

Prof.(Dr.) Paritosh Bhattacharya

Professor

Department of Mathematics

National Institute of Technology, Agartala

(An Institute of National Importance, Govt. of India)

Barjala, Jirania, Pin-799046, West Tripura, India.

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Personal Details

DATE OF BIRTH: June 18, 1976

MARITAL STATUS: Married

CURRENT STATUS: Professor in Mathematics, HoD, Dept. of Education, Chairman Student Activity Centre, CoPI Incharge CCMT& CCMN at National Institute of Technology, Agartala (An Institute of National Importance, Govt. of India) Barjala, Jirania, PIN 799046, West Tripura, India.

Qualifications:

Educational Qualifications:

Examinations passed	Year of passing	Board/ Council/ University	Total Marks & % of marks	Division/ Class	Subjects Taken
Ph.D	12 th April, 2010	Jadavpur University			Mathematical Modeling
M.Tech in Energy Science & Technology	2001	Jadavpur University	73.07%	1 st Class	Renewable Energy / Non Conventional Energy
M.Sc. in Applied Mathematics	1999	VISVA – BHARATI (Santineketan)	659 & 65.9%	1 st Class	Mathematics Special papers: Dynamical Meteorology & Dynamical Oceanography , Biomathematics
Others1	1999	Qualified GATE			Percentile: 85.66, All India Rank 103

Teaching Experience:

Sl. No.	Institute/ College	Designation	Duration
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1.	National Institute of Technology, Agartala (An Institute of National Importance, Govt. of India) Barjala, Jirania, PIN 799046, West Tripura, India	Professor	26th Feb, 2024 to Till date
2.	National Institute of Technology, Agartala (An Institute of National Importance, Govt. of India) Barjala, Jirania, PIN 799046, West Tripura, India	Associate Professor	From 27 th March 2012 to 25 th Feb, 2024
3.	College of Engineering & Management, Kolaghat, (Govt. Aided Institution), K.T.P.P Township, Dist: East Midnapore, Pin: 721171, West Bengal, India	Assistant Professor	From 1 st July 2002 to 26 th March 2012

All India Examinations Qualified:

Name of Examinations Qualified	Conducting Body	Year of Passing	Remarks
Graduate Aptitude Test in Engineering(GATE-1999)	IIT, MUMBAI	1999	Percentile=85.66 All India Rank (AIR)=103

SPONSORED RESEARCH PROJECTS/ PATENTS:

Sl. No.	Sponsoring Agency	Title of the Project(s)/ Patent(s)	Role PI or CoPI	Amount	Duration	Status
1.	Ministry of New and Renewable Energy (MNRE), New Delhi	Design Development & Demonstration of Solar Dryer Suitable for Drying Natural Rubber Sheets in North East India. (15/27/2016-17/ST dated 30 th June 2017)	Dr. Paritosh Bhattacharya (Joint PI)	MNRE Share: Rs. 21.40 Lakh	July 2017- March 2021	Completed
2.	Department of Science and Technology (DST), Govt. of India	DST – FIST Program (No. SR/FST/MSI – 102/2015 (C) dated 20 th May 2016)	Dr. Paritosh Bhattacharya (PI/ PC)	Rs. 49.00 Lakh	18th September 2017 – 21st November 2019	Completed
3.	AICTE - NPIU	A study on deterministic model for HIV/ AIDS through Stability Analysis and Approximate Analytical Method	Dr. Paritosh Bhattacharya (Co PI)	Rs 4.18 Lakh	June 2019 – Sept 2020	Completed
4.	Indian Space Research Organisation (ISRO), Dept. of Space (DoS), Govt. of India	Long Term Trend in Weather Parameters and Atmospheric Chemistry and its Effect on Tea Cultivation over North-East India (TDP code: S-TIC-NR-0107,NRSC) Duration : 36 Months	Dr. Paritosh Bhattacharya (PI)	Rs. 19.804 Lakh	Oct 2019- June 2023	Ongoing (Mr. Aminul Haque(JRF) (earlier) / Santanu Mallick working as JRF)
5.	Indian Space Research Organisation	Finding Suitable Ionospheric Precursors For Earthquakes For North Eastern Region	Dr. Paritosh Bhattacharya (PI from	Rs. 10.184 Lakh	Oct 2019- Oct 2021	Completed (Ms G. Sree Anusha

	(ISRO), Dept. of Space(DoS), Govt. of India	(TDP code: S-TIC-NE-0124;NESAC) Duration : 24 Months	03.10.2019 to 27.12.2020) later CoPI as per ISRO Policy			worked as JRF)
6.	Indian Space Research Organisation (ISRO), Dept. of Space(DoS), Govt. of India	Development Of An Integrated, Miniature And Portable Air Pollution Monitoring System (TDP code: S-TIC-NE-0123;NESAC) Duration : 24 Months	Dr. Paritosh Bhattacharya (Co PI)	Rs. 24.4352 Lakh	Oct 2019– September 2022	Completed
7.	Department of Science and Technology (DST), Govt. of India	“Development of Mathematics Proficiency in North East India” Under “Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI) Program – 2021” sanction no:- DST/RND/STUTI/2021/40(C) dated 9 th February 2022	Dr. Paritosh Bhattacharya (Co PI)	Rs. 2,24,47,0 00/- (Rs Two Crore Tewnty Four lakh and Forty Seven Thousan d only)	31 st January 2022 to 31 st June 2023	Completed
8	Department of Atomic Energy, NBHM, Govt. of India	Mathematical Studies by Means of Numerical Simulation of Some Interacting Populations with Ecological Behavior	Dr. Paritosh Bhattacharya (PI)	Rs. 15.314 Lakh	July 2022 to July 2025	Ongoing
9.	Indian Patent	A Molecular QCA Based CT Scan System (Application number 201731011402) The Patent office Journal No. 24/2018 dated 15/06/2018	Dr. Paritosh Bhattacharya (Inventor) et.al	NA	NA	Published
10.	Indian Patent	Waste Monitoring System (Application number 201931040157A) The Patent office Journal No. 15/2021 Dated 09/04/2021	Dr. Paritosh Bhattacharya (Inventor) et.al	NA	NA	Published

Dr. P. Bhattacharya has recently presented the DST-FIST project progress report which was solely prepared under the leadership of himself, before the DST committee at INSA office, New Delhi. The same has been highly appreciated by the expert committee members of DST

Syllabus review workshop (M. Sc and BS-MS) Mathematics had been conducted under the hegemony of Dr. P. Bhattacharya on 8-9th day of November, 2018 in the immense interest of progress of Dept. of Mathematics, NIT Agartala and it is Approved in Senate on 27.02.2019

***Received letter from BARC [ref: BARC/HSEG/RPAD/BKS/07091/2020 dated 7th September 2020] regarding National Project entitled “Setting up of a solar powered Indian Network for Detection of Radon Anomaly towards Seismic Alert (INDRA-SA)” for installation and commissioning of the Radon Geo-Station at National Institute of Technology, Agartala. ***

Award Won:

1. **Selected** for the Prestigious **The National Academy of Sciences, India (NASI) Membership 2023**
2. **INSA Visiting Scientist award 2022** (1st June 2022 to 30th June 2022 at Jadavpur University)
3. **Coordinator, NBHM Ph.D Test at NIT Agartala**, National Board for Higher Mathematics (DAE, Govt. of India)2021 onwards
4. Subject Expert for assisting the **Union Public Service Commission (UPSC)** In various Interviews/Personality Test Boards.
5. **Visiting Team Member** of National Council of Teacher Education (NCTE), (A Statutory Body of the Government of India)
6. **Fellow** Institute of Engineers(India) (Membership No: **F-1254916**), **FIE** from 14 July 2019
7. **IEEE Senior Membership** no. 95625524
8. Received NBHM ICIAM Travel Grants from Department of Atomic Energy (DAE) for the award of an **ICIAM 2019 Travel Grant of Rs. 2.3 lakh** for registration fee, travel, accommodation, daily allowance and visa and insurance expenses which will be held at **Valencia , Spain** during 15- 19 July 2019.
9. **Best Technical Paper Award (First) in 52nd Annual Convention of Computer Society of India (CSI 2017)** organized by Kolkata Chapter at Science City Kolkata on 19th – 21st January 2018. Springer CCIS Series (SCOPUS INDEXED)
10. Received **Outstanding Scientist Award** (in the category of Science / Mathematics) of **Venus International Foundation Research Awards (VIFRA 2015)**.
11. Enjoyed the Award of **Summer Research Fellowship Programme 2015** funded by **Indian Academy of Sciences, Bangalore**, during summer vacation 2015 under the guidance of **Prof. Indrani Bose** at **Bose Institute** Kolkata (56 days).
12. Enjoyed the Award of **National Renewable Energy Fellowship** funded by the **Ministry of Non-conventional Energy Sources** during M.Tech (1999-2001).

ARTICLES PUBLISHED/ ACCEPTED

1. Ankur Biswas, Santi P. Maity, Rita Banik, P. Bhattacharya & Jhunu Debbarma “GAN-Driven Liver Tumor Segmentation: Enhancing Accuracy in Biomedical Imaging” **SN Computer Science**, Volume 5, article number 652, (2024), Scopus
2. S Mandal, K H Gazi, S Salahshour, S P Mondal, P Bhattacharya, A K Saha “Application of Interval Valued Intuitionistic Fuzzy Uncertain MCDM Methodology for Ph.D Supervisor Selection Problem” **Results in Control and Optimization**, Volume 15, June 2024, 10041, Scopus
3. Anirban Tarafdar, Apurba Debnath, A Poojitha Reddy and Paritosh Bhattacharya "ROVM Integrated Advanced Machine Learning Based Malaria Prediction Strategy in Tripura with Seasonal Weather Conditions" **The Journal of Supercomputing**, Impact Factor 3.3 (SCI Accepted).
4. S. Samaddar, M.Dhar, P. Bhattacharya and U Ghosh “Bifurcation analysis of a modified Leslie-Gower predator-prey model with hunting cooperation and favourable additional food for predator” in **Journal of Biological Systems**, SCI, Impact Factor 1.909 <https://doi.org/10.1142/S0218339023500353>

5. K. K. Dhar, A. Mitra and P. Bhattacharya “Abnormality Detection in Chest Diseases Using a Convolutional Neural Network” in **Journal of Information and Optimization Sciences** (Accepted) (Taylor & Francis Journal)
6. K. K. Dhar, A. Mitra and P. Bhattacharya “Edge Detection of Image Using Image Divergence and Down sampling Method” in **International Journal of Engineering and Manufacturing** DOI: 10.5815/ijem.2022.03.02, Vol 3, 2022 , Pp 14-24.
7. A. Paul, T. Dhar, S.P. Maiti and P. Bhattacharya “Histogram modification in adaptive bi-histogram equalization for contrast enhancement on digital images” in **Optik, SCI**, Impact Factor 2.443, Volume 259, June 2022, 168899
8. Dridhiti Roy and P. Bhattacharya “Spatial Dynamics in a Predator-Prey Model with Beddington-DeAngelis functional response’ in **Journal of Mechanics of Continua and Mathematical Sciences**, Vol – 17, No. 2, February 2022, Pp 22-29.
9. A. Paul, T. Dhar, S.P. Maiti and P. Bhattacharya “Infrared Images Enhancement using Fuzzy Dissimilarity Histogram Equalization” in **Optik, SCI**, Impact Factor 2.443 Volume 247, December 2021, 167887
10. A. Biswas ,P. Bhattacharya and S.P.Maity “Data Augmentation for Improved Brain Tumor Segmentation” **IETE Journal of Research**, Taylor and Francis (SCIE Indexed 2019 Impact Factor 1.125) (<https://doi.org/10.1080/03772063.2021.1905562>)
11. S. Samaddar, M. Dhar, P. Bhattacharya “Impact of refuge to the heterogeneous interaction of species in food chain model: A holistic approach” in **Iranian Journal of Science and Technology, Transactions A: Science**, SCI, Impact Factor 0.875, 45, pages221–233(2021)
12. A. Paul, T. Dhar, S.P. Maiti and P. Bhattacharya “Adaptive Clip-Limit Based Bi-Histogram Equalization Algorithm for Infrared Image Enhancement” in **Applied Optics**, SCI, Impact Factor 2.180, Vol. 59, Issue 28, pp. 9032-9041(2020), <https://doi.org/10.1364/AO.395848>.
13. S.Maiti, Jigar K Andharia; P. Bhattacharya “Development and performance analysis of a mixed mode solar thermal dryer for drying of natural rubber sheets in the north-eastern part of India” **Solar Energy**, SCI, Impact Factor 5.170, 208, 1091-1102 (2020)
14. M. Dhar, S. Samaddar, P. Bhattacharya “Modeling the cell-to-cell transmission dynamics of viral infection under the exposure of non-cytolytic cure” in **Journal of Applied Mathematics and Computing**, SCI, Impact Factor 1.242, 65, Pp. 885–911(2021)
15. S. Samaddar, M. Dhar, P. Bhattacharya “Effect of fear on prey predator dynamics: Exploring the role of prey refuge and additional food” in **Chaos: An Interdisciplinary Journal of Nonlinear Science**, SCI, Impact Factor 2.643, Chaos 30, 063129 (2020); <https://doi.org/10.1063/5.0006968>
16. M. Dhar, S. Samaddar, P. Bhattacharya “Effect of non-cytolytic cure and saturation response: An in silico study to instigate the viral spread inhibition” in **European Physical Journal Plus**, SCI, Impact Factor 2.612, Vol 135, Article no.407 (2020). <https://doi.org/10.1140/epjp/s13360-020-00418-4>
17. K. K. Dhar, A. Mitra and P. Bhattacharya “Two-Phase Simulation On Natural Convection Of A Nanofluid Along An Isothermal Vertical Plate” in **Journal of Mechanics of Continua and Mathematical Sciences**, Vol – 15, No – 9, September, 2020 Edition

18. M. Dhar, S. Samaddar, P. Bhattacharya “Modeling the effect of non-cytolytic immune response on viral infection dynamics in the presence of humoral immunity” in **Nonlinear Dynamics**, Impact Factor: 4.604 (SCI Indexed), DOI <https://doi.org/10.1007/s11071-019-05219-8>
19. M. Dhar, S. Samaddar, P. Bhattacharya, R. K. Upadhyay “Viral Dynamic Model with Cellular Immune Response: A case study of HIV-1 Infected Humanized Mice” in **Physica A**, Impact Factor: 2.132 (SCI Indexed), Volume 524, 15 June 2019, Pages 1-14.
20. A. Debberma, P. Bhattacharya and B.S. Purkayastha “ Named Entity Recognitionfor a Low Resource Language” in **International Journal of Rescent Technology and Engineering (IJRTE)** Vol 8 , Issue 3, Sept 201 Page no. 587- 590. (Scopus Indexed)
21. S. Samaddar, M. Dhar and P. Bhattacharya “Supplement of additional food: Dynamics of self competitive prey predator system incorporating prey refuge” in **Iranian Journal of Science and Technology, Transactions A: Science**, Impact Factor: 0.757 (SCIE Indexed), DOI: 10.1007/s40995-019-00804-3
22. M. Dhar, P. Bhattacharya, “Analysis of SIR epidemic model with different basic reproduction numbers and validation with HIV and TSWV data” in **Iranian Journal of Science and Technology Transactions A: Science**, Impact Factor: 0.757 (SCIE Indexed) (<https://doi.org/10.1007/s40995-019-00701-9>)
23. A. Biswas ,P. Bhattacharya “A hybrid approach for fast 3D segmentation of Brain Tumor” **Journal of Computational and Theoretical Nanoscience** (SCIE Indexed 2015 Impact Factor 1.666) Vol- 17 (1), 340-346.
24. M. Dhar and P. Bhattacharya “Comparison of the logistic and the Gompertz curve under different constraints” in **Journal of Statistics & Management Systems** DOI : 10.1080/09720510.2018.1488414 (**Emerging Source Citation Index Expanded (ESCI), Thomson Reuters (Taylor & Francis) Vol 21, issue 7, 2018, Pp 1189- 1210.**
25. A. Biswas ,P. Bhattacharya, and S.P. Maity “A Smart System of 3D Liver Tumor Segmentation” in **International Journal of Product Development** (Scopus Indexed) – InderScience Publisher Vol. 23, No. 2/3, 2019
26. S. Deb, H Singh, BL Rohini, D Mishra, RK Meena, P Bhattacharya “BYOD Supported Crowd Interaction System” in **Procedia Computer Science** 132 (2018) 1586-1591 (**Scopus Indexed**)
27. S. Deb, P. Bhattacharya, et.al“ Brain Computer Interfaced Single Key Onmi Directional Pointing and Command System: a Screen Pointing Interface for Differently-abled Person” in **Elsevier Procedia Computer Science Journal** (Scopus Indexed) 133 (2018), 161-168
28. A. Biswas ,P. Bhattacharya, and S.P. Maity “An efficient volumetric segmentation of cerebral lateral ventricles” in **Elsevier Procedia Computer Science Journal** (Scopus Indexed) 133 (2018), 561-568
29. A. Biswas ,P. Bhattacharya, and S.P. Maity “3D segmentation of liver and its lesions using optimized geometric contours” in **Elsevier Procedia Computer Science Journal** (Scopus Indexed) 133(2018), 240-247
30. A. Paul, P. Bhattacharya, S. P. Maity and B Bhattacharya “Plateau limit based Tri-histogram equalization for image enhancement” in **IET Image Processing**, Impact Factor : 1.044 (SCI, SCIE, Scopus Indexed)– DOI: 10.1049/iet-ipr.2017.1088
31. S. Deb, P. Bhattacharya “Augmented Sign Language Modeling(ASLM) with interaction design on smartphone - an assistive learning and communication tool for inclusive classroom” in **Procedia Computer Science** 125 (2018) 492–500 (**Scopus Indexed**)

32. S. Deb, A. Pal, P. Bhattacharya “Design considerations for self paced interactive notes on video lectures - a learner's perspective and enhancements of learning outcome” in 9th international conference on Intelligent Human Computer Interaction (IHCI 2017), Paris, France, from 11 to 13 of December 2017(**Springer series Lecture Notes in Computer Science (LNCS)** and indexed in the ISI Conference Proceedings Citation Index, Scopus)
33. Mitra Barun Sarkar , Bijit Choudhuri , P. Bhattacharya , R.N. Barman , A. Ghosh ,S.M.M. Dhar Dwivedi , S. Chakrabarty, Aniruddha Mondal, “Improved UV Photodetection by Indium Doped TiO₂ Thin Film Based Photodetector”, **Journal of Nanoscience and Nanotechnology**, Vol 18, Issue 7 (2018) Pp 4898-4903(Science Citation Index Expanded (SCIE), Thomson Reuters)
34. A. Debbarma, P. Bhattacharya and B. S. Purkayastha “SVM APPROACH TO NAMED ENTITY RECOGNITION FOR LOW RESOURCE LANGUAGE” in **Journal of Advance Research in Dynamical and Control Systems** (Scopus Indexed) Volume 10 , Number 1, 2017
35. A. Debbarma, P. Bhattacharya and B. S. Purkayastha “CRF Approaches to Kokborok Named Entity Recognition, a Low Resource Language” in **International Journal of Control Theory and Applications** (Scopus Indexed) 02- Special Issue, 2017, Pages: 738-747
36. S. Paul, S. Mondal and P. Bhattacharya, “Discussion on Proportional Harvesting Model in Fuzzy Environment: Fuzzy Differential Equation Approach” in **International Journal of Applied and Computational Mathematics** Vol 3, Issue 4 Pp 3067-3090 – Springer Journal
37. M Laskar, R Bhattacharjee, M Sau Giri, P Bhattacharya, “Weather Forecasting Using Arduino Based Cube-Sat” in **Procedia Computer Science** Vol 89, Pp 320-323 (2016)– Scopus Indexed
38. S. Paul, S. Mondal and P. Bhattacharya, “Some comparison of Different Numerical techniques on Mathematical biology problem” in **International Journal of Differential Equations**– Hindawi press (Scopus Indexed, Emerging Source Citation Index Expanded (ESCI), Thomson Reuters) Volume 2016, Article ID 8921710, 14 page
39. S. Paul, S. Mondal and P. Bhattacharya, “Optimal Harvesting of two species mutualism model with interval parameters” in **Journal of Intelligent & Fuzzy Systems**, Vol 33, Issue 4, Pp 1991-2005 – IOS press (Scopus Indexed, Science Citation Index Expanded (SCIE), Thomson Reuters) (Impact Factor: 1.004)
40. S. Paul, S. Mondal and P. Bhattacharya, “Discussion on Fuzzy Quota Harvesting Model in Fuzzy Environment: Fuzzy Differential Equation Approach” in **Modeling Earth Systems and Environment**- Springer Publication – Springer Vol. 2. Issue- 2 , June 2016, Pp- 1-15. (Scopus)
41. S. Paul, P. Bhattacharya and K. S. Choudhury “Stability Analysis Of A Two Species competition Model With Fuzzy Initial Conditions: Fuzzy Differential Equation Approach Environment” in **BIOMAT 2015 , Proceedings of the International Symposium on Mathematical and Computational Biology** (ISI - Web of Science - Scientific Proceedings Citation Index) (World Scientific Publication) Vol_ I Pp 334- 345
42. S. Paul, S. Mondal and P. Bhattacharya, “Numerical Solution of Lotka Volterra Prey Predator Equations By Using Runge Kutta Fehlberg Method And Laplace Adomian Decomposition Method” in **Alexandria Engineering Journal** - Elsevier (Scopus Indexed, Emerging Sources Citation Index (ESCI), Thomson Reuters) Vol. 55, Pp613-617, 2016.
43. S. Mondol, S. Paul and P. Bhattacharya “Classical Modeling of HIV Virus Infected Population in Imprecise Environments” in **Turkish Journal of Fuzzy Systems** Vol.6, No.1, pp. 017-055, 2015

44. S. Das, P. Bhattacharya “Effect Of Prandtl Number On Laminar Natural Convective Heat Transfer Inside Cavity” in **Procedia Engineering – Elsevier Journal** (Scopus Indexed) Vol. 127 (2015) Pp. 229 – 234
45. P. Bhattacharya, S. Das “A Numerical Study of Laminar natural convective heat transfer inside a closed cavity with different aspect ratio in **Journal of Engineering Thermophysics (JET)**– (Science Citation Index Expanded, Impact Factor: 0.812) Volume 26, Issue- 1, January 2017, Pp 79- 90.
46. P. Biswas, A. Paul and P. Bhattacharya “A Cycle Detection Based Efficient Approach for Constructing Spanning Trees Directly from Non-regular Graphic Sequences” in **Springer – Advances in Intelligence and Soft Computing (AISC)** (Scopus Indexed) https://doi.org/10.1007/978-81-322-2656-7_10
47. A. Mitra, P. Bhattacharya and K. K. Dhar “Experimental Study on Shape and Rise Velocity Of Small Bubbles in Stagnant Water” in **Journal of Mechanics of Continua and Mathematical Sciences**, Volume 9, No. 2, Pp: 1396-1402, (2015)
48. S. Dey, P. Bhattacharya “Role of immature Paddy in Rice Husk Gasification” in **Energy Education Science and Technology Part B: Social and Educational Studies** (Science Citation Index Expanded 2012), Volume 8, No. 1, Pp: 13-24 (2016)
49. S. Dey, P. Bhattacharya “Performance Analysis of Bio-gas Plant for Cooking Applications” in **Energy Education Science and Technology Part B: Social and Educational Studies** (Science Citation Index Expanded 2012) , Volume 8, No. 1, Pp: 1-12 (2016)
50. P. Biswas, A. Paul and P. Bhattacharya “Analyzing the Realization of Degree Sequence by Constructing Orthogonally Diagonalizable Adjacency Matrix” in **Elsevier Procedia Computer Science Journal** (Scopus Indexed) Volume 57, Pages 885–889 (2015).
51. P. Bhattacharya, S. Dey, B. Mustaphi “Performance evaluation of a solar photovoltaic system in Rajasthan” in **Energy Education Science and Technology Part B: Social and Educational Studies** (Science Citation Index Expanded 2012) , Volume 7, No. 4, Pp: 301-314 (2015)
52. A. Paul, P. Bhattacharya P. Biswas and S. P. Maity “Comparative Analysis of Image de-blurring with Radial Basis Functions in Artificial Neural Network” in **Advances in Intelligent Systems and Computing** (Scopus Indexed)– Springer Verlag, Germany Vol 332 Pp 135 - 143(2015)
53. P. Bhattacharya, Abhishek Pal, S. P. Maiti “ Comparative Analysis of Radial Basis Functions with SAR images in Artificial Neural Network” in **Advances in Intelligent Systems and Computing** (Scopus Indexed)– Springer Verlag, Germany Vol 320, Pp 125-131 (2015)
54. P. Bhattacharya, S. Paul, K. S. Choudhury “Mathematical Modelling Of Ecological Networks, Structure and Interaction Of Prey And Predator” in **Palestine Journal of Mathematics** , Volume 4, Number 2, Pp 335-347 (2015) (Scopus)
55. P. Bhattacharya, S. Das “A Study on Steady Natural Convective Heat Transfer Inside A Square Cavity For Different Values of Rayleigh and Nusselt Numbers” in **Journal of Applied Fluid Mechanics (JAFM)**– (Science Citation Index Expanded, Impact Factor: 0.746) (Scopus Indexed) Volume 8, Number 3, Pp 635-640(2015)
56. P. Bhattacharya, S. Paul, K. S. Choudhury “Different types of epidemic models and their Characteristic behaviour by using Matlab” in **Journal of Interdisciplinary Mathematics** (Scopus Indexed) – Taylor & Francis publication, Volume 18, issue 5, Pp 569-592 (2015)

57. A. Paul, P. Bhattacharya and S. P. Maity “An approach of optimizing singular value of YCbCr Color space with q-Gaussian function in Image Processing” in **Smart Innovation, Systems and Technologies** (Scopus Indexed)– Springer International Publishing Switzerland Vol 27, Pp 245-250 (2014)
58. P. Bhattacharya, A. Biswas and S.P. Maity “Wavelets-Based Clustering Techniques for Efficient Color Image Segmentation” in **Smart Innovation, Systems and Technologies**(Scopus Indexed) – Springer International Publishing Switzerland, Vol 27, Pp 237-244 (2014)
59. A. Paul, P. Bhattacharya and S. P. Maity “Eigen Value and It’s Comparison with Gaussian RBF, Multi-Quadratic RBF and Inverse Multi-Quadratic RBF Methods” in **Information Sciences Letters** Vol.3, No. 2, 41-47 (2014)(Scopus)
60. P. Bhattacharya, S. Dey, B. Mustaphi “Some Analytical Studies on the Performance of Grid Connected Solar Photovoltaic System with Different Parameters” in **Elsevier Journal Procedia Material Science** Vol. 6, Pp 1942-1950 (2014)
61. A. Paul, P. Bhattacharya and S. P. Maity “Eigen value and it’s comparison with different RBF methods by using Matlab” in **Lecture Notes in Electrical Engineering** (Scopus Indexed) – Springer Verlag, Germany vol. 298, Pp 219 - 224 (2014)
62. P. Bhattacharya, S. Paul, K. S. Choudhury “Analysis on Food Web Structure, Interaction, Strength, and Stability of different Mathematical models of Prey & predator” in **Lecture Notes in Electrical Engineering** (Scopus Indexed) – Springer Verlag, Germany vol. 298, Pp 207- 218 (2014)
63. A. Paul, P. Bhattacharya and S. P. Maity “Comparative study of Radial Basis Function neural network with estimation of Eigenvalue in image using MATLAB” in **Advances in Intelligent Systems and Computing** (Scopus Indexed) – Springer Verlag, Germany vol. 266, Pp 141-146(2014)
64. A. Paul, P. Bhattacharya and S. P. Maity “An Interference Based Routing Metric In Wireless Mesh Network” in **Applied Mathematics & Information Sciences** (Science Citation Index Expanded, Impact Factor: 1.232) , Vol. 8, No. 4, 1717-1724 (2014)
65. P. Bhattacharya, S. Dey “An update technology for integrated biomass gasification combined cycle power plant” in **Applied Solar Energy** (Springer Verlag, United States) (Scopus Indexed), *Vol. 50, No. 1, pp. 44–48, 2014.*
66. A. Paul, P. Bhattacharya and S. P. Maity “ Designing Interference Based Routing Metric In Wireless Mesh Network and Comparison According to Various Tunable Parameters” in **Information Sciences Letters** Vol.3, No. 1, 21-27 (2014) (scopus)
67. S. Pal, P. Bhattacharya and K S Choudhury “Maximum Sustainable Yield Policy in Prey-Predator System-A Study” **IJCA Proceedings on Computing Communication and Sensor Network**, CCSN, Volume. 1 Pp. 46-49, 2013, Published by Foundation of Computer Science, New York, USA.
68. P. Bhattacharya, S. Mukhopadhyay, P. K. Bose, B. B. Ghosh “ Optimized use of Solar Tracking System and Wind Energy” in **Elsevier Journal Procedia Technology** 4 (2012) 834 – 839.
69. S. Mukhopadhyay, P. Bhattacharya, B. B. Ghosh, “Application of Vertex Coloring in a triangular Closed path structure & in Kraft’s inequality”, **IEM International Journal of Management & Technology**, Volume 1, No 1, 109-112, 2011.
70. P. Bhattacharya, S Mukhopadhyay “Weibull Distribution for Estimating the Parameters and application of Hilbert Transform in case of a low wind speed at kolaghat” **International Journal of Multi physics** (Scopus Indexed) Volume 5, Number 3, 2011, pp 203 - 214.

71. P. Bhattacharya, B. B. Ghosh, P. K. Bose “Transmission Loss And Performance Test Of A Two Cylinder Four Stroke Diesel Engine” **Journal of Engineering Science and Technology** (Scopus Indexed) Volume 5, Issue 3, September 2010, pp 284-291.
72. P. Bhattacharya, R. Bhattacharjee “A Study on Weibull Distribution for Estimating the Parameters” **Wind Engineering** (Scopus Indexed, Emerging Sources Citation Index (ESCI), Thomson Reuters) Volume 33, No. 5, 2009 Pp 469–476.
73. P. Bhattacharya, R. Panua, B. B. Ghosh, P. K. Bose “Design of reactive muffler for study on the noise level and performance of a two cylinder four stroke 16 h.p diesel engine” **Noise & Vibration Worldwide** (Scopus Indexed), Volume 39, Number 8, September 2008, pp. 24-27.
74. B. B. Ghosh, R. Panua, P. Bhattacharya, P. K. Bose “Studies on the Noise Level and Performance of a Two Cylinder Four Stroke 16 H.P Diesel Engine Using Modified Reactive and Resonative Muffler” **Advances in Applied Mathematical Analysis (AAMA)**, Volume 2, Number 1 (2007), pp 31-39.
75. B. B. Ghosh, P. Bhattacharya, R. Panua, P. K. Bose “Prediction of Noise Level by Mathematical Modeling in the Exhaust Muffler and Validation of these Analytical Results with the Experimental Results for 4-Stroke Diesel Engine, in **Advances in Applied Mathematical Analysis (AAMA)**, Volume 2, Number 1 (2007), pp 41-49.
76. B. B. Ghosh, P. Bhattacharya, P. K. Bose, M.Y. Vaijanapurkar “Analytical and Experimental Study on Noise Attenuation of Multi-cylinder Diesel Engine with Resonative Muffler” **JOURNAL OF APPLIED SCIENCES RESEARCH**, 3(8), 676-680, 2007.
77. B. B. Ghosh, P. Bhattacharya, P. K. Bose, M.Y. Vaijanapurkar “Analytical and Experimental Study on Noise Attenuation of Multi-cylinder Diesel Engine with Existing and Modified Muffler” **Noise & Vibration Worldwide** (Scopus Indexed), Volume 37, Number 9, October 2006, pp. 21-28(8).

PAPERS PUBLISHED IN CONFERENCES AND SEMINARS:

1. Chiranjit Bhowmik, Paritosh Bhattacharya, Umesh Mishra & J.K. Mani “Impact of Micro-climatic Parameters on the Yield of Tea in North-East India” International Conference on Innovation and Sustainability: Research and Practice, St Xavier University, Kolkata, 22 - 23 March 2024.
2. Banya Das, Susmita Roy, Biswajit Das and Paritosh Bhattacharya, “An optimal design of radial basis function neural network coupled with genetic algorithm for weld bead geometry prediction”, International Conference on Emerging Trends in Mathematical Sciences and Computing (IEMSC– 2024), February 2 – 4, 2024 (Hybrid mode).
3. Aditya Raj, Susmita Roy and Paritosh Bhattacharya, “Osprey-PSO: A novel hybrid metaheuristic algorithm for unconstrained optimization problems”, International Conference on Emerging Trends in Mathematical Sciences and Computing (IEMSC– 2024), February 2 – 4, 2024 (Hybrid mode).
4. Naima Debbarma, Susmita Roy and Paritosh Bhattacharya, “An interval valued Pythagorean fuzzy AHP-TOPSIS based multi-criterion group decision making framework for empowerment of women in India”, International Conference on Emerging Trends in Mathematical Sciences and Computing (IEMSC– 2024), February 2 – 4, 2024 (Hybrid mode).
5. S. Sutradhar, I. Ali, A. Tarafdar and Paritosh Bhattacharya “The Dynamics of a Three Stages Prey-Predator-Top Predator Ecological Model Including Shelter and Linear Harvesting and the Effects of

- Additional Food” 17th International Conference on “Mathematical Sciences for Advancement of Science and Technology (MSAST 2023)” during December 21-23, 2023 in Kolkata, India.
6. A. Tarafdar, Paritosh Bhattacharya U. Mishra and J.K. Moni “Machine Learning based Modeling of Meteorological Factors and their Influence on Tea Yield variability in Tezpur, North East India” in 7th International Conference in Biotechnology and biological sciences, UEM Kolkata during 16-18 November 2023.
 7. Banya Das, S.Roy, and P. Bhattacharya “An optimal Design of MLFNN coupled with Genetic Algorithm for prediction of MIG-Co2 welding process ” in International Conference on Advance Computing Techniques in Engineering and technology (ACTET- 2023) at SKITM Jaipur during 18-19 December 2023 (Springer CCIS congerence)
 8. Shreya Roy, A. Tarafdar, Paritosh Bhattacharya and Azharuddin “Advance Machine Learning Based Optimal Heart Disease Prediction System” in IEEE International Conference on Ambient Intelligence in Health Care (ICAIHC-2022) at Siksha ‘O’ Anusandhan (Deemed to be University), Bhubaneswar during 17-18, November 2023 (Accepted)
 9. Banya Das, S.Roy, and Paritosh Bhattacharya “Quadratic Interpolation enhanced hybrid Grey Wolf Optimization and Moth Flame Optimization for global optimization” in IEEE SILCON 2023 at NIT Silchar during 3-5 November 2023
 10. A. Debnath, A. Tarafdar, Paritosh Bhattacharya and Azharuddin “MOORA MCDM based Optimal Machine Learning Regression Techniques for Breast Cancer Prediction” in IEEE SILCON 2023 at NIT Silchar during 3-5 November 2023
 11. Banya Das, S.Roy, B. Das and Paritosh Bhattacharya “Artificial Intelligent based Modeling weld bead geometry prediction of MIG-CO2 welding process made of EN-3A grade Mild steel using radial basis function neural network coupled with genetic algorithm ’ in 5th International Conference on Research in Applied Mathematics and Computer Science (ICRAMCS 2023) at Morocco during March 16-18, 2023.
 12. Sagar Aditya, S. Mallik, U. Mishra, Paritosh Bhattacharya, J. K. Moni “A review on the quality and yield improvement of tea through water treatment, management, and the control of other relevant parameters in the tea gardens”.in 2nd International Conference on Advances in Water Treatment and Management, at PDEU Gandhinagar, Gujarat, India during 11-12 March 2023.
 13. Sagar Aditya, S. Mallik, U. Mishra, Paritosh Bhattacharya, J. K. Moni “Utilization of Different Models to Predict Tea Crop Yield: A Critical Review”.in International Conference on Agriculture and Rural Development (Agri Vision-2023), CUTM-Bhubaneswar Campus, Odisha, India. during 27-29 January 2023.
 14. Shilpa Samaddar, and Paritosh Bhattacharya “Ecological Aspect of Fear and Hunting cooperation in Prey Predator Dynamics: A Case study Analysis’ in International Conference on Emerging Technology and Management Trends in Environment and Sustainability at BBIT Kolkata during November 29-30, 2022 (Taylor & Francis)
 15. Shilpa Samaddar, Mausumi Dhar and Paritosh Bhattacharya “Effect of Nonlinear Prey Refuge on Predator-Prey Dynamics’ in International Conference on Nonlinear Analysis and Optimization, at Dept. of Mathematical Sciences, IIT (Banaras Hindu University), Varanasi during December 21-23, 2021 (Springer Proceedings in Mathematics and Statistics)
 16. Shilpa Samaddar, Mausumi Dhar and Paritosh Bhattacharya “LOCAL STABILITY ANALYSIS OF A PREDATOR PREY DYNAMICS INCORPORATING BOTH SPECIES DENSITY INCREASING

- FUNCTIONAL RESPONSE' in Third Online International Conference on Advanced Research and Development in Applied and Pure Mathematics (ARDAPM), during December 8 & 9, 2021 at Kolkata
17. Dridhiti Roy and Paritosh Bhattacharya "SPATIAL DYNAMICS IN A PREDATOR-PREY MODEL WITHBEDDINGTON-DEANGELIS FUNCTIONAL RESPONSE' in Third Online International Conference on Advanced Research and Development in Applied and Pure Mathematics (ARDAPM), during December 8 & 9, 2021 at Kolkata.
 18. K. K. Dhar, A. Mitra and Paritosh Bhattacharya "THE EFFECT OF TEMPERATURE GRADIENT ON BUBBLE RISE: A COMPUTATIONAL STUDY' in Third Online International Conference on Advanced Research and Development in Applied and Pure Mathematics (ARDAPM), during December 8 & 9, 2021 at Kolkata
 19. Shilpa Samaddar, Mausumi Dhar and Paritosh Bhattacharya "Impact of additional food on a self competitive prey predator dynamics' in International Conference on Applied Mathematics and Computetational Intelligence (ICAMCI) , 23-24 December 2020 at NIT Agartala
 20. A. Hoque, Sree Anusha Ganapathiraju, P. Bhattacharya "A Study on the Impact of Weather Parameters in Tea Cultivation' in International Conference on Applied Mathematics and Computetational Intelligence (ICAMCI) , 23-24 December 2020 at NIT Agartala
 21. Sree Anusha Ganapathiraju, P. Bhattacharya, Anjan Debnath and J.K. Rakshit "A Survey on the Ionospheric Parameters for Earthquake Warning Systems' in International Conference on Applied Mathematics and Computetational Intelligence (ICAMCI) , 23-24 December 2020 at NIT Agartala
 22. A.Hoque, J. Raj, A.Saha and P. Bhattacharya "Earthquake Magnitude Prediction Using Machine Learning Technique" International Conference on Computational Intelligence, Security and Internet of Things, Communications in Computer and Information Science book series (CCIS, volume 1358) ,2020 (Springer)
 23. S. Deb, N. Saha and P. Bhattacharya "Designing a BYOD Supported Formative Learning Interface and Analysis of Classroom Interaction" Advanced Computing and Intelligent Engineering, 497-506, 2020 (Springer Singapore)
 24. A. Biswas, S.P.Maity P. Bhattacharya "An Efficient Semiautomatic Active Contour Model of Liver Tumor Segmentation from CT Images" in Computational Network Application Tools for Performance Management, 75-85, 2020 Springer, Singapore.
 25. M. Dhar, S. Samaddar, P. Bhattacharya, "Global behavior of a with-in host viral dynamic model with non-cytolytic cure effect" in TENSYP-2019 during 7th-9th June 2019, Kolkata.
 26. A. Biswas, S.P.Maity P. Bhattacharya "A 3-dimensional Brain tumor segmentation using hybrid intelligent algorithms" in 4th International Conference on Computing Communication and Automation (ICCCA 2018) Galgotias University on 14-15 December 2018.(IEEE Conference ISBN # 978-1-5386-6947-1)
 27. A. Biswas, S.P.Maity P. Bhattacharya "Optimal Geometric Active Contours: Application to human brain Segmentation" in in 52nd Annual Convention of Computer Society of India (CSI 2017) organized by Kolkata Chapter at Science City Kolkata on 19th – 21st January 2018.(Springer CCIS Series (SCOPUS INDEXED). Best Technical Paper Award (First)
 28. S. Paul, S. Banik and P. Bhattacharya, "Stability analysis of prey–predator system in Interval environment" 11th International Conference of IMBIC on "Mathematical Sciences for Advancement of Science and Technology" (MSAST 2017) , December 21-23, 2017 at Kolkata

29. A. Biswas, P. Bhattacharya and S.P.Maity “An efficient semi automatic Active Contour model of Liver Tumor Segmentation from CT Images” in International Conference RECENT ADVANCES & APPLICATIONS IN COMPUTER ENGINEERING (RAACE 2017), November 23-25, 2017 at Xt. Xavier College Jaipur. (Springer CCIS Series (SCOPUS INDEXED)).
30. S. Deb and P. Bhattacharya “Enhancing personalized learning with interactive note taking on video lectures-an analysis of effective HCI design on learning outcome ” 3rd International Conference on Next Generation Computing Technologies during 30th and 31st Oct 2017 at University of Petroleum and Energy Studies, Dehradun, India (Springer Publication)
31. A.Paul, P. Bhattacharya “Power-log Based Plateau Limit Histogram Equalization Algorithm for Infrared Image Enhancement” in 2017 10th International Conference on Contemporary Computing (IC3- 2017) August 10-12, 2017 at IIIT Noida
32. P. Bhattacharya , A. Roy “Stochastic Time Evolution Of A Simple Birth-Death Process” in International Journal of Arts & Sciences (IJAS) in Joseph B. Martin Conference Center at Harvard Medical School, 77 Avenue Louis Pasteur, Boston, Massachusetts, from 22 to 26 May 2017
33. S. Pratiher, S. Patra,P. Bhattacharya “On the Marriage of Kolmogorov Complexity and Multi-fractal parameters for Epileptic Seizure Classification” 2nd International Conference on Contemporary Computing and Informatics (IC3I 2016) held in Amity University, Noida, India from 14 - 17 December 2016.(IEEE Conference)
34. Sawon Pratiher, Vigneshram Krishnamoorthy, P. Bhattacharya “An Adaptive Weighted Lp Metric with Application to Optical Remote Sensing Classification Problems” in SPIE Digital Optical Technologies Internationales Congress Center, Munich, Germany, 25 - 29 June 2017.
35. P. Bhattacharya , A. Roy S. Paul “Differential-Transform-Method For Solving Lotka -Volterra Equations By Using Holling Type III Functional Response” in 9th International Conference on Research in Sciences Technology (ICRST - 2016) in AIT, Bangkok during 29-30 December, 2016
36. S. Prathier, P. Bhattacharya “Trends in wind velocity distribution using phase space trajectory” in IEEE International Conference on Signal Processing (ICSP-SATI 2016), at Samrat Ashok Technological Institute (Engineering College), Vidisha (M.P.) India during 7-9 November, 2016.
37. S. Prathier, P. Bhattacharya “On the Fusion of Non-linear features for Epileptic Seizure Detection” in IEEE International Conference on Signal Processing (ICSP-SATI 2016), at Samrat Ashok Technological Institute (Engineering College), Vidisha (M.P.) India during 7-9 November, 2016.
38. Suman Deb, Ananda Bibek Ray and Paritosh Bhattacharya “Smartphone Based Virtual Reality Systems in Classroom Teaching - a study on the effects of learning outcome” in IEEE International Conference on Technology for Education (T4E 2016). T4E 2016, at the Indian Institute of Technology Bombay, Mumbai, India from December 2-4, 2016.
39. Jagrati, Suman Deb and Paritosh Bhattacharya “A Framework To Enhance The Learning Outcome With Fuzzy Logic Based ABLS(Adaptive Behaviourial Learning System)” in International Conference on Advanced Computing and Intelligent Engineering (ICACIE 2016), Dec 21-23, 2016 at Bhubaneswar (Springer Publication)
40. P. Bhattacharya, S. Paul “Solution Of Insect Population Model By Using Laplace Adomian Decomposition Method” in International Conference on Computational Science and Engineering (ICCSE 2016), October 4-6, 2016 at RCC Institute of Information Technology, Kolkata. Accepted papers will be published by CRC Press (Taylor and Francis) (<http://www.balkema.nl/>) in online (CRCnetBASE) with

41. K.Gogoi, M.B.Sarkar and P.Bhattacharya “ Analysis of Different Defect States Incorporated in e-Beam Evaporated TiO₂ Thin Flim of Variable Thickness” in 4th National Conference on Materials, Devices and Circuits in Communication Technology (MDCCT 2016), February 19-20, 2016 at Burdwan University, West Bengal.
42. P. Bhattacharya, S. Das “Analysis of Heat Transfer and Flow due to Natural Convection in Air of Different Sizes inside A Closed Cavity” in 9th International Conference of IMBIC on "Mathematical Sciences for Advancement of Science and Technology" (MSAST 2015) , December 21-23, 2015 at Salt Lake Kolkata
43. S. Deb, M. Sinha, S. Nandi, P. Bhattacharya “ Blended 3D Interaction Using Wii-Remote for Learning Educational Content” in Progress in Advanced Computing and Intelligent Engineering, Pp23-88 (Springer Singapore)
44. S. Deb, S.Saha and P. Bhattacharya “ Blended Interaction for Augmented Learning-an Assitive Tool for Cognitive Disability ” in 12th International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2015), October 24-26, 2015 at Maynooth University, Greater Dublin, Ireland.
45. P. Biswas, P. Bhattacharya, et.al “An Efficient Way to Determine the Chromatic Number of a Graph Directly from its Input Realizable Sequence.” in Third International Symposium on Women in Computing and Informatics (WCI-2015), August 10-13, 2015 (ACM Conference) at Kerala, India.
46. P. Biswas, A. Paul and P. Bhattacharya, “An Efficient Approach for Constructing Spanning Trees by Applying BFS and DFS Algorithm Directly on Non-regular Graphic Sequences” in Third International Conference on “Emerging Research in Computing, Information, Communication and Applications (ERCICA-2015), 31 July – 01 August, 2015 (Springer Conference) at NMIT Bangalore
47. P. Biswas, A. Paul, P. Bhattacharya “Application of (0, 1)-Matrix in Determination of Graphic Realization of Non-Increasing Positive Integer Sequence.” in International Conference on Advanced Research in Computer Science Engineering & Technology (ICARCSET 2015), March 6-7, 2015 (ACM Conference) at Eluru, Andhra Pradesh
48. P. Bhattacharya, P. Biswas, A.Paul “Some Analytical Study On the Realization of Degree Sequence of Graphs Using Adjacency Matrix.” in International Conference on Emerging Trends in Information Technology (ICETIT 2015), March 23-24, 2015 at Babasaheb Bhimrao Ambedkar University, Lucknow
49. P. Bhattacharya, P. Biswas, A. Paul “An Optimized Algorithm To Determine The Eigenvalues From A Graphic Sequence By Constructing A Symmetric Matrix” in International Conference on Management and Behavioral Sciences-ICMBS 2015, March 25-26, 2015 in Singapore
50. P. Bhattacharya, S. Paul, P. Biswas, “Mathematical Modeling Of Treatment Sir Model With Respect To Variable Contact Rate” in International Conference on Management and Behavioral Sciences-ICMBS 2015, March 25-26, 2015 in Singapore
51. P. Bhattacharya, P. Biswas, A. Paul “Generating Spanning Tree of Non-Regular Graphic Sequences Through A Variant of Prim’s Algorithm” IEEE International Conference on Circuit, Power and Computing Technologies, ICCPCT-2015, March 19-20, 2015, Kanyakumari district, Tamilnadu
52. S. Mukhopadhyay, P. Bhattacharya, A. Mitra, K. K. Dhar “Diagnosing Heterogeneous Dynamics for wind particle trajectory in wavelet domain” in IEEE International conference on Computer, Communication, Control and Information Technology (C3IT 2015) from 7-8 February 2015 at Academy of Technology, Kolkata

53. P. Bhattacharya, A. Mitra, K. K. Dhar “Experimental Study on Shape and Path of Small Bubbles using Video-Image Analysis” in IEEE International conference on Computer, Communication, Control and Information Technology (C3IT 2015) from 7-8 February 2015 at Academy of Technology, West Bengal
54. P. Bhattacharya, Abhishek Pal, S.P.maiti “An Analytical and Comparative study of various Radial Basis Functions in Artificial Neural Network” in 3rd International Conference on RECENT ADVANCES IN COGNITION AND HEALTH (ICRACH-2014) from December 19-21, 2014 at Banaras Hindu University, Varanasi, India
55. S. Paul, S. Mondol, P. Bhattacharya “Application of Adomian Decomposition Method in Biological Growth Model and Epidemic Model” in 8th International Conference of IMBIC on "Mathematical Sciences for Advancement of Science and Technology" (MSAST 2014) , December 21-23, 2014 at Salt Lake Kolkata
56. P. Biswas, A. Paul, P. Bhattacharya “An Efficient Dynamic Non-Linear Minimal Spanning Tree Algorithm using Cycle Detection in an Undirected Graph” in International Conference on Nonlinear Dynamics and its Applications in Physical and Biological Sciences (CNDAPBS-14) during 01—03 Nov. 2014 organized by the Department of Physics, Darjeeling Govt. College in collaboration with Bose Institute & St. Joseph’s College, Darjeeling, 734101, India
57. A. Debbarma, P. Bhattacharya, B. S. Purkayastha “Frequency Based Named Entity Recognition System For Under Resource Language” in International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT 2014) (IEEE Conference) from July 10 -11, 2014 at Noorul Islam University, Tamilnadu
58. P. Bhattacharya, S. Paul, K.S.Choudhury “Ecological Networks, Structure, Interaction, Strength & Stability on different Prey predator Models” in 3rd International Symposium on Complex Dynamical Systems and Applications (CDSA 2014) from March 10 -12, 2014 at Indian Statistical Institute, Kolkata.
59. A. Debberma, P.Bhattacharya, B. Purakayasta “Stemmer for Resource Scarce Language using String Similarity Measure” in IEEE International Conference on Reliability Optimization & Information Technology (ICROIT 2014) from 6-8 February 2014, New Delhi.
60. P. Bhattacharya, Abhishek Pal, S.P.maiti “Eigen values of colour images and their comparison with various Radial Basis Functions” in IEEE 2nd International Conference on Computing, Communication and Sensor Network (CCSN 2013) from 22nd -24th , 2013, Kolkata
61. P. Bhattacharya, Abhishek Pal, S.P.maiti “Mathematical Modelling and Comparison of Eigen Value with Different Radial Basis Functions in Neural Network” in 7th International Conference on Advanced Computing and Communication Technologies (ICACCT™-2013) in association with INDERSCIENCE Publishers, UK, IETE and Technically Co-sponsored by Computer Society Chapter IEEE, Delhi Section at Asia Pacific Institute of Information Technology SD India, Panipat (Haryana) on 16th November 2013.
62. P. Bhattacharya, S. Das, U. K. Bera “Visualization of streamlines with their velocity profiles” in International Conference Energy System Modeling and Optimization Conference (ESMOC 2013) from December 9-11, 2013, NIT Durgapur, India.
63. P. Bhattacharya, Abhishek Pal, S. P. Maiti “Eigen value and its comparison with different RBF neural Networks” in International Conference on Recent Trends in Communication and Computer Networks - ComNet 2013 from Nov 08-09, 2013; Hyderabad, India (Elsevier Science and Technology Publications 2013)
64. P. Bhattacharya, Abhishek Pal, S. P. Maiti “Study of various Routing Metric In Wireless Mesh Network

- and comparison according to various tuning parameters” in Fifth International Conference on Advances in Recent Technologies in Communication and Computing, ARTCom 2013 from 20-21 September 2013, Bangalore (Elsevier Science and Technology Publications 2013)
65. P. Bhattacharya, S. Paul, K.S.Choudhury “Different growth models in population dynamics and its exponential regression” in International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA 2013) from 2-3 August 2013 at Nitte Meenakshi Institute of Technology, Bangalore. (Elsevier Science and Technology Publications 2013)
 66. S. Mukhopadhyay, Paritosh Bhattacharya, “Optimized DHT-RBF model as replacement of ARMA-RBF model for wind power forecasting” in IEEE International Conference in Emerging Trends in computing, communication and Nanotechnology (ICE-CCN) from 25-26 March 2013 at Tirunelveli, India
 67. S. Mukhopadhyay, Paritosh Bhattacharya, “Minimum Vertex Colored Wavelet Packets to prove the Kraft’s Inequality”, 100th Indian Science Congress, 3-7 January 2013, Calcutta University, Kolkata, India
 68. S. Mukhopadhyay, Paritosh Bhattacharya, R. Bhattacharjee, P.K.Bose “Discrete Hilbert Transform as Minimum Phase Type Filter for the Forecasting and the characterization of Wind Speed”, IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS), 28-29, December 2012 at Jadavpur University, Kolkata.
 69. A. Mitra, S.Mukhopadhyay P. Bhattacharya “Wind Power Forecasting Based on Discrete Hilbert Transform and Neural Network Model” International Conference on Advances in Mechanical Engineering and its interdisciplinary areas, CEM Kolaghat, 27-28, December, 2012
 70. S. Mukhopadhyay, P. Bhattacharya, P. Das, “Sustainable Development Using Wind Power in Rural Area”, National Conference on Sustainable Development through Innovative Research in Science and Technology sponsored by DST PURSE PROGRAMME, 28-29, September, 2012 at Jadavpur University, Kolkata
 71. S. Mukhopadhyay, P. Bhattacharya, P. Das, “Possibility Determined by Weibull Parameters for Wind Farm installation in Midnapore Zone”, IETE Annual Seminar, 8-9 September, 2012, Kolkata
 72. Paritosh Bhattacharya, S Mukhopadhyay, “Weibull Distribution and Hilbert Transform for Characterization of Wind Speed at Kolaghat”, National Conference on Material Science & Technology, (3-5) June, 2011, Haldia Institute of Technology, West Bengal
 73. Participated and Presented a paper entitled “Fabrication and Performance Test Of a Two Cylinder Four Stroke Diesel Engine” in National Seminar on Mechanical Engineering “Advance Manufacturing Trend” on 24th February 2011. at Seacom Engineering College, Howrah , Kolkata
 74. Application of Vertex coloring in a particular triangular closed path structure and in Kraft’s inequality in International Conference on Scientific Paradigm Shift in Information Technology & Management January 5th & 6th, 2011 ,Science City Auditorium (Kolkata, India)
 75. Participated and Presented a paper entitled “Mathematical Modeling For Design Of Expansion Chamber Of Muffler Using Bessel Function” in IEEE Sponsored International Conference on Scientific Paradigm Shift in Information Technology & Management January 5th & 6th, 2011 ,Science City Auditorium (Kolkata, India)
 76. Participated and Presented a paper entitled “Effect on Velocity Distribution of A Pipe Containing Stagnant Viscous Fluid Due To External Sinusoidal Pulse” in 4th International Conference of IMBIC on "Mathematical Sciences for Advancement of Science and Technology" (MSAST 2010) , December 19-21, 2010 at IMBIC Hall , Salt Lake Kolkata

77. Participated and Presented a paper entitled “Computational Experiments for Estimating the Parameters of Weibull Distribution” in 3rd Annual International Conference on Management and Social Welfare, December (14-15) 2009 at IISWBM Kolkata
78. Studies On The Noise Level And Loss Of Output Energy Of A Two Cylinder Diesel Engine Using Modified Muffler in NCRAME (20-21) December, 2008, NIT Silchar
79. Participated and Presented a paper entitled Mathematical Modeling For Prediction Of Sound Pressure Level By The Exhaust Muffler And Validation Of Analytical Results With The Experimental Results For Two Cylinder Four Stroke 16 H.P Diesel Engine in NCRAME (20-21) December, 2008, NIT Silchar
80. Studies On The Noise Level And Performance Of A Two Cylinder Diesel Engine Using Modified Muffler in , Proceedings of 4th BSME-ASME International Conference on Thermal Engineering, 27 - 29 December, 2008, Dhaka
81. Theoretical Modeling For Prediction Of Noise Level By The Exhaust Muffler And Validation Of These Analytical Results With The Experimental Results, in Proceedings of 4th BSME-ASME International Conference on Thermal Engineering, 27 - 29 December, 2008, Dhaka
82. Participated and Presented a paper entitled “PREDICTION OF NOISE LEVEL BY MATHEMATICAL MODELING IN THE EXHAUST MUFFLER ” in International Conference on Frontier of Mathematics & Applications (icfma-2008) from January, 16-18, 2008 at Burdwan University.
83. Control Of S.I.Engine Exhaust Emissions Using Non-Precious Catalyst (Zsm-5) Supported Bimetals And Noble Metals As Catalyst, Proceedings of ICES2005, ASME Internal combustion Engine Division, 2005 Spring Technical Conference, April 5-7, Chicago, IL , USA
84. Participated and Presented a paper entitled “ COMPARISON BETWEEN WEIBULL DISTRIBUTION AND GAMMA DISTRIBUTION FOR DIFFERENT VALUES OF THE SHAPE PARAMETER” in 92nd Indian Science Congress, Ahmedabad (India) from January 3-7, 2005
85. Participated and presented a paper entitled “THE TOUCHING STORY OF AN INDIAN MATHEMATICIAN” in International Conference on History and Heritage of Mathematical Sciences, Indore (India) from December 16-19, 2004.
86. Participated and presented a paper entitled "DESIGN OF A WINDMILL ROTOR USING LINEARIZATION OF BLADE CHORD AND BLADE SETTING" in National Seminar on Mathematics And Its Application held at Bengal Engineering College (Deemed University) Howrah on 27th March, 2004.
87. Seminar attended with Presentation of a paper entitled “ GLOBAL DATABASE MODELLING FOR SOLAR SIMULATION OF BUILDINGS “ in All India Inter Science, Engineering & Technology Colleges ACADEMIC MEET 2000 ,held at Bengal Engineering College (Deemed University) Howrah (14th-15th July) organized by FORUM OF SCIENTISTS, ENGINEERS & TECHNOLOGISTS (FOSET) B.E College , Howrah. T-he paper was judged THIRD in the meet
88. Participated and Presented a paper entitled “DYNAMIC HEAT FLOW MODELLING OF BUILDING STRUCTURES in National Renewable Energy Convention (NREC-2000), 30th November -2nd December 2000, Organized by IIT Bombay, Mumbai-400076.

WORKSHOP (Organized as Convener/ coordinator/ Chairman):

1. **Secretary:** International Conference on Statistics Mathematical Physics (ICSMP 2022) (Online mode) with **CEMK, India** and **UBI Portugal** during 15-16 April 2022.
2. **Coordinator:** AICTE sponsored Five Day Faculty Development Programme (FDP) on “ Examination Reforms” during 24th January 2022 to 28th January 2022 at NIT Agartala
3. **Chairman:** International Conference on Applied Mathematics and Computational Intelligence (ICAMCI-2020), Sponsored by **DST, CSIR and TEQIP III** during 23-24, December 2020 at NIT Agartala
4. **Coordinator:** **Five Day** Workshop on Linear Algebra and Multivariate Calculus for Science and Engineering Teachers (LAMCSET 2019) Sponsored by **TEQIP III** during 1-5 January 2019 at Department of Mathematics , **VNIT Nagpur** under Twinning Programme
5. **Convener:** **Five Day** National Workshop in Soft Computing and its Applications in Real Life Problem Sponsored by **TEQIP III** during 9-13 April 2018 at NIT Agartala
6. **Joint Convener:** National Workshop on Recent Advances in Applied Soft Computing Techniques Sponsored by **TEQIP II** during 29-31 January 2016 at NIT Agartala.
7. **Convener:** National workshop on Techniques in Bioinformatics, Sponsored by **Department of Biotechnology (DBT)** Govt. of India. 07-08 August, 2015, NIT Agartala.
8. **Convener:** National workshop on Recent Advances in Applied Mathematics Sponsored by **National Board for higher mathematics (NBHM)**, Department of Atomic Energy, Govt. of India. 20-21 September 2014, NIT Agartala.
9. **Convener:** Two week Mini Mathematics Training and Talent search (Mini MTTs) Programme from 17-29 JUNE 2013 Sponsored by **National Board for Higher Mathematics (NBHM)**, Department of Atomic Energy, Govt. of India, Total participant : 31(from Aizawl, Tezpur, Guwahati etc).
10. **Convener:** National workshop on Emerging Areas in Mathematics with Applications to Science & Engineering (EAMASE'09) jointly sponsored by **National Board for Higher Mathematics (NBHM), Council of Scientific and Industrial Research (CSIR) & Forum For Interdisciplinary Mathematics (FIM)**, (21-22) December, 2009.

Books / Monographs / Edited Volumes:

Sl. No.	Title	ISBN and Publisher
1.	Wind Energy Management	ISBN 978-953-307-1096-5, Publisher: INTECH, CROATIA
2.	Weibull Distribution for Estimating the Parameters (Book Chapter)	ISBN 978-953-307-1096-5 Publisher: INTECH, CROATIA
3.	Exhaust Muffler: Mathematical Modeling in the Internal Combustion Engine Exhaust Muffler	ISBN 978-3-8484-3993-5, Publisher: LAP LAMBERT Academic Publishing, Germany. (2012)
4	Vertex Coloring: For the analysis of Gaussian & Laplacian Image Pyramid	ISBN-13: 978-3659200663 Publisher: LAP LAMBERT Academic Publishing, Germany. (2012)
5	Hilbert Transform in Engineering	ISBN-13: 978-3-659-22902-2 Publisher: LAP LAMBERT Academic Publishing, Germany. (2012)

Details of M.Sc student Project: 17(guided)

Sr No.	Name of Student	Year	Title of the M.Sc Project
1.	Mr. Uttam Pal	2012	Applications of Linear Algebra in Engineering systems.
2.	Miss Kanka Rani Sen	2013	Some study on Fishery Management Model
3.	Mr. Ankan Das Adhikari	2013	Some study on Population Growth Model
4.	Mr. Tushar Debnath	2014	Application of Wave Equation in Silencers/ Mufflers
5.	Mr. Ranjit Barman	2015	Some study on Helmholtz Wave Equation and its application
6.	Mrs. Mayuri Jadhav	2016	Population Dynamics & its applications
7.	Ms Samashree Dey	2017	Some studies on Population Model & its solution by Differential Transform Method
8.	Mr. Ranu singh	2018	Comparison test between Logistic and Gompertz growth model and its application in Mathematical Biology
9.	Satadip Das	2020	Deterministic Models in Mathematical Epidemiology
10.	Jiban Krishna Muhari	2020	Phase Plane Analysis of Prey Predator Model
11.	Dharmendra kumar	2021	Corona Virus diseases 2019
12	Deepraj Nath	2021	Some study on Two Specis Intereaction using Rosenzweig – Macarthur Model
13	Sourav Das	2022	Ongoing (Left after getting Govt. Job)
14.	Devendra Singh	2022	Mathematical Modeling of Tumor Growth and stability Analysis with Chemotherapy
15.	Shivam Sharma	2023	Cloud Based Corporate Project Development Strategy
16.	Shreya Roy	2024	Machine Learning for disease Classification identifying Optimal Model
17.	Bappaditya Maity	2024	GoGrocers: A Online Shoping Website using MERN Stack
18.	Priti Gupta	2025	Ongoing
19.	Pritam Chakraborty	2025	Ongoing

Details of M.Tech / MCA student Project: 2 (guided)

Sr No.	Name of Student	Year	Title of the M.Tech/ MCA Project
1	Mr. Gautom Prabhakar	2019-2020	Working on the ISRO TEA project
2.	Mr. Prantik Biswas (M.Tech Student)	2014-15	An Efficient Approach on The Construction and Generalization of Spanning Trees Directly from Realizable Degree Sequences
3.	Mr. Syham Sundar (MCA Student)	November 2014	Comparative study of Image DE noising

Details of UG / BS-MS/BT-MT student Project: 19 (guided)

Sr No.	Name of Student	Year	Title of the M.Tech/ MCA Project
1.	Lakmulla Shiva Kumar	2017	Solution to the LOTKA-VOLTERRA model using PSAM and analysis of ALEE effect on the LOTKA-VOLTERRA model
2.	Sudip Kanti Das	2017	Solution of differential equation by Taylor series and higher order arithmetic progression
3.	Mr. RamaRam Choudhury	2018	A general study of lotka volterra model and natural decomposition method
4.	Mr. Anuj Kumar	2018	Some Elementary study on Theory of Relativity
5.	Miss Kakali Debnath	2018	Mono to multi-scale modelling in population dynamics- an approach
6.	Mr. Sandip Nath	2018	Study of solid Tumor growth by using mathematical model
7.	Miss Tandra Deb	2019	Some study on SIR Epidemic Models and its Analysis
8	Shirshendu Datta	2019	Mathematical Modeling, Analysis and Simulation of Tumor Dynamics with Drug Interventions
9	Miss Bithika Sinha	2020	Some Study On Symbiotic Relationships And Modelling The Interactions Through Species Carrying Capacities
10.	Chaitanya Gali	2020	Study on Lotka Volterra Predator Prey Model
11.	Didhriti Roy	2021	Mathematical Modeling on Reaction Kinetics and its steady State Analysis
12.	Andrew debbarma	2021	Mathematical Modeling of Infectious Disease: A case study on Dengue Dynamics
13.	Sudarshan Das	2022	Some study on Extended Logistic Growth Model
14.	Rupa Majumder	2022	Mathematical Analysis of Prey Predator Population Dynamics using Lotka Volterra Functional Response

15.	Subhradeep Dutta	2022	Evolutionary Mathematics: Mathematical analysis of Darwinian and Mandelian Genetics
16.	Apurba Debnath	2023	A case Study on Malaria Fever in Tripura through advance Intelligent Techniques
17.	Banya Das	2023	A parametric study on optimal design of Multilayer Neural Network coupled with Genetic Algorithm for input output modeling
18.	Shantanu Sutradhar	2023	Some studies on the two species competition model and its stability analysis
19.	Aditya Raj	2023	A study on Hand written digit recognition using Convolution Neural Network
20.	Dharmendra Raj	2024	Heart disease prediction: machine learning project
21.	Korbi Debbarma	2024	A Study On Selection Of Mobile Phone Using Ahp-Topsis
22.	Naima Debbarma	2024	A Comparative Study on MCGDM Methods to find the Best Domain for Women Empowerment in India”.
23.	Sahu Nabin Narayan	2025	Ongoing
24.	Divansghu Verma	2025	Ongoing
25.	Arjun Paswani	2025	Ongoing
26.	Rahul Kumar Sharma	2025	Ongoing
27.	Ashesh Paul	2025	Ongoing
28.	Shivam kumar	2025	Ongoing

Details of PG / BS-MS student Project: 12 (guided)

Sr No.	Name of Student	Year	Title of the M.Tech/ MCA Project
1.	Lakmalia Shiva Kumar	2018	Solution to the LOTKA-VOLTERRA model using PSAM and analysis of ALEE effect on the LOTKA-VOLTERRA model
2.	Sudip Kanti Das	2018	Solution of differential equation by Taylor series and higher order arithmetic progression
3.	Mr. RamaRam Choudhury	2019	Analysis of dynamics of Hepatitis C
4.	Mr. Anuj Kumar	2019	Analysis of general theory of Relativity

5.	Miss Kakali Debnath	2019	Population dynamics and some mathematical modelling
6.	Mr. Sandip Nath	2019	Study of Tumor growth and treatment by using mathematical model
7.	Tandra Deb	2020	Some study on Compartmental Epidemic Models
8.	Miss Bithika Sinha	2021	Some Study on a relationship between SIR Model and Generalised Logistic Distribution with applications to Covid 19
9.	Chaitanya Gali	2021	Study on Diabetic Mellitus
10.	Shirshendu Datta	2021	Mathematical Modeling, Analysis and Simulation of Tumor Dynamics with Drug Interventions
11.	Didhriti Roy	2022	Analysis of Predator Dependent Functional Responses in a Predator Prey Model incorporating Prey Refuge
12.	Andrew debbarma	2022	Mathematical Analysis of Dengue Dynamics of Odisha
13.	Rupa Majumder	2023	Some study on comparison of two functional Responses on Prey Predator Models incorporating Prey Refuge
14.	Subhradeep Dutta	2023	Some Analysis on 3- Species Predator Prey Interaction involving Holling Type II & III Functional Responses and Limiting Resource parameter
15.	Apurba Debnath	2024	A Case Study on Analyzing Heart Diseases: Unravelling Insights for Improved Diagnosis and Treatment
16.	Banya Das	2024	L-Jaya CoSine: A novel hybrid meta-heuristic optimization algorithm for engineering design problem and data classification
17.	Shantanu Sutradhar	2024	Intelligent Levenberg-Marquardt Predictive Networks for Analyzing Three-Stage Prey-Predator-Top Predator Dynamics with Shelter, Linear Harvesting, and Supplementary Food Effects
18.	Aditya Raj	2024	A study on handwritten digit recognition using Convolutional Neural Network
19.	Dharmendra Raj	2025	Ongoing
20.	Korbi Debbarma	2025	Ongoing

21	Naima Debbarma	2025	Ongoing
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Details of Ph D Students guiding: 10 (Awarded), 04(Ongoing)

Sr No	Name of Student	Department /Year of registration/Enrollment No.	Title of the Dissertation
1	Ms Susmita Paul (Co Supervisor- Prof. Kripasindhu Choudhury, Jadavpur University)	Dept of Mathematics NIT Agartala/ 2012/ 12DMA005	SOME PROBLEMS ON DYNAMICS AND CONTROL OF POPULATION GROWTH MODELS AND EPIDEMIC MODELS (Awarded on 10.05.2016)
2	Ms Sangita Das (Co Supervisor- Dr. U. K. Bera NITA)	Dept of Mathematics NIT Agartala /2012/ 12DMA011	NUMERICAL STUDY ON NATURAL CONVECTIVE HEAT TRANSFER INSIDE CLOSED CAVITIES (Awarded on 17.09.2018)
3	Mr. Suman Deb	Dept of Computer Science & Engineering NIT Agartala /2012/ 12DCS004	Didactic design scaffolding BYOD supported teaching learning and models for enhancing classroom interaction with technology inclusion. (Awarded on 21.01.2021)
4	Mr. Abhishek Paul (Co Supervisor- Prof. Shanti Prasad Maiti, IEST Shibpur)	Dept of Computer Science & Engineering NIT Agartala /2012/ 12DCS003	On Modification in Histogram Equalization for Enhancement in Digital Images (Awarded on 15.01.2020)
5	Mr. Ankur Biswas (Co Supervisor- Prof. Shanti Prasad Maiti, IEST Shibpur)	Dept of Computer Science & Engineering NIT Agartala / 2012/ 12DCS002	On active contour methods in medical image segmentation (Awarded on 06.07.2020)
6	Mr. Abhijit Debberma (Co Supervisor- Prof. B. Purokayastha, Assam University)	Dept of Computer Science & Engineering NIT Agartala /2012/ 12DCS001	Named Entity Recognition For Low Resource Language (Awarded on 22/11/2021)
7	Mr. Kishore kumar Dhar (Co Supervisor- Dr. Asish Mitra, CEM Kolaghat)	Dept of Computer Science & Engineering NIT Agartala /2012/ 12DCSR003	EXPERIMENTAL STUDY ON BUBBLE RISE IN STAGNANT FLUID AND COMPUTER SIMULATION OF NATURAL CONVECTIVE NANO FLUID FLOW AND ITS APPLICATION IN IMAGE PROCESSING. (Awarded on 09.11.2022)
8	Mr. Mitra Barun Sarkar (Co Supervisor- Dr. Aniruddha Mondal, NIT Durgapur)	Dept of Electronics & Communication Engineering NIT Agartala /2012/ 12DEC021	PROPERTIES OF IN DOPED TIO2 AND ITS APPLICATIONS IN OPTOELECTRONICS (Awarded on 16.05.2018)

9	Mousumi Dhar	Dept of Mathematics NIT Agartala /2016/16EDMAR003	Mathematical modeling of intra and inter host transmission dynamics of infectious diseases incorporating some real life applications (Awarded on 28.07.2021)
10	Shilpa Samadder	Dept of Mathematics NIT Agartala /2018/	Analyzing the Dynamics of Multi - Species Prey- Predator Interactions by Modeling both Direct and Indirect effects (Awarded on 30/08/2023)
11	Partha Sarathi Debnath	Dept of Mathematics NIT Agartala /2020/	Working on Mathematical Biology (Course work going on)
12	Mr. Sudipta Biswas	Dept of Mathematics NIT Agartala /2021/ Part Time	Working on Mathematical modeling (Course work going on)
13	Jayanto Mahato	Dept of Mathematics NIT Agartala /2023	Working on Mathematical modeling (Course work going on)
14	Debasish Patra	Dept of Mathematics NIT Agartala /2024	Working on Mathematical modeling (Course work going on)

CHAIRMAN DOCTORAL COMMITTEE

Sl.	Name of the Ph.D scholar	Department
1.	Amit Debnath	Computer Science & Engg
2.	Binayak Choudhury	Production Engg. Dept.
3.	Ritabrata Dey	Civil Engg. Dept
4.	Jagagnath Nath	Mathematics Department
5.	Birojit paul	Mathematics Department
6.	Lokesh Ranjan	Production Engg. Dept.
7.	Rajib Choudhury (17EDCSR002)	Computer Science & Engg
8.	Sharmistha Majumder (17EDCSR004)	Computer Science & Engg
9.	Mili Dhar (18EDCSR001)	Computer Science & Engg

INVITED LECTURE

- Delivered invited lecture at **Maharaja Bir Bikram University Agartala** in National Workshop on Computational Mathematics and its Application during 12th -16th September 2019.
- Delivered invited lecture at **Tripura Institute of Technology, Narsingarh Agartala** in TEQIP II sponsored FDP on “Discrete Mathematics and Its Applications in Engineering” during 26th -28th October 2016.
- Delivered invited lecture at **Gujrat Technological University, Ahmedabad, Gujrat** in Research Week 2016 and also act as an Expert Professor to review Doctoral Candidates & PG Students at the Research Week 2016 during 11-12 April 2016.
- Delivered invited lecture at **Government College of Engineering & Textile Technology, Berhampore West Bengal** in Summer School on **Introduction to Matlab & Simulink: Its Engineering Applications** during 29th June 2015 to 3rd July 2015.
- Delivered invited lecture at **Gujrat Technological University, Ahmedabad, Gujrat** in Research Week 2015 and also act as an Expert Professor to review Doctoral Candidates & PG Students at the Research Week 2015 during 13-15 April 2015.
- Delivered invited lecture at **Tripura Institute of Technology, Narsingarh Agartala** in National Level Faculty Development Programme on Topics on Data Mining during June 10-21, 2013.

7. Delivered invited lecture at **College of Engineering & Management, Kolaghat** in “National Workshop on Applied Optimization” during June 29-30, 2013.
8. Delivered invited lecture at **NIT Agartala** in “Rashtriya Avishkar Abhiyan” during May 16-20, 2016.

VISITED ABROAD

1. Visited Singapore for presenting a paper in ICMBS 2015.
2. Visited AIT Bangkok for presenting a paper in ICRST 2016.
3. Visited Harvard University, Boston, USA for presenting a paper in IJAS 2017.

WORKSHOP AND SHORT TERM COURSES ATTENDED

1. Participating in yearlong course entitled “GITA for life in light of Shri Aurobindo” through online mode as a special Training programme organized by IIT Guwahati during 21/02/2022 to 20/02/2023 from 09.00pm TO 10.00 pm on Friday, Saturday and Sunday.
2. Participated in Central Vigilance Commission (CVC) Sponsored Three Days Online Induction Training Programme for Part Time CVOs under Ministry of Human Resource Development Through CBI Academy” during February 22-23, 2021 and March 23, 2021.
3. Participated in AICTE Sponsored Five Days Faculty Development Programme on “Model Curriculum as Prescribed by AICTE” organized by Department of Mathematics NIT Agartala during January 18- 22, 2021 .
4. Acted as Member of the Organizing Committee in International Conference on Emergent Research in Mathematics and Engineering “ during May 17-18, 2019 at NIT Agartala
5. Acted as Vice Chairman in One week TEQIP III Workshop on "Vedic Mathematics ” during January 22- 26, 2019 at NIT Agartala.
6. Participated in One week TEQIP III Workshop on "Academia and Industry Interaction ” during June 25- 29, 2018 at **NIT Agartala**.
7. Participated in One week TEQIP III Workshop on "Active Learning, Autonomy, Academic Governance and R& D” during May 28 to 1 June 2018 at **IIT Roorkee**.
8. Participated in 2 day Workshop on "Startup and Innovation” on 20-21 March 2018 organized by SPIU NE at NEDFi Convention Centre **Guhawati**.
9. Participated in the regional Workshop on "National Information System for Climate and Environmental Studies (NICES) on 5th February 2018 at **NIT Agartala**.
10. Participated in TEQIP III Orientation Workshop on "Startup and Innovation” on 22-23 December 2017 at Mini Auditorium, **IIT Guhawati**.
11. Participated in “CASE METHOD WORKSHOP” at **IIM Calcutta** during 2-3 March 2017.
12. Participated in "Two days National Workshop on Advances in Two-Phase Flow and Heat Transfer (March 25-26, 2016) at **NIT Agartala**.
13. Participated as Organizing Committee Member in Two Days National Workshop on Cloud Computing during 20th to 21st October, 2014 at **NIT Agartala**.
14. Participated Two days workshop on Matlab and its Application in ANN, Fuzzy Logic & genetic Algorithm under TEQIP II during 20th to 21st March, 2014 at **NIT Agartala**.
15. Participated as Technical Member in Three Days spring school on Algorithms for Mobile and Pervasive Computing sponsored by **ISI kolkata** during 24th to 26th February, 2014 at **NIT Agartala**.
16. Participated Two days National Conference on Ancient Indian Mathematics Sponsored by Tripura Mathematical Society during 8 - 9 February 2014 at **Women College Agartala, Tripura**.
17. Participated Two days workshop on Green Energy and Economy under TEQIP II during 6-7 February 2014 at **NIT Agartala**.
18. Participated Two days workshop on Advances in Multi – Criteria Decision Making (MCDM) Techniques under TEQIP II during 13-14 January 2014 at **NIT Agartala**.
19. Participated as Technical Member in Two Days National Workshop on MATLAB and its Application in Digital Image Processing and Pattern Recognition during 29-30 November, 2013 at **NIT Agartala**.

20. Participated one day National workshop on “ Contemporary and Future Perspectives of Physics Applicable to Science and Technology: Challenges and Opportunities” on 4th February 2013 at **NIT Agartala**.
21. Participated Two day ISTE Workshop on “ Aakash for Education “ conducted by **IIT Bombay** on 10-11 November 2012.
22. Participated Annual Review Respond Projects programme, Sponsored by **ISRO Space Application Centre** Ahemedabad from 1st November 2012 to 2nd November 2012 at ISRO , SAC, Ahemedabad
23. Participated Brain Storming workshop funded by **DST Government of India** 18-19 October 2012 at Pragna Bhawan Agartala
24. Participated One Day Workshop on “Intellectual Property Rights” Sponsored by **National Institute of Technology, Agartala & TIFAC (DST) Govt. of India, New Delhi** in collaboration with MHRD IPR Chair at Tezpur University at NIT Agartala on 10th August 2012.
25. Participated three day “National workshop on CFD and its application in Bio fluid Dynamics” sponsored by **AICTE, DST & DBT**, at College of Engineering & Management, Kolaghat from (2 - 4) January, 2012
26. Participated workshop on Reliability Theory and Survival Analysis during 23-25 November, 2011, in **Indian Statistical Institute, Kolkata**.
27. Participated two day workshop on Quality Enhancement for Teachers of Engineering Education through **National Programme on Technology Enhanced Learning (NPTEL)**, 16-17 NOV, 2011 at IIT Kharagpur
28. Participated two day short term course on Mathematical Analysis and its Applications organized by **University Grant Commission**, Academic Staff College at Department of Mathematics, Jadavpur University, Kolkata from 22nd March 2011 to 23rd March 2011.
29. Participated 32nd Orientation Programme organized by **University Grant Commission**, Academic Staff College, Jadavpur University, Kolkata from 22nd November 2010 to 20th December 2010 with **A Grade**
30. Participated QIP Short Term Course sponsored by AICTE entitled “ High Performance parallel and Enterprise Computing” at **IIT Kharagpur** from (12-18) April, 2010
31. Participated AICTE / MHRD sponsored Summer School on Functional English for College Science and Engineering Teachers at **IIT Kharagpur** from (14-20) July, 2009
32. Attended workshop Lectures on Probability and Stochastic Process III held at **Indian Statistical Institute** Kolkata from November (20-24) , 2008.
33. Participated in the national workshop “ Basics Of Computational Fluid Dynamics” sponsored by **AICTE & DST**, at College of Engineering & Management, Kolaghat from (11-13) January, 2008
34. Participated UGC sponsored University with potential for excellence Scheme on Energy System And Climate Change at **Jadavpur University** on 10 January, 2007.
35. Participated UGC sponsored University with potential for excellence Scheme on Energy Conservation at **Jadavpur University** on 15 December, 2006.
36. Participated AICTE sponsored QIP Short Term Course on Modelling And Simulation Of Engineering Systems In Multi-Energy Domains at Department of Mechanical Engineering, **Indian Institute of Technology, Kharagpur** during December 20-25, 2004.
37. Participated in the national workshop “Causes And Mitigation Of Pollution Caused By Power Plants” sponsored by **AICTE** & co sponsored by **WBPDC**, at College of Engineering & management, Kolaghat on 7th August, 2004.
38. Participated in the workshop on “Review Of Engineering Degree Curriculum Of Mathematics” held at **National Institute of Technical Teachers Training and Research (NITTTR)**, Kolkata, from 26th – 30th July, 2004.
39. Participated ISTE – AICTE sponsored Short Term Training Programme On Present Trends & Future Prospects Of Non-Conventional Energy Problems & Challenges (June 9-21, 2003) at Department Of Mechanical Engineering, **Birla Institute Of Technology, Mesra, Ranchi**.
40. Participated in the One Day Entrepreneurship Awareness Camp On Solar Energy held on 23rd march, 2001 at **Jadavpur University**, sponsored by **West Bengal Renewable Energy Development Agency & Ministry of Non- Conventional Energy Sources**.
41. Workshop attended on “ National Workshop on Energy Studies” organized by School of Energy Studies, **Jadavpur University, India** on (08 – 12) January, 2001

- **REVIEWER:**
 1. IEEE Transactions on Industrial Informatics
 2. IEEE Access
 3. IEEE Consumer Electronics Magazine
 4. Journal of Engineering Letter,
 5. Journal of Engineering Science and Technology
 6. Scientia Iranica
 7. Mathematical Reviews

MEMBERSHIP:

1. Selected for the Prestigious The National Academy of Sciences, India (NASI) Membership 2023
2. Fellow , Institute of Engineers(India) (Membership No: F-1254916)
3. IEEE Senior Membership no. 95625524
4. Life member Biomathematical Society of India. No. BMSI/L/0125/22
5. Life Member Solar Energy Society of India No. LM/2876/2024
6. National Network for Mathematical and Computational Biology (NNMCB), SERB, Govt. of India
7. Indian Society for Technical Education (ISTE), Membership Number: GM56300
8. International Association of Computer Science & Information Technology (IACSIT), Member NO.: 80348645
9. Society of Automotive Engineers, India ,SAE Number:-7031000014
10. Tripura Mathematical Society Life Membership no. 449/2016

ADMINISTRATIVE RESPONSIBILITIES

1. HOD, Dept. of Education, NITA from 5th July 2024- till date
2. Co-PI In-charge of CCMT & CCMN for the Year 2024
3. Chief Vigilance Officer (CVO) of NITA from 12th January 2016 – 15th September 2023
4. Chief Vigilance Officer (CVO) of IIIT Agartala from 2nd July 2021 – 15th September 2023
5. Chairman, Student Activity Centre from 21st January 2022 – till date
6. Chairman DPC Mathematics from 29th May 2023 - 7th June 2024
7. HOD Mathematics from 18th September 2017 – 21st November 2019
8. HOD Mathematics (i/c) from 2nd February 2021 – 26th March 2021 (53 Days)
9. Associate Dean (Faculty Welfare) from 26th May 2015- 17th April 2018
10. Start Up Cell Coordinator (TEQIP III) from 30 November 2017- 14th December 2018
11. HOD CSE from 27th July 2012 to 17th February 2015
12. Member Centre for Rural and Tribal Development, NITA from Jan 2024
13. Member Secretary DPPC Mathematics from 19.08.2020 to till date
14. BTMT course Coordinator of Mathematics Department from 2021
15. Faculty Advisor of M.Sc, BSMS and BTMT student from 2021 onwards.
16. Core Committee member Intellectual Property Right Cell (IPRC) from 14th Jan 2019
17. Core Committee member of NIT MCA Entrance Test (NIMCET 2014)
18. Member Institute Purchase Committee (IPC) from 27th July 2012 to 17th February 2015
19. Purchase committee Chairman - Director's Bungalow, Transit house, Guest house
20. Chairman DPPC & DUPC of CSE Department(27th July 2012 to 17th February 2015)
21. Member DPPC of Mathematics Department
22. Member of Board of Under Graduate Studies (BUGS) from 24.08.2020
23. Chairman DPC – Mathematics Department from 10th April 2015 for four years
24. Chairman DPC – Mathematics Department from 29th May 2023 onwards
25. Members in the committee for the Convocation 2013, 2014 and 2015.

26. Technical Committee member of different workshop organized at NIT Agartala
27. Chairman for selection to a post of Technical Assistant under NIMCET 2014
28. Member Scrutiny Committee for attending Conference, Seminar etc. under TEQIP II