

List of Publications in Journals

Sl. No.	Authors	Title of the Paper	Name of Journal, Volume, Year and Page
1.	Shalivahan, Srivastava, and Agarwal, B. N. P.	Inversion of the amplitude of the analytic signal of the magnetic anomaly by particle swarm optimization technique:	Geophysical Journal International , 2010
2.	Rajib K. Sinharay, Shalivahan, and Bimalendu B. Bhattacharya,	Audio magnetotelluric studies to trace the hydrological system of thermal fluid flow of Bakreswar hot spring, Eastern India: A Case History	Audio magnetotelluric studies to trace the hydrological system of thermal fluid flow of Bakreswar hot spring, Eastern India: A Case History: Geophysics, SEG, USA (in press)
3.	Agarwal, B. N. P., and Srivastava, Shalivahan	A FORTRAN code to implement the finite element method to compute regional and residual anomalies from the gravity data	Computers & Geosciences, 2010, doi: 10.1016/j.cageo.2009.11.002.
4.	Agarwal, B. N. P., and Srivastava, Shalivahan	Analyses of self-potential anomalies by conventional and extended Euler deconvolution techniques	Computers and Geosciences, 35, 2009, 2231-2238, doi:10.1016/j.cageo.2009.03.005.
5.	Srivastava, Shalivahan, and Agarwal, B. N. P.	Interpretation of self-potential anomalies by Enhanced Local Wave number technique	Journal of Applied Geophysics, 2009, 68, 259-268, doi: 10.1016 / j.jappgeo.2008.11.011.
6.	Agarwal, B. N. P., and Srivastava, Shalivahan,	FORTRAN codes to implement enhanced local wave number technique to determine the depth and location and shape of the causative source using magnetic anomaly	Computers and Geosciences, 2008, 34,1843-1849,doi: 10.1016 / j.cageo.2007.10.012
7.	Sinharay, Rajib K., Shalivahan and Bhattacharya, Bimalendu B.	Audio Magnetotelluric Studies Over Bakreswar Hot Spring	International Association for Gondwana Research, 2007, Memoir No. 10, 243 – 250.
8.	Bhattacharya B. B., Shalivahan, Jardani, A., and Bera, A.	Three – dimensional probability tomography of self-potential anomalies of graphite and sulphide mineralization in Orissa and Rajasthan, India:	Near Surface Geophysics (EAGE), 2007,223-230.
9.	Shaw, R. K., and Shalivahan	Particle swarm optimization: A new tool to invert geophysical data	Geophysics: 72, 2007, F75-F83, 10.1190/1.2432481
10.	Shalivahan, Sinharya, Rajib K., and Bhattacharya, Bimalendu B	Remote reference (RR) Magnetotelluric (MT) Impedance Estimation of Wideband data using hybrid algorithm	Journal of Geophysical Research – Soild Earth, 111, 2006, doi:10.1029/2006JB004330
11.	Aparna Bera, Bimalendu B. Bhattacharya and Shalivahan	2D Tomographic Imaging Over Mineralized Zones Using Self-Potential Data	Jl. Of Geological Society of India, 2006, 67, 447-458.

12.	Shalivahan and Bimalendu B. Bhattacharya,	Electrical anisotropy of asthenosphere in a region of window to mantle underneath Eastern Indian Craton	Physics Of The Earth And Planetary Interiors (Elsevier), 2005, 152, 43-61.
13.	Bhattacharya, B. B., Shalivahan, and Sen, M. K.	Use of VFSA for resolution, sensitivity and uncertainty estimates for 1D DC resistivity and IP inversion	Geophysical Prospecting, 2003, 51, 393-408.
14.	Bhattacharya, Bimalendu B., and Shalivahan	The electric moho underneath Eastern Indian Craton	Geophysical Research Letters (American Geophysical Union), 2002, 29, No. 10, 14/1-14/4.
15.	Shalivahan, and Bhattacharya, Bimalendu B	How remote can be the far remote reference site for magnetotelluric measurements?	Journal of Geophysical Research (Solid Earth-American Geophysical Union), 2002, 107, ETG1-1 – 1-8.
16.	Bhattacharya, Bimalendu B., and Shalivahan	Moho from magnetotelluric studies in Eastern Indian Craton and Slave Craton, Canada underneath Singhbhum craton	Journal of Geological Society of India, 2002, 60, 687-690.
17.	Shalivahan, and Bhattacharya, Bimalendu B	Implications of novel results about Moho from Magnetotelluric studies	Current Science, 2002, 83, 1259-1264.
18.	Bhattacharya, Bimalendu B., Gupta, D., Banerjee, B. and Shalivahan	Mise-a-la-masse survey over an auriferous sulfide deposit: a case study	Geophysics (SEG, USA), 2001, 66: 70-77
19.	Sinharay, Rajib K., Shalivahan and Bhattacharya, Bimalendu B.	An analysis of magnetotelluric (MT) data over geothermal regions of Bakreswar, West Bengal	Jl. of Geophysics, 2001, XXII, 31-39.
20.	Bhattacharya, Bimalendu B., Shalivahan, Pathak, Sobhan, Shaw, K. Ranjit, Mohanty, Priya R., Sinharay, Rajib K. and Acharya, Samir K.,	Remote reference (RR) magnetotelluric (MT) studies over Singhbhum granite	Research Highlights in Earth System Science: 2000, Volume 1, Paper No. 13, DST, 151-162.
21.	Bhattacharya, Bimalendu B., and Shalivahan	Application of robust processing of magnetotelluric (MT) data using single and remote reference sites	Current Science, 1999, 76, 1108 1113.
22.	Shalivahan, Bhattacharya, Bimalendu B., and Sen, M. K.	Interpretation of self-potential anomalies by nonlinear inversion	Jl. of Geophysics, 1998, XIX, No. 4, 219-224.

List of Papers in Seminar

Sl. No.	Authors	Title of the Paper	Name of Seminar
1.	Vishal Das, Ghoshal, A., Shalivahan and Bhattacharya, B. B.	A Comparative analysis of particle swarm optimization (PSO) and very fast simulated annealing techniques for self-potential (SP)	SEG, International Exposition and Eightieth Annual Meeting, Denver, Colorado

		anomalies study of	
2.	Ghoshal, A., Vishal Das, Shalivahan and Bhattacharya, B. B.	Self-Potential data inversion Particle Swarm Optimization	20 th EM Induction Workshop, Cairo, Egypt, 2010.
3.	Bimalendu B Bhattacharya**, Shalivahan* and Surajit Gorain	Mapping Sediments below Deccan Trap	20 th EM Induction Workshop, Cairo, Egypt, 2010.
4.	Shalivahan, Bimalendu B. Bhattacharya and Rajib K. Sinharay	Audio magnetotelluric studies over Bakreswar hot spring, Eastern India	20 th EM Induction Workshop, Cairo, Egypt, 2010.
5.	Shalivahan, Shaw, R. K., and Bhattacharya, B. B.	Use of Swarm Intelligence to invert magnetotelluric (MT) data for crustal structure	19 th EM Induction Workshop, Beijing, China, 2008.
6.	Bimalendu B Bhattacharya, Shalivahan, Ranjit K Shaw	Second-Derivate of MT Apparent Resistivity Data : A Possible Solution to Detectability of Thin Layers	19 th EM Induction Workshop, Beijing, China, 2008.
7.	Gorain S., Shalivahan, Bhatatcharya, B. B., Patro, B. K., and Kumar, K.	Geoelectric strike determination using magnetotelluric phase tensor	S2-16 (Poster Presentation): Data Processing and response function analysis, 200, 18 th EM Induction Workshop, Spain, 2006.
8.	Shalivahan and Shaw, R. K	Processing of Magneto Telluric Sounding Data for Pseudo Depth Sections	Intl. Conference, 6 th SPG, Kolkatta , 2006
9.	Bhattacharya, B. B., Shalivahan, Pathak, S., Shaw, R. K., Mohanty, P. R., Acharya, S. K. and Sinharay, R. K.	Imaging Moho along Chhottanagpur Gneissic Complex-Dalma Volcanics-Singhbhum Craton Using Remote Reference Magnetotelluric Data: Crustal studies on the eastern indian shield	East Crust, 2005
10.	Shalivahan, Sinharay, R. K., and Bhattacharya, B. Bimalendu	Electrical conductivity structure over geothermal province of Bakreswar, Eastern India	17 th EM International Workshop, 2004
11.	Shalivahan, and Bhattacharya, Bimalendu B	Nonlinear inversion using spline parameterization of resistivity and IP data	National Seminar on Developments in Geophysical Sciences in India, 2003
12.	Bhattacharya, Bimalendu B., Sinharay, Rajib, K., and Shalivahan	Audiomagnetotelluric (AMT) investigations for 2D electrical conductivity modeling over geothermal province of Bakreswar, Eastern India	72nd Society of Exploration Geophysicist (72 nd SEG, Utah, USA, 2002
13.	Shalivahan, and Bhattacharya, Bimalendu B.	Some recent studies on electric moho	EM Conference, Vishakhapatnam, 2001
14.	Bhattacharya, Bimalendu B., Sinharay, Rajib K., and Shalivahan	Analysis of magnetotelluric (MT) data to determine the nature of subsurface conductivity structure	Invited Papers, Technical Session VI, Non Seismic Methods in Geophysical Prospecting, 3rd Conference & Exposition on Petroleum Geophysics, Soc. of Petroleum Geophysicist, New

			Delhi-2000, February 23-25, 2000, p.32
15.	Shalivahan, Sinharay, Rajib K. and Bimalendu B. Bhattacharya	2D inversion of resistivity and induced polarisation data	Abstracts, 26th Annual Convention and Seminar on Exploration Geophysics Association of Exploration Geophysicists, Goa, India, 2000, p. A-27
16.	Sinharay, Rajib K., Shalivahan and Bimalendu B. Bhattacharya	Audio magnetotelluric (AMT) survey for geothermal exploration	Abstracts, 26th Annual Convention and Seminar on Exploration Geophysics Association of Exploration Geophysicists, Goa, India, 2000, p. A-14.
17.	Shalivahan and Bimalendu B. Bhattacharya	Electrical modelling over Rakha Block, Singhbhum Copper Belt, Bihar	Proceedings of Seminar on Geology and Mineral Resources of Bihar and Jharkhand, 2000, 180-186.
18.	Sinharay, Rajib K., Bhattacharya, Bimalendu B., and Shalivahan	An analysis of magnetotelluric (MT) data over geothermal region of Bakreshwar, West Bengal	Abstracts, 25th Annual Convention and Seminar on Exploration Geophysics Association of Exploration Geophysicists, Chandigarh, India, 1999, p. A-14.
19.	Shalivahan, Sinharay, Rajib K., and Bhattacharya, Bimalendu B.	Comparison of electrical and electromagnetic joint inversion with VFSA inversion of electrical data for layered earth	Abstracts, 25th Annual Convention and Seminar on Exploration Geophysics, Association of Exploration Geophysicists, Chandigarh, India, 1999, p. A-13.
20.	Bhattacharya, Bimalendu B., Roy, U. S., Shalivahan, and Sinharay, Rajib K	Determination of mechanical strength of the formations using geophysical well logging techniques	ROCKSITE, Proceedings of International Conference on Rock Engineering Techniques for Site Characterisation, 1999, 177-183, Oxford & IBH Publishing, Bangalore, India.
21.	Bhattacharya, Bimalendu B., Shalivahan, and Sinharay, Rajib K., 1999	Influence of layer parameters on resistivity sounding data:- a model study using VFSA inversion technique:	ROCKSITE, Proceedings of International Conference on Rock Engineering Techniques for Site Characterisation, 1999a, 197-202, Oxford & IBH Publishing, Bangalore, India.
22.	Bhattacharya, Bimalendu B., Shalivahan, and Sinharay, Rajib K.	1-D and 2-D modelling over an Indian sulphide deposit using very fast simulated annealing (VFSA) technique	Abstracts, International Conference, St.-Petersburg, 1999b, Russia, 71.
23.	Bhattacharya, Bimalendu B., Shalivahan, and Sinharay, Rajib K.,	2D electrical conductivity structure by magnetotelluric (MT) method over eastern Indian craton:	Extended Abstract, 1, 61st Conference, European Association of Geoscientists & Engineers, Helsinki-Finland, 1999c, 2-16.
24.	Bhattacharya, Bimalendu B., and Shalivahan,	Robust Processing of Magnetotelluric (MT) sounding data measured	Proc. of 23rd Annual Convention and Seminar on Exploration Geophysics, AEG, 1997.

		over Dhanbad-Dalma-Singhbhum-Badampahar section	
25.	Bhattacharya, Bimalendu B., Shalivahan, and Sen, M. K	Nonlinear inversion by very fast simulated annealing for IP and resistivity sounding over multilayered earth	Proc. of International Workshop on High Resolution Geophysics organised by Laboratory of Advance Subsurface Imaging, Dept. of Mining and Geological Engineering, The Univ. of Arizona, 1997
26.	Bhattacharya, Bimalendu B., Pathak, S., Sen, M. K., and Shalivahan	Inversion of Magnetotelluric data by very fast simulated annealing	Proc. 2nd Intl. Seminar & Exhibition on Geophysics Beyond 2000 organised by Assoc. of Expl. Geophy, 1996, 337-340.
27.	Bhattacharya, Bimalendu B., Shanta Ram, T. V., and Shalivahan	Magnetotelluric method for petroleum exploration: prospects and problems on the basis of Saurashtra basin	Proc. of Conference & Exposition on Petroleum Geophysics, Soc. of Petroleum Geophysicist, Dehradun, 1996
28.	Shalivahan, Bhattacharya, Bimalendu B., and Sen, M. K	Interpretation of self-potential anomalies by nonlinear inversion	Proc. 2nd International Seminar & Exhibition on Geophysics Beyond 2000 organised by Assoc. of Expl. Geophy, 1996, 334-336.