

Dr. Sri Niwas, FNASc, FASc, FNA

*Professor of Geophysics
Department of Earth Sciences
Indian Institute of Technology Roorkee
Roorkee – 247667, India*

*IITR Campus, Roorkee
Tel. + 91-1332 275739 and 285579*

Email: srsnpfes@iitr.emet.in
Tel. + 91-1332 285570
Fax. + 91-1332 273560

CURRICULUM VITAE

Father's Name

Late Sri Ram Adhar Pandey

Date of birth

July, 04, 1946

Permanent address

Village & Post-Rakahat, District –Gorakhpur, UP

Academic Qualification

Ph.D. (Geophysics) 1974, M.Sc. (Geophysics) 1968, B.Sc. (Hons.) 1966 – all from Banaras Hindu University, Varanasi; High School (10th) 1962, Intermediate (10+2) 1964-UP Board, Allahabad.

Position held

Professor of Geophysics (17.4.90 – contd.), Reader (17.4.80-6.11.89), Lecturer (14.2.77-16.4.80). Scientist (CSIR Pool, 21.12.76-13.3.77) – University of Roorkee, Roorkee; Professor and Chairman (7.11.89-17.6.92, on leave from University of Roorkee)-Kurukshetra University, Kurukshetra.

@ Period between 1968-20.12.76 was spent as Research Scholar, Junior Research Fellow, Senior Research Fellow and Post Doctoral Fellow as Banaras Hindu University and University of Roorkee.

Awards/Honors

Shanti Swarup Bhatnagar (SSB) Prize, CSIR, Government of India, 1991; Khosla Annual Research Prizes, University of Roorkee, 1987, 1988, 1990; Fellow, Indian National Science Academy (**FNA**), New Delhi; Fellow, Indian Academy of Science (**FASc**), Bangalore; Fellow, National Academy of Science (India) (**FNASc**), Allahabad; Fellow, Indian Geophysical Union, Hyderabad; Fellow, Association of Exploration Geophysicists, Hyderabad.

Specialization

Inversion of Geophysical Data; Geoelectromagnetism; Geohydrology (Exploration, development and management of groundwater); Exploration Geophysics.

Research Milestones

Research Papers (80)-Appendix **B**; Ph.D. Thesis supervised (10) – Appendix **A**; M. Tech. Dissertation guided(83)– Appendix **C**; Technical Report (31) –Appendix **D**; Book (1*)

* Natural Source Electromagnetic Induction in the Earth (Ed) BR Arora and Sri Niwas

Membership of Professional Bodies

Life Member, Indian Association of Hydrologists, Roorkee; Life Member, Indian Geological Congress, Roorkee; Active Member, Society of Exploration Geophysicists, USA

Administrative Experience

Member, Governing Council, Indian Institute of Geomagnetism, Mumbai (2003-).

Member, Programme Implementation Committee, Mission Mode Project on Seismology, DST, Govt. of India (2003-)

Member, National Committee for International Union of Geodesy & Geophysics (IUGG) 2001-2004.

Member, National Expert Committee, Human Resources Development in Earth Sciences, DST, Government of India, New Delhi (2000-2001)

Member, Advisory Committee, SSB Prizes (Earth, Ocean, Atmosphere and Planetary Sciences), CSIR, Government of India, New Delhi, 1999.

Member, Scrutiny Committee (Physical Sciences), National Academy of Sciences (India), Allahabad, (1998-2000).

This committee recommends names for the Fellowships (FNASc.) of the Academy.

Member, Sectional Committee (Earth and Planetary Sciences), Indian National Science Academy (INSA) New Delhi (1999-2001).

This is a National Committee of Experts constituted to evaluate the quality of research and the impact factor of the research work done by leading scientists (National and Foreigners) and recommend names to the research work done by leading scientists (National and Foreigners) and recommend names to the INSA Council for election to the Fellowship (FNA) of INSA (Fellow and Foreign Fellow).

Member, Project Advisory and Monitoring Committee (Earth and Environmental Sciences), Council of Scientific and Industrial Research (CSIR), Government of India (1998-2001).

This is also a National Committee of Experts in the field of Earth System Science (including remote sensing) responsible to sanction, monitor and evaluate the research projects submitted to CSIR for funding by researchers.

Member, Project Advisory and Monitoring Committee (Deep Continental Studies), Department of Science and Technology, Government of India (1995-1998).

This committee of experts drawn on National Level responsible to assess the Formulation of Research Projects, monitor its implementation and progress and evaluate the project completion Reports submitted by the investigators to DST for major funding.

Member, Syndicate (Administrative and Executive Body), University of Roorkee (1992-1997).

Professor and Chairman, Department of Geophysics, Kurukshetra University, Kurukshetra. (1989-1992)

Involvement in Planning and Development of newly created Department of Geophysics.

Present Pay Scale

IIT pay Scale of Rs. 18,400.00-500-22,400.00, Fixed on 1.1.2002 at Rs. 22,400.00

Ph.D. Thesis written and supervised

1. **Sri Niwas** (1974), Theoretical treatment of some problems on electrical behavior of layered Earth system. Banaras Hindu University, Varanasi.
2. **D.C. Singhal** (1984), Hydrogeological and geoelectrical studies of southeastern parts of Banda District, U.P., India. University of Roorkee, Roorkee.
3. **M.Israil** (1988), A matrix method for the interpretation of resistivity data. University of Roorkee, Roorkee.
4. **N. Kumar** (1994), Influence of lithology on groundwater quality and soil salinity in alluvial Plains of Chaggar-Yamuna basin, Haryana, India. Kurukshetra University, Kurukshetra.
5. **Yogesh Gupta** (1995), Statistical analysis of seismicity, crustal configuration and acceleration Pattern in Ghaggar-Yamuna basin, Haryana, India. Kurukshetra University, Kurukshetra.
6. **Anupma Rastogi** (1997). A finite difference algorithm for two-dimensional inversion of Geoelectromagnetic data. University of Roorkee, Roorkee.
7. **Mohamad Shakeel** (1997). An integrated approach for evaluation of hydraulic properties of Alluvial aquifers. University of Roorkee, Roorkee.
8. **Peeyush Tiwari** (1999), Mathematical modelling of magma solidification and lithosphere thinning. University of Roorkee, Roorkee.
9. **Arvind Kumar Singh** (2000), Atmospheric particles and electrical conductivity during different weather conditions. Submitted, University of Roorkee, Roorkee.
10. **O.P. Dubey** (2003) Synergistic approach for optimal land use in piedmont zone between Ganga and Yamuna rivers, UP, India. IIT Roorkee, Roorkee.

Research Papers

1. Avadh Ram. and **Sri Niwas**, 1971, Seismicity of Hindukush and Delhi region. *Pure and Applied Geophysics*, **86**, 36.
2. S.K. Upadhyay and **Sri Niwas**, 1971, Apparent resistivity over a three layered Earth with Anisotropic interstratum. *Pure and Applied Geophysics*, **87**, 155.
3. S.K. Upadhyay and **Sri Niwas**, 1972, Determination of the kernel function for a layered Anisotropic Earth. *Geophysical Research Buflletin*, **10**, 18 1.
4. **Sri Niwas** and S.K. Upadhyay, 1972, Direct analysis of resistivity kernel function over a two layer Earth with transitional boundary. *Proc. Indian Nat. Sci. Acad*, **38**, 103.
5. **Sri Niwas** and S.K. Upadhyay, 1972, Depth of inclined bed rock below the power electrode from surface potential measurements. *Geophysical Prospecting*, **20**, 910.
6. **Sri Niwas** and S.K. Upadhyay, 1974, Theoretical resistivity sounding results over a transition layer model. *Geophysical Prospecting*, **22**, 279.
7. **Sri Niwas**, 1975, Direct interpretation of geoelectric measurements using linear filter theory. *Geophysics*, **40**, 12 1.
8. **Sri Niwas** and S.K. Upadhyay, 1975, Apparent resistivity curves for an infinite line source parallel to an inclined contact. *Geophysics*, **40**, 689.
9. **Sri Niwas**, V.K. Painuly and J.B. Srivastav, 1976, Use of 2x2 matrices in magneto-telluric analysis for layered Earth. *Proc. Indian Nat. Sci. Acad.*, **42**, 313.
10. J.B. Srivastav and **Sri Niwas**, 1976, Magnetotelluric sounding over models of continuously varying conductivity. *Proc. Indian Nat. Sci. Acad.*, **42**, 320.
11. V.K. Gaur, **Sri Niwas** and Nek Ram, 1977, Electrical anomalies over hydrocarbon bearing Structures- a mathematical study. In *Geophysical Methods and Techniques*, 2, 1, AEG series.
12. **Sri Niwas**, DC Singhal and BBS Singhal (1979), Aquifer mapping in Mau Block of Banda district With the help of geoelectrical measurement. *Proc. International Seminar on Development and Management of Groundwater Resources, Roorkee*.
13. RS Chaturvedi, **Sri Niwas**, and AK Awasthi (1979), Geoelectrical investigation for assessment of foundation geology vis-à-vis the problem of flooding in the pump house at Virbhadra, Rishikesh. *Proc. International Symposium on In-Situ Testing of Soils and Rocks, Roorkee*, **17**.
14. **Sri Niwas**, AK Awasthi and S. Mantri (1980), Geoelectrical response of a water bearing sandstone-shale sequence and estimation of sand-shale ratio. *Proc. Indian Acad Sc. (Earth and Planet, Sc.)*, **89**, 413.
15. VK Gaur, **Sri Niwas** and NR Garg (1980), Electrical resistivity anomalies over hydrocarbon bearing structure. *Proc. Indian Acad. Sc. (Earth and Planet, Sc.)*, **89**, 239.
16. **Sri Niwas**, VK Gaur and GC Katiyar (1980), Inversion of micro earthquake arrival time data. *Proc. Indian Acad. Sc. (Earth and Planet, Sc.)*, **89**, 369.
17. **Sri Niwas** (1980), Depth of investigation in AMN array. *Geoscience Journal*, **1**, 77.
18. SK Upadhyay and **Sri Niwas** (1981), Application of Swarz-christoffel transformation to determine depth of inclined contact using surface potential measurement. *Jr. Assoc. Expl. Geophy.*, **2**, 37.
19. **Sri Niwas** and DC Singhal (1981), Estimation of aquifer transmissivity from Dar-Zarrouk parameters. *Jr. of Hydrology*, **50**, 393.
20. **Sri Niwas**, KK Pande, VK Gaur and AK Awasthi (1982), Geoelectrical discriminant of sand-shale: ratio of sedimentary section derived from Manto Carlo simulation technique. In RS Mittal Commemoration Volume on *Engineering Geo sciences* (Ed) BBS Singhal, 196.
21. **Sri Niwas**, P Kumar and HR Wason (1982), Fast automatic solution of the inverse resistivity problem. *Proc Indian Acad Sc. (Earth and Planet Sc.)*, **91**, 29.
22. DC Singhal and **Sri Niwas** (1983), Estimation of aquifer transmissivity from surface Geoelectrical measurement. Proc. UNESCO Symposium on *Methods and Instrumentation of Investigating Groundwater System*, The Netherlands, 405.
23. **Sri Niwas**, DC Singhal (1983), An automatic; technique for interpreting the field resistivity data. Proc of Seminar on *Assesment, development and Management of Groundwater Resources*, New Delhi, **3**, 164.
24. DC Singhal, **Sri Niwas** and BBS Singhal (1983), Automatic interpretation of resistivity data for groundwater investigations in parts of alluvial areas of Banda District, UP, *Proc. Groundwater Development -A New Perspective for year 2000 AD*, Roorkee, **85**.

25. **Sri Niwas** (1984), Geophysical exploration for groundwater, Proc. International Workshop *on Rural Hydrogeology and Hydraulics in Fissured Basement Zones*, Manglik Prakashan, Saharanpur, 233.
26. OP Dubey, **Sri Niwas** and AK Awasthi (1984), Analysis of remotely sensed data for groundwater studies of piedmont zone, Proc. *Asian Conference on Remote Sensing*, Kathamandu, 8a.
27. **Sri Niwas** and DC Singhal (1985), Aquifer transmissivity of porous media from surface resistivity measurements, *Jr. Hydrology*, **54**, 143.
28. OP Dubey, **Sri Niwas** and AK Awasthi (1985), Geohydrological studies using remotely sensed data. Proc. *Integration of Remote Sensing Data in GIS for Processing Global Resources Informations*, Washington.
29. OP Dubey, **Sri Niwas** and AK Awasthi (1985), Remote sensing for rapid assessment of groundwater, Proc. IWRS Symposium on Remote Sensing of Water Resources, Ahmedabad.
30. OP Dubey, **Sri Niwas** and AK Awasthi (1986), Monitoring vegetal cover, impact on hydrological parameters using remote sensing technique, Proc. *International Conference on Remote Sensing and Photogrammetry for Developing Countries*, Delhi.
31. OP Dubey, **Sri Niwas** and AK Awasthi (1986), Remote sensing technique - a powerful tool for groundwater assessment, Proc. *Seminar on Problems of Arid and Semi-Arid Zones*, Jodhpur.
32. **Sri Niwas** and Mohd. Israil (1986), Computation of apparent resistivities using an exponential approximation of kernel function, *Geophysics*, **51**, 1594.
33. **Sri Niwas** and Mohd. Israil (1987), A simple method of interpretation of resistivity sounding data using exponential approximation of kernel function, *Geophysical Prospecting*, **35**, 548.
34. **Sri Niwas** and Mohd. Israil (1987), A simple method of interpreting dipole resistivity sounding, *Geophysics*, **52**, 1412.
35. OP Dubey, **Sri Niwas** and AK Awasthi (1987), Groundwater recharge evaluation using satellite data, Proc. IWRS Symposium on Integrated Water Resources Management for Drinking, Agricultural and Industry- Policies and Issues, Hyderabad.
36. Brijesh Kumar, **Sri Niwas** and PK Sarswat (1987), A lab equipment to study the surface polarization in a.c. resistivity modelling, *Jr. Assoc. Explr. Geophy.*, **8**, 111.
37. DC Singhal, **Sri Niwas** and BBS Singhal (1988), Integrated approach for aquifer delineation in hard rock terrain- a case study from Banda District, India, *Jr. Hydrology*, **98**, 165.
38. OP Dubey, **Sri Niwas** and AK Awasthi (1988), Land use model for watershed. management, Proc. *Asian Conference on Remote Sensing*, Bangkok, 23.
39. SK Verma and **Sri Niwas** (1989), Comparison of deep resistivity, magneto-telluric and deep-transient electromagnetic method in delineation of conducting sediments below high velocity lava flow, SEG International Meeting, Dallas, USA.
40. **Sri Niwas** and Mohd. Israil (1989), Transformation of resistivity data from one configuration to the other using matrix method, *Geophysical Prospecting*, **37**, 209.
41. **Sri Niwas** and Mohd. Israil (1990), A reply to the discussion by E Szaraniec on "A simple method of interpreting dipole resistivity sounding published in Geophysics 1987", *Geophysics*, **55**, 1647.
42. Keshav Kumar, J Rai, Vir Singh and **Sri Niwas** (1990), Study of VLF radiation from lightening above a faintly conducting two layer earth, *IDOJARAS*, **91**, 195.
43. Mohd. Israil, **Sri Niwas** and KN Khattri (1991), Efficiency of the matrix method in resistivity data interpretation, Proc. *Seminar on Deep EM Exploration*, IIT, Kharagpur.
44. VC Goyal, **Sri Niwas** and PK Gupta (1991), Theoretical investigation for modified Wenner array as a tool in shallow resistivity exploration, *Groundwater*, **29**, 582.
45. **Sri Niwas** (1991), Transformation of line source data to point source data and vice - versa using matrix method. *Geophysical Prospecting*, **39**, 95.
46. **Sri Niwas**, P.K. Gupta, R Vishwanathan and VK Gaur (1991), Estimation of depth to the magnetic basement rocks using Backus Gilbert method. *Jr. Assoc. Explr. Geophy.*, **12**, 1.
47. **Sri Niwas**, RK Gupta and Susheel Kurnar (1991), AAIM and REDLAY-user friendly computer programmes for inversion of resistivity sounding data in kernel domain, *Jr. Assoc. Explr. Geophys.*, **10**, 16 1.
48. **Sri Niwas** and P.K. Gupta (1991), Stability of the inverse solution with 1 ohm-m change in embedded 'thick' conducting layer resistivity; *Acta Geod Geoph. Hung.*, **26**, 423.
49. **Sri Niwas** and Pramod Kumar (1991), Resolving power of direct current and magnetotelluric resistivity soundings in exploring thick sedimentary horizons; *Acta Geod Geoph. Hung.*, **26**, 435.
50. M.Israil and **Sri Niwas** (1991), Resistivity data interpretation in the vicinity of vertical discontinuities using matrix method, *Acta Geod. Geoph. Hung.*, **26**, 395.
51. S.K. Verma and **Sri Niwas** (1994), Comparison of the deep resistivity, MT and deep transient EM method in the delineation of conducting sediments of high resistive lava flow; *Jr. Assoc. Explr. Geophy.*, **15**, 33.

52. **Sri Niwas** (1994), Quantitative interpretation of dipole resistivity sounding data using matrix method; *Proc. Environmental Aspects of Groundwater development*, 11-74.
53. Pramesh Tyagi **Sri Niwas** and Anurag Tyagi (1996), Pattern recognition of 2-D geoelectrical signature using Artificial Neural Network (ANN), *Jr. Assoc. Exp. Geopy.*, **17**, 35-46.
54. Yash Pal Singh, P.K.Gupta and **Sri Niwas** (1996), Linear inversion of 2D electromagnetic data using integral equation method; *Jr. Assoc. Exp. Geophy.*, **17**, 155-164.
55. P.K.Gupta, **Sri Niwas** and V.K.Gaur (1996), Straightforward inversion scheme (SIS) for 1-D magnetotelluric data, *Proc. Indian Acad. Sci. (Earth planet Sci)*, **105**, 413 -429.
56. P.K.Roy, Ajay Chauhan, **Sri Niwas** and KN. Khatri (1996), Multifractal, strange attractor and epicentral distribution. *Proc. AEG Seminar*.
57. Anupma Rastogi, P.K. Gupta and **Sri Niwas** (1997), Multigrid inversion of 2-D electromagnetic data using bi-conjugate gradient method, *Jr. of Geophy.*, **28**, 43-50.
58. P.K.Gupta, **Sri Niwas** and V.K.Gaur (1997), Straightforward inversion of vertical electrical sounding data, *Geophysics*, **62**, 1 -11.
59. **Sri Niwas** and Amit Mehrotra (1997), A stable iterative scheme for inversion of direct current resistivity sounding data, *Acta Geod. Geoph. Hung.*, **32**, 15.
60. Peeyush Tewari, U.S.Gupta and Sri Niwas (1997), Modelling of solidification processes in. magma chambers cooled from above, *Acta. Geod Geoph. Hung.*, **32**, 3.
61. Peeyush Tewari, U.S. Gupta and **Sri Niwas** (1997), Numerical solution of a Stefan Problem. Using Fourier Series Method, in *Mathematics and its applicafions in Engineering Industry*, Narosa Publishing House, New Delhi, 521.
62. Anupma Rastogi, P.K. Gupta and **Sri Niwas** (1998), Inversion of GDS data of northwest Himalaya using EM2INV. *Proc. Indian Acad. Sc. (Earth and Planetary Sc.)*, **107**, 149.
63. D.C.Singhal, **Sri Niwas**, M. Shakeel and E.M. Adam (1998), Estimation of Hydraulic characteristics of Alluvial Aquifers from Electrical Resistivity Data, *Jr. Geol. Soc. India*, **51**,461.
64. Peeyush Tewari, U.S. Gupta and **Sri Niwas** (1998), Numerical solution of a phase boundary problem using Fourier Series; *Nat. Acad. Sci. Letters*, **21** (5&6), 157.
65. M.Israil, **Sri Niwas** and K.N. Khattri (1998), Computational efficiency of the matrix method in the inversion of resistivity sounding data; In. *Deep Electromagnetic Explorations* (Eds. K.K.Roy et al) Narosa Publishing house, New Delhi. 507-516.
66. **Sri Niwas** (1998), Spectral characteristics of system matrices: *In Inverse Methods General Principles and Applications to Earth System Sciences* (chapter 5), (Eds) N.K.Indira and P.K.Gupta, Narosa Publishing House, New Delhi.
67. **Sri Niwas** (1998), Comparative analysis of different approaches to inversion of Magn etotelluric data; *In Inverse Methods- General Principles and Applications to Earth System Sciences* (chapter 10.1), (Eds) N.K.Indira and RK.Gupta, Narosa Publishing House, New Delhi.
68. Adarsh Kumar, J.Rai, A.K.Singh and **Sri Niwas** (1998), Effect of orographic features on atmospheric electrical parameters of different cities of India. *Ind. Jour. Radio and Space Physics*, **27**, 125.
69. Arvind K. Singli, Adarsh Kumar, J.Rai and Sú Niwas(1999), Variation in atmospheric aerosols and electrical conductivity at Roorkee during the total solar eclipse of October, 1995. *Ind. J. Radio and Space Physics*, **28**, 1.
70. P.K. Gupta, **Sri Niwas** and Anupma Rastogi (1999), EM2INV- A finite difference based algorithm for 2D inversion of geoelectromagnetic data. *Proc. Indian Acad. Sci. (Earth Planet. Sci)*, **108**, 1-21.
71. Arvind K. Singh, J. Rai and **Sri Niwas** (2000), Variation of aerosols in relation to some Meteorological parameters during different weather conditions. *Atmosfera* **13**(3), 177-184.
72. O.A.L. de Lima and **Sri Niwas** (2000), Quantitative estimation of hydraulic parameter of shaly sandstone aquifers from geoelectrical measurements. *J. Hydrology*, **235**, 12-26.
73. M.J. Porsani, **Sri Niwas** and N. R. Ferreira (2001), Robust inversion of vertical electrical sounding data using a multiple reweighted least-squares method. *Geophysical Prospecting*, **49**, 255-264.
74. O.A.L. de Lima, M.B. Clennell and **Sri Niwas** (2001), Theoretical model for the geoelectrical response of fresh water shaly sandstone. *Proc. Int. Congress of Brazilian Geophysical Society*, Salvador, Brazil.
75. O.A.L. de Lima, H.K.Sato and **Sri Niwas** (2001), Mathematical modelling and simulation of electrical current density distribution in porous aquifer settings. *Proc. Int. Congress of Brazilian Geophysical Society*, Salvador, Brazil.
76. **Sri Niwas**, O.A.L. de Lima and Ben Clennell (2001), Induced polarization measurement as a complementary means to evaluate aquifer transport properties. *Proc. Int. Congress of Brazilian Geophysical Society*, Salvador, Brazil.

77. **Sri Niwas**, and O.A.L. de Lima (2001), Correlation of electrical and hydraulic conductivities of porous aquifer – a critique. *Proc. Int. Congress of Brazilian Geophysical Society*, Salvador, Brazil.
78. Arvind K. Singh, Jagdish Rai and **Sri Niwas** (2002), Variation of aerosols during winter season at Roorkee. Proc. Nat. Workshop on Atmospheric Chemistry (NWAC-99), pp. 48-51.
79. **Sri Niwas** and O.A.L. de Lima (2003), Aquifer parameter estimation from surface geoelectrical measurements. *Groundwater*, vol. 41, 94-99.
80. O.A.L. de Lima, Michael Ben Clennell, Geraldo Girão Nery and **Sri Niwas** (2003), A volumetric approach for the resistivity response of fresh water shaly sandstone. Communicated to *Geophysics*.
81. O.A.L. de Lima and **Sri Niwas** (2003), Electrical resistivity/ formation factor and hydraulic conductivity relations in porous aquifers. *J. Appl. Geophysics*. (Communicated).
82. **Sri Niwas**, O.A.L. de Lima and Ben Clennell (2003), Induced Polarization measurements as a complimentary means to evaluate aquifer transport properties. *Geophysical Prospecting* (Communicated).

M. Tech. Dissertation Guided

1. Nek Ram (1976), Direct detection of hydrocarbons through electrical methods; University of Roorkee.
2. K.K. Pande (1977), Monte Carlo technique applied to the study of sand/shale ratio in a geo hydrological section; University of Roorkee.
3. S.Mantri (1978), Study of sand-shale models of groundwater system by resistivity interpretation-a stochastic approach; University of Roorkee.
4. G. C. Katiyar (1978), Inversion of micro earthquake arrival time data- a g-inverse approach; University of Roorkee.
5. E.M.S. Mutalemwa (1979), Resistivity mapping of aquifers in Mau-Block- Banda District using direct method. of interpretation; University of Roorkee.
6. Pawan Kumar (1980), Direct interpretation of resistivity sounding measurements using nonlinear optimization technique; University of Roorkee.
7. N.K.Sharma (1980), Inversion of gravity data of Cauvery Basin, India; University of Roorkee.
8. R.K.Garg (1981), Direct interpretation of electromagnetic depth sounding data using linear filter theory; University of Roorkee.
9. RC.Gandhi (1981), Automatic interpretation of resistivity sounding data using g-inverse approach-,University of Roorkee.
10. R Vishwanathan (1982), Determination of depths to magnetic basement rocks using Backus- Gilbert Method; University of Roorkee.
11. J.K.Vemra (1982), Micro-seismicity of north can India using hypo-ellipse program; University of Roorkee.
12. J. S.Mathew (1983), Transmissivity estimation from resistivity sounding data; University of Roorkee.
13. S.K Dimri (1983), Geo electrical survey and analysis of pump test data in alluvial formation of Hathua Block, Varanasi; University of Roorkee.
14. D.S. Ramesh (1984), Automatic estimation of hydrological parameters of an aquifer having radial discontinuity; University of Roorkee.
15. Y.V. Durga Prasad (1984), Inversion techniques for the pump test data; University of Roorkee.
16. Brajesh Kumar (1984), Design and development of a laboratory equipment to study the effect of surface polarisation in A.C. resistivity modelling, using; tank experiments; University of Roorkee.
17. SK. Sinha (1984), Geoelectrical and. hydro-geochemical studies of a part of upper Hindon basin, Saharanpur District, U.P.; University of Roorkee.
18. S.C. Gupta (1984), Synthetic electrolog modelling of sedimentary sequences of deltaic environment; University of Roorkee.
19. Susheel Kumar (1985), Critical evaluation of two resistivity inverse solutions with reference to their quality and reliability; University of Roorkee.
20. N.K. Goel (1986), Quantitative interpretation of magnetotelluric data in time domain: University of Roorkee.
21. G. Manoj Reddy (1986), Parallel and perpendicular electric field components of a lightning discharge over a layered earth; University of Roorkee.
22. N.D.R. Krishna (1986), On the well logging interpretation of shally sands; University of Roorkee.
23. Parvez Ahmed (1986), Quantitative analysis of remote sensing data for ground water resources in Solani catchment distt., Saharanpur, University of Roorkee.
24. A. Venkataswaram (1987), Automatic interpretation of well-log data from hydrocarbon bearing horizons; University of Roorkee.
25. B.S. Bora (1987), Automatic interpretation of time-domain, magneto telluric data; University of Roorkee.
26. Bhupinder Singh (1987), inversion of magnetotelluric data over layered earth; University of Roorkee
27. Abdbe Haile Mariam (1988), Geo electrical investigation for groundwater in parts of Saharanpur District. UP, University of Roorkee.
28. Anupama Rastogi (1988), Finite element resistivity modelling over 2D structure, University of Roorkee.
29. Pramod Kumar (1988), Inversion of DC and MT resistivity for critical appraisal of detectibility and resolvability of conducting layer embedded between two resistive layers. University of Roorkee.

30. Naresh Kumar (1989), Occam's inversion of geo electrical data of Saurashtra region. University of Roorkee.
31. Manoj Sharma (1989), Reconstruction of plane-wave electromagnetic reflectivity section for layered earth. University of Roorkee.
32. Rajeev Prasad (1989), Quantitative interpretation of well log data from the part of Cambay basin. University of Roorkee.
33. V.K. Gahalaut (1989), Analysis of micro-earthquake data from Garhwal Himalaya. University of Roorkee,
34. Ram Prakash (1990), Study of micro-earthquakes front Kumaon- Garhwal region, India. Kurukshetra University.
35. Y. Nagendra Singh (1990), A seismological study in north eastern region in India. Kurukshetra University.
36. P.K. Sapat (1990), Estimation of source parameters of an earth-quake. Kurukshetra University.
37. Pankaj Sharma (1990), Modified Cagniard technique for TEM response of layered earth due to a line source. Kurukshetra University.
38. Rajesh Kalra (1990), Modelling and inversion of magneto telluric data. Kurukshetra University
39. Rajesh Raheja (1990), Automatic interpretation of apparent resistivity sounding data. Kurukshetra University.
40. Naresh Gupta (1990), Resistivity Data acquisition and interpretation for ground-water exploration; Kurukshetra University.
41. Manoj Jain (1991), Occam's and Ridge-regression inversion of magneto telluric data from panonian basin, Hungary; Kurukshetra University.
42. Samir Kumar Walia, (1991), Principle Component analysis of translation invariant transform features of a synthetic seismogram., Kurukshetra, University.
43. Ashwani Kathuria (1991), Pattern recognition of seismic responses of hydrocarbon bearing formations; Kurukshetra University.
44. Manoj Prajapati (1991), Robust one dimensional algorithm for interpreting "Geo electric data; Kurukshetra University.
45. Rajnish Kumar Garg (1991), An integrated study of seismo-tectonics of Himalayan region, Kurukshetra University.
46. Anup Kumar (1991), Discrimination between sand/shale versus coal/shale sequences through pattern recognition of seismic response; Kurukshetra University.
47. Sushil Kumar (1991), An integrated study of seismo-tectonics of Himalayan region. Kurukshetra University.
48. Pramesh Kumar (1993), Artificial Neural Network application for geophysical interpretation using back propagation algorithm; University of Roorkee
49. Subodh Kumar (1993), Inversion of earthquake arrival time data; University of Roorkee.
50. Yesh Pal Singh (1994), Linear inversion of 2-D EM data; University of Roorkee.
51. K.K. Maheshwarri (1994), Occam inversion of field MT data; University of Roorkee.
52. Anchal Vashistha (1994), Interpretation of VES data from Noida area using Occam inversion technique; University of Roorkee.
53. Aditya Pathak (1994), Computer algorithms for NP- hard optimization problem: A simple genetic algorithms and its applications; University of Roorkee.
54. Manish Agrawal (1995), Mathematical modelling of 2-D electromagnetic problems; University of Roorkee.
55. Harish Kumar (1995), 2D resistivity modelling using integral equation method. University of Roorkee.
56. Puspraj Singh (1995), Processing and interpretation of time domain MT sounding data. University of Roorkee.
57. Sanjeev Kumar (1995), Inversion of reflection seismogram: a numerical experiment. University of Roorkee.
58. Avadhesh Kumar Upadhyay (1995), Prediction of 1D slow movement in unsaturated medium. University of Roorkee.
59. Shibu K. Mani (1995), Numerical modelling of unsteady flow to a well in layered aquifer system. University of Roorkee.
60. Rakesh Ranjan (1995), Estimation of drainage parameter in GIS environment. University of Roorkee.
61. Ajay K. Chauhan (1996), Multifractals, strange attractors and epicentral distribution. University of Roorkee.

62. Brij Mohan Kandpal (1996), Noise monitoring by digital seismograph for shallow investigations. University of Roorkee.
63. Rajeev Kumar Sinha (1996), Computer aided, numerical modelling of contaminant transport in groundwater. University of Roorkee.
64. Gautam Kumar Aulia (1997), Comparative study of two algorithms for inversion of resistivity sounding data. University of Roorkee.
65. Luvkush Gahalaut (1997), Geophysical application of LISP based genetic problem. University of Roorkee.
66. Rajesh Pratap Singh (1997), Bayesian synthesis of precursory phenomenon. University of Roorkee.
67. Sushil K. Singh (1997), Seismic attribute analysis. University of Roorkee.
68. Neeraj Kumar (1997), Expert GIS for landslide study. University of Roorkee.
69. Rajarshi Debnath (1997), Numerical modelling of contaminant transport in groundwater systems. University of Roorkee.
70. Rajat Kumar (1997), GIS in groundwater exploration University of Roorkee.
71. K. Prakash (1998), Chaotic characterization of dynamical systems by Lyapunov spectrum. University of Roorkee.
72. Mahendra Kishore (1998), Wavelet transform and its application in geophysical data compression. University of Roorkee.
73. Ashwani Kumar (1998), Seismic modelling for evaluating hydrocarbon traps. University of Roorkee.
74. Naveen K. Gupta (1998), Total organic (TOC) determination using well logs. University of Roorkee.
75. Chandra Shekhar Bhuiyan (1998), Hydrogeologic zonation for assessment and management of groundwater resources in parts of Udaipur District Rajasthan: An integrated approach through remote sensing and GIS. University of Roorkee.
76. Anurag Prakash Mathur (1998), Thermal modelling of Broach depression, Cambay Basin, India. University of Roorkee.
77. K. Udai Kiran (1998), Locating environmentally safe region using GIS. University of Roorkee.
78. Vipin Kara (1998), Electrical and seismic investigation around Roorkee. University of Roorkee.
79. Kumar Hemant (1999), 2D electromagnetic modelling in anisotropic media. University of Roorkee.
80. Neeraj Kumar (1999), 1D inversion of 2D EM data. University of Roorkee.
81. Anand Kumar (1999), Geological feasibility and slope stability analysis under GIS environment for rail route alignment from Jammu to Poonch. University of Roorkee.
82. Gautam Rawat (1999), An application of time frequency localization through S-transform. University of Roorkee.
83. Pijush Kanti Paul (1999), Time lapse seismic modelling for reservoir modelling. University of Roorkee.
84. Pinaki Chakravorty (2000), Contextual classification for geo-features identification. University of Roorkee.
85. Suman Dasgupta (2000), Small hydro project site investigation using GIS. University of Roorkee.
86. Arkaparva Mukharjee (2000), Lineament mapping and hydrological modelling in and around Simlipal area using IRS-1C and ERS2 data. University of Roorkee.
87. Subodh P. Nautiyal (2002), Complete solution of Bussian equation of electrical effects of shaly sandstone reservoir. Indian Institute of Technology Roorkee.
88. Vishnu K. Pandey (2002), Filtering techniques for enhancement of high resolution satellite image. Indian Institute of Technology Roorkee.
89. Girish K. Gupta (2002), Depth domain 3D seismic data processing. Indian Institute of Technology Roorkee.

Technical Reports on Consultancy Projects

1. **Sri Niwas** (1978), Self-potential survey for graphite in Oriapali, Distt. Bolangir, Orissa (for L.N.Agarwal and Company, Patan).
2. R.S Chaturvedi, **Sri Niwas** and A.K.Awasthi (1978), Geo electrical investigation for assessment of foundation geology vis-a-vis the problem of flooding in the pump house of IDPL, virbhadra, Rishikesh (for Chief Engineer, Indian Drugs and Pharmaceutical Ltd. Virbhadra, Rishikesh).
3. R.S Chaturvedi, **Sri Niwas** and A.K.Awasthi (1979), Ground water investigation in Sevagram, B.H.E.L.Hardwar (for Bharat Heavy Electricals Ltd., Hardwar).
4. R.S Chaturvedi, **Sri Niwas** and A.K.Awasthi (1979), Site investigation for location of a tube well in sector-IV of Indian Drugs and Pharmaceutical Ltd, Virbhadra, Rishikesh.
5. **Sri Niwas**, D.C.Singhal and B.B.S.Singhal (1981), Groundwater investigation in parts of Jartauli area, Khair Tehsil Distt. Aligarh (for U.P. Jal Nigam, Roorkee).
6. **Sri Niwas**, R.P.Gupta and B.B.S.Singhal (1981), Geohydrological investigation for infiltration well site in Khairon wala Rao, Sherpur-Pelon Water Supply Scheme, Distt. Saharanpur (for U.P. Jal Nigam, Saharanpur).
7. B.B.S.Singhal, **Sri Niwas**, D.C.Singhal and. A.K. Awasthi (1981), Geohydrological and Geo electrical investigations for siting of an infiltration well in the bed of river Ganges near Sri Nagar, Disit. Pauri-Gurhwal (for U.P. Jal Nigam, Sri Nagar).
8. **Sri Niwas** and D.C.Singhal (1982), Geo electrical investigation for construction of an infiltration well in the bed of river Malini in Bhabhar area of Kotdwara Distt. Pauri-Garhwal (for U.P. Jal Nigan. Kotdwara).
9. **Sri Niwas**, H. Sinvhal and B.B. S. Singhal (1983), Geo hydrological investigation for infiltration well site selection in Kaluwala Rao in Saharanpur Distt. (for U.P. Jal Nigam, Saharanpur).
10. **Sri Niwas** (1983), Earth resistivity measurement at test bed of turbo generator, BHEL, Hardwar (for BHEL, Hardwar).
11. **Sri Niwas**, V.K.Gaur and P.K.Gupta (1983), Geo electrical investigation for the location of potential aquifer zone in the green field area near Faridabad, Harayana (for Urban Improvement Co. (P) Ltd., New Delhi).
12. **Sri Niwas** and B.B.S.Singhal (1983), Geo electrical investigation for the location of a tubewell site in the campus of Sri Janald Sugar Mills and Co. Doiwala, Dehradun (for Sri Janaki Sugar Milis and Co. Doiwala).
13. **Sri Niwas** and K.N.Khattri (1983), Geoelectrical survey for basement mapping near proposed suspension bridge over river Siang at Ranaghat- Arunachal Pradesh (for Consulting Engineering Services (India) Pvt. Ltd., New Delhi).
14. **Sri Niwas**, AK. Jain. and R.G.S. Sastri (1984), Gravity and Lineament Tectonics studies for deciphering possible subsurface extension of basement ridge in Garrhwal Himalayas towards Uttarkashi beyond Hardwar (for Chief Engineer, Tehri dam project).
15. **Sri Niwas** and B.B. S. Singhal (1984), Geo electrical investigation for the location of well site in the bed of river Tons near Birpur area Dehradun (for Ganison Engineer, Dehradun cantonment).
16. **Sri Niwas**, K.N.Khattri and B.B.S.Singhal (1985), Geo electrical investigation for the location of tubewell sites in the campus of Ord. Factory, Raipur, Deharadun. (for Commander Works Engineer (Project), Dehradun cantonment).
17. **Sri Niwas**, K.N.Khattri and H.Sinvhal (1985), Geo electrical investigation for the assessment of the foundation geology at Mundi Wala Rao Super-passage of Khara Power Project. (for Supdt, Engg., Irrigation construction circle Dehradun).
18. **Sri Niwas** and K.N. Khattri (1985), Resistivity sounding for sub surface geological mapping at canal cum drainage cum road crossing (TRC) of Khara Power channel (For irrigation construction circle, Dehradun)
19. **Sri Niwas** and K.N. Khattr i(1986), Resistivity sounding for assessment of foundation geology vis-à-vis presence of laminar clay deposits at PRB structure of Khara power channel (For irrigation construction circle, Dehradun)
20. **Sri Niwas** and K.N. Khattri (1986) Geo electrical mapping for subsurface geology at Gajra Rao Super Passage over Khara Power Channel and saturated zone configuration between River Yamuna and the Super Passage.(Irrigation Construction Circle, Dehradun)
21. **Sri Niwas** (1987), Geophysical investigation for location of infiltration well in the bed of Chhapuri Rao. U.P. Jal Nigain.

22. **Sri Niwas** and K.N. Khattri (1988), Geoelectrical investigation for aquifer in area near Faridabad, Haryana. Dinesh Agrawal and Company, New Delhi.
23. K.N. Khattri, **Sri Niwas**, V.N. Singh and H.R. Wason (1990), Micro earthquake studies around Narora Atomic Power Plant (NAPP, A.E.C. Mumbai).
24. **Sri Niwas** and V.N. Singh (1993), Electrical resistivity survey for tube well site location at Aurangabad, Hardwar. Tube Well Division, U.P. Govt., Roorkee.
25. **Sri Niwas** and S. Balakrishna (1993), Geological and geoelectrical investigation for contamination of soil in factory compound of Modi Xerox Ltd., Rampur, U.P.
26. **Sri Niwas** and P.K. Gupta (1994), Forward and inverse modelling of geo electrical situations near Greater NOIDA, U.P. Groundwater Department Govt. of U.P., Roorkee.
27. **Sri Niwas** (1995), Geo electrical investigation for groundwater potential near Sheetla, Dist. Almora, U.P. CHIRAG, Almora.
28. **Sri Niwas** and B.B.S. Singhal (1996), Geohydrological investigation around Dwarahat near Ranikhet, U.P. UPRAC, Lucknow.
29. A.K. Jain, **Sri Niwas** and others (1997), Geohydrological studies of ash-pond -Singrauli Super Thermal Power Station. NTPC, New Delhi.
30. A.K. Jain, **Sri Niwas** and others (1997), Geohydrological studies of ash-pond -Vindhyachal Super Thermal Power Plant. Vindhyachal NT, (NTPC, New Delhi.)
31. A.K. Jain, **Sri Niwas** and others (1997), Geohydrological investigation of ash-pond -Rihand Super Thermal Power Project, Rihand, UP. NTPC, New Delhi.
32. A.K.Jain, **Sri Niwas** and others (2000), Geohydrological studies of ash-pond - Talcher Super Thermal Power Project, Talcher, Orissa. NTPC, New Delhi.