



# SLC (University of Delhi)

## SHYAM LAL COLLEGE



### Faculty Profile

<b>Title:</b>	Dr.	<b>First Name:</b> Virender	<b>Last Name:</b>
<b>Designation:</b>	Assistant Professor		
<b>Department:</b>	Mathematics		
<b>Address:</b>	91 GF 3BR North Avenue II Omaxe City Bahadurgarh (HR) 124507		
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<b>Web-Page:</b>			



Educational Qualifications (from Bachelor's Degree):			
Degree	Subject	University/ College/Institution	Year
B.Sc. (H)	Mathematics	University of Delhi	2001
M.Sc.	Mathematics	University of Delhi	2004
CSIR NET-JRF	Mathematics	CSIR	2004
Ph.D.	Mathematics	M.L.S. University Udaipur	2009

Experience:					
	Name of the University/College/ Institute/Organisation	Designation & Status (Permanent/ Ad-hoc)	From	To	Effective Time Period
Teaching	Ramjas College, University of Delhi	Ad-hoc	27.07.2009	13.11.2022	13 Years 4 Months
	Shyam Lal College, University of Delhi	Permanent	27.03.2023	Till date	2 Months
Research/ Corporate					
Consultancy					

Teaching - Learning Process (During the Academic Year 2019-2020)		
Are You using ICT (LMS, E-Resources)?	If Yes, Please give the details below:	
	Name	Total Numbers
E- Resources	MIT and other Reputed Resources related to topics	
Techniques and Platforms	CAS: Mathematica, TORA, R, Latex	

Career Advancement and Contribution to College Corporate Life ( Last three years till June 2020):				
	Name of the Committee/ Centre/ Society/ Cell	Designation	From	To
Convenor/Member of Committees				
Any Other Administrative Responsibility (Bursar, Coordinator, Superintendent etc.)				

Areas of Interest/Specialisation:	
S.No.	Areas of Interest/ Specialisation
1	Analysis
2	Functional Analysis

**Subjects Taught (During the Academic Year 2019-2020)**

S.No.	Subject	S.No.	Subject
1	Multivariate Calculus	2	Numerical Methods
3	Partial Differential Equations	4	Mechanics
5	Linear Programming and Applications	6	Analysis

**Publications: Citation Index in Scopus/Web of Science or Pub Med/ Indian Ciation Index**

Title of Paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	h-Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations	Impact factor, if any	
On Perturbation of Frames in Hilbert Spaces	Virender	International Journal of Pure and Applied Mathematics	2008			M.L.S.U. Udaipur			Before June 2018
A Note on Block Sequences in Hilbert Spaces	Virender	Glasnik Matematicki	2008			M.L.S.U. Udaipur			
On Stability of Frames in Conjugate Banach Spaces	Virender	Journal of Indian Mathematical Society	2008			M.L.S.U. Udaipur			
A Note on Frame Sequences in Hilbert Spaces	Virender	International Journal of Contemporary Mathematical Sciences	2008			M.L.S.U. Udaipur			
On Atomic Decomposition in Banach Spaces	Virender	International Journal of Mathematical Analysis	2010			M.L.S.U. Udaipur			
On Almost Orthogonal Frames	Virender	International Journal of Mathematics and Mathematical Sciences	2012			Ramjas College			
On WH-Packets in $L^2(\mathbb{R})$	Virender	Communications in Mathematics and Applications	2012			M.L.S.U. Udaipur			
On Stability of Orlicz N-Frames	Virender	Journal of Environment Sciences, Computer Sciences and Engineering	2014			Ramjas College			
On Stability of Frames in Hilbert Spaces	Virender	Journal of Chemical, Biological and Physical Sciences	2015			M.L.S.U. Udaipur			
A Note on Feichtinger Conjecture	Virender	Southeast Asian Bulletin of Mathematics	2015			Ramjas College			
Dual Frames in Finite Dimensional Quaternionic Hilbert Spaces	Virender	Poincare Journal of Analysis and Applications	2016			Ramjas College			
Matrix Valued Wave Packet Bessel Sequences and Symmetric Frames in $L^2(\mathbb{R}_d; C_{sxr})$	Virender	Poincare Journal of Analysis and Applications	2018			Ramjas College			July 2018 - June 2019
On Frames in Finite Dimensional Quaternionic Hilbert Spaces	Virender	Palestine Journal of Mathematics	2020			Ramjas College			July 2019-June 2020
Applications of Mathematics in Machine Learning	Virender	Hans Sodh Sudha	2021			Ramjas College			

Inhomogeneous wave reflection from the surface of a partially saturated thermoelastic porous media	Virender	International Journal of Numerical Methods for Heat and Fluid Flow	2021			Ramjas College			July 2020-June 2021
Wave-induced flow of pore fluid in a cracked porous solid containing penny shaped inclusions	Virender	Petroleum Science	2021			Ramjas College			
A Note on Generalized Frame Potential	Virender	Jordan Journal of Mathematics and Statistics	2022			Ramjas College			July 2021-June 2022
A Note on Excess of Frames in Hilbert Spaces	Virender	Tattva-Sindhu	2022			Ramjas College			
Near Equiangular Frames in Hilbert Spaces	Virender	International Journal of Interdisciplinary Organizational Studies	2022						

**Books and Chapters in edited Volumes/Books published, and paper in National /International conference Proceeding per teacher during the Year**

Title of Book/Paper/ Book Chapter	Publisher	National/International	Year	
A Study of Gabor Frames and Related Concepts in Banach Spaces	Scholars' Press	International	2014	Before June 2018
An Introduction to Linear Algebra (For Beginners)	Imprint Books	National	2015	
Multiple Integral (Double Integral)	ILLL	National	2014	
Multiple Integral (Triple Integral)	ILLL	National	2014	
Dual Spaces	ILLL	National	2015	
Improper Integrals	ILLL	National	2015	
Gamma Function and Beta Function	ILLL	National	2016	
				July 2018 - June 2019
				July 2019- June 2020

**Conference/ Seminar/ Symposium/ Workshop/ Presentation:**

Sr. No.	National/ International/state	Topic of the Conference/Seminar/Workshop	Paper Presentation/Attend/ Resource Person	Date	Duration	
1	National	On Retro-p Frames in Conjugate Banach Spaces	Paper Presentation	31.01.2010	25 Min.	Before June 2018
2	International	Fourier Analysis and Signal Processing	Paper Presentation	14.05.2011	25 Min.	
3	International	An Introduction to Foundation of Holography	Paper Presentation	18.05.2011	25 Min.	
4	National	On Localization of Frames	Resource Person	26.02.2016	25 Min.	
5	International	Frame Scaling in Hilbert Spaces	Resource Person	19.12.2017	25 Min.	
6	International	Mini Course on Wavelets and Frames	Resource Person	20.12.2017	50 Min.	
7	State	Introduction to Mathematical Modeling	Resource Person	26.12.2016	90 Min.	

1	International	Frame Potential in Hilbert Spaces	Resource Person	05.11.2019	25 Min.	July 2018 - June 2019
1	International	Bases and Frames in Quaternionic Hilbert Spaces	Resource Person	27.08.2020	25 Min.	July 2020-June 2021
2	National	Resources on Multivariate Calculus and Numerical Methods	Resource Person	07.10.2020	25 Min.	

**Research Projects/ Innovation Projects (Major Grants/Research Collaboration):**

S.No.	Title of the Project	Funding Agency	Status/Output

**Research Guidance (Ph. D./ M. Phil.):**

	No. of Ph.D. Students	No. of M.Phil. Students
Awarded		
Submitted		
Under Progress	2	

**Fellowships/Awards /Distinctions/Recognitions:**

Year of Award	Name of the Fellowship/Award/ Distinction/ Recognition	Desination	Name of the Academic Bodies /Association	International /National/ State
2004	Junior Research Fellowship	Research Scholar, Ph.D.	CSIR	National

**Incentive to the teachers who receive recognition/awards**

State	National	International

**Association with the Professional Bodies:**

	Name of the Organisation	Year
Membership	AMS, ISHM	2019-2023, Life Member
Any Other		

**Development of E-Learning Delivery Process/Material:**

S.No	Title of the Module	Recognised by/Submitted at/ Delivered at any government setup

**Refresher/ Orientation Programme/ FDP / Other Specialised Courses:**

S.No.	Topic	Name of the Organiser	Place	Duration and Year
1	Concerns in Educational Research and Assessment	SWAYAM	Online/Offline	3 Months, 2020
2	Pedagogical Innovations and Research Methodology	SWAYAM	Online/Offline	3 Months, 2020
3	Fourier Analysis and Its Applications	SWAYAM	Online/Offline	3 Months, 2021
4	Leadership and Governance in Higher Education	SWAYAM	Online/Offline	3 Months, 2021
5	Faculty Induction Programme	TLC Ramanujan College	Online	1 Month, 2021
6	Applications of Algebra and Number Theory in Network Security	FDRC Hansraj College	Online	1 Week, 2020
7	Student-Centric Pedagogic Methods	FDRC Hansraj College	Online	1 Week, 2021
8	Roadmap for Building New India with New Education Policy	FDRC Hansraj College	Online	1 Week, 2021
9	Creation and Development of Moocs while Managing Online Classes	FDRC Hansraj College	Online	1 Week, 2021
10	Applications of AI-Machine Learning and Soft Computing Techniques	FDRC Hansraj College	Online	1 Week, 2022
11	Administrative Skills and Leadership	FDRC Hansraj College	Online	1 Week, 2022

**Declaration**

I do hereby solemnly declare that the information given and the statements made by me are correct and true to the best of my knowledge

**Dr. Virender**