

## Curriculum Vitae

Name : Dr. Jayanta Borah  
Designation : Assistant Professor  
Qualification: M.Sc (Gauhati University), Ph.D (IIT Guwahati)  
Specialization: Fractional Differential Equations  
Date of Joining TU: 11<sup>th</sup> December, 2019.



Dr. Jayanta Borah  
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Department of Mathematical Sciences  
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Research Interest: Abstract Fractional Differential Equation, Mathematical Control theory.

### **Academic Qualifications:**

1. HSLC from Parbatia High School, Tezpur, Assam in 1996.
2. HS from Tezpur Govt. Higher Secondary School, Tezpur, Assam in 1998.
3. B.Sc from Darrang College, Tezpur, Assam in 2001.
4. M.Sc from Gauhati University, Guwahati, Assam in 2003.
5. Qualified GATE in 2005.
6. Qualified SLET(NE) in 2005.
7. Qualified CSIR-UGC NET (JRF) in 2005.
8. 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.

#### **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.