




## Faculty Details proforma for DU Web-site

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Title	Dr.	First Name	Surendra	Last Name	Kumar	
Designation		Assistant Professor				
Address		Department of Mathematics, University of Delhi, Delhi				
Phone No	Office	011- 27666658				
	Residence Mobile	07503XXX768				
Email		<a href="mailto:surendraiitr8@gmail.com">surendraiitr8@gmail.com</a>				
Web-Page						
Educational Qualifications						
Degree		Institution			Year	
Ph. D.		I.I.T. Roorkee, Roorkee			2013	
M. Sc.		Ch. Charan Singh University (Campus), Meerut			2007	
B. Sc.		Ch. Charan Singh University, Meerut			2005	
Career Profile						
<ol style="list-style-type: none"> <li>1. Assistant Professor, Department of Mathematics, University of Delhi, Delhi (25<sup>th</sup> February 2014 (FN) to till date).</li> <li>2. Assistant Professor, Department of Mathematics, Jaypee University of Engineering &amp; Technology, Guna, M.P. (1<sup>st</sup> April 2013 to 23<sup>rd</sup> February 2014).</li> <li>3. Associate Lecturer, Department of Mathematics, Jaypee University of Engineering &amp; Technology, Guna, M.P. (11<sup>st</sup> July 2012 to 31<sup>st</sup> March 2013).</li> </ol>						
Administrative Assignments						
Areas of Interest / Specialization						
Control Theory, Functional Differential Equations, Nonlinear Analysis, Optimal Control						
Subjects Taught						
<ol style="list-style-type: none"> <li>1. Postgraduate level: Matrix Analysis, Functional Analysis, Topology I, Measure and Integration, General Measure Theory, Fluid Dynamics, Advanced Complex Analysis</li> <li>2. Undergraduate level: Mathematics I (B. Tech), Mathematics II (B. Tech), Numerical Methods (B. Tech), Discrete Mathematics (B. Tech), Partial Differential Equations (B. Sc.)</li> </ol>						
Research Guidance						
Supervision of M. Phil. Thesis (1) Monu Kumar (Completed) (2) Ahmed Farheen (Completed) (3) Paras Sharma (Under Progress)						
Ph. D. under progress (1) Shobha Yadav (2) Syed Mohammad Abdal (3) Anjali Upadhyay.(4) Abhishek Sharma (Jointly with Dr. H.P. Singh, CIC, University of Delhi, Delhi)						

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Publications Profile

1. S.M. Abdal, Surendra Kumar, Approximate controllability of semilinear system involving state-dependent delay via fundamental solution, *Ricerche di Matematica* 69 (1), 261-282 (2020).
2. Surendra Kumar; Shobha Yadav, Infinite-delayed stochastic impulsive differential systems with Poisson jumps, *Indian Journal of Pure and Applied Mathematics*, (Accepted).
3. S.M. Abdal, Surendra Kumar, Approximate controllability of impulsive system involving state-dependent delay and variable delay in control via fundamental solution, *Filomat*, (Accepted)
4. Surendra Kumar, Approximate Controllability of Nonlocal Impulsive Stochastic Differential Equations with Delay, *Advances in Mathematical Methods and High Performance Computing*, Vol. 41, 149-161 (2019). (Proceeding).
5. Surendra Kumar, Shard Rastogi, The solvability and controllability of semilinear coupled wave equation, *International Journal of Applied and Computational Mathematics*, 5:30, (2019).
6. Surendra Kumar, Approximate controllability of second-order impulsive stochastic differential system with nonlocal conditions, *Nonlinear Studies* 25 (2), 301-313 (2018)
7. Surendra Kumar, The Solvability and Fractional Optimal Control for Semilinear Stochastic Systems, *Cubo (Temuco)* 19 (3), 1-14, (2017)
8. Surendra Kumar, Mild solution and fractional optimal control of semilinear system with fixed delay, *Journal of Optimization Theory and Applications* 174 (1), 108-121, (2017).
9. Surendra Kumar, Approximate controllability of nonlocal impulsive fractional order semilinear time varying delay systems, *Nonlinear Dynamics and Systems Theory*, Vol. 16 (4) 420-430 (2016).
10. Surendra Kumar and N. Sukavanam, Controllability of semilinear systems with fixed delay in control, *Opuscula Mathematica*, Vol. 35(1), 71-83 (2015).
11. Surendra Kumar and N. Sukavanam, Approximate controllability of retarded semilinear systems in Hilbert space, *Nonlinear Studies*, Vol. 21(3), 475-484 (2014).
12. Surendra Kumar and N. Sukavanam, Controllability of Second Order Systems with Nonlocal Conditions in Banach Spaces, *Numerical Functional Analysis and Optimization*, Vol. 35, 423-43 (2014).
13. Surendra Kumar and N. Sukavanam, Controllability of fractional order system with nonlinear term having integral contractor, *Fractional Calculus and Applied Analysis*, Vol. 16 (4), 791-801 (2013).
14. Surendra Kumar and N. Sukavanam, "On the approximate controllability of fractional order control systems with delay" *Nonlinear Dynamics and Systems Theory*, Vol. 13, 69-78 (2013).
15. Surendra Kumar and N. Sukavanam, Approximate controllability of fractional order semilinear delayed control systems, *Nonlinear Studies*, Vol. 20, 73-83 (2013).
16. Surendra Kumar and N. Sukavanam, Approximate controllability of fractional order semilinear system with bounded delay, *Journal of Differential Equations*, Vol. 252, 6163-6174 (2012).
17. Surendra Kumar and N. Sukavanam, Approximate controllability of fractional order neutral control systems with delay, *International Journal of Nonlinear Science*, Vol.13(4), 454-462 (2012).
18. N. Sukavanam and Surendra Kumar, Approximate controllability of fractional order semilinear delay systems, *Journal of Optimization Theory and Applications*, Vol. 151, 373-384 (2011). Impact Factor-1.406.
19. Surendra Kumar and N. Sukavanam, Approximate controllability of fractional order semilinear system with finite delay, *Int. J. Mathematical Sciences and Applications*, Vol. 2, 417-424 (2011).
20. N. Sukavanam, Surendra Kumar, Approximate controllability of fractional order semilinear delay systems, *Communications in Computer and Information Science*, Vol 140, 73-78 (2011) (Proceeding).

<b>Conference Organization/ Presentations (in the last three years)</b>
<p>Paper Presentations:</p> <ol style="list-style-type: none"> <li>1. Presented a paper entitled “Controllability of fractional stochastic delayed system with nonlocal conditions,” in the 3rd International Conference on “Modern Mathematical Methods and High Performance Computing in Science &amp; Technology (M3HPCST-2020) Inderprastha Engineering College, Ghaziabad, INDIA, during January 09-11, 2020.</li> <li>2. Presented a paper entitled “Approximate Controllability of Nonlocal Impulsive Stochastic Differential Equations with Delay,” in the 2nd International Conference on “Modern Mathematical Methods and High Performance Computing in Science &amp; Technology (M3HPCST) Inderprastha Engineering College, Ghaziabad, INDIA, during January 04-06, 2018.</li> <li>3. Presented a paper entitled “Existence of Mild Solution for Fractional Semilinear Delayed System with Nonlocal Condition”, in the International Conference on Differential Geometry, Algebra and Analysis (ICDGAA 16) held at Department of Mathematics, Jamia Millia Islamia, New Delhi-110025, India during November 15 - 17, 2016.</li> <li>4. Presented a paper entitled “Solvability and Controllability of Semilinear Delayed Systems with Nonlinear Control” in International conference on Recent Advances in Optimization Theory and Applications (RAOTA-2016) held at University of Delhi, Delhi, India during January 30-31, 2016.</li> </ol>
<b>Research Projects (Major Grants/Research Collaboration)</b>
<ol style="list-style-type: none"> <li>1. Grant of Rs. 1,40,000 (Rupees One Lakh Forty Thousand only) under the Research &amp; Development scheme 2015-16 for the project entitled “Controllability of fractional semilinear delay systems.</li> <li>2. Grant of Rs. 1,10,000 (Rupees One Lakh Ten Thousand only) under the Research &amp; Development scheme 2014-15 for the project entitled “Some results on fractional order semilinear systems”</li> </ol>
<b>Awards and Distinctions</b>
<ol style="list-style-type: none"> <li>1. CSIR-UGC (NET + JRF) Qualified in Mathematical Sciences, 2007.</li> <li>2. GATE-2008 Qualified in Mathematics (AIR-239, Percentile-91.09).</li> </ol>
<b>Association With Professional Bodies</b>
<b>Other Activities</b>
<ol style="list-style-type: none"> <li>1. Presented a paper in the 3rd International Conference on “Modern Mathematical Methods and High Performance Computing in Science &amp; Technology (M3HPCST-2020) Inderprastha Engineering College, Ghaziabad, INDIA, during January 09-11, 2020.</li> <li>2. Presented a paper in the 2nd International Conference on “Modern Mathematical Methods and High Performance Computing in Science &amp; Technology (M3HPCST) Inderprastha Engineering College, Ghaziabad, INDIA, during January 04-06, 2018.</li> <li>3. Participated in the Refresher Course in Mathematical Science held in CPDHE, University of Delhi, Delhi, India from 6th June 2017 to 27th June 2017.</li> <li>4. Presented a paper in the International Conference on Differential Geometry, Algebra and Analysis (ICDGAA 16) held at Department of Mathematics, Jamia Millia Islamia, New Delhi-</li> </ol>

110025, India during November 15-17, 2016

5. Participated in the Orientation Programme (OR-85) held in CPDHE, University of Delhi, Delhi, India from from 20th May 2016 to 17th June 2016.
6. Participated and presented a paper in International conference on Recent Advances in Optimization Theory and Applications (RAOTA-2016) held at University of Delhi, Delhi, India during January 30-31, 2016.
7. Participated in 14<sup>th</sup> Discussion Meeting on Harmonic Analysis, University of Delhi, Delhi, India during December 10-12, 2015.
8. Participated in the workshop International Workshop on Operator Spaces, University of Delhi, Delhi, India during December 7-9, 2015.
9. Participated in the conference Conference on Partial Differential Equations (CPDE-2014) held at LNMIIT Jaipur, India during December 10-11, 2014.
10. Participated in the workshop on Advanced Workshop on Hyperbolic PDEs: Theory, Numerics & Applications (HPTNA-2014) held at LNMIIT Jaipur, India during December 01-09, 2014.
11. Participated and presented a paper in the Advances in Control and Optimization of Dynamical Systems (ACODS-2012) held at Indian Institute of Science, Bangalore, India during February 16-18, 2012.
12. Participated and presented a paper in the the conference Computational Mathematics & Information Technology, , JUET, Guna, M.P., India during December 7-9, 2012
13. Participated and presented a paper in the International Conference on Logic, Information, Control & Computation (ICLICC 2011), held at Gandhigram Rural Institute - Deemed University, Tamil Nadu, India during February 25-27, 2011.
14. Participated and presented a paper in the International Congress of Mathematicians (ICM-2010) held at Hyderabad, India during August 19-27, 2010.
15. Participated in the workshop Study Group Meeting on Industrial Problems held at Dept. of Mathematics, IIT Roorkee, India during 16-21 March, 2009.

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.