

CV of Dr. M. Israil

Name: Mohammad Israil

Nationality: Indian

Present position: Professor of Geophysics

Mailing Address:

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India

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Qualification:

Ph. D. 1989, Exploration Geophysics, Department of Earth Sciences, University of Roorkee, India

Title of Ph. D. thesis:

" A matrix method for the interpretation of direct current resistivity data"

M. Sc. 1980, Physics

Specialization: Magnetotellurics, groundwater Geophysics, Environmental Geophysics, Exploration geophysics.

Position held:

Lecturer: July 12, 1990 to Jan. 18, 1996 & Reader: Jan. 19, 1996 to April 30, 1996; Kurukshetra University, Kurukshetra;

Assistant Professor: May 1, 1996 to Jan. 26, 2006

Associate Professor: Jan 27, 2006 to April 15, 2008

Professor: April 15, 2008 to present; Indian Institute of Technology Roorkee, Roorkee, India.

Awards and prizes:

- i. Khosla Research prize and Commendation certificate of Roorkee University 1987.
- ii. Khosla Research medal and prize of Roorkee University 1988.
- iii. Director appreciation for overall "excellent" performance in the year 2003-04

Publications: Journals: 51; Proceedings: 66

Ph.D. Supervised 6; M. Tech/M. Phil supervised 65

Research Projects 8; Consultancy projects 32

Membership of professional bodies:

Life member of Association of Exploration Geophysicists (AEG)

Life member of Indian Geological Congress (IGC)

Life member of Association of Global Groundwater Scientists (AGGS)

Foreign Visits:

1. University of California Berkeley, USA as visiting Scholar from May 22 to July 25, 1999 for Collaborative work on Magnetotelluric methods.
2. El Vendrell, Spain from Sept. 17-23, 2006 to attend 18th International Workshop on Electromagnetic Induction in the Earth, held at El Vendrell, Spain during Sept. 17-23.
3. Department of Geophysics and Meteorology, University of Koln, Germany, Oct. 2007
4. Department of Geophysics and Meteorology, University of Koln, Germany, Oct. 2008
5. Department of Geophysics and Meteorology, University of Koln, Germany, June 15 – July 15, 2009; June 01-July 31, 2010; Feb. 19-26, 2011.

6. Giza, Egypt, from September 18-24, 2010, to attend 20th International Workshop on Electromagnetic Induction in the Earth, held at Giza, Egypt during Sept.18-24, 2010
7. GEMRC, RAS Moscow Russia from June 3-18, 2011 in the frame of DST-RFBR, Indo-Russian joint project.
8. GEMRC, RAS Moscow Russia from June 10-20, 2012 in the frame of DST-RFBR, Indo-Russian joint project.
9. 21th EM Induction workshop, Darwin, Australia July 25-31, 2012
10. Moscow state University (MSU) in the frame of DST-RFBR project during June 1-10, 2014.
11. 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014. Presented paper
12. Geological survey of Bangladesh, Dhaka to deliver expert lecture of electrical resistivity methods and its application, June 12-16, 2015.
13. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented paper

List of publications

a. Journals:

1. 1985 P. N. Ram, R. D. Bijalwan , P. D. Semalty and M. Israil: Resonant Scattering of phonons in ZnS:Fe²⁺ and CdTe:Fe²⁺. Phys. Stat. Sol.(b) 13, 365-373.
2. 1986 Sri Niwas and M. Israil: Computation of apparent resistivities using an exponential approximation of kernel functions. Geophysics, 51, 8, 1594-1602
3. 1987 Sri Niwas and M. Israil: A simple method of interpreting resistivity sounding data using exponential approximation of kernel function. Geophysical Prospecting vol. 35, 5, 548-569.
4. 1987 Sri Niwas and M. Israil: A simple method of interpreting of dipole resistivity sounding." Geophysics vol. 52, 1412-1417
5. 1989 Sri Niwas and M. Israil: Matrix method for the transformation of resistivity sounding data of one electrode configuration to that of other electrode configuration. Geophysical Prospecting Vol. 37, 209-221.
6. 1989 Sri Niwas and M. Israil: A discussion of "A simple method of interpreting of dipole resistivity sounding" Geophysics vol. 52, 10, 1412-1417" Geophysics vol. 54, 1647.
7. 1991 M. Israil and Sri Niwas: Resistivity data interpretation in the vicinity of vertical discontinuity using matrix method. Acta. Geod. Geop. Mont. Hung. Vol.26 (1-4), 395-405.
8. 1992 M. Israil: Apparent resistivity computation for the models with transitional layers. Acta. Gcod. Geop. Mont. Hung. Vol.27 (2-4), 399-404.
9. 1994 M. Israil: Resistivity data interpretation for the identification of subsurface electrical structure of the earth. Journal of Physics Education, Vol. 11(1), 24-36.

10. 1994 M. Israil and P. C. Chaturvedi: Geoelectrical studies for the ground water investigation near Kurukshatra- Haryana. *Hydrology Journal* vol. xvii, 61-68.
11. 1996 M. Israil, Nand Lal and Abhey Bansal: Iso- resistivity map for the estimation of ground water potential in Jind area- Haryana. *Hydrology Journal* vol. xix, 45-51
12. 2001 I. sarkar, A. K. Pachauri and M. Israil: On the damage caused by the Chamoli Earthquake of March 29,1999. *Journal of Asian Earth Sciences*, 19,129-134.
13. 2001 D. K. Sharma, M. K. Bansal, J. Rai and M. Israil: Variation of aerosols in relation to some meteorological parameters. *Mausam*, 52, 4, 709-716.
14. 2002 M. Israil and Pachauri A. K.: Characterization of a landslide site in Himalayan foothill region. *J. of Ind. Geophys. Union* 6, 2, 71-80
15. 2003 D. K. Sharma, J. Rai, M. Israil and S. C. Garg: The effect of lighting on ionospheric temperature determined by SROSS-C2 Satellite. *Ind. J. Radio and Space Phy* 32, 93-97.
16. 2003 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam, P. Chopra and S. C. Garg: Sunrise effect on ionospheric temperature as measured by SROSS- C2 Satellite. *J. of Ind. Geophysical Union* 7, 2, 117-123.
17. 2003 D. K. Sharma, J. Rai, M. Israil and Pratap Singh: Summer variation of the atmospheric aerosol number concentration over Roorkee, India. *Journal of Atmospheric and Solar-Terrestrial Physics* 65, 9, 1007-1019.
18. 2003 M. Israil and Pachauri A. K: Geophysical characterization of a landslide site in the Himalayan foothill region. *Journal of Asian Earth Sciences* 22, 253-263.
19. 2004 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam, P. Chopra and S. C. Garg: Enhancement in ionospheric temperature during thunderstorms. *Journal of Atmospheric and Solar-Terrestrial Physics* 66, 51-56
20. 2004 D. K. Sharma, J. Rai, M. Israil and S. C. Garg: Lighting induced heating of the ionosphere. *Atmosfera* vol. 17, 1, 31-38
21. 2004 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam, P. Chopra and S. C. Garg: Effect of solar flare on electron and ion temperatures as measured by SROSS-C2 satellite. *Ind. J. Radio and Space Physics* Vol. 33, 7-12.
22. 2004 M. Israil, Pravin K. Gupta and D. K. Tyagi: Determining sharp layer boundaries from straightforward inversion of resistivity sounding data. *J. Ind. Geophysical Union* 8, 2, 125-133.
23. 2004 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam, P. Chopra and S. C. Garg: Enhancement in electron and ion temperature due to solar flares as measured by SROSS-C2 satellite, *Annales Geophysicae* 22, 2047-2052.

24. 2005 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam: Diurnal, seasonal and latitudinal variations of ionospheric temperatures of the topside F region over the Indian region during solar minimum (1995-1996). *Journal of Atmospheric and Solar-Terrestrial Physics* 67, 3, 269-274.
25. 2005 Rambhatla G. Sastry, Neeta Chaudhary and M. Israil: Is there a need for variable density option in making combined mass correction to gravity data acquired over high relief? *Current Science* vol. 88, 2, 269-273.
26. 2005 D. K. Sharma, Ramesh Chand, M. Israil, Jagdish Rai: Variation of electron and ion temperature ratio over the Indian region during the period 1995-1999 as measured by SROSS-C2 satellite. *Journal of Atmospheric and Solar-Terrestrial Physics* 67, 1443-1447.
27. 2006 M. Israil, Mufid al-Hadithi, D. C. Singhal and Bhism Kumar: Groundwater-recharge estimation using a surface electrical resistivity method in Himalayan foothill region, India. *Hydrogeology Journal* 14: 44-50.
28. 2006. M. Israil, Mufid al-Hadithi, D. C. Singhal: Application of a resistivity survey and geographical information system (GIS) analysis for hydrogeological zoning of a piedmont area, Himalayan foothill region, India. *Hydrogeology Journal* 14: 753-759.
29. 2006 D. K. Sharma, Ramesh Chand, M. Israil, Jagdish Rai: Effect of seismic activities on ion temperature in the F₂ region ionosphere. *Atmosfera* 19(1), 1-7.
30. 2006 M. Israil: Delineation of layer boundaries from smooth models obtained from the inversion of geoelectrical sounding data. *Acta Geophysica Polonica*, Vol 54, 2, 126-141.
31. 2006 M. Israil, Mufid al-Hadithi, D. C. Singhal, Bhishm Kumar, M. Someshwar Rao and S. K. Verma: Groundwater resources evaluation in the Piedmont zone of Himalaya, India, using Isotope and GIS techniques. *Journal of Spatial Hydrology*, vol 6, no. 1.
32. 2006 D.K. Sharma, M. Israil, Ramesh Chand, Jagdish Rai, P. Subrahmanyam and S.C. Garg. Signature of seismic activities in the F₂ region ionospheric electron. *Journal of Atmospheric and Solar-Terrestrial Physics*, Vol. 68, 6, 691-696
33. 2007 M. Israil, Kumari Sudha, D. C. Singhal, Provin K. Gupta, Sosina Shimeles, Vinay K. Sharma: Direct determination of aquifer configuration using Geoelectrical techniques in a Piedmont zone, Himalayan foothills region, India. *Current Science*, 92, 9, 1293-96.
34. 2007 M. Israil, Sri Niwas and O. A. L. De Lima: Inversion of resistivity sounding data: a critical appraisal of three numerical techniques. *Proc. Nat. Acad. Sci. India* 77(A), IV, 321-28
35. 2008 M. Israil, D. K. Tyagi, P. K. Gupta, Sri Niwas: Magnetotelluric investigations for imaging electrical structure of Garhwal Himalayan Corridor, Uttarakhand, India, *J. of Earth Syst. Sci.* 117,3, 189-200.

36. 2009 Kumari Sudha, Israil M, Mittal S, Rai J; Soil characterization using electrical resistivity tomography and geotechnical investigations. *Journal of Applied Geophysics* 67, 74-79.
37. 2009 Ranjan Sinha, Israil M, Singhal D C ; A hydrogeological model of the relationship between Geoelectric and hydraulic parameters of anisotropic aquifers *Hydrogeology Journal* 17, 495-503.
38. 2009 R. Chand, M. Israil and J. Rai ; Schumann resonance frequency variations observed in magnetotelluric data recorded from Garhwal Himalayan region India. *Ann. Geophys.*, 27, 3497-3507.
39. 2010 Sudha, B. Tezkan, M. Israil, D. C. Singhal and J. Rai ; Geoelectrical mapping of aquifer contamination: A case study from Roorkee/India. *J. of Near-surface Geophysics* 8, 33-42.
40. 2010 D. C. Singhal, M. Israil, V. K. Sharma and B. Kumar: Evaluation of groundwater resources and estimation of its potential in Pathri Rao watershed, district Haridwar (Uttarakhand). *Current Science*, 98, 2,25, 162-170.
41. 2011 Sri Niwas, B. Tezkan and M. Israil; Aquifer hydraulic conductivity estimation from surface Geoelectrical measurements for Krauthausen test site, Germany. *Hydrogeology Journal* 19, 307-315.
42. 2011 Sudha, Bulent Tezkan, M. Israil and J. Rai; Combined electrical and electromagnetic imaging of hot fluid within fractured rock in rugged Himalayan Terrain. *J. App. Geophysics* 74,205-214.
43. 2012 P. Yogeshwar, B. Tezkan, M. Israil, M. E. Candansayar; Groundwater contamination in the Roorkee area, India: 2D joint inversion of Radiomagnetotelluric and Direct current Resistivity data. *J. App. Geophysics* 76,127-135.
44. 2013 M. von Papen, B. Tezkan and M. Israil; Characterization of an aquifer in Roorkee, India using spatially constrained inversion of in-loop tem data. *J. of Near Surface Geophysics*, 11, 1, 85-94
45. 2014 Rohit Miglani, M. Shahrukh¹, M. Israil, Pravin K. Gupta, S. K. Varsheney, and Sokolova Elena¹ Geoelectric structure estimated from magnetotelluric data from the Uttarakhand Himalaya, India, *J. of Earth Syst. Sci.* 123, 8, 1907-1918.
46. 2016 E. Yu. Sokolova, M. Israil P. Gupta, A. V. Koshurnikov, M. Yu. Smirnov, M. V. Cherevatova; Crustal electrical conductivity of the Indian continental subduction zone: New data from the profile in the Garhwal Himalaya. *Izvestiya, Physics of the Solid Earth*, 52(2), 271-290; DOI 10.1134/S1069351316020130.
47. 2016 A K Jain, S Dasgupta, O N Bhargava, M Israil, R Jayangonda perumal, R C Patel, M Mukul, S K Parcha, V Adlakha, K K Agarwal, P Singh, K Bhattacharyya, N C Pant and D

M Banerjee, Tectonics and Evolution of the Himalaya. *Proc Indian Natn Sci Acad* 82 No. 3 July Spl Issue 2016 pp. 581-604

48. 2016 *N.S. Golubtsova, M. Israel, P.Yu. Pushkarev, M.Yu. Smirnov, E.Yu. Sokolova* 2016, First experience of three-dimensional interpretation of magnetotelluric data, obtained in Garhwal Himalaya. № 1 (9) 2016 | ВОПРОСЫ ЕСТЕСТВОЗНАНИЯ (In Russian)
49. 2016 M. Israil, Paramjeet Mamoriya, Pravin K. Gupta and S. K. Varshney. 2016. Transverse tectonics feature delineated by modelling of magnetotelluric data from Garhwal Himalaya corridor, India. *Current Science*, vol. 111, no. 5, 868-875.
50. 2016 Rahul Dehiya, Arun Singh, Pravin K. Gupta, M. Israil Optimization of computations for adjoint field and Jacobian needed in 3D CSEM inversion. PII: S0926-9851(16)30559-6 DOI: doi:[10.1016/j.jappgeo.2016.11.018](https://doi.org/10.1016/j.jappgeo.2016.11.018)
- 51 2017 Rahul Dehiya, A Singh, Pravin K. Gupta, M. Israil 3D CSEM data inversion algorithm baed on simultaneously active multiple transmitters concept. In press *Geophys. J. Int.*

b. Paper in International/ National conference

1. 1987 Sri Niwas and M. Israil: Interpretation of field apparent resistivity data using matrix method. Proceeding of 6th Indian Geological congress held at University of Roorkee, Roorkee Feb. 21-24.
2. 1991 M. Israil, Dinesh Kumar and Sri Niwas: Computation of geoelectrical models with transition layer - A matrix method. Proceeding AEG, International Seminar held at Hyderabad Nov 25-30, PP 737-744.
3. 1993 M. Israil: Geoelectrical studies for the ground water investigation near Kurukshetra-Haryana. International conference on hydrology and water resources held at New Delhi, Dec. 20-22.
4. 1994 M. Israil, Nand Lal and Abhey Bansal: Hydrological investigation near Kurukshetra and adjoining area in Haryana using surface electrical method. Proceeding of regional workshop on Environmental aspect of ground water development held at Kurukshetra October 17-19, pp 65-68.
5. 1996 M. Israil: Approximate inversion of magnetotelluric data. Proceeding second International Seminar and exhibition of AEG held at Hyderabad Nov. 1520, pp. 347-350.
6. 1997 Verma D. V. S, Gupta N. K., and M. Israil: Mitigating water scarcity at Chandigarh. Proceeding International Symposium on Emerging trends in Hydrology at University of Roorkee, Roorkee Sept. 25-27, PP 339-345.
7. 1998 M. Israil: Geoelectromagnetism: National status and scope of development. Proceeding of Brain storming workshop Geoelectromagnetism held at Indian Institute of Technology

Kanpur, Oct. 5- 6, pp 13

8. 1998 M. Israil and Sri Niwas: Comparison of three inversion techniques for one dimensional resistivity data. Proceeding of 24th AEG seminar held at Nagpur, Oct. 28-30
9. 1998 M. Israil Sri Niwas and Khattri K. N.: Computational efficiency of the matrix method in the inversion of resistivity sounding data. Deep Electromagnetic Induction Edited by K. K. Roy. pp. 508-516
10. 2001 J. Rai, D. K. Sharma and M. Israil: Application of Atmospherics in ground water detection. Workshop on Recent Development in Atmospheric and space sciences, March 19-21, P 7.
11. 2001 M. Israil, T. Harinarayana, Sharma, P. K., Gupta, P. K., Rai, J : Resistivity imaging using straight forward inversion of magnetotelluric data. Int. conference on Mathematical modelling held at Deptt. of Mathematics Univ. of Roorkee, Roorkee, Jan. 29-31, 574-578.
12. 2001 D. K. Sharma, J. Rai, M. Israil and S. C. Garg: Temperature and density variation in ionospheric plasma over different locations in India. Proc. National Conference on Advances in Contemporary Physics and Energy at IIT Delhi, 265-278.
13. 2001 M. Israil, D. K. Sharma, P. K. Gupta and J Rai.: 1 D inversion of 3D Magnetotelluric data for geothermal exploration. National Workshop on Recent Development in Atmospheric and space sciences, Univ. of Roorkee, Roorkee, March 19-21, pp 51-62.
14. 2001 D. K. Sharma, J. Rai and M. Israil: Density behaviour of aerosols during summer season over Roorkee. Workshop on Recent Development in Atmospheric and space sciences, University of Roorkee, Roorkee, March 19-21, pp 73-78.
15. 2002 M. Israil, R. K. Nishad and P. K. Gurta: Analysis of Magnetotelluric data using straightforward inversion. Proc. Of 4th Conference and Exposition on Petroleum Geophysics, Mumbai-2002, Jan. 7-9, pp 61-65.
16. 2002 D. K. Sharama, J. Rai, M. Israil and S. C. Garg. Effect of lighting on ionospheric temperature and density. XII National Space Science Symposium (NSSS-2002) held at Bhopal during Feb. 25-28. P 228.
17. 2002 D. K. Sharama, D. K. Tyagi, S. Darmora, J. Rai, and M. Israil : Study of aerosols during two alternative seasons: Influence of meteorological parameters. XII National Space Science Symposium (NSSS-2002) held at Bhopal, Feb. 25-28, p 49.
18. 2002 D. K. Sharma, J. Rai, M. Israil, P. Subrahmanyam, P. Chopra and S. C. Garg : Sunrise effect on ionospheric temperature. presented in 39th IGU convention and meeting at NEERI Nagpur, Oct. 4-6.
19. 2003 R. G. S. Sastry , M. Israil and Neeta Chaudhry: Geodynamic models for Indian plate at Indus-Tsangpo and Shyok Suture zones of ladakh Himalaya through combined gravity and magnetic anomaly analysis. DST sponsored symposium on Himalayan Tectonics (The Himprobe Results) held at IIT Roorkee, Oct. 16-17, 2003.

20. 2003 R. G. S. Sastry, Neeta Chaudhry and M. Israil: Need for variable densities in gravity terrain reduction – Gravity example from Indus-Tsangpo and Shyok suture zone of Ladakh Himalaya, CSIR Diamond Jubilee celebration: Seminar of frontier of Geophysical Research, Sep. 10-11, 2003, NGRI Hyderabad.
21. 2003 M. Israil, Pravin K. Gupta and D. K. Tyagi: Straightforward inversion of vertical Electrical sounding data for sharp layer boundaries. Proc. of Int. conference on the role of natural Resources and environment in Sustainable Development in south and Southeast Asia (NESDA) held at Dhaka (Bangladesh), Jan. 17-20, 2003.
22. 2003 Mufid al-hadithi, M. Israil and D. C. Singhal: 'Goelectrical characterization of aquifer in piedmont zone' District Haridwar (Uttaranchal) India. Proc. of Int. conference on the role of natural Resources and environment in Sustainable Development in south and Southeast Asia (NESDA) held at Dhaka (Bangladesh), Jan. 17-20, 2003.
23. 2003 M. Israil, Pravin K. Gupta and D. K. Tyagi: Determining layer boundaries from apparent resistivity data. Proc. of International conference on water and environment WE-2003 held at Bhopal (India), Dec. 15-18, 2003.
24. 2003 Mufid al-hadithi, D. C. Singhal and M. Israil: Evaluation of groundwater resource potential in Ratmau-Pathri Rao watershed Haridwar district, Uttaranchal, India, using remote sensing, geoelectrical and GIS techniques. Proc. of International conference on water and environment WE-2003 held at Bhopal (India), Dec. 15-18, 2003.
25. 2004 M. Israil, D. K. Tyagi, Sri Niwas, P. K. Gupta and A. P. Singh: Preliminary results of magnetotelluric survey in Gangotri section- Higher Himalayan region, India. 17th International conference on Electromagnetic Induction in the earth, October 18-23, 2004, NGRI Hyderabad, PP 28.
26. 2004 M. Israil, D. K. Sharma, Ramesh Chand and Jagdish Rai: Ionospheric Temperature variation and its possible relation with audio magnetotelluric (AMT) source field. 17th International conference on Electromagnetic Induction in the earth, October 18-23, 2004, NGRI Hyderabad, PP 166.
27. 2004 Pravin K. Gupta, Sri Niwas and M. Israil: Evaluation of a new response function and straightforward inversion scheme (SIS). 17th International conference on Electromagnetic Induction in the earth, October 18-23, 2004, NGRI Hyderabad, PP 13.
28. 2005 M. Israil, Mufid al-hadithi, and D. C. Singhal: Groundwater resource evaluation of a typical watershed in piedmont zone of Himalaya, India, using integrated Geo-electrical and GIS techniques. Proceeding of International conference on Hydrological perspectives for sustainable development, (HYPESD-2005), 23-25 Feb. 2005, Deptt of Hydrology, IIT Roorkee, India pp 825-836.
29. 2005 M. Israil, Sosina Shimeles and D. C. Singhal: Direct determination of aquifer system using

Geoelectrical imaging in a Piedmont area, Himalayn foothill region, India. RAWRDM-2005, IIT Roorkee Nov. 23-25, vol. 1, 428-436.

30. 2006 M. Israil, Sosina Shimeles and D. C. Singhal: Application of resistivity imaging for delineation of aquifer configuration in Pathri-Rao watershed, Himalayan foothills regions, India. Int. Conference on Ground Water for sustainable development, held at JNU New Delhi Feb. 1-4, 2006
31. 2006 Laxi Kant Kachhwal, D. C. Singhal, Bhisim Kumar, S. K. Verma and M. Israil: Hydrogeological Investigations in Pathri-Rao watershed, Uttaranchal, India using an integrated isotopes technique. Int. Conference on Ground Water for sustainable development, held at JNU New Delhi Feb. 1-4, 2006.
32. 2006 M. Israil, D. K. Tyagi, Sri Niwas and P. K. Gupta: Magnetotelluric investigations for crustal structure in Garhwal Himalaya, India. 18th International Workshop on Electromagnetic Induction in the Earth, held at El Vendrell, Spain on Sept. 17-23, 2006.
33. 2006 D. K. Tyagi, M. Israil, P. K. Gupta, Sri Niwas: Modeling of 2D terrain effect on magnetotelluric data using finite difference method. 18th International Workshop on Electromagnetic Induction in the Earth, held at El Vendrell, Spain on Sept. 17-23, 2006.
34. 2006 Kumari Sudha, M. Israil, S. Mittal, J. Rai: Correlation of Geoelectrical and Dynamic cone penetration test results for geotechnical investigations: Third Int. Seminar and Exhibition on Exploration Geophysics on Exploration Geophysics, Hyderabad, India, Nov. 6-12, 2006. pp A-37.
35. 2006 D.K. Sharma, Ramesh Chand, M. Israil, Jagdish Rai: Signature of seismic activities in F2 region ionosphere. Int. Workshop (IWEMSEV-2006) on Electromagnetic Studies related to Earthquakes and Volcanoes. Nov. 20-22, 2006 pp74-75.
36. 2007 D. K. Tyagi, M. Israil, Sri Niwas, P. K. Gupta: Mapping of 2D terrain effect on magnetotelluric signature. Workshop on Electromagnetotic induction in the earth, ISM Dhanbad, March 12-13, 2007.
37. 2007 Sudha, M. Israil, D. C. Singhal, P. K. Gupta, S. Shimeles and V. K. Sharma: Electrical characterization of Pathri –Rao watershed I Himalayan foothills region, Uttarakhand, India. 22nd Colloquium Electromagnetic depth Research, Decin, Czech republic , Oct. 1-5, 2007.
38. 2008 Israil M., Tyagi DK, Gupta PK, Sri Niwas: Electrical structure of Garhwal Himalayan region, India, inferred from Magnetotelluric. The 23rd Himalayan- Karakoram-Tibet Workshop, Leh, August 8-11, 2008 pp 70
39. 2008 Rambhatla G Sastry, Israil M: Analysis of gravity and magnetic data along Rumtse-Upshi-Leh-Kardung la and Rumtse-Upshi-Igu-Shaki-Chang la-Durbuk profiles-Presence of ophiolites within Ladakh batholiths and suture zones, The 23rd Himalayan- Karakoram-Tibet Workshop, Leh, August 8-11, 2008 p133

40. 2008 Rambhatla G Sastry, Israil M: Analysis of gravity and magnetic data along Mahe-Sumdo_tso Morari. The 23rd Himalayan- Karakoram-Tibet Workshop, Leh, August 8-11, 2008 pp135.
41. 2008 Sudha, Tezkan Bulent, Israil M ; Multidimensional interpretation of DC and TEM data observed on Geothermal Area in Garhwal Himalaya, India. The 19th International Workshop on EM Induction in The Earth Beijing China, October 23-29, 2008
- 42 2009 Yogeshwar P., B. Tezkan and M. Israil; Groundwater contamination around Roorkee/India: 2D Joint inversion of Radiomagnetotelluric and Geoelectromagnetic data Presented in 23rd Colloquium on deep Electromagnetic sounding, Potsdam, Germany, 28 Sep- 02 Oct, 2009.
- 43 2010 M. Israil, Sudha, B. Tezkan, Pravin K. Gupta and J. Rai; Joint inversion of TEM and DC resistivity data for mapping the groundwater contamination around Rookee area, India. 20th Electromagnetic Induction workshop, Giza, Egypt, September 18-24, 2010.
- 44 2010 P. Yogeshwar, B. Tezkan, M. Israil, E. Candansayar; Groundwater contamination in the Rookee area, India: 2D joint inversion of Radiomagnetotelluric and direct current resistivity data. 20th Electromagnetic Induction workshop, Giza, Egypt, September 18-24, 2010.
- 45 2010 Ramesh Chand, M. Israil, Jagdish Rai: Schumann resonance frequency behavior as observed in Magnetotelluric data recorded from Garhwal Himalaya, India; 20th Electromagnetic Induction workshop, Giza, Egypt, September 18-24, 2010.
- 46 2011 M. Israil, B. Tezkan and Sudha; Application of TEM and DC resistivity measurements for mapping the ground water contamination around Roorkee area, India. Presented in DGG meeting held in Cologne, Germany Feb. 21-24, 2011, Proceed. PP. 26
- 47 2011 Von Papen, M., Tezkan, B., and M. Israil; Spatial constrained Inversion von In-loop TEM daten zur Bestmmung der Grundwaserkontamination in Roorkee, Indien. Presented in DGG meeting held in Cologne, Germany Feb. 21-24, 2011. Proceed. PP. 27
- 48 2011 M. Israil; Magnetotelluric investigations in Garhwal Himalaya. Indo-French Workshop on “Deep Earth Processes-interactions Between solid, fluid earth and environment” Feb. 1-5, 2011 at Mahabalipuram, Tamil Nadu, India. Sponsored by IFCPAR(CEFIPRA), New Delhi.
- 49 2011 M. Israil¹, B. Tezkan², P. Yogeshwar², M. von Papen², Sudha² and Pravin K. Gupta: Mapping the groundwater contamination around Roorkee, India; using TEM and DC resistivity measurements: Case study. Presented in Workshop on recent advance in ground and airborne electromagnetic methods-innovation in processing and inversion techniques held at NGRI, India; during Sept. 27-28, 2011.
- 50 2011 B. Tezkan², M. von Papen, M. Israil; Aquifer contamination at Roorkee/India studies by Spatially constrained Inversion of TEM In-loop data. Presented in Near Surface 2011- the

17th European Meeting of Environmental and Engineering Geophysics: Session
Geophysical Investigation of Groundwater Resources. Sep. 12 2011.

- 51 2012 M. Israil, Groundwater recharge estimation and aquifer characterization using integrated Geoelectrical and electromagnetic methods.” Indo-Tunisian Workshop on Water Science and Technology CSIR-NGRI (Hyderabad), India, Feb 1-5, 2012.
- 52, 2012 M. Israil, Sokolova Elena, Gupta, P. K., Koshurnikov Andrey, Smirnov Maksim, Maria C., Varentsov Ivan, Geoelectrical section of Garhwal Himalaya along extended Roorkee-Gangotri profile, Uttarakhand, India. Presented in 21th EM Induction workshop, Darwin, Australia July 25-31, 2012
- 53, 2012 Suresh Kannaujiya , M. Israil, S. K. Varshney, Sokolova , Elena, Pravin K. Gupta, Koshurnikov Andrey, Maxim Smirnov; Geoelectrical structure estimation along Roorkee-Gangotri profile of Garhwal Himalayan region, India, using qualitative analysis of MT/MV data. India. Presented in 21th EM Induction workshop, Darwin, Australia July 25-31, 2012
- 54, 2013 Arun Singh, Pravin K. Gupta, and M. Israil, 2013. 2D Magnetotelluric Modelling using Finite Difference Scheme - Comparison of Various algorithms. National Conference on Earth Sciences in India: Presented in “Challenges and Emerging Trends (ESICET)”, November, 7-9, Roorkee, India.
- 55, 2014 Arun Singh, Vishal Kharti, Pravin K Gupta, Mohd. Israil, 2014. Interpretation of Geophysical data using Block Inversion algorithm: 2D Magnetotelluric case. 84th International Exposition “Denver 2014”, annual meeting of Society of Exploration Geophysicists (SEG), October, 28-31, Denver, USA. . Abstract Accepted.
- 56 2014 Singh, A., Dehiya, R., Gupta, P.K., Israil, M., 2014. Development of block Inversion algorithm and its comparison with cell inversion schemes. The 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014. Presented.
- 57, 2014 Dehiya, R., Singh, A., Gupta, P.K., Israil, M., 2014. Interpretation of Geophysical data using Block Inversion algorithm: 2D CSEM case. The 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014, presented.
58. 2014 Sokolova, E., Israil M., Golubtsova, N., Gupta, P., Pushkarev, P., Cherevatova, M., Smirnov, M. 2014, Crustal conductivity anomalies of Garhwal Himalaya illuminate regional seismotectonic pattern. The 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014. Presented
- 59 2014 Pravin K. Gupta, Israil M., Sokolova Elena, Paramjeet Mamoriya, S. K. Varsheney 2014, Geometry of Main Himalayan Thrust in Garhwal Himalaya, India: as delineated by magnetotelluric data. India. 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014. Presented

- 60 2014 Israil M. , Sanjay Pandit, Pravin K. Gupta, S. K. Varsheney, Sokolova Elena and Paramjeet Mamoriya , 2014 Application of Mohr circle to determine dimensionality and directionality in magnetotelluric data recorded from Uttarakhand, Himalaya, India. 22nd International Electromagnetic Induction Workshop (EMIW), August, 24-31, Weimar, Germany 2014. Presented
- 61 2015 Israil M. , Paramjeet Mamoriya, Pravin K. Gupta, S. K. Varshney: 2015; Three dimensional Geoelectrical structure delineated from Magnetotelluric data recorded along Roorkee-Gangotri profile, India. 11th SPG conference and Exhibition Dec 4-6, 2015; Jaipur; India.
- 62 2016 M. Israil, Paramjeet Mamoriya, Pravin K Gupta, S K Varshney: 2016 3D inversion of a magnetotelluric profile data from Garhwal Himalayan region, India. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented
- 63 2016 Nitin Kumar, Mohammad Israil and Praveen Kumar Gupta. Geoelectric structure dimensionality and strike direction estimated from MT data acquired in Chamoli Region, India. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented
- 64 2016 Arun Singh, Nitin Kumar, Praveen Kumar Gupta and Mohammad Israil. A MATLAB based 3D modeling and inversion cod for MT data. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented
- 65 2016 Anita Devi, Mohammad Israil, R. Anbalagan and Praveen Kumar Gupta. Delineation of overburden thickness using resistivity imaging at Dobra bridge site, Uttarakhand India. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented
- 66 2016 Pravin K. Gupta, Rahul Dehiya, Mohammad Israil, Arun Singh. Efficient computation of adjoint field for 3D CSEM inversion. 23rd International Electromagnetic Induction Workshop (EMIW), August, 14-20, Chiang Mai, Thailand 2016. Presented

Sponsored Research Projects

1. 1994 Development of efficient software for Magnetotelluric data processing and inversion. Sponsoring Agency: Department of Science and Technology, New Delhi
2. 1999 Study of the structure of the Ophiolites of the Indo Suture zone by using Gravity and Magnetic data along HIMPROBE Geo-transect (gravity and magnetic co-PI) Sponsoring agency: Department of Science and Technology, New Delhi.
3. 2002 Magnetotelluric studies for crustal structure at several depth scale in Uttarakhand (co-PI): Sponsoring Agency, Department of Science and Technology, New Delhi.
4. 2003 Groundwater resource evaluation for Pathri rao watershed, Distt. Haridwar. (co-PI) Sponsoring Agency, Department of Science and Technology, New Delhi.

5. 2008 Groundwater contamination due to waste disposal and aquifer characterization around Roorkee using integrated Geoelectrical techniques. Indo-German (DST-DFG) programme of co-operation in Science and Technology
6. 2010 Deep Geoelectrical studies of Indo-Eurasia Collision Zone: Regional MT profile in Uttarakhand Himalaya Indo-Russian (DST-RFBR) programme of co-operation in Science and Technology.
7. 2013 Deciphering 3D Geoelectrical structure from MT/MV data recorded in Garhwal Himalayan region. Indo-Russian (DST-RFBR) programme of co-operation in Science and Technology. On going
8. 2013 Magnetotelluric studies for delineation of 3D Geoelectrical structure of Garhwal Himalaya. Ministry of Earth Sciences, New Delhi. on going.

Consultancy Projects

1. 1995 Geoelectrical investigations for ground water prospecting for location of tube well at Nishan Flora India Ltd. Site in Karnal (Haryana) (co-PI). Sponsoring Agency: M/S Mishan Flora India Ltd. Site in Karnal, (Haryana)
2. 1995 Geophysical Investigations for mapping the overburden thickness at Baragaon small hydel project. (co-PI) Sponsoring Agency: M/S K.K. Kohli & Bros., Faridabad.
3. 1996 Geophysical Investigations for mapping the overburden thickness at Shirrir small Hydro-generation site, H. P. (co-PI). Sponsoring Agency: M/S K.K. Kohli & Bros., Faridabad.
4. 1998 Investigations for seismic velocity generated due to Blasting Operations in the Tehri Dam Works. (co-PI) Sponsoring Agency: M/S Jai Prakash Ind. Tehri.
5. 1998 Geohydrological studies of the Ash pond of Talchir Super thermal Power project: (TSTPP - NTPC), Talchir, Orrisa.sponsored by NTPC, New Delhi(A. K. Jain, PI, Geophysical aspect(co-PI)
6. 1999 Testing of resistivity meter TRM500. (PI) Sponsored by M/S Tarang Kinetices, Roorkee.
7. 2000 Ground water investigation for installation of tube well. (co-PI). Sponsored by Ex. Er D. Nagpal, Sharanpur.
8. 2000 Seismic refraction survey at VIZAG. (PI), Sponsored by M/S Tojo Vikas Int. Pvt. New Delhi.
9. 2000 Seismic refraction survey at Manglore. (PI), Sponsored by M/S Tojo Vikas Into Pvt. Ltd. New Delhi.

10. 2001 Geophysical investigation for site selection for tube well in Uttarakashi. (PI), Sponsored by Sup. En. CPWD, DehraDun.
11. 2001 Geophysical investigation for site selection for tube well in Lal Bahadur Sastri Academy Mussoorie (PI), Sponsored by Sup. En. CPWD, Dehra Dun
12. 2001 Geophysical survey for site select in for tube well at I. T. B. P. Transit camp (Rishikesh) (PI), Sponsored by Sup. En. CPWD, Dehra Dun.
13. 2002 Resistivity survey for groundwater investigation in and around Dehradun (Uttaranchal) (PI): Sponsored by Gen. Manager Garhwal Jal Sansthan Dehra Dun.
14. 2002 Electrical resistivity survey for site selection for water targeting at Uttarkashi (Uttaranchal) (PI): Sponsored by Executive Eng. Hydrel Uttarkashi.
15. 2003 Soil Investigation for Transmission Tower at location No. 89/5, Rajaji national Park, Rishikesh, Uttranchal(co- PI). PI: Dr. Satyendra Mittal, Deptt. of Civil Eng, Sponsored by Dy. Gen. Manager, Power Grid Corporation of India Ltd.
16. 2003 Soil Investigation for construction of pile foundation at 220 KV D/C tanakpur- Bareilly Line at Tower no. 17 in District Champawat(co-PI). PI: Dr. Satyendra Mittal, Deptt. of Civil Eng, Sponsored by Chief. Manager, Power Grid Corporation of India Ltd.
17. 2004 Seismic refraction test at Surat (PI). Sponsored by Integrated Geophysical & Geological Dervices, New Delhi.
18. 2004 Geophysical resistivity investigations for site location for a Tubewell at Jaunpur, Kotdwar, Distt. Pauri.(co-PI), Sponsored by Uttaranchal Jal Sansthan.
19. 2004 Groundwater investigation for construction of new tubewells in Dehradun District. (co-PI), sponsored by Tubewell Div. Dehra Dun.
20. 2005 Resistivity image profiling at Mangalore(PI), Sponsored by M/s Integrated Geophysical and Geological services, New Delhi.
21. 2005 Aquifer and Soil Electrical Resistivity test at plot no. 1, sector-1,SIDCUL, Industrial estate, Haridwar(U. A.) (co-PI), Sponsored by M/s ITC Ltd. Kolkatta.
22. 2005 Resistivity survey for site selection for boring at Vishnu Prayag Hydro-Electric Power Project, Chamoli, UA. Sponsored by M/s JAIPRAKASH ASSOCIATES LIMITED Eng. Div. Vishnu Prayag Hydro-Electric Power Project, Chamoli.

23. 2006 Soil investigation & recommendations of bearing capacity for proposed 2x 250 MW units at Harduaganj Thermal Power station (U.P.) Sponsored by U.P. Rajya Utpadan Nigam Ltd. co-PI (PI: Dr. Satyendra Mittal).
24. 2006 Soil tests for Parichha Thermal Power Plant, Jhansi, U. P., Sponsored by U.P. Rajya Utpadan Nigam Ltd.co-PI (PI: Dr. Satyendra Mittal).
25. 2006 Electric resistivity test at Barrage site of Alaknanda Hydro Electric project Badrinath, District Chamoli, UA, India. Sponsored by M/S Halcrow Consulting India Ltd., New Delhi,
26. 2007 Geoelectrical survey for subsoil water at Malsi Estate, Dehradun. sponsored by M/S Max Healthcare Institute Dehradun.
27. 2007 Electrical resistivity survey at Dam site of Jangi-Thopan –Powari Hydroelectric Project in district Kinnaur(HP), sponsored by M/S Brakel Knnaur Power Pvt. Ltd. Shimla.
28. 2006 Geo-thermal investigations for Vishnugad-Pipalkoti Hydro-Electric Project, Uttaranchal, India. Sponsored by WAPCOS (completed June 2010)
29. 2010 Hydrogeological study of Bherda and Jaisurjana mining area, Birla Cement works Madhav Nagar Chandaria, Chittorgarh, Sponsored by Birla Cement works Madhav Nagar Chandaria (Raj) D. C. Singhal (PI) M. Israil.
30. 2012 Detailed hydrogeological study of Adityana Limestone and Marl Mines of M/S Suarashtra Cement Ltd. (M. K. Jain (PI)) M. Israil.
31. 2013 Investigation for water leakage in underground structure(Auditorium) at ANJAR (Kuthch District, Gujrat (D. C. Singhal(PI), M. Israil.
32. 2016 Electrical Resistivity imaging test at Dobra-Chanti Bridge sit in Tehri Reservoir, Uttarakhand, India. (R. Anbalagan (PI), M. Israil, Sponsored by SE, PWD, New Tehri UK.

(a) Ph. D. thesis supervised

Supervised

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In progress

5

1. 1998 N. K. Gupta, Hydrogeological and Gcoelectrical studies in north-eastern part of Haryana with special reference to delineation of recharge basin. co-Supervisor, Dr. D. V.S. Verma.
2. 2003 D. K. Sharma, Ionospheric response to solar phenomena and thunderstorms. Co-supervisor Dr. Jagdish Rai
3. 2004 Mufid Sadie A. G. Al-Hadithi, Groundwater evaluation of a typical watershed in piedmont zone of Himalaya, India. Co-supervisor Dr. D. C. Singhal.

4. 2007 Deepak K. Tyagi, 2D modeling and inversion of magnetotelluric data acquired in Garhwal Himalaya. co-supervisor: Dr. Jagdish Rai and Dr. P. K. Gupta.
5. 2009 Ramesh Chand, Ionospheric response to Earthquakes and Schumann resonances: co-supervisor: Dr. Jagdish Rai
6. 2010 Sudha Near surface studies using Geoelectrical and EM techniques in northern India. co-supervisor: Dr. Jagdish Rai and Dr B Tezkan

(b) M. Tech/M. Sc./ M. Phil/ME Dissertation Supervised:

1. 1991 Manoj P., Robust 1 D algorithm for the interpretation of Geo-electrical data.
2. 1991 Rajeev Jain, Gravity data inversion of fault model. Co-supervisor Dr. Sri Niwas
3. 1992 Hemant Kumar, Inversion of Magnetotelluric data from field records.
4. 1992 Neel Kamal, iterative inversion of 2D magnetic anomaly. Co-supervisor Dr. Dinesh Kumar.
5. 1992 Vikas Dubral, critical analysis of field apparent resistivity data.
6. 1994 Devendra Kumar, Analysis of 1 D Magnetotelluric data.
7. 1995 Abhey Bansal, Estimation of hydro-geological parameters using surface geoelectrical method. Co-supervisor Dr. Nand Lal
8. 1995 Shashi Mohan, One dimensional inversion of Magnetotelluric data.
9. 1995 A. A. Siddiqi, Physical modelling using model tank experiment. Co-supervisor Dr. S. S. Teotia.
10. 1997 Aman Pal Singh, Design and fabrication of EM wave transmitter for SIROTEM unit. (M. Phil co- supervisor Prof. J. Rai).
11. 1997 Gautam K. Auliya, Comparative study of two algorithms for inversion of resistivity data. Co-supervisor Prof Sri Niwas.
12. 1997 Pavitra Mohan, A log analysis technique for evaluation of thin bed reservoirs. Co-supervisor Prof S. K. Upadhyay & Dr. U.S. Roy.
13. 1998 Vipin Kara, Electrical and Seismic investigations around Roorkee. Co-supervisor Prof Sri Niwas.
14. 1998 Ms. Madhu Yadav, Resistivity modeling using model tank experiment (M. Phil co- supervisor Prof J Rai).
15. 1999 P.H.H.K. Reddy, Site Characterization by SASW method. (ME Thesis co - supervisor Sri S. Mukherjee).
16. 1999 T. Maru A., Hydrogeological studies of Rishikesh and Mohand area in Doon Valley using electrical and Seismic refraction methods. Co-supervisor Prof: B. Prakash.
17. 1999 Ashok Kumar, Recovery and picking of missing data in geophysical signals. Co-supervisor Dr. Kamal.
18. 2000 Chandresh, A Fuzzy approach for Landslide risk zoning using GIS.
19. 2000 Divya Prakash Singh, A. V. O. A tool for Detection of Gas. Co-supervisor Mr G. C. Katiyar.
20. 2000 Vinay Kumar, Estimation or Hydrocarbon saturation in thinly laminated reservoirs from the transverse resistivity estimates. Co-supervisor Dr. P. K. Gupta
21. 2001 Praveen Vohat, Two dimensional inversion of magnetotelluric data using EM2INV.
22. 2001 Ramesh K. Nishad, One dimensional inversion of magnetotelluric data.
23. 2001 Chidanand Badatya, Hydrogeological studies of Rishikesh and Dhanpura area using electrical resistivity and seismic refraction methods. (M. Sc. Thesis).

24. 2002 Sunil K. Singh, Analysis of Magnetotelluric data by using GIS. Co-supervisor Dr. Sudhir Kumar.
25. 2002 Hemanshu Thusiar, Ionospheric perturbation due to earthquake and fabrication of payload. Co-supervisor Dr. J Rai.
26. 2003 Raj Kumar Singh, Resistivity measurement using model tank. (M. Phil co- supervisor Dr. G.D. Verma).
27. 2003 Arun Kumar, Application of Zohdy's resistivity method in inversion of one dimensional magnetotelluric data.
28. 2003 Yogendra Singh, Study of GDS response of 2D models.
29. 2004 Rahul Dixit, Estimation of impedance tensor from Magnetotelluric data.
30. 2004 Naveen Dutt Sharma, Two-dimensional inversion of Magnetotelluric data.
31. 2004 Rajiv Khalkho, Reservoir parameter estimation from well log data. (M. Sc. Dissertation).
32. 2005 Sosina Shimeles, Groundwater resources evaluation of Pathri Rao watershed, using geophysical techniques.
33. 2005 Pawan Kumar, Seismic refraction survey. M. Phil.
34. 2006 Ashish Singh Thakur, Magnetotelluric investigation in Uttaranchal Himalaya
35. 2006 Ranjan Sinha, Relationships between geoelectric and hydraulic parameters in parts of Ganga-Yamuna interfluvium, North India (co-supervisor D. C. Singhal).
36. 2007 Tapesh Kumar Tyagi, Application of Time domain electromagnetic sounding for shallow investigation in Chamoli area. (co-supervisor Sri Niwas).
37. 2007 Ritesh Kumar Sharma, MT data processing of Pipalkoti area.
38. 2007 Ainul Abedeen, Magnetotelluric Investigation in Himalayan region.
39. 2008 Fishan Ur Rehman, Reservoir characterization using well logs, M Tech (co-supervisor Indrajeet Dutta)
40. 2008 Anish C R ; Aquifer characterization in and around Roorkee area using Time domain EM method, (M Sc Diss Co-Supervisor DC Singhal)
41. 2008 Yash Pal, 2D inversion of electromagnetic induction vectors. (M Tech; co-supervisor Sri Niwas)
42. 2008 Maya V. Panicher, Resistivity Imaging for investigation of groundwater pollution due to sewage disposal around Roorkee area, Uttarakhand. (co-supervisor D. C. Singhal).
43. 2009 Shiv Sharan, Study of 2-D MT responses of the Garhwal Himalaya.(M. Tech)
44. 2009 Diku Das 1-D magnetotelluric responses of possible Garhwal Himalayan models. (M.Tech)
45. 2010 Awadhesh Kumar Prasad, 2D Inversion of Magnetotelluric data: The Kayabe dataset. (M. Tech)
46. 2010 Pankaj Kumar, Impedance tensor decomposition of Magnetotelluric data: The Kayabe dataset. M Tech)
47. 2010 Jayanta Sinha, Electrical resistivity Imaging study for aquifer delineation in IIT Roorkee Campus. M. Sc.
48. 2010 Priyanka, Time domain Electromagnetic study to investigate shallow water conditions in IIT Roorkee Campus. M. Sc.
49. 2011 Bishwa Bandhu K. C. , Hydrological, Geoelectrical and water quality studies in a limestone mine, Chittorgarh, M. Tech.

- 50 2011 Suresh Kannaujiya Determination of Geoelectric Strike and 2D Inversion of Magnetotelluric Data from Himalayan Region. M. Tech
51. 2011 Javed Raof Identification of clastic-carbonate boundary through 3-D seismic attributes and impedance inversion. M. Tech.
- 52 2012 Shivendra Kumar Yadav, Inversion of 2D magnetotelluric data using MT2DINVMATLAB. M. Tech.
- 53 2012 Arindam Chakrabarti, Hydrogeological and VLF studies of springs in eastern and north-eastern part of Dabka micro-watershed, district Nainital.
- 54 2013 Mohammad Shahrukh; Determination of geoelectric strike using Groom Bailey decomposition Md Israil and P.K. Gupta
- 55 2013 Rohit Miglani Development of MT tensor decomposition algorithms based on Bahr's model. ; M. Israil and P.K. Gupta.
- 56 2013 Palkesh Goyal Development of algorithms based on Eigen State methods for the analysis of Impedance Tensors. P.K. Gupta and Md Israil.
- 57 2013 Meenu Choudhary; Phase tensor based analysis of MT data from Garhwal Himalaya.(new). P.K. Gupta and M. Israil.
- 58 2013 Pandit Sanjay Arjun Subhadra; Development of Mohr Circle based algorithm for the analysis of Impedance Tensor. P.K. Gupta and Md Israil
- 59 2014 Arun Singh: Development of block inversion algorithm and its comparison with cell inversion scheme. P K Gupta and M. Israil
- 60 2014 Sudhanshu Tyagi: comparative study of various 1d direct inversion schemes for magnetotelluric data. P K Gupta and M. Israil
- 61 2015 Manoj Kumar: Dimensionality and directionality analysis of MT impedance tensor. P. K. Gupta and M. Israil
- 62 2015 Kunduru Sanjana: Modelling of 2D DC resistivity data using immersed interface method. P. K. Gupta and M. Israil
- 63 2015 Shanbhag Aalok Ganesh: Meshfree modeling and inversion of magnetotelluric data. P. K. Gupta and M. Israil
- 64 2015 David Stephen Lall: Modeling and inversion of 2D magnetotelluric data using immersed interface method. P. K. Gupta and M. Israil
- 65 2015 Deepak Kumar: Numerical modelling and inversion of MT data using radial basis function. P. K. Gupta and M. Israil