Dr. Anil Kumar

Assistant Professor

Department of Mathematics

Govt. Degree College Banjar

Distt. Kullu HP 175123

Email id.: anilmathsiit@gmail.com

Contact No.: 9882060265

Education:

2020—2023: PhD in Mathematics, School of Mathematical and statistical sciences, IIT Mandi, India

2017—2019: M.Sc. in Applied Mathematics, IIT Mandi, India

2014—2017: B.Sc. (Maths Honours), Himachal Pradesh University Shimla, India

Additional Qualification(s)

1. National Eligibility Test - Junior Research Fellowship (NET-JRF) 2020.
2. Graduate Aptitude Test in Engineering (GATE) organized by IIT Madras 2019.

Research Interests:

1. Mathematical Biology, Mathematical Modelling, Dynamical System Theory
2. Time Scales Calculus
3. Fuzzy Differential Equations, Impulsive Differential Equations
4. Controllability of Differential Equations

Conferences/seminars/webinars attended:

1. Participated International Conference on Differential Equations and Control Problems (ICDECP23), June 15 - 17, 2023, Organized by School of Mathematical & Statistical Sciences, IIT Mandi, H. P. India.
2. Attended International Conference on "Mathematical Modelling, Applied Analysis and Computation-2021" organized by Department of Mathematics, Faculty of Science, JECRC University, Jaipur (Raj.), India from 5-7 August, 2021.
3. Attended One Day International Webinar on "Application of Mathematics: Future of Science, Technology, and Innovation" held on 28 Feb. 2021 at JECRC University, Jaipur (India).

4. Attended Five days online workshop on "Application of Fractional Calculus in Engineering and Technology" held from 01 March 2021 to 05 March 2021 at Anand International College of Engineering, Jaipur (India).
5. Attended Two-week (Online) Faculty Development Programme on "BIOMATHEMATICS" from 15th October - 28th October, 2020 organized by Department of Mathematics, P.G.D.A.V. College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi.
6. Attended online Workshop on "Mathematical Modeling and MATLAB Applications (MMMA 2020)" organized by Department of Mathematics, NIT Uttarakhand and SLIET Longowal, during 24-25 August, 2020

Research Work:

1. **Anil Kumar**, Muslim Malik, An analysis of hybrid impulsive prey-predator-mutualist system on nonuniform time domains. Computational and Mathematical Biophysics. 2024 Apr 1;12(1):20230125.
2. **Anil Kumar**, Muslim Malik and Yun Kang, Dynamics for a hybrid non-autonomous prey–predator system with generalist predator and impulsive conditions on time scales, Int. J. Biomath., vol. 16, no. 1, 2023, Art. no. 2250067.
3. **Anil Kumar**, Muslim Malik, Impact of hunting cooperation and feedback control for a nonlinear hybrid Leslie-Gower predator-prey system on non-uniform time domain, Rocky Mt. J. Math., 2023, 53(2):485-515.
4. **Anil Kumar**, Muslim Malik, Mohammad Sajid, Dumitru Baleanu, Existence of local and global solutions to fractional order fuzzy delay differential equation with non-instantaneous impulses, AIMS Math., 7 (2022) 2348-2369.
5. Muslim Malik, Anjali Rose, **Anil Kumar**, Controllability of Sobolev type fuzzy differential equation with non-instantaneous impulsive condition, Discrete Contin. Dyn. Syst. - S., 15 (2022) 387.
6. **Anil Kumar**, Muslim Malik, Kottakkaran Sooppy Nisar, Existence and total controllability results of fuzzy delay differential equation with non-instantaneous impulses, Alex. Eng. J., 60 (2021) 6001-6012.