**s Faculty Profile**

**Name:** C. Vidhya

**Designation:** Assistant Professor

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**Area of Specialisation :** Partial Differential Equation , Ordinary Differential Equation, Neural Network**.**

**Year of Experience : 10 Years 6 Months as on January 2021**

**PUBLICATIONS IN SCIENCE CITATION INDEXED JOURNALS:**

1. P. Balasubramaniam, **C. Vidhya,** Global asymptotic stability of stochastic BAM neural networks with distributed delays and reaction- diffusion terms, **Journal of Computational and Applied Mathematics**, 234 (2010), 3458 -3466. **Impact Factor : 1.883**
2. **C. Vidhya,** P. Balasubramaniam, On the stability of the stochastic parabolic Ito equation with delay and Markovian jump, **Computers and Mathematics with Applications**, 60 (2010), 1959-1963. **Impact Factor : 3.370**
3. **C. Vidhya,** P. Balasubramaniam, Robust stability of uncertain Markovian jumping stochastic Cohen-Grossberg type BAM neural networks with time-varying delays and reaction diffusion terms, **Neural, Parallel, and Scientific Computations,** 19 (2011), 181-196**. Impact Factor : 4.47**
4. P. Balasubramaniam, C. Vidhya, Exponential stability of stochastic reaction–diffusion uncertain fuzzy neural networks with mixed delays and Markovian jumping parameters, **Expert System with Application**, 39 (2012), 3109-3115. **Impact Factor : 5.452**
5. **C. Vidhya,** S. Dharani, P. Balasubramaniam Global Asymptotic Stability of Delayed Stochastic Reaction-Diffusion Recurrent Neural Networks with Markovian Jumping Parameters and Mixed Delays, **The Journal of Analysis**, 27 (1) (2019) , 277 - 292. **Impact Factor :**
6. **C. Vidhya,** S. Dharani, P. Balasubramaniam, Stability of Impulsive stochastic reaction diffusion recurrent neural network, **Neural Processing Letters**, **51** (2020)**,**1049–1060. **Impact Factor : 3.100**

**PUBLICATION IN NATIONAL LEVEL:**

1. C. Vidhya, P.Balasubramaniam, LMI approach for stability of delayed stochastic reaction-diﬀusion recurrent neural networks and Wiener Process, **Proceeding of the International Conference on Emerging Trends in Mathematics and Computer Application, Allied Publishers, Pvt. Ltd, Chennai**, 2010, 217-222. ISBN : 978-81-8424-649-0.
2. C. Vidhya, P. Balasubramaniam, Stability of uncertain reaction-diffusion stochastic BAM neural networks with mixed delays and Markovian jumping parameters, **Mathematical Modeling and Scientific Computation, International Conference ICMMSC 2012, Gandhigram, Tamil Nadu, India, March 16-18, 2012, Proceedings, Springer Publisher**, 283-293. ISBN 978-3-642-28925-5.

**Details of Projects:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Topic** | **Organized By** | **Period** |
| 1 | A Study On (s,S) Inventory System | Gandhigram Rural University (M.Phil Curriculum project) | September-2007 |
| 2 | Statistical Analysis of Ambient Noise | National Institute of Ocean Technology, Chennai (M.Sc Curriculum project) | November 2005 – April 2006 |

**Details of Papers presented:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Topic** | **Organized By** | **Period** |
|  | LMI Approach for stability of Impulsive stochastic reaction diffusion recurrent neural network and mixed time delay | International Conference on Dynamical Systems, Mathematical Modelling and Computing Techniques | February 2019 |
|  | Global Asymptotic Stability of Delayed Stochastic Reaction-Diffusion Recurrent Neural Networks with Markovian Jumping Parameters and Mixed Delays | International Conference on Applied Analysis, Mathematical Modelling and Computing Techniques | March 2018 |
|  | Stability of Uncertain Reaction-Diffusion Stochastic BAM Neural Networks with Mixed Delays and Markovian Jumping Parameters | International Conference on Mathematical Modeling and Scientific Computation, Gandhigram Rural University, Gangram Dindugal. | March 2012 |
|  | Asymptotic stability of uncertain reaction-diffusion stochastic fuzzy BAM neural networks with mixed delays and Markovian jumping parameters. | International Conference on Simulation Modeling and Analysis, Amrita School of Engineering, Ettimadai, Coimbatore | December 2011 |
| 5. | LMI approach for stability of delayed stochastic reaction diffusion recurrent neural networks and Wiener process | International Conference on Emerging Trends in Mathematics and Computer Applications, Mepco Schlenk Engineering college, Sivakasi | December 2010 |
| 6. | The global asymptotic stability of BAM stochastic neural networks with distributed delays and reaction-diffusion terms | International Conference on Recent Trends in Computational Partial Differential Equations,  IIT Bombay, Mumbai | December 2008 |
| 7. | Rectangular Matrix representation as tree graph grammar | National Symposium on Interdisciplinary Application of Mathematical Modeling | August 2005 |
| 8. | Tree Graph Grammar | National Conference on Graph Theory,  Alliance Business Academy, Bangalore | May 2005 |

**Details of Workshops/Conferences/Symposiums/Seminars Attended**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Topic** | **Organized By** | **Period** |
|  | International Faculty Development Program on Fixed Point Theory and its Applications | St. Joseph’s College of Engineering | 8 – 9 August 2020 |
|  | ASTUTE EFFLUX Trends in Mathematics | SNS College of Engineering | 02 July to 07 July 2020 |
|  | Webinar on ‘Organising a Literature Review’ | Vellore Institute of Technology Chennai | 3rd June, 2020 |
|  | Webinar on ‘Mathematics of COVID-19’ | Vellore Institute of Technology Chennai | 28th May, 2020 |
|  | National Workshop on Stochastic Processes and Applications | SSN College of Engineering | February 2020 |
|  | National Seminar on Application of Geometric Function theory and Special function | Vellore Institute of Technology, Chennai | December 2018 |
|  | Advanced School on Analysis and International Workshop on Mathematical  Modelling and Dynamical System | Gandhigram Rural Institute – Deemed University, Gandhigram | 27th February – 3rd March, 2013 |
|  | Science Academies Lecture Workshop on Differential Equations and their Application | PSGR Krishnammal College for Women, Coimbatore. | December  2011. |
|  | International Workshop on Advances in Computational Partial Differential Equations | BITS Pilani – GOA Campus, GOA. | February 2011-March 2011 |
|  | National Workshop on Soft Computing and Mathematical Modelling | Gandhigram Rural Institute – Deemed University, Gandhigram | February 2010 |
|  | National Seminar on Analysis of Partial Differential Equations | Pondicherry University, Puducherry. | December 2009 |
|  | National Workshop on Mathematical Modelling and Computational Mathematics | Gandhigram Rural University, Gandhigram. | February 2009 |
|  | Workshop on Computational Partial Differential Equations. | IIT Bombay, Mumbai. | December 2008 |
|  | Instructional School on Partial differential equations and National Symposium on Hyperbolic Partial differential equations | IIT Bombay, Mumbai. | June to July 2008. |
|  | Symposium on Mathematics, Recent Advances in Mathematical Modeling in Engineering | Thiagarajar College of Engineering, Madurai. | September 2007 |
|  | National Conference about Mathematics, Computing and Modelling | Gandhigram Rural University, Gandhigram. | March 2007 |
|  | State Level Seminar about Fuzzy Mathematics and its Applications | Fatima College, Madurai. | February 2006 |