

DR KOKILA JAYAKUMAR

Curriculum vitae



Personal : Born on 20.02.1985, female, Married, Indian Citizen
Present Address : NBHM Post-Doctoral Research Fellow
Indian Institute of Technology (IIT) Palakkad
Palakkad, Kerala, India.
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Mobile : (91)9746214357

AREAS OF SPECIALIZATION

Differential Equations • Fractional Calculus • Stochastic Calculus

• Control Theory • Ill posed problems

ACADEMIC DETAILS

NBHM Post Doctoral Fellow

Guide	: Dr.Lakshmi K. Sankar	IIT Palakkad
	Assistant Professor of Mathematics	(1st March 2018 - Ongoing)
Field	: Discussion on Solution for Fractional Elliptic Equations	

Women Post Doctoral Fellow

Guide	: Dr. M. Thamban Nair	IIT Madras
	Professor and Head	(10th Feb 2017 - 9th Feb 2018)
Field	: Ill posed Problems on Fractional Parabolic Equations	

Ph.D., Mathematics

Guide	: Dr. K. Balachandran	Bharathiar University
	Professor and Head	(2010 - 2013)
Field	: Fractional Differential Equations and Control Theory	

M.Phil., Mathematics

Guide : Dr. K. Balachandran
Professor and Head
Field : Differential Equations
and Control theory

Bharathiar University
(2008 - 2009)

M.Sc., Mathematics

Kongu Arts and Science College
Erode- 638 011.
Graduated with 87.7%

Affiliated to
Bharathiar University
(2006 - 2008)

B.Sc., Mathematics

Kongu Arts and Science College
Erode- 638 011.
Graduated with 82.8%

Affiliated to
Bharathiar University
(2003 - 2006)

GRANTS AWARDED

NBHM Post Doctoral Fellowship

Sponsored by
National Board of Higher Mathematics
and Department of Atomic Energy

Hosted by
IIT Palakkad
March 2018- Feb 2020

Women Post Doctoral Fellowship

IIT Madras
2017-2018

University Research Fellowship

Bharathiar University
2010-2012

PUBLICATIONS

Journal Articles

1. Controllability of stochastic functional integrodifferential evolution systems, *Journal of Applied Mathematics and Informatics*, 29 (2011) 587–601.
2. Relative controllability of fractional dynamical systems with time varying delays in control, *Communications in Nonlinear Science and Numerical Simulation*, 17 (2012)

3508–3520.

3. On the Controllability of Fractional Dynamical Systems, *International Journal of Applied Mathematics and Computer Science*, 22 (2012) 523–531.
4. Relative Controllability of Fractional Dynamical Systems with Multiple Delays in Control, *Computers and Mathematics with Applications*, 64 (2012), 3037–3045.
5. Relative controllability of fractional dynamical systems with distributed delays in control, *Computers and Mathematics with Applications*, 64 (2012), 3201–3209.
6. Controllability of fractional dynamical systems with prescribed controls, *IET Journal of Control Theory and Applications*, 7 (2013) 1242–1248.
7. Constrained controllability of fractional dynamical systems, *Numerical Functional Analysis and Optimization*, 34 (2013) 1187–1205.
8. Controllability of implicit fractional dynamical systems, *IMA Journal of Applied Mathematics*, 79 (2014) 562–570.
9. Fourier truncation method for the non homogeneous time fractional backward heat conduction problem. *Inverse Problems in Science and Engineering*, (Under Review).

PARTICIPATION IN CONFERENCES

National Conference on Recent Frontiers in Applied Dynamical Systems, Karunya University, Coimbatore.	Jan 21-22, 2011
Lecture Series on Navier Stokes Equation (Solvability, Control and Stochastic Analysis) Department of Mathematics, Bharathiar University, Coimbatore.	Feb 14-18, 2011.
Lecture Series on Large Deviation Theory (Connection to Control Theory, Fluid Dynamics, Nonlinear PDE and Statistics), Department of Mathematics, Bharathiar University, Coimbatore.	Feb 16-22, 2012.
Seminar on Partial Differential Equations, Department of Mathematics, Bharathiar University, Coimbatore.	Feb 28-29, 2012.
National Seminar on Fractional Calculus: Theory & Applications, Department of Mathematics, University of Pune, Pune.	Nov 5-7, 2012.

PRESENTATIONS

- ◆ *Controllability of abstract functional integrodifferential inclusions*
 - National Level Seminar on Partial Differential Equations
 - Bharathiar University, Coimbatore, November 6th, 2009.
- ◆ *Controllability of stochastic functional integrodifferential systems*
 - National Conference on Advances in Differential Equations and Applications
 - Periyar University, Salem, October 8th, 2010.

COMPUTER SKILLS:

Document Packages : MS-Office • Latex

Mathematical Packages : Matlab • Mathematica

Operating Systems : Ubuntu • Windows

PERSONAL

Born on February 20, 1985.

Indian Citizen.

DECLARATION

I hereby declare that the details furnished above are true to my knowledge.

J.Kokila

REFERENCES

1. Dr K. Balachandran
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Bharathiar University
Coimbatore - 641 046.
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Email : kbkb1956@yahoo.com,
balachandran_k@lycos.com
2. Dr M. Thamban Nair
Professor and Head
Department of Mathematics
IIT Madras
Chennai - 6 .
Phone : +91-44 - (O), (R)
Email : mtnair@iitm.ac.in