Curriculum Vitae of Dr. V.N.A. Naikan

Name		:	Dr. V.N. Achutha Naikan			
Date of Birth		:	30-04-1965			
Present Designation		:	Professor			
Department		:	Joint faculty of Reliability Engineering and Department of Industrial Engg. & Management			
Present Emplo	oyer	:	Indian Institute of Technology, Kharagpur, Pin – 721 302 West Bengal, India.			
E-mail		:	naikan@hijli.iitkgp.ernet.in			
Phone		:	(91) (03222) – 283994 (O), 283995(R); 91-9434722566 (Mob)			
Fax		:	(91) (03222) – 282290			
Residential Ac	ldress	:	C ₁ -160, Indian Institute of Technology, Kharagpur, West Bengal, India. Pin – 721 302			
Educational Q	ualifications	:				
Ph.D. M.Tech. B.Tech. Pre-Degree SSLC	: Indian Institu : University of : University of	te of Teo Kerala, Kerala,	chnology, Kharagpur, 1996 chnology, Kharagpur, 1990, first class (8.98 CGPA) Trivandrum, 1988, first class, second rank (83.66%) Trivandrum, 1982, first class (65.78%) ninations, Kerala State, 1980, first class (79.16%)			
Specialization	:					
Ph.D. M.Tech. B.Tech. Title of Ph.D.	Ph.D.: Industrial Engineering & Management (1991-1994)M.Tech.: Reliability Engineering (1988-1990)B.Tech.: Mechanical Engineering (1984-1988)					
			ion Monitoring Techniques			
·	Subjects Interested to Teach:					
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Industrial Summer Training

About one month training in **QETCOS Limited**, **Quilon** – a lathe manufacturing unit

I certify that the information contained herein is accurate and true to the best of my knowledge.

Working Experience:

- 1. M/S Union Carbide India Limited, Calcutta: Engineer, 1 year, (1990)
- 2. Indian Institute of Management, Ahmedabad: Academic Associate in Production and Quantitative Methods, 6 months(1994)
- 3. Indian Space Research Organization, Ahemedabad Engineer "SC", 1 year 3 months, (1994 1996)
- 4. Indian Institute of Technology, Kharagpur:
 - a. Lecturer in the Department of Industrial Engineering and Management, 2 years, (1996 1998)
 - b. Assistant Professor in the Reliability Engineering Center and Department of Industrial Engineering and Management, 6¹/₂ years, (1998 2004)
 - c. Associate Professor in the Reliability Engineering Center and Department of Industrial Engineering and Management, 5 years, (2004-2010)
 - d. Professor in the Reliability Engineering Center and Department of Industrial Engineering and Management, 5 years, (2010-till date)
- 5. **The Chinese University of Hong Kong, Hong Kong**: PDF in the Department of Systems Engineering and Engineering Management, 1 year (2001)
- 6. **The University of Maryland, USA**: Visiting Professor, Department of Mechanical Engineering (January-June 2013)

Publications

Books:

- Reliability Estimation and Life Testing (Prentice Hall, 2009)
- A Chapter on "Statistical Process Control" in the Handbook on Performability Engineering" (Springer, UK, 2008)
- A Chapter on "Multiple Fault Classification using support Vector Machines in a Machinery Fault Simulator", in the book "Vibration Engineering and Technology of Machinery", (Springer International Publishing, Switzerland, 2015)

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Membership of Professional society: FIIE, IEEE Reliability Society, Institution of Engineers, Society for Reliability and Safety, System society of India

Other Academic and Corporate Activities : Technical chair of international conference (3 times), Co-Chairman of the Technical symposium on "*OPTIMA 2006*", Assistant Warden

of Hostel, Head of the centre, Assistant Editor-in-Chief of the International Journal of Performability Engineering, Reviewer and advisor for several international journals.

Awards and Recognition

- 1. Second Rank of University of Kerala (BTech)
- 2. Won the first prize in the energy conservation awareness competition held by the Chinese University of Hong Kong (2001)
- 3. Awarded the National Merit Scholarship by the Government of India, throughout my studies
- 4. GATE Scholarship for PG studies
- 5. Institute Scholarship for Research programme of IIT Kharagpur
- 6. When I was working with Union carbide (I) Limited, Calcutta, I had implemented a temperature monitoring based fault diagnosis technique on Extruders. This had reduced the down time of extruders considerably and the top management had appreciated the work, published in the news letter, and decided to implement at other locations of the company.
- 7. PhD student was awarded full financial support for presenting our paper in the 20th International Congress on Sound and Vibration to be held at Bangkok, Thailand from the 7th to the 11th July, 2013, by the Acoustical Society of the Netherlands (NAG) and the International Institute of Acoustics and Vibration (IIAV). This paper was selected out of 800 plus papers submitted for the conference.

List of Publications – Dr. V.N.A. Naikan

(a) **Books**

- Naikan V.N.A. "Reliability Engineering and Life Testing" (Prentice Hall, 2009, 2010, 2014)
- Naikan V.N.A. "A Chapter on "Statistical Process Control" in the Handbook on Performability Engineering" (Springer, 2008)
- Fatima S., A.R. Mohanty and V.N.A. Naikan, "Multiple Fault Classification using support Vector Machines in a Machinery Fault Simulator", in the book "Vibration Engineering and Technology of Machinery", Mechanisms and Machine Science, pp 1021-1031, J.K. Sinha Ed.(Springer International Publishing, Switzerland, 2015)

(b) International Journals and Conferences

- 1. A.S.R. Murty and V.N.A. Naikan, "Inverse Distributions in Reliability Design A Revisit", International Journal of Reliability Engineering & System Safety, No.44, pp167-171, (1994).
- 2. A.S.R. Murty and V.N.A. Naikan, "Availability and Maintenance Cost Optimization of a Production Plant", International Journal of Quality and Reliability Management, Vol.12, No.2, pp28-35, (1995).

- A.S.R. Murty and V.N.A. Naikan, "Reliability Strength Design Through Inverse Distributions Exponential and Weibull Cases", International Journal of Reliability Engineering & System Safety, Vol 51, pp 77-82, (1996).
- 4. A.S.R. Murty and V.N.A. Naikan, "Condition Monitoring Strategy A Risk Based Interval Selection", International Journal of Production Research, Vol.34, No.1, pp285-296, (1996).
- 5. A.S.R. Murty and V.N.A. Naikan, "Machinery Selection Process Capability and Product Reliability Dependence", International Journal of Quality and Reliability Management, Vol.14, No.4, pp381-390, (1997).
- 6. S.K. Roy, M.M. Bhattacharya and V.N.A. Naikan, "Maintainability and Reliability Analysis of a Fleet of Shovels", Mining Technology, International Journal of Institutions of Materials, Minerals and Mining, UK, Vol. 110, No. 3, pp A163-A171, (2001).
- 7. C.C. Yang and V.N.A. Naikan, "Optimum Design of Component Tolerances of Assemblies Using Constraint Networks", International Journal of Production Economics, Vol. 84, No.2, pp149-163, (2003).
- 8. Anupam Pattanayak, Ashish Apurva, Md. Shahabuddin and V.N.A. Naikan, "Ergonomic Design of Indian Cycle Rickshaw", Industrial Engineering Journal, Vol.32, No.2, pp3-7, (2003).
- 9. T. Nath, B. Mahanty and V.N.A. Naikan, "Implementation of Cost of Quality Among Indian Industries: A Survey" International Journal of Manufacturing Technology and Management, Vol. 5, No. 5/6, pp 579-592 (2003).
- 10. C.C. Yang and V.N.A. Naikan, "Optimum Tolerance Design using Constraint Networks and Relative Sensitivity Algorithm", International Journal of Applied Artificial Intelligence, Vol.17, No.7, pp 631-669, (2003).
- 11. C.C. Yang and V.N.A. Naikan, "Optimum Tolerance Design for Complex Assemblies using Hierarchical Interval Constraint Networks", International Journal of Computers and Industrial Engineering, Vol. 45, pp 511-543, (2003).
- 12. T. Nath and V.N.A. Naikan, "Dynamics of Quality Improvement through Prevention Efforts", R&D Quality Quest, Vol.5, No.2, pp5-16, August (2003).
- 13. T. Nath, B. Mahanty and V.N.A. Naikan, "Dynamic Modeling for Process Improvement" IT Based Manufacturing, Editors: Surender Kumar, S.K. Mukherjee, and Vinay Sharma, Narosa Publishers, New Delhi pp691-696, (2003).
- 14. T. Nath, B. Mahanty and V.N.A. Naikan, "Implementation of Cost of Quality Among Indian Industries: a Survey", International Journal of Manufacturing Technology and Management, Vol 5, No.5/6, pp 579-592, (2003).
- 15. Sanjiv Kapur and V.N.A. Naikan, "Reliability Modeling and Analysis of Automobile Engine Oil", Journal of IMechE Automobile Engineering, Vol 220, No.2, pp 187-194, (2006).
- 16. P.N.S. Rao and V.N.A. Naikan, "Generalized condition-based preventive maintenance policy for Markov deteriorating systems", International Journal on Performability Engineering, Vol 2, No.2, pp175-189, Aug (2006).
- 17. P.N.S. Rao and V.N.A. Naikan, "An Optimization methodology for condition based minimal and major preventive maintenance", Accepted to publish in International Journal of Economic Quality Control, Vol 21(2), pp127 141, (2006).
- 18. P.N.S. Rao and V.N.A. Naikan, "Dynamic collaboration of repair crews in production shops", Journal of Scientific and Industrial Research, Vol 66, No.4, pp317-324, April (2007).
- A. Syamsundar and V.N.A. Naikan, "Segmented point process models for maintained systems", International Journal of Reliability, Quality and Safety Engineering; World Scientific Journal, Vol.14, No.5, pp 431-458, (2007).

- P.N.S. Rao and V.N.A. Naikan, "An Optimal Maintenance Policy for Compressor of a Gas Turbine Power Plant", ASME Journal for Engineering for Gas Turbines and Power, Vol. 130, No.2, pp 0218011-0218015, (2008).
- 21. A. Syamsundar and V.N.A. Naikan, "Analysis of crane wheel assembly failures using multivariate counting and point processes", Journal of Structural Engineering, Vol.34,, No.4, pp 316-322, (2007).
- 22. A. Syamsundar and V.N.A. Naikan, "Modelling of maintained systems using segmented point processes", Advances in Performance and Safety of Complex Systems, Macmillan Advanced Research Series, pp 412-419, (2008).
- 23. P.N.S. Rao and V.N.A. Naikan, "An Algorithm for Simultaneous Optimization of Parameters of condition based preventive maintenance", Structural Health Monitoring, Vol. 8, No.1, pp83-94, (2009).
- 24. A. Syamsundar and V.N.A. Naikan, "A proportional intensity segmented model for maintained systems", Proceedings of the Institute of Mechanical Engineers Part O Journal of Risk and Reliability, 222, 4, 643-654, (2008).
- 25. A. Syamsundar and V.N.A. Naikan, "Hierarchical Segmented Point Process Models with multiple change points for Maintained Systems", International Journal of Reliability Quality and Safety Engineering, Vol 15, No 3, pp 261-304, (2008).
- 26. A. Syamsundar and V.N.A. Naikan, "Mathematical Modeling of Maintained Systems using Point Processes", The IMA Journal of Management Mathematics, Oxford Publication, doi:10.1093/imaman/dpn037, pp 1-27, (2008).
- 27. M.S. Rao and V.N.A. Naikan, "A Markov System Dynamics (MSD) Approach for Reliability Analysis", International Journal of Communications in Dependability and Quality, Vol 11, No.3, pp17-30, (2008).
- 28. A. Syamsundar and V.N.A. Naikan, "Sequential Detection of Change Points for Maintained Systems Using Segmented Models", Quality and Reliability Engineering International. Published online in Wiley Inter Science, Vol. 25, pp 739-757, (2009).
- 29. M.S. Rao and V.N.A. Naikan, "A Managerial tool for Reliability analysis using a novel Markov System Dynamics (MSD) approach", International Journal of Management Science and Engineering Management, Vol.4, No.3, pp 230-240, (2009).
- M.S. Rao and V.N.A. Naikan, "A Novel Markov System Dynamic Framework for Reliability Analysis of Systems", International Journal of Economic Quality Control, Vol. 23, No 1, pp1-16, (2009).
- 31. M.S. Rao and V.N.A. Naikan, "A Markov System Dynamics (MSD) based Reliability and Availability analysis of a process industry", International Journal of Communications in Dependability and Quality, Vol 12, No.3, 26-49, (2009).
- 32. A. Syamsundar and V.N.A. Naikan, "Imperfect Repair Proportional Intensity Models for Maintained Systems", IEEE Transactions on Reliability, Vol 60, No.4, pp 782-787, Dec (2011).
- 33. A. Syamsundar, K. Muralidharan, and V.N.A. Naikan, "General Repair Models for Maintained Systems", Sri Lankan Journal of Applied Statistics, vol. 12, pp117-143, (2011).
- V.M.S. Hussain and V.N.A. Naikan, "Reliability and Imbalance Modelling of a Low Pressure Turbine Rotor", Life Cycle Reliability and Safety Engineering, Vol.1, Issue 2, pp 61-70, (2012).
- 35. V.N.A. Naikan, "Guest Editorial on New Trends in Quality Engineering and Management", International Journal of Performability Engineering, Special Issue on New Trends on Quality Engineering & Management, Vol. 8, No. 6, pp 585-586, (2012).
- 36. B. Mahanty, T. Nath and V.N.A. Naikan, "System Dynamics Approach for Modeling Cost of Quality", International Journal of Performability Engineering, Special Issue on New Trends on Quality Engineering & Management, Vol. 8, No. 6, pp 625-634, (2012).

- 37. Joydeep Majumdar, B.K. Vijaykumar and V.N.A. Naikan, "Research Trends in Quality Engineering and Management, International Journal of Performability Engineering", Special Issue on New Trends on Quality Engineering & Management, Vol. 8, No. 6, pp 587-600, (2012).
- 38. Swajeet Pilot Panchangam and V.N.A. Naikan, "Reliability Modeling of Sensors Network System for Critical Applications", International Journal of Conceptions on Electronics and Communication Engineering Vol. 1, Issue. 1, pp 1-5, (2013).
- 39. Swajeet Pilot Panchangam and V.N.A. Naikan, "Optimal Sensor Networks System reliability Allocation using Improved AGREE Method", Reliability Theory & Applications, Vol. 7, No 4, pp 80-89, (2012).
- 40. Swajeet Pilot Panchangam and V.N.A. Naikan, "Failure Analysis Methods for Reliability Improvement of Electronic Sensors", International Journal of Recent Technology and Engineering, Vol.1, No. 3, pp 83-87, (2012).
- 41. Swajeet Pilot Panchangam and V.N.A. Naikan, "Application of Reliability Growth Models to Sensor System", Theory & Applications, Vol. 7, No. 4, pp 19-30, (2012).
- 42. Fatima Sahab, Amiya Ranjan Mohanty, Sabyasachi G Dastidar and V.N.A. Naikan, "Techniques for optimal placement of transducers for fault detection in rotating machines", Proceedings of the Institution of Mechanical Engineers, part O, Journal of Risk and Reliability, 227 (2), pp119-131, (2013).
- 43. Swajeet Pilot Panchangam and V.N.A. Naikan, "Reliability Analysis of Temperature Sensor System", International Journal of Reliability Quality and Safety Engineering, Vol 20, No. 1, pp 1350003-1 to 20, (2013).
- 44. V.M.S. Hussain and V.N.A. Naikan, "Reliability Modeling of Rotary Systems Subjected to Imbalance", International Journal of Performability Engineering, Vol. 9, No. 4, pp 423-432, (2013).
- 45. V.N.A. Naikan, Book Review on Life Cycle Reliability Engineering, Microelectronics Reliability, Volume 53, Issue 12, Page 2078, (December 2013).
- 46. M.S. Rao and V.N.A. Naikan, "Reliability Analysis of Repairable systems using System Dynamics Modeling and simulation", Journal of Industrial Engineering International, Springer, Vol 10, No.3, pp 1-10, Published on-line: 24 July (2014).
- 47. M.S. Rao and V.N.A. Naikan, "Reliability analysis of general standby systems using a novel hybrid simulation approach", International Journal of Advanced Science and Engineering Technology, Springer Berlin Heidelberg, Vol.4, No.1, (2014).
- 48. A. Datar, S.P. Sarmah and V.N.A. Naikan, "A Demand-Supply Interference Technique for Modeling Spare-parts Inventory Policy", International Journal of Management Science and Engineering Management, Taylor & Francis, Vol. 10, No. 3, pp 191-198, (2014).
- 49. Fatima Sahab, Amiya Ranjan Mohanty, B Guduri and V.N.A. Naikan, "Transducer invariant multi-class fault classification in a rotor-bearing system using support vector machines", International Journal of Measurement, Elsevier, Vol.58, pp363-374, (2014).
- 50. Joydeep Majumdar, V. N. A. Naikan, Condition monitoring of combined fault scenarios in rotating machinery by integrating vibration based analysis and design of experiments, COMADEM International journal of condition monitoring and diagnostic engineering management, Vol.17, No.2, pp 29-37, (2014)
- 51. Fatima Sahab, Amiya Ranjan Mohanty, and V.N.A. Naikan, "Multiple Fault Classification Using Support Vector Machine in a Machinery Fault Simulator", Vibration Engineering and Technology of Machinery Mechanisms and Machine Science, Springer International Publishing, Volume 23, pp1021-1031, (2015).

- 52. Fatima Sahab, Amiya Ranjan Mohanty, and V.N.A. Naikan, "A misalignment detection methodology by measuring rate of temperature rise of shaft coupling using thermal imaging", Journal of Risk and Reliability, SAGE Journals, Vol.229(3) pp. 209-219, (2015).
- 53. M.S. Rao and V.N.A. Naikan, "Availability Modeling of Repairable systems using Markov system dynamics simulation", International Journal of Quality and Reliability Management, Emerald Group Publishing Limited, Vol.32, No.5, pp517-531. (2015).
- 54. M.S. Rao and V.N.A. Naikan, "A System Dynamics Model for Transient Availability Modelling of Repairable Redundant Systems", International Journal of Performability Engineering, Vol.11, No.3, pp203-211, (2015).
- 55. T. Ch Anil Kumar, Gurmeet Singh, and V N A Naikan, "Effectiveness of vibration monitoring in the health assessment of induction motor", International Journal of Prognostics and Health Management, ISSN 2153 -2648, 2015 007
- 56. V.N.A. Naikan, "Reliability Estimation by Accelerated Life Testing:, Life Cycle Reliability and Safety Engineering, Vol.4, Issue, pp 32-42, (2015).
- 57. Naikan V.N.A. and Arvind Rathore, "Accelerated Temperature and Voltage Life Tests on Aluminium Electrolytic Capacitors: A DOE Approach" International Journal of Quality and Reliability Management, Emerald Publishers, Vol 33, (1), pp120-139, (2015)
- 58. M.S. Rao and V.N.A. Naikan, "A Markov system dynamics approach for repairable systems reliability modeling", International Journal of Reliability, Quality and Safety Engineering, World Scientific Publishing Company, Vol. , No. , (2016)
- 59. M Karthikeyan, VNA Naikan, R Narayan, DP Sudhakar, "Orbital TIG Welding Process Parameter Optimization using Design of Experiment for Satellite Application", International Journal of Performability Engineering, Vol.12, No.2, pp, (2016)
- 60. V.N.A.Naikan, "High Temperature Accelerated Life Tests on Electrolytic Capacitors", 4th International Conference on Reliability, Maintainability, and Safety, Beijing, China, May 18-21, (1999).
- 61. S.K Roy and V.N.A. Naikan, "Reliability, Availability, and Maintainability Studies of a Fleet of 10 m³ Electric Rope Shovel", International Conference on Management of Mining machinery, Calcutta, pp157-177, (1999).
- 62. S. Kriskna, S. Sahu and V.N.A. Naikan, "Application of TPM Activities in Indian Jute Industry for Productivity Improvement", 12th world productivity congress hong kong, beijing, 5-10 November (2001).
- 63. C.C Yang and V.N.A. Naikan, "Application of Hierarchical Interval Constraint Networks for Optimization of Tolerance Allocation", The forth Asia-Pacific Conference on Industrial Engineering and Management Systems, December 18-20, Taipei (2002).
- 64. T. Nath, B. Mahanty and V.N.A. Naikan, "Pilot Project on Cost of Quality", International Conference on Integrating World Markets: Living Excellence Through Technology and Beyond, School of Management Studies, MNREC, Allahabad, pp1.30-1.37, (2002).
- 65. C.C. Yang and V.N.A. Naikan, "Cost Optimal Allocation and Rationing in Supply Chains", 33rd International Conference on Computers and Industrial Engineering, Jeju, Korea, March 25-27, (2004).
- 66. P.V. Sasatte, R.B. Misra and V.N.A. Naikan, "Repairable system reliability prediction using neural networks", 33rd International Conference on Computers and Industrial Engineering, Jeju, Korea, March 25-27, (2004).
- 67. P.N.S. Rao and V.N.A. Naikan, "Maintenance Cost Benefit Analysis of Production Shops An Availability Based Approach", in Proceedings-Annual Reliability and Maintainability Symposium, Alexandria, VA, United States, IEEE RAMS, pp. 404 409, (2005).

- 68. P.N.S. Rao and V.N.A. Naikan, "Generalized Preventive Maintenance Policies for Markov Deteriorating Systems", INCRESE 2005, Bhubaneswar, Dec. 21-23, (2005).
- 69. P.N.S. Rao and V.N.A. Naikan, "An Algorithm for Simultaneous Optimization of Load Sharing Repairable K-out-of-N System", CONQUEST-2006, Hyderabad, Vol II, pp. 274 284, (2006).
- P.N.S. Rao and V.N.A. Naikan, "An Algorithm for Simultaneous Optimization of K-out-of-N Repairable System", presented in International Conference on Reliability, Statistics and related fields (ICRSRF), January 7 – 9, (2005).
- 71. A. Syamsundar and V.N.A. Naikan, "Crain wise analysis of wheel assembly failures using point process", International conference on Reliability and Safety Engineering, Chennai, pp 80-91, December 18-21, (2006).
- 72. Neelesh Bhattacharya and V.N.A. Naikan, "Modern software testing methods for the analysis of high-risk applications", International conference on Reliability and Safety Engineering, Chennai, pp 357-367, December 18-21, (2006).
- 73. Neelesh Bhattacharya and V.N.A. Naikan, "A study of the Key Factors influencing Software Quality", International Conference on Modeling and Simulation, August (2007).
- 74. Neelesh Bhattacharya and V.N.A. Naikan, "Propagation analysis of data-errors using data flow diagrams", Flow Graph, National Conference on Mathematical and Modeling Optimization and their Application, OptiMA, Feb 28-29, (2007).
- 75. M. Srinivasa Rao and V.N.A. Naikan, "Application of reliability models for a process industry", International conference on Reliability and Safety Engineering, Chennai, pp 426-433, December 18-21, (2006).
- 76. A. Syamsundar and V.N.A. Naikan, "Crane wise analysis of wheel assembly failures using Point Processes" Proceedings of 2nd International Conference in Reliability and Safety Engineering, Chennai, pp80-91, Dec.18-20, (2006).
- 77. A.S.R. Murty, Satish Kumar and V.N.A. Naikan, "Economic Risk and Decision Factors Related to Condition Monitoring Techniques", National Conference on Condition Monitoring, Engineers India Limited, Nagpur (1989).
- 78. A.S.R. Murty and V.N.A. Naikan, "A Temperature Monitoring Strategy for Quick Fault Location in a production Machine", National Conference on Condition Monitoring, National Productivity Council, Madras, VE1-5, (1991).
- 79. A.S.R. Murty and V.N.A. Naikan, "Trends in Steam Turbine Monitoring, National Conference on Condition Monitoring", National Productivity Council, Madras, IID1-5, (1991).
- 80. P. Kulkarni, P. Dhar and V.N.A. Naikan, "Maintainability Concepts in high Reliability Electronic Equipment", INS Valsura, Jamnagar, pp26-36, September (1996).
- V.N.A. Naikan, "Reliability Evaluation of Electrolytic Capacitors by Life Testing at High Temperature", 23rd National systems Conference, Banarus Hindu University, Varanasi, pp 81-85, (1999).
- 82. T. Nath, B. Mahanty and V.N.A. Naikan , "System Dynamics Modeling for Quality Management Systems", 19th All India Manufacturing Technology Design & Research Conference, Indian Institute of Technology, Madras, December 14-16 (2000).
- 83. S.S. Jaglan and V.N.A. Naikan, "Implementing reliability centered maintenance in Indian industries", All India Conference on Maintenance and Reliability, November 27-28 (2003).
- 84. V.N.A. Naikan, "Availability evaluation and maximization of production shops with large number of machines", All India Conference on Maintenance and Reliability, November 27-28 (2003).
- 85. S. Kapur and V.N.A. Naikan, "Reliability Modelling of Lubrication Oil", All-India conference on Condition Based Maintenance, Calcutta, December 3-4 (2004).

- M.S. Rao and V.N.A. Naikan, "Statistical quality control based expert system for a process industry, Proceedings of 2nd International conference INCRESE, Bhubaneswar, December 19-21 (2005).
- 87. M.S. Rao and V.N.A. Naikan, "Application of basic reliability models for a process industry", Proceedings of 2nd International conference INCRESE, Chennai, December 18-20 (2006).
- 88. Syamsundar A. and V.N.A. Naikan, "A Hybrid Segmented Model for Maintained System", proceedings of the INCRESE, Udaipur, PP 572-590, (2007).
- 89. M.S. Rao and V.N.A. Naikan, "A Reliability Analysis Methodology at Design Stage of Systems", Proceedings of the INCRESE, Udaipur, PP 663-671, (2007).
- 90. Syamsundar A. and V.N.A. Naikan, "Modelling of maintained systems using segmented point processes Part 2", International Conference on Reliability Safety and Quality Engineering (ICRSQE) (2008).
- 91. Syamsundar A. and V.N.A. Naikan, "Hierarchical Segmented Point Process Models with multiple change points for Maintained Systems, International Conference on Present Practices and Future Trends in Quality and Reliability (ICONQR 08), January 21-25 (2008).
- 92. M.S. Rao and V.N.A. Naikan "A system dynamics based soft computing approach for Reliability analysis of systems, International Conference on Operations Research for a growing Nation, ORSI, Tirupati, December 14-17 (2008).
- 93. M.S. Rao and V.N.A. Naikan "A soft computing approach for reliability analysis of repairable systems", ICAME S. V. National Institute of Technology, Surat, Dec.15-17 (2008).
- 94. M.S. Rao and V.N.A. Naikan "System Dynamics simulation based hybrid approach for reliability analysis", Proceedings of the27th International Conference of the System Dynamics Society, Albuquerque, New Mexico, USA, July 26 30 (2009).
- 95. M.S. Rao and V.N.A. Naikan "A system thinking approach for time dependent availability analysis of multi-component systems", Second International Conference on Reliability, Safety & Hazard, Mumbai, December 162-167 (2010).
- 96. V.M.S. Hussain and V.N.A. Naikan, "Point Process Based Maintenance Modeling for Repairable Systems: A Review", Proceedings of the 2010 International Conference on Industrial Engineering and Operations Management, Dhaka, Bangladesh, pp 418-426, January 9 – 10 (2010).
- 97. Syamsundar A., E. Vijay Kumar and V.N.A. Naikan, "Imperfect repair accelerated failure time processes for maintained systems", Second International Conference on Reliability, Safety & Hazard, Mumbai, December 313-318 (2010).
- 98. P.V. Varde, M. Agarwal, P.P. Marathe, U. Mohapatra, and R.C. Sharma and V.N.A. Naikan, "Reliability and life prediction for electronic connectors for control applications", Second International Conference on Reliability, Safety & Hazard, Mumbai, December 63-67 (2010).
- 99. M.S. Rao and V.N.A. Naikan, "A hybrid Markov system dynamics approach for availability analysis of degraded systems, Proceedings of Intl. Conf. on Industrial Engineering & Operations Management, Kuala Lumpur, Malaysia, pp 1160-1165, January 22-24 (2011).
- 100. Syamsundar A., D. E. V. Kumar, and V.N.A. Naikan, "Imperfect repair accelerated failure time models with time varying covariates for maintained systems, Accepted for publication in the 7th International Conference on Modelling in Industrial Maintenance and Reliability, MIMAR 2011, Sidney Sussex College, University of Cambridge UK, April 18-20 (2011).
- 101. Syamsundar A., K. Muralidharan and V.N.A. Naikan, "General Repair Models for Maintained Systems, International Statistics Conference, Colombo, December 28-30 (2011).
- 102. M. Karthikeyan, M.M. Nayak, R. Narayan, K.M. Shanbhouge and V.N.A. Naikan, " Reliability Improvement Through Failure Mode Effects And Criticality Analysis On Electric Propulsion Feed System", National conference on Electric Propulsion system, ISRO Bangalore, February 23-24 (2011).

- 103. S. P. Panchangam and V.N.A. Naikan, "Reliability modeling of sensors network system for critical applications", Intl. conf. on Engineering, Technology and Management, the 2nd International Conference on Advances in Electronics Engineering, Tirupati, Sept. 7-8, (2012).
- 104. S. P. Panchangam and V.N.A. Naikan, "Failure mode identification and analysis of electronic sensors", International Conference on Advances in Electronics and Bio-Medical Engineering, Pondicherry, India, August (2012).
- 105. M. Karthikeyan, R. Narayan, and G. Narayanan and V.N.A. Naikan, "Methodology adopted to improve reliability in satellite integration by optimizing parameters of orbital TIG welding", National Propulsion Conference, IIT Madras, Feb 21-23 (2013).
- S. P. Panchangam and V.N.A. Naikan, "Reliability Analysis of Hall Effect Current Sensor System", International Conference on Optimization Modeling and Applications (OPTIMA-2012), New Delhi, November 29- December 01, (2012).
- 107. S. Fatima, A. R. Mohanty and V.N.A. Naikan, "Most Effective Transducer Locations for Permanent Health Monitoring of A Rotating Machine, 20th International Congress on Sound and Vibration to be held at Bangkok, Thailand, July 7-11 (2013).
- 108. V.N.A. Naikan, "Effective time domain features for distinguishing coupling effects on misaligned shaft", in: Proceedings of Acoustics, New Delhi, November 10-15 (2013).
- 109. B. Mago and V.N.A. Naikan, "Environmental Study on Battery Performance at Low Temperature, SRESA National Conference on Reliability and Safety Engineering, Thiruchirapally, pp 37-43, Feb 13-15 (2014).
- 110. A. Rathore and V.N.A. Naikan, "Accelerated Life Testing of Aluminum Electrolytic Capacitors: Effect of Applied Voltage on Life", SRESA National Conference on Reliability and Safety Engineering, Thiruchirapally, pp 79-82, Feb 13-15 (2014).
- 111. S. Fatima, A. R. Mohanty and V.N.A. Naikan, "Shaft misalignment detection by thermography", in: Proceedings of the 21th International Congress on Sound and Vibration, Beijing, China, July 13-17 (2014).
- 112. S. Fatima, A. R. Mohanty and V.N.A. Naikan, "Multiple fault classification using support vector machine in a machinery fault simulator", in: 10th International Conference on Vibration Engineering and Technology of Machinery, Manchester, UK, pp 1021-1026, Sept 9-11 (2014).
- 113. D. P. Behera and V.N.A. Naikan, "Virtual Fault Simulation for Sympathetic Vibrations of Rotating Machine", IEEE International Advance Computing Conference (IACC), pp 905-910, Feb. 21-22 (2014).
- 114. D. P. Behera, Reshmi Behera and V.N.A. Naikan, Virtual Fault Simulation for Diagnosis of Shaft Misalignment of Rotating Machine 2014 International Conference on Advances in Computing, Communications and informatics (ICACCI, 24-27 Sept. 2014), IEEE explore, pp 2476-2480, (2014).
- 115. D. P. Behera, Reshmi Behera and V.N.A. Naikan, Virtual Fault Simulation for Bearing Defects of Various Types of Rotating Machine, 5th International Conference- Confluence The Next Generation Information Technology Summit (Confluence), IEEE explore, pp 726-730, (2014).
- 116. Joydeep Majumdar, V. N. A. Naikan, P.K. Ray, "Multiple fault scenario analysis in rotating machinery assets by applying design of experiments on vibration data", 27th International Congress of Condition Monitoring and Diagnostic Engineering Management, Australia, Queensland, Brisbane, 16 - 18 September 2014

List of Short-Term Training Courses Organized:

- Quality Engineering & Management, for teachers of Management Institutes. Sponsored by AICTE, Government of India, November 24-December 04, 1999. Venue: IIT Kharagpur
- Patent Writing & Patenting, for Managers, Scientists, and Engineers from industry as well as for others, including Government officials, Ministry of Industry, DRDO, BARC, etc. Partially sponsored by DSIR, Government of India, July 09-10, 1998. Venue: IIT Extension Centre, Calcutta.
- Reliability, Availability, and Maintainability Engineering in Manufacturing, for teachers of Technical Institutes and Managers from Industry. Partially sponsored by DST, Government of India, June 08-20, 1998. Venue: IIT Kharagpur
- 4. **Highly Accelerated Life Testing**, for Managers, Engineers, and decision makers from Industry and R&D Organizations, November 29-30, 2000.
 - Venue: IIT Extension Centre, Calcutta.
- 5. Electronic Systems Reliability Assurance, Managers/Engineers of GECL, Baroda, 1995. Venue: Baroda
- Design for Reliability and Durability, for managers and engineers from Industry, Defense, and R&D organizations, September 9-11, 2002. Venue: IIT Extension Centre, Calcutta.
- Accelerated Life Testing, for managers and engineers from Industry, Defense, and R&D organizations, September 13-14, 2002. Venue: IIT Extension Centre, Calcutta.
- 8. First course on **Reliability Centered Maintenance**, for managers and engineers from Industry, Defense, and R&D organizations, November 9-11, 2006.
- 9. Second Course on **Reliability Centered Maintenance**, for managers and engineers from Industry, Defense, and R&D organizations, February 7-9, 2007.
- 10. Strategic Quality Control of Coal, for managers and engineers from Kothagudam Coal Mines, Kothagudam, AP, November 13-15, 2008
- 11. Third Course on **Reliability Centered Maintenance**, for managers and engineers from Industry, Defense, and R&D organizations, July 13-15, 2009
- 12. **Reliability engineering and Life Testing**, AICTE Sponsored for teachers of Engineering Institutes. Sponsored by AICTE, Government of India, February 1-14, 2010
- 13. **Reliability Measurement and Demonstration Methods,** Defence Institute of Quality Assurance, Bangalore, November 8-12, 2010
- 14. **Reliability Measurement and Demonstration Methods,** Defense Institute of Quality Assurance, Bangalore, October 17-21, 2011
- 15. **Reliability Measurement and Demonstration Methods,** Defense Institute of Quality Assurance, Bangalore, December 10-15, 2012
- 16. **Reliability Measurement and Demonstration Methods,** Defense Institute of Quality Assurance, Bangalore, December 09-14, 2013

PhD Theses Supervised:

- 1. Tuleswar Nath: Cost of Quality Measurement and Modeling, December (2002)
- 2. P.N. Srinivasa Rao: Design of optimal maintenance policies for production systems (2006)
- 3. A. Syam Sundar: Segmented Point Process Models for maintained Systems (2009)
- 4. M. S. Rao: System Dynamics Simulation for Reliability Modeling (2010)
- 5. Fatima Sahib: Strategies for automated fault diagnosis in rotating machines (2014)
- 6. S. Kartikeyan: Reliability modeling of satellite systems (in progress)
- 7. V. Mohammad Hussain: Reliability Modeling of Rotary Systems (in progress)
- 8. Tulluri Anil Kumar: Condition Monitoring of Ball Bearings (in progress)
- 9. Gurmeet Singh: Fault Diagnosis and Prognosis of Electrical Motor
- 10. Krishna Kumar Dodsena: Performance Improvement of Indian Trucking Industry
- 11. Agam Gugalia: Availability Optimization

MS Theses Supervised:

- 1. N. Bhattacharya: Software Reliability Modeling and Testing for High Risk Applications (2008)
- 2. Swajeet Pilot Panchangam: Failure Analysis of sensor Systems (2014)

Sl.	Degree	Name of the	Thesis Title	Industry	Year
No. Stude		Student	ıdent		
MTech V Sri		V Srinivas Pothula	Preliminary risk analysis of Hypersonic Aero Space Vehicle (HASV)	DRDL	2015
	MTech	Wg Cdr Suneel Shankar Huddar	Preliminary risk analysis of Hypersonic Aero Space Vehicle (HASV)	DRDL	2015
1	MTech	Arvind Rathore	DOE Approach to Study the Effect of Applied Voltage and Ambient Temperature on Life of Aluminium Electrolytic Capacitors		
2	MTech	Bhavdeep Mago	Temperature Effects on Battery Life	Indian Navy	2014
3	MTech	Raju Nelluri	Reliability Demonstration of Dosage Control Unit for Heavy Duty Commercial Vehicles in Indian Market	Bosch, Bangalore	2014
4	MTech	Joydeep Majumdar	A DOE Approach For Modeling Multi- Fault Scenarios For Vibration Based Condition Monitoring in Rotating Machinery		2013
5	MTech	Vipul Kantaria	Optimization of Maintenance Decision Based on Reliability Centered Maintenance	GNFC Ltd, Bharuch	
6	MTech	K G Muthanna	Reliability Analysis of Traction System	Delhi Metro	

MTech Theses Supervised:

			of Rolling Stock		
-	MTech	B.S. Dhankar	Reliability study of PMM Set and its	BHEL	2012
7			Associated Controller		
8	MTech	K. Sudarsanam	Reliability modeling and analysis of	ISRO	2012
0			pressure transducers		
9	MTech	Indrajit Das	Failure and risk analysis of pressure	ISRO	2012
9			transducer		
10	MTech	Aniruddha Datar	Applications of reliability engineering	Menon &	2012
10	_		techniques in mass manufacturing set up	Menon, Kolhapur	
11	MTech	B. Ratawal	Assembly Line performance evaluation		2012
			and line balancing using simulation	× 11 4	2011
10			Assessment of residual mission	Indian Army	2011
12	MTech	B.K. Raghunath	reliability of armoured fighting vehicles		
	MT	A surfa O's a l	through condition based monitoring		2011
12	MTech	Amit Singh	Optimal PM scheduling in a Steel Plate		2011
13			Industry		
14	MTech	Pulkit Sharma	Study and development of a temperature	LANVESS	2011
15	MTech	Jitendra Kumar Raj	control system in heat exchangers Reliability analysis of car batteries	LANXESS	2011
15	MTech	S. Sanooj	Reliability modeling of gas generator	RCI	2011
10	MTech	R.N.Rai	Repairable system reliability modeling	IAF	2010
17	MTECH	K.IN.Kal	of defence equipments	ІАГ	2010
	MTech	Utpal Rabha	Reliability studies on motors	ONGC	2009
18	witten	Otpai Rabila	Reliability studies on motors	onde	2007
19	MTech	Guhe Sushil Suresh	ALT on Connectors BARC		2009
	MTech	Haranadha Reddi	Advanced Simulation technique in	Dritte	2009
20	in reen	Medapati	reliability evaluation of piping system		2009
	MTech	Sashikant Guria	Reliability Assessment of Flooded lead-		2009
21			acid battery		
22	MTech	Nitesh Chatri	Reliability analysis of rotating systems		2009
22	MTech	Ashish Kumar	Sponge Iron process quality assurance Tata Sponge Iron		2009
23		Diwakar	using design of experiments Ltd		
			Estimation od reliability of a 63Sn37Pb		2009
24	MTech	Abhijeet Nath	joint by finite element analysis using		
			ANSIS		
25	MTech	Sandeep Pandey	Design of process layout of a molding		2008
23			item for improvement of productivity		
26	MTech	Durgesh Kumar	Logistic capability study in Noamundi	Noamundi Iron	2008
20			Iron Mines	Mines	
27	MTech	Lt. Cdr. S.K. Rana	Modelling of Missile Systems	DRDL	2008
	MTech	Ashish Gupta	Reliability estimation and improvement		
28			during product development		2008
			Estimation of Reliability of a 63Sn37Pb	DRDL	2008
29	MTech	Abhijit Nath	Solder joint by finite element Method		
			using ANSYS		
30	MTech.	A.K. Diwakar	Sponge Iron Process Quality Assurance		2008
	MTech	Wg Cdr Pradeep K	Reliability analysis of Missiles in		2007
31		Dey	storage		
			Crack Fatigue Propagation and	General Electric	2007
32	MTech	Ranajit Dhar	Predicting Residual Life using		
			degradation model		
33			Decision support system for personnel		2007

	MTech	Sahan Ray	requirement analysis and policy planning for a software firm		
	MTech	C. Dealer Serier		II	2007
34	MTech	G. Raghu Sankar	Simulation Model of purchase order creation process: A case study	Honeywell	2007
35	MTech	Subhani Shaik	Supplier performance evaluation using Analytic Hierchy Process	Honeywell	2007
36	MTech	Shailesh Rao	Accelerated degradation testing approach to quantify product lifeTVS Motor Company		2006
	MTech	M. Srinivasa Rao	Development of software for reliability	Company	2006
37	WITCON	WI. SHIIIVasa Kao	estimation		2000
38	MTech	Jitendra Usara	Reliability improvement for the design of rear axle of tractor	ESCORTS	2006
39	MTech	Hema Lakhsmi	Alarm generation algorithms based on statistical analysis of combustion dynamics	GENERAL ELECTRIC	2006
40	MTech	Anilkumar Ammina	Reliability analysis of composite wing subjected to gust loads	ADA	2006
41	MTech	Maj. Mathialagan	Reliability Analysis of an automobile gearbox	TATA MOTORA	2006
42	MTech	K. Jayaram	Development and performance testing of a web application for an HR activity at a software company	HONEYWELL	2006
43	MTech	Maj. Sanjiv Kapur	Lubricant Condition Based Maintenance Strategy for Army Fleet	INDIAN ARMY	2005
44	MTech	Abhimanyu	System Reliability Optimization by Genetic Algorithm		2005
45	MTech	Nilanjan Sengupta	Stochastic Design of a Simply Supported Shaft		2005
46	MTech	Saurabh Agarwal	Application of Neural Network in Software Reliability Prediction		2005
47	MTech	Maj. S.S. Jaglan	Study and Implementation of Reliability Centered Maintenance in the Army	INDIAN ARMY	2004
48	MTech	Rajesh Misra	Reliability Assessment of a Telecommunication Exchange	BSNL	2004
49	MTech	Vineet Kumar Singh	A Practical Approach to Product Reliability and Process Reliability Assessment	TISCO	2002
50	MTech	Anirban Dev Burman	Production Planning and Control of the Synthetic Division of a Wire Industry		2002
51	MTech	Sq Ldr S.M. Choudhari	Spare Parts Management and Standardization of Induction Motors in Manufacturing CompanyTATA BEARINGS		2002
52	MTech	Hemant S. Raut	Software Development for Ship Repair- Commercial, Planning and EstimateCALCUTTA PORTSFunctions		2002
53	MTech	Desh Bandhu Singh	Optimization of Truck Loading Time in ACC a Cement Industry		2002
54	MTech	Lt. Cdr. D. P. Joshi	Reliability Analysis and Study of Gun Barrel Wear in Indian Navy	INDIAN NAVY	2001
55	MTech	Uday Pioneer Kola	Process Control of Outer Race Track Grinding Operation of Bearings	TATA BEARINGS	2001

56	MTech	Maj. Jitesh Kumar	Modified Fault Tree Technique for Fault Diagnosis and Maintenance of Helicopter	INDIAN AIRFORCE	2001
57	MTech	K. Srinivasa Rao	Full Business Potential in a Foil and Packaging Industry		2000
58	MTech	Ch. Sasi Bhusan	Optimum Cutting of Caster Slabs in an Integrated Steel Plant	RURKELA STEEL PLANT	2000
59	MTech	Hariprakash Agarwal	Availability and Opportunity Loss Analysis of Hot Strip Mill		2000
60	MTech	G. Yadagiri	Optimum Rolling Plan for Hot strip Mill in an Integrated Steel Plant – A Tabu Search Approach	TISCO	2000
61	MTech	P. Krishna Vardhan	Parameter Design of the Micro Finishing Process Using Design of experiments	TATA BEARINGS	2000
62	MTech	Atul Kumar Gupta	Quality Control and Improvement Studies in an Integrated Aluminum Company	NALCO	1999
63	MTech	Sanjay Kumar Roy	Reliability, Availability, and Maintainability of a Fleet of Shovel	CMERI	1999
64	MTech	B. Sita Rama Prasad	Development of a Software Tool for Path Testing and Reliability Assurance		1998
65	MTech	G. Ramakrishna	Improvement of Electronic Equipment Reliability – A Case Study		1998
66	MTech	Rajesh Ranjan Khalko	Gear Box Testing – Vibration and Noise Analysis	FLENDER MCNELL	1998
67	MTech	Samir Ranjan Pattanaik	Signal Processing Software Development and Testing, Application to Reliability and Condition Monitoring		1997
68	MTech	K. Vetriselvam	Reliability Centered Maintenance for Utilities of a Glass Plant	GLASSWARES	1997
69	MTech	Anil D. Jambulkar	Statistical Process Control in a Diesel Engine Manufacturing	KIRLOSKAR	1997
70	PGDST	A.S. Rao Durgendu Jha	Analysis of availability and maintenance of critical electrical equipments in steel plant	VSP	2007
71	PGDST	Viswajit Kumar Uday Prakash	Reliability study of blast furnace equipment – Mud gun	Bokaro Steel Plant	2007
72	PGDST	P. Chandra Shekhar Ravindra M. Patel	Reliability study of hotstrip mill critical equipment – Coil Box	ESSAR Steel	2007
73	PGDST	Satyajit Mohapatra	Complaint analysis of steel for auto segment using reliability techniques	TATA STEEL	2006
74	PGDST	Kishore Behera	Complaint analysis of steel for auto segment using reliability techniques	TATA STEEL	2006
75	PGDST	Sanjoy Banerjee	Study of Maintenance system & failure analysis in steel plant using reliability engineering method	TATA STEEL	2006
76	PGDST	Ramesh Shankar	Study of Maintenance system & failure analysis in steel plant using reliability engineering method	TATA STEEL	2006

SI. No.	Degree	Name of the Student	Title of thesis	Year
1	BTech	Budhanatn Ratewal	Network analysis using fuzzy logic concepts	
2	BTech	Pulkit Sharma	Cost analysis of extended warranty models	2010
3	BTech	Bipin Kumar	Study of existing warranty models and development of an optimum warranty model for multi- component product	2010
4	BTech	Chetan Agarwal	Effect of no claim discount system on propensity to claim	2010
5	BTech	Chetan Goyal	Determining the warranty cash reserve and the optimal warranty period for the manufacturer of computers	2009
6	BTech	Ashish Gupta	Optimal ratio0ning of supply chain distribution network	
7	BTech	Sahan Ray	A heuristic model for the adaptive timing and sequencing of traffic signal to control traffic flow through an intersection	
8	BTech	Sanket Kawde	Development of Vibration Based Fault Simulator	2004
9	BTech	Virendra Pratap Singh	Simulation of Supply Chain to Study the Bullwhip Effect	
10	BTech	Subra Kanti Ghosh	Multi-Echelon Supply Chains – A System Dynamics Approach	2003
11	BTech	Birendra Kumar	Study on Performance Index of Supply Chains	2003
12			Suggesting a Road Map for the Indian Industries to	
	BTech	Sanjoy Das	Survive in the Global Competition	
13	BTech	Vishal Kumar Gupta Anirban Mondal	Multi-Stress Accelerated Life Tests on Electrolytic Capacitors	
14	BTech	Anubha Singh	Reliability and Life Testing of Electronic Components	

Under Graduate Thesis Supervision

Sponsored Projects and Consultancy Undertaken

Title of Project / Consultancy	Duration	Sponsor	Value
Study for Strategy Formulation For Productivity		Ministry of Textiles and	
Improvement in Jute Industry	18 months	JMDC	Rs. 32 lacs
Hybrid Systems Safety Analysis	2 years	MHRD	Rs. 12 lacs
Reliability of Restructured Power Systems	2 years	MHRD	Rs. 6 lacs
Software Reliability Testing and Modeling for High			
Risk and Safety Applications	2 years	MHRD	Rs. 8 lacs
Reliability and Maintenance Work Package for	1 year	DRDO, Govt. of India	Rs. 8 lacs
Project Missile Type I			
Reliability and Maintenance Work Package for	1 year	DRDO, Govt. of India	Rs. 11 lacs
Missile Type II			
Reliability and Maintenance Work Package for	1 year	RCI, Ministry of	Rs. 6 lacs
Generators/motors		Defence	
Accelerated Life Testing of 30-pin connectors	6 months	BARC & ECIL	Rs. 2.25
			lacs
Residual Mission Reliability of Vehicles through	9 months	Ministry of Defence	Rs. 16 lacs
СВМ			

Rotating Machinery fault Simulation lab	2 years	MHRD	Rs. 52 lacs
Reliability modeling, Analysis and Prediction of 21	2 years	ISRO	8.4 lacs
NA (Absolute) Pressure Transducers			
Reliability analysis of Permanent magnet machine set	9 months	BHEL	6.6 lacs
and its associated controller			
Hazard identification and risk assessment of	2 years	ITR, Chandipur	9.5 lacs
industrial activities in the ITR Chandipur			
Virtual Labs Phase II (VLT	3 Years	MHRD	539.37 lacs
Application Of Rams Concepts For Hhp (4500hp)	8 months	DLW Varanasi	9 Lakhs
Diesel Locomotives,			
Preliminary Risk Analysis of Hypersonic Technology	9 months	DRDL	9.972 lacs
Demonstrator Vehicle			

Other Academic and Professional Activities

- 1. I was the Technical Chair of the International Conference on Reliability and Safety Engineering, *INCRESE 2005, INCRESE 2006, and INCRESE 2007.*
- 2. Asia Pacific Editor of the International Journal of Performability Engineering
- 3. Guest Editor of the Special issue on "Quality Engineering and Management" of IJPE
- 4. Reviewer for many international journals such as IEEE Transactions on Reliability, International Journal of Production Research, International Journal of Performability Engineering, International Journal of Quality and Reliability Management, System assurance Engineering & Management, International Journal of Management Science and Engineering, Microelectronics Reliability, Institution of Engineers, etc.
- 5. I was Co-Chairman of the Technical symposium on "*OPTIMA 2006*", organized by the Department of Industrial Engineering & Management, IIT Kharagpur, March 10-12, 2006
- 6. Organizing Committee Member, International Conference on Advances in Supply Chain and Manufacturing Management, Dec 16-18, 2011, Kharagpur, India
- 7. Program Committee Member, The 4th Asia Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2010), Dec 2-4 2010, Wellington New Zealand
- 8. Co-Chairman, Technical Committee, International Conference on Reliability, Safety and Hazard ICRESH 2010, Dec 14-16, 2010, Mumbai.
- 9. Program Committee Member, The 5th Asia Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2012), Nov 1-3 2012, Nanjing, China
- 10. Program Committee Member, 6th International Conference on Quality, Reliability, Infocom Technology and Industrial Technology Management, Nov 26-28, 2012, New Delhi.
- 11. International Advisory Committee Member, 4th International Conference On Quality, Reliability And Infocom Technology & Mathematical Modeling And Related Optimization Techniques, Dec 18-20, 2009, New Delhi.
- 12. Program Committee Member, International Conference on Microelectronics & Reliability, Oct 17-18, 2013, Amity University, Noida, India
- 13. I was Assistant Warden of the Vidyasagar Hall of Residence from 2006-2009, IIT Kharagpur
- 14. Head of the Reliability Engineering Centre, IIT Kharagpur from September 2008 2012, and from November 2013 till date.

I certify that the information contained herein is accurate and true to the best of my knowledge.

(V N Achutha Naikan)

Date: