




## Shivaji College Faculty Details Proforma

<b>Title</b>	<b>Dr.</b>	<b>First Name</b>	MRIDULA	<b>Last Name</b>	BUDHRAJA	<b>Photograph</b>
<b>Designation</b>		Associate Professor				
<b>Address</b>		S.U. 30, Pitam Pura, Delhi-110034				
<b>Office Phone No.</b>		25116644				
<b>Residence</b>		27342078				
<b>Mobile</b>		9212500143				
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<b>Web-Page</b>						
<b>Educational Qualifications</b>		M.A., M. Phil, Ph.D. (Mathematics)				
<b>Degree</b>		<b>University/Institute</b>			<b>Year</b>	
Ph.D.		University of Delhi			2008	
M.Phil./M.Tech.		University of Delhi			2000	
PG		University of Delhi			1998	
UG		University of Delhi			1996	
<b>Any Other Qualification</b>						
<b>Career Profile</b>						
Worked as Adhoc Lecturer from November 1999, in Lady Shri Ram College for Women, and Deen Dayal Upadhyaya College. Appointed in Shivaji College, on permanent basis, on 16 <sup>th</sup> July, 2002						

<b>Administrative Assignments</b>
<b>Currently: Secretary, Staff Council</b>
<b>Areas of Interest/Specialisation</b>
<b>Dynamical Systems</b>
<b>Subjects Taught</b>
<b>Mechanics, Differential Equations, Analysis</b>
<b>Innovation Project/Research Projects (Major Grants/Research Collaboration)</b>
<b>Publications Profile (<i>Research Papers/Books</i>)</b>

1. Controlling Chaos In 2-Dimensional Systems, L.M. Saha, G.H. Erjaee and Mridula Budhraj, Published in Iranian Journal of Science and Technology Transaction A, Vol.28, No. A 2, 2004, 219 – 226.
2. Characterization Of Attractors In Gumowski-Mira Map Using Fast Lyapunov Indicators, L.M. Saha, M.K. Dass and Mridula Budhraj Published in FORMA, Vol. 21, 2006, 151-158.
3. The Largest Eigenvalue: An Indicator Of Chaos? , L.M. Saha, and Mridula Budhraj, Published in International Journal of Applied Mathematics and Mechanics, Vol. 1, 2007, 61-71.
4. Complete Synchronization Of Chaotic Systems, L.M. Saha and Mridula Budhraj, Published in Proceedings of the National Academy of Sciences, Vol. 77(A), II, 2007, 161-168.
5. Detection Of The Chaotic Behaviour Of A Bouncing Ball By The 0-1 Test , G.Litak, A. Syta, M. Budhraj and L.M. Saha , Published in Chaos, Solitons and Fractals, Vol. 42, 2009, 1511- 1517.
6. Test Applied to Peter-De-Jong Map, Mridula Budhraj, Narender Kumar, L.M. Saha, International Journal of Engineering and Innovative Technology, Vol. 2, Issue 6, 2012, 253-257.
7. Continuous Models Of Tumor Induced Angiogenesis And Anti- Angiogenesis Strategy, Published in Mathematical Journal of Interdisciplinary Sciences, Vol. 2, I, 2013, 57-75.
8. Complexity Study And Chaos Control In A Prey-Predator System, Mridula Budhraj, Keerti J. Behera, L.M. Saha, Journal of Advances in Mathematics, Vol. 4, III , 2013, 469-477.
9. The 0-1 Test Applied to Peter-De-Jong Map, Mridula Budhraj, Narender Kumar, L.M. Saha, International Journal of Engineering and Innovative Technology, 2(6), 2012, 253-257
10. Multi-Switching Synchronization between T-system and Liu-Syatem, Ayub Khan, Mridula Budhraj, Aysha Ibraheem, published in Int. J. Dynam. Control, in April, 2017.
11. Different Types of Synchronization Between Different Fractional Order Chaotic Systems, A. Khan, M. Budhraj and A. Ibraheem, Published in Non-Linear Dynamics and Systems Theory in July, 2017.
12. Multi-Switching Compound Synchronization of four different chaotic systems via active backstepping method, Ayub Khan, Mridula Budhraj, Aysha Ibraheem, Published in Int. J. Dynam. Control in November, 2017.
13. Multi-Switching Dual Compound Synchronization of Chaotic systems, Ayub Khan, Mridula Budhraj, Aysha Ibraheem, Published in Chinese Journal of Physics in December, 2017.
14. Synchronization of dynamical systems of different orders and different dimensions, Ayub Khan, Mridula Budhraj and Aysha Ibraheem, Published in Malaya Journal of Matematik in February, 2018.
15. Multi-Switching Synchronization of Four Non-Identical Hyperchaotic Systems, Ayub Khan, Mridula Budhraj, Aysha Ibraheem, Published in Int. J Appl. Comput. Math in March, 2018.

#### **Conference/Seminar/Faculty Development Programme/Workshop**

Participated in 5-day National Workshop on “Differential Equations, Computing and Modelling”, held in Deptt. of Mathematics, University of Delhi, from 20th – 24th December, 2010.

Participated in National Conference on Advances in Applied Mathematics and Statistics(NCAAMS-2017), organized by Mata Sundri College for Women, University of Delhi, September 7-8, 2017.

#### **Research Guidance (*Supervision of Doctoral Thesis/Dissertations*)**

**Currently supervising a research scholar for award of Ph. D degree from University of Delhi**

#### **Awards and Distinctions**

<b>Memberships</b>
<b>Other Academic Activities</b>
<b>Cultural/Extracurricular Activities</b>
<b>An Active member of National Service Scheme (NSS) Unit of College.</b>

**Signature of Faculty Member**