

Resume



1. Name : **Dr. O.P. Misra**
2. Qualifications : M.Sc. (From **Allahabad University**),
Ph.D. (From **I.I.T., Kanpur**)
3. Place of birth : Deoria, U.P.
4. Designation : Professor(From 27-7-2006)
5. Institute/
Organization : School of Mathematics and Allied Sciences,
Jiwaji University, Gwalior (M.P.)
6. Research Area : Mathematical Modelling in Ecotoxicology,
Mathematical Modelling in Population and
Community Ecology, Mathematical Modelling
of Infectious and Communicable Diseases.
7. Visits Abroad : **03(USA and Italy)**
 - 1 Visited College of Natural Resources, University of California, Berkeley U.S.A in 1992-93 for six months as a visiting scholar under BOYSCAST scheme of D.S.T., New Delhi.
 - 2 Visited International Center for Theoretical Physics Trieste, Italy for three weeks in 1992 to attend Second Autumn Workshop on Mathematical Ecology.
 - 3 Visited International Center for Theoretical Physics, Trieste, Italy for three weeks in 1990 to participate in the Third Autumn Course on Mathematical Ecology.
8. Number of Research Fellowships - **01**
(Boyscast Fellowship of Department of Science and Technology, New- Delhi)
9. (a) Number of Research Papers Published in Reputed National and International Journals and Proceedings-**50**
 1. J.B. Shukla, V.N. Pal and **O.P. Misra**, Effects of Population and Industrialization on the Degradation of Biomass and its Regeneration by

- Afforestation: A Mathematical Model, *Journal of Biomathematics*, Vol. 3 No. 1, 1988.
2. J.B. Shukla, **O.P. Misra**, S. Gakkhar and M. Agarwal, Effects of Ecological and Environmental Gradient on the Coexistence of Interacting Species, *Mathematical and Computer Modeling*, Vol. 11, 1988.
 3. J.B. Shukla, **O.P. Misra**, M. Agrawal and A. Shukla, Effects of Pollution and Industrial Development on the Degradation of Biomass Resource: A Mathematical Model with Reference to Doon Valley, *Mathematical and Computer Modeling*, Vol. 11, 1988.
 4. J.B. Shukla, M. Agrawal, A. Shukla and **O.P. Misra**, Environmental Effects on Marine Ecosystem: A Mathematical Model, *Proceedings of Interdisciplinary Conference on Natural Resource Modelling and Analysis*, Sep. 29 – Oct. 1, 1988, Halifax, Nova Scotia, Canada.
 5. J.B. Shukla, H.I. Freedman, V.N. Pal, **O.P. Mishra**, M. Agrawal and A. Shukla, Degradation and Subsequent Regeneration of a Forestry Resource: A Mathematical Model, *Ecological Modelling*, Vol. 44, 1989.
 6. **O.P. Misra** and V.P. Saxena, Effects of Environmental Pollution on the Growth and Existence of Biological Populations: Modelling and Stability Analysis, *Indian Journal of Pure and Applied Mathematics*, Vol. 22, No. 10, 1991.
 7. V.P. Saxena, **O.P. Misra**, Praveen M. Saxena and A. Shrivastava, A Finite Element Approach to the Problems of Dispersion of CO from an Area Source with Variable Reaction Rate, *Asian Journal of Experimental Sciences*, Vol. 6, No. 1 & 2, 1992.
 8. V.P. Saxena, A. Juneja and **O.P. Misra**, Analysis of SIR Epidemic Model in Heterogeneous Population, *Journal of Biological Systems*, Vol. 1, No. 1, 1993.
 9. **O.P. Misra**, V.P. Saxena and Harendra Singh, Effects of the Dynamics of Parasite Population Growth and Active Immunity on the Growth of Infection: A Model, *Proceedings of National Academy of Sciences, India, Sec. A*, Vol. 63, Part II, 1993.
 10. V.P. Saxena, **O.P. Misra** and A. Shrivastava, Effects of Variable Diffusivity and Reaction Rate on the Dispersion of Air Pollutant from an Area Source, *Proceedings of the Second Annual Conference of Indian Society of Industrial and Applied Mathematics*, February 23-25, 1994, Madras, India.
 11. **O.P. Misra** and Virendra K. Shrivastava, Long Term Responses of *E. Vaginatum* to Climate Change: A Mathematical Model, *Current Trends in Biomedical Engineering*, Eds. S. Radha Krishnan and M. Ramasubba Reddy, Allied Publishers, 1996.

12. **O.P. Misra** and H.P. S. Chauhan, Dynamics of the Spread of Communicable Diseases in Age Structured Population: A Mathematical Model, *Advances in Biomechanics*, ed. K.R. Pardasani, 1998.
13. Poonam Sinha, **O.P. Misra**, and V.P. Saxena, Mathematical Study of a Three Species Prey-Predator System in a Three Patch Habitat, *Advances in Biomechanics*, ed. K.R.Pardasani, 1998.
14. K.K. Sharma, R.Jain, and **O.P. Misra**, Stability Analysis of the Effect of Poaching on a Three Species Interacting System with Mutualism and Competition, *Advances in Biomechanics*, ed. K.R.Pardasani, 1998.
15. V.P. Saxena, **O.P. Misra** and P.Sinha, On the Stability of Egg-Eating Predator – Prey system with Age Structured Predator Population, *Indian J. Pure & Appl. Math.* 29(9), 1998.
16. **O.P. Misra** and B.P.S. Jadon, Stability of System of Two Competing Species with Convective and Dispersive Migration in a Heterogeneous Habitat, *Proceedings of National Academy of Sciences*, 69 (A), II, 1999.
17. **O.P. Misra**, B.P.S. Jadon and A.K. Saxena, Mathematical Study of the Effects of Chemical Transformation of Toxicants on Single Species Population: A Qualitative Approach, *Proceedings of National Academy of Sciences*, 70(A), III, 2000.
18. **O.P. Misra** and H.P.S. Chauhan, A SIRS Mathematical Model with Variable Susceptibility for Two Groups of Population, *Applications and Teaching of Mathematics for Engineers and Scientists*, Allied Publishers Pvt. Limited, New Delhi, 2002.
19. R.Jain, **O.P. Misra** and K.K. Sharma, Stability Analysis of a Resource Based Competing Species System, *Indian Journal of Pure and Applied Mathematics*, 33(11), 2002.
20. **O.P. Misra**, Modelling Exploitation and Conservation of a Forestry Resource with Size-Specific Harvesting under Pollution Stress, *Proceedings of the Mathematical Society*, B.H.U., Vol. 18, 2002.
21. **O.P. Misra**, S.K.S. Rathore and Y.N. meitei, A Mathematical Model for the Survival or Extinction of Resource Dependent Species under Pollution Stress and Industrialization Pressure, *Proceedings of the Mathematical Society*, B.H.U., Vol. 19, 2003.
22. **O.P. Misra** and Y.N. Meitei, Modelling Combined Effects of Acid and Metal on the Survival of Resource-Based Aquatic Population, *Proc. of Math. Soc. B.H.U.*, Vol. 20, 2004.
23. **O.P. Misra**, Poonam Sinha and S.K.S. Kushwah, Mathematical Study of the Effect of Toxicant on a Prey-Predator Species System in a Two-Patch Habitat, *Proc. of Math. Soc. B.H.U.*, Vol. 20, 2004.

24. **O.P. Misra**, B.P.S. Jadon and Y.N. Meitei, Model for the Effect of Degrading Habitat on the Existence of Resource-Based Single Species System, *Differential Equations and Dynamical Systems*, Ed.-D.Bahuguna, Narosa Publishing House, New Delhi, 2005.
25. **O.P. Misra** and Poonam Sinha, Effect of a Diffusive Predator Species on the Dynamics of Two Species-System with Mutualistic Interaction: A Model, *Proc. of Math. Soc. B.H.U.*, Vol. 21, 2005.
26. **O.P. Misra**, Y.N. Meitei, V.K. Chaturvedi and S.K.S. Rathore, Effect of Age – Based Vaccination Policy on the Dynamics of Delay Epidemic Models, *Mathematical Biology Recent Trends*, Eds. P. Chandra & B.V. Rathish Kumar, Anamaya Publishers, New Delhi, 2006.
27. **O.P. Misra**, P.Sinha, and S.K.S. Rathore, Effect of Air Pollution on the Growth Dynamics of Plant–Herbivore System: A Mathematical Model, *Research Hunt*, Vol. 1, Issue-1, 2006.
28. **O.P. Misra** and P.Sinha, Effect of Pollution on the Photosynthate Partitioning during Plant Growth: A three Compartment Model, *Research Hunt*, Vol. 2 Issue 2., 2007.
29. R. Vishnoi and **O.P. Misra**, Combined Effect of a Toxicant and an Infectious Disease on Existence of a Fishery Resource undergoing Age specific Harvesting, *GAMS Journal of Mathematical Biosciences*, Vol. 3, No.1, 2007.
30. **O.P. Misra**, P.Sinha and S.K.S. Rathore, Effect of Polluted Soil on the Growth Dynamics of Plant-Herbivore System: A Mathematical Model, *Proc. Nat. Acad. Sci. India*, 78(A), II, 2008.
31. P.Sinha, **O.P. Misra** and V.P. Saxena, Stability Analysis of a Prey-Predator Model Incorporating Age Based Predation, *GANITA*, 2008.
32. S.Sinha, **O.P. Misra** and J.Dhar , Study of a Prey-Predator Dynamics under the Simultaneous Effect of Toxicant and Disease, *The J. Nonlinear Sci. Appl.*, Vol. 1, No. 2, 2008.
33. Swati Khare, **O.P. Misra** and J. Dhar, Effect of Soil Pollutant on the Plant-Herbivore Interacting System Incorporating Nutrient Cycling: A Mathematical Model, *Journal of Scientific Research*, Vol. 53, 2009.
34. S.Sinha, **O.P. Misra** and J.Dhar, A Two Species Competition Model under the Simultaneous effect of Toxicant and Disease, *Nonlinear Analysis: Real World Applications*, Vol. 11, 2010.
35. **O.P. Misra** and D.K. Mishra, Modelling the Effect of Booster Vaccination on the Transmission Dynamics of Diseases that Spread by Droplet Infection, *Nonlinear Analysis: Hybrid Systems*, Vol. 3, 2009.
36. Swati Khare, **O.P. Misra** and J. Dhar, Dynamical Behavior of a Plant-Herbivore System with Nutrient Cycling in a Polluted Habitat, *Applied Mathematical Sciences*, Vol. 4, No.15, 2010.

37. Sudipa Sinha, **O.P. Misra** and J. Dhar, Modelling a Predator-Prey System with Infected Prey in Polluted Environment, *Applied Mathematical Modelling*, Vol. 34, 2010.
38. Swati Khare, **O.P. Misra** and J. Dhar, Role of Toxin Producing Phytoplankton on a Plankton Ecosystem, *Nonlinear Analysis: Hybrid Systems*, Vol.4, 2010.
39. O.P.Misra, D.K.Mishra and H.P.S.Chauhan, Transmission of Infectious Diseases by Droplet Infection and their Control by Age Specific Immunization: A Delay Model, *Journal of Scientific Research*, B.H.U., Varanasi, Vol. 54, 2010
40. Swati khare, O.P.Misra and Preety Kalra, Effects of Toxicant on the Existence Single Species System: A Model, *Proc. of Math. Soc. B.H.U.*, Vol. 25, 2009.
41. O.P.Misra and Anita Chaturvedi, Combined Effects of Acid and Metal on Resource Based Interacting Aquatic Species System to appear in *The Journal Of The Indian Academy Of Mathematics*, Vol. 33 No.1 (2011).
42. O.P.Misra and Anita Chaturvedi, Modelling Effect of Eutrophication on the Survival of Fish Population Incorporating Nutrient Recycling, to appear in the *Journal of International Academy of Physical Sciences*, Vol. 14 (2010).
43. Swati Khare, O.P.Misra and J. Dhar, Effect of Environmental Pollutant on a Detritus Prey-Predator System, *Bulletin of the Allahabad Mathematical Society*, Vol. 26, part 1, 2011.
44. O.P.Misra, Preety Kalra, S.K.S. Rathore and P.Sinha, Effect of Increasing Temperature due to Depletion of Ozone Layer Caused by CFC on the Dynamics of two Competing Populations: A Model, *Journal of Applied Mathematics and Computing*, Vol. 38, 2012, Springer.
45. O.P. Misra and Parmod Kushwah, Effect of Exotic Population on a Resource Based Native Population: A Model, *Proceedings of the Mathematical Society*, B.H.U., Vol. 26, 2010.
46. Swati Khare, O.P. Misra, Chhatrapal Singh and J.Dhar, Role of Delay on Planktonic Ecosystem in the Presence of a Toxic Producing Phytoplankton, *International Journal of Differential Equations*, Vol. 2011.
47. O.P.Misra and Preety Kalra, The Study of Increasing Environmental Temperature on the Dynamical Behaviour of a Prey-Predator System: A Model, *International journal of Engineering and Natural Sciences*, Vol. 5, No. 4, 2011.
48. S. Chauhan and O.P. Misra, Modeling and Analysis of a Single Species Population with Viral Infection in Polluted Environment, *Applied Mathematics*, Scientific Research Publication, Vol. 3, 2012.
49. S. Sinha and O.P. Misra, Modeling a Plant-Herbivore System with Simultaneous Effect of Disease and Toxicant, *VIVECHAN International Journal of Research*, Vol. 3, 2012.

50. O.P.Misra and Dinesh Kumar Mishra, Simultaneous Effects of Control Measures on the Transmission Dynamics of Chikungunya Disease, Applied Mathematics (Scientific and Academic Publishing), Vol. 2, No. 5, 2012.

(b) Number of Research Papers Presented in Conferences/ Seminars-24

- 1 Modeling Effects of Toxicant on Egg-Eating Predator-Prey Systems, National Research Seminar on Mathematics, March, 6-7, 1995 Govt. Science College Gwalior, India.
- 2 A SIRS Mathematical Model with Variable Susceptibility for Two Groups of Populations, 6th Annual Conference of Vijnana Parishad of India, Dec. 26-28, 1996, B.I.E.T, Jhansi, India.
- 3 Changing Habitat Niches and Survival of Populations: A Model, 7th Annual Conference of Vijnana Parishad of India, Oct. 24-26, 1997, H.B.T.I., Kanpur, India.
- 4 Dynamics of the Spread of Communicable Diseases in Age Structured Population: A Mathematical Model, 6th National Conference on Biomechanics, January 14 –16, 1998, M.A.C.T., Bhopal, India.
- 5 Effect of Degrading Habitat on the Existence of Resource Based Single Species System, National Seminar on Computer Applications with Special Reference to Numerical, Analytical Methods, Operations Research and Bio-Mathematics, Sept 18-19, 1998, Govt. Autonomous Science College, Gwalior.
- 6 Existence of Prey-Predator Species System under Warming Climate Due to the Emission of Green House Gases, Fourth Annual Conference of Gwalior Academy of Mathematical Sciences and Symposium on Mathematical Modelling and Computer Applications in High Altitude Physiological Problems with Special Reference to Defense, July 31, 1999, Defense R & D Establishment, Gwalior.
- 7 Mathematical Study of SEIR Epidemic Models in Classified Population with Immunity Dependent Variable Mean Latent Period, Third Annual conference of International Academy of Physical Sciences, Dec 17-19, 1999, University of Allahabad, Allahabad.
- 8 Mathematical Study of Sexually Transmitted Diseases Including AIDS in Structured and Heterogeneous Population, MOIT-MDM 2000, Jan., 14-16, 2000, Bundelkhand University, Jhansi.
- 9 Modelling Effect of Toxicant on Three Interacting Species in a Food Chain System, 5th Annual Conference of Gwalior Academy of Mathematical Sciences, May 21, 2000, Govt. P.G. College, Guna (M.P.)
- 10 Mathematical Study of Communicable Diseases with Temporary-Immunity & Migration in Heterogeneous Population, 6th Annual Conference of Gwalior

Academy of Mathematical sciences, Feb, 25, 2001, Jiwaji University, Gwalior.

- 11 Model for the Effect of Degrading Habitat on the Persistence of Resource Based Single Species System, International Conference on Current Trends in Differential Equations and Dynamical Systems, I.I.T. Kanpur, December 15-17, 2001.
- 12 Modelling Exploitation and Conservation of a Forestry Resource with Size – Specific Harvesting under Pollution Stress, 18th Annual Conference of the Mathematical Society, Banaras Hindu University, Varanasi, December 29-30, 2002.
- 13 A Mathematical Model for the Survival or Extinction of Resource Dependent Species under Pollution Stress and Industrialization Pressure, 19th Annual Conference of the Mathematical Society, Banaras Hindu University, Varanasi, December 26-27, 2003.
- 14 A Model for the Effects of Primary and Secondary Toxicants on a Prey– Predator Species System Incorporating Environmental and Food Chain Modes of Exposure, International Conference on Mathematical Biology, I.I.T. Kanpur, February 19-21, 2004.
- 15 Effect of Age –Based Vaccination Policy on The Dynamics of Delay Epidemic Model, International Conference on Mathematical Biology, I.I.T. Kanpur, February 19-21, 2004.
- 16 Modelling Effects of Toxicant in a Plant- Herbivore System Incorporating Non-Linear Dose Response Relationship, 10th Annual Conference of Vijnana Parishad of India, M.A.N.I.T., Bhopal, May 17-19, 2004.
- 17 Mathematical Study of the Effect of Toxicant on Single Species Aquatic Population in a three Compartment Aquatic Ecosystem, 10th Annual Conference of Vijnana Parishad of India, M.A.N.I.T., Bhopal, May 17-19, 2004.
- 18 Stability Analysis of a Prey-Predator Model Incorporating Age-Based Predation, 10th Annual Conference of Vijnana Parishad of India, M.A.N.I.T., Bhopal, May 17-19, 2004.
- 19 Mathematical Study of the Effect of Toxicant on a Prey-Predator Species System in a Two Patch Habitat, 20th annual conference of the Mathematical Society, Banaras Hindu University, Varanasi, Jan.10-11, 2005.
- 20 Effect of a Diffusive Predator Species on the Dynamics of two Species System with Mutualistic Interaction. A Model, 21st Annual Conference of the Mathematical Society, B.H.U., Varanasi, Jan 23-24, 2006.
- 21 Modelling Effects of Elevated Temperature on Account of Green house Gases on the Existence of two Competing Species System, International Conference

on Mathematical Modelling and Computer Simulation, The LNM Institute of Information Technology, Jaipur, December 12-15, 2006.

- 22 Dynamical Study of Prey- Predator System under the Simultaneous Effects of Toxicant and Disease, 12th Annual Conference of Gwalior Academy of Mathematical Sciences (GAMS) and All India Symposium on Computational Biology, Maulana Azad National Institute of Technology, Bhopal, April 6-8, 2007.
- 23 Transmission and Control of Japanese Encephalitis: A Mathematical Model, 74th Annual Conference of Indian Mathematical Society, University of Allahabad, December 27-30, 2008.
- 24 Mathematical Study of SVIR Model for the Spread of Infectious Disease and its Control by Vaccination, 2nd National Conference on Computational Mathematics and its Application to Engineering and Biological System, GEC, Gwalior, 15th May, 2010.

10. (a) Number of Ph.D. Guided –08

- 1 Mathematical Study of the Environmental Effects on Interacting Populations, B.P.S Jadon, 1999.
- 2 Mathematical Study of the Communicable Diseases in Heterogeneous Populations, H.P.S Chauhan, 2000.
- 3 Mathematical Study of the Effects of the Pollutants on Interacting Populations in Aquatic Ecosystems, Y.N. Meitei, 2006.
- 4 Mathematical Approach to the Study of Community Dynamics Under Environmental Stresses, S.K.S. Rathore, 2006.
- 5 Modelling the Simultaneous Effects of Pollution and Infectious Diseases on Populations in Terrestrial Ecosystem, Sudipa Sinha, 2009.
- 6 The Mathematical Study of the Transmission Dynamics of Communicable Diseases and their Control by Elimination and Vaccination Processes, D.K.Mishra, 2010.
- 7 Modelling Effects of Pollutants on Interacting Species Systems with Nutrient Cycling, Swati Khare, 2010
- 8 Effects of Water Pollution on Interacting Aquatic Populations in a Fresh water Lotic and Lentic Habitats: Modelling and Stability Analysis, Anita Chaturvedi, 2011.

11. (a) Number of M.Phil. Guided – 26

1. Mathematical Study of the Growth of Infection: Modelling and Stability Analysis, H.Singh, 1989
2. Various Aspects of the Population Growth and its Effects on Resource: A Theoretical and Mathematical Approach, H.K.Litoria, 1990.
3. A Mathematical Study of Epidemics and Communicable Diseases: A Deterministic Approach, G.P.S.Sikarwar, 1990.
4. A Mathematical Study of the Growth of One and Two Interacting and Dispersing Species with Varying Parameters Incorporating Environmental Effects, Anita Chaturvedi, 1990.
5. A Mathematical Study of Renewable Resources (Forestry and Fishery) with Size and Age Specific Harvesting, S.K.Acharya, 1991
6. Computational Approach to the Study of Temperature Dependent Predator Prey Systems, B.P.Nawghare, 1991.
7. Mathematical Study of Air Pollution Due to Gas Diffusion, Mukesh Singh, 1992.
8. Mathematical Study of the Growth of Sedge *E. Vagniatum* in the Arctic, V.K.Shrivastava, 1993.
9. A Mathematical Study of the Effects of Primary & Secondary Toxicants on the Existence of one and two Interacting Species Systems, Vandana Jain, 2002.
10. Mathematical Study of Epidemic Models Incorporating Vaccination, Proportional Mixing and Maturation Delay, A.S. Yadav, 2002-2003.
11. Stability Analysis of the Models for the Transmission of HIV Infection in a Heterosexual Community, Manindra Kumar Srivastava, 2003-2004.
12. Effects of Toxicant on the Existence of Single Species and Prey- Predator Species Systems: Modelling and Stability Analysis, Swati Khare, 2003-2004.
13. Mathematical Study of the Effects of Environmental Stresses on the Existence of Interacting Species Systems, Rochana Vishnoi, 2004-2005.
14. Effects of Vaccination on the Dynamics of Seasonally Forced Epidemic Models, Akhil Kumar, 2005-06.
15. Effects of Industrialization Pressure and Pollution on the Existence of Interacting Species Systems: Modelling and Stability Analysis, Benna Bundela, 2006-07.

16. Effect of Degrading Habitat on the Existence of two Interacting Species Systems: Modelling and Stability Analysis, Shivnath C. Vishwkarma, 2006-07.
17. Modelling Effect of Toxicant on Predator-Prey Species System Inducting Harvesting and Maturation Delay in Predator Population, Pramod Kuswah, 2006-07.
18. Mathematical Study of Infectious Disease Models with Nonlinear Infection Force and Vertical Transmission, Rahila Niyazi, 2007-08.
19. Mathematical Study of Infectious Disease with Migration and Vaccination, Preeti Kakwani, 2007-08.
20. Modelling and Stability of Infectious Disease Models with Nonlinear Incidence, Vaccination and Migration, Rachna Jain, 2007-08.
21. A Mathematical Study of the Effects of Pollutants on Biological Population Incorporating Delay in Model Parameter, Milan Dixit, 2008-2009.
22. Modelling and Analysis of Swine Flu and Malaria Diseases, W. Premeshori Devi, 2008-2009.
23. Stability Analysis of Epidemic Models with Droplet Infection and Time Lag, Mamata Raipuriya, 2009-10.
24. Mathematical Study of SVIR and SEIS Models for the Transmission of Infectious Diseases, Sadhana Gupta, 2009-10.
25. Stability Analysis of Time Delay Epidemic Models for the Venereal Diseases and Diseases with Vertical Transmission, Jyoti Gupta, 2009-10.
26. The Role of Immunity in the Study of SIRS and SVIR Infectious Disease Models Incorporating the Effect of Pollutants, Priyanka Gupta, 2008-2009.

12. Number of Conferences, Seminars, Symposia and Workshops Attended -34

- 1 National Research Seminar on Mathematics, Government (Autonomous) Model Science College, Gwalior, (March 6-7) 1995.
- 2 6th Annual Conference of Vijnana Parishad of India, BIET, Jhansi (Dec.26-28) 1996.
- 3 Seventh Annual Conference of Vijnana Parishad of India H.B.T.I.,Kanpur, (Oct. 24-26) 1997.
- 4 Sixth National Conference on Biomechanics M.A.C.T., Bhopal, (Jan. 14-16) 1998.

- 5 National Seminar on Computer Applications with Special Reference to Numerical, Analytical Methods Operations Research & Bio-Mathematics, Govt. Science College, Gwalior, (Sept.18-19) 1998.
- 6 Workshop on Industrial Mathematics & Computing, Institute of Basic Sciences, Agra, India (April 9-13) 1999.
- 7 4th Annual Conference of Gwalior Academy of Mathematical Sciences And Symposium on Mathematical Modelling & Computer Applications in High Altitude Physiological Problems with Special Reference to Defence, Defence R & D Establishment Gwalior, India, (Jul.31) 1999.
- 8 Third Conference of the International Academy of Physical Sciences, University of Allahabad, Allahabad, (Dec. 17-19) 1999.
- 9 MOIT – MDM – 2000, Bundelkhand Univ., Jhansi, (Jan. 14-16) 2000.
- 10 National Conference on Operation research and Information Technology, Dr. B.R.Ambedakar Univ., Agra, (April 2-3) 2000.
- 11 5th Annual Conference of GAMS, Govt. P. G. College, Guna (M.P.), (May 21)2000.
- 12 6th Annual Conference of GAMS, Jiwaji University, Gwalior, (Feb. 25) 2001.
- 13 International Conference on Current Trends in Differential Equations and Dynamical Systems, I.I.T. Kanpur, (Dec. 15-17) 2001.
- 14 18th Annual Conference of Mathematical Society, B.H.U., B.H.U., Varanasi,(Dec.29-30) 2002.
- 15 19th Annual Conference of Mathematical Society, B.H.U., B.H.U., Varanasi, (Dec.26-27) 2003.
- 16 8th Annual Conference of GAMS, Datia, M.P., (Jan.19) 2003.
- 17 International Conference on Mathematical Biology, I.I.T. Kanpur, (Feb. 19-21)2004.
- 18 10th Annual Conference of Vijnana Parishad of India M.A.N.I.T. Bhopal, (May 17-19) 2004.
- 19 9th Annual Conference of GAMS, I.T.M., Gwalior, (Jan. 17-19) 2004.
- 20 20th Annual Conference of Mathematical Society, B.H.U., B.H.U.,Varanasi, (Jan. 10-11) 2005.
- 21 A National Seminar on Application of Mathematics in the Field of Comp.Science, Govt. K.R.G College, Gwalior (Feb. 26-27) 2005.

- 22 21st Annual Conference of the Mathematical Society, B.H.U., B.H.U., Varanasi, (Jan. 23-24) 2006.
- 23 International Conference on Mathematical Modelling and Computer Simulation, The LNM Institute of Information Technology, Jaipur, (December 12-15) 2006.
- 24 12th Annual Conference of Gwalior Academy of Mathematical Sciences (GAMS) and All India Symposium on Computational Biology, Maulana Azad National Institute of Technology, Bhopal, (April 6-8) 2007.
- 25 74th Annual Conference of Indian Mathematical Society, University of Allahabad, December 27-30, 2008.
- 26 One day Colloquium on Mathematical Biology and Ecology held on February 20, 2009, Jadavpur University, Kolkata.
- 27 Silver Jubilee Conference of the Mathematical Society, B.H.U. (Banaras Hindu University), Varanasi, December 22-24, 2009.
- 28 11th International Conference of the International Academy of Physical Sciences, University of Allahabad, Allahabad, February 20-22, 2010.
- 29 2nd National Conference on Computational Mathematics and its Application to Engineering and Biological System held at GEC, Gwalior, 15th May, 2010.
- 30 Chaired a technical session in the conference on Special Functions and their Applications and Symposium on Computational and Biological Mathematics, Jiwaji University, Gwalior, June 21-23, 2010.
- 31 Chaired a technical session in the 26th Annual Conference of the Mathematical Society, Banaras Hindu University, Varanasi, November 28-29, 2010.
- 32 National Conference on Theoretical Biology and Biomathematics, Jadavpur University, Kolkata, December 15-16, 2010.
- 33 3rd National Conference on Present Trends in Mathematics and its Applications held at G.E.C Gwalior on April 23rd, 2011.
- 34 National Conference on Mathematical Modelling and Computer Simulation, July 7-9th, 2011, at Babha Group of Institutions, Kanpur.

13. Administrative Positions Holding at Present:

- 1 Coordinator, M.Sc. Tech in Industrial Mathematics with Computer Application, Jiwaji University, Gwalior.

14. Administrative and other Positions Held:

1. Head, School of Mathematics and Allied sciences, Jiwaji University, Gwalior.
2. Dean of Administration in Bundelkhand Institute of Engineering and Technology, Jhansi, (U.P.)
3. Coordinator, S.O.S. in Jyotirvigyan, Jiwaji University, Gwalior.
4. Warden, Boys Hostel, Jiwaji University, Gwalior.
5. Warden, Boys Hostel, Bundelkhand Institute of Engineering and Technology, Jhansi (U.P.).
6. Coordinator, Control Room Exam, Jiwaji University, Gwalior.
7. Secretary, Jiwaji University Teachers Association.

15. (a) Books – Published one Book as an Assistant Editor in 2002 from Allied Publishers Pvt. Ltd., New Delhi with the Following Title:

“Applications and Teaching of Mathematics for Engineers and Scientists”

(b) Journal-02 (As member of the Publication Committee)

1. GAMS Journal of Mathematics and Mathematical Biosciences, Vol.1, No. 1, 1997.
2. GAMS Journal of Mathematical Biosciences, Vol.2, No. 1 and 2, 1998.

(c) Contributed one Unit in the Reading Material of IGNOU, New Delhi in the Paper: Mathematical Modelling, in M.Sc. (Mathematics) Programme.

16. Number of Conferences and Workshops Organized: - 05

1. District Level Camp on Future Studies, April 16, 1992 (**as Assistant Coordinator**).
2. District Level Camp and Workshop on the Future Study of Human Population and Related Problems, March 19–20, 1994 (**as Organizing Secretary**).
3. Sixth Annual Conference of Gwalior Academy of Mathematical Sciences, Feb. 25, 2001, School of Mathematics and Allied Sciences, Jiwaji University, Gwalior (**as Organizing Secretary**).

4. Ramanujan Mathematical Society Workshop on Financial and Biological Mathematics, Jul. 19-20, 2004, School of Mathematics and Allied Sciences, Jiwaji University, Gwalior (**as Coordinator**).
5. National Conference on Mathematical Modelling and Simulation, Jan 9-11, 2009 (**as Convener**).

17. Academic Positions Held:

1. Member, Board of Studies in Computer Applications, Jiwaji University, Gwalior.
2. Executive member of the Gwalior Academy of Mathematical Sciences.
3. Member, Editorial Board of the Proceedings of the Mathematical Society, B.H.U. Varanasi.
4. Member, Board of Studies in Jyotirvigyan, Jiwaji University, Gwalior.
5. Member, Board of Studies in Jyotirvigyan, Lucknow University, Lucknow.
6. Executive Member of the Computer Society of India, Gwalior Chapter.
7. Vice-President of the Mathematical Society, B.H.U., Varanasi.
8. Member, Board of Studies in Mathematics, Government Autonomous P.G. College, Datia, M.P.

18. Academic Positions Holding at Present:

1. Member, Board of Studies in Mathematics, Jiwaji University, Gwalior.
2. Editor of the Mathematical Society, B.H.U. Varanasi.
3. Member, Board of Studies in Mathematics, Bundelkhand University, Jhansi.
4. Member, Board of Studies in Mathematics, Kamla Raja Government Autonomous P.G. College, Gwalior, (M.P.)
5. Vice-President of Bio-mathematical Society of India, Jadavpur University, Kolkata.

19. Number of Research Projects Completed – 03

1. Quantitative Study of the Effects of Growth of Population and Pollution on Rural Ecosystem, Sponsored by M.P.Council of Science and Technology, Bhopal (1989-1992). (**As Co-investigator**).
2. Mathematical Modelling in the Study of Ecological Effects of Pollution on the Existence of Interacting Species Systems, Sponsored by U.G.C. New Delhi (2001-2004). (**As Co-investigator**).
3. Mathematical Study of Wildlife Population with Special Reference to Shivpuri District of Madhya Pradesh, Sponsored by M.P. council of Science and Technology, Bhopal (2002-2005). (**As Co-investigator**)

20. Number of Long Term Programs (Refresher Course, Schools, Orientation -Course, Instructional Conference and Workshop) Attended-10

1. UGC Sponsored Summer School on Biomathematics, I.I.T.,Kanpur, (May 1-26), 1984.
2. Instructional Conference on Applied Mathematical techniques with Special Reference to Modelling in Atmospheric and Oceanic Processes, D.A. University, Indore (April 10-29), 1989.
3. Continuing Education Course on Future Scanning, Technology Forecasting, Assessment and Management, ESCI, Hyderabad (Jan. 1-6), 1990.
4. Continuing Education Course on Forecasting Methodologies, Perspective Planning and Management of Futures, ESCI, Gwalior (Feb. 19-23), 1990.
5. Third Autumn Course on Mathematical Ecology, I.C.T.P.Trieste, Italy, (Oct 29-Nov.16), 1990.
6. Instructional Conference on Computational and Finite Element Methods, IGNOU, New Delhi (Oct.22-Nov.02), 1991.
7. Second Autumn Workshop on Mathematical Ecology, I.C.T.P.Trieste, Italy, (Nov.02-20), 1992.
8. Orientation Programme on Computers, Jiwaji University, Gwalior, (Feb.22-March7), 1992.
9. Instructional Conference on Mathematical Modelling in Ecology and Medicine, Jiwaji University, Gwalior (March 28-April 17), 1997.
10. Refresher Course on Industrial Mathematics and Computing, Institute of Basic Sciences, Agra (March 20-April 14), 1999.

21. Member of Academic Bodies and Management Board-08

1. Life Member of Computer Society of India.
2. Life Member of Gwalior Academy of Mathematical Sciences.
3. Life Member of Mathematical Society, B.H.U.
4. Member of Advisory Board of the Jai Institute of Nursing, Gwalior.
5. Member of Advisory Board of the V.I.S.M., Gwalior.
6. Life Member of Indian Society for Mathematical Modelling and Computer Simulation, (ISMMAACS).
7. Life Member of International Academy of Physical Sciences (IAPS).
8. Life Member of Bio-mathematical Society of India (BSI).

22. Number of Invited Lectures/Talks delivered - 11

1. Delivered an invited lecture in 5th Annual Conference of Gwalior Academy of Mathematical Sciences held at Govt. P.G. College, Guna on May 21, 2000.
2. Delivered an invited talk on Neural Network and Stability Theory in an ISTE Sponsored Training Programme held at Bundelkhand Institute of Engineering and Technology, Jhansi on 23 December, 2000
3. Delivered an invited talk on Modelling Spread of Epidemics in a Structured Population in the 20th annual conference of the Mathematical Society, Banaras Hindu University, Varanasi held during Jan.10-11, 2005.
4. Delivered an invited talk on Effect of Air Pollution on the Growth Dynamics of Plant– Herbivore System: A Mathematical Model in the 21st Annual Conference of the Mathematical Society, B.H.U., Varanasi held during Jan.23-24, 2006.
5. Delivered an Extension Lecture on Applications of Mathematics in Life Sciences in Govt. S.L.P.P.G. College, Gwalior on Feb. 23, 2008.
6. Delivered an invited talk on Two Species Competition Model under the Simultaneous Effect of Toxicant and Disease in the one day Colloquium on Mathematical Biology and Ecology, Jadavpur University, Kolkata, Feb. 20, 2009.
7. Delivered an invited talk on Modelling a Predator-Prey System with Infected Prey in Polluted Environment in Silver Jubilee Conference of the Mathematical Society, Banaras Hindu University held at Varanasi during December 22-24, 2009.

8. Delivered an invited lecture on Modelling the Effect of Booster Vaccination on the Transmission Dynamics of Diseases that Spread by Droplet Infection in 11th International Conference of the International Academy of Physical Sciences held at University of Allahabad, Allahabad, during February 20-22, 2010.
9. Delivered an invited lecture on Modelling of Infectious Diseases that Spread by Droplet Infection and its Control by Vaccination in the 26th Annual Conference of the Mathematical Society, Banaras Hindu University, Varanasi, November 28-29, 2010.
10. Delivered an invited lecture on Role of Toxin Producing Phytoplankton on a Plankton Ecosystem with Recycling in the National Conference on Theoretical Biology and Biomathematics, Jadavpur University, Kolkata, December 15-16, 2010.
11. Delivered an invited lecture on Modelling Spread of Communicable Diseases in Human Population in the 3rd National Conference on Present Trends in Mathematics and its Applications held at G.E.C. Gwalior on April 23rd, 2011.

23. Cultural/ Extra Curricular Activities:

1. Worked as Member of the Organizing Committee of West Zone Intersarsity Youth Festival (1998-99).
2. Worked as Member of the Organizing Committee of National Inter-University Youth Festival (2004).
3. Organized General Science Quiz Competition on Science Day (28- 02-2008) in Jiwaji University, Gwalior.
4. Served the teacher community in the capacity of the Secretary of Jiwaji University Teachers Association for Two Years.

(O.P. Misra)