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## Academic qualification :

Degree	University / College	Year	Subjects	Class/ Grade	Percentage/ Grade
					point
B. Sc.	University of Madras	1977	Maths., Physics.,	First Class	85.8
	Govt. Arts College, Salem		Statistics		
M. Sc.	University of Madras	1979	Mathematics	A Grade	5.39 / 6.0
	Govt. Arts College, Salem				
Ph. D.	Indian Institute of	1985	Integral operators	Thesis Title: Some results on finite	
	Science, Bangalore			section linear integral operators	

## **Experience**

Scientist B at NSTL, DRDO, Vizag 2years (1984-86)

Research Scientist in Dept. of Mathematics, IIT, Bombay 3 years (1987-90)

Lecturer at BITS, Pilani, Rajasthan 6 years (1990-96)

Assistant Professor at IIT, Roorkee from May 1996.

**Areas of Interest:** Nonlinear Analysis(control theory), Robotics and control

## **List of publications/presentations**

- 1. N. Sukavanam and Vikas Panwar, Computation of boundary control of heat equation using Artificial Neural Network, To appear in Int. Communications on Heat and Mass Transfer
- 2. N. Sukavanam and Divya, Approximate controllability of abstract semilinear systems, To appear in Bulletin of Calcutta Mathematical Society.
- 3. N. Sukavanam and Divya, Exact and approximate controllability of abstract semilinear control systems, Indian J. Pure and Applied Maths., Dec. 2002, 1927-35
- 4. N. Sukavanam, Solvability of semilinear operator equations with growing nonlinearity, J. Math. Anal. Appl., 241, 2000, 39-45.
- 5. N. Sukavanam, Approximate controllability of semilinear control systems with growing nonlinearity, Monograph on Mathematical Theory of Control, Selected papers from Int. Conf. On Control Theory held at IITB, in Dec.'90, Published by Marcel Dekker, New York, 1993, 353-357.

- 6. M. C. Joshi and N. Sukavanam, Approximate solvability of semilinear operator equations, Nonlinearity, 3, 1990, 519-525.
- 7. R. V. Rao and N. Sukavanam, Spectral Analysis of finite section Normal Integral Operators, J. Math. Anall. Appl., 115, 1986, 23-45.
- 8. N. Sukavanam, A Fredholm-type theory for third kind integral equations, J. Math. Anal. Appl., 100, 1984, 476-483.
- 9. R. V. Rao and N. Sukavanam, Kac-Akhiezer formula for Normal Integral Operators, J. Math. Anal. Appl. 114, 1986, 458-467.
- 10. R. V. Rao and N. Sukavanam, On the eigenvalues and eigenfunctions of some integral operators, J. Math. Anal. Appl., 108, 1985, 463-470.
- 11. N. Sukavanam, A note on Chandrasekhar's X-function, Indian J. Pure and Applied Maths., 19, 1988, 443-447.
- 12. N. Sukavanam, Approximate Controllability for a class of abstract semilinear control systems, To appear in the proceedings of Conference on Recent Trends in Applied Mathematics at Bharatiyar Univ.in April 24-25, 2003.
- 13. N. Sukavanam and Divya, Exact controllability for a class of semilinear control systems, Proceedings of Int. Conference on Mathematical Modeling held at Roorkee University, Tata McGrahill, Jan. 2001,
- 14. N. Sukavanam, Image based visual servo control in robotics, Mathematics and its applications Engineering and Industry, Conference Proceedings, Narosa Publishing House, 1996, 263-270
- 15. N. Sukavanam, Sunita and P. K. Jain, Object tracking using image based vision control, Proceedings of 18<sup>th</sup> All India Manufacturing Technology Design and Research Conference held at IIT, Kgp, 1998, 513-516.
- 16. N. Sukavanam and Sunita, Feature based feed back control algorithm for object tracking using robot vision, Proceedings of International conference on Mathematical Modeling held at Roorkee University, Tata Mcgrahill, Jan. 2001, 307-313
- 17. N. Sukavanam, Perturbation of eigenfunctions of some integral operators, Proceedings of the 42<sup>nd</sup> ISTAM conference, 1990, 109-117.
- 18. N. Sukavanam, Approximate solvability of semilinear operator equations, Int. Conf. On Mathematical Modelling of Nonlinear Systems, held in Dec. 1999 at IIT, Kgp.
- 19. N. Sukavanam, Computation of control using ANN, Int. Conf. On Industrial Mathematics, Dec. 7-9, 2003, IIT, Bombay.
- 20. Sunita and N. Sukavanam, Real time visual servo control of a robot manipulator using Kalman Filter, Int. Conf. On Industrial Mathematics, Dec. 7-9, 2003, IIT, Bombay.