# STAFF PROFILE

**1.** Name          : **Dr R. JOICE NIRMALA**

2. Date of Birth   : 26, September, 1989

3. Gender       : Female

4. Nationality    : Indian

5. Phone        : +919486861481

6. Email ID      : joys.maths.bu@gmail.com

7.Qualification    : M.Sc., M.Phil., Ph. D.,

8. Specialization   : Fractional Differential Equation, Controllability of Fractional Differential  Equations Delay Differential Equations, Stability.

9.Experience      : 2 years,      Research     : 8 years

## 10. RESEARCH PUBLICATIONS

1. R. Joice Nirmala and K. Balachandran, Analysis of Solutions of Time fractional telegraph Equation, *Journal of Korean Society for Industrial and Applied Mathematics*, 18(2014), 209-224.

2. R. Joice Nirmala, K. Balachandran and J.J. Trujillo, Controllability of Nonlinear Fractional Delay Dynamical Systems, *Reports on Mathematical Physics,* 77(2016), 87- 104.

3. R. Joice Nirmala and K. Balachandran, Controllability of nonlinear fractional delay Integrodifferential Systems, *Discontinuity, Nonlinearity, and Complexity,* 5(2016), 59-73.

4. R. Joice Nirmala and K. Balachandran, Controllability of fractional nonlinear systems in Banach spaces, *Journal of Applied Nonlinear Dynamics*, 5( 2016), 487-496.

5. R. Joice Nirmala, Relative controllability of nonlinear fractional delay dynamical systems with time varying delays in control, *Lecture Notes in Electrical Engineering*, 369-380, 2016.

6. R. Joice Nirmala and K. Balachandran, Controllability of Nonlinear Fractional Delay Dynamical Systems with Multiple Delay in Control, *Kibernetika*, 53(2017), 161-178.

7. R. Joice Nirmala and K. Balachandran, Controllability of Nonlinear Implicit Fractional Delay Dynamical Systems, *International Journal of Applied Mathematics and Computer Science*, 27(2017), 501-513.

8. R. Joice Nirmala, K. Balachandran and J.J. Trujillo, Null Controllability of Fractional Dynamical Systems with Constrained Control, *Fractional Calculus and Applied Analysis*, 20( 2017), 553-565.

## 11. **PAPER PRESENTATIONS**

1. Presented a paper entitled „" *On the controllability of nonlinear Fractional Delay Integrodifferential System using Laplace Transform*"" in the 81$^{st}$ Annual Conference of THE INDIAN MATHEMATICAL SOCIETY, organized by Department of Mathematics and Department of Computer Science and Engineering, VNIT, Nagpur, December 27-30,2015.

2. Presented a poster entitled „"*Controllability of Nonlinear Fractional Delay Integrodifferential Systems*"" in the 8$^{th}$ International Congress on Industrial and Applied Mathematics(ICIAM 2015), China National Convention Center, China, August 10-14, 2015.

3. Presented a paper entitle "*Controllability of Fractional Delay Integrodifferential System*" in the National Conference on Mathematics and Its Applications held at Department of Studies in Mathematics, Manasagangotri, University of Mysore, Mysuru on 21$^{st}$ February, 2015.

4. Presented a paper entitled "*Remarks on the Solution Representation of Fractional Differential Equations in Banach Spaces*" in the 3$^{rd}$ National Conference on Advances in Differential Equations and Applications held at Department of Mathematics, Periyar University, Salem, December 4-5, 2014

5. Presented a paper entitled "*Analysis of Fractional Partial Differential Equation*" in the National Conference on Partial Differential Equations and Applications held at Department of Mathematics, Bharathiar University, Coimbatore, January 30 - 31, 2014.

6. Presented a paper entitled "*Analysis of Solutions of Time Fractional Telegraph Equation*" in the National Conference on Advances in Partial Differential Equations, held at Srinivasa Ramanujan Center, SASTRA University, Kumbakonam. December. 13-14, 2013.

## 12. CONFERENCES/SEMINARS/WORKSHOPS ATTENDED

1. Advanced level workshop on "Computational Methods forControl Problems (CMCP)" from March 16 – 21, 2015 at Mar Ivanios College, Trivandrum, India

2. Special lecture series on "Quasi-linear Partial Differential Equations of Fluid Dynamics and Physics" by Prof. Dr Sivaguru S. Sritharan, NPS, Monterey, USA from June 30- July 11, 2014 at Bharathiar University, Coimbatore, India

3. SERB School on Matrix Methods and Fractional Calculus, sponsored by the Department of Science and Technology,Government of India, New Delhi, held at Center of Mathematical and Statistical Sciences Peechi Campus, KFRI, Thrissur, Kerala, April 28 -May 23, 2014.

4. Second National Conference on Computational Biology (NCCB-2014) during March 27–28, 2014 at DRDO-BU-CLS,Bharathiar University Campus, Coimbatore, India.

5. National Conference on Advances in Partial Differential Equations, held at Srinivasa Ramanujan Center, SASTRA University, Kumbakonam. Dec. 13-14, 2013.

6. National Conference on Computational Biology (NCCB- 2013) during February 15–16, 2013 at DRDO-BU-CLS, Bharathiar University Campus, Coimbatore, India.

7. Special lecture series on "Mathematics of Turbulence, Random Waves and Quantum Field" by Prof. Dr SivaguruS. Sritharan, NPS, Monterey, USA from July 16 –27, 2012 at Bharathiar University, Coimbatore, India.

8.  Seminar on "Partial Differential Equations" from February 28–29, 2012 at Bharathiar University, Coimbatore, India.

9.  "Lecture Series on Large Deviation Theory" by Prof. DrSivaguru S. Sritharan, NPS, Montery, USA from February 16–22, 2012 at Bharathiar University, Coimbatore, India.

10. Special Lectures on "Navier-Stokes Equations: Solvability,Control and Stochastic Analysis" by Prof. Dr Sivaguru S. Sritharan, NPS, Montery, USA from February 14 -18, 2011 at Bharathiar University, Coimbatore, India.

## 13. FELLOWSHIP AND AWARDS

1.  Secured First Rank in B.Sc Mathematics, Bharathiar University,Coimbatore in the year 2010.

2.  Secured Third Rank in M.Sc Mathematics, Bharathiar University,Coimbatore in the year 2012.

3.  Awarded UGC merit Fellowship for getting $1^{st}$ rank in
    B.Sc Mathematics for the period 2007 to 2010.

4.  UGC-MANF Maulana Azad National Fellowship for Minority Student for pursuing Ph.D. program during April, 2014- June, 2016.

## 14. PROFESSIONAL AFFILIATIONS

1.  Member  -  Society for Industrial and Applied Mathematics(SIAM).
2.   Member  -  Indian Mathematical Society (IMS)
3.  Member  -  Indian Society of Industrial and Applied Mathematics