

## BIO DATA



1. Name : Dr. Tarun Kumar Garai
2. DOB: 27.02.1975
3. Sex: Male
4. Nationality: Indian
5. Address for correspondence: Department of Mathematics,  
Bolpur College, Bolpur, West-Bengal, Pin-731204, INDIA  
E-mail: tg70841@gmail.com
6. Present Designation: Associate Professor, Department of Mathematics, Bolpur College,
7. Academic Qualification: Ph.D. in Mathematics
8. Ph.D.:

(a) Title of the thesis	Generalized Continuity, Generalized Derivative and its application to Integration Theory.
(b) University/Institute	Dept. of Mathematics, Siksha Bhavana, Visva-Bharati, Santiniketan
(c) Year of Obtaining PhD degree	2022
(d) Area of research Work	Real Analysis
(e) PhD Course Work	Done

**9. (a) Work experience:**

Post Held	Name of the employer	Nature of Assignment	Period	Exp. In Years	Remark
1. Associate Prof. of Mathematics	Bolpur College,	Permanent	From 27.05.2019 till date	3 year 2 months	Present service
2. Assistant Prof. of Mathematics	Bolpur College	Permanent	From 25.02.2015 to 26.05.2019	4 year 3 months	Present service
3. Assistant Prof. of Mathematics	Raghunathpur college, Raghunathpur, Purulia	Permanent	From 27.05.2005 To 24.02.2015	9 yrs 9 months.	Past service
4. Assistant Teacher of Mathematics	Bipratikuri High School, Birbhum	Permanent	From 30.12.2002 to 26.05.2005	2 year 5 months (approx.)	Past service

**9. (b) Post-Graduate Teaching Experience:**

(1) Workied as a guest faculty of Mathematics at Sidho-Kanho-Birsha University, Purulia from 2011 to 2015

(2) Taken classes of M.Sc. Mathematics students at DDE- University of Burdwan since 2011.

(3) Taken classes of M.Sc. Mathematics students at Netaji Open University (Bolpur College Study center) several times.

**10. Research Projects Completed:**

Sl. No.	Title	Agency	Period	Grant/ Amount mobilized (Rs. lakh)
1.	Generalized Integral using higher order symmetric derivative and its application to trigonometric series.	UGC	2014-2016	330000.00

## 11. Publications:

### (a) Published Research papers:

- i) P.Guptaroy, **Tarun K. Garai**, S.Bhattacharyya, “ $J/\psi$  Production In Some RHIC Interactions At ..... and Some Look Into The System Size effect”, Hadronic Journal, **31** ,513-528 (2008):ISSN: 0162-5519
- ii) P.Guptaroy, **Tarun K. Garai**, Goutam Sau, S.K.Biswas, S.Bhattacharyya, “Analysing  $J/\psi$  Production In Various RHIC Interactions with A Version of Sequential Chain Model (SCM)”, Hadronic Journal, **32** ,95-124 (2009) ISSN: 0162-5519
- iii) S.Ray and **T.K.Garai**, "On Laplace Continuity". Real Analysis Exchange, 37(2). 2011/2012 279-290. ISSN: 0147-1937
- iv) S.Ray and **T.K.Garai**, "Integration By Parts For Laplace-Perron Integral". Will appear in Rev.Bull.Cal.Math.Soc, **21**, (1) 71-78(2013) . ISSN: 2231-5306
- v) S.Ray and **T.K.Garai**, " Convexity Conditions For Approximate Generalized Riemann Derivable Functions". Indian Journal of Mathematics., Allahabad Mathematical Society. **55**(3) 315-323(2013) ISSN: 0019-5324
- vi) **T.K.Garai** and S.Ray, “Integration by Parts for  $D_k$  Integral”, International Journal of Modern Engineering Research, **5**(1) 61-65(2015) ISSN: 2249-6645
- vii) **T.K.Garai** and S.Ray , “A Perron Type Integration Using Laplace Derivative”,Bull.Cal.Math.Soc, Vol 110, No.1, ( 2018), 5-10.
- viii) **T.K.Garai** , “Relation between  $L_p$ -Riemann Derivative, Approximate Riemann Derivative and Riemann Derivative”, International Journal of Scientific Research in Mathematical and Statistical Sciences, Vol 6, Issue.1, ( 2019), 167-172.
- ix) **T.K.Garai** , Higher Order  $L_p$ -Derivative,  $L_p$ -Continuity and  $L_p$ -Boundedness of Complex Valued Function, International Journal of Scientific Research in Mathematical and Statistical Sciences, Vol 6, Issue.1, ( 2019), 307-310.
- x) **T.K.Garai** , Symmetric  $L_p$ -Riemann Derivative, Journal of Applied Science and Computations, Vol VI, Issue.II, ( 2019), 1807-1811.

**(b) No. of Seminar/Conference attended (Invited talk / Paper presentation only):**

Sl.No	Topic	Organised By	Date	Title of the Paper
1.	National Seminar on Mathematics and Application	Department of Mathematics, The University of Burdwan	Feb,24-25 2011	On Laplace Continuity
2.	National Seminar on Mathematics for Non-Linear Aspects of Analysis and Algebra	Department of Mathematics, Siksha Bhavana, Visva-Bharati	March,24-25 2012	On Laplace Perron Integral
3.	National Seminar on Mathematics and Application	Department of Mathematics, The University of Burdwan	March,28-29 2012	Convexity Conditions for Approximate Generalised Riemann Derivable functions.
4.	International Conference on Frontier of Mathematical with Application	Calcutta Mathematical Society, Calcutta	Dec,07-09 2012	Integration by Parts For Laplace Perron Integral
5.	National Seminar on Mathematics for Non-Linear Systems	Department of Mathematics, Siksha Bhavana, Visva-Bharati	March,17-18 2013	Approximate Generalised Riemann Derivative of Order Two
6.	National Seminar on Mathematics To Commemorate Sesquientenary of Sir Asutosh Mookherjee	Department of Mathematics SKBU	April25, 2014	A Generalised Integral
7.	The 8 <sup>th</sup> International Conference on Mathematical Science for Advancement of Science and Technology	Institute for Mathematics, Bioinformatics, Information Technology and Computer Science	December 21-23, 2014	Integration by Parts for $D_k$ Integral
8.	International Conference on Revisiting Mathematics and Mathematical Science	Department of Mathematics, The University of Burdwan	Feb 18-20, 2015	The $L_n$ Integral
9.	State Level Seminar on "A Tribute To People's Man APJ Abdul Kalam Who Served Our Nation Trough His Life and Work	Department of Chemistry, raghunathpur College, Purulia	15 <sup>th</sup> October 2015	A Comparative Study of APJ Abdul Kalam's <b><i>Wings of Fire</i></b> An Auto Biography
10.	One Day State Level Seminar on Scientific, Social & Economic Impact on Environment: Awareness, Benefits & Limitations	Raghunathpur College, Raghunathpur, Purulia	10.01.2017	Green Revolution: Impact Limits and benefits
11.	International Conference on Exploring Advances in Mathematical Sciences	Department of Mathematics, University of Gourbanga, Malda	March,23-24 2017	Higher Order $L_p$ -Derivative, Complex Valued Function .
12	International Conference on Geometry and Mathematical Models in Complex Phenomena	Calcutta Mathematical Society, Kolkata	December 05-07, 2017	A Perron Type Integration Using Laplace Derivative
13	International Conference MSAST 2017	Institute for Mathematics, Bioinformatics, Information Technology and Computer Science	December 21-23, 2017	$L_p$ -Riemann Derivative

**12.(a) Design of new curricula/ professional update:**

<b>Sl.No</b>	<b>Name of the Programme</b>	<b>Venue</b>	<b>Duration</b>
1.	9 <sup>th</sup> Refresher Course in Mathematics	Academic Staff College, Burdwan University	Feb 17 To March 09, 2007
2.	70 <sup>th</sup> Orientation Programme	Academic Staff College, Burdwan University	May 16 To 12 <sup>th</sup> June 2009
3.	Workshop for framing U.G Syllabus in Mathematics, Sidho-Kanho-Birsha University	Sidho-Kanho-Birsha University, Purulia.	April 21, 2011
4.	Refresher Course in Basic Science (Physics, Chemistry, Mathematics)	HRDC Ranchi University, Ranchi	11 <sup>th</sup> Jan to 31 <sup>st</sup> Jan 2016
5.	UGC Sponsored Workshop on CBCS	HRDC, Burdwan University, Burdwan	29 <sup>th</sup> January to 4 <sup>th</sup> February 2019