

## **List of Publications**

### **(a) Journals**

1. Behera Diptiranjan, Huang Hong-Zhong and Tapaswini Smita, Uncertain dynamic responses of imprecisely defined arbitrary order fractionally damped beam subject to various loads, *Engineering Computations*, 35 (2018) 818-842;
2. Chakraverty S., Hladik M. and Behera Diptiranjan, Formal solution of an interval system of linear equations with an application in static responses of structures with interval forces, *Applied Mathematical Modelling*, 50 (2017) 105-117;
3. Tapaswini Smita, Mu Chunlai, Behera Diptiranjan and Chakraverty S., Solving imprecisely defined vibration equation of large membranes, *Engineering Computations*, 34 (2017) 2528-2546;
4. Behera Diptiranjan and Chakraverty S., A note on "A new method for solving an arbitrary fully fuzzy linear system", *Soft Computing*, Vol. 21 (2017), 7117-7118;
5. Behera Diptiranjan and Chakraverty S., Erratum to "Solving fuzzy complex system of linear equations" [*Information Sciences* 277 (2014) 154-162], *Information Sciences*, 369 (2016) 788-790;
6. Behera Diptiranjan, Chakraverty S. and Huang Hong-Zhong, Non-probabilistic Uncertain Static Responses of Imprecisely Defined Structures with Fuzzy Parameters, *Journal of Intelligent and Fuzzy Systems*, 30 (2016) 3177-3189;
7. Behera Diptiranjan, Huang Hong-Zhong and Chakraverty S., Solving Fully Fuzzy Generalized System of Linear Equations by Linear Programming Approach, *Computer Modeling in Engineering and Sciences*, 108 (2015) 67-87;
8. Behera Diptiranjan and Chakraverty S., Dynamic response and oscillating behavior of fractionally damped beam, *Computer Modeling in Engineering and Sciences*, 104 (2015) 211-225 ;
9. Chakraverty S. and Behera Diptiranjan, Uncertain dynamic responses of fuzzy fractionally damped spring-mass system, *Journal of Intelligent and Fuzzy Systems*, 29 (2015) 327-336;
10. Tapaswini Smita, Chakraverty S. and Behera Diptiranjan, Numerical solution of imprecisely defined inverse heat conduction problem, *Chinese Physics B*, 24 (2015), 050203- (01-10);
11. Behera Diptiranjan, Chakraverty S. and Tapaswini Smita, Uncertain dynamic responses of fuzzy arbitrary order damped beam, *ASCE-ASME Journal of Risk and*

Uncertainty in Engineering Systems: Part B. Mechanical Engineering (2015) DOI: 10.1115/1.4030440 (ASME);

12. Behera Diptiranjan and Chakraverty S., New approach to solve fully fuzzy system of linear equations using single and double parametric form of fuzzy numbers, *Sadhana-Academy Proceedings in Engineering Science*, 40 (2015), 35-49;
13. Tapaswini Smita, Chakraverty S. and Behera Diptiranjan, Uncertain vibration equation of large membranes, *The European Physical Journal Plus*, 129 (2014) 251-266;
14. Behera Diptiranjan and Chakraverty S., Solving fuzzy complex system of linear equations, *Information Sciences*, 277 (2014) 154-162 ;
15. Chakraverty S. and Behera Diptiranjan, Parameter identification of multistorey frame structure from uncertain dynamic data, *The Strojniški Vestnik-Journal of Mechanical Engineering*, 60 (2014) 331-338;
16. Behera Diptiranjan and Chakraverty S., Uncertain impulse response of imprecisely defined half order mechanical system, *Annals of Fuzzy Mathematics and Informatics*, 7 (2014) 401-419;
17. Behera Diptiranjan and Chakraverty S., Fuzzy analysis of structures with imprecisely defined properties, *Computer Modeling in Engineering & Sciences*, 96 (2013), 317-337;
18. Behera Diptiranjan and Chakraverty S., Fuzzy finite element analysis of imprecisely defined structures with fuzzy nodal force, *Engineering Applications of Artificial Intelligence*, 26 (2013) 2458-2466;
19. Behera Diptiranjan and Chakraverty S., Fuzzy centre based solution of fuzzy complex linear system of equations, *International Journal of Uncertainty Fuzziness and Knowledge-Based Systems*, 21 (2013), 629-642;
20. Chakraverty S., and Behera Diptiranjan, Fuzzy system of linear equations with crisp coefficients, *Journal of Intelligent and Fuzzy Systems*, 25 (2013), 201-207;
21. Behera Diptiranjan and Chakraverty S., Numerical solution of fractionally damped beam by homotopy perturbation method, *Central European Journal of Physics*, 11 (2013), 792-798;
22. Behera Diptiranjan and Chakraverty S., Solution method for fuzzy system of linear equations with crisp coefficients, *Fuzzy Information and Engineering*, 5 (2013), 205-219;

23. Chakraverty S. and Behera Diptiranjan, Dynamic responses of fractionally damped mechanical system using homotopy perturbation method, *Alexandria Engineering Journal*, 52 (2013) 557-562;
24. Behera Diptiranjan and Chakraverty S., Solution of fuzzy system of linear equations with polynomial parametric form, *Application and Applied Mathematics: An International Journal (AAM)*, 7 (2012), 648-657;
25. Behera Diptiranjan and Chakraverty S., A new method for solving real and complex fuzzy system of linear equations, *Computational Mathematics and Modeling*, 23 (2012), 507-518;

## **(b) Conferences**

1. Behera Diptiranjan, Huang Hong-Zhong, Chakraverty S. and Tapaswini Smita, Imprecisely defined viscoelastic fractionally damped spring-mass mechanical system, QR2MSE 2016 and WCEAM 2016, Jiuzhaigou, Sichuan, China, 25th-28th July, 2016;
2. Behera Diptiranjan and Chakraverty S., Solving fully fuzzy system of linear equations, International Conference on Mathematical Modelling, University of Colombo, Sri Lanka, 13th-14th March, 2014;
3. Behera Diptiranjan and Chakraverty S., Parameter identification of multistorey frame structure from uncertain dynamic data, Eleventh International Conference on Recent Advances in Structural Dynamics, RASD-2013, Pisa, Italy, 1st-3rd July, 2013;
4. Behera Diptiranjan and Chakraverty S., Solution to interval system of linear equations for static responses of structures with interval forces, Theme Meeting on Fuzzy and Interval based Uncertainty Modelling (FIUM-2013), NIT Rourkela, Odisha, India, 18th-20th July, 2013 (Abstract Published);
5. Behera Diptiranjan and Chakraverty S., Static analysis of imprecisely defined bar with uncertain force, 39th Annual conference of Orissa Mathematical Society and National seminar on cryptography, VIVTECH, Bhubaneswar, Odisha, 4th -5th February, 2012; (Abstract Published);
6. Behera Diptiranjan, Datta D. and Chakraverty S., Development of a finite element solution of a stepped rectangular Bar in presence of fuzziness in material properties, Proc. of the 5th International Conference on Advances in Mechanical Engineering, ICAME-2011, SVNIT, Surat-395 007, India, 6th -8th June, 2011;
7. Behera Diptiranjan and Chakraverty S., Fuzzy finite element solution of a stepped rectangular bar with uncertain material properties, National Meet for Research

Scholars in Mathematical Sciences, IIT Kharagpur, 12th -16th October, 2011;  
(Abstract Published).

### **(c) Book**

1. Chakraverty S., Tapaswini Smita and Behera Diptiranjan, Fuzzy Arbitrary Order Systems: Fuzzy Fractional Differential Equations and Applications, John Wiley & Sons Inc., Wiley, Hoboken, NJ, August 2016, ISBN-10: 111900411X, ISBN-13: 978-1119004110;
2. Chakraverty S., Tapaswini Smita and Behera Diptiranjan, Fuzzy Differential Equations and Applications for Engineers and Scientists, CRC Press, Taylor and Francis Group, Florida, USA, December 2016, ISBN 9781482244731-CAT#K23501.

### **(d) Book chapters**

1. Chakraverty S. and Behera Diptiranjan, Uncertain static and dynamic analysis of imprecisely-defined structural systems, Mathematics of Uncertainty Modeling in the Analysis of Engineering and Science Problems, Editor: S. Chakraverty, IGI Global Publication, USA, 357-382, 2014.