

List of Publications

(A) LIST OF PUBLISHED RESEARCH PAPERS

1. Disturbance of SH-type waves due to shearing stress discontinuity in a layered half-space. Published in Geophysical research Bulletin. Vol. 15, no.3, pp 13 – 22, 1977.
2. Disturbance of SH-type waves due to shearing stress discontinuity at the interface of two layers overlying a semi-infinite elastic medium. Published in Archives of Mechanics. 29. no.6, pp 821-827. (1977)
3. Ax symmetric disturbance due to the propagation of shearing stress discontinuity in a semi-infinite elastic medium. Published in Gerlands Beitr. Zur Geophysics, 87 1978, 1, S.46-56 (E. Germany)
4. The propagation of SH-type waves in two heterogeneous media overlying a homogeneous half space. Gerlands Beitr Geophysics, 87, 5 s. 403-408. (1978)
5. Generation of SH-type waves in layered anisotropic elastic media, Int. Jour Maths & Maths sci, Vol. 2, No.4, (1979), pp. 703 – 716 (USA).
6. On SH-type of waves due to shearing stress discontinuity in a visco-elastic layered half-space, Published in the Journal Gerlands Beitr. Geophyiks, 88 (1979), 4, 5, 329-337.
7. A note on the generation of waves in a visco-elastic medium due to forces on a spherical cavity. Mechanique Appliaquee, Vol. 25, no.6, (1980), p. 957-961, Bucarest.
8. On the propagation of SH-waves in a three layered inhomogeneous media. Gerlands Beitr Zur Geophysics (Leipzig), 90, (1981), 4, S. 349-353.
9. Disturbance due to a Moving Normal stress on the liquid surface overlying a solid half-space. Gerlands Beitr. Zur Geophysik, (Leipzig) 91, (1982), 6, S. 525-532.
10. Generation of SH-type waves due to Non-uniformly moving stress discontinuity in Layered anisotropic elastic half-space, Acta Mechanica 49, 209-220 (1983).
11. The dispersion and attenuation of Love Type surface waves in a frictionally bonded transversely isotropic elastic media. Ind Jour of Pure Appl Maths, 14(6), pp 757-766 (June-1983).
12. On the disturbance produced by an impulsive shearing stress on the surface of a semi-infinite poro-elastic medium. J. Acoust Soc Am 74 (20, pp 586-590 (August 1983).
13. On the disturbance produced by an impulsive torsional motion of a circular ring source in semi-infinite transversely isotropic medium. Ind Jour of Pure and Appl Maths, 16(2), 1979-188, (Feb. 1985).
14. A note on the torsional body forces in visco-elastic half space NGRI Bulletin, Vol.25, No.4, 81-87 (1987).
15. On the Love wave propagation in sandy layered medium, Ind Jl. Of Pure. Appl math, Vol.19 (3) (1988) 302-310.

16. Generation of SH-type waves due to stress-discontinuity in a poroelastic medium overlying an elastic half space, Proceedings of Indian National Science Academy (Sec. A) Vol.56, 1990, pp.314-324.
17. Dispersion and Attenuation of Love type waves in a frictionally bounded anisotropic media. Proceeding of 58th session of National Academy of science, Jiwaji University, Gwalior – (nov.3-5, 1991).
18. Propagation of Rayleigh waves in a thermo-elastic half-space. Proceeding of 79th session of ISCA, M. S. University of Baroda, Baroda, (Jan 3-8, 1992).
19. The effect of in homogeneity on the torsional impulsive motion over a circular region in transversely isotropic elastic half space. Vol.24 (2), pp.133-144 (1993), Ind Jour Pure & Appl. Maths.
20. On the torsional impulsive body forces in a transversely isotropic elastic half-space. Proceeding of 24th session of ISTAM, NIO, Goa, and Dec 4-6, 1994.
21. Effect of body forces on the propagation of SH-type waves in a semi-infinite transversely isotropic elastic medium. Indian Nath. Sc. Acad, 60 A, No.5, pp.695-706 (1994).
22. Generation and propagation of SH-type waves due to stress discontinuity in a linear visco-elastic layered medium proc. Indian Acad Sci (Maths Sci). Vol.105, no.2, pp.241-249 (Nov. 1995).
23. Generation of SH-type waves in an anisotropic soil layer propagation and their inversion, Int conference, 4-15 Nov. 96, ICTP, Trieste, Italy. (Proceeding)
24. Wave motion in an anisotropic medium subjected to non-uniformly moving surface pressure – Proceeding 3rd international conf on vibration problems of elasticity, Nov.28-30, 1996, North Bengal Univ. Silliguri.
25. A Fundamental solution for transversely isotropic and inhomogeneous media Int. Jl. Of Engg. Sci, 35, No.2, pp.112-117 (1997).
26. Reflection of and refraction of SH-waves due to the presence of a dry sandy layer, Indian Acad of Sci, 108(2) (1998) pp.103.
27. Propagation of Rayleigh waves in thermo-visco-elastic medium. Ind J. of pure & appl math No.20 (3) (1998), pp. 105-112.
28. Propagation of Rayleigh waves in thermo visco-elastic half space in a slightly curved free surface. Acta Geophys Polonica, Vol. XLVII, No.4 (1999), p. 363-373.
29. Surface wave propagation in a heterogeneous layer over a liquid saturated poro-elastic solid half-space. Acta Geophys Pol., WARSZWA, Vol.XLVIII no.2 (2001) p. 195-205.
30. Generation of SH-waves By a moving stress discontinuity in an anisotropic soil layer over an elastic half space, Acta Geophys Pol. Vol.XLVIII no.4 (2001), pp.465-478.
31. A note on the torsional body forces in a visco-elastic half space. Ind Jl. Pure Appl Math, 32(2) (2001) p 207-213.
32. Effect of dynamic visco-elasticity on vertical and torsional vibrations of a half space Sadhana vol.26, part 4 (2001) pp 371-377.

33. On shear wave propagation in a multi layered medium including a fluid-saturated porous solid stratum. Proc. of IASC, VOL 114,102 (May 2004).
34. On the displacement produced in an inhomogeneous anisotropic elastic half-space by an impulsive torsional load. Proceeding of National Seminar on advances in mathematical, statistical and computational methods in science and technology, September (2003) pp. 49-54.
35. The propagation of plane shear waves in three layered medium including a fluid saturated porous stratum. Proceeding of National Seminar on advances in mathematical, statistical and computational methods in science and technology, September (2003) pp. 59-65.
36. On shear wave propagation in a multilayered medium including a fluid saturated porous solid stratum, Jl. of bulletin of Calcutta Math Soc., Vol. 98 no.6, pp. 597-606, 2006.
37. Identification of Stakeholders Expectations in Technical Education Sector in India for designing Quality Management System , SYNTHESIS, Jan-June, 2007, Vol. 4, No.1.
38. An Approach to Improve Consistency of Analytic Hierarchy Process Matrices, Bhavishya-Journal of Future Business School, Vol-03, No.-2, pp-101-117, 2009.
39. Propagation of SH-type waves in three layered medium including a fluid-Saturated Porous Solid Stratum. "International Journal of Theoretical and Applied Mechanics." Vol.- 4, No-3, pp-295-304, 2009.
40. An approach to improve consistency of analytical Hierarchy process matrices. "Bhavishya-Journal of Future Business School." Vol-03, No.-2, pp-101-117, 2009.
41. Reflection and refraction of plane waves in randomly stratified media. "International Journal of Theoretical and Applied Mechanics", Vol-05, No.-1, pp-63-71, 2010.
42. Reflection & refraction of waves in a frictionally bonded interface of layered anisotropic elastic half-spaces, "Advances in Theoretical and Applied Mathematics", vol. 5(3), pp-367-374, 2010.
43. Disturbance of SH-type of waves due to shearing – stress discontinuity in a visco-elastic layered half space", International Journal of Mechanics and Solid, vol. 6(2), pp.176-189, 2011.
44. Disturbance Of SH-Type Waves Due To Shearing Stress Discontinuity In An Orthotropic Media", Journal of Academic Research, vol. 3(4), pp.17-25, 2011.
45. Torsional Oscillations of a Rigid Disc Embedded in a Transversely Isotropic Elastic Half-Space, "Advances in Theoretical and Applied Mechanics", vol. 4, No. 4, pp. 177-188, 2011.
46. Torsional body force in a Kelvin-Voigt-type visco-elastic half space, "Communications in computer and information science", vol. 140, No. 2, pp. 145-151, 2011.

47. Effect of visco-elasticity and magnetic field on saline sea-water surface waves, "Journal of Mathematics and Technology", vol. 2, No. 3, pp. 14-20, 2011.
48. Surface waves in fluid saturated porous layer bounded by a liquid layer and an orthotropic elastic half space, Journal of Informatics and Mathematical Sciences (Accepted).

(B) Important papers presented/published in National/International conference/ symposia.

1. Dispersion and Attenuation of Love type waves in a frictionally bonded anisotropic media. - 58th session of national Academy of sciences, Jiwaji University, Gwalior (Nov. 3 – 5, 1992).
2. Propagation of Rayleigh waves in a thermo-elastic half-space - 79th session of ISCA, M.S. University of Baroda, Baroda, (Jan 3-8, 1993).
3. On the torsional impulsive body forces in a transversely isotropic elastic half-space - 24th session of ISTAM, NIO, Goa, Dec. 4-6, 1994.
4. Generation of SH-type waves in an anisotropic soil layer propagation and their inversion, 4-15 Nov'96, International Centre for Theoretical Physics, Trieste, Italy.
5. Wave motion in an anisotropic medium subjected to non-uniformly moving surface pressure - 3rd international conf. On vibration problems of elasticity, No.28-30, North Bengal University. Silliguri.
6. Generation of SH-waves in an isotropic soil layer overlaying an elastic half space by non-uniformly moving sources. Proceedings of Recent trends and Advances of mathematics and statistics in Engg. And Technology" Nov. 28-30, 1997, Deptt. Of Applied Mathematics, ISM. Dhanbad.
7. On the displacement produced in an inhomogeneous anisotropic elastic half-space by an impulsive torsional load, Pl. Jublee National Seminar on Advances in Mathematical, Statistical and Computational Methods in Science & Technology, Nov. 29 – 30, 2001, Deptt. Of Applied Mathematics, ISM. Dhanbad.
8. Propagation of waves in a dry saturated & unsaturated poroelastic medium, national seminar on Physico-Chemical studies of solids including mineral & coal, 21-22 Dec., 2006, Deptt. Of Applied Physics, ISM, Dhanbad.
9. Wave propagation in multilayered dry, saturated and unsaturated poroelastic media, proceedings of national conference of applicable mathematics in wave mechanics & vibrations, March 21-22, 2006.
10. On shear wave propagation in a visco-elastic layer with void pores", International Conference of Theoretical & Applied Mechanics, Aug 24-30, 2008, The University of Adelaide, Adelaide, Australia

11. Ranking of Stakeholders for Technical Education Sector in India –An Analytic Hierarchy Process Approach, National Conference on System Thinking & System Dynamics, ITBHU, Varanasi, 29 Feb-01 March, 2008.
12. SH-type Waves in a Double Surface Layered Medium Sandwiched by a Fluid-Saturated Porous Solid Stratum, “96th Indian science Congress Association at NEHU”, Shillong. Jan 3-7, 2009.
13. Application of Group Fuzzy Preference Programming Approach for consolidation of data in Analytic Hierarchy Process, National Seminar on Recent Advances in Theoretical and Applied Seismology, ISMU, Dhanbad, 27-28 March, 2009.
14. Surface Waves in an elastic in an elastic solid layer overlying a visco-elastic fluid saturated porous solid half space, National Seminar on Recent Advances in Theoretical and Applied Seismology, ISMU, Dhanbad, 27-28 March, 2009.
15. On shear wave propagation in three layered inhomogeneous anisotropic media” National Seminar on Recent Advances in Theoretical and Applied Seismology, ISMU, Dhanbad, 27-28 March, 2009.
16. A note on the disturbance of SH-type of waves due to shearing-stress discontinuity in a visco-elastic layered half- space, “International Congress of Mathematicians”,19-27 August,2010.
17. On the propagation of SH-type waves in elastic isotropic and homogeneous media sandwiched by elastic inhomogeneous medium. “International Congress of Mathematicians”, 19-27 August, 2010.
18. On torsional vibration of a rigid disc embedded in a transversely isotropic elastic half space, “First national conference on Applied Mathematical Science”, pp. 1-12, ISBN:978-81-909694-0-7, March 11-13, 2011.

(C) Visit Abroad

- i) For attending a conference and workshop in “Three dimensional modeling of seismic wave’s generation & their propagation” at International centre for theoretical Physics, Trieste, Italy from Nov 4 to Nov 21, 1997
- ii) For attending a conference and presenting a paper in International congress of Theoretical and Applied Mechanics held at University of Adelaide, Adelaide, Australia, Aug 22-29, 2008.