Faculty Profile

Brief Profile (Few Paragraphs)

Dr. M. N. Vijaya Kumar is currently working as an Associate Professor in the Department of Industrial Engineering and Management at R.V. College of Engineering, Bengaluru. He has over 20 years of rich experience encompassing

teaching, research, consultancy, and training. In addition, he has three years of research experience at the Defence Research and Development Organization (DRDO) – Gas Turbine Research Establishment (GTRE), Bengaluru, where he was involved in cutting-edge projects in defense technology.

He holds a Bachelor's degree in Mechanical Engineering from PES College of Engineering, Mandya, a Master's degree in Engineering Management, and a Doctoral degree from Avinashilingam University, Coimbatore. His academic and professional journey reflects a strong foundation in both technical and managerial aspects of engineering education.

Dr. Vijayakumar is actively involved in teaching subjects such as Statistical Quality Control, Project Management, Virtual Commerce, E-commerce, Material Science and Metallurgy, Operations Research, Facility Planning and Design and Management Information Systems to undergraduate and postgraduate students in engineering and management streams. He has guided several student projects that focus on solving live industrial problems, many of which have led to practical and implementable solutions in the fields of Industrial and Systems Engineering.

In addition to his teaching responsibilities, he has presented and published numerous technical papers in national and international journals and conferences, contributing to the academic and research community. He has also successfully executed funded projects and departmental training assignments, demonstrating his commitment to applied research and industry engagement. As part of his research contributions, Dr. Vijayakumar has one patent published and one more patent filed, reflecting his drive for innovation and technological advancement. He remains dedicated to fostering innovation, industry collaboration, and academic excellence within his field.

Personal Information

Name: Dr. M N Vijaya KumarDesignation: Associate Professor

• **Department:** Department of Industrial Engineering & Management

• Email: vijayakumar@rvce.edu.in

Phone: 080:68188153

Google Scholar / ResearchGate / LinkedIn: [Link if applicable] / ORCID: [Link]

Google Scholar: https://scholar.google.com/citations?user=pYruzLAAAAAJ&hl=en

Research Gate: https://www.webofscience.com/wos/author/record/O-9401-2016

LinkedIn: https://www.linkedin.com/feed/?trk=guest homepage-basic nav-header-signin

ORCID: https://orcid.org/0000-0001-5547-5677

Domain of Expertise

Research Focus

- Primary Area: Quality Management, Enterprise Resource Planning, Implementation
- Allied Areas:
 - o Software Engineering
 - o Management Information System

Academic Qualifications

- Ph.D.:- Avanashilingam University for Women, Coimbatore in ERP Implementation
- M.Sc./M.Tech: M.Tech, Visvesvaraya Technological University (VTU), Belgaum in Master of Engineering Management
- B.E./B.Tech: Mysore University, in Mechanical Engineering
- Postdoctoral Research: NA

Professional Experience

Experience						
S.No	Institute/College/Industry	Job Title	Duration (From- To)			
1.	R.V. College of Engineering Bangalore. (Affiliated to VTU, Belgaum)	Associate Professor	Till Date			
2.	R.V. College of Engineering Bangalore. (Affiliated to VTU, Belgaum)	Assistant Professor	01-01-2011			
3.	R.V. College of Engineering Bangalore. (Affiliated to VTU, Belgaum)	Senior Lecturer	10-11-2010 till 31-12-2010			
4.	R.V. College of Engineering Bangalore. (Affiliated to VTU, Belgaum)	Lecturer	01-09-2005 till 09-11-2010			
5.	Gas Turbine Research Establishment(GTRE),Bangalore	Project Engineer	10-7-2004 till 30-8-2005			
6.	National Institute of Engineering (N.I.E), Mysore	Guest faculty	Three Semester			

Publications & Patents

Journal Publications

- M N Vijayakumar & Dr. A.V. Suresh published a paper on "Study and Analysis the Quality issues in ERP Implementation" at IEEE Computer Society, pp. 759 764, ISSN 978-0-7695-3884-6/09. E-ISBN: 978-0-7695-3884-6, Print ISBN: 978-1-4244-5250-7, No. 11088613 22 January 2010, Issue Date: 16th 18th December 2009
- 2. M.N. Vijayakumar, Dr. A.V. Suresh and K N Subramanya published a paper on "Application of an Analytic Hierarchy Process to Prioritize the Factors Affecting ERP Implementation" at International Journal of Computer Application (IJCA), No. 2, Article 1, Vol. 2, May 2010, ISSN 0975-8887.

- 3. M N Vijayakumar & Dr. A.V. Suresh published a paper on "Customer Satisfaction Survey of Educational Institution Software" at International Journal of Computer Science and Information Technology (IJCSI) Vol. 3, No. 2, 2010 pp. 183-189, ISSN: 0974-5580.
- 4. M N Vijayakumar and Dr. A.V. Suresh published a paper on "Statistical Software Quality Improvement to an ERP Package by Six Sigma Methodology" at International Journal of Advanced Engineering Technology (IJATE), E-ISSN 0976-3945, IJAET / Vol.II / Issue II / April-June, 2011
- 5. M N Vijayakumar and Dr. A.V. Suresh published a paper on "Application of the Six Sigma Methodologies to Enterprise Resource Planning Implementation" at Journal of Business and Systems Research to be published by Inderscience Publishers. (IJBSR, ISSN (Online): 1751-2018 ISSN (Print): 1751-200X, In print
- 6. Disha M Nayak, Vijaya Kumar M N , G.Sreenivasulu Naidu, Veena Shankar published a paper on "Evaluation of OEE in A Continuous Process Industry on an Insulation Line in a Cable Manufacturing Unit" at International Journal of Innovative Research in Science, Engineering and Technology Vol. 2, Issue 5, May 2013, pp. 1629 1634, ISSN: 2319-8753
- 7. Prashant V, Vijayakumar M N, Dr. K N Subramanya, Dr. N S Narahari presented a paper on "Application of Six Sigma Methodology for a Manufacturing Cell A Case Study" at Industrial Engineering and Engineering Management (IEEM), 2013 Institute of Electrical and Electronics Engineers (IEEE) International Conference during 10 13th December 2013. 978-1-4799-0986-5/13/\$31.00 ©2013 IEEE, pp 280 284.
- 8. Disha M N, Vijayakumar M N, Ms. Veena Shankar and Dr. N S Narahari published a paper on Measuring Quality Management System Maturity in a Cable Manufacturing Unit, using EFQM Excellence model A Case Study Analysis at Industrial Engineering Journal, Vol. VII, Issue No. 2, pg. 28 30, Feb 2014
- 9. Darshan Patel Y G, M N Vijaya Kumar published a paper on "Evaluating the Effectiveness of Agricultural Extension Services: An Exploratory Research", at International Journal of Latest Technology in Engineering, Management and Applied Science (IJLTEMAS), Vol. III, Issue VII, July 2014, pp. 289-293, ISSN: 2278-2540.
- 10. Dr. M N Vijayakumar, Archana M S, Kamalakant W "Exploratory Study on the Application of IIoT in CNC" at 3rd International Conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS 2018) technically Co-sponsored by IEEE, organized at R V College of Engineering, Bangalore during 20th 22nd December 2018
- 11. JR Nataraj, Praveen Y Bagali, M Krishna, MN Vijayakumar published paper on <u>Development of silver doped Titanium oxide thin films for gas sensor applications</u> at Materials Today: Proceedings, Vol. 5, Issue 4, pp. 10670-10680 published by Elsevie
- 12. Shreyash S Kalal, Archana BG, Krithika Devaiah A, Dr. M.N Vijaya Kumar published a on "Market Resaerch Feasibility Study for Prospecting Potential Market Segments & Geographies" International Research Journal of Modernization in Engineering Technology and Science, Vol:02, Issue:05, e-ISSN: 2582-5208, May-2020
- 13. Nikitha A.P., Basha M.M.J., Vijayakumar M.N., Archana M.S published a paper on "Efficient Utilization of Home Energy During Pandemic—A Case Study' at Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies, Springer, Singapore Vol. 213, ISBN: 978-981-33-4443
- 14. Likhith Gowda G S, Varunkumar J M, Ekambar A Ghorpade, Rushab B, Dr M N Vijayakumar published a paper on "Review on Design and Development of Quadcopter for Smart Agriculture" at International Research Journal of Engineering and Technology (IRJET) Volume: 08 Issue: 07, p-ISSN: 2395-0072, pp, 3681 3685, July 2021, Impact Factor value: 7.529.
- 15. Dr Vijaya Kumar, Dr MS.Shyamasundar M S and Ms. Archana. Published a paper on "Women Entrepreneurship and Innovation in Higher Education: Opportunities and Challenges in India -A Review" at Journal of Engineering Education Transformations (JEET) Volume 35, No. 3, January 2022, ISSN 2349-2473, eISSN 2394-1707.
- 16. Dr Vijaya Kumar, Dr MS.Shyamasundar M S and Ms. Archana. Published A Perceptual study of Entrepreneurial Readiness of Women Students studying in Indian Technical Institutions World Review of

- Entrepreneurship, Management and Sust. Development, Vol. XX, No.X,XXXX (paper accepted for publication)
- 17. Ramesh S Sharma, Vijayakumar M N, K N Subramanya Recent developments in damage detection of CFRP composites using non-destructive techniques a review in CRC publication (under review)
- 18. Dr Vijaya Kumar M N ,Prof Bhaskar MG, Dr Vikram N B, Dr Ramaa A, Dr N S Narahari presented a paper on "Experiential Learning Model for Gen Z Student's Engagement in Engineering Education: A Case Study" at AICTE sponsored two days national conference on "Critical thinking for Gen Z Multidisciplinary Approach (CTGZMA -2021)" in association with Indian Society of Technical Education (ISTE), New Delhi during 28th-29th October 2023. Awarded Best Paper
- 19. Dr. Narahari N S Dr Vijaya Kumar M N *Recent Developments in Quality Management in the Era of DigitalTransformation A Review. European Journal of Theoretical and Applied Sciences, (2023). Vol. 1, No. 1, 1-5. (ISSN 2786-7447)
- 20. Gourav Vivek Kulkarni, Ramesh S Sharma, M.N. Vijaya Kumar, Sunith Babu L "Artificial Neural Network Based Prediction of Impact Loads and Thickness in CFRP and GFRP Composite Laminates" International Journal of Fracture Mechanics and Damage Science vol-2, issue-1, pp-34-45
- 21. Gaurav Kulkarni,Dr Ramesh sharma, Dr Vijaya Kumar M N, Sunith babu "Artificial Neural Network based prediction of impact loads and thickness in CFRP and GRPF composite laminates, International Journal of Fracture Mechanics and design science, vol-2, issue-1, pp-33-38, DOI:37591/IJFMDS

Conference Papers

- 1. Vijaykumar M N, Lecturer and Divya Ramakrishna, VI Sem presented a paper on "Managing the Economic Slowdown", at National conference on 'Emerging Trends in Industrial Engineering and Management' at B.M.S. College of Engineering, Bangalore during 28th and 29th February 2009.
- 2. M.N. Vijayakumar presented a paper on "Implementing SDLC in CMMI Framework" at International Conference on Arts, Science, Engineering and Management (ICASEM) organised by Gogte Institute of Technology at Goa during 23rd 25th April 2009
- 3. M. N.Vijayakumar, Dr. A.V. Suresh and Vikram B presented a paper on "Statistical Modeling Approaches to ERP Implementation" at 2nd National conference on Software Engineering NCSE-09 sponsored by AICTE, IEEE SMC and Accenture at Dept. of MCA, M.S. Ramaiah Institute of Technology, Bangalore during 6th 7th November 2009.
- 4. M.N. Vijayakumara and Dr. A.V. Suresh presented a paper on "Study and analysis the Quality issues in ERP implementation" at International Conference on Emerging trends in Engineering and Technology (ICETET-09) at Nagpur during 16th 18th December 2009
- 5. M. N.Vijayakumar, Vikram N B and Dr. A V Suresh, presented a paper on "Review of Literature and Research opportunities in the field of Software Reliability" at International Conference on Latest Trends in Simulation Modeling and Analysis, Department of Mechanical Engineering, NIT Calicut, during 17th 19th December 2009.
- 6. M. N. Vijayakumar, V Ravishankar and Dr. A.V. Suresh presented a paper on "Review of Literature Survey on CMMI Implementation" at International conference on Advances in Industrial Engineering Application" department of Industrial Engineering, Anna University Chennai during 6 8 January 2010.
- 7. M.N.Vijayakumar, and Dr. A.V. Suresh presented a paper on "Software Testing Strategies" at National conference on Advanced Computing Techniques NCACT 2010. Organized by Avinashilingam University for Women, India, during 19th February 2010, ISBN No. 978-93-80381-02-2,
- 8. M.N.Vijayakumar presented a paper on "Application of the DMAIC cycle to an institutional ERP package" at International Conference on Advanced Materials, Manufacturing, Management and Thermal Sciences [AMMMT 2010], during 18-19th November 2010, held at Department of Mechanical Engineering & Department of Industrial Engineering and Management, Siddaganga Institute of Technology, Tumkur-572103, Karnataka.

- 9. M N Vijaya Kumar and Dr. A.V.Suresh presented a paper on "Changing Goal Post Software Development Life Cycle Model for Indian Software SMEs" at International Conference on "Operational Excellence for Global Competitiveness" (ICOEGC 2011) organized by Department of Industrial Engineering and Management R. V. College of Engineering, Bangalore, in association with M/s ABCON Information Systems Pvt. Ltd., Bangalore during 3rd 5th February 2011.
- 10. M N Vijaya Kumar, Keshav Murthy D.B and Dr. A.V.Suresh to be presented a paper "Application of Force Field Analysis for successful ERP Implementation" at IIIE -12, 54th International Conference on paradigms for global challenges and opportunities: vision 202 30th 31st October 2012
- 11. Dr. N S Narahari, Vijayakumar M N, Prashant V, Deepak Rathod presented a paper on "Determination of Optimal Product Mix in a Process Industry using LPP Model A Case Study" at National Conference on Recent Trends in Operations Research, NCRTOR, Amity School of Engineering and Technology, New Delhi, during April 11th -12th, 2013
- 12. Disha M Nayak, Mr Vijaya Kumar M N and Ms. Veena Shankar presented a paper on "Evaluation of OEE in a Continuous Process Industry on an Insulation Line in a Cable Manufacturing Unit" National Conference on Advances in Design, Manufacturing and Management (ADMM) organized by Dept. of Mechanical Engineering, R V College of Engienering, Bangalore on 23rd May 2013.
- 13. Vijaya Kumar M N, Prashant V, Dr. K N Subramanya, Dr. N S Narahari presented a paper on "Productivity Improvement Studies in a Process Industry A Case Study" at International conference on the Global Reach of Industrial Engineering at Istanbul Turkey during 26th 28th June 2013.
- 14. Prashant V, Vijayakumar M N, Dr. K N Subramanya, Dr. N S. Narahari presented a paper on Application of Six Sigma Methodology for a Manufacturing Cell at IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2013), Bangkok Thailand during 10 -13 December 2013
- 15. M.N Shruthi, M.N Vijaya Kumar, Dr. K.N Subramanya presented a paper on "Productivity Studies of Ultra High Density (UHD) Stitching Process" at Fourth International Joint Conference on Advances in Engineering and Technology, AET 2013 during 13th 14th December 2013 at Delhi
- 16. K. N. Subramanya1, B. S. Satyanarayana, N. S. Narahari, M N Vijayakumar, PrashantV, M P Shrinivas, MayankChetan & G.Shireesha presented a paper on "Ergonomic Evaluation & Assessment Of Musculoskeletal Disorder in Indian Children Due To School Bag Weight And Consideration Of Flexible PVDF Pressure Sensors For The Same" at 3rd National Conference on Advances in Metrology (AdMet 2014) at Thapar University, Patiala (Punjab) during 19th 21st February 2014.
- 17. Dr. K N Subramanya, Mr. Vijayakumar M N, Mr. Prashant V, Mr. Vikram N B, Malleshi S Talawar presented a paper titled "Ultrasonic Testing for the Measurement of Process Capability in Piston Manufacturing Line" NDE 2014, National Seminar and Exhibition on Non-Destructive Evaluation, organized by ISNT, Pune chapter during 4th 6th December 2014
- 18. Dr.B.S.Satayanarayana ,Dr. N S. Narahari ,Dr. K N Subramanya, Dr. Vijayakumar M N, Mr. Prashant V, Mayank Chetan, M P Shrinivas, & G.Shireesha presented a paper on "Consideration of feasibility of Flexible PVDF Pressure Sensors for Ergonomical designed School Bag for Assessment and Mitigation Of Musculoskeletal Disorder in Indian Children Due To Weight" at First International Conference on Large area and Flexible Microelectronics (ILAFM-2014) 18th -20th December 2014
- 19. Malleshi S Talawar, Vijayakumar M N ,Vikram N B, Prashant V Mild Steel Component Using Ultrasonic Pulse-Echo Testing Method" at two day national conference on Advances in Research & Development and Dissemination of Interdisciplinary Developments for Sustainability organized by Depts. of Mech. IEM, BT, CHEM and Civil, RVCE during 25th & 27th April 2015
- 20. G Y Naveen Kumar, Dr. J R Natraj, Dr. K Ramachandra, Dr. M N Vijayakumar presented a paper on "Reduction of Residual Stresses in a Dual Grained Gas Turbine Disk by Simulation of Heat Treatment Process using Defoem software" at two day All India Seminar on Residul Stress: Key Challenges and Remedies organized by National Design and Research Foundation, The Institution of Engineers (India) Karnataka State Centre, under the aegis of Metallurgical & Materials Engineering Division Board, IEI and Central Power Research Institute during 21st 22nd January 2016

- 21. Dr. M N Vijayakumar, Archana M S, Kamalakant W presented a paper on "EXPLORATORY STUDY ON THE APPLICATION OF IIoT IN CNC" in the proceedings of 3rd International Conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS 2018) technically Co-sponsored by IEEE, organized at R V College of Engineering, Bangalore during 20th -22nd December 2018.
- 22. Dr. VijayaKumar, Ms. Archana M S and Dr. MS.Shyamasundar presented a paper titled "Entrepreneurial Readiness of Women Students Studying in Indian Technical Institutions XV International Conference on Applied Research in Engineering and Management Sciences, ARC2021 held on 13th August 2021 with ISBN: 978-81-953571-3-0.
- 23. Prof Bhaskar MG, Dr Vikram N B, Dr Ramaa A, Dr Vijaya Kumar M N Dr N S Narahari presented a paper on "Experiential Learning Model for Gen Z Student's Engagement in Engineering Education: A Case Study" at AICTE sponsored two days national conference on "Critical thinking for Gen Z Multidisciplinary Approach (CTGZMA -2021)" in association with Indian Society of Technical Education (ISTE), New Delhi during 28th 29th October 2021. Awarded Best Paper

Seminars/Conferences/Workshops

- Attended Designing Road Map for Industrial Engineering & Management Profession organized by Department of Industrial Engineering and Management, BMS College of Engineering on 26th November 2018
- Attended "DWIH New Delhi FRUGAL INNOVATIONS" at Hotel Haytt Centric MG Road, Bangalore on 11th December 2018
- Attended Webex Meeting on MINITAB 18 By MINITAB on 23rd February 2018
- Attended one day seminar on Future ICT 2.0 organised by Bavarian India Centre at Shangri-La hotel on 23-01-2019
- Attended lecture on "Online Education" by Dr. Zvi Galil, Dean Computing, Georgia Technological University at ISE dept. on 8th May 2019.
- Attended technical talk on "Residual Stress Analyzer" at Institute of Engineers on 30th May 2019
- Attended two weeks Faculty Development Programme on "Work Place Ergonomics Perspectives Principles and Practices" organized by dept. of IEM, sponsored by All India Council for Technical Education (AICTE), New Delhi during 1st 13th July 2019.

Books/Book Chapters

 Dr. Vijayakumar M N, Dr. N S Narahari, Dr. K N Subramanya, Mr. Prashant V published "Industrial Engineering Applications in Emerging Countries" published by CRC Press with ISBN No. 9781482226898.

Patents

1. FLAT PLATE SOLAR COLLECTOR WITH WAVY SHAPED RISER TUBES 1.Lakshmikant Shivanayak 2. Gowreesh Subramanya S 3.Sreenivasalu Reddy N 4.Vijaya Kumar M N, 5.Channaveerayya 6.Kailash Patent number :392159-001, Date : 08/08/2023

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

Project Title	Agency	Duration	Amount (Rs.)	Principal Investigator
Establishing Non	Vision Group on	2 years	40 Lakhs	Dr. A.V. Suresh
Destructive Testing	Science & Technology	2012 - 2014		Dr. K.N.Subramanya
laboratory for PG	Department of Science			Co-Investigators
Courses and Research"	& Technology, Govt. of			Mr. Vijaya Kumar. MN
	Karnataka,			Mr. Vikram. N. B
	K-FIST Level II			Mr. Prashant. V
Investigation of Damage	AICTE - Research	2020 - 2023	13,16,078/-	Project Investigator
and Fiber content in	Promotion Scheme			Dr. Ramesh S Sharma,
CFRP composites using				CO-Project Investigator
ultrasonic test method				Dr. Vijaya Kumar M N

Ongoing & Completed Consultancy Projects

Professional Memberships

NATURE	ORGANIZATION	MEMBERSHIP NUMBER
LIFE MEMBER	Indian Society for Technical Education (ISTE)	LM – 48463
LIFE MEMBER	Indian Foundry Organization	AM158
Life member	Indian society for Quality	ISQ/LM/197

Awards & Recognitions

- Received honor from ISTE RVCE Chapter for achieving excellence through Doctoral Studies during teacher's day function held on November 4th 2015
- Received honor from RSS trust for achieving excellence through Doctoral Studies January 26th 2015
- Certificate of Honor presented by Indian Institution for Industrial Engineers, Bangalore Chapter on 57th foundation day function on 15th February 2015
- Honored by the RSS Trust on 18th March 2025 in recognition of the patent grant

Student Supervision

• Ph.D. Candidates: --

• M.Tech/M.Sc. Students: 05

Undergraduate Research Mentees: 42

Professional Roles

• Editorial Board: Inderscience, JEET journal, International Journal of Systems Assurance Engineering and Management (IJSA)

Teaching

Core Courses: [Even 2024-2025]

- HS361TA Entrepreneurship and Intellectual Property Rights
- IM365TDA Facilities Planning and Design

Advanced/Lab Courses:

- Supply Chain Management Lab
- Nondestructive Testing Lab
- IDEA Lab

Professional Roles

Responsibilities

- Academic: Academic Monitoring Committee,
- Administrative: SAP Coordinator, Skill Lab Coordinator, Interdisciplinary Project Coordinator

External Connect

• Involved in Board of Examination (BoE) – SJCE, Mysore