

Information Regarding Research & Publications

Number of publications:

Sl. No	Name of the faculty	International Journal	National Journal	Conference	Books/ Books Chapter
1	Dr Paritosh Bhattacharya	75	00	International: 55 National: 12	00

Publication Details: Dr Paritosh Bhattacharya

2022

1. Abhisek Paul ^a, Paritosh Bhattacharya ^b, Santi P. Maity ^c “Histogram modification in adaptive bi-histogram equalization for contrast enhancement on digital images” in **Optik**, pages 168-899(2022)
2. Kishore Kumar Dhar, Asish Mitra, Paritosh Bhattacharya, "Edge Detection of Image Using Image Divergence and Downsampling Method ", in **International Journal of Engineering and Manufacturing (IJEM)**, Vol.12, No.3, pp. 14-24, 2022. DOI: 10.5815/ijem.2022.03.02
3. Dridhiti Roy¹, Paritosh Bhattacharya², “Spatial Dynamics in a Predator-Prey Model with Beddington-Deangelis Functional Response”, in **Journal of Mechanics of Continua and Mathematical Sciences**, Cont. & Math. Sci., Vol.-17, No.-2, February (2022) pp 22-29
4. Shilpa Samaddar¹ , Mausumi Dhar² , Paritosh Bhattacharya, “Local Stability Analysis of a Predator-Prey Dynamics Incorporating both Species Density Increasing Functional Response” in **Journal of Mechanics of Continua and Mathematical Sciences**, Vol. 17, No.1, January (2022) pp 81-87
5. Kishore Kumar Dhar¹ , Asish Mitra² , Paritosh Bhattacharya³, “Thermal Effect on Bubble Rise - an Experimental Study”, in **Journal of Mechanics of Continua and Mathematical Sciences**, Vol.-17, No.-3, March (2022) pp 12-17

2021

6. 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)

7. 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)
8. Abhisek Paul ^a, Tandra Sutradhar ^b, Paritosh Bhattacharya ^c, Santi P. Maity ^d, “Infrared Images Enhancement using Fuzzy Dissimilarity Histogram Equalization” in **Optik**, Vol. 247, December (2021) pages 167-887
9. Ankur Biswas, Paritosh Bhattacharya, Santi P Maity, Rita Banik, “Data Augmentation for Improved Brain Tumor Segmentation”, in **IETE Journal of Research**, pages 1-11 (2021)

2020

10. 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>.
11. 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” in **Solar Energy, SCI, Impact Factor 5.170**, 208, 1091-1102 (2020)
12. 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)**.
13. K. 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).
14. 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
15. 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)**.
16. A Biswas, N Debnath, D Datta, S Das, P Bhattacharya, “A Hybrid Approach for Fast 3D Segmentation of Brain Tumor”, in **Journal of Computational and Theoretical Nanoscience**, Vol. 17, Issue 1, pages 340-346 (2020)

2019

17. 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>).
18. 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.**
19. 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.**
20. A. Debberma, P. Bhattacharya and B.S. Purkayastha “ Named Entity Recognition for 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).**

2018

23. 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.**
24. 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**
25. 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**
26. 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**

27. 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**)
28. Mitra Barun Sarkar , Bijit Choudhuri , P. Bhattacharya , R.N. Barman , A. Ghosh ,S.M.M. Dhar Dwivedi , S. Chakrabartty, 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**).
29. 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**).

2017

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, 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**)
32. 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**.
33. 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**
34. 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**.

2016

35. 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 4Pp 3067-3090 – Springer Journal.**
36. 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.**
37. 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**
38. 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.**
39. 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.**
40. 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)**
41. 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)**

2015

42. 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.
43. 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**
44. 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
45. 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.
46. 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)
47. 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).
48. 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)
49. 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)

50. 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)
51. 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)
52. 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).
53. 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, issue5, Pp 569-592 (2015)**

2014

54. 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).
55. 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).**
56. 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).
57. 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).
58. 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)
59. 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) .

60. 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)
61. 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).
62. 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.**
63. 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)

2013

64. 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.

2012

65. P. Bhattacharya, S. Mukhopadhyay, P. K. Bose, B. B. Ghosh “ Optimized use of Solar Tracking System and Wind Energy” in **Elsevier Journal Procedia Technology4 (2012) 834 – 839.**

2011

66. 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.
67. 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.

2010

68. 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.

2009

69. 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.

2008

70. 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.

2007

71. 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.
72. 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.
73. 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.

2006

74. 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).

2005

75. 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) .**

International Conferences:

2020

1. 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**).
2. 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**).
3. 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**.

2019

4. M. Dhar, S. Samaddar, P. Bhattacharya, “Global behavior of a within host viral dynamic model with non-cytolytic cure effect” in **TENSYMP-2019** during 7th-9th June 2019, Kolkata.

2018

5. 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**).
6. 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)**).

2017

7. 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.**
8. 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, 2017at **Xt. Xavier College Jaipur. (Springer CCIS Series (SCOPUS INDEXED))**.
9. 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)**.
10. 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 .**
11. 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.
12. 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.

2016

13. 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).
14. 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.
 15. 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.
 16. 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.
 17. 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.
 18. 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)
 19. 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 ISBN (ISBN: 978-1-138-02983-5).
 20. 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.

2015

21. 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.**
22. 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).
23. S. Deb, S.Saha and P. Bhattacharya “ Blended Interaction for Augmented Learning-an Assistive 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.**
24. 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.**
25. 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.**
26. 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.**
27. 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.**
28. 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.**

29. 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**
30. 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.**
31. 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.**
32. 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**

2014

33. 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.
34. 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.**
35. 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.

36. 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.
37. 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.**
38. 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.

2013

39. 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.
40. 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 (ICACCTTM-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.
41. 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.**
42. 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**) .
43. 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**).

44. 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**)
45. 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**
46. 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**

2012

47. 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.**
48. 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.**
49. 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**
50. 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.**

2011

1. Paritosh Bhattacharya, S Mukhopadhyay, “Weibull Distribution and Hilbert Transform for Characterization of Wind Speed at Kolaghat”, **National Conference on Material Science & Technolgy, (3-5) June, 2011, Haldia Institute of Technology, West Bengal**
2. 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.**

3. 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).**
4. 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).**

2010

5. 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.**

2009

6. 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.**

2008

7. 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.**
8. **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.**
9. 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.**
10. 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.**

11. 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.**

2005

12. 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.**
13. 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, Ahemedabad (India)** from January 3-7, 2005

2004

14. 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.
15. 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.
16. 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.**

2000

17. 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.**

List of Ph.D Awarded:

Sl. No.	Name	Title of the Thesis	Year	Supervisor
1	Ms Susmita Paul	Some problems on dynamics and control of population growth models And epidemic models	2016	Dr. Paritosh Bhattacharya & Prof. Kripasindhu Choudhury, Jadavpur University
2	Sangita Das	Some numerical studies on closed cavities	2018	Dr. Paritosh Bhattacharya & Dr. Uttam kumar Bera
3	Mr. Mitra Barun Sarkar	Properties of in Doped Tio2 And its Applications in Optoelectronics	2018	<i>Dr. Paritosh Bhattacharya & Dr. Aniruddha Mondal, NIT Durgapur</i>
4	Mr. Abhishek Paul	On Modification in Histogram Equalization for Enhancement in Digital Images	2020	<i>Dr. Paritosh Bhattacharya & Prof. Shanti Prasad Maiti, IEST Shibpur</i>
5	Mousumi Dhar	Mathematical modeling of intra and inter host transmission dynamics of infectious diseases incorporating some real life applications	2020	<i>Dr. Paritosh Bhattacharya</i>
6	Mr. Ankur Biswas	On active contour methods in medical image segmentation	2020	<i>Dr. Paritosh Bhattacharya & Prof. Shanti Prasad Maiti, IEST Shibpur</i>

Sl. No.	Name	Title of the Thesis	Year	Supervisor
7	Mr. Suman Deb	Didactic design scaffolding BYOD supported teaching learning and models for enhancing classroom interaction with technology inclusion. (Submitted on 28.09.2020)	2020	<i>Dr. Paritosh Bhattacharya</i>
8	Mr. Abhijit Debberma	Named Entity Recognition For Low Resource Language (Submitted on 17.09.2020)	2020	<i>Dr. Paritosh Bhattacharya & Prof. B. Purokayastha, Assam University</i>

