Details of Published, Communicated and Presented articles

Published articles:

1. Anil Chavada, Nimisha Pathak, A Note on Lyapunov-type Inequalities for Fractional Boundary Value Problems with Sturm-Liouville Boundary Conditions, Journal of Mathematical Extension, Vol.15, No.4, (2021): (7)1-12, doi:10.30495/JME.2021.1634

2. Anil Chavada, Nimisha Pathak, "Transmission dynamics of Breast cancer through Caputo Fabrizio fractional derivative operator with real data" Mathematical Modelling and Control, Vol. 4, No. 1 (2024): 119-132, doi: 10.3934/mmc.2024011

3. Anil Chavada, Nimisha Pathak, Sagar R. Khirsariya, "A fractional mathematical model for assessing the cancer risk due to smoking habit" Mathematical Modelling and Control, Vol. 4, No. 3 (2024): 246-259, doi: 10.3934/mmc.2024020

4. Anil Chavada, Nimisha Pathak, Rutu Raval, "Fractional mathematical modelling of Breast cancer stages with true data from Saudi Arabia" Result in Control and Optimization, 15, 100431,(2024), doi: https://doi.org/10.1016/j.rico.2024.100431

5. Anil Chavada, Nimisha Pathak, and Sagar R. Khirsariya. "Fractional-order modeling of Chikungunya virus transmission dynamics." Mathematical Methods in the Applied Sciences, 1-25, 2024, doi: https://doi.org/10.1002/mma.10372

6. Anil Chavada & Nimisha Pathak, Eigen Value Estimates for Fractional Sturm-Liouville Boundary Value Problem, *Springer Proceedings in Mathematics & Statistics, Springer, Singapore*, Vol. 344, (2021), pp 231–238, ISBN: 978-981-33-4646-8,

7. Anil Chavada, Mihir Thakkar & Nimisha Pathak, Mathematical analysis of a Pancreatic cancer with Atangana-Baleanu derivative, *Proceedings of International Conference RAISE 2023: Vol. III Computer Science & Engg., (2023), Applied Mathematics, Electrical Engineering, Applied Physics*, ISBN: 978-81-962938-3-3.

8. Anil Chavada, Nimisha Pathak, Bhavyata Patel & Geeta Chaudhary, Numerical Simulation of Fractional Mathematical Model of Tumor Growth, *Proceedings of International Conference RAISE 2023: Vol. III Computer Science & Engg., (2023), Applied Mathematics, Electrical Engineering, Applied Physics*, ISBN: 978-81-962938-3-3.

Communicated articles in International Journals (Under Review):

1. Anil Chavada, Nimisha Pathak, Fractional order mathematical modelling and analysis of Breast cancer epidemiology under control parameters.

2. Anil Chavada, Nimisha Pathak, Mihir Thakkar, Qualitative analysis of Caputo fractional mathematical model of pancreatic cancer.

3. Anil Chavada, Nimisha Pathak, Sagar R Khirsariya, Assessing the effectiveness of fractional-order hard water treatment model to reduce water-borne disease incidence.

List of articles presented in conference:

1. International Conference on Fractional Calculus:Theory, Applications and Numerics (ICFTAN–2023) Organized by Department of Mathematics, National Institute of Technology Puducherry, Karaikal, India, during 27th - 28th January, 2023.
   Title : Numerical simulation of fractional initial value problems with atangana baleanu fractional derivative operator

2. International Conference on Recent Advances in (Applied) Sciences & Engineering (Raise-2023) organized by Faculty of Technology & Engineering, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India, during 12th - 13th April, 2023.
   Title : Numerical Simulation of Fractional Mathematical Model of Tumor Growth

3. International Symposium on Mathematical Analysis of Fractals and Dynamical System-2023 (ISMAFDS-2023) organized by the Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, Tamil Nadu, India held from 24th - 25th, August 2023.
   Title : Fractional order mathematical modelling and analysis of Breast cancer epidemiology under control parameters