

## Curriculum Vitae

Name : Dr. Jayanta Borah  
Designation : Assistant Professor  
Specialization: Abstract Differential Equations  
Date of Joining TU: 11<sup>th</sup> December, 2019.



Dr. Jayanta Borah  
Assistant Professor  
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Research Interest: Abstract Differential Equations.

### **Academic Qualifications:**

1. M.Sc from Gauhati University, Guwahati, Assam in 2003.
2. Ph.D in Fractional Differential Equations from IIT Guwahati, Assam in 2019.

### **Details of Employment:**

#### **Assistant Professor:**

Institute: Tezpur University, Assam  
Joining: 11<sup>th</sup> December 2019.

#### **Assistant Professor (Stage III)**

Institute: NERIST, Nirjuli, Arunahal Pradesh  
Tenure: 07<sup>th</sup> July 2017—10<sup>th</sup> December 2019.

#### **Assistant Professor (Stage II)**

Institute: NERIST, Nirjuli, Arunahal Pradesh  
Tenure: 07<sup>th</sup> July 2012—06<sup>th</sup> July 2017.

#### **Lecturer**

Institute: NERIST, Nirjuli, Arunahal Pradesh  
Tenure: 07<sup>th</sup> July 2006—06<sup>th</sup> July 2012.

### **Publications:**

1. Borah, J. and Bora, S. N. Existence of mild solution for mixed Volterra-Fredholm integro fractional differential equation with non-instantaneous impulses, *Differential Equations and Dynamical Systems* (<http://dx.doi.org/10.1007/s12591-018-0410-1>).
2. Borah, J. and Bora, S. N. Existence of mild solution of a class of nonlocal fractional order differential equation with not instantaneous impulses, *Fractional Calculus and Applied Analysis*, 22(2), 495-508, 2019.
3. Borah, J. and Bora, S. N. Sufficient conditions for existence of integral solution for non-instantaneous impulsive fractional evolution equation, *Indian Journal of Pure and applied Mathematics*, 51, 1065–1082, 2020.
4. Borah, J. and Bora, S. N. Non-instantaneous impulsive Fractional Semi linear Evolution Equations with Finite Delay, *Journal of Fractional Calculus and Applications*, 12(1), 120-132, 2021.
5. Borah, J. and Bora, S. N. Existence results for non-instantaneous impulsive fractional functional differential equation with finite delay, *Fractional Differential Calculus*, 11(1), 35-53, 2021.

6. Devi, D. and Borah , J. On the solution of nonlinear nonlocal Volterra–Fredholm type hybrid fractional differential equation, Indian Journal of Pure and Applied Mathematics, 2023 (<https://doi.org/10.1007/s13226-023-00462-7>).
7. Barman, T., Borah, J., Chutia, D and Haloi, R. Weighted norm inequalities for one sided vector valued Hardy-Littlewood maximal function on one sided Morrey like spaces, The Journal of Analysis, 2023(<https://doi.org/10.1007/s41478-023-00602-6>).
8. Devi, D. and Borah , J. Existence of Solutions for a Nonlinear Nonlocal Hybrid Functional Fractional Differential Equations, Rocky Mountain Journal of Mathematics, 53(5), 1459-1467, 2023.
9. Borah, J, Devi. D, Haloi, R. Strong solutions to quasi-linear differential equations with deviating arguments, The Journal of Analysis, 2023(<https://doi.org/10.1007/s41478-023-00600-8>).

#### **Conference Presentations:**

1. Mild solution of a class of nonlocal fractional differential equation, National Conference on Advances in Mathematical Sciences, Gauhati University, Guwahati, December 22-23, 2016.
2. Existence results of fractional functional evolution equation with non-instantaneous impulses, International Conference on Applied and Computational Mathematics, IIT Kharagpur, November 23-25, 2018.
3. Existence results of mild solution of fractional differential inclusion with non-instantaneous impulses, National Conference on Mathematical Sciences and Applications in Science, Engineering and Technology, Rajiv Gandhi University, Arunachal Pradesh, March 25-26, 2019.

#### **Memberships:**

1. Life Member, Assam Academy of Mathematics (AAM).
2. Life Member, Indian Mathematical Society (IMS).

#### **Workshop Attended:**

1. Application of Mathematical Methods in Physical Problem, SMIT, Sikkim, December 18-23, 2009.
2. Instructional School of Lecturers in Differential Equations and Computations, Jaypee University of Information Technology, Himachal Pradesh, June 04-16, 2012.
3. ATMW Partial Differential Equations of Fractional order, TIFR- Centre for Applicable Mathematics, Bangalore, July 06-18, 2015.
4. TEW on Real Analysis, Linear Algebra and Differential Equations, IIT Guwahati, December 14-19, 2015.
5. Mathematical Analysis and its Applications to Engineering, IIT Guwahati, January 02-04, 2016.
6. NE- Summer Workshop in Analysis and Probability-2016, Rajiv Gandhi University, May 31-June 04, 2016.
7. Pedagogical Training for Mathematics Teachers, Tezpur University, Tezpur, December 25-30, 2019.

8. International Webinar Series on "Advances in Mathematics" organized by Tata Institute of Social Sciences, Tuljapur from 22-27 July 2020.

9. Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy organized by Tezpur University during 8-22 October, 2020.