Dr. Tapan Kumar Kar
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Department of Mathematics

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Residential Address: EE-103/1, Salt Lake, Sector-2, Kolkata-700091, West Bengal, India

Academic qualifications:

1990: BSc (Honours) (**First Class first**) (Calcutta University) Major: Mathematics, Minors: Physics and Chemistry.

1993: MSc.(Calcutta University)(**First class 2nd**) Applied Mathematics, Specialization: Mathematical Biology.

1993: Qualified "National Eligibility Test (**NET**)" conducted by Council of Scientific and Industrial Research (CSIR) and University Grants Commission (UGC)

1993: Qualified "Graduate Aptitude Test in Engineering (**GATE**)", Ministry of Human Resource Development (MHRD), Government of India.

1994: M.Phil (Calcutta University) Applied Mathematics, Specialization: Mathematical Ecology.

2004: Ph.D. (Jadavpur University), Thesis title: Some Mathematical Models on Bioeconomic Harvesting Problems of Multispecies Fisheries. Supervisor: Professor Kripasindhu Chaudhuri, Jadavpur University.

2005-07: Post Doctoral Fellow (JSPS) Yokohama National University, JAPAN

2013: Visiting Professor, Kyoto University, Japan

2014: JSPS Invitation fellow, Kyushu University, Japan.

2017: Visiting Professor, Kyoto University, Japan

Teaching experience: 22 years

1996-2001   Lecturer, Department of Mathematics, Bengal Engineering and
            Science University, Shibpur, Howrah, India.

2001-2005: Senior Lecturer, Department of Mathematics, Bengal Engineering
            and Science University, Shibpur, Howrah, India.

2005- 2008: Assistant Professor, Department of Mathematics, Bengal
             Engineering and Science University, Shibpur, Howrah, India.

2008- 2011   Associate Professor, Department of Mathematics, Bengal
             Engineering and Science University, Shibpur, Howrah, India

2011 : Professor, Department of Mathematics, Indian Institute of Engineering
        Science and Technology, Shibpur

Research areas:

Dynamical systems.

Stability and bifurcation theory.

Population dynamics.

Mathematical ecology : Theoretical studies on ecology, population management, food chain, conservation of aquatic ecosystems, sustainable use of ecosystem services.

Modeling and control of epidemiological problems.

Mathematical modeling of eco-epidemiological problems.

Pest control.

Impact of invasive species on the sustainable utilization of native species

Research experience: 25 years

Courses undertaken:

Undergraduate: All the Mathematics courses at undergraduate level.

Post graduate: Special functions, C-language, Computer

programming, Nonlinear Dynamics, Mathematical   Ecology.

Ph.D. guidance (awarded/thesis submitted /registered /enrolled):

1. Ujjwal Kr. Pahari ---   Awarded
2. Swarnakamal Misra – Awarded
3. Ashim Batabyal ---   Awarded
4. Saroj Chattopadhyay-Awarded
5. Kunal Chakraborty – Awarded
6. Soovoojeet Jana   --- Awarded
7. Prasanta K. Mondal – Awarded
8. Bapan Ghosh --------- Awarded
9. Uttam Das   ------- Awarded
10. Abhijit Ghorai ----   Awarded
11. Milon Chakraborty ---Awarded
12. Samadyuti Halder ----Awarded.
13. Srabani guria -------- Awarded
14. Palash Halder   ---   Awarded
15. Prosenjit Paul ------ Awarded
16. Chaity Ganguly ----   Registerd, Institute Fellow
17. Debprasad Pal   ----   Registered, CSIR Fellow
18. Kunal Das   -----   Registered Fellow
19. Debbrata Das   ----- Registered Fellow
20. Dhiraj Kr. Das   ---   Registered, Institute Fellow
21. Swapan Nandi ----   Registered Fellow
22. Anupam Khatua   Registered (DST Inspire Fellow)
23. Manotosh Mandal   ---Registered Fellow
24. Kanisha Pujaru   ---- Registered (DST Inspire Fellow)

Awards/Honours/Associateship:

1. Certificate of **highly cited research** in Biosystems is awarded in December, 2016 (Elsevier).
2. National Scholarship from Government of West Bengal, India
3. Debaprasad Ghosal Memorial Gold Medal for first Class first in B.Sc. from Ramkrishna Mission College, Narendrapur, India.
4. Certificate of merit for first class first in B.Sc (Hons) from University of Calcutta.
5. Certificate of merit for first class 2nd in M.Sc. from University of Calcutta.
6. Certificate of qualifying in Graduate Aptitude Test in Engineering (GATE), Department of Education, Ministry of Human Resource Development, Government of India.
7. Junior Research Fellowship (NET) from University Grants Commission
8. Two years Post Doctoral Fellowship from the Japan Society for the Promotion in Sciences (JSPS), Yokohama National University, Japan, 2005-2007.
9. Visiting Professor- Kyoto University, Japan, 2013.
10. JSPS invitation fellowship, Kyushu University, Japan, 2014
11. Visiting Professor, Kyoto University, Japan, 2017

Projects (completed and ongoing):

A number of socially relevant projects are carried out such as:

1. Fisheries management: Bioeconomic modelling and development of solution techniques (2005 - 2007)--- Yokohama National University, Japan.
2. Integrated modeling approach of fisheries management and policy, (2008-2011) Funded by Council of Scientific and Industrial Research (CSIR), India.
3. Incorporating ecosystem objectives into management of sustainable marine fisheries: ecological economic modelling with some case studies along the coastal side of West Bengal (2011 - 2014) --Funded by UGC, India.

4. Sustainable use of ecosystem services: Jointly determined ecological thresholds and economic trade offs (2013) -- Kyoto University, Japan.

5. Developing coupled social and ecological dynamics for global environmental change (2014) --- Kyushu University, Japan.

6. Transmission Dynamics and Spread of Infectious Diseases: Modelling, Prediction and Control (2015-2017)--Funded by CSIR, India.

7. Modelling socio-economic aspects of ecosystem management and biodiversity conservation (2017)- Kyoto University Japan.

Research publications:

International reviewed (mostly SCI/SCOPUS) journal articles:

1. **Kar, T.K**. and Chaudhuri, K. S., On non-selective harvesting of a multispecies fishery. Int. J. Math. Educ. Sci. Technol. 33(4)(2002)543-556 (Taylor & Francis).

2. **Kar, T.K**. and Chaudhuri, K. S., On non-selective harvesting of two competing fish species in the presencetoxicity, Ecological Modelling, 161(2003)125-137(ELSEVIER).

3. **Kar, T. K**. and Chaudhuri K. S., Regulation of a prey-predator fishery by taxation: a dynamic reaction model. Journal of Biological System, 11 (2)(2003)173-187 (WORLD SCIENTIFIC).

4. **Kar, T. K**. and Chaudhuri K. S., Regulation of a prey-predator fishery by taxation. Int. J. Math. Educ. Sci. Technol., .34(3)(2003)403-416 (Taylor & Francis).

5. **Kar, T. K**., Selective harvesting in a prey-predator fishery with time delay. Math. Comp. Model. 38(2003) 449-458 (ELSEVIER).

6. **Kar, T.K**., Optimal harvesting and stability for a prey-predator system with stage structure, Advances in Modelling and Analysis Series D, 8(3)(2003) 61-71(AMSE periodicals, FRANCE).

7. **Kar, T.K**. and Chaudhuri, K. S., Harvesting in a two prey one predator fishery: a bioeconomic model. The ANZIAM J. 45(3)(2004) 443-456 (Australian Mathematical Society, AUSTRALIA).

8. **Kar, T. K**., A bioeconomic model ofin a tritrophic food chain fishery, Int. J. Nonl. Model. Sci. Eng. 2(1)(2004) 1-12.

9. **Kar, T. K**. Influence of environmental noises on the Gompertz model of two species fishery. Ecological Modelling, 173(2/3)(2004) 283-293 (ELSEVIER).

10. **Kar, T. K**. Stability analysis of a prey-predator model with delay and harvesting. J. Biological Systems. 12(1)(2004)1-11(WORLD SCIENTIFIC).

11. **Kar, T. K**. Conservation of a fishery through optimal taxation: a dynamic reaction model. Commu. Nonl. Sci. Num. Simul. 10(2)(2004) 121-131(Elsevier)

12. **Kar, T.K**. and Chaudhuri, K. S. On selective harvesting of two competing fish species in the presence of environmental fluctuation. Natural Resource Modeling, 17(4)(2004)1-23(USA).

13. **Kar, T. K**. Pahari, U.K. and Chaudhuri, K. S, Management of a single species fishery with stage structure. Int. J. Math. Edu. Sci. Tech. 35(3)(2004) 403-414 (Taylor & Francis).

14. **Kar, T. K**. Management of a fishery based on continuous fishing effort. Nonlinear Analysis: Real World Application, 5/4(2004)629-644 (Elsevier).

15. **Kar, T. K**. Pahari, U.K. and Chaudhuri, K. S., Management of a prey-predator fishery based on continuous fishing effort. J. Biol. Syst. 12(3)(2004)1-13(World Scientific).

16. **Kar T. K**., Optimal harvesting and stability in a three level food chain fishery. Advances in Modelling and Analysis Series D, 25(1)(2004)31-46(AMSE Periodicals, France).

17. **Kar, T. K**., Stability of a stage structured prey-predator model. Advances in Modelling and Analysis Series D, 9(3)(2004)15-26 (AMSE Periodicals, France).

18. **Kar, T. K**. Stability analysis of a prey-predator model incorporating a prey refuge. Communications in Nonlinear Sciences and Numerical Simulation 10(6)(2005)681-691(Elsevier).

19. **Kar T. K.,** Pahari U. K. and Chaudhuri K. S., Conservation of a prey-predator fishery based on continuous fishing effort. Journal of Applied Mathematics and Computing, 19(1/2)(2005)311-326 (Korea).

20. **Kar T. K**., Stability and optimal harvesting of a prey-predator model with stage-structure for predator, Applicationes Mathematicae, 32(2005)279-291(Polland).

21. **Kar, T. K**. and Pahari, U. K. Non-selective harvesting in prey-predator models with delay, Communications in Nonlinear Science and Numerical Simulation. 11(4)(2005)499-509 (Elsevier).

22. **Kar, T. K**. Optimal harvesting and stability for a prey-predator system with stage-structure for predator, Advances in Modelling and Analysis, Series D, 10(1)(2005)53-62(AMSE Periodicals, France).

23. **Kar. T. K**. Modelling and analysis of a harvested prey-predator system incorporating a prey refuge. Journal of Computational and Applied Mathematics, 185(2006)19-33 (Elsevier).

24. **Kar. T. K**. and Matsuda H, Modelling and Analysis of Marine Reserve Creation, Journal of Fisheries and Aquatic Sciences. 1(1)(2006)17-32(Academic Journals Inc, USA).

25. **Kar, T.K**., A mathematical model on bioeconomic harvesting of a nonlinear prey-predator fishery, Int. J. Math. Educ. Sci. Technol., 37(3)(2006)309-319 (Taylor & Francis).

26. **Kar, T. K**. and Matsuda H, Controllability of a harvested prey-predator system with time delay, Journal of Biological Systems, 14(2)(2006)1-12.(World Scientific).

27. **Kar, T. K**., Controllability and optimal harvesting of a prey-predator model incorporating a prey refuge, Int. J. Math. Educ. Sci. Technl., 37(5) (2006) 559-571(Taylor & Francis).

28. **Kar, T. K** and Misra Swarnakamal, Influence of prey reserve in a prey-predator fishery, Nonlinear Analysis 65 (2006)1725-1735 (Elsevier).

29. **Kar, T. K** , Misra Swarnakamal, Mukhopadhyay B., A bioeconomic model of a ratio-dependent predator-prey system and optimal harvesting, Journal of Applied Mathematics and Computing 22(2006)(1/2)387-401 (Korea).

30. **Kar, T. K** and Matsuda H., An overview of bioeconomic analysis and management in fisheries, Journal of Fisheries and Aquatic Sciences 1(3)(2006)218-234(Academic Journals Inc, USA).

31. **Kar, T. K**. and Misra Swarnakamal, Optimal control of a fishery under critical depensation. Journal of Fisheries and Aquatic Sciences 1(3)(2006)253-261 (Academic Journals Inc, USA).

32. **Kar T. K**., Pahari U. K., Modelling and analysis of a prey-predator systems with stage-structure and harvesting, Nonlinear Analysis: Real World Applications 8(2007)601-609 (Elsevier).

33. **Kar. T. K**. and Matsuda H., Global dynamics and controllability of a harvested prey-predator systems with Holling type III functional response. Nonlinear Analysis : Hybrid Systems:1(2007)59-67 (Elsevier).

34. **Kar T. K**., Pahari U. K., A model for prey-predator fishery with marine reserve, Journal of Fisheries and Aquatic Sciences 2(3)(2007)195-205 (Academic Journals Inc, USA).

35. **Kar, T. K**., Dynamics of a ratio-dependent prey-predator system with selective harvesting of predator species, Journal of Applied Mathematics and Computing 23(2007)(1/2)385-395(Korea).

36. **Kar, T. K**., A model for fishery resource with reserve area and facing prey-predator interaction, Canadian Applied Mathematics Quarterly 14(4)(2006)387-401(Canada).

37. **Kar T. K**. and Matsuda H, Permanence and optimization of harvesting return: a stage structured prey-predator fishery, Research Journal of Environmental Sciences 1(2)(2007)35-46 (USA).

38. **Kar, T. K**., Misra Swarnakamal, Modelling and analysis of a prey-predator system with stage-structure and harvesting, Advances in Modelling and Analysis, Series D, 12(3)(2007)31-44 (FRANCE).

39. **Kar, T. K**. and Matsuda H, Regulation of a multi-fleet fishery., Research Journal of Environmental Sciences 1(3)(2007)93-101(Academic Journal Inc, USA).

40. **Kar T. K**. and Matsuda H, Sustainable management of a fishery with a strong Alee effect, Trends in Applied Science Research 2(4)(2007)271-283, USA.

41. **Kar, T. K.** .Matsuda H, A bioeconomic model of a single species fishery with marine reserve, Journal of Environmental Management 86(1)(2008)171-180 (Elsevier).

42. **Kar, T. K**. and Batbyal Ashim. (2009): Stability and bifurcation of a prey-predator model with time delay, C. R. Biologies 332, 642-651 (Elsevier)

43. **Kar, T. K**. and Chakraborty, K. (2009): Marine reserves and its consequences as a fisheries management tool. World Journal of Modelling and Simulation, 5(2), 83-95 (World Academic Press, USA).

44. **Kar, T. K**. and Chattopadhyay, S. K. A bioeconomic model of two-prey one predator system, Journal of Applied Mathematics and Informatics 27(5/6)(2009) 1411-1427.

45. **Kar. T. K**. and Chattopadhyay, S. K. Bioeconomic modeling: an application to the North-East Atlantic cod fishery, Journal of Mathematics Research 1(2) (2009) 164-178 (CCSE, Canada).

46. **Kar, T. K**. and Batabyal Ashim. Persistence and extinction of two prey and one predator system, Int. J. Engg. Sci. & Tech. 2(2) (2010) 174-190.

47. **Kar, T. K**. and Chattopadhyay, S. K. and Agarwal, R. P., Dynamics of an exploited prey-predator system with non-monotonic functional response, Communications in Applied Analysis, 14(1)(2010)21-38 (USA).

48. **Kar. T. K.** and Batabyal Ashim, Modeling and analysis of an epidemic model with non-monotonic incidence rate under treatment. J. Math. Res., 2(1) (2010)103-115.

49. **Kar, T. K**. and Batabyal, Ashim. Optimal use of fertilizer to overcome the effects of toxicity inJ. Math. Res., 2(1)(2010), 103-115

50. **Kar, T. K**. and Chakraborty, K. Bioeconomic analysis of fishery with reference to the optimal utilization and management of the resource: An application to the Maryland's Chesapeake Bay oyster fishery, Int. J. Engg. Sci. Tech 1(1)(2009)172-189.

51. **Kar, T. K**. and Misra Swarnakamal, A resource based stage structured fishery model with selective harvesting of mature species, Appl. Appl. Math. 5(1)(2010)42-58 (USA).

52. **Kar, T. K**. and Chakraborty, K. Effort dynamics in a prey-predator model with harvesting. Int. J. Inf. & Syst. Sci. 6(3)(2010) 318-332

53. **Kar, T. K**. and Chakraborty, K. A bioeconomic assessment of the Bangladesh srimp fishery, World J. Modelling & Simulation, 7(1)(2011)58-59 (World Academic Press).

54. **Kar, T. K**., Chakraborty, K and Pahari, U. K. A prey-predator model with alternative prey: Mathematical model and analysis. Canadian Applied Mathematics Quarterly, 18(2)(2010) 137-168 (CANADA).

55. **Kar, T. K**., Batabyal, Ashim and Agarwal, R. P. Modelling and analysis of an epidemic model with classical Kermack Mckendrick incidence rate under treatment, J. KSIAM 14 (2010), 1-16

56. **Kar, T. K**. and Chakraborty, K. Bio-economic modelling of a prey-predator system using differential algebraic equations, Int. J. Engg. Sci. Tech., 2(1) (2010) 13-34

57. **Kar, T. K**. and Misra Swarnakamal and Batanyal Ashim, An analysis for a two species predator-prey system with harvesting, Int .J. Advn Sci.Techn. 1(5)(2010)84-99 (USA).

58. **Kar, T. K** & Chattopadhyay, S. K., A dynamic reaction model of a prey-predator system with stage-structure for predator, Modern Applied Sciences, 4(5)(2010)183-195 (CANADA).

59. **Kar, T. K**., Batabyal, A. and Misra, S., "An Analysis for a Two Species Predator-Prey System with harvesting" International Journal of Advances in Science and Technology, 1(5) (2010) 76-90.

60. **Kar, T. K** and Ghosh, Bapan, Bifurcation and feedback control of a stage-structure exploited prey-predator system. Int . J. Engg. Sci. Tech. 2(6) (2010)131-141

61. **Kar, T. K** and Chattopadhyay, S.K; A focus on long-run sustainability of a harvested prey-predator system in the presence of alternative prey, C. R. Biologies 333 (2010) 841-849 (Elsevier).

62. **Kar, T. K**. and Batabyal, Ashim, Stability and optimal control of an SIR epidemic model by vaccination, BioSystems 104(2011)127-135 (Elsevier).

63. Chakraborty, K. Chakraborty, M and **Kar, T. K**. Optimal control of harvest and bifurcation of a prey-predator model with stage structure. Applied Mathematics and Computation 217(2011)8778-8792 (Elsevier).

64. **Kar, T. K**. and Ghorai, Abhijit, Dynamic behaviour of a delayed predator-prey model with harvesting, Applied Mathematics and Computation 217(2011)9085-9104 (Elsevier).

65. **Kar, T. K**. and Mondal, Prasanta Kumar, Global dynamics and bifurcation in delayed SIR epidemic model, Nonlinear Analysis : Real world Applications 12(2011)2058-2068 (Elsevier).

66. Chakraborty, K. Chakraborty, M and **Kar, T. K**. Bifurcation and control of a bioeconomic model of prey-predator system with time delay, Nonlinear Analysis: Hybrid Systems 5(2011)613-625 (ELSEVIER).

67. **Kar, T. K**. and Ghosh, Bapan, Dynamic analysis of a biological economic model of prey-predator system with alternative prey, International J. Ecological Economics and Statistics, 25(2)2012, 12-32.

68. **Kar, T. K**. and Pahari, U.K. Bifurcation and feedback controll in an exploited prey-predator system with stage structure for prey, Journal of Applied Mathematics and Informatics, 29(2011)(5/6)1193-1204.

69. Chakraborty, K. Chakraborty, M and **Kar, T. K**. Regulation of a prey-predator fishery incorporating prey refuge by taxation: A dynamic reaction model. Journal Biological Systems 19(3)(2011)417-445 (World Scientific).

70. Chakraborty, K. Das, Sanjoy and **Kar, T. K**. Optimal control of effort of a stage structured prey-predator fishery model with harvesting, Nonlinear Analysis: Real World Applications 12(2011)3452-3467(Elsevier).

71. **Kar, T. K**. and Mondal, Prasanta, A mathematical study on the dynamics of an eco-epidemiological model in the presence of delay, Applications and Applied Mathematics: An International Journal 7(1)(2012)300-333 (USA).

72. **Kar. T. K**., Ghorai, Abhijit and Batabyal, Ashim. Global dynamics and bifurcation of a tri-trophic food chain model. World J. Modelling and Simulations, 8(1)(2012)66-80 (World Academic Press, USA).

73. **Kar T. K**. and Ghosh Bapan, Sustainability and Optimal control of an exploited prey predator system through provision of alternative food to predator. BioSystems 109(2)(2012)220- 232 (Elsevier).

74. Chakraborty, K, Jana, Soovoojeet and **Kar, T. K**, Global dynamics and bifurcation in a stage-structured prey-predator fishery model with harvesting, Applied Mathematics and Computation 218(2012)9271-9290 (Elsevier).

75. **Kar, T. K**. Ghorai, Abhijit and Jana, Soovoojeet. Dynamics of pest and its predator model with disease in the pest and optimal use of pesticide. Journal of Theoretical Biology310(7) (2012)187-198 (Elsevier).

76. Jana, Soovoojeet, and **Kar T. K**., The Optimal allocation of ocean space for the purposes of fishery and ecotourism management, Marine Science 2(5) (2012) 85-93 (Scientific and Academic Publishing).

77. Chakraborty, K, and **Kar, T. K**, Economic perspective of marine reserves in fisheries: A bioeconomic model, Mathematical Biosciences 240 (2012) 212-222 (Elsevier).

78. **Kar, T. K**. and Mondal, Prasanta, Global dynamics of a tuberculosis epidemic model bifurcation and the influence of backward bifurcation, Journal of Mathematical Modelling and Algorithms 11(4) (2012) 433-459 (Springer).

79. Jana, Soovoojeet, Chakraborty, M. Chakraborty, K. and **Kar, T. K**. Global stability and bifurcation of time delayed prey-predator system incorporating prey refuge. Mathematics and Computers in Simulations 85(2012)57-77 (Elsevier).

80. Chakraborty, K, Jana, Soovoojeet, and **Kar, T. K**, Effort dynamics of a delay induced prey-predator system with reserve, Nonlinear Dynamics 70(2012)1805-1829 (Springer).

81. **Kar, T. K**. and Mondal, Prasanta, Dynamical behaviour of a tuberculosis model with outcome of reinfection and optimal steering, International Journal of Ecological Economics and Statistics 28(1) (2013) 49-79 (CESER).

82. **Kar, T. K**. and Jana, Soovoojeet, A theoretical study on mathematical modeling of an infectious disease with application of optimal control. BioSystems 111 (2013) 37-50 (Elsevier).

83. **Kar, T. K**. Ghorai,and Jana, Soovoojeet, Dynamic consequences of prey refuges in a two predator one prey system, Journal of Biological Systems 21(2) (2013) 13500131-135001328 (World Scientific).

84. .**Kar, T. K**. and Jana, Soovoojeet, Stability and bifurcation analysis of a stage structured predator-prey model with time delay. Applied Mathematics and Computation 219(8) (2013)3779-3792 (Elsevier).

85. .**Kar, T. K**., Jana, Soovoojeet and Ghorai, Abhijit, Effect of isolation in an infectious disease, International Journal of Ecological Economics and Statistics 29(2)(2013)87-106 (CESER).

86. **Kar, T. K**. and Ghosh, Bapan. Sustainability and economic consequences of creating marine protected area in multi-species multi-activity context. Journal of Theoretical Biology 318(2013) 81-90 (Elsevier).

87. .Jana, Soovoojeet and **Kar, T. K**., Modelling and analysis of a prey-predator system with disease in the prey, Chaos, Solitons and Fractals 47(2013) 42-53 (Elsevier).

88. Ghosh, Bapan and **Kar, T. K**. Maximum sustainable yield and species extinction in ecosystem: Some new results. Journal of Biological Physics 39(3) (2013) 453-467 (Springer).

89. **Kar, T. K**. and Ghosh, Bapan, Impacts of maximum sustainable yield policy to prey-predator systems. Ecological Modelling 250(2013) 134-142 (Elsevier).

90. Pahari, U. K. and **Kar, T. K**. Conservation of a resource based fishery model through optimal taxation, Nonlinear Dynamics 72 (2013) 591-603 (Springer).

91. Chakraborty, K. Das, K. and **Kar, T. K**. Combined harvesting of a stage structured prey-predator model incorporate cannibalism in competitive environment, C. R. Biologies 336(2013)34-45 (Elsevier).

92. Chakreborty, K, Halder, S and **Kar, T. K**. Global stability and bifurcation analysis of a delay induced prey-predator system with stage-structure. Nonlinear Dynamics 73(3) (2013) 1307-1325 (Springer).

93. **Kar, T. K**. and Jana, Soovoojeet, Application of three controls optimally in a vector-borne disease - a mathematical study, CommunicationsNonlinear Science and Numerical Simulation 18 (2013) 2868-2884 (Elsevier).

94. Ghosh, Bapan and **Kar, T. K**., Possible ecosystem impacts of applying maximum sustainable yield policy in food chain models, Journal of Theoretical Biology 329 (2013) 6-14 (Elsevier).

95. Chakraborty, K., Das, Sanjoy, and **Kar, T. K**., On non-selective harvesting of a multispecies fishery incorporating partial closure for the populations.Applied Mathematics and Computation,221,2013), 581-597 (Elsevier).

96. **Kar, T. K**. and Mondal, P. K., Global dynamics of a water-borne disease model with multiple transmission pathways. Applications and Applied Mathematics: An International Journal 8(1) (2012) 75-98 (USA).

97. **Kar, T. K**. and Das, Uttam, Regulation of an exploited prey predator system: A dynamic reaction model, International Journal of Ecological Economics and Statistics, 31(4) (2013) 102-121 (CESER).

98. Jana, Soovoojeet, and **Kar, T. K**. A mathematical study of a prey-predator model in relevance to pest control. Nonlinear Dynamics, 74 (2013) 667-683 (Springer).

99. Chakraborty, K. Das, K. and **Kar, T. K**. An ecological perspective of marine reserves in prey–predator dynamics, Journal of Biological Physics, 39(4) (2013) 749-776 (Springer).

100. Ghorai, A. and **Kar, T. K**. Biological control of a prey-predator system in the presence of a super predator. Nonlinear Dynamics, 74 (2013) 1029-1040 (Springer).

101. Mondal, P. K., Jana, Soovoojeet and **Kar, T. K**., A theoretical approach on controlling agricultural pest by biological controls. Acta Biotheoretica, 62 (2014) 47-67 (Springer).

102. **Kar, T. K**. and Das Uttam, Singular induced bifurcation and control of a bioeconomic model of an exploited prey-predator system. Canadian Applied Mathematics Quarterly, 20(3) (2012), 355-373 (CANADA).

103. Das, Uttam, **Kar, T. K**., Pahari, U. K., Global dynamics of an exploited prey-predator model with constant prey refuge, ISRN Biomathematics, 2013, Article ID 637640, 12 pages (Hindawi, USA).

104. Das, Uttam and **Kar, T. K**., Bifurcation analysis of a delayed predator-prey model with Holling type III functional response and predator harvesting, Journal of Nonlinear Dynamics, Vol.Article ID 543041, 10 pages, (2014) (Hindawi, USA)

105. Ghosh, Bapan and **Kar, T. K**., Sustainable use of prey species in a prey-predator system: Jointly determined ecological thresholds and economic trade-offs. Ecological Modelling, 272 (2014) 49-58 (Elsevier).

106. Chakraborty K, Chakraborty M. and **Kar T. K**., Sustainable development of European Hake resource: Bioeconomic perspective, Journal of Biological Systems, (World Scientific) (2014)1-23.

107. Das, Kunal, Chakraborty, M., Khakraborty, K, **Kar, T. K**. Modelling and analysis of delayed exploited ecosystem towards coexistence perspective, Nonlinear Dynamics (Springer) (2014)1-19.

108. Ghosh, Bapan, **Kar, T. K**. and Legovic Tarzan, Sustainability of exploited ecologically interdependent species, Population Ecology 56(2014) 527-537 (Springer).

109. Ghosh, Bapan, **Kar, T. K**. and Paul, Prosenjit, Extinction scenarios in exploited system: Combined and selective harvesting approaches, Ecological Complexity 19(2014)130-139 (Elsevier).

110. Ghosh, Bapan, **Kar, T. K**. and Legovic, Tarzen, Relationship between exploitation, oscillation, MSY and extinction, Mathematical Biosciences, 256(2014)1-9 (Elsevier).

111. Das, Kunal, Chakraborty, M. Chakraborty, K. and **Kar T. K**. Modelling and analysis of a multiple delayed exploited ecosystem towards coexistence perspective, Nonlinear Dynamics, 78(2014)505-523 (Springer).

112. Das, Uttam **Kar, T. K**., and Jana, Soovoojeet, Dynamical behaviour of a delayed stage-structured predator-prey model with nonmonotonic functional response. International Journal of Dynamics and Control 3 (2015) (3) 225-238 (Springer).

113. Chakraborty, K, Das, Kunal and **Kar, T. K**., Modelling and analysis of a marine plankton system with nutrient recycling and diffusion, Complexity 21(1)(2015)229-241 (Wiley).

114. Guria, Srabani, Pal, Prosenjit and **Kar, T. K**., Sustainability of a stage-structured exploited prey-predator system, International Journal of Biomathematics and Systems Biology, 1(1)(2014)1-17.

115. Chakraborty, K., Das, Kunal, Haldar Samadyuti and **Kar, T. K**., A mathematical study of an eco-epidemiological system on disease persistence and extinction perspective. Applied Mathematics and Computation 254(2015)99-112 (Elsevier).

116. Haldar, Samaduyti, Chakraborty, Kunal, Das, Kunal, **Kar, T. K**., Bifurcation and control of an eco-epidemiological system with environmental fluctuations: a stochastic approach. Nonlinear Dynamics. 80(2015)1187-1207 (Springer).

117. Paul, Prosenjit, Ghosh, Bapan and **Kar, T. K.,** Impact of species enrichment and fishing mortality in three species food chain models, Commun Nonlinear Sci Numer Simulat 29(2015)208-223 (Elsevier).

118. Jana, Soovoojeet, Guria Srabani, Das Uttam, **Kar T. K**. and Ghorai Abhijit. Effect of harvesting and infection on predator-prey system, Nonlinear Dyn 81(2015)917-930 (Springer).

119. Mondal, Prasanta and **Kar T. K**., Optimal treatment control and bifurcation analysis of a tuberculosis model with effect of multiple re-infections, Int. J. Dynam. Control DOI. 10. 1007/s40435-015-0176-z (Springer).

120. Haldar Samadyuti, Chakraborty Kunal and **Kar T. K**. Controllability of an eco-epidemiological system with disease transmission delay: A theoretical study. Applications and Applied Mathematics: An International Journal 10(1) (2015)382-420 (USA).

121. Das Uttam, Guria Srabani, **Kar, T. K**. and Pahari, U, K, A dynamic reaction model of a prey-predator syatem incorporating a constant prey refuge, In. J. Ecol. Econ. Stat. 36(3) 2015.

122. Das Uttam, **Kar, T. K**. and Jana Soovoojeet, Dynamic behavior of a delayed stage structured predator prey model with nonmonotonic functional response. Int. J. Dynam. Control (2015) (3) 225-238 (Springer).

123. Chakraborty, Kunal, Halder, Samadyuti and **Kar, T. K.** Ecological sustainability of an optimal controlled systemincorporating partial closure for the populations. J. Biol. Syst. 23(3) (2015) 1-30 (World Scientific).

124. Mondal, Prasanta Kumar, Jana, Soovoojeet, Haldar, Palash and **Kar, T. K.,** Dynamical behavior of an epidemic model in a fuzzy transmission. International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, 23(5)(2015)651-665 (**World Scientific**).

125. Jana Soovoojeet, Ghorai, Abhijit, Guria, Srabani, and **Kar, T. K**. Global dynamics of a predator, weaker prey and stronger prey system. Applied Mathematics and Computation 250(2015)235-248 (**Elsevier**).

126. Jana, Sovoojeet, Halder Palash, **Kar, T. K.** Complex Dynamics of an epidemic model with vaccination and treatment controls. International Journal of Dynamics and Control 4(2016)318-329 **(Springer).**

127. Jana Sovoojeet, Halder Palash, Nandi Swapan and **Kar, T. K**. Global dynamics of a SEIRS epidemic model with saturated disease transmission rate and vaccination control. International Journal of Applied and Computational Mathematics 3(2017)43-64 (**Springer**).

128. Nandi Swapan Kumar, Mondal Prasanta Kumar, Jana Soovoojeet, Haldar Palash and **Kar, T. K**. Prey-predator model with two stage infection in prey: Concerning

pest control. Journal of Nonlinear Dynamics. Volume 2015, Article ID 948728, 13 pages.

129. Jana Soovoojeet, Haldar Palash **and Kar T. K**, Optimal control and stability analysis of an epidemic model with population dispersal. Chaos, Solitons and Fractals 83(2016)67-81. (Elsevier).

130. Jana, Soovoojeet, Nandi S. K. and **Kar, T. K**, Complex dynamics of an SIR epidemic model with saturated incidence rate and treatment. Acta Biotheoretica 64(2016)65-84 (Springer).

131. Paul, Prosenjit, **Kar, T. K**., and Ghorai, Abhijit. Ecotourism and fishing in a common fishing ground of two interacting species, Ecological Modelling 328(2016) 1-13 (Elsevier).

132. Paul, Prosenjit and **Kar, T. K**., Impacts of invasive species on the sustainable use of native exploited species, Ecological Modelling 340(2016) 106-115 (Elsevier).

133. Ghosh, Bapan, Pal, Debprasad, **Kar, T. K**. and Valverde, Jose C. Biological conservation through marine protected areas in the presence of alternative stable states, Mathematical Biosciences 286(2017)49-57 (Elsevier).

134. Jana, Soovoojeet, Haldar, Palash and **Kar, T. K**., Mathematical analysis of an epidemic model with isolation and optimal controls. International Journal of Computer Mathematics 94(7)(2017)1318-1336. (Taylor and Francis).

135. Pahari, U. K., Ganguli, Chaity, **Kar, T. K.** and Das Uttam, Global dynamics of a tritrophic food chain model, International Journal of Ecological economics and statistics 38 (2017)

136. Ganguli, Chaity and **Kar, T. K**., Optimal harvesting of a prey-predator model with variable carrying capacity, International Journal of Biomathematics 10(5)(2017) 1-24. (World Scientific).

137. Nandi, S. K., Jana, S., Mandal, M., **Kar, T. K**., Analysis of a fuzzy epidemic model with saturated treatment and disease transmission, International Journal of Biomathematics, 11(1)(2018) (world Scientific).

138. Paul, Prosenjit, **Kar, T. K**. and Ghorai, Abhijit, Impact of marine reserve on maximum sustainable yield in a traditional prey-predator system. Commun. Nonl. Sci. Numer. Simult. 54(2018)34-49 (Elsevier).

139. Khajanchi, S. , Das, Dhiraj Kumar, **Kar, T. K.**, Dynamics of tuberculosis transmission with exogenous reinfections and endogenous reactivation, Physica A: Statistical Mechanics and its Applications 497(2018)52-71(Elsevier)

140. Jana, S. Nandi, S. K., Mondal, M. and **Kar, T. K.**, Mathematical analysis of an epidemic system in presence of optimal control and population dispersal. Biophysical Reviews. https://doi.org/10.1142/S1793048018500017 (World Scientific).

Proceedings publications:

1. **Kar, T. K**., Sinha, D. K. and Bagchi, M. C., On viscoelastic behaviour of enzymes: a stochastic model, Journal of Biomedical Engineering Society of India vol. 15(1995) Page 52 (Special issue).

2. **Kar T. K**. Stage structure prey-predator model and optimal harvesting, Proceedings of the International Symposium on Analysis, Manifolds and Mechanics, page 139, February 5-7, 2003, M. C. Chaki Centre for Mathematics and Mathematical Sciences, Kolkata, India.

3. **Kar T. K**. and Chaudhuri K. S., Bioeconomic Modelling of a prey-predator fishery : A capital theoretic approach, Proceedings of the National Seminar on Recent Trends in Mathematics and its Applications, Feb 25-26, 2002, page no. 49-55, Department of Mathematics, Siksha Bhavana, Visva Bharati, Santiniketan, India.

4. **Kar, T. K**. and Matsuda H, Controllability of a harvested prey-predator system with time delay, Proceedings of the 15th Annual Meeting of the Japanese Society for Mathematical Biology, Page 52, Sept 15-17, 2005, Yokohama National University, Japan

5. **Kar T. K**. and Matsuda H., A bioeconomic model of a single species fishery with marine reserve, International Symposium on Recent Advances in Mathematics and its Applications, December 17-19, 2005, Calcutta Mathematical Society, India.

6. **Kar T. K**. and Matsuda H., Stability, bifurcation and controllability of a harvested prey-predator system with time delay, International Symposium on Recent Advances in Mathematics and its Applications, December 16-18, 2006, Calcutta Mathematical Society, India.

7. **Kar T. K**. and Chkraborty, Kunal., A bioeconomic assessment of the Maryland's Chespeake Bay oyster fishery with reference to the optimal utilization and

management of the resource, Proceedings of the International Seminar on Modern Trends in Biological Sciences, pp 101-108, October 24, 2009, Published by Raja N. L. Khan Women's College, Midnapur, India.

8. Chakraborty, Kunal and **Kar, T. K**. Bifurcation analysis and optimal control of harvest in a prey-predator model with stage structure for prey, Proceedings of the National Seminar on Mathematical Modelling of Natural Phenomena (NSMMNP-2010), 207-218.

9. Chakraborty, K., Jana, S. and **Kar, T. K**. Influence of marine reserve in a bioeconomic system. Proceedings National Seminar on Recent Advances in the Application of Mathematical Analysis and Computational Techniques in Applied Sciences, Siliguri College, (2011)42-52.

10. Mondal, P. K. and **Kar, T. K**., Optimal control and stability analysis of an SIR model with vaccination strategy. Proceedings of the International conference on recent trends in Science & Technology organised by College of Engineering and Management,Kolaghat, West Bengal, India, December 27-29, (2013) 136-142.

11. Jana, S. and **Kar, T. K**., Optimal control of an epidemic model with vaccination and treatment control. Proceedings of the International conference on recent trends in Science & Technology organised by College of Engineering and Management, Kolaghat, West Bengal, India, December 27-29, (2013) 143-149.

Books/chapters publications:

1. Jana, S. and **Kar, T. K.,** Complex dynamics of some ecological systems with special emphasis on epidemiological problems. LAP LAMBART Academic Publishing, 2015.

2. Nandi, Swapan, Jana, Soovoojeet and Kar, T. K. , Bio-Mathematical Modelling under uncertain environment (Chapter 4), Narosa, New Delhi, 2016

3. Kar, T. K. Bio-Mathematical modelling under uncertain environment (Chapter 7), Narosa, New Delhi, 2016.

4. Mondal P. K. and Kar, T. K. Bio-Mathematical Modelling under uncertain environment (Chapter 10), Narosa, New Delhi, 2016.

Conference/visit/workshop/seminar:

1. Training cum workshop on Unix C, March 7- April 24, 1995. UGC Computer Center, Calcutta University, Kolkata, India.

2. The Role of Mathematics in the New Millennium: Theories and Applications, March 23-25, 2001. Department of Mathematics, Jadavpur University, Kolkata, India.

3. Orientation Program, March 1-30, 2001. Academic Staff College, Calcutta University, Kolkata, India.

4. Refresher Course, Dec 28, 2001-January 20, 2002. Sivatosh Mukherjee Science Centre Kolkata, India.

5. National Seminar on Recent trends in Mathematics and its Applications, Feb 25-26, 2002. Department of Mathematics, Visva - Bharati University, Visva-Bharati, India.

6. Refresher Course, Feb 17 – March 8, 2003. Academic Staff College, Jadavpur University, Kolkata, India

7. Controllability of a harvested prey-predator system with time delay, September 15-17, 2005. The 15th Annual Meeting of the Japanese Society for Mathematical Biology, Yokohama National University, JAPAN

8. A bioeconomic model of a single species fishery with marine reserve, December 17-19, 2005. International Symposium on Recent Advances in Mathematics and its Applications, Calcutta Mathematical society, Kolkata, India.

9. Stability, bifurcation and controllability of a harvested prey-predator system with time delay, December 16-18, 2006. International Symposium on Recent Advances in Mathematics and its Applications, Calcutta Mathematical Society, Kolkata, India.

10. International Symposium on Dynamical Systems Theory and its Applications on Biology and Environmental Sciences, March 14-17, 2007. Shizuoka University, JAPAN.

11. Optimization and Control, January 16-20, 2007. IMA Annual Program Year Workshop, University of Minnesota, USA.

12. Participated in International Symposium on Recent Advances in Mathematics and its Applications, Dec 15-17, 2008. Calcutta Mathematical Society, Kolkata, India.

13. Participated in the One Day Colloquium on Mathematical Biology and Ecology, Feb. 20, 2009, Department of Mathematics, Jadavpur University, Kolkata, India.

14. Participated in the National Conference on Mathematical Sciences and Applications : State of the Art, January 14-16, 2010, Deaprtment of Mathematics, Jadavpur University, India

15. Participated/presented paper "Economic evaluation of Bangladesh Shrimp" in the 17th West Bengal State Science & Technology Congress, held on 4-5 March,2010. Organized by West Bengal State Council of Science and Technology & West Bengal University of Animal and Fishery Science, Kolkata, India.

16. Participated in the International Congress of Mathematicians, 2010 held at Hyderabad during 19-27 August, 2010. India.

17. Presented a paper entitled " Some aspects of bioeconomic modelling of renewable resources" in the "National Seminar on Impact of Emerging Areas of Science & Technology on the Development of Society" organised by Central Calcutta Science and Culture Organisation for Youth in Collaboration with University of Calcutta during 5th & 6th February, 2011 at the Science City Auditorium, Kolkata, India.

18. Participated in the "National Conference On Mathematics and its Applications (NCMA 2010)" Organized by Department of Mathematics, Jadavpur University, Kolkata-700032 during 13-14th January 2011, India.

19. Presented a paper entitled, "Optimal utilization and management of the European Hake fishery" in "International Conference on Mathematical Sciences for Advancement of Science & Technology (MSAST 2010)" organized by Institute for Mathematics, Bioinformatics, Information-technology and Computer-science (IMBIC), Kolkata in collaboration with Indian Statistical Institute during 19-21st December, 2010, India.

20. Participated in the "National Conference On Theoretical Biology and Biomathematics (NCTBB 2010)" Organized by Centre for Mathematical Biology and Ecology, Department of Mathematics, Jadavpur University, Kolkata-700032 in collaboration with Biomathematical Society of India during 15-16th December 2010, India.

21. Presented a paper entitled, "A biological economic model of prey-predator system with alternative prey" in "International Conference on Recent Development in Mathematical sciences and their Applications (ICRDMSA, 2010)" Organized by Calcutta Mathematical Society, Saltlake, Kolkata-64 during December 09-11, 2010, India.

22. Participated in the UGC sponsored state level seminar on "Recent Trends in Algebra and Its Applications (RTAA-2010)" held at Gokhale Memorial Girl's College, Kolkata, India on 3rd December, 2010, India.

23. Participated in the National Seminar on "National Seminar on Mathematical Modelling of Natural Phenomena (NSMMNP-2010)" organized by Indian Society of Nonlinear Analysis (ISNA) held in Bose Institute, Kolkata, India on 29th October, 2010, India.

24. Participated in the International Conference on Recent Advances in Mathematical Sciences and Applications (ICRAMSA-2011), organized by Calcutta Mathematical Society, held in Kolkata, December 9-11, 2011, India.

25. Participated in the 5th International Conference on "Mathematical Sciences for Advancement of Science & Technology (MSAST 2011)" organized by Institute for Mathematics, Bioinformatics, Information-technology and Computer-science (IMBIC), Kolkata in collaboration with Indian Statistical Institute during 18-20st December, 2011, India.

26. Presented an invited talk entitled "Optimal control applied to biological problems" in CSIR sponsored National Workshop on Recent trends of Mathematics in interdisciplinary research organized by the Department of Basic Science, MCKV Institute of Engineering Liluah, Howrah in collaboration with Central Glass & Ceramic Research Institute, Kolkata, India.

27. Presented a paper entitled " Mathematical analysis of a vector born disease model using three controls" in the "National Seminar on Recent Development in Mathematical Sciences (NSRDMS-2012)organized by Calcutta Mathematical Society, held in Kolkata, April 21-22, 2012, India.

28. Presented an invited talk entitled "Mathematical Epidemiology of Infectious Diseases: Model Building, Analysis and Simulations" in the National Workshop on

Numerical Techniques for Chemical and Biological Engineers organized by the Department of Basic Science and Humanities, College of Engineering and Management, Kolaghat, West Bengal, August 11-12, 2012, India.

29. Presented an invited talk entitled " Sustainability and economic consequences of creating marine protected areas in a multi-species multi-activity context" at Center for Ecological Research, Kyoto University, Japan, October, 2013.

30. Presented an invited talk at Faculty of Environment and Information Sciences, Yokohama National University, Japan, January, 2014.

31. Presented an invited talk at Tsukuba University, Japan, January, 2014.

32. Presented an invited talk at Kyushu University, Japan, February, 2014.

33. Presented talk entitled " Dynamical behaviour of an eco-epidemiological system influenced by the competition among the predators subpopulations" and chiring a session at the International conference on Dynamical systems and Mathematical Biology, November 17-19, 2014, Dept of Mathematics, Jadavpur University.

34. Presented a talk entitled "Modelling and analysis of a two prey one predator system" , in the 8th international conference on " Mathematical Sciences for Advancement of Science and Technology" MSAST 2014, organised by the Institute for Mathematics, Bioinformatics, Information Technology and Computer science (IMBIC) December 21-23, 2014.

35. Presented an invited talk in the Bio-Mathematical/Ecological Modelling under DBT Star College Programme, organized by Gope College, West Bengal during 11th February 2015.

36. Presented an invited talk entitled "Modelling, prediction and control of infectious diseases in humans" in the Indian Workshop and Symposium on Modelling Experimentation and Simulation on Complex Systems. Organised by Department of Basic Sciences, Haldia Institute of Technology, Haldia, West Bengal, during 5-7th August 2015.

37. Presented an invited talk entitled "Mathematical modeling and analysis of infectious diseases with application of optimal control" in the UGC Sponsored National Seminar " Recent Trend in Bio-Mathematical Modelling under Uncertain

Environment" Organised by Department of Mathematics, Mugberia Gangadhar Mahavidyalaya Purba Medinipur, West Bengal, during 11-12th September 2015.

38. Presented an invited talk in the International Conference on nonlinear dynamics, analysis and optimization (ICNDAQ 2015) during 9th -11th December 2015, organized by Department of Mathematics, Jadavpur University, Kolkata-700032.

39. Presented an invited talk in the National seminar on recent development in mathematics and its applications (NSRDMA - 2016) during January 21-22, 2016 organized by Department of Mathematics, University of Kalyani.

40. Presented a paper entitled " Ecotourism and its consequences in a common fishing ground of interacting species" in the International Conference on Mathematics, Physics and Allied Sciences (ICMPAS) 2016 at Carmel College, Nuvem, Goa, India during March 03-05, 2016.

41. Presented a paper in the 1st Regional Science and Technology Congress 2016, Presidency Division, West Bengal held during 13th and 14th November, 2016 at National Institute of Technical Teachers Training and Research, Kolkata.

42. Participated in the 10th International Conference on Mathematical Sciences for Advancement of Science and Technology, MAST 2016, December, 21-23, 2016, Organized by IMBIC, Kolkata.

43. Presented an invited talk on "Mathematical modeling and analysis of some infectious diseases with application of optimal control" in the UGC sponsored 2 day National Seminar on Advanced level of mathematical science, organized by Department of Mathematics, Raja N. L. Khan Womens College and Chandrakona Vidyasagar Mahavidyalaya, during 9th & 10th February, 2017, Midnapore, West Bengal.

44. Presented an invited talk on Qualitative analysis of continuous dynamical systems in the one day state level seminar on Introduction to dynamical systems, organized by the Department of Mathematics, Vidyasagar Evening College and Indian Society of Nonlinear Analysis, Kolkata, on February 8, 2017.

45. Presented a paper in the 2$^{nd\ t}$ Regional Science and Technology Congress (Southern Region) 2017, West Bengal held during 14th and 15th December, 2017 at University of Kalyani.

46. Presented a paper "Transmission dynamics of tuberculosis with multiple re-infections" in the International Conference MSAST 2017 December 21-23, Organized by IMBIC, Kolkata.

47. Presented an Invited talk on "Biological conservation through marine reserve in the presence of alternative stable states" in the National Conference on Mathematical and Theoretical Biloogy, 2018, Organized by Department of Mathematics, Jadavpur University and Centre for Mathematical Biology and Ecology, Kolkata, March 22-23. 2018.

Membership:

(i)   Joint Secretary Biomathematical Society of India

(ii)   Executive member of the Calcutta Mathematical Society, Kolkata, India

(iv) Member of the Indian Statistical Institute (ISI), Kolkata, India

Editorial board member :

(i) Journal of Fisheries and Aquatic Sciences (Ex),

(ii) Research Journal of Environmental Sciences (Ex)

(iii) Journal of Applied Sciences (Ex),

(iv) Journal of Advanced Research in Dynamical and Control Systems (Ex)

(v) International Journal of Biomathematics and Systems Biology.

Reviewers of Journals:

1.   Mathematical Analysis and Applications
2. Turkish Journal of Mathematics
3. Journal of the Franklin Institute
4.   Bulletin of Pure and Applied Mathematics
5. Journal of Applied Mathematics and Computing
6. Journal of Biological Dynamics
7. Nonlinear Analysis: Real World Application

8. Nonlinear Analysis: Theory, Methods and Applications

9. Journal of Biological Systems

10. Ecological Economics

11. AMSE Periodicals

12. International Journal of Mathematical Education in Science and Technology

13. Journal of Computational and Applied Mathematics

14. Applied Mathematical Modeling

15. Nonlinear Analysis: Modeling and Control

16. Communications in Nonlinear Science and Numerical Simulations

17. International Journal of Biomathematics

18. Ecological Modelling

19. Research Journal of Environmental Sciences,

20. Applied Mathematics and Computation

21. Journal of Computational Science

22. Computer Mathematics and its application

23. International Journal of Engineering, Science & Technology

24. Journal of Computational Science

25. Journal of Fisheries and Aquatic Sciences,

26. Journal of Mathematical Biology

27. International Journal of Mathematics and Soft Computing

28. Mathematics and Computers in simulation

29. BioSystems

30. Journal of Inequalities and Applications

31. Applications and Applied Mathematics: An International Journal

32. Nonlinear Dynamics

33. Abstract and applied analysis

34. Discrete dynamics in nature and Society

35. Differential equations and dynamical systems.

36. Int. J. of Dynamical Systems and Differential Equations.

37. Journal of control and decision.

38. Acta Biotheoretica.

39. Mathematical Biosciences

40. Journal of Theoretical Biol;ogy.

41. Journal of Nonlinear Dynamics.

42. Optimal control: Applications and Methods

43. Chaos, Solitons and Fractals

Research Collaborations:

I have some collaborations both at national and international level. At international level, I am collaborating with Yokohama National University, Japan; Kyoto University, Japan; Kyushu University, Japan; Florida Institute of Technology, USA; Institute R. Boskovic, Croatia. At national level, I am collaboration with Ocean Sciences Group, Indian National Centre for Ocean Information Sciences, Hyderabad; National Institute of Technology, Meghalaya; Jadavpur University, Kolkata.

M. Sc. Dissertations:

1. Dibyendu Dey,
2. Gadadhar Mahata
3. Prasanta Kr. Das
4. Sowmik Biswas
5. .Saikat Sarkar,
6. Rikhia Dhar,
7. Kajal Hari,
8. Sanjay Nandi,
9. Srabani Guria,
10. Ashmantara Khatun,
11. Dipak Bera,
12. Malabika Panda,
13. Moumita
14. Sudipta Pain,

15. Soumita Biswas

16. Devkumar Pal

17. Bishal Sharma

18. Swarnanshu Nandi

19. Rita Chowdhury

20. Sourav Saha

21. Piasha Koley

22. Konisa Pujaru

23. Anuran Maity

24. Aritra Pal

25. Dhrubajyoti Dhara

Other information (if any):

1. Worked as Ph.D. thesis examiner of several University/Institute.

2. Worked as project evaluator for different funding agencies

3. Worked as selection committee member of different University/ Institute.