CV Title Name



Title	DR	First	PARDE	Last	KUMAR	Photograph
		Name	EP	Name		
Designation		Assistant Professor				
Address		B-48, Shakur Pur JJ Colony Delhi-34				
Phone No (Office)		9811948488				M ZO
Residence		8587017428				
Mobile						
Email		pardeep@ip.du.ac.in				
Webpage	e					
Orcid ID		https://vidwan.inflibnet.ac.in/profile/232400				
Vidwan I		0000-0002-9416-1723				
Research			<u>researchgate</u>	.net/profile/Pa	<u>irdeep-Kumar-</u>	
Google S	<mark>cholar ID</mark>	79/research				
		https://myaccount.google.com/?hl=en&pli=1				
Education	nal Qualific	ations				
Degree		Institution				Year
B.Sc.(Hons) Mathematics		Rajdhani College, University of Delhi			2002	
M.Sc. Mathematics		Hansraj College, University of Delhi				2005
MPhil (Mathematics)		Department of Mathematics, University of Delhi			2012	
PhD (Mat	PhD (Mathematics)		of Mathemat narkhand.	2023		
Career P	rofile					
	istant Profes	<u>sor</u>				
Nature of Post: Adhoc						
1. Vivekananda College, University of Delhi (July,2011-July,2013) 2. Lakshmi Bai College, University of Delhi (July,2013-April,2015)						
3. Keshav Mahavidvalava, University of Delhi (July,2015-Ian,2016)						
4. Shyama Prasad Mukherji College for women, University of Delhi (Jan, 2016-continue)						
	f Post : Guest	llaga Universit	v of Dolhi (20	111 2012 2010	2010)	
1. Lakshmi Bai College, University of Delhi (2011-2013,2018,2019)						

2. Aaryabhatta College, University of Delhi (2019)					
Nature of Post : Permanent 1. Indraprastha College for Women					
Administrativa Assignments	Year				
Administrative Assignments Deputy Supretendant of SOL Examination	DEC-2023				
beputy Supretendant of SOL Examination	DEG-2023				
Areas of Interest / Specialization	•				
Nonlinear Science, Chaos Theory, Mathematical Modelling, Dynamical System and Bio-Mathematics, Cancers Cell Growth.					
Subjects Taught					
Real Analysis, Differential Equation (Hons./GE/Prog.) with Practical, Numerical Analysis with Practical, Partial Differential Equation with Practical, Group Theory (Hons./Prog.), Ring Theory, Complex Analysis with Practical, Calculus (Hons./Prog./GE) with Practical, Linear Algebra (Hons/Prog./GE), Probability and Statistics with Practical, Multivariate Calculus with Practical, Field Theory, Linear Programming with Practical, Reimann Integration, Theory of Real function, Analytical Geometry, Applied Algebra, Essential with Python with Practical, Stats with R with Practical, Latex and HTML with Practical, IT skills and Data Analysis-I with Practical, Metric Space, Building Mathematical Ability, Information Technology, Discrete Mathematics with Practical, Vedic Mathematics, Programming Using Python, Bio-Mathematics. Classes Taught: BA/BCom/BSc (Hons.) and BA/BCom (Prg.)					
Technical Knowledge • Mathematica, MatLab, Maxima, Python, C++, R, Quiskit, Latex, Excel and Excel Solver, Lingo, Simulink and other research-related software and App. • One-year Professional Diploma in Software Engineering from F-TEC New Delhi in July, 2000					
Research Guidance and Examination					
Co-supervision of Ph D thesis					
Title of Thesis : Controlling Influence of Dissipative Dynamics in Fractional Oe	rder Dynamical System.				
Student Name: Ms Meenu					
University: Department of Mathematics, Vinoba Bhave University, Hazaribagh Jharkhand.					
Supervision of Post Graduate Dissertation					

Examination of Ph. D, M. Phil, and Post Graduate Dissertations

Publications Profile
Book
Book Chapter
Research Articles
Mentioned in APA format
Kumar, Pardeep, et al. "(R1980) Effect of Climate Change on Brain Tumor." <i>Applications and Applied Mathematics: An International Journal (AAM)</i> 17.2 (2022): 17.
Kumar, Pardeep, et al. "Synchronization of Chaos and its Effect on Brain Tumor" International Journal of Research and Analytical Review. 9 (2022): 139.
Kumar, Pardeep, et al. "Onset of Chaos in Behaviour of Corona Virus" International Journal of Research and Analytical Review. 9 (2022): 462.
Kumar, Pardeep, et al. "The Aspect of Ceteris Paribus in Dynamical System" INTERNATIONAL JOURNAL OF MATHEMATICS TRENDS and TECHNOLOGY, 68(2022):107.
Jain, M., Kumar, D., Satya, S. K., & Kumar, P. (2017). R3BP with Stokes Drag Effect when the Smaller Primary is a Finite Straight Segment and Bigger One is an Oblate Spheroid. <i>International Journal of Engineering and Management Research (IJEMR)</i> , 7(3), 210-215.
Satyendra Kumar, Dinesh Kumar, Govind Jha, and Pardeep Kumar. "Non Linear Stability of L4 in photogravitational CRTBP." <i>A A</i> 1, no. 4 (2017): 4.
Kumar, Pardeep, et al. "QUASI MINIMIZERS, QUASI EFFICIENCY AND QUASI SADDLE POINT CRITERIA IN OPTIMIZATION PROBLEMS" International Journal of Research and Analytical Review. 9 (2022) 494.
Kumar P., Chaudhary M., "Higher-Order Generalized Invexity And Strict Minimizers In Vector Optimization Within Conic Spaces", <i>Educational Administration: Theory and Practice</i> , 30(3), 2665-2673.
Kumar P., Chaudhary M. and Singh A. "Parametric Set Mathematical Programming Problem Over Cone Using P-KLocally Connected Set Maps", <i>Library Progress International</i> , 44(3), 15069-15075.
Kumar P., khan A., Singh A and Singh D, "Impact of Microbial Communities in Environment on Cancer Cell Dynamics" African Journal of Bio-Medical Research, 23(3S), 663-670.
Book Reviews
Editorial Roles

Study Materials					
Articles in Newspapers and Magazines					
1 1 8					
Conference and Workshop	Dates				
Paper Presentation in Conference					
Presented a Paper at a National Seminar, entitled "Recent Innovation in Chemical Science and Environmental Technology" organised by Sri Aurobindo College, University of Delhi.	4-March,2017.				
Presented a Paper at the National Seminar, entitled "Impact of Microorganisms on the Tumor in the Brain" Organized by Shyama Prasad Mukherji College for Women.	3-March,2022.				
Presented a Paper at a National Seminar, entitled "Synchronization of Chaos and its Effect on Brain Tumor" Organized by Shyama Prasad Mukherji College for Women.	3-March,2022.				
Presented a Paper at an International Conference, entitled "Influence of Temperature on Growth of Tumour Cell" Organized by Raj Rishi College, Alwar, Rajasthan.	14-July,2023.				
Presented a Paper at an International Conference on Analysis and its Applications	19-21- Jan,2024				
(ICAA-2024) "Analysis and its Application" organized by Department of Mathematics, Jamia Millia Islamia University, Delhi.					
Presented a paper at an "International Symposiuam on Recent Advanvement in Differential Equation and its Application(ISRADEA-2024) organized by Department of Mathematics, Deshbandhu Collge University of Delhi.	6-Aug, 2024				
Session Chair in Conference					
Participation in Workshop					
On "Building Mathematical Ability", organized by CPDHE, University of Delhi.	June-24 - 26, 2013.				
On "Information Technology" organized by CPDHE, University of Delhi.	July-26- 27, 2013.				
On "Latex and Website Designing" organized by Shaheed Bhagat Singh College, University of Delhi.	Aug-11- 12, 2016.				
On "Mathematical Modelling and Computational Techniques by Mathematica" organized by Zakir Hussain College, University of Delhi.	March-30-31, 2017.				

•	On "Numerical Techniques for partial differential equation" organized by NIT Nagpur.	July,10-14, 2017
•	On "LaTeX" organized by SPM College, University of Delhi.	Sept-27,2016
•	On "LaTeX and HTML" organized by ANDC, University of Delhi.	Sept-27,2016
•	On "Technical Terminology in Science" Organized by CSTT, VBU, Jharkhand.	July-12 to 13,2018,
•	On "Technical Terminology in Higher Education" organized by SPM College, University of Delhi.	Oct-29 to 30, 2018
•	On "Energy Conservation and Environment" organized by SPM College, University of Delhi.	Feb- 1 to 2, 2019,
•	On "Group and Geometry" organized by SPM College, University of Delhi.	Aug- 2 to 3, 2019
•	On "Evolving Trends in Teaching Quality with Outcomes" organized by SPM College, University of Delhi.	Nov- 1to 2, 2019
•	Teacher Enrichment Workshop on "Differential Equation and Mathematical Modelling" organized by Deshbandhu College, University of Delhi.	July-24 to 29, 2018
•	Science Academies Workshop on "Mathematical Biology" organized by Hindusthan College of Arts and Science, Tamilnadu.	Jan-10 to 12, 2022
•	On "AL and ML using MATLAB" organized by MITS, Andhra Pradesh.	Nov-3 to 7, 2021
•	On "New Advances in Mathematical and Computational Sciences" organized by Yogi Vemana University Andhra Pradesh.	Sept-13 to 18, 2021
•	On " Innovative Technique and Data Analysis" organized by Styabhama Institute of Technology, Chennai.	Jan- 3 to 7, 2022
•	On "Latex", Organized by MTTF, Punjab.	Jan -15 to 16, 2022
•	On "Network and Dynamical System" organized by IIT, Madras.	Aug- 25 to 28, 2021

On " Geogebra" organized by St. Xavier College, Goa.	Jan- 24 to 25, 2022
On "Introduction to Securities Markets" organized by Therthanker Mahaveer University, Moradabad, UP.	Feb-3, 2022
On "Statistical Analysis Using SPSS for Research" organized by Karmaveer Bhaurao Patil College, Vashi, Mumbai.	Sep-30 to Oct-2, 2022
 Participated in One Day National Workshop on "Research Methodology", organized by Department of Commerce & Management, Shri Muktanand College Gangapur, Dist. Chhatrapati Sambhajinagar (M.S.)-431109. 	11th March, 2024
 Participated in One Week Workshop "Emerging Areas of Differential Equations" Organized by Department of Mathematics, Govt. College of Kullu, H.P. 	16-20, Sept-2024.
 Participated in Two Days workshop "Software R" organized by Department of Mathematic, Indraprastha College for Women, University of Delhi. 	Aprl,3 -4, 2024.
Organization	
Member of the organizing team in the Science Academies Lecture workshop on "A comparative study of Real and complex analysis" organized by SPM College, University of Delhi.	5-7,January 2023.
Member of the organizing team in the seminar "Expanding the domain of Indian Languages in Mathematics and Science" organized by SPM College, University of Delhi.	Nov-18, 2022.
Convener in two days workshop on "Machine Learning with Mathematics" organized by the Department of Mathematics, SPM College, University of Delhi.	Dec-22 to 23, 2021.
Co-Convener in the career counselling session organized by the Department of Mathematics, SPM College, University of Delhi.	15 ⁻ March,2021.
Work done as Judge of Inter-College Paper Presentation Competition organized by the Department of Mathematics, SPM College, University of Delhi.	Jan-29, 2022.
Worked as Mentor in "Interdisciplinary Student Seminar" organized by Department of Mathematics, SPM College, University of Delhi.	Oct-10, 2016.

Association with Professional Bodies

Membership of societies

- 1. Life Member of Indian Science Congress Association, Kolkata, India.
- 2. Life Member of Ramanujan Mathematical Society, Tiruchirapalli, India.
- 3. Life Member of Indian Mathematical Society, Aurangabad, India.

Membership of committees/ boards

Member of Committees to make syllabus of Bio-Mathematics (NEP)

Other Academic Activities

Faculty Development Programme

- On "LaTex" Sept-27, 2016 organized by SPM College, University of Delhi.
- On "Software R" Mar-24, 2017 organized by Keshav Mahavidyalaya, University of Delhi.
- On "Effective Teaching and Learning" Sept- 22 to 26, 2018 organized by SPM College, University of Delhi.
- On "Recent Development in Mathematical Science" Dec-22 to 26, 2021 at MDU Rohtak, Haryana.
- On "Computational Mathematics and Artificial Intelligence for Engineers" from 13/12/2021 to 17/12/2021 at Dayananda Sagar College of Engineering.
- On "Mathematical Modelling and Controller Design for Non-Linear Process" from 11/10/2021 to 15/10/2021 at Sree Vidyanikethan Engineering College.
- On "Emerging Trends in Applied Mathematics" from 06/12/2021 to 10/12/2021at Dayananda Sagar College of Engineering.
- On "MATLAB and LaTex" Jan- 5 to 11, 2022 organized by Baba Farid Group of Institution, Punjab.
- On "Research Tool and Methodology" Sept-27 to Oct-1, 2021, Organized by Lendi Institute of Engineering and Technology, Vizianagaram.
- On "Outcome Based Education" Jan-13 to 19, 2022 organized by Rajiv Gandhi College of Management Studies, Maharashtra.
- On "Technology in New Era" Jan-22, 2022 organized by Curvey College of Women, Tamil Nadu.
- On "Deep Learning" Jan- 17 to 22, 2022 organized by Vel Tech Institutes of Science and Technology.
- On "Virtual Lab" Oct-18 to 22, 2021 organized by Lendi Institute of Engineering and Technology, Vizianagaram, Karnataka.
- On "Emerging Trends in Science and Engineering" Feb 14 to 18, 2022 organized by Regional College of Education and Research and Technology, Jaipur, Rajasthan.
- On "Recent Methods in Economics Using Stata" Mar-2 to 6, 2022, Organized by MTTF.
- On "IPR and Patent" Mar-12, 2022 Organized by Rajiv Gandhi College of Management Studies, Maharashtra.
- Five Day International Virtual Faculty Development Program' from 20th to 24th June 2022 jointly organized by, Dr. M.G.R. Educational and Research Institute, Tamil Nadu.
- On "Research Perspectives in Mathematics and its Applications" July-4 to 16, 2022 organized by Styabhama Institute of Technology, Chennai.
- On "Emerging Trends of Pedagogy in Language, Literature and Social Sciences" July-13 to 19, 2020 organized by, Ramanujan College, University of Delhi.
- On "Mathematical Science" Sept-26 to Oct-10, 2022 organized by, Ramanujan College, University of Delhi.
- On "Smart Tools and Methodologies for Academic Research" Aug-1 to 5, 2022 organized by the Department of ECE, Mahatma Gandhi Institute of Technology, Hyderabad in association with Swecha.
- On "Art of writing research paper" organized by R&D Committee, RGCMS on March -18, 2023.
- On "Integrating Autodesk in Engineering" June-26 to July-1, 2023 organized by Lendi Institute of Engineering and Technology, Vizianagaram, Karnataka.
- On "Mathematics in Real, Applied and Computational Domains" organized by the Department of Mathematics, School of Science and Humanities, Sathyabama Institute of Science and Technology, Chennai, from 3 to 8 July, 2023.
- On "Impact of Information Technology in Diverse domain" July-17 to 24, 2023 organised by Dwarka Doss Goverdhan Doss Vaishnav College, Chennai.
- On "R programming for Data Science" April-24 to May-07, 2023 organized by MTTF.
- On "Open source for Teaching and Research and Training" May-22 to 28, 2023 organized by Ramanujan College, University of Delhi.
- On "Effective Teaching Learning Paradigms through Pedagogical Innovations" organized by the Department of Mathematics, School of Science and Humanities, Sathyabama Institute of Science and Technology, Chennai, from 7 to 12 Feb, 2022.
- On "Publishing in Open Access Journals" organized by R&D Committee, RGCMS on 8th January 2022.
- On "Applicability of Mathematical Sciences in Emerging World" organized by the Department of Mathematics, School of Science and Humanities, Sathyabama

Institute of Science and Technology, Chennai from 7 to 12 August, 2023.

• On "Pyton Programming and its Application" organized by Department of Technology SNGB's Polytechnic, Nasik, on 18-19, July-2023.

Professional Development Programme

• On "Dynamical Systems and its Application" May-8 to May12, 2017 organized by IIT-Dhanbad.

Certificate Course

- On "Introduction to CAS" June-27 to July-18, 2020 organized by Hansraj College, University of Delhi.
- On "Statistical Concept and Ordinary Differential Equation with R" July-26 to Aug-12, 2021 organized by PGDAV College, University of Delhi.
- On "Wolfram Mathematica from Beginner to Expert" May-18, 2023 organized by udemy.

Orientation Course

- 4 weeks orientation programme organized by Ramanujan College from June-4 to July-1, 2020.
- 4 weeks orientation programme organized by Ramanujan College from Oct-22 to Nov-20, 2023.
- 4 weeks orientation programme organized by Ramanujan College from Dec-2 to Dec-31, 2023.

Internship

• 30 days Machine Learning Master Class organized by ASSDC completed on Dec- 2021.

Refresher Course

• "Refresher Course in Mathematics" Aug-31 to Sept-14, 2021 organized by Ramanujan College, University of Delhi.

Short Term Training Proframme

- On "Master Class on Artificial Intelligence" Dec-6, 2021 to Jan-4, 2022 organized by ASSDC with Pantech Pvt. Ltd.
- On "Microsoft Team Software" Aug-28 to 29, 2020 organized by SPM College, University of Delhi.
- ISTTP-2 on "Impact and panacea of environmental pollution: the past, present and future" organized by Raj Rishi Govt. Autonomous College from 20th-26th, April 2022.
- ISTTP-3 on "International Short Term Training Programme-3 on "Contrivance of Sustainable Development Goals (SDGs) for Environmental Conservation" organized by Raj Rishi Govt. Autonomous College from 24th -30th June 2022.
- ISTTP-4 on "Methods, Modeling, Data And Tools of Environmental Conservation" organized by Raj Rishi Govt. Autonomous College from 1st -7th November-2022.
- ISTTP-5 "on production and regulation of chemicals and toxins for environmental conservation" organized by raj rishi govt. autonomous college from 7th -13th dec. 2022.
- ISTTP-6 on "Greener living: Reduce, Reuse and Recycle" organized by Raj Rishi Govt. Autonomous College from 1st -7th Feb. 2023.
- ISTTP-7 on "Biodiversity and Environment Conservation" organized by Raj Rishi Govt. Autonomous College from 9th -15th March 2023.
- ISTTP-8 on "Energy and Environment Conservation" organized by Raj Rishi Govt. Autonomous College from 18th -24th April 2023.
- ISTTP-9 "On Environment Pllution: A threat to Life Below Water & World Environment Day Celebration Week" organized by Raj Rishi Govt. Autonomous College from 5th -11th June 2023.
- STTP on "Data Science" Jan-31 to Feb-4, 2022 organized by Amity University, Jaipur, Rajasthan.

• Participated in "16 Lecture series of MatLab Tutorial" Organised by MTTF, Punjab from Jan-2023 to Aug-2023.

Conferences/Seminars

- National Seminar on "Artificial Intelligence" Mar-11 to 12, 2022 organized by SPM College, University of Delhi.
- "Research Scholar Seminar" Mar-18 to 19, 2010 organized by the Department of Mathematics, University of Delhi.
- International Conference on "The Legacy of Ramanujan" Dec-17 to 22, 2012 organized by the Department of Mathematics, University of Delhi.
- National Seminar on "Optimization and its Application" Jan-15 to 16, 2015 organized by the Department of Mathematics, Lakshmi Bai College, University of Delhi.
- On "Youth Programme on Oil Conservation" Jan-20, 2017 organized by PCRA.
- International Conference on "Mathematics and Its Application" April-26 to 28, 2107 organized by the Department of Mathematics, the University of Delhi.
- International Conference on "Mathematical Modelling and Bio-Systems" March-12 to 14, 2018 organized by the Department of Mathematics, IIT Roorkee.
- National Conference on "Advances in Mathematics" March-17 to 18, 2018, Organized by the Department of Mathematics, MB Govt. PG College, Haldwani, Uttrakhand.
- Annual Conference by RMS with the University of Delhi from Jun 1-3, 2018.
- National Webinar on "Quantum Computing" Aug-21, 2021 organized by the Department of Mathematics, Maitreyi College, University of Delhi.
- National webinar on "Recent Trends in Statistical Research" Aug-27, 2012 organized by the Department of Mathematics, Janki Devi College, University of Delhi.
- International Seminar "On Impact Of Ozone Layer Depletion On Climate Change" organized by Raj Rishi Govt. Autonomous College on 16 September 2022.
- Webinar on "Some Essential for Quality Research in Mathematics" Aug-28, 2021organized by the Department of Mathematics, University of Rajasthan.
- International Webinar on "Introduction to Matlab" organized by the Department of Mathematics, JSSATE Noida on September 17, 2021.
- Webinar on "Transforming Teaching Learning Process using ICT Tools" organized by IQAC, PGDAV College, University of Delhi, from 23rd July to 25th July 2020.
- Webinar on "Introduction to Simulink" organised by Mathsworks on Oct-21, 2022.
- Virtual webinar on "Advanced Mathematical Tools For Engineering Research" organized by Department Of Mathematics, Mangayarkarasi College Of Arts and Science for women, Paravai, Madurai On 01.10.2021.
- Participated on the "Latest AI enhancements in Medical Domain & Source for Datasets" webinar organized by Artificial Intelligence Medical and Engineering Researchers society on July 23rd -2022.
- International seminar on "Emerging Trends and Practice in Environment Conservation" June-5 to 6, 2022, organized by Raj Rishi Govt. Autonomous College, Alwar.
- Webinar on "A Journey from Linear Algebra to Machine Learning" on 01st May, 2022 organized by
- Supercomputer Facility at Computer Engineering Department of Government Engineering College, Rajkot.
- National Webinar On "Role of Higher Education for Sustainable Development" May-10, 2022, Organized by Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed to be University), Udaipur sponsored by National Assessment & Accreditation Council. Bangalore.
- International Webinar on "MATHEMATICAL MODELLING OF BIOLOGY AND MEDICINE" organized by the Department of Mathematics, Vidyasagar Metropolitan College on the 13th May 2022 from 7:00 pm to 8:00 pm.
- "National Webinar on 'Coding Theory'" during September 21-23, 2021, organized by the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in collaboration with the Indian Institute of Information Technology, Lucknow.
- Webinar on "Recent Advances in Biometrics Security with Machine Learning" on 24th April 2022 organized by Supercomputer Facility at Computer Engineering Department of Government Engineering College, Rajkot.

- International Webinar on "Intelligent Optimization Techniques" Feb-25 to 27, 2022 organized by Panjab University, Patiala.
- National Webinar on "Record Keeping and Data Collection" Jan-19, 2022 organized by SPMC, University of Delhi.
- Webinar on "Math-To-Industry Boot Camp". Fifth Session entitled "MATHEMATICAL MODELLING OF COMPLEX MECHANICAL ASSEMBLIES". Dated 06/01/2022. Organized by the Laboratory of Applied Mathematics & Data Analysis (LAMDA).
- International webinar on "Bringing Character Education in Classroom" Oct-10, 2021 organized by Institutes of Global Professionals.
- Webinar on "SQLite Database" at 1-7-2027 organized by Marvadi University, Rajkot.
- "A two-day NAAC collaborated national virtual seminar on "holistic and multidisciplinary approach towards national higher education quality framework" on 05.07.2023 & 06.07.2023 organized by Curvey College of Women, Trichy.

Talk

- Delivered lectures as a resource person in a workshop organized by the Department of Mathematics, Shyama Prasad Mukherji College, on "Matrix Calculator" on Oct-19, 2022.
- Delivered lectures as a resource person in a workshop organized by the Department of Mathematics Shyama Prasad Mukherji College, on "Magic of Mathematics with Mathematica" on Sept-04, 2021.
- Delivered an invited lecture titled "Controlling Chaos in Cancer Cells Through Mathematical Modelling" in the Online Faculty Development Programme on "Recent Trends in Biomathematics & Dynamical Systems with Bifurcation, Chaos & Simulation Methods", organized by the Department of Mathematics, Mahadevananda Mahavidyalaya, from 7 Feb. 2024 to 13 Feb. 2024.

Credit Course

4 credit course entitled with "Programming in Python" from SWAYAM Portal held in May-2024.

Examination

- Appointed as an Observer in the NTA Examination in Revari, Hryana on 5-6 Nov. 2022.
- Appointed as an **Observer in** the NTA Examination in Revari, Hryana on 21-22 Oct, 2023.
- Appointed as Virtual Observer for the conduct of NEET (UG)- May-7, 2023 Examination.

Dr Pardeep Kumar

Department of Mathematics

(NAME with Sign)