




Faculty Profile Of Prof. Madan Lal

M. J. P. Rohilkhand University, Bareilly.

Title	Dr.	First Name	Madan	Last Name	Lal	Photograph
Designation		Professor				
Department		Applied Mathematics				
Address	Campus	Dept. of Applied Maths., Basic Science Building.				
	Residence	8-B.C. Bank Colony, Surkha, Bareilly.				
Mobile No.		9456207701 9897755148 (WhatsApp)				
Email ID		Personal		madan.mjpru@gmail.com		
		University Domain		madan.lal@mjpru.ac.in		
Educational Qualifications (Graduation Onwards)						
Course/Degree		Institution		Year	Details/Thesis Topic/Subjects	
B.Sc.		M.J.P.R.U. Bareilly		1995	Subjects: PCM	
M.Sc.		M.J.P.R.U. Bareilly		1997	Subject : Mathematics	
Ph.D.		M.J.P.R.U. Bareilly		2003	Thesis Topic: “Some Problems on Hydrodynamics and MHD Flows.”	
Career Profile						
Organization / Institution		Designation		Duration	Nature of Duties	
Dept. of Mathematics, Bareilly College, Bareilly.		Assistant Professor (Contractual)		1997-1998	Academic	
Dept. of Applied Mathematics, Faculty of Engg. & Tech., MJPRU, Bareilly.		Assistant Professor (Contractual)		1998-2007	Academic	
Dept. of Applied Mathematics, Faculty of Engg. & Tech., MJPRU, Bareilly.		Assistant Professor		2007- 2019	Academic and Administrative	
Dept. of Applied Mathematics, Faculty of Engg. & Tech.,		Associate Professor		2019- 2022	Academic and Administrative	

MJPRU, Bareilly.									
Dept. of Applied Mathematics, Faculty of Engg. & Tech., MJPRU, Bareilly.		Professor	2022-Continuing	Academic and Administrative					
Research Interests / Specialization									
Fluid Mechanics, Magnetohydrodynamics, Bio-Mathematics (Blood flow in artery)									
Research Experience in Years : 26									
No of Research Scholars Successfully Guided									
Name of Programme	Awarded		Under Supervision						
Ph.D.	02		08						
M.Phil.	01		Nil						
Teaching Experience (Subjects/Courses Taught) : 26 years									
1997-1998 : Complex Analysis , Differential Equations , Matrices , Vector 1998-2003 : Engineering Mathematics- I , Engineering Mathematics- II , Operations Research 2003-2023 : Modern Algebra , Topology , Differential Geometry and Tensor Algebra , Fluid Dynamics, Mathematical Statistics.									
Publications /Academic Activities (Numbers Only)									
Books & Monographs (Single Author)	-	Research Papers Published in International Journals	18	Papers Presented in Seminars/ Conferences	11	Seminars/ Symposium Organized	1	Research Projects (Completed)	-
Books (Co-authored)	9	Research Papers Published in Other Journals	5	Seminar/ Conferences Attended	31	Workshops/FDPs attended	14	Research Projects (Ongoing)	1
Books (Edited)		Articles Published in Popular Fora, e.g., Websites, Blogs, Newspapers, Magazines etc.	-	Sessions Chaired in Seminars/ Conferences	4	Membersh ip of Academic/ Profession al Bodies	2	Developm ent of e- content on UPHE Digital Library	16
Chapters in Edited Books	8			Resource Lectures Delivered	3				

Details of Publications /Academic Activities			
(a) Papers Published in UGC Care Listed /Indexed/ Peer Reviewed Journals			
Year of Publication	Title	Name of Journal	ISSN No
2001	Study of Unsteady flow of an electrically conducting viscous fluid.....under the influence of an arbitrary time varying pressure gradient.	Bulletin of Pure and Applied Sciences, Vol.20E (No.1), 47-50.	0970-6577
2003	Velocity character of two Rivlin-Ericksen fluids.	Bulletin of Pure and Applied Sciences, Vol.22E(No.2), 335-339.	0970-6577
2010	Flow of Viscous Conducting Fluid Through Triangular Tube.	Journal of Computer & Mathematical Sciences, Vol.1(3), 274-277.	2319-8133
2011	Heat Transfer in Magnetohydrodynamics.	Journal of Computer & Mathematical Sciences, Vol.2(1),153-158.	2319-8133
2011	MHD Flow of a Dusty Fluid.	Journal of Computer & Mathematical Sciences, Vol.2(2), 352-357.	2319-8133
2013	Study of Magnetohydrostatic Problems in Force Free Field.	Journal of Computer & Mathematical Sciences, Vol.6(12), 460-464.	2319-8133
2015	Free Convective MHD Flow Through Porous Media	SRMS Journal of Mathematical Sciences, Vol. 2(1), 56-64.	2395-725X
2016	A Study on Unsteady Dusty Viscous Fluid Flow Through A Circular Pipe Under the Influence of an Uniform Transverse Magnetic Field	Journal of Computer & Mathematical Sciences, Vol. 7(12), 710-715.	2319-8133
2017	Mathematical Analysis on Blood Flow in Stenotic Inclined Artery.	International Journal of Advance Research and Innovation, 55-57.	2347-3258
2017	Mode to Mode Energy Transfer in Magneto- hydrodynamic Turbulence.	International Journal of Advance Research and Innovation, 52-54.	2347-3258
2017	Unsteady Flow of Electrically Conducting Viscous Fluid through a Rectangular Channel.	Journal of Computer & Mathematical Sciences, Vol. 8(12), 837-840.	2319-8133
2017	Flow of Two Immiscible Visco-Elastic Fluids Between Parallel Plates.	Parishodh Journal, Vol. 6(1), 26-31.	2347-6648
2017	Analytical Study of MHD Thermoconvective Waves Through its Propagation	SRMS Journal of Mathematical Sciences, Vol. 3(1), 1-6.	2394-725X
2018	Computational and Theoretical Fluid Dynamics Non-linear Energy Transfer in Magnetized Plasma.	International Journal of Pure and Applied Mathematics, Vol. 118, No. 22.	1314-3395
2018	Energy Decay of MHD Turbulence for Five-point Correlation	Journal of Computer and Mathematical Sciences, Vol. 9(10).	2319-8133

2018	Investigation of non-Newtonian Blood Flow Characteristics through an Overlapping Stenosed Artery with Variable Viscosity.	Journal of Computer & Mathematical Sciences, Vol. 9(11), 1795-1802.	2319-8133
2019	Unsteady Flow of a Dusty Gas through a Horizontal Pipe with Time Varying Pressure Gradient.	Int. J. of Innovative Technology and Exploring Engineering, Vol. 9(3), 627-631.	2278-3075
2020	Natural Convection MHD Effect on Heat Transfer in Vertical Cylinder	Int. J. of Innovative Technology and Exploring Engineering, Vol. 9(4). 237-240.	2278-3075
2020	Slip Velocity Effect on Blood Flow through a Multi – Irregular Constricted Artery.	Int. J. of Innovative Technology and Exploring Engineering, Vol. 9(4).1969-1972.	2278-3075
2020	A Two Phase Mathematical Model of Fluid Flow through Bell Shaped Stenotic Artery.	Int. J. of Innovative Technology and Exploring Engineering, Vol. 9(5). 35-38.	2278-3075
2021	Suspension Model Of Fluid Particle For Blood Flow Through Balloon Catheterized Elliptic Shaped Stenosed Artery	Bioscience Biotechnology Research Communications, Vol. 14(5), 343-348.	0974-6455
2021	Numerical Study of Magnetohydrodynamic Flow of Dusty Fluid Through Different Channels	Communications in Mathematics and Applications, Vol. 12(4), 815-824.	0975-8607
2022	A Mathematical Model of Blood Flow in a Multi-irregular Stenosed Artery in Presence of Uniform Magnetic Field	International Journal of Biology, Pharmacy & Allied Sciences, Vol. 11(3),1394-1406.	2277-4998
2023	Thermoconvective study of blood based carbon nanotubes	Communicated in Utilitas Mathematica	0315-3681
2023	Computational investigation of brownian motion and thermophoresis effect on blood based Casson nanofluid on a non-linearly stretching sheet	Communicated in Results in Physics	2211-3797
2023	Computational Investigation of nanofluid for impact of trajectory of gold and silver nanoparticles injected in blood under stenosed artery with viscous dissipation	Communicated in Physics of Fluids	1089-7666

b) Chapters in edited books

Publication		Title of the Book	Title of the Chapter	Name & Address of Publisher	Year	ISBN
National	International					
MRI Publication Pvt. Ltd.			Free convective MHD flow through porous media	MRI Publication Pvt. Ltd., Uttar Pradesh	2015	2394-725X
	International Journal of	Modern Trends in	Mathematical Analysis on	International Journal of	2017	2347-3258

	Advance Research and Innovation	Analytical and Environmental Physics	blood flow in stenotic artery	Advance Research and Innovation		
	International Journal of Advance Research and Innovation	Modern Trends in Analytical and Environmental Physics	Mode to mode energy transfer in magnetohydro dynamics turbulence	International Journal of Advance Research and Innovation	2017	2394-725X
SRMS Journal of Mathematical Sciences			Analytical study of MHD thermoconvective waves through its propagation	SRMS Journal of Mathematical Sciences, Bareilly	2017	2394-725X
INSC Publishing House		COVID - 19 : a Drill Down Analysis	Mathematical Analysis of Spread of Corona Virus in India	INSC Publishing House, Karnataka	2020	9788197637028
Walnut Publication		Emerging Advances in Mathematical and Physical Sciences	A study on spread of Corona virus in India	Walnut Publication , Bhubaneswar (Odisha), India	2020	978939026167 3
	Lexicon International Publishers	COVID-19 : The Clinical Management	Covid-19 : A Mathematical Approach	Lexicon International Publishers	2021	9788194914709
	Lexicon International Publishers	COVID-19 : Vaccination & Its Outcome	An Overview of Vaccine of Different Diseases	Lexicon International Publishers	2021	9789391271114

(c) Books

Title of Book	Name of Publisher	Year	ISBN
A Textbook of Differential Calculus	Students' Friends & Company	2021	978-93-82933-98-4
A Textbook of Integral Calculus	Students' Friends & Company	2021	978-93-82933-7-7
A Textbook of Geometry	Krishna Publication	2022	978-93-91152-05-5
A Textbook of Mathematical Methods	Krishna Publication	2022	978-93-94511-05-7

Textbook of Mechanics	Krishna Publication	2023	978-93-94511-94-1
(d) Seminars/Conferences/Workshops Organized			
Symposium on “Wavelet and its Applications in Engg. Problems” has been organized during 20-21 Dec. 2015.			
(e) Administrative Positions/Assignments Held			
Post	Organization	Duration	
		From	To
ADSW	MJPRU	2008	2018
		2020	Continuing
Co-ordinator	Training and Placement Cell, MJPRU, Bareilly.	2013	2014
Head/ Incharge	Department of Applied Maths, MJPRU, Bareilly.	2018	2023
Head	Department of Applied Maths, MJPRU, Bareilly.	2023	Continuing
Proctor, Basic Science	MJPRU	2022	Continuing
(f) Seminar/Conference/Workshops/FDPs Attended/Presentations			
<ol style="list-style-type: none"> 1. A research paper entitled “Stability of a Viscous Flow in Porous Medium” has been presented in 99th Indian Science Congress, during Jan . 3-7, 2012. 2. Participated in 99th Indian Science Congress held at KIIT University, during Jan . 3-7, 2012. 3. Participated in National Seminar on “Vision 2020: Quality Education in Pharmacy and It’s Challenges” organized by SRMS College of Engineering & Technology, (Pharmacy) Bareilly held on 5th February, 2012. 4. A research paper entitled “Steady Plane MHD Flow Through Porous Media .” has been presented in National Conference organized by Hindu College Moradabad, during Feb. 25- 26, 2012. 5. Successfully completed UGC Sponsored Orientation Programme organized by Aligarh Muslim University, Aligarh during 13th March-11th April, 2012. 6. Successfully completed UGC sponsored Subject Refresher Course in Environmental Studies organized by Aligarh Muslim University during 1st-19th May, 2012. 7. Participated in International Conference on Recent Trends in Climate change researches vis-à-vis Biodiversity held at M. J. P. Rohilkhand University, Bareilly during 3rd-4th December, 2012. 8. Attended a One week International Workshop under Faculty Development Programme on “Futuristic Materials: Characterization, Properties & Applications in Technology sponsored by World Bank under TEQIP II during 17th-22nd July, 2014. 9. Participated in Faculty Development Programme on “Environmental Impact Assessment” during 26th-28th March, 2015. 10. Participated in Symposium on “Wavelet and Its Applications in Engineering Problems” organized by Faculty of Engineering and Technology, M. J. P. Rohilkhand University, Bareilly under TEQIP scheme during 20th-21st December, 2015. 11. A research paper entitled “Analytical Study of MHD Thermo-Convective Waves Through its Propagation.” has been presented in 3rd National Conference Organized by SRMS College of Engg. & Technology, during Jan.22-23, 2016. 12. A research paper entitled “Free Convective MHD Flow Through Porous Medium” has been presented in the National Conference organized by SRMS College of Engg. & Technology Bareilly, during Jan.22-23, 2016. 13. Attended One Week Short Term Course/Workshop on “Microwave & Wireless Communication” organized by Department of Electronics & Communication, Faculty of 			

Engineering and Technology, M. J. P. Rohilkhand University, Bareilly during 29th March-03rd April, 2016.

14. A research paper entitled “Mathematical Analysis on Blood Flow in Stenotic Inclined Artery” has been presented in Nation conference organized by Hindu College Moradabad, during Oct.17-18,2016.
15. A research paper entitled “Analytical Study of MHD Thermo-Convective Waves Through its Propagation” has been presented in the National Conference organized by SRMS College of Engg. & Technology Bareilly, during July.18-19,2017.
16. A research paper entitled “Non Linear Energy Transfer in Magnetized Plasma Turbulence” has been presented in the National conference organized by Vardhaman College Bijnor, during Feb. 24-25, 2018.
17. Attended an International Workshop on “Youth Empowerment through Skill Development” organized by Department of Mechanical Engineering, M. J. P. Rohilkhand University, Bareilly held on 09th April, 2018.
18. Successfully completed Special Summer School in “Basic Sciences” organized by Aligarh Muslim University during 23rd June-13th July, 2018.
19. Participated in Three Days Workshop on “Research Methodology and Data Analytical Tools” organized by Faculty of Engineering and Technology, M. J. P. Rohilkhand University, Bareilly during 23rd-25th January, 2019.
20. Participated in National Conference on “Skill Development in India : Challenges and Opportunities” organized by Department of Humanities, M. J. P. Rohilkhand University, Bareilly during Feb. 4-5, 2019.
21. Participated in Workshop on “Revised Process of NAAC Assessment & Accreditation and Total Quality Management in Higher Education” organized by M. J. P. Rohilkhand University, Bareilly during 29th-30th March, 2019.
22. Participated in Training Programme on “Academic Leadership” organized by Department of Business Administration, M. J. P. Rohilkhand University Campus, Bareilly during 27th-30th April, 2019.
23. Attended national level Faculty Development Programme on “Research Methods and Data Analysis using SPSS & AMOS” organized by M. J. P. Rohilkhand University, Bareilly during 27th Jan.-01st Feb, 2020.
24. Participated in 5th International Conference on Academic Research in Engineering, Management and Information Technology organized by Faculty of Engineering & Technology, M. J. P. Rohilkhand University, Bareilly during 01st-03rd Feb., 2020.
25. Participated in MHRD sponsored TEQIP Faculty Development Programme on “green Chemistry” organized by Department of Chemical Engineering, M. J. P. Rohilkhand University, Bareilly during 25th Feb-29th Feb, 2020.
26. A research paper entitled “ A Study on Spread of Corona Virus in India” has been presented in the International E- conference organized by Hindu College Moradabad, during Jun. 28-30, 2020.
27. Successfully completed AICTE-ISTE approved Orientation/Refresher Programme on “Innovations in Management” organized by M. J. P. Rohilkhand University, Bareilly during 16th - 22nd March, 2021.
28. Successfully completed One Week Faculty Development Programme on “Open Source tools for Research” organized by Ramanujan College, University of Delhi during 24th-30th Aug., 2021.
29. Participated in National Workshop on “Recent Updates in Mechanical Engineering” organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, M. J. P. Rohilkhand University, Bareilly held on 26th March, 2022.

(g) Sessions Chaired

1. Chaired the session in National Conference on “Modern trends in Analytical and Environmental Physics” organized by Department of Physics, Hindu College, Moradabad during 17th -18th Oct., 2016.

2. Chaired the session in International Conference on “Emerging Advances in Mathematical and Physical Sciences” organized by Department of Mathematics & Physics, Hindu College, Moradabad during 28th -30th June, 2020.
3. Chaired a session in International Conference on “Pure and Applied Mathematics 2023” sponsored by “Scientific and Engineering Research Society” organized by M. D. university, Rohtak held on 14th March, 2023.

(h) Memberships of Academic/Professional Bodies

1. Life member of “Indian Science Congress Association” Kolkata .
2. Life member of “Indian Mathematical Society .”

(i) Any Other Details

1. Expert in UPPSC & CGPSC Exams/Interviews.
2. Reviewer of International Research Journal “Physics of Fluids”.
3. Member of Editorial Board of “Lexicon International Publishers”.
4. Acted as Assistant Co-ordinator in the central evaluation of the University in the year 2008, 2009, 2010, 2011, 2015, 2016, 2017, 2018.
5. Qualified NET-CSIR Examination in Dec.2001 and had obtained one year JRF from CSIR.
6. Observer in UP B.Ed., CTET & MJPRU Entrance Examinations.
7. Active Member of Flying Squad of MJPRU Exams.
8. Member & Convener of Board of Studies of Applied Mathematics.
9. Time-Table Incharge of F.E.T., MJPRU, Bareilly.
10. Expert to evaluate the research papers of the students of MJPRU.
11. Course-Work Co-ordinator of Pre-Ph.D. in Mathematics during 2018 and 2021.
12. Proctor, Basic Science.
13. Acted as Co-ordinator in the central evaluation of the University in the year 2022 and 2023.
14. Member of Board of Studies of Department of Mathematics and Statistics, Dr. Hari Singh Gaur University, Sagar, M.P. in 2022 and 2023.



Signature of Faculty Member