

Department of Mechanical Engineering

Personal Details

Name:	Dr. Buckshumiyan A
Designation:	Associate Professor
Educational Qualification:	M.E., Ph.D.
Experience:	10 Years
Area of Specialization:	CAD, FEA, Design.

Educational Details

S.No.	Degree	Branch/Specialization	Institute/University	Year
1	B. Tech.	Mechanical Engineering	Sastra University, Thanjavur.	2005
2	M. E	CAD	B.S.A Crescent Engineering College / Anna University.	2008
3	Ph. D.	FEA -Analysis in Pipe Bends	National Institute of Technology (NIT), Tiruchirappalli.	2016

Publication Details

International Journal

- 1 **Buckshumiyan A**, AR. Veerappan and S. Shanmugam, "Plastic collapse loads in shape-imperfect pipe bends under in-plane opening bending moment", International Journal of Pressure Vessels and Piping 2013; 111-112: 21-26.
- 2 **Buckshumiyan A**, AR. Veerappan and S. Shanmugam, "Effect of shape imperfections on thin-walled pipe bends under out-of-plane moment and internal pressure", Applied Mechanics and Materials 2014; 592-594: pp 1050-1054.
- 3 **Buckshumiyan A**, AR. Veerappan and S. Shanmugam, "Determination of collapse loads in pipe bends with ovality and variable wall thickness under internal pressure and in-plane opening moment", International Journal of Pressure Vessels and Piping 2014; 123-124: 1-9.
- 4 Ashok kumar. A, **Buckshumiyan. A**,"Performance analysis of regenerative feed water heaters in

210MW thermal power plant”, International journal of Mechanical Engineering and Technology 2017, 8-8, 1490-1495.

- 5 **A Buckshumiyam,**” A Review and Design of Bore well Rescue Robot, ”REST Journal on Emerging trends in Modelling and Manufacturing,2022-09-01, DOI: 10.46632/jemm/8/2/5
- 6 Chidambaram, P.K.; **Buckshumiyam, A.**; Venkatesh, E.; Karthikeyan, B.,” Experimental analysis of natural composite material for helical gear, Materials Today: Proceedings, 2023, ISSN: 22147853.
- 7 **Buckshumiyam, A.**; Babu, S.S.; Prakash, M.; Arasu, G.A.,” Recycling of plastic wastage by die shredder machine,” Materials Today: Proceedings, 2023, ISSN: [22147853](#).

International Conference

- 1 **Buckshumiyam A,** AR. Veerappan and S. Shanmugam, “Finite Element limit analysis in pipe bends subjected to in-plane opening bending moment and internal pressure”, International conference of computer aided engineering (2013), IIT madras, Chennai.
- 2 **Buckshumiyam A,** AR. Veerappan and S. Shanmugam, “Effect of shape imperfections on thin-walled pipe bends under out-of-plane moment and internal pressure”, International Mechanical Engineering Congress (2014), NIT-Tiruchirappalli.
- 3 Prakash Malaiyappan, **Buckshumiyam A,** A. K. R. Shanmuga Vadivu, “ Simulation Analysis of wind turbine generator system’ Second International Conference on Future Technology in Manufacturing, Automation Design and Energy (2021), NIT – Puducherry.
- 4 T. Syeda Jeelani Basri; Adokshaja Krishnarao Kulkarni; Renuka K; Yamini Supriya B; Kavya R V; **Buckshumiyam A,**” Artificial Intelligence for Drug Discovery Accelerating the Development of New Pharmaceuticals”, ITM Web Conference,Volume 76, 2025 ISSN: 2271-2097.
- 5 Anuradha, P.; Fallahhusein, M.; Subramaniam, S.; Srinivas, T.A.S.; **Buckshumiyam, A.,**” Energy-Efficient Resource Allocation in Wireless Networks Using Federated-Double-Deep Q-Network”, 3rd International Conference on Integrated Circuits and Communication Systems (ICICACS) 2025, ISBN: 9798331508456.
- 6 K.M.; Habelalmateen, M.I.; Shashidhara, K.S.; **Buckshumiyam, A.**; Muthukumaran, K.,” Ensemble Learning based Categorical Boosting for Customer Lifetime Value Prediction in Businesses”, International Conference on Intelligent Systems and Computational Networks (ICISCN) 2025, ISBN: [9798331529246](#).
- 7 Kanchan Yadav; Gazal Sharma; **A. Buckshumiyam;** Rajesh Deorari; Allirani P; Haideer M. Alabdeli,” Role of Predictive Analytics in Marketing: Analyzing Consumer Preferences and Campaign Performance, 2025 International Conference on Technology Enabled Economic Changes (InTech), 2025-02-27.

Book / Book Chapter Details

- 1 M. SilpaRaj; O. Sathish; K. C. Rajeswari; K. Sivakumar; Kamal Kant Joshi; **A. Buckshumiyam,** “Cognitive Digital Twin Technologies for Predictive Community Collaboration Data Driven Smart Decision Making and Next Level Urban Intelligence”, ISSN: [2948-1961](#)

- 2 Malaiyappan, P.; **Buckshumiyan, A.**; Vadivu, K.R.S.,” Simulation Analysis of Wind Turbine Generator System”, Lecture Notes in Mechanical Engineering,2023, ISSN: 21954364 21954356.
- 3 Harish Kumar Sriram; Dippi Verma; M. Saraswathy; R. Ravi; Akshay Kumar; **A. Buckshumiyan,**” Next Generation Adaptive Artificial Intelligence Systems for Inclusive Societal and Economic Transformation in Smart Communities”, Advances in Computer Science Research, 2025.

Professional Society Membership

- 4 International Association of Engineers (320692)

Program Attended

FDP/STTP

- FDP in RSRI in March 2022, covering Emerging Trends in Research Methodology.
- FDP on Entrepreneurship scheduled for January 2021 at DST.
- IQAC FDP Research: From conception to publication in February 2024

Other Details

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