CURRICULUM VITAE

Name: PROF. SHRIPRAKASH SHARMA
Mailing Address: Department of Mathematics
Indian Institute of Technology Roorkee
Roorkee-247 667, Uttarakhand, India
Date of Birth: January 2, 1952
Marital Status: Married and have three children
Nationality: Indian
Email ID : sspprfma@iitr.ernet.in
Phone No.: 01332-285207(O), 285141(R)
Mob. No. : +91-09897915401

Academic Qualifications:

Certificate/Degree	Year	Board/University	Division	Subjects	Distinction
High School	1966	UP Board Allahabad	I	Hindi, English, Mathematics, Science, Geometry Drawing	Mathematics, Science, English
Intermediate	1968	-do-	I	Hindi, English, Mathematics, Physics, Chemistry	Mathematics, Physics
BSc	1970	Meerut University	I	Mathematics, Physics, Chemistry, Basic Statistics and General English	
MSc	1972	University of Roorkee	I with honors	Applied Mathematics	Second position in order of merit
PhD	1980	-do-		Mathematics	

Awards and Honors:

1. Awarded **National Scholarship** (Govt. of India).
2. Awarded **UGC** and **CSIR fellowships** (Govt. of India).
3. Awarded **Medal** for the **Best** Student during **Master's** course.

Area of Interest: Theory of Reliability, Optimization, General Theory of Relativity, Dynamic Systems, Graph Theory, Discrete Mathematics

Teaching Experience: 36 years

Position Held	Institution	Duration
JRF (UGC and CSIR)	University of Roorkee	Sept. 1972 to July 20, 1973
Head, Department of Mathematics	CCR, PG College, Muzaffaranagar	July 21,1973 to Aug1,1976
Lecturer, Department of Mathematics	University of Roorkee	Aug2, 1976 to July 20, 1986
Reader, Department of Mathematics	-do-	July 21,1986 to April 8, 1996
Professor	IIT Roorkee	April 9, 1996 till date

Extra – Curricular Activities:

1. O.C, Time –Table, Department of Mathematics, University of Roorkee, January 1982 to June 1985.
2. Member of Post – Graduate academic program committee. Department of Mathematics.
3. Program Officer in National Service Scheme of India since 1983 to 1986.
4. Part time NCC Officer since September 1986 to July 2007.
5. O.C. Stores of Department of Mathematics during 1994 to 1997.
6. Superintendent examination of Department of Mathematics during Spring 2002-2003.
7. O.C. Administration in Department of Mathematics since 1994 to December 2005.
8. Head of Mathematics Department, IITR, January 2006 to December 2008.
9. O.C., Library of Department of mathematics, IITR since January 2009 to till date

Academic Research:

1. MSc Projects/Dissertations Guided: 22.
2. MPhil, Project/ Dissertations Guided: 04
3. PhD Thesis Guided: 05+02(Continuing).

List of Research Publications of Prof. SP Sharma et.al.:

1. Plane Symmetric Space – time of Class – I, GRG, 8 (2), pp. 147 -53, 1977.
2. Embedding Class of the Plane Symmetric Space –time, Gravitation, Quanta and the Universe proceedings of the Einstein's Centenary Symposium held at Ahmedabad, India, 1979 Wiley Eastern Ltd, pp. 302, 1980.
3. Plane Symmetric Space – time of Class –I and Electromagnetism, Indian Journal of Pure and Applied Mathematics, 10(11), pp. 1389 – 1396, November 1979.
4. Insufficiency of Karmarkar's Condition, GRG, 14(1), 1982.
5. Parabolic Analogues of some Well – known Algebraically Special Solution, GRG Conference held at Ahmedabad, India, 1982.
6. Class –I Perfect fluid distribution with non- vanishing conformal curvature, GRG Conference held at Ahmedabad, India, 1982.
7. Gravitational Significance of Taub's Plane Symmetric Space – time, GRG Conference, India, 1982.

8. Spherically symmetric conformally –Flat Perfect Fluid Distribution of class –I, Indian Journal of Pure and Applied Mathematics, 14(1), 1983.

9. Self –Gravitating Fluids of class –I with non –vanishing Weyl Tensor, Journal of Mathematical Physics, 25(12), 1984.

10. Einstein- Rosen Cylindrically symmetric Space – time subject of class –I, GRG, 16(4), 1984.

11. Hyper surfaces of a 5- dimensional Flat Space Describing perfect Fluid Distributions. 11th International GRG Conference held in Sweden, July 1986.

12. Gravitational significance of speed of light and longitudinal mass, 11th International GRG Conference held in Sweden, Vol – 1, pp.267, July 1986.

13. Gravitating Field of a Fast Moving Body, ISIAM, pp. 433 – 434, 1992.

14. An overview of some model reduction techniques in frequency domain, in Proceeding of Mathematics and its Application in Engineering and Industry, Narosa Publishing House, India, pp.549 – 556, 1997.

15. Suchana Sansadhan Yanta tatha Parimit Avastha Yanta, Vigyan Garima Sindhu, Vol. – 28, pp. 189-192, 1999.

16. Reduction of linear dynamic systems using advantages of Koenig's theorem and factor division, in Proceeding of International Conference on energy, Automation and Information Technology, IIT Kharagpur, India, pp. 90-93, December 2001.

17. Reduction of linear dynamic systems using advantages of step response matching and modified truncation, presented at International Conference on Current Trends in differential Equation and Dynamical Systems, IIT Kanpur, India, December 2001.

18. Computational; experience using Routh and Pade methods of model reduction, in proceeding of International conference on computer Application in Electrical Engineering – Recent Advances, IIT Roorkee, India, pp. 471-476, February 2002.

19. Reduction of multivariable systems using the advantages of Mihailov criterion and Factor division, in proceeding of international Conference n computer applications, in electrical Engineering – Recent Advances, IIT Roorkee, India, pp.477-482, February 2002.

20. A mixed method for the reduction of linear dynamic systems using step response matching, 4th International conference on Modeling and simulation – General & Engineering applications, Melbourne, Australia, November 2002.

21. Model Reduction using Routh - Hurwitz array and error minimization technique, in Proceeding of 26th National Systems Conference, Indian National Centre for Ocean Information Services, Hyderabad, India, November 2002.

22. Some Combined Method for Model reduction of continuous time systems, in proceeding of 26th National Systems Conference, Indian National Centre for Ocean Information Services, Hyderabad, India, November 2002.

23. A mixed method for the Reduction of linear time invariant systems using error minimization technique, International conference and Instructional Workshop on Industrial Mathematics, IIT Bombay, India, pp. 33, December 2002.

24. Linear model reduction using the advantages of Mihailov criterion and factor division, J. Inst. Engrs., India, pt. EL Vol. -84, pp. 7 – 10, 2003.

25. Improved Pade approximants for multivariate systems using stability equation method, J. Inst. Engrs., India, Pt. EL, Vol. – 84, pp. 161 – 164, 2003.

26. Reduction of multivariate systems using stability equation method and error minimization technique, in proceeding of 27th International Systems Conference, IIR Kharagpur, India, pp. 34- 38, December 2003.

27. On the reduction of discrete time systems using combined methods, in Proceeding of 27th International Systems Conference, IIR Kharagpur, India, pp. 39- 43, December 2003.

28. Reduction of linear dynamic systems using an error minimization technique, J. Inst. Engrs., India, Pt. EL, Vol. -84, pp. 201 – 206, 2004.

29. A mixed method for the reduction of multi-variable systems, J. Inst. Engrs., India, Pt. EL, Vol. – 85, pp. 177 – 181, 2005.

30. Reliability analysis of the feeding system in a paper industry using Lambda-Tau technique, Proceedings of "3rd International Conference on Reliability and Safety Engineering(INCRESE)", Udaipur, India, pp. 531-537, December 17-19,2007.

31. Availability Optimization of a Series Parallel Systems using Genetic Algorithms, Proceeding of NSC08, Electrical Engineering Department, IIT Roorkee, India, pp. 640-644, December 17-19, 2008.

32. Performance Analysis of a Complex Robotic System using Fault Tree and Fuzzy Methodology, Proceeding of NSC08, Electrical Engineering Department, IIT Roorkee, India, pp. 874-878, December 17-19, 2008.

33. RAM analysis of the press unit in a paper plant using genetic algorithm and Lambda-Tau methodology, Presented in 13th online conference WSC-2008, November 10-28, 2008, Paper No. 58.

34. Complex repairable industrial system reliability analysis using GABLT technique, Proceeding of NSC08, Electrical Engineering Department, IIT Roorkee, India, pp. 617-622, December 17-19, 2008.

35. Nonlinear Tracking Control of Kinematically Redundant Robot Manipulators Based on Neural Network, Presented in National Conference on Recent Trends in Manufacturing Technology (RTMT), Anna University, Chennai, India.

36. Neural Network Based Adaptive Hybrid Force/Position Control for Robot Manipulators, accepted in 6th International Conference on Informatics in Control, Automation and Robotics (ICINCO), Milan, Italy during 2-5 July, 2009.

37. Reliability Analysis of Complex Robotic System using Petri Nets and Fuzzy Lambda-Tau Methodology, Accepted for publication in Engineering Computations, Emerald.

38. Neural Network Based Nonlinear Tracking Control of Kinematically Redundant Robot Manipulators, accepted in Engineering Applications of Artificial Intelligence, Elsevier.

39. Stochastic behavior analysis of the press unit in a paper mill using GABLT technique, accepted for publication in International Journal of Intelligent Computing and Cybernetics, Emerald.

40. Stochastic behavior and performance analysis of an industrial system using GABLT technique, accepted for publication in International Journal of Industrial and systems Engineering, Inderscience.