Title	Ms.	First Name	Tanvi	Last Name		Photograph

Designation	Assistant Professor
Address	Pocket B-7, House No. 53, Sector-5, Rohini, Delhi - 110085.
Phone No. Office	--
Residence	--
Mobile	9811933526
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Educational Qualifications

Degree	Institution	Year
Ph.D.	Department of Mathematics, University of Delhi	Pursuing
M.Phil.	Department of Mathematics, University of Delhi	2017
M.Sc. Mathematics	Hansraj College, University of Delhi	2015
B.Sc.(H) Mathematics	Hansraj College, University of Delhi	2013
CSIR-NET	CSIR-UGC	2015

Career Profile

1) Working as an Assistant Professor in Deshbandhu College, University of Delhi, from January 22, 2021 till now.

2) Worked as an Assistant Professor in Shaheed Rajguru College of Applied Sciences for women, University of Delhi, from July 20, 2017 to January 21, 2021.

Areas of Interest/Specialization

Differential Equations, Mathematical Modeling, Numerical Methods

Subjects Taught

1. Ordinary Differential Equations

2. Partial Differential Equations

3. Numerical Methods

4. Probability and Statistics

5. Calculus

6. Linear Algebra.

7. Discrete Mathematics

Publications Profile

1. **Tanvi** and Rajiv Aggarwal, Dynamics of HIV-TB co-infection with detection as optimal intervention strategy, International Journal of Nonlinear Mechanics, Vol. 120 (2020) p.103388.

2. **Tanvi** and Rajiv Aggarwal, Stability analysis of a delayed HIV-TB co-infection model in resource limitation settings, Chaos Solitons and Fractals, Vol. 140 (2020) p.110138.

3. **Tanvi** and Rajiv Aggarwal, Estimating the Impact of Antiretroviral Therapy on HIV-TB Co-Infection: Optimal Strategy Prediction, International Journal of Biomathematics, Vol. 14 (2020).

4. **Tanvi**, Rajiv Aggarwal and Tamas Kovacs, Assessing the Effects of Holling Type-II Treatment Rate on HIV-TB Co-infection, Acta Biotheoritica, Vol. 69, 1-35 (2020).

5. **Tanvi**, Mohammad Sajid, Rajiv Aggarwal and Ashutosh Rajput, Assessing the Impact of Transmissibility on a Cluster-Based COVID-19 Model in India, International Journal of Modeling, Simulation, and Scientific Computing, Vol.12 (2020).

6. **Tanvi**, Rajiv Aggarwal and Ashutosh Rajput**,** Estimation of Transmission Dynamics of COVID-19 in India: The Influential Saturated Incidence Rate, Applications and Applied Mathematics: An International Journal, Vol. 15 (2020).

7. **Tanvi**, Rajiv Aggarwal, Ashutosh Rajput and Mohammad Sajid, Modeling the Optimal Interventions to Curtail the Cluster Based Covid-19 Pandemic in India: Efficacy of Prevention Measures, Applied and Computational Mathematics an International Journal, Vol. 20, 70-94 (2021).

8. **Tanvi,** Rajiv Aggarwal and Yashi Raj, A fractional order HIV-TB co-infection model in the presence of exogenous reinfection and recurrent TB, Nonlinear Dynamics, 104, 4701–4725 (2021).
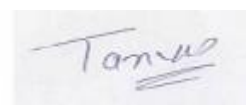
Conference Presentations

Conference presentations

1) Presented a paper entitled "Mathematical Modeling of a Cluster Based Novel Coronavirus: A Case Study of India" in the 20th International Symposium on Mathematical and Computational Biology (BIOMAT 2020) held on November 01- 06, 2020.

2) Presented a paper entitled "Dynamics of HIV-TB Co-infection with Detection as Optimal Intervention Strategy" in the 19th International Symposium on Mathematical and Computational Biology (BIOMAT 2019) held in Hungary on October 21- 25, 2019.

3) Presented a paper entitled "Dynamics of HIV/AIDS and TB Co-infection with Holling Type-II Treatment Rate" in an international conference on "Mathematical Modeling and Computations in Biosystems" in IIT Roorkee held on March 12-14, 2018.

Conferences/Seminars/Workshop attended

1) Attended a Workshop on "Introduction to MATLAB" at the University of Delhi on June 27 - July 01, 2016.

2) Attended a Workshop on "LaTeX and HTML" in Acharya Narendra Dev College, University of Delhi · on August 27, 2016.

3) Attended an International Conference on "Recent Advances in Theoretical and Computational Partial Differential Equations with Applications" in Panjab University, Chandigarh on December 5-9, 2016.

4) Attended a National workshop on "Mathematical Modelling and Computational Techniques using Mathematica" in Zakir Husain Delhi College, University of Delhi on March 30-31, 2017.

Association With Professional Bodies

An Active member of American Mathematical Society (AMS)

Signature of Faculty