extracted from Ph.D. thesis*)
- JP18** Bokhari, M. A., “Converse results in the theory of equiconvergence of interpolating rational functions,” *Rocky Mount. J. Math.*, 19 (1989), pp. 73-81. (*Extracted from Ph.D. thesis*)

- JP19 Bokhari, M. A.**, “Extensions of certain results in Walsh-type equiconvergence”, *Bull. Austral. Math. Soc.*, 44 (1991), pp. 451-460. (*Extracted from Ph.D. thesis*)
- JP20 Bokhari, M. A.** and Sharma, “Equiconvergence of some sequences of rational functions,” *Intern. J. Math. & Math. Sc.*, 15 (1992), pp. 221-228.
- JP21 Bokhari, M. A.**, “A note on certain next-to-interpolatory rational functions,” *Acta Math. Hungarica*, 62 (1993), pp. 49-55.

III. Conference Publications

After Promotion to the Rank of Associate Professor: (Jan. 1992)

- CP1** Yushau, B. and **Bokhari M. A.**, “Language and Mathematics: The case of Bilingual Arabs”. *Second UAE-Math-Day*, American University of Sharjah, United Arab Emirates (April 2004), (Related to JP11)
- CP2** **Bokhari, M. A.**, and Yushau, B., “Local (L, ε) -approximation of a function of a single variable: an alternative way to define limit,” Poster presented at *International Conference on Mathematics Education (ICME-10)*, Copenhagen, Denmark from (July 2004), (Related to JP12).
- CP3** Yushau B, **Bokhari M. A.**, Mji A. and Wessels D.C.J., “Factors contributing to mathematics achievement: the case of a Computer Aided Learning Environment,” M. N. Anwar and M. I. Syam (Eds), *Proceedings of the Second International Conference of Mathematics*, UAE University, AL-Ain (Dec 2004), pp. 19-38.
- CP4** **Bokhari, M. A.**, “Gauss Quadrature Formula: An Extension via Interpolating Orthogonal Polynomials”, *Proceedings of First International Conference on Modeling, Simulation and Applied Optimization*, Paper No. 341 [CD-ROM], American University of Sharjah, Sharjah, UAE (Feb. 2005). (Related to JP13)
- CP5** **Bokhari, M. A.**, “Hermite interpolating L_2 Approximants: Computational Aspects,” *Proceedings of International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2005): Extended Abstracts*, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, (2005) pp. 63-66. (Related to JP14)
- CP6** Yushau, B., **Bokhari, M. A.**, Mji, A., Wessels & D. C. J. “Predictors of success in Computer Aided Learning of

Mathematics”, *Proceedings of the 27th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* [CD-ROM]. Eugene, OR: All Academic (2005).

- CP7** **Bokhari, M. A.**, “Interpolating orthogonal polynomials,” *Proceedings of the Workshop on Special Functions in Physics and Applied Mathematics*, King Abdulaziz City of Science & Technology, Riyadh, Saudi Arabia (April 2006). (*in press*)
- CP8** **Bokhari, M. A.**, “Certain Approximation Problems: *Subject to Interpolatory Constraints*”, *Third UAE Math Day*, University of Sharjah, UAE (April 2006).
- CP9** **Bokhari, M. A.** and Al-Attas, H., “Interpolating Exponential Polynomial Approximants on Half Line”, Poster presented at the *CAIMS-MITACS 2006 Joint Annual Conference*, Canada (June 2006)
- CP10** **Bokhari, M. A.**, “A variant of Gauss quadrature rule,” *Proceedings of International Conference on Numerical Analysis and Applied Mathematics* (ICNAAM-2006): Extended Abstracts, Wiley-VCH Verlag GmbH & Co. KGaA (2006), Weinheim.
- CP11** **Bokhari M. A.** and Sadek, I. “Application of Orthogonal Exponential Zero-Interpolants in Optimal Control Problems”, *Second International Conference on Modeling, Simulation and Applied Optimization*, Abu-Dhabi, UAE, (2007), *accepted*.

Before Promotion to the Rank of Associate Professor

- CP12** **Bokhari, M. A.** and Sharma, A. “Equiconvergence of certain sequences of rational functions (Hermite case)”, *International series of Numerical Mathematics*, Birkhauser Verlag Basel, 76, (1986), pp. 281-292. (*Extracted from Ph.D. thesis*)

IV. KFUPM Research Projects

1. Zaman, F. D., and **Bokhari, M. A.**, “Study of Diffraction of SH-waves at a mixed interface”, Final report approved by KFUPM Research committee (1993-1994) *completed*
2. **Bokhari, M. A.**, Samman, M., Yushau, B., “Students’ Learning Process in Pre-Calculus and Calculus Courses at KFUPM:

Identifications of Problems and Possible Remedies”, Deanship of Academic Development, KFUPM, (2004-2005) *completed*

3. **Bokhari, M. A.**, Al-Attas, H., “Interpolating Orthogonal Exponential Polynomials: Theoretical & Computational aspects”, KFUPM Research Committee (2005-2006). *completed*
4. Abulhamayel, H., Al-Attas, H., **Bokhari, M. A.**, Ghalib, A., Jalil, P., and Al-Momani, M., “Improving Students Academic Performance”, Planning & Quality, Deanship of Academic Development, KFUPM (2006 - ...) *in progress*
5. **Bokhari, M. A.**, Al-Attas, H., “Combination of Orthogonal Collocation Points with Pre-assigned Knots: A Study of Numerical Solutions of Boundary Value Problems,” KFUPM Research Committee (2006-2007) *in progress*.

V. Citations

i. JP7 is cited in

1. Padhi, R., Balakrishnan, S.N., Optimal management of beaver population using a reduced-order distributed parameter model and single network adaptive critics , *IEEE Transactions on Control Systems Technology* 14 (4) (2006), pp. 628-640.
2. Qi, C., Li, H.-X., Chen, G., Intelligent modeling of unknown distributed parameter systems, *Proceedings of the SICE Annual Conference*, (2005), pp. 1836-1841.
3. Shang, H., Fraser Forbes, J., Guay, M. Feedback control of hyperbolic distributed parameter systems , *Chemical Engineering Science* 60 (4) (2005), pp. 969-980.
4. Padhi, R., Balakrishnan, S.N., Proper orthogonal decomposition based optimal neurocontrol synthesis of a chemical reactor process using approximate dynamic programming, *Neural Networks* 16 (5-6) (2003), pp. 719-728.
5. Padhi, R., Balakrishnan, S.N., Optimal process control using neural networks, *Asian Journal of Control* 5 (2) (2003), pp. 217-229.
6. Padhi, R., Balakrishnan, S.N., A systematic synthesis of optimal process control with neural networks, *Proceedings of the American Control Conference* 3 (2001), pp. 1910-1915.

ii. **JP8** is cited in

1. de Bruin, M.G. (0, m) Pál-type interpolation: Interchanging value- and derivative-nodes, *Journal of Computational and Applied Mathematics* 179 (2005), pp. 175-184.
2. de Bruin, M.G., (O, m) Pál-type interpolation on the Möbius transform of roots of unity, *Journal of Computational and Applied Mathematics* 178 (2005), pp. 147-153.
3. de Bruin, M.G., On a special interpolation problem and overconvergence, *Journal of Computational and Applied Mathematics* 153 (1-2) (2003), pp. 163-169.

iii. **JP10** is cited in

1. L. Stern, S. Markham, and R. Hanewald, You can lead a horse to water: How students *really* use pedagogical software, *Proceedings of the Ninth Annual SIGCSE/SIGCUE Conference on Innovation and Technology in Computer Science Education (ITiCSE05)*, ACM Press, ISSN: 0097-8481 (2005), pp. 246-250.
2. Karen Hope Snyder, Roles of students and instructors in a pilot computer-based college algebra course, *Masters of Science Thesis in Teaching*, The Graduate School, The University of Maine, (2006).

iv. **JP11** is cited in

1. B. Barton, R. Chan, C. King, P. Neville-Barton, J. Sneddon, EAL undergraduates learning mathematics, *International Journal of Mathematical Education in Science and Technology*, Vol. 36, (2005), pp 721 – 729.
2. Gong Wengao, Hong Huaqing², Koh Kim Hong, Incorporating corpus linguistics into content teaching: the feasibility of using small corpus in Singapore primary Maths teaching, *Proceeding of Conference “REDESIGNING PEDAGOGY: Research, Policy, Practice”*, Centre for Research in Pedagogy and Practice, National Institute of Education, Singapore, (May 30-June 1, 2005)
<http://conference.nie.edu.sg/paper/html/index.htm>

v. **JP17** is cited in

- Jakimovski, A.; Sharma, A., Quantitative results on equiconvergence of certain sequences of rational interpolants, *Math. Balkanica (N.S.)* 16 (2002), no. 1-4, 249--282.

VI. Conference Presentations

1. **Bokhari, M. A.** “Converse results in the theory of equiconvergence”, Approximation Theory Conference, Edmonton, Canada, (June, 1986)
2. **Bokhari, M. A.**, “On interpolating rational functions in the complex domains”, Urdu Science Conference, Hyderabad, Pakistan, (February, 1987)
3. **Bokhari, M. A.**, “On the asymptotic behavior of the zeros of exponential function”, 3rd Ramadhan Math Symposium, Umm-ul Qura University, Makkah, Saudi Arabia (February 1992).
4. **Bokhari, M. A.**, “On least squares approximants”, 1st Annual Meeting, Saudi Arabian Math. Soc. Riyadh, Saudi Arabia (April 1994).
5. **Bokhari, M. A.**, “On Interpolating Least Squares Approximants”, Annual Meeting Saudi Arabian Math. Soc. Riyadh, Saudi Arabia (March 2001)
6. **Bokhari, M. A.**, “Gauss Quadrature Formula: An Extension via Interpolating Orthogonal Polynomials”, ICMSAO Paper No. 341 presented at First International Conference on Modeling, Simulation and Applied Optimization, American University of Sharjah, Sharjah, UAE (Feb. 2005),
7. **Bokhari, M. A.**, “Hermite interpolating L_2 Approximants: *Computational Aspects*,” International Conference on Numerical Analysis and Applied Mathematics, Crete, Greece (2005)
8. **Bokhari, M. A.**, “Interpolating Orthogonal Polynomials,” Paper No. 2 presented at the Workshop on Special Functions and Applied Mathematics, King Abdulaziz City of Science & Technology, Riyadh, Saudi Arabia (April 2006).
9. **Bokhari, M. A.**, “Certain Approximation Problems: *Subject to Interpolatory Constraints*”, Third UAE Math Day, University of Sharjah, UAE (April 2006).
10. **Bokhari, M. A.** and Al-Attas, H., “Interpolating Exponential Polynomial Approximants on Half Line”, Poster presented at the CAIMS-MITACS 2006 Joint Annual Conference, Canada (June 2006)
11. **Bokhari, M. A.**, “A variant of Gauss quadrature rule,” International Conference on Numerical Analysis and Applied Mathematics, Crete, Greece (September 2006).
12. **Bokhari, M. A.** and Al-Attas, H., “Constrained approximation of functions over a semi-infinite interval: Computational aspects”, Third Saudi Science Conference, Riyadh (March 2007).
13. **Bokhari, M. A.** and Al-Attas, H., “On collocation method by orthogonal 0-interpolants”, 6th International Congress on Industrial and Applied Mathematics (ICIAM 2007), Zurich, (*accepted for presentation*)

VII. Technical Seminars delivered at KFUPM

1. **Bokhari, M. A.**, “On Equiconvergence of Rational Interpolants”, Dept. Math. Sc., KFUPM, (Oct. 1988).
2. **Bokhari, M. A.**, “Simultaneous interpolation and approximation,” Dept. Math. Sc., KFUPM, (Dec. 1992).
3. **Bokhari, M. A.**, “Constrained polynomial approximation,” Dept. Math. Sc., KFUPM, (Jan. 1994)
4. **Bokhari, M. A.**, “On certain convergent approximation processes over $[0, \infty)$,” Dept. Math. Sc., KFUPM, (April 2001)
5. **Bokhari, M. A.** and Tawfiq, H., “An Extension of Gauss Quadrature Formula: Theoretical & Computational Aspects,” Dept. Math. Sc., KFUPM, (May 2003).
6. **Bokhari, M. A.**, “Interpolation beyond interval of convergence” Dept. Math. Sc., KFUPM, (February 2006).

VIII. Technical Seminars delivered outside KFUPM

1. **Bokhari, M. A.**, “Walsh Theory of Equiconvergence,” Punjab University Mathematical Society, Pakistan (April 1987).
2. **Bokhari, M. A.**, “On Exponential Polynomial Approximants,” Dept. of Math., QAU, Islamabad, Pakistan (Nov. 1997)
3. **Bokhari, M. A.**, “On interpolating rational functions in the complex domain,” College of E & ME, National University of Sciences and Technology, Pakistan (Feb. 1998)
4. **Bokhari, M. A.**, “Convergence of Interpolating Polynomials,” Dept. Comp. Sc., Math & Stat, American University of Sharjah, UAE. (December 2000)
5. **Bokhari, M. A.**, “On certain approximation problems,” CASPAM, BZU, Pakistan. (January 2006)
6. **Bokhari, M. A.**, “How to generate research problems,” CASPAM, BZU, Pakistan. (February 2007)
7. **Bokhari, M. A.**, “Mixing Interpolation with Orthogonality Beyond Compact Interval,” Centre for Physics and Mathematics, National University of Sciences and Technology, Pakistan (February. 2007)
- 8.

IX. Thesis related Contributions

1. **PhD Thesis** Co-Supervisor for Mr. B. Yushau: “The Predictor of Success of Computer Aided Learning of Pre-Calculus Algebra” Dept. of Math Education, University of South Africa (2003-2006).

2. **PhD Thesis** Committee Member for Mr. A. Domolo, “Fixed points results of some nonlinear maps with applications” Dept. of Math Sc, KFUPM, 2004-2006.
3. **MS Thesis** Committee Member: student, Mr. L. Jamiro, “One Dimensional Coupled Vibrating Systems with Control Applied at the Coupled Points” Dept. of Math Sc, KFUPM, (1994-1995).
4. **MS Thesis** Supervisor for Mr. Tawfiq, “The Effect of Inexact Line Search on Conjugate Gradient Methods” Dept. of Math Sc, KFUPM, (199-1992).
5. **M Phil Theses** Supervisor: Survey theses of six M. Phil students at BZU (Pakistan) (1987-1988)

X. Research Visits at the invitation of

1. Prof. A. Sharma, Dept. of Math. Univ. of Alberta, Canada
(July 1986)
2. Prof. A. Sharma Dept. of Math. Univ. of Alberta, Canada
(March 1991)
3. Prof. R. Varga, Inst. Computational Math, Kent State Univ., USA
(April 1991)
4. Prof. A. Sharma, Dept. of Math. University of Alberta, Edmonton,
(July 1998)
5. Prof. A. Sharma, Dept. of Math. University of Alberta, Edmonton,
(July 1999)
6. Prof I. Sadek, Dept. of Math, American Univ. of Sharjah, Sharjah,
(Dec. 2000)
7. Prof I. Sadek, Dept. of Math, American Univ. of Sharjah, Sharjah.
(April, 2006)
8. Prof I. Sadek, Dept. of Math, American Univ. of Sharjah, Sharjah.
(September, 2006)

XI. Conference Attendance

1. Mathematics Conference, Ayubia, **Pakistan**, (July 1974)
2. Urdu Science Conference, Multan, **Pakistan**, (January, 1978)
3. Pakistan Mathematical Society, Karachi, **Pakistan**, (December 1979)
4. Approximation Theory Conference, Edmonton, **Canada** (July 1981)
5. Approximation Theory Conference, Edmonton, **Canada**, (June, 1986)
6. Urdu Science Conference, Hyderabad, **Pakistan**, (February, 1987)
7. 3rd Ramadhan Math Symposium, Umm-ul Qura University, Makkah, **Saudi Arabia** (February 1992).
8. Annual Meeting, Saudi Arabian Math. Soc. Riyadh, **Saudi Arabia** (April 1994).

9. Annual Meeting Saudi Arabian Math. Soc. Riyadh, **Saudi Arabia** (March 2001).
10. First Saudi Science Conference, KFUPM, Dhahran, **Saudi Arabia**
11. AMAM Conference, European Math Soc., University of Nice, **France** (Feb. 2003).
12. First International Conference on Modeling, Simulation and Applied Optimization, American University of Sharjah, Sharjah, **UAE** (Feb. 2005),
13. International Conference on Numerical Analysis and Applied Mathematics, Crete, **Greece** (2005)
14. Third UAE Math Day, University of Sharjah, **UAE** (April 2006).
15. CAIMS-MITACS 2006 Joint Annual Conference, **Canada** (June 2006)
16. International Conference on Numerical Analysis and Applied Mathematics, Crete, **Greece** (2006)

XII. Editorial work

1. On the Reviewer's list for **AMS Reviews** since 1989
2. **Reviewed articles** for the following journals
 - a. Journal of Franklin Institute
 - b. Mathematical & Computer Modeling
 - c. Arabian Journal of Sciences & Engineering
 - d. Journal of Natural and Physical Sciences
3. **Reviewed Projects/Research Proposals** for
 - a. King Abdulaziz University, Jeddah
 - b. KFUPM Research Committee

XIII. Membership of Professional Societies

1. American Mathematical Society. (1980-85; 1989 to date)
2. Punjab Mathematical Society. (Life Member, since 1991)
3. Islamic Society of Statistical Sciences. (Life Member, since 1992)

6. Services/Committee Work³

I. Administrative Positions

- i. Coordinator, Prep-Year Math Program, KFUPM, 2000-2002 (T093-011 & T013)
- ii. Chairman, Dept. of Mathematics, BZU, Pakistan, 1976-77.

II. Committee Work at KFUPM (1998-2006)

2005-2006

No.	Committee	Term	Formed by	Position	Type
1	Contents of Math courses for various disciplines of Hail University	I, II	U	M	A
2	Program Assessment Team (AT)	I	DAD	M	A
3	Award for Excellence in Teaching	II	C	C	A
4	Award for Excellence in Teaching	I-II	D	C	S
5	Program Self-Assessment	I-II	D	C	A
6	Undergraduate	II-III	D	C	S
7	Undergraduate	I	D	M	S
8	Dept. Planning & Development	II	D	M	S

2004-2005

No.	Committee	Term	Formed by	Position	Type
1	Program Self-Assessment	I, II	D	C	A
2	Numerical Analysis & Optimization Group	I-II	D	C	S
3	Award for Excellence in Teaching	I-II	D	C	S
4	Prep-Year Math Advisory Comm.	I-II	D	M	A
5	Analysis Group	I-II	D	M	S
6	Accreditation of College Programs	II	C	M	A
7	Award for Excellence in Teaching	II	C	M	A

2003-2004

No.	Committee	Term	Formed by	Position	Type
1	Numerical Analysis & Optimization Group	I, II	D	C	S
2	Award for Excellence in Teaching	I-II	D	C	S
3	Selection of Calculus Textbook	I-II	D	M	A
4	Prep-Year Math Advisory Comm.	I-II	D	M	A
5	Analysis Group	I-II	D	M	S
6	Award for Excellence in Teaching	II	C	M	S
7	Industrial Math Workshop (Organizing Comm.)	II	D	M	A

³ Details of contribution on some committees is given in the Services/Committee Work Profile

2002-2003

No.	Committee	Term	Formed by	Position	Type
1	Numerical Analysis & Optimization Group	I, II	D	C	S
2	Calculus Committee	I-II	D	C	S
3	Review of Service Courses	I-II	D	C	A
4	Selection of MATH 471/472 Textbook	I-II	D	C	A
5	Dept. Planning & Development	I-II	D	M	S
6	Industrial Math Workshop (Organizing Comm.)	I-II	D	M	A
7	Analysis Group	I-II	D	M	S
8	Award for Excellence in Teaching	II	C	M	S
9	College Program Committee	I-II	C	M	A
10	College Newsletter Committee	II	C	M	A

2001-2002

No.	Committee	Term	Formed by	Position	Type
1	Numerical Analysis & Optimization Group	I, II	D	C	S
2	Selection of MATH 321 Textbook	I	D	C	A
3	Selection of MATH 260 Textbook	I	D	M	A
4	Search (for new faculty)	I-II	D	M	S
5	Analysis Group	I-II	D	M	S
6	Evaluation of Academic Program	I-II	D	M	A
7	Issues related to Summer Training Program for Math Students	II	D	M	A
8	Prep-Year Math Advisory Comm.	I	C	C	A
9	Prep-Year Math Advisory Comm.	II	C	M	A
10	Industrial Math Workshop (Organizing Comm.)	I-II	C	M	A
11	Award for Excellence in Teaching	II	C	M	S
12	Experiment to modify Teaching Techniques for P-Y Math Courses	II	PY MATH	C	A

2000-2001

No.	Committee	Term	Formed by	Position	Type
1	Dept. Planning & Development	I, II	D	M	S
2	Prep-Year Math Committee	I-II	C	C	A
3	Math Learning Centre	I-II	C	M	A
5	Industrial Math Workshop (Organizing Comm.)	II	C	M	A
5	College Council (To review academic programs)	I-II	C	M	A

1999-2000

No.	Committee	Term	Formed by	Position	Type
1	Workshop on Algebra & Applications (Organizing Comm.)	II	D	C	A
2	How to increase the number of students in BS Math program	I-II	D	C	A
3	Undergraduate	I-II	D	M	S
4	Assessment of eligibility for Promotion	II	D	M	A
3	Promotion Committee	I	C	M	A
4	College Council (To review academic programs)	I-II	C	M	A

III. Miscellaneous Committee Work at KFUPM (1988-1997)

1. Dept. of Math. Sc.

Committee Chairman:

- Undergraduate Program
- Calculus related Issues
- Committees on Calculus Courses for (C & M)
 - Preparation of Syllabi
 - Increasing credit hours from 3 to 4
 - Utilization of 4th Hour
- Preparation of Syllabi for MATH 311,411, 412
- Issues related to Coordinated Exams
- Preparation of Syllabi for Calculus Courses
- Scheduling Affairs (Course Allocation/Timings; Exams etc
- Award for Excellence in Teaching
- Space Requirement and Plan for Faculty Offices

Committee Member:

- Graduate Program,
- Research & Colloquium
- PhD Proposal in the area of Analysis
- Department Planning and Development
- Preparation of Syllabi for Advanced Calculus Courses,
- Review of KFUPM Exam Rules and their Implementation
- Causes for Students' Low Performance in Math Service Courses

- Committees on Calculus Courses for (C & M)
 - Preparation of Syllabi
 - Increasing credit hours from 3 to 4
 - Utilization of 4th Hour
- Committee on Review of KFUPM Exam Rules & their Implementation.
- Committee on Job Opportunities for Math Graduates
- Committee on Promotion of Statistics as a Major

2. University

Committee Member:

- University Library (S)
- University Housing (S)
- Use of Technology for Exams/Quizzes in Pre-calculus Courses (A)

IV. College of E & ME, NUST, Pakistan

Member:

- Faculty Board (1997-1998)

V. BZU, Pakistan

Member:

- Board of Studies in Mathematics (1977-1979)
- University Chancellor's Committee (1986-87)

VI. Reports based on Committee Work

Being chairman/coordinator of a committee/scientific group, I submitted detailed reports on the assigned tasks. Some of the reports run over several pages. The worth-mentioning among these are:

- i. Self-Assessment of Undergraduate Program in Mathematics
- ii. Revised Undergraduate Program
- iii. Graduate Program in Analysis
- iv. Suggestions for Award Rules concerning Excellence in Teaching
- v. Procedure for Change of Textbooks
- vi. Prep-Year Math Exams
- vii. Issues related to Coordinated Exams

VII. Presentations on Administrative/Academic Matters

A. University Level

- i. Progress Report on Prep-Year Math Program (I)
[before Rector & Dean COS] (October 2000)
- ii. Math Learning Centre (with Prof. N. Tabet)
[before Rector & Dean COS] (March 2001)
- iii. Selection of Textbook for Prep-Math Courses
[before Academic Committee] (April 2001)
- vi. Progress Report on Prep-Year Program (II)
[before Rector & Dean COS] (October 2001)
- vi. Progress Report on Prep-Year Program
[before Academic Committee] (October 2001)
- vii. Revised BS Program in Math (with Chairman Math Sc)
[before Academic Committee] (October 2003)
- viii. Transparency-based Teaching for MATH 001
[before VRAA, Dean COS,
Chairman Math, Coordinator PYMP] (May 2005)
- ix. Prep-Year Math Course contents & Teaching Methodology
[before VRAA, Dean COS,
Chairman Math, Coordinator PYMP] (November 2005)
- x. Award Rules for excellence in teaching
[before Academic Committee] (September 2006)

B. College Level

- xi. Report on Prep-Year Math Program (Term 993)
(October 2000)
- xii. Proposed setup for the Prep-Year Math Program
(February 2001)
- xiii. Task Groups & selection of textbook, P-Year Math Program
(April 2001)
- xiv. Review of rules “Award for excellence in teaching”
(April 2006)

C. Department Council

- i. Input from US institutions vis-à-vis holding exams (written, MCQ), credit hours for Calculus Sequence Courses
(October 1993)
- ii. Reorganization of the contents of MATH 102 & 201
(May 1995)
- iii. Salient features of the revised BS program in Math (I)
(June 18 1996)
- iv. Salient features of the revised BS program in Math (II)
(June 23 1996)
- v. Revision for BS program in Math (Complete Document)
(April 1997)
- vi. Process of evaluating textbooks for Prep-Math
(April 2001)
- vii. Activities during the visit of Program Assessment Team
(December 2005)
- viii. Program Assessment: Observations, Recommendations, and Implementation plan
(March 2007)

VIII. Public Lectures (Outside KFUPM)

- i. **Bokhari, M. A.**, “Some suggestions for the improvement of Math and Physics education at the college level”, Faculty of Sciences, Balochistan Univ., Quetta, Pakistan (Aug. 2002)
- ii. **Bokhari, M. A.**, “Development of Mathematics at CIIT: A need not a luxury”, COMSAT Inst. of Information Technology., Islamabad, Pakistan (Dec. 2002)
- iii. **Bokhari, M. A.**, “Four Year BS Program at KFUPM: *An Introduction*”, Vice-Chancellor’s Committee, BZU, Multan, Pakistan (August. 2003)
- iv. **Bokhari, M. A.**, “Preparation for higher studies abroad,” CASPAM, BZU, Pakistan (Dec. 2003)
- v. **Bokhari, M. A.**, “Time Management for Math Courses,” Saudi-Pakistani School, Al-Khobar (June 2004)
- vi. **Bokhari, M. A.**, “Self-Assessment of Academic Programs,” Vice-Chancellor’s Committee, University of Sargodha, Pakistan (August 2005).
- vii. **Bokhari, M. A.**, “King Fahd University of Petroleum and Minerals, Saudi Arabia: *An overview of Administrative and Academic Set-up*,” Vice-Chancellor’s Committee, University of Sargodha, Pakistan (August 2005)
- viii. **Bokhari, M. A.**, “Learning outcomes based formation of syllabus”, CASPAM, BZU, Pakistan (February 2007)

IX. Participation in Organizing Committees

1. **Member** IX International Conference on Approximation and Optimization, Columbia (2008)
2. **Chair** Program Sub-committee: Workshop on Industrial Mathematics, KFUPM, (Feb. 29-Mar. 02. 2004).
3. **Chair** Publication, Site & Registration Committee: Workshop on Algebra & Applications, KFUPM, (Oct. 1999).
4. **Organizer**: One-day Instructors' Workshop for Pre-Year Math Program, KFUPM, and (Sept 2000; Jan. 2001; Jan. 2002).
5. **Organizer**: 3-day Instructors' Workshop for Pre-Year Math Program, KFUPM with the Author of the P-Y Math Textbook as key-note speaker (August 2001)
6. **Member** Organizing Committee: Urdu Science Conference, BZU, Pakistan, (Feb 1978).

X. Faculty Selection/Promotion Committees

1. Subject Expert: Selection Board for the position of Associate Professor in Mathematics, BZU, Multan, Pakistan (February 1998)
2. Member: Promotion Committee for the position of Associate Professor in Mathematics, KFUPM (1998)
3. Member: Review Committee for the position of Lecturer in Mathematics, KFUPM (1999)
4. As coordinator, Prep-Year Math Program, I interviewed several candidates for the position of Lecturer in Mathematics, KFUPM (2000-2001)
5. External referee for three applicants for the position of Associate Professor in Mathematics, BZU, Multan, Pakistan (February 2004).

7. Recognition of Services

I. Within KFUPM

1. **University** Appreciation for achievements/services in
 - Prep-Year Math Program [2002]
 - University [1997]
2. **College** Appreciation for achievements/services in
 - Department & College [2003]
 - Prep Year Math Program (Term 013) [2002]
 - Math Learning Center [2001]
 - Participation & Contribution to Academic Programs presented in the College Council [2000]
3. **Department** Appreciation for achievements/services in
 - Numerical Analysis Sc. Group [2005]
 - Teaching Award Committee [2005]
 - Self-Assessment Team [2005]
 - Workshop on Industrial Mathematics [2004]
 - Prep-Year Math Advisory Comm. [2004]
 - Calculus Committee [2003]
 - Numerical Analysis Sc. Group [2003]
 - Numerical Analysis Sc. Group [2002]
 - Workshop on Algebra & Applications [1999]
 - Exhibition for Math program [1999]
 - Teaching MATH 201 & 280 (Term 953) [1995]

II. Outside KFUPM

1. Recognition of Services at **BZU, Pakistan** [1988]
 2. Recognition of Teaching at **U of A, Canada** [1986]
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