# **CURRICULUM VITAE**

NAME : DR. QAMRUL HASAN ANSARI

Father's Name : Mr. Aley Hasan Ansari

Marital Status : Married

Date and Place of Birth : August 10, 1959; Alapur, Budaun, U.P. (INDIA)

Nationality : Indian

Permanent Address : Alapur, Budaun - 243631 (INDIA)
Permanent Position & Address : Professor, Department of Mathematics

Aligarh Muslim University Aligarh 202 002, India

Present Position : Professor

Present and Postal Address : Department of Mathematics & Statistics

King Fahd University of Petroleum & Minerals P.O. Box 1169, Dhahran 31261, Saudi Arabia

Phone Number : ++966-3-8602538 (O), ++966-3-8606563 (R)

++966-508762348 (M)

Fax Number : ++966-3-860-2340

E-mail Address : qhansari@kfupm.edu.sa and qhansari@sancharnet.in

# **ACADEMIC QUALIFICATIONS:**

**M. Phil.** (Awarded in 1985 by The Aligarh Muslim University, Aligarh) **Ph. D.** (Awarded in 1988 by The Aligarh Muslim University, Aligarh)

# • TOPIC OF M. PHIL.

Variational Inequalities and Error Estimation

# • TOPIC OF PH.D.

On Certain Problems Concerning Variational Inequalities

#### • AWARD OF SCHOLARSHIPS

- 1. Merit Scholarship in M.Sc.
- 2. Junior Research Fellowship in Ph.D.
- 3. Post Doctoral Fellowship of National Science Council of Taiwan (October 1997 July 2000).

#### • FIELD OF SPECIALIZATION AND INTEREST

Applied Functional Analysis, Optimization, Convex Analysis, Nonlinear Analysis, Fixed Point Theory in Topological Vector Spaces, Abstract Economies, Game Theory.

#### • RESEARCH EXPERIENCE

20 years in the field of Variational Inequalities, Complementarity Problems, Optimization, Convex Analysis, Vector Equilibrium problems, Fixed Point Theory in Topological Vector Spaces, Multivalued Mappings, Abstract Economies, Game Theory.

#### • TEACHING EXPERIENCE

19 years

August 1988 - October 1989, as a Lecturer, Department of Mathematics, Aligarh Muslim University, Aligarh, India.

October 1989 - June 1990, as a Lecturer, Department of Mathematics, College of Education for Girls, Al-Anbar University, Ramadi, Iraq.

August 1990 - December 1992, as a Lecturer, Women's College, Aligarh Muslim University, Aligarh, India.

December 1992 - March 28, 1997, as a Lecturer, Department of Mathematics, Aligarh Muslim University, Aligarh, India.

March 28, 1997 - March 27, 2005, as a Reader (Associate Professor), Department of Mathematics, Aligarh Muslim University, Aligarh, India.

March 28, 2005 - Continue (On Extra Ordinary Leave), as a Professor, Department of Mathematics, Aligarh Muslim University, Aligarh, India.

September 08, 2003 - July 23, 2007, as an Associate Professor, Department of Mathematical Sciences, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia.

July 24, 2007 - Continue, as a Professor, Department of Mathematics & Statistics, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia.

#### • COURSES TAUGHT

**Under graduate courses :** Calculus, Numerical Analysis, Convex Analysis, Mathematical Methods, Real Analysis, Metric Spaces.

**Post-graduate courses:** Applied Functional Analysis, Functional Analysis, General Topology, Optimization, Topological Vector Spaces, Computer Programming (FORTRAN 77), Mathematical Programming.

#### • PH.D. SUPERVISED

- 1. S. S. Irfan, Existence Results and Solution Methods for Certain Variational Inequalities and Complementarity Problems, 2002.
- 2. Z. Khan, Systems of Variational Inequalities and Multiobjective Games, 2003/2004.

#### • RESEARCH PROJECT

- 1. Major Research Project of U.G.C. entitled "Vector Equilibrium Problems and their Applications", April 01, 2002 to September 06, 2003.
- 2. Fat Track Research Project of KFUPM entitled "Ekeland's Variational Principles for Equilibrium Problems and their Applications", September 01, 2006 to August 31, 2007.

#### • REFEREE OF THE JOURNALS

Journal of Optimization Theory and Applications (U.S.A.), Journal of Global Optimization (U.S.A.), Nonlinear Analysis; Theory, Methods and Applications (U.S.A.), Journal of Mathematical Analysis and Applications (U.S.A.), Optimization (Germany), Annales

des Sciences Mathematiques du Quebec (Canada), Indian Journal of Pure and Applied Mathematics (India), International Journal of Fuzzy Systems (Taiwan), Taiwanese Journal of Mathematics (Taiwan), Journal of Computational and Applied mathematics (Elsevier), Applied Mathematics Letters (Elsevier), Computers and Mathematics with Applications (Elsevier), RAIRO Operations Research, Applied Mathematics and Optimization (Elsevier), Asia Pacific Journal of Operations Research (India), European Journal of Operations Research, Proceedings of the International Conferences.

# • MEMBER OF ORGANIZING COMMITTEE OF INTERNATIONAL CONFERENCES/ SYMPOSIUM

- 1. Member of the program committee of "International Conference on Optimization and Optimal Control (ICOOC 2001)", May 30 June 03, 2001, Department of Mathematics, National Cheng Kung University, Tainan, Taiwan.
- 2. Member of the International advisory committee of "7th International Symposium on Generalized Convexity/Monotonicity", August 27 31, 2002, The Hanoi Institute of Mathematics, Hanoi, Vietnam.
- 3. Member of the Scientific Committee of "International Conference on Analysis and Its Applications", May 28-31, 2004, Department of Mathematics, National Changhua University of Education, Changhua, Taiwan.

# • MEMBER OF ACADEMIC SOCIETIES

- 1. Indian Society of Industrial and Applied Mathematics
- 2. Working Group of Generalized Convexity/Monotonicity
- 3. Working Group of Equilibrium Models in Complex Systems

# • VISITING PROFESSOR / SCIENTIST FOR SHORT TERM

- 1. Mathematisches Seminar, University of Kiel, Kiel, Germany from March 29 to June 29, 1997 under Scientific exchange program between INSA, New Delhi, Indian and DFG, Bonn, Germany.
- 2. Department of Applied Mathematics, Hong Kong Polytechnic University, Hong Kong, from December 01 06, 1999; June 05 July 05, 2001 and August 01 17, 2004.
- 3. Department of Mathematical Engineering, Concepcion University, Concepcion, Chile, May 01 30, 2001.
- 4. Department of Applied Mathematics, National Sun Yet-sen University, Kaohsiung, Taiwan and Department of Mathematics, National Changhua University of Education, Changhua, Taiwan, July 05 14, 2001, May 16 June 18, 2002 and July 05 18, 2005, August 01 14, 2007.
- 5. The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, June 30 August 11, 2002.

6. Institut für Angewandte Mathematik, Universität Erlangen-Nürnberg, Erlangen, Germany, October 02 – 11, 2007

# • TRAINING / WORKSHOP ATTENDED

- 1. All India Summer Institute in Mathematics and Computer Sciences, Utkal University, Bhubaneswar, 1988.
- 2. National Winter Institute in Computer Programming, Govt. Arts College, Triuvannamalai, Tamil Nadu, 1988.
- 3. Regioal Workshop on Applicable Mathematics, Aligarh Muslim University, Aligarh, 1989.
- 4. Refresher Course in Mathematics, Academic Staff College, Aligarh Muslim University, Aligarh, 1992.
- 5. Workshop on Industrial Mathematics, Organized by Department of Mathematics, Aligarh Muslim University at Jamia Hamdard, New Delhi, 1992.
- 6. Workshop on Variational Methods for Hamiltonian System, International Center for Theoritical Physics, Trieste, Italy, 1994.
- 7. School on Algebraic Number Theory, Bombay University, Bombay, 1994-95.
- 8. A Course on Wavelets Theory, KFUPM, Dhahran, Saudi Arabia, September December, 2003.
- 9. Workshop on Industrial Mathematics, KFUPM, Dhahran, Saudi Arabia, February 29 March 02, 2004.

#### • INTERNATIONAL AND NATIONAL SYMPOSIUM / CONFERENCES ATTENDED

- 1. Indo-French Instructional Conference and Symposium on Differential Equations and Numerical Methods, Tata Institute of Fundamental Research, Banglore, 1986.
- 2. Indian Mathematical Society Conference, Jaipur, 1986.
- 3. Instructional Conference on Functional and Applications, Aligarh Muslim University, Aligarh, 1989.
- 4. Symposium on General Topology, Maitreyi College, Delhi University, 1987.
- 5. Indian Mathematical Society Conference, Gorakhpur University, Gorakhpur, 1987.
- 6. Indian Mathematical Society Conference, Poona University, Pune, 1988.
- 7. Indian Mathematical Society Conference, Aligarh Muslim University, Aligarh, 1989.
- 8. Vistas in Modern Applied Mathematics, Goa University, Goa, 1993.
- 9. Indian Mathematical Society Conference, Bihar University, Muzzafarpur, 1993.
- 10. Indian Society of Industrial and Apllied Mathematics Conference, Anna University, Madras, 1994.
- 11. Jammu Mathematical Society Conference, Jammu University, Jammu, 1996.

- 12. International Conference on Nonlinear Differential Equations, Tata Institute of Fundamental Research, Bangalore, 1996.
- 13. International Conference on Functional Analysis with Applications, Aligarh Muslim University, Aligarh, 1997.
- 14. A mini Conference on KKM-Theory and Applications, National Changhua University of Education, Changhua, Taiwan, 1998.
- 15. International Conference on Mathematical Analysis and Applications, National Sun Yat-sen University, Kaohsiung, Taiwan, January 17-21, 2000.
- 16. in 30th Course: Equilibrium Problems and Variational Models, June 23 July 02, 2000, 'Ettore Majorana' Foundation and Centre for Scientific Culture, International School of Mathematics << G. Stampacchia >>, Erice, Sicely, Italy, June 23 July 02, 2000.
- 17. APORS 2000, National University of Singapore, Singapore, July 5-7, 2000.
- 18. International Conference IAMIS, GNDU, Amritsar, January 22-25, 2001.
- 19. International Conference on Optimization Techniques and Its Applications in Engineering and Technology, R.B.S. College, Agra, September 22 23, 2001.
- 20. International Symposium on Generalized Convexity/Monotonicity, Hanoi Institute of Mathematics, Hanoi, Vietnam, August 27-31, 2002.
- 21. International Conference on Analysis and Discrete Structures, Indian Institute of Technology, Kharagpur, December 22 24, 2002.
- 22. 4th European Congress of Mathematics, Stockholm University, Stockholm, Sweden, June 27-July 02, 2004.
- 23. The Third International Conference on Optimization and Control with Applications, Chongqing, Chengdu, Jiuzhaigou, China, July 25-31, 2004.
- 24. The Fourth International Conference on Nonlinear Analysis and Convex Analysis (NACA 2005), Okinawa, Japan, June 30 July 04, 2005. Also Chaired a session.
- 25. 6th International Congress on Industrial and Applied Mathematics, Zurich, Switzerland, July 16 20, 2007.
- 26. Second International Conference on Nonlinear Programming and with Applications (NPA2008), Beijing, China, April 7 9, 2008. Also Chaired a session.
- 27. SIAM Conference on Optimization, Boston Park Plaza Hotel and Towers, Boston, Massachusetts, USA, May 10 13, 2008.
- 28. International Conference on Analysis, PDEs and Applications, On the occasion of the 70th birthday of Vladimir Maz'ya, University "La Sapienza" in Rome, Italy, June 30 July 3, 2008.

# • INVITED TALKS DELIVERED

1. *Minimization and Variational Problems*, in "Refresher course in Mathematics", Academic Staff College, Aligarh Muslim University, Aligarh, India, 1992.

- 2. *Multivalued Maps*, in "Refresher course in Mathematics", Academic Staff College, Aligarh Muslim University, India, Aliagrh.
- 3. *Variational Inequalities and their Applications*, in "Jammu Mathematical Society Conference", Jammu University, Jammu, India, 1996.
- 4. *Variational-like Inequalities and Their Applications*, Mathematisches Seminar, University of Kiel, Kiel, Germany, April, 1997.
- 5. On the Equivalence of Extended Generalized Complementarity and Generalized Least-element Problems, at Department of Mathematics, National Cheng-Kung University, Tainan, Taiwan, and National Changua University of Education, Changua, Taiwan, 1998.
- 6. Vector Equilibrium Problems and Vector Variational Inequalities, in, "A mini Conference on KKM-Theory and Applications", National Changua University for Education, Changua, Taiwan March 12-13, 1998.
- 7. An Iterative Method for Nonlinear Variational Inequalities arising in Elastoplasticity at National Taiwan Normal University, Taipai, Taiwan, 1998.
- 8. General KKM Theorem with Applications to Minimax and Variational Inequalities at National Changhua University for Education, Changhua, Taiwan, 1999.
- 9. *On Variational-like Inequalities*, at Department of Applied Mathematics, National Dong-Hwa University, Hualian, Taiwan, October 10, 1999.
- 10. System of Vector Equilibrium problems and Its Applications, at Department of Applied mathematics, The Hong Kong Polytechnic University, Hong Kong, December 3, 1999; and in "International Conference on Mathematical Analysis and Applications", National Sun Yat-sen University, Kaohsiung, Taiwan, January 17-21, 2000.
- 11. *Generalized Vector Equilibrium Problems*, in the Conference on "Optimization" was held at Department of Mathematics, National University P.S. For Overseas Chinese Students, Linkou, Taiwan, March 23-24, 2000.
- 12. *On Vector Quasi-Equilibrium Problems* at 'Ettore Majorana' Foundation and Centre for Scientific Culture, International School of Mathematics << G. Stampacchia >>, in 30th Course: Equilibrium Problems and Variational Models, June 23 July 02, 2000, Erice, Sicely, Italy.
- 13. Generalized Vector Equilibrium problems under Generalized Pseudomonotonicity with Applications at APORS 2000, National University of Singapore, July 5-7, 2000.
- 14. An Iterative Algorithm for Generalized Mixed Nonlinear Variational-like Inclusions, in the International Conference of IAMIS, GNDU, Amritsar, India, January 22-25, 2001.
- 15. *Vector Quasi-Equilibrium Problems* at the Department of Mathematical Engineering, University of Concepcion, Concepcion, Chile; and Center of Mathematical Modeling, San Diago University, San Diago, Chile, May, 2001.

- 16. Generalized Vector Quasi-Equilibrium Problems at the Department of Mathematics, National Changhua University for Education, Changhua, Taiwan, July, 2001.
- 17. *Generalized Vector equilibrium Problems*, in the International Conference on Optimization Techniques and Its Applications in Engineering and Technology, R.B.S. College, Agra, September 22 23, 2001.
- 18. Quasi-Variational Inequalities in Product Spaces For Relatively Pseudomonotone Maps at the International Symposium on Generalized Convexity/Monotonicity, Hanoi Institute of Mathematics, Hanoi, Vietnam, August 27-31, 2002.
- 19. System of Generalized Vector Quasi-Equilibrium Problems with Applications, in the International Conference on Analysis and Discrete Structures, Indian Institute of Technology, Kharagpur, December 22 24, 2002.
- 20. *Introduction to Multivalued Maps*, in "Refresher Course in Mathematics, University of Jammu, Jammu, May 21 June 07, 2003.
- 21. Generalized Quasi-Variational Inequalities over Product Spaces, at The Third International Conference on Optimization and Control with Applications, Chongqing, Chengdu, Jiuzhaigou, China, July 25-31, 2004.
- 22. Generalized Implicit Quasi-equilibrium Problems and generalized Weighted Quasi-Variational Inequalities, at The Fourth International Conference on Nonlinear Analysis and Convex Analysis (NACA 2005), Okinawa, Japan, June 30 July 04, 2005. Also Chaired a session.
- 23. Second International Conference on Nonlinear Programming and with Applications (NPA2008), Beijing, China, April 7 9, 2008. Also Chaired a session.

# • RESEARCH PUBLICATIONS

- 1. An Iterative Method for Generalizad Variational Inequalities, *Mathematica Japonica*, 34 (1989), 475-481 (with A.H. Siddiqi).
- 2. An Algorithm for a Class of Quasivariational Inequalities, *Journal of Mathematical Analysis and Applications*, 145 (1990), 413-418 (with A.H. Siddiqi).
- 3. Strongly Nonlinear Quasivariational Inequalities, *Journal of Mathematical Analysis and Applications*, 149 (1990), 444-450 (with A.H. Siddiqi).
- 4. General Strongly Nonlinear Variational Inequalities, *Journal of Mathematical Analysis and Applications*, 166 (1992), 386-392 (with A.H. Siddiqi).
- 5. On the Nonlinear Implicit Complementarity Problem, *International Journal of Mathematics and Mathematical Sciences*, 15 (1993), 783-790 (with A.H. Siddiqi).
- 6. On Variational-like Inequalities, *Annales des Sciences Mathématiques du Québec*, 18 (1994), 95-104 (with A.H. Siddiqi and A. Khaliq)
- 7. On Nonlinear Variational Inequalities, *Indian Journal of Pure and Applied Mathematics*, 25 (1994), 969-973 (with A.H. Siddiqi and K.R. Kazmi).
- 8. On Vector Variational Inequalities, *Journal of Optimization Theory and Applications*, 84 (1995), 171-180 (with A.H. Siddiqi and A. Khaliq).
- 9. On Generalized Variational-like Inequalities, *Indian Journal of Pure and Applied Mathematics*, 26(12) (1995), 1135-1141 (with A.H. Siddiqi and R. Ahmad).
- 10. On Generalized Vector Variational-like Inequalities, *Annales des Sciences Mathématiques du Québec*, 19 (1995), 131-138.
- 11. On Vector Variational-like Inequalities, *Indian Journal of Pure and Applied Mathematics*, 28(8) (1997), 1009-1016 (with A.H. Siddiqi and R. Ahmad).
- 12. Extended Generalized Vector Variational-like Inequalities For Nonmonotone Multivatued Maps, *Annales des Sciences Mathématiques du Québec*, 21 (1997), 1-11.
- 13. A Note on Generalized Vector Variational-like Inequalities, *Optimization*, 41 (1997), 197-205.
- 14. A Generalization of Vectorial Equilibria, *Mathematical Methods of Operations Research*, 46 (1997), 147-152 (with W. Oettli and D. Schläger).
- 15. A Generalized Vector Variational-like Inequality and Optimization Over an Efficient Set, in *Functional Analysis with current Applications in Science, Technology and Industry*, Edited by M. Brokate and A.H. Siddiqi, Pitman Reseach Notes in Mathematics Series Vol. 377, pp. 177-191, Longman, London, 1998 (with A.H. Siddiqi).
- 16. An Iterative Method for Nonlinear Variational Inequalities Arising in Elastoplasticity, *Numerical Functional Analysis and Optimization*, 19 (9& 10) (1998), 949-959 (with M. Brokate).
- 17. Pre-Variational Inequalities in Banach Spaces, in *Optimization Techniques and Applications*, Edited by L. Caccetta, K.L. Teo, P.F. Siew, Y.H. Leung, L.S. Jennings

- and V. Rehbock, Curtin University of Technology, Perth, Vol.2, pp. 1165-1172, (1998) (with J. C. Yao).
- 18. The Existence of Nonlinear Inequalities, *Applied Mathematics Letters*, 12(5) (1999), 89-92 (with N.C. Wong and J.C. Yao).
- 19. Generalised Variational-like Inequalities and a Gap Function, *Bulletin of the Australian Mathematical Society*, 59 (1999), 33-44 (with J.C. Yao).
- 20. Extension of Generalized Variational-like Inequalities, *The Southeast Asian Bulletin of Mathematics*, 23 (1999), 1-8.
- 21. On the Equivalence of Extended Generalized Complementarity and Generalized Least-element Problems, *Journal of Optimization Theory and Applications*, 102(2) (1999), 277-288 (with T.C. Lai and J.C. Yao).
- 22. A Fixed Point Theorem and Its Applications to the System of Variational Inequalities, *Bulletin of the Australian Mathematical Society*, 59 (1999), 433-442 (with J.C. Yao).
- 23. On Strong Solutions of the Generalized Implicit Vector Variational Problem, *Advances in Nonlinear Variational Inequalities*, 2(1) (1999), 1-10 (with J.C. Yao).
- 24. Variational-like Inequalities For Multivalued Maps, *Indian Journal of Pure and Applied Mathematics*, 30(2) (1999), 161-166 (with A.H. Siddiqi and M.F. Khan).
- 25. An Existence Result for Generalized Vector Equilibrium Problem, *Applied Mathematics Letter*, 12 (1999), 53-56 (with J.C. Yao).
- 26.  $\eta$ -Pseudolinearity, *Rivista di Matematica per le Scienze Economiche e Sociali*, 22 (1999), 31-39 (with S. Schaible and J.C. Yao).
- 27. Generalized Vector Variational-like Inequalities and Their Scalarization, in *Vector Variational Inequalities and Vector Equilibria. Mathematical Theories*, Edited by Prof. F. Giannessi, Kluwer Academic Publishers, Dordrecht-Boston-London, pp. 17-38, (2000) (with A.H. Siddiqi and J.C. Yao).
- 28. Vector Equilibrium Problems and Vector Variational Inequalities, in *Vector Variational Inequalities and Vector Equilibria. Mathematical Theories*, Edited by Prof. F. Giannessi, Kluwer Academic Publishers, Dordrecht-Boston-London, pp. 1-16, (2000).
- 29. General KKM Theorem with Applications to Minimax and Variational Inequalities, *Journal of Optimization Theory and Applications*, 104(1) (2000), 41-57 (with Y.C. Lin and J.C. Yao).
- 30. Nonlinear Variational Inequalities for Pesudomonotone Operators with Applications, *Advances in Nonlinear Variational Inequalities*, 3(1) (2000), 61-70 (with J.C. Yao).
- 31. Generalized Multivalued Nonlinear Variational Inclusions with Relaxed Lipschtiz and Relaxed Monotone Mappings, *Advances in Nonlinear Variational Inequalities*, 3(1) (2000), 93-102 (with M.F. Khan and R. Ahmad).
- 32. An Iterative Algorithm for Generalized Nonlinear Variational Inclusions, *Applied Mathematics Letter*, 13 (2000), 23-26 (with R. Ahmad).

- 33. A Perturbed Algorithm for Strongly Nonlinear Variational-like Inclusions, *Bulletin of the Australian Mathematical Society*, 62(2000), 417-426 (with C.S. Lee and J.C. Yao).
- 34. A Perturbed Ishikawa Iterative Algorithm for General Mixed Multivalued Mildly Non-Linear Variational Inequalities, *Advances in Nonlinear Variational Inequalities*, 3(2) (2000), 53-64 (with R. Ahmad and Salahuddin).
- 35. On Nondifferentiable and Nonconvex Vector Optimization Problems, *Journal of Optimization Theory and Applications*, 106(3)(2000), 487-500 (with J.C. Yao).
- 36. System of Vector Equilibrium Problems and Its Applications, *Journal of Optimization Theory and Applications*, 107(3) (2000), 547-557 (with S. Schaible and J.C. Yao).
- 37. Coincidence and Fixed Point Theorems with Applications, *Topological Methods in Nonlinear Analysis*, 15(1) (2000), 191-202 (with A. Idzik and J.C. Yao).
- 38. Systems of Generalized Variational Inequalities and Their Applications, *Applicable Analysis*, 76(3-4) (2000), 203-217 (with J.C. Yao).
- 39. Some Remarks on Variational-like Inequalities, in *Mathematics and Its Applications in Industry and Business*, Edited by A.H. Siddiqi and Khalil Ahmad, Narosa Publishing House, New Delhi, pp. 101-108 (2000) (with A.H. Siddiqi and R. Ahmad).
- 40. Existence and Duality of Generalized vector Equilibrium Problems, *Journal of Mathematical Analysis and Applications*, 259 (2001), 115-126 (with A.H. Siddiqi and S.Y. Wu).
- 41. On Generalized Vector Equilibrium Problems, *Nonlinear Analysis; Theory, Methods and Applications*, 47 (2001), 543-554 (with I.V. Konnov and J.C. Yao).
- 42. Iterative Scheme for Solving Mixed Variational-like Inequalities, *Journal of Optimization Theory and Applications*, 108(3) (2001),527-541 (with J.C. Yao).
- 43. Existence of a Solution and Variational Principles for Vector Equilibrium Problems, *Journal of Optimization Theory and Applications* 110(3) (2001), 481-492 (with I.V. Konnov and J.C. Yao).
- 44. Existence and Duality of Implicit Vector Variational Problems, *Numerical Functional Analysis and Optimization*, 22(7 & 8) (2001), 815-829 (with X.Q. Yang and J.C. Yao).
- 45. Characterizations of Solutions for Vector Equilibrium Problems, *Journal of Optimization Theory and Applications*, 113(3) (2002), 435-447 (with I.V. Konnov and J.C. Yao).
- 46. An Iterative Algorithm for Generalized Mixed Nonlinear Variational-like Inclusions, in *Current Trends in Industrial and Applied Mathematics*, Edited by P. Manchanda, K. Ahmad and A.H. Siddiqi, Anamaya Publishers, New Delhi, pp. 202-209 (2002) (with A.H. Siddiqi).
- 47. The System of Generalized Vector Equilibrium Problems with Applications, *Journal of Global Optimization*, 22 (2002), 3-16 (with S. Schaible and J.-C. Yao).

- 48. Generalized Vector Equilibrium Problems, *Journal of Statistics and Management Systems*, 5 no. 1-3 (2002), 1-17 (with J.C. Yao).
- 49. Fixed Point Theorems for Non-convex valued Multifunctions, *Southeast Asian Bulletin of Mathematics*, 26 (2002), 15-20.
- 50. Generalized Vector Equilibrium Problems under Generalized Pseudomonotonicity with Applications, *Journal of Nonlinear and Convex Analysis*, 3(3) (2002), 331-344 (with S. Schaible and J.C. Yao).
- 51. Relatively B-Pseudomonotone Variational Inequalities over Product of Sets, *Journal of Inequalities in Pure and Applied Mathematics*, 4 (1) (2003), Article 6 (with Zubair Khan).
- 52. On Vector Quasi-Equilibrium Problems, in "Equilibrium Problems and Variational Models" Edited by P. Daniele, F. Giannessi and A. Maugeri, Kluwer Academic Publishers, Dordrecht-Boston-London, (2003), pp. 1-18 (with J. C. Yao).
- 53. Generalized Vector Quasi-Equilibrium Problems with Applications, *Journal of Mathematical Analysis and Applications*, 277 (2003), 246-256 (with F. Flores-Bazan).
- 54. Geometric Properties and Coincidence Theorems with Applications to, Generalized Vector equilibrium Problems, *Journal of Optimization Theory and Applications*, 117 (2003), 121-137 (with L.-J. Lin and C. Y. Wu).
- 55. Coincidence Point Theorems with Applications to Minimax Inequalities, in *Proceedings of the second International Conference on Nonlinear and Convex Analysis*, Edited by W. Takahashi and T. Tanaka, Yokahama Publishers, Japan, (2003), pp. 7-14 (with Jen-Chih Yao).
- 56. On the Constrained Equilibrium Problems Finite Families of Players, *Nonlinear Analysis*, 54 (2003), 525-543 (with L.-J. Lin, S. F. Cheng and X. Y. Liu).
- 57. Fixed Point and Maximal Element Theorems with Applications to Abstract Economies and Minimax Inequalities, *Journal of Mathematical Analysis and Applications*, 284 (2003), 656-671 (with L.-J. Lin, Z.-T. Yu and L.-P. Lai).
- 58. On Existence of Pareto Equilibria for Constrained Multiobjective Games, *Southeast Asian Bulletin of Mathematics*, 27 (2004), 973-982 (with Zubair Khan).
- 59. The System of Vector Quasi-Equilibrium Problems with Applications, *Journal of Global Optimization*, 29(1) May (2004), 45-57 (with W. K. Chan and X. Q. Yang).
- 60. Collective Fixed Points and Maximal Elements with Applications to Abstract Economies, *Journal of Mathematical Analysis and Applications*, 296 (2004), 455-472 (with L.-J. Lin).
- 61. System of Generalized Vector Quasi-Equilibrium Problems with Applications, in *Mathematical Analysis and Applications*, Edited by S. Nanda and G.P. Rajasekhar, Narosa Publication House, New Delhi, (2004), pp. 1-13 (with Zubair Khan).
- 62. On Generalized Mixed Co-Quasi-Variational Inequalities with Noncompact Valued Mappings, *Bulletin of the Australian Mathematical Society*, 70 (2004), 7-15 (with Rais Ahmad and Syed Shakaib Irfan).

- 63. Existence Results for Stampacchia and Minty type Implicit Variational Inequalities with Multivalued Maps, *Nonlinear Analysis*, 61(1-2) (2005), 1-19. (with L. J. Lin, M. F. Yang, and G. Kassay).
- 64. Generalized Variational Inclusions and Generalized Resolvent Equations in Banach Spaces, *Computers and Mathematics with Applications*, 29(11-12) (2005), 1825-1835. (with R. Ahmad and S.S. Irfan).
- 65. Generalized Vector Quasi-variational Inequality Problems over Product Sets, *Journal of Global Optimization*, 32(4) (2005), 437-449 (with S. Schaible and J. C. Yao).
- 66. Systems of Simultaneous Generalized Vector Quasi-Equilibrium Problems and Their Applications, *Journal of Optimization Theory and Applications*, 127(1) (2005), 27-44 (with L.-J. Lin and L.-B. Su).
- 67. Weighted Variational Inequalities, *Journal of Optimization Theory and Applications*, 127(2) (2005), 263-283 (with Z. Khan and A. H. Siddiqi).
- 68. Recession Method for Generalized Vector Equilibrium Problems, *Journal of Mathematical Analysis and Applications*, 321(1) (2006), 132-146 (with F. Flores-Bazan).
- 69. Weighted Quasi-Variational Inequalities and Constrained Nash Equilibrium Problems, *Taiwanese Journal of Mathematics* 10(2) (2006), 361-380 (with W. K. Chan and X. Q. Yang).
- 70. Strong Convergence Theorems of Relaxed Hybrid Steepest-Descent Methods for Variational Inequalities, *Taiwanese Journal of Mathematics* 10(1) (2006), 13-29 (with L.C. Zeng and S.Y. Wu).
- 71. Densely Relative Pseudomonotone Variational Inequalities over Product of Sets, *Journal of Nonlinear and Convex Analysis*, 7(2) (2006), 179-188 (with Z. Khan).
- 72. Iterative Algorithm for Solving Mixed Quasi-Variational-Like Inequalities with Skew-Symmetric terms in Banach Spaces, *Journal of Inequalities and Applications*, 2006 (2006), Article ID 82695, 1-16 (with L.-C. Ceng and J.-C. Yao).
- 73. Some Fixed point Theorems and Their Applications to Abstract Economies, *Non-linear Studies* 13(1) (2006), 43-52 (with Y.C. Lin).
- 74. Generalized Quasi-Variational Inequalities over Product Spaces, in *Frontiers in Optimization and Control*, Edited by S.H. Hou, X.M. Yang and G.Y. Chen, The Hong Kong Polytechnic University, Hong Kong, (2007), pp. 1-17 (with X. Q. Yang and J. C. Yao).
- 75. Some Existence Results for Solutions of Generalized Vector Quasi-Equilibrium Problems, *Mathematical Methods of Operations Research* 65 (2007), 85-98 (with L.-J. Lin and Y.-J. Huang).
- 76. Systems of Quasi-Equilibrium Problems with Lower and Upper Bounds, *Applied Mathematics Letters* 20(3) (2007), 323-328 (with S. Al-Homidan).
- 77. Generalized Implicit Quasi-Equilibrium Problems and Generalized Weighted Quasi-Variational Inequalities, in *Nonlinear Analysis and Convex Analysis* (proceedings of NACA 2005, Okinawa, Japan, June 30 July 04, 2005), Edited by W. Takahashi and T. Tanaka, Yokohama Publishers, Japan, January, 2007.

- 78. Existence Equilibria for Generalized Abstract Economies and System of Quasi-Minimax Inequalities, *International Journal of Mathematical Analysis*, 1(1) (2007), 37-53 (with L.-J. Lin and C.-S. Chuang).
- 79. Vectorial Form of Ekeland-type Variational Principle with Applications to Vector Equilibrium Problems and Fixed Point Theory, *Journal of Mathematical Analysis and Applications*, 334(2) (2007), 561-575.
- 80. Existence of Solutions of Systems of Generalized Implicit Vector Variational Inequalities, *Journal of Optimization Theory and Applications*, 134(3) (2007), 515-531 (with S. Al-Homidan and S. Schaible).
- 81. Existence of Solutions of Systems of Generalized Implicit Vector Quasi-Equilibrium Problems, *Journal of Mathematical Analysis and Applications*, 341(2) (2008), 1271-1283.
- 82. Generalized Abstract Economy and Systems of Generalized Vector Quasi-Equilibrium Problems, *Journal of Computational and Applied Mathematics*, 208(2) November (2007), 341-353 (with L.-J. Lin and L.-F. Chen).
- 83. Some generalizations of Ekeland-type Variational Principle with Applications to Equilibrium Problems and Fixed Point Theory, *Nonlinear Analysis, Theory, Methods and Applications*, 69(1) (2008), 126-139 (with S. Al-Homidan and J.-C. Yao).
- 84. Equivalence of Generalized Mixed Complementarity and Generalized Mixed Least Element Problems in Ordered Spaces, To appear in *Optimization*, 2008 (with L.-C. Zeng and J.-C. Yao).
- 85. Generalized Variational Inclusions and *H*-Resolvent Equations with *H*-Accretive Operators, To appear in *Taiwanese Journal of Mathematics*, 2008 (with Rais Ahmad).
- 86. System of Vector Quasi-Variational Inclusions with Some Applications, To appear in *Nonlinear Analysis*, *Theory, Methods and Applications*, 2008 (with L.-J. Lin and Y.-J. Huang).
- 87. Topological Degree Methods in Boundary Value Problems for Degenerate Functional Differential Inclusions with Infinite Delay, To appear in *Taiwanese Journal of Mathematics*, March 2009 (with Y.C. Liou, V. Obukhovskii and N.C. Wong).
- 88. Existence of Solutions of Generalized Variational Inequalities in Reflexive Banach Spaces, To appear in *Applied Mathematics Letters*, 2008 (with M.-M. Wong and J.-C. Yao).
- 89. Viscosity Approximation Methods for Generalized Equilibrium Problems and Fixed Point Problems, To appear in *Journal of Global Optimization*, 2008 (with L-C. Ceng and J.-C. Yao).
- 90. On Generalized Vector Mixed Variational-like Inequalities with Complete Semicontinuity, To appear in *Dynamics of Continuous, Discrete and Impulsive Systems*, 2008 (with L-C. Ceng and J.-C. Yao).
- 91. Strong Convergence of Composite Iterative Schemes for Zeros of *m*-Accretive Operators in Banach Spaces, To appear in *Nonlinear Analysis, Theory, Methods and Applications*, 2008 (with L.C. Ceng, A.R. Khan and J.-C. Yao).

- 92. An Iterative Scheme for Equilibrium Problems and Fixed Points Problems of Strict Pseudo-Contraction Mappings, To appear in *Journal of Computational and Applied Mathematics*, (2008) (with L.C. Ceng, S. Al-Homidan and J.-C. Yao).
- 93. Generalized Minty Vector Variational-like Inequalities and Vector Optimization Problems, To appear in *Journal of Optimization Theory and Applications*, (2008) (with S.Al-Homidan).
- 94. General Iterative Algorithms for Solving Mixed Quasi-Variational-Like Inclusions, To appear in *Computers and Mathematics and Applications*, (2008) (with L.C. Zeng and J.-C. Yao).
- 95. Mann Type Steepest-Descent and Modified Hybrid Steepest-Descent Methods for Variational Inequalities in Banach Spaces, To appear in *Numerical Functional Analysis and Optimization*, (2008) (with L.C. Ceng and J.-C. Yao).

#### • PAPERS PRESENTED IN CONFERENCES / SYMPOSIUM

- 1. *Multivalued Mapping on 2-metric Spaces* (with A.H.Siddiqi and Anis Ahmad Khan), presented at "IMS Conference, held at Jaipur, 1986.
- 2. *Some Continuities of Fuzzy Multifunctions* (with A.H.Siddiqi), presented at "Spmposium on General Topology", Maitreyi College, Delhi University, 1987.
- 3. Fuzzy Multifunctions (with A.H.Siddiqi), presented at IMS Conference, held at Gorakhpur, 1987.
- 4. *On a Class of Generalized Variational Inequalities* (with A.H.Siddiqi), presented at IMS Conference, held at Pune, 1988.
- 5. Complementarity Problems in Semi-inner product Spaces (with A.H.Siddiqi and R. Ahmad), presented at "Vistas in Modern Apllied Mathematics", Goa University, Panji, Goa, 1993.
- 6. Generalized Mixed Multivalued Variational Inequalities (with A.H.Siddiqi), presented at "ISIAM Conference, held at Madras, 1994.
- 7. A Generalized Vector Variational-like Inequality and Optimization Over an Efficient Set (with A. H. Siddiqi), presented at the International Conference on Functional Analysis with Applications, held at A.M.U., Aligarh, 1997.
- 8. *Generalized Quasi-Variational Inequalities over Product Spaces*, presented in "The Third International Conference on Optimization and Control with Applications", July 25-31, 2004, Chongqing, Chengdu, Jiuzhaigou, China (with X. Q. Yang and J. C. Yao).
- 9. Generalized Implicit Quasi-equilibrium Problems and generalized Weighted Quasi-Variational Inequalities, presented in "The Fourth International Conference on Nonlinear Analysis and Convex Analysis" NACA 2005, June 30 July 04, 2005, Okinawa, Japan.
- 10. On Relaxed Viscosity Iterative Methods for Variational Inequalities in Banach Spaces, Presented in "6th International Congress on Industrial and Applied Mathematics", July 16 20, Zurich, Switzerland.
- 11. Quasi-Equilibrium Problems with Lower and Upper Bounds in Ordered Topological Spaces, Presented in "Second International Conference on Nonlinear Programming and with Applications" (NPA2008), April 7 9, 2008, Beijing, China.