




Shivaji College Faculty Details Proforma

Title	Dr	First Name	SUBEDAR	Last Name	RAM	Photograph
Designation		Assistant Professor				
Address		Department of Mathematics, Shivaji College, University of Delhi, Raja Garden, Ring Road, New Delhi-110027. India.				
Office Phone No.						
Residence						
Mobile		+91-8375095037				
Email		sdram.apm@shivaji.du.ac.in				
Web-Page		https://scholar.google.co.in/citations?user=BwhsAS0AAAAJ&hl=en https://www.researchgate.net/profile/S-D-Ram				
Educational Qualifications						
Degree		University/Institute		Year		
Ph.D.		Indian Institute of Technology-BHU, Varanasi		2011		
M.Phil./M.Tech.						
PG		Banaras Hindu University, Varanasi		2006		
UG		VBS Purvanchal University Jaunpur		2004		
Any Other Qualification		CSIR-UGC -NET (2017) GATE (2007)				
Career Profile						
<ul style="list-style-type: none"> ➤ Since Feb. 05, 2024: Assistant Professor (Regular) Department of Mathematics, Shivaji College, University of Delhi, Raja Garden New Delhi-110027 ➤ January 12, 2022 to Feb.4, 2024: Lecturer, Department of Applied Science & Humanities, SBP Government Polytechnic Azamgarh. ➤ July 20, 2016 to January 11, 2022: Assistant Professor (Adhoc) Department of Mathematics, Keshav Mahavidyalaya, University of Delhi, Pitampura, Near Sainik Vihar, Delhi-110034. ➤ August 22, 2012 to July 19, 2016: Assistant Professor (Adhoc) Department of Mathematics, Mata Sundri College for Women, University of Delhi, Mata Sundri Lane, New Delhi - 110002 						

Administrative Assignments
Areas of Interest/Specialisation
Compressible Fluid, Computational Fluid Dynamics, Propagation of Shock Waves, Non-Linear Partial Differential Equations, Riemann Problem.
Subjects Taught
Elementary Real Analysis, Linear Algebra, Fundamentals of Calculus, Multivariate calculus, Differential Equations, Abstract Algebra, Graph Theory, Sequences and Series of Functions.
Innovation Project/Research Projects (Major Grants/Research Collaboration)
Publications Profile (<i>Research Papers/Books/Books Chapters</i>)
<p>[1] L. P. Singh, S. D. Ram and D. B. Singh, Exact solution of planar and non-planar weak shock wave problem in gasdynamics, <i>Chaos Solitons & Fractals</i>, Vol. 44 (2011) 964-967. ISSN 0960-0779, Impact Factor: 7.8.</p> <p>[2] L. P. Singh, S. D. Ram and D. B. Singh, Quasi-Similar solution of strong shock wave problem in non-ideal gasdynamics, <i>Astrophysics & Space Science</i> Vol. 337(2) 2012, 597-604. ISSN 0004-640X, Impact Factor: 1.9.</p> <p>[3] L. P. Singh, R Singh and S. D. Ram, Evolution and decay of acceleration waves in perfectly conducting inviscid radiative magnetogasdynamics, <i>Astrophysics & Space Science</i> Vol.342 2012, 371-376. ISSN 0004-640X, Impact Factor: 1.9</p> <p>[4] L. P. Singh, S. D. Ram and D. B. Singh, Analytical solution of the blast wave problem in a non-ideal gas, <i>Chinese Physics Letters</i>, Vol.28(11) (2011) 114303-1-3. ISSN 1741-3540, Impact Factor: 3.5.</p> <p>[5] L. P. Singh, S. D. Ram and D. B. Singh, The influence of magnetic field upon the collapse of a cylindrical shock wave, <i>Meccanica</i>, Vol. 48 (2013) 841-850. ISSN 1572-9648, Impact Factor: 2.7.</p> <p>[6] L. P. Singh, S. D. Ram and D. B. Singh, Propagation of weak shock waves in non-uniform radiative magnetogasdynamics, <i>Acta Astronautica</i> Vol. 67 (2010) 296-300. ISSN 0094-5765, Impact Factor: 3.5.</p> <p>[7] L. P. Singh, S. D. Ram and D. B. Singh, Uniform solution for the flow past a slender body with an attached shock wave in radiative magneto gas-dynamics, <i>Acta</i></p>

- Astronautica* Vol. 68 (2011) 700-706. ISSN 0094-5765, Impact Factor: 3.5.
- [8] L. P. Singh, D. B. Singh and S. D. Ram, [Growth and decay of weak shock waves in magnetogas dynamics](#), *Shock Wave* Vol. 26 (2016), 709–716 ISSN 1432-2153, Impact Factor: 2.2.
- [9] L. P. Singh, S. D. Ram and D. B. Singh, [Flow pattern induced by the plane piston moving in a non-ideal gas with weak gravitational field](#), *Ain Shams Engineering Journal*, Vol. 2 (2011) 125-131. ISSN 2090-4479, Impact Factor: 6.0.
- [10] R. Singh, L. P. Singh and S. D. Ram, [Acceleration waves in non-ideal magnetogas dynamics](#), *Ain Shams Engineering Journal*, Vol. 5, 2014, 309–313. ISSN 2090-4479 Impact Factor: 6.0.
- [11] J. P. Chaudhary, S. D. Ram and L. P. Singh, [The plane piston problem with weak gravitational field in a dusty gas](#), *Journal of King Saud University-Science*, Vol. 31, 2019, 1027–1033. (Science Direct) ISSN 1018-3647, Impact Factor: 3.8.
- [12] Dhanpal Singh, Ekta Jain and S D Ram, [The behavior of weak shock waves under the influence of weak gravitational field](#), *Indian Journal of Physics*, Vol. 98, 2024, 797–802 ISSN 0974-9845, Impact Factor: 2.0.
- [13] L. P. Singh, D. B. Singh and S. D. Ram, [Evolution of weak shock waves in perfectly conducting gases](#), *Applied mathematics*, Vol. 2 (2011) 653-660. ISSN 2152-7393 Impact Factor: 0.73
- [14] L. P. Singh, R Singh and S. D. Ram, [Growth and decay of acceleration waves in non-ideal gas flow with radiative heat transfer](#), *Open Engineering formerly Central European Journal of Engineering*, Vol. 2(2012), 418-424. ISSN 2391-5439. Impact Factor: 1.7
- [15] L. P. Singh, D. B. Singh and S. D. Ram, [Propagation of weak shock waves in a non-ideal gas](#), *Open Engineering formerly Central European Journal of Engineering*, Vol. 1(3) (2011) 287-294. ISSN 2391-5439 Impact Factor: 1.7
- [16] L. P. Singh, D. B. Singh and S. D. Ram, On the propagation of weak shocks in reactive magnetogas dynamics flow, *International Journal of Nonlinear Science (Accepted 2012)* ISSN 1749-3897
- [17] L. P. Singh, D. B. Singh and S. D. Ram, [On the propagation of small amplitude disturbances in electrically conducting gases](#), *Journal of Scientific Research*, Vol.53 (2009) 259-265. ISSN 0447-9483.
- [18] S. D. Ram, L. P. Singh and R Singh, [An exact analytical solution of the strong shock wave problem in non-ideal magnetogas dynamics](#), *Journal of Fluid*, (2013), ISSN: 2314-6826
- [19] Dhanpal Singh and Subedar Ram, [Theory of reliability: a mathematical characteristics](#), *International Journal of Pure and Applied Mathematics*, Vol. 118(22) 2018, 1425-

1434. ISSN: 1314-3395

- [20] Panjabi Singh, Dhanpal Singh and S D Ram, Important Mathematical Tools and their Applications in Reliability Theory, *International Journal of Engineering Technology Science and Research*, Vol. 4(4) (2017) 518-523, ISSN: 2394-3386
- [21] L. P. Singh, S. D. Ram and D. B. Singh, On the propagation of weak shock waves in radiating gas, proceeding of *Mathematical Society, Banaras Hindu University*, Vol.24 (2008) 145-152. ISSN 0970-7080
- [22] R. Singh, S. D. Ram and L. P. Singh, Evolution and decay of weak shock waves in non-ideal reactive flow, proceeding of *Mathematical Society, Banaras Hindu University*, Vol.27 (2011) 77-89. ISSN 0970-7080
- [23] L. P. Singh, D. B. Singh and S. D. Ram, Propagation of small amplitude disturbances in an electrically conducting gas with finite electrical conductivity, Proceeding of National conference on "*Mathematical Modelling and Computer Simulation*", 2011, 69-73.

BOOKS/BOOKS CHAPTERS

- [1] Modelling of cylindrical blast waves with dust particles, [Modeling and Simulation of Fluid Flow and Heat Transfer](#), 110-125, ISBN No. 9781032712079, CRC Press.
- [2] Study of Blast Wave Problem in a Non- Ideal Dusty gas, Futuristic Trends in Contemporary Mathematics & Applications, Volume 3, Chapter-4, e-ISBN No. 978-93-6252-416-4.

PAPER PRESENTATION IN INTERNATIONAL / NATIONAL CONFERENCES

- [1] "*Propagation of weak shock waves in non-uniform radiative magnetogasdynamics*," presented in Silver Jubilee Conference of the Mathematical Society, B.H.U., Varanasi, during Dec. 22-24, 2009.
- [2] "*Exact solution of planar and non-planar weak shock wave problem in gasdynamics*" presented in National Conference On Mathematical Modelling and Computer Simulation, IIT-BHU, Varanasi, during March 25-27, 2011.
- [3] "*Analytical solution of the blast wave problem in a non-ideal gas*" presented in National Conference On Mathematical Modelling and Computer Simulation, IIT-BHU, Varanasi, during March 23-25, 2012.
- [4] "*Quasi-Similar solution of strong shock wave problem in non-ideal gasdynamics*", Presented in National Seminar on Recent Advances in Mathematics And Its Computational Aspects, Shaheed Mangal Pandey Govt. Girls P.G. College, Meerut, During November 11-12. 2016
- [5] "*Theory of Reliability: A Mathematical Characteristics*" Presented in the National Conference on Advances in Operations Research and Mathematical Science (AORMS-2018), during 24-25 Feb., 2018.

Conference/Seminar/Faculty Development Programme/Workshop

- [1] Short term course on "*Computer Programming using C*" held at Computer Centre of the

- Banaras Hindu University, Varanasi, India, during September 1-6, 2008.
- [2] Indo-German Workshop-cum-lecture series on “*Computational Models and Methods Driven by Industrial Problems*” in Phase-II held at IIT Madras, Chennai, India, during January 5-16, 2009.
 - [3] Training program on “*LATEX and other Open Source Software*” held at D.S.T. Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, Varanasi, India, during Dec.7-12, 2009.
 - [4] Mathematical Modeling of Real Life Problems, Silver Jubilee Conference of “The Mathematical Society, Banaras Hindu University, Varanasi during Dec. 22-24, 2009.
 - [5] National conference on “*Mathematical Modelling and Computer Simulation*”, IIT- BHU, Varanasi, during March 25-27, 2011.
 - [6] National conference on “*Mathematical Modelling and Computer Simulation*”, IIT- BHU, Varanasi, during March 23-25, 2012.
 - [7] National conference on “*Mathematica*”, Acharya Narendra Dev College (University of Delhi), Delhi, on March 1, 2013.
 - [8] State Level Seminar on “*Mathematics and its Applications*”, Department of mathematics, Kamala Neharu College University of Delhi, on March 04, 2016.
 - [9] Faculty Development Programme on “*Statistical Software ‘R’*”, Department of Mathematics, Keshav Mahavidyalaya, University of Delhi, on March 24, 2017.
 - [10] Webinar on the topic “Emerging Trends in E-Learning: Complete Classroom and Evaluation Process using MOODLE LMS” organized by the Internal Quality Assurance Cell (IQAC) and Department of Botany, Swami Shraddhanand College, University of Delhi on May 18, 2020.
 - [11] Faculty Development Programme on “*Application of algebra and number theory in network security*”, Mahatma Hansraj Faculty Development Center, A center of MoE, Govt. of India, on 22nd December to 29th December, 2020.
 - [12] Online Teachers Enrichment Workshop on “*Differential Equation and Its Applications*”, a joint programme of INSA & NCM, hosted by Deshbandhu College, University of Delhi, New, Delhi During March 15-28, 2021.
 - [13] One week (Online) Faculty Development Programme on ‘*Mathematical Analysis and its Applications*’ organized by Vivekananda College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi during (26th July – 31st July 2021)
 - [14] One Week (Online) Interdisciplinary Faculty Development Programme on ‘*Creation and development of MOOCs while managing online classes*’ organized by Keshav Mahavidyalaya, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi during 24th August 2021 to 31st August 2021.
 - [15] One Day Online National Webinar entitled “*The Importance of Data Visualization*” organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of Ministry of Education on 10th August 2021.
 - [16] Online **Nep-Oriented and Sensitization Programme**, under the Malaviya Mission Teacher Training Centre (MM-TTC) of University Grants Commission (UGC) organised by Centre for Professional Development in Higher Education (UGC-MMTTC), University of Delhi from 20th

February 2024 – 29th February 2024.

- [17] Online Induction Training/ Orientation Programme for Faculty in Universities/Colleges/ Institutions of Higher Education organised under the aegis of Pandit Madan Mohan Malaviya National Mission on Teachers & Teaching Ministry of Education, 21 February - 19 March 2024.

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

Awards and Distinctions

Memberships

1. Life time member of “*Mathematical Society Banaras Hindu University Varanasi*” (INDIA).
2. Editorial Member “*Edwin Group of Journal*” (<http://www.edwinincorp.com>)
3. Reviewer of the “*Meccanica*” (Springer Science).
4. Reviewer of the “*Acta Astronautica*” (Elsevier), (IOP) (Institute of Physics)
5. Reviewer of the “*Physics of Fluids*” (AIP). (American Institute of Physics)
6. Reviewer of the “*Chinese Journal of Physics*” (AIP). (American Institute of Physics)
7. Reviewer of the “*Indian Journal of Physics*” (Springer Science)

Other Academic Activities

Cultural/Extracurricular Activities



Signature of Faculty Member