CURRICULLUM – VITAE

Dr. MADAKA TIRUMALA DEVI



PERSONAL PROFILE

1. Name of the candidate : MADAKA TIRUMALA DEVI

2. Father's Name : M. Rajalingu

3. Mother's Name : M. Rajeswari

4. Address for correspondence

Residence

30-2-696/1 West City, Madikonda(P) Kazipet(M), Warangal Telangana – 506142

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Department of Mathematics Kakatiya University Warangal

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5. Date of Birth : 20 - 09 - 1973

ACADEMIC PROFILE

Oct 2012 : Awarded Ph.D, Kakatiya University, Warangal

1995- 1996: B.Ed with first division, Osmania University, Hyderabad.

1993- 1995: M.Sc (Mathematics) first division with distinction, Kakatiya University, Warangal.

Secured Gold medal in the faculty of science

1990- 1993: B.Sc (Mathematics, Physics, Computer science) with first division, Kakatiya University, Warangal.

TEACHING EXPERIENCE

- 1. From 1999 to June 2005, worked as Junior Lecturer at Govt. Junior College, Cherial, Warangal.
- From June 21st, 2005 to till today working as Assistant Professor in the Department of Mathematics, Kakatiya University, Warangal.

No. of Conferences attended (National/International)	: 15
No. of Webinars/Workshops/Training Programmes attended	
(National/International)	: 11
No. of Research Publications(National/International)	: 40
No. of Conferences organized	: 02
No. of Orientation Courses attended	: 01
No. of Refresher Courses attended	: 02
No. of Short term Courses attended	: 03

ADMINISTRATIVE POSITIONS

- ➤ Incharge Principal, University PG College, Bhupalpally and University PG College, Mahabubabad from 31-07-2014 to 06-10-2015
- ➤ Incharge Principal, University College for Women, Subedari from 31 07 2014 to 06 09 2015
- ➤ Vice Principal, University College for Women, Subedari from 25 10 2013 to 30 07 2014
- \triangleright Director for SC/ST Cell, KU and Coordinator for Coaching Scheme for Entry into Services for SC/ST Students in the University from 17-10-2012 to 28-03-2016
- ➤ Joint Director for Padmakshi Women's Hostel, Kakatiya University from 18 07 2009 to 22 07 2011

NSS Programme Officer, University Arts and Science College, Subedari from 04 - 07 - 2005 to 04 - 07 - 2008.

ACADEMIC POSITIONS

- ➤ Head, Department of Mathematics, Kakatiya University from 04 09 2017 to 04 09 2019
- \triangleright Chairperson, Board of Studies in Mathematics, Kakatiya University from 04-09-2015 to 04-09-2017
- ➤ Member on Departmental Committee(DC) of Kakatiya University

ORIENTATION COURSES ATTENDED

1. Orientation Course at Academic Staff College, Osmania University, Hyderabad from 20-04-2009 to 15-05-2009

REFRESHER COURSES ATTENDED

- 1. Refresher Course in Mathematics and Statistics at Academic Staff College, Osmania University, Hyderabad from 07 12 2010 to 29 12 2010
- 2. Refresher Course in Mathematics (ID- Statistics & Computer Science) at Academic Staff College, Osmania University, Hyderabad from 31 01 2017 to 18 02 2017

SHORT TERM COURSES ATTENDED

- Short Term Course on e-learning and ICT for teaching and learning at Academic Staff College, UGC-HRDC, JNT University, Hyderabad from 30-07-2018 to 04-08-2018
- 2. Online Short Term Course on MOOCs, e-Content Development and Open Educational Resources at Academic Staff College, UGC-HRDC, JNT University, Hyderabad from 13 07 2020 to 18 07 2020.

3. Online short term course on machine learning for data science using python, NIT Warangal, 19-07-2021 to 28-07-2021.

CONFERENCES ORGANIZED

- XXVI Congress of APSMS & National Conference on Recent Advances in Mathematics from 11th – 13th August, 2017 by the Department of Mathematics, Kakatiya University, Warangal.
- National Conference on Applications of Mathematics in Engineering and Industry from 26th – 28th March, 2013 by the Department of Mathematics, Kakatiya University, Warangal.

CONFERENCES ATTENDED AND PRESENTED PAPERS

- International Conference on Mathematical Sciences and Applications(ICMSA-2019) during August 9-11, 2019 organized by Department of Mathematics, School of Technology, GITAM(Deemed to be University), Hyderabad
- International Conference on Science Engineering and Technology(ICSET-2K19)
 organized by Amalapuram Institute of Management Sciences and College of Engineering,
 Mummidivaram, Andhra Pradesh from 26th 27th July 2019
- 3. 106th Indian Science Congress held at Lovely Professional University, Phagwara, Jalandhar from January 3 to 7, 2019
- National Conference on Recent Advances in Mathematics & XXVII Congress of APTSMS, organized by Department of Mathematics, Maris Stella College, Vijayawada from 8th – 10th December 2018
- International Conference on Science, Computers, Technology and Engineering(ICSCTE-2018), organized by Shree Velagapudi Ramakrishna Memorial College, Nagaram, Guntur from 26th – 27th October 2018
- International Conference on Pure and Applied Mathematics, Sri Chandrashekharendra Saraswathi Viswa Mahavidyalaya(SCSVMV) University, Kanchipuram, 19th-20th February, 2018.

- XXVI Congress of APSMS & National Conference on Recent Advances in Mathematics from 11th – 13th August, 2017 by the Department of Mathematics, Kakatiya University, Warangal
- International workshop and conference on Analysis and Applied mathematics held at NIT,
 Tiruchirapalli, 6th 10th June, 2016
- National Seminar on Recent Advances in Mathematical Sciences held at Andhra Loyola College, Vijayawada on 12th February, 2016
- 10. International Conference on Mathematical modelling and Applied soft computing held at Coimbatore institute of technology, Coimbatore from $11^{th} 13^{th}$ July, 2012
- 11. The 31st Annual Convention of ISPS & International Conference on Statistics, Probability and Related Areas held at Cochin University of Science and Technology, Cochin from 19th 22nd December, 2011
- 12. The National Conference on Recent Developments in statistics held at Gulbarga University, Gulbarga from $8^{th} 9^{th}$ September, 2011
- 13. The National conference on Advances in mathematical analysis and Applications, held at K.S.Ranga Swamy College of Arts and Science, Tiruchengode, Tamilnadu from 12th – 13th August, 2011
- 14. The 5^{th} National conference on Applicable Mathematics in wave mechanics and vibrations (WMVC-2010), held at Department of Mathematics, Kakatiya University, $13^{th}-15^{th}$ March, 2010

POSTER PRESENTATIONS

 National Conference on Harmony with Nature in Context of Environmental Issues and Challenges, organized by Department of Zoology, Kakatiya University from 21st-23rd December, 2017

WEBINARS/WORKSHOPS/TRAINING PROGRAMMES ATTENDED

 National Webinar in Mathematics & Statistics, organized by Department of Mathematics & Statistics, University College for Women, Koti, Hyderabad on 24th June 2020

- 2. Two day International Webinar on Recent Advances in Mathematics & COVID-19, organized by the Departments of Mathematics and Statistics, St.Joseph's College for Women(A), Visakhapatnam on 15th & 16th June 2020
- 3. Faculty Development Program Dealing with Differential Equations and PDEs, organized by Binary Semantics on June 8, 2020
- 4. National Workshop on Design and analysis of Algorithms, Kakatiya University from 29th-30th December,2017
- 5. International Workshop on Reliability Theory and Survival Analysis at Cochin University of Science and Technology, Cochin from December 31, 2013 January 2, 2014.
- 6. Training Programme to PG Teachers of Affiliated Colleges held at Department of Mathematics Kakatiya University, Warangal from 25th April, 2012 to 1st May, 2012.
- National Workshop on Graph Theory and Statistics held at Department of Mathematics, Kakatiya University from 28th – 29th February, 2012
- 8. Training Programme on Mathematical Programming and Advanced Analysis held at Department of Mathematics, Kakatiya University from 8th 11th April, 2011
- Workshop on Capacity Building of Women Managers in Higher Education held at Centre for Extension Studies, Sri Venkateswara University, Tirupati from 28th October to 1st November 2009
- 10. Training Programme to UG Teachers of Affiliated Colleges held at Department of Mathematics Kakatiya University from 15th 21st July, 2009
- 11. Training Programme on MATLAB, GRAPHICS and LaTeX held at Department of Mathematics, Kakatiya University from 21st 22nd March, 2009

LIST OF PUBLICATIONS

- M.Tirumala Devi, T.Sumathi Uma Maheswari and A.Sathyanarayana, Reliability index of simply supported beam based on HL method, *Journal of Reliability and Statistical Studies*, vol.15, issue 2, 745-758, 2023.
- M.Tirumala Devi, Sammena Afreen, V. Shyam Prasaad, Abdul Majeed and G. Mahender Reddy, Application of analytic hierarchy process in engineering education, *Ratio Mathematica*, vol.45, 267-279, 2023.

- 3. K.Sandhya Rani, **M.Tirumala Devi** and T.Sumathi Uma Maheswari, Reliability estimation of N-component parallel system by Bayesian approach using inverse Rayleigh distribution, *Mathematical Statistician and Engineering Applications*, vol.71, no.4, 6267-6275, 2022.
- 4. Md. Yakoob Pasha, **M. Tirumala Devi** and T. Sumathi Uma Maheswari, Reliability comparison of the shafts when shear stress follow the different distributions, *Mathematical Statistician and Engineering Applications*, vol.71, No. 4, 589-599, 2022.
- 5. **M.Tirumala Devi**, T.Sumathi Uma Maheswari and A.Sathyanarayana, Reliability of cantilever steel beam using FOSM and simulation methods, *GIS science journal*, vol. 9, issue 2, 383, 393, 2022.
- 6. K.Sandhya Rani, P. Asok, **M.Tirumala Devi** and T.Sumathi Uma Maheswari, Reliability estimation of n- cascade system for inverse exponential distribution, *International Journal of Mechanical Engineering*, vol. 2022, No. 2, 4355-4362, 2022.
- G. Saritha, M. Tirumala Devi and T. Sumathi Uma Maheswari, Availability measures for 4component system using Markov process, *International journal of advanced trends in*computer science and engineering, 2278-3091, 340-344, Feb 2021.
- 8. T. Sumathi Uma Maheswari and **M. Tirumala Devi**, Reliability analysis of m-modular redundancy system using markovian technique, *Journal of Xian University of Architecture* and *Technology*, 1006-7930, 2725-2728, 2020.
- G.Saritha, M.Tirumala Devi, T.Sumathi Uma Maheswari, Reliability model for 4-modular and 5-modular redundancy system by using markov technique, Advances in Intelligent Systems and Computing, Springer Link, pp:329-338, April 2020
- 10. A.Sathyanarayana, T.Sumathi Uma Maheswari, M.Tirumala Devi, Reliability analysis over I
 Section of beam due to uniform distribution of load, *International Journal Performability Engineering*, Vol 16, No.3, pp:333-341, March 2020
- 11. T.Sumathi Uma Maheswari, **M.Tirumala Devi**, Reliability analysis of m-modular redundancy system using markovian technique, *Journal of Xian University of Architecture and Technology*, ISSN No.1006-7930, Vol XII, iss v, pp:2725-2728, 2020
- 12. A.Sathyanarayana, T.Sumathi Uma Maheswari, **M.Tirumala Devi**, Reliability of simply supported rectangular beam under uniformly distributed load, *Journal of Xian University of Architecture and Technology*, ISSN No.1006-7930, Vol XII, iss V, pp:2678-2684, 2020

- 13. K.Sandhya Rani, **M.Tirumala Devi**, T.Sumathi Uma Maheswari, Reliability estimation for n independent stresses based on exponential and pareto distribution, *Journal of Xian University of Architecture and Technology*, ISSN No.1006-7930, Vol XII, iss v, pp:2627-2634, 2020
- 14. K.Sandhya Rani, P.Ashok, M.Tirumala Devi, T.Sumathi Uma Maheswari, Reliability estimation of time dependent stress strength system for different distributions, *International Journal of Advanced Science and Technology*, ISSN No.2005-4238, Vol 29, No.3, pp:6571-6577, 2020
- 15. T.Sumathi Uma Maheswari, M.Tirumala Devi, Reliability analysis of resultant stress for unsymmetrical columns for stress follow exponential distribution, *International Journal of Engineering and Advanced Technology*, ISSN No.2249-8958, Vol. 8, iss 6S3, September 2019
- 16. T.Sumathi Uma Maheswari, M.Tirumala Devi, Research on stress strength model under random repeated cycles, *International Journal of Innovative Technology and Exploring Engineering*, ISSN No.2278-3075, Vol 8, July 2019
- 17. P.Ashok, N.Swathi, M.Tirumala Devi, T.Sumathi Uma Maheswari, Reliability of time dependent stress strength system for finite mixture of exponential and pareto distribution under different cycles, *Journal of Physics- Conference Series*, 2019
- 18. P.Ashok, **M.Tirumala Devi**, T.Sumathi Uma Maheswari, Reliability of a cascade system of type(X<Y<Z) for pareto and weibull distributions, *AIP Conference Proceedings*, 2019
- 19. T.Sumathi Uma Maheswari, G.Saritha, **M.Tirumala Devi**, Reliability Analysis of n component system using markovian model, *Journal of Engineering Technology and Innovative Research*, ISSN No.2349-5162, Vol 6, iss 6, pp:296-299, 2019
- 20. P.Ashok, N.Swathi, **M.Tirumala Devi**, T.Sumathi Uma Maheswari, Reliability of a multi component system using mixture of two weibull distributions, *International Journal of Recent Technology and Engineering*, ISSN No.2277-3878, Vol 7, iss 5S2, January 2019
- 21. P.Ashok, N.Swathi, M.Tirumala Devi, T.Sumathi Uma Maheswari, Reliability of multi component system using pareto distribution, *International Journal of Mathematics Trends and Technology*, ISSN No.2231-5373, Vol 64, No.2, 2018
- 22. P.Hari Prasad, **M.Tirumala Devi**, T.Sumathi Uma Maheswari, Reliability analysis of structural beam section using first order reliability method, *International Journal of*

- Scientific Research in Science and Technology, ISSN No.2395-6011, Vol 4, iss 5, March 2018
- 23. P.Ashok, N.Swathi, M.Tirumala Devi, T.Sumathi Uma Maheswari, Reliability of a multi component system using strength and stress mixture of two exponential and lindley distribution, *International Journal of Pure and Applied Mathematics*, ISSN No.1314-3195, Vol 119, No.15, pp: 1357-1367, 2018
- 24. P.Ashok, N.Swathi, **M.Tirumala Devi**, T.Sumathi Uma Maheswari, Reliability of time dependent stress strength system which follow different distributions when the number of cycles follows binomial distribution, *International Journal of Mathematical Archieve*, 8(11), ISSN No.2229-5046, pp:213-217, 2017
- 25. T.Sumathi Uma Maheswari, N.Swathi, M.Tirumala Devi, P.Ashok, Reliability analysis of time dependent stress strength system when the number of cycles follows binomial distribution, *International Journal of Statistics and Systems*, ISSN No.0973-2675, Vol 12, pp: 575-583, Research India Publications, 2017
- 26. **M.Tirumala Devi**, T.Sumathi UmaMaheswari, N.Swathi, Cascade system reliability with stress & strength follow lindley distribution, *International Journal Engineering Research* & *Technology*, Volume 5, Issue 9, ISSN 2278-0181, September -2016
- 27. N.Swathi, T.S.Uma Maheswari, M.Tirumala Devi, Reliability model of time dependent stress strength system, Special Issue on Computational Science, Mathematics and Biology, JCSME-SCSMB-16, ISSN-2349-8439, March-2016
- 28. N.Swathi, T.S.Uma Maheswari, **M.Tirumala Devi**, Reliability analysis of time dependent system when the number of cycles follow binomial distribution and stress-strength follow pareto distribution, *Mathematical Sciences International Research Journal*, Vol 5, Spl iss, 2016
- 29. **M.Tirumala Devi**, K.Sandhya, T.Sumathi Uma Maheswari, Reliability of a system with m-stresses and n-strengths, *OPSEARCH Springer*, 49(4): 463-481, Oct- Dec, 2012
- 30. N.Swathi, T.Sumathi Uma Maheswari, **M.Tirumala Devi**, K.Sandhya, P.Hari Prasad, Reliability of time dependent system when stress and strength follow extreme value distribution, *Proceedings of National seminar on Mathematical modeling in Science and Technology*, TheTechnological institute of Textile and Sciences, Bhiwani, Haryana, August 18, 2012

- 31. P.Hari Prasad, T.S Uma Maheswari, **M.Tirumala Devi**, N.Swathi, K.Sandhya, Reliability Computations for shearing stress in Beams, *Proceedings of the International Conference on Mathematical modeling and applied soft computing*, July 11-13, 2012.
- 32. N.Swathi, T.S Uma Maheswari, **M.Tirumala Devi**, K.Sandhya, P.Hari Prasad, Reliability of Time dependent system when stress and strength follow Pareto distribution, *Proceedings of the International Conference on Mathematical modeling and applied soft computing*, July 11-13, 2012.
- 33. M.Tirumala Devi, T.S. Uma Maheswari, K.Sandhya, N.Swathi, P.Hari Prasad, Reliability of a cascade system with Extreme value distributed stress and strength, *Proceedings of the International Conference on Mathematical modeling and applied soft computing*, July 11-13, 2012.
- 34. K.Sandhya, **M.Tirumala Devi**, T.S.Uma Maheswari, Reliability of n- cascade system under stress attenuation with extreme value distributed stress and weibull strength, *Proceedings of the International Conference on Mathematics in Engineering and Business Management*, March 9-10, 2012.
- 35. N.Swathi, T.Sumathi Uma Maheswari, **M.Tirumala Devi**, Reliability of time dependent stress and strength for deterministic and random cycles, *CiiT International Journal of Programmable Device Circuits and Systems*, vol. 4, No. 2, February 2012.
- 36. **M.Tirumala Devi**, K.Sandhya, T.S.Uma Maheswari, N.Swathi, Reliability of a Cascade system with stress and strength follow Pareto distribution, *CiiT International Journal of Programmable Device Circuits and Systems*, vol. 4, No. 2, February 2012.
- 37. **M.Tirumala Devi**, K.Sandhya, T.S.Uma Maheswari, Reliability of n-Cascade system when stress and strength follow extreme value distribution, *CiiT International Journal of Software Engineering and Technology*, 17thDecember, 2011.
- 38. Zeenath Farheen, T.S.Uma Maheswari, **M.Tirumala Devi**, Post optimal analysis for transportation problem, *International Journal of Agricult.Stat Sci.* Vol.5 No.2, 2009.
- 39. Zeenath Farheen, T.S.Uma Maheswari, **M.Tirumala Devi**, Post Optimal analysis for non linear programming problems using wolf's modified simplex method, *International Journal of Logic Based Intelligent Systems*, Vol.2, No.2, December 2008

40. Zeenath Farheen, T.S.Uma Maheswari, **M.Tirumala Devi**, Structural changes in a linear programming problem of a post optimal solution, *International Journal of applied Mathematical Analysis and Applications*, Vol.3, No.2, pp 167-171, July-Dec 2008.

AS RESOURCE PERSON

- One day workshop ANWESH Career as Mathematician, Organized by Department of Mathematics, Government Degree College, Mancherial on 26th November, 2016
- One day district level workshop on CBCS syllabus, Organized by Department of Mathematics, Government Degree College for Women, Khammam on 29th September, 2016
- One day departmental conference on implementation of CBCS for UG courses in Mathematics, Organized by Department of Mathematics, Kakatiya University on 24th August, 2016

ACADEMIC ASSOCIATION

- A life member in Andhra Pradesh Society for Mathematical Sciences, Osmania University, Hyderabad
- 2. A life member in The Indian Science Congress Association, Kolkata
- 3. Member in Departmental Research Committee