FACULTY PROFILE TEMPLATE FOR WEBSITE

Basic Details:

- **Name:** Dr.S.Sindhuja
- **Designation**: Assistant Professor
- **Phone Number:** 9677519100
- **Email Id:** sindhujs@srmist.edu.in
- **Area of Specialization:** Mathematical Modelling, Inventory Control Theory
- **Affiliation:** Faculty of Science and Humanities, SRMIST, Ramapuram Campus, Chennai.

Educational Details+:

- **Degree** – Ph.D
- **Area or Subject** – Mathematics
- **University** – B.S.ABDUR RAHUMAN CRESCENT INSTITUTE OF SCIENCE AND TECHNOLOGY
- **Awarded Year** – 2024
- **Degree** – M.PHIL
- **Area or Subject** – MATHEMATICS
- **University** – VELS INSTITUTE OF SCIENCE AND TECHNOLOGY
- **Awarded Year** – 2015
- **Degree** – M.SC
- **Area or Subject** – MATHEMATICS
- **University** – MADRAS UNIVERSITY
- **Awarded Year** – 2010
- **Degree** – M.Ed
- **Area or Subject** – Education
- **University** – Tamilnadu Teacher Education University
- **Awarded Year** – 2013

Other Details:

Research Interests: Mathematical modelling, Inventory control theory.

Selected Publications:

- Sindhuja, S., Arathi, P. and Mohan, V. (2021) 'A quadratic demand EOQ model for deteriorating items with time dependent shortage'**, Int. J. Mathematics in Operational Research**, Vol. 20, No. 1, pp.41–59.
- Sindhuja, S. and Arathi, P. (2022) 'An economic order quantity model for Pareto distribution deterioration with linear demand under linearly time-dependent shortages', **European J. Industrial Engineering,** Vol. 16, No. 4, pp.418–441.
- S. Sindhuja & P. Arathi, (2023) 'An inventory model for deteriorating products under preservation technology with time-dependent quality demand**', Cogent Engineering (2023),** 10: 2176968.
- S.Sindhuja and P. Arathi. "An Inventory Model with Pareto Distribution Deterioration with Weibull Demand Rate and Time-Dependent Shortages." **Proceedings of International Conference on Recent Trends in Computing: ICRTC 2021**. Singapore: Springer Nature Singapore, 2022.
- **Sharma, U.K., Mohan, V., Sindhuja, S. and Iqbal, P. (2024) '**Economic order quantity model for Pareto distributed decaying products with quadratic demand, shortage and salvage value'**, *Int. J. Mathematics in Operational Research*, Vol. 27, No. 4, pp.479-495.**
- **Papers Presented:**

- Presented a paper entitled "Quadratic demand EOQ model for deteriorating items with a time-dependent shortage" at the International Conference On Dynamical Systems, Mathematical Modelling And Computing Techniques held during feb14-16,2019 at The Gandhigram Rural Institute, Gandhigram, Dindigul, Tamil Nadu.
- Presented the paper entitled "An EOQ model for Pareto distribution deterioration with linear demand under linearly time dependent shortages" in International Conference On Mathematical Computer Engineering (ICMCE-2020) Organized by the Mathematics Division, Vellore Institute of Technology, Chennai during 21-22 February 2020.
- Presented the paper entitled "An Inventory model with pareto distribution deterioration with Weibull demand rate and time-dependant shortages", 9th International Conference on Recent Trends in Computing, ICRTC-2021, 4th – 5th June 2021.
- Presented the paper entitled "An application of preservation technology on an inventory model for food with Weibull demand rate and time-dependent shortages" for XLV Indian Social Science Congress, held from 28th March to 1st April 2022, at BSAR Crescent Institute of Science and Technology Vandalur.
- Presented the paper entitled "An inventory model for food products with Pareto distribution deterioration under controllable carbon emission" at CICAMAMC-2023 on January 11 2023 at BSAR Crescent Institute of Science and Technology, Vandalur.

Working Papers:

- Preparing the paper entitled "An inventory mathematical model for deteriorating items with preservation technology and quality demand based on trade credit policy".
- Preparing the paper entitled "An inventory mathematical model for deteriorating items based on carbon emission.

Work in Progress:

- A paper entitled "An Application of Preservation Technology on Inventory Model for Food Products with Weibull Demand Rate and Time-Dependent Shortages" communicated in scopus journal.

Research Experience: 6 Years

Academic Experience: Nil

Workshops /Seminars/Conferences:

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