

Dr. Subedar Ram

Qualifications: Ph.D. -Mathematics (IIT-BHU)
CSIR-NET -2017,
UGC-JRF, UGC-SRF,
GATE-2007,

*Research Topic: Propagation of Nonlinear Waves in Gasdynamics,
Magnetogasdynamics,
Nonlinear Partial Differential Equations,*

List Publications

PUBLISHED/ACCEPTED IN REFEREED /SCI/SCOPUS JOURNALS

- [1] L. P. Singh, **S. D. Ram** and D. B. Singh, Exact solution of planar and non-planar weak shock wave problem in gasdynamics, *Chaos Solitons & Fractals*, Vol. 44 (2011) 964-967. **ISSN 0960-0779, Impact Factor: 3.764**
- [2] L. P. Singh, **S. D. Ram** and D. B. Singh, Quasi-Similar solution of strong shock wave problem in non-ideal gasdynamics, *Astrophysics & Space Science* Vol. 337(2) 2012, 597-604. **ISSN 0004-640X, Impact Factor: 1.681**
- [3] L. P. Singh, R Singh and **S. D. Ram**, Evolution and decay of acceleration waves in perfectly conducting inviscid radiative magnetogasdynamics, *Astrophysics & Space Science* Vol.342 2012, 371-376. **ISSN 0004-640X, Impact Factor: 1.681**
- [4] L. P. Singh, **S. D. Ram** and D. B. Singh, Analytical solution of the blast wave problem in a non-ideal gas, *Chinese Physics Letters*, Vol.28(11) (2011) 114303-1-3. **ISSN 1741-3540, Impact Factor: 1.08**
- [5] L. P. Singh, **S. D. Ram** and D. B. Singh, The influence of magnetic field upon the collapse of a cylindrical shock wave, *Meccanica*, Vol. 48 (2013) 841-850. **ISSN 1572-9648, Impact Factor: 2.316**
- [6] L. P. Singh, **S. D. Ram** and D. B. Singh, Propagation of weak shock waves in non-uniform radiative magnetogasdynamics, *Acta Astronautica* Vol. 67 (2010) 296-300. **ISSN 0094-5765, Impact Factor: 2.830**
- [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 magnetogas-dynamics, *Acta Astronautica* Vol. 68 (2011) 700-706. **ISSN 0094-5765, Impact Factor: 2.830**
- [8] L. P. Singh, D. B. Singh and **S. D. Ram**, Growth and decay of weak shock waves in magnetogasdynamics, *Shock Wave* Vol. 26 (2016), 709-716 **ISSN 1432-2153, Impact Factor: 1.248**
- [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: 1.943**

- [10] R. Singh, L. P. Singh and **S. D. Ram**, Acceleration waves in non-ideal magnetogasdynamics, *Ain Shams Engineering Journal*, Vol. 5, 2014, 309-313. **ISSN 2090-4479 Impact Factor: 1.943**
- [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: 2.835**
- [12] 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**
- [13] 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 (Springer Science). **ISSN 2391-5439 SJR:0.211**
- [14] 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, (Springer Science) **ISSN 2391-5439 SJR:0.211**
- [15] L. P. Singh, D. B. Singh and **S. D. Ram**, On the propagation of weak shocks in reactive magnetogasdynamics flow, *International Journal of Nonlinear Science* (Accepted 2012) **ISSN 1749-3897**
- [16] 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 0447-948**
- [17] **S. D. Ram**, L. P. Singh and R Singh, An exact analytical solution of the strong shock wave problem in non-ideal magnetogasdynamics, *Journal of Fluid*, (2013), **ISSN: 2314-6826**
- [18] Panjabi Singh, Dhanpal Singh and S D Ram, Important Mathematical Tools and their Applications in Reliability Theory, *International Journal of Computer & Mathematical Sciences*, Vol. 6(12) (2017) 1-5, **ISSN: 2347-8527**
- [19] 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**
- [20] 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**
- [21] 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.

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

INTERNATIONAL/NATIONAL ATTENDED WORKSHOPS / CONFERENCES / SHORT-TERM-COURSES

- [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.