Curriculum-Vitae

Dr. Saumen Maiti

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Department of Applied Geophysics
Indian Institute of Technology (Indian School of Mines)
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About Me

My research covers several disciplines; development and application of innovative computational framework based on machine learning and artificial intelligence in various domains of exploration and applied geosciences.

Courses Taught

- GPC 99102/ GPC25101:Geophysical Inversion
- GPC 23102:Electromagnetic Method
- GPC 51201: Petroleum Exploration & Geophysics Geophysical Modelling
- GPC 90101/ GPE26105:Environmental Geophysics
- GPC 93101: Earth and Planetary System
- GPC 26201: Near Surface Geophysics: Hydrology
- GPE 51107: Geohydrology
- GPC 98102/GPC24102: Geophysical Signal Processing
- GPC 98106: Signal Processing
- GPD 523/GPO503: Artificial Intelligence and Machine Learning in Geosciences
- GPC532:Hydrology
- GPD 521:Time Series Analysis in Geosciences

Academics

2003-2009 Ph.D (Geophysics), CSIR-National Geophysical Research Institute [CSIR-NGRI], Osmania University, Hyderabad, India.
PhD Thesis: Application of neural network and Walsh transform techniques for identification of rock boundary from the KTB bore hole data. http://dx.doi.org/10.1190/1.3447983.
Supervisor: Dr. R. K. Tiwari, Raja Ramanna Fellow, DAE, GOI.

1999-2002 M.Sc. Tech (Applied Geophysics), Indian School of Mines (ISM), Dhanbad, India
Masters Dissertation**:** "Generation of various thematic maps as input to the watershed management of western part of Burdwan district (W.B) using digital IRS LISS-III image data analysed through EASI/PACE and SPANS image processing and GIS software package."

1996-1999 B.Sc.(Physics Hons.), Narendrapur Rama Krishna Mission Residential College, University of Calcutta, India

Positions

04/21-Present "Associate Professor", Indian Institute of Technology (Indian School of Mines), IIT(ISM), Dhanbad.
05/13-04/21 "Assistant Professor", Indian Institute of Technology (Indian School of Mines),IIT(ISM), Dhanbad.
01/13-04/13 "Reader ", Indian Institute of Geomagnetism [IIG], Navi-Mumbai.
03/07-12/12 "Fellow", Indian Institute of Geomagnetism [IIG], Navi-Mumbai.
06/05-02/07 "Research Assistant", Central Water & Power Research Station [CWPRS], Pune.
01/04-06/05 "CSIR-Intern Fellow", National Geophysical Research Institute [NGRI], Hyderabad.
02/03-12/03 "Project Fellow", National Geophysical Research Institute [NGRI], Hyderabad.

Awards & Honours

- ***Krishnan Gold Medal 2013***, Indian Geophysical Union [IGU], Hyderabad (awarded during the IGU 50th Annual Convention, Hyderabad, January 8, 2014) http://www.igu.in/awards.htm#KRISHNAN%20MEDAL

- ***JSPS-KAGI21*** Exchange Programme for East Asian Young Researchers, Kyoto University, Japan, 2009.
- ***CSIR-Intern*****,** Diamond Jubilee Award, NGRI, Hyderabad, 2003-2004
- Prize with student: Mr. Prasenjit Sarkar**,** PhD student of Department of Applied Geophysics, IIT (ISM), Dhanbad wins the Best Student Paper ***Inder Mohan Thapar Research Award (IMTR)*** 2021.
- Prize with student: Mr. Shubham Priyadarshi**,** 5- Year Integrated M.Sc. Tech (Applied Geophysics) student of Department of Applied Geophysics, IIT (ISM), Dhanbad wins the ***Best Student Paper 3rd Prize in 79th European Association of Geoscientists and Engineers (EAGE) Conference & Exhibition 2017***-Student Programme. Title of the paper "PSO-Based Hybrid Approach for Inversion of Vertical Electrical Sounding Data-A Case Study from Western Maharashtra" by S. Priyadarshi, S. Maiti and A. Das
- Selected as ***Assistant Professor*** on Tenure Track, Dept. of Geology & Geophysics**, IIT-Kharagpur**, 2010

Publications

Books Chapter

2. **Maiti, S.,** and Gupta, G., Integrated Geoelectrical and Hydrochemical Investigation of Shallow Aquifers in Konkan Coastal Area, Maharashtra, India: Advanced Artificial Neural Networks based Simulation Approach: *Advances in modeling and interpretation for near surface geophysics,* (Eds. A. Biswas and SP Sharma), Springer Geophysics, Springer Nature Switzerland AG 2020https://doi.org/10.1007/978-3-030-28909-6_3

1. Gupta, G., Erram, V. C., and **Maiti, S**., Application of Electrical Resistivity Tomography in Delineation of Saltwater and Freshwater Transition Zone: A Case Study in the West Coast of Maharashtra, India. In: *GROUNDWATER: ASSESSMENT, MODELING AND MANAGEMENT*, (Eds. M. Thangarajan and Vijay P. Singh), CRC Press, (A unit of Taylor & Francis Group, UK), 1st July 2016 https://www.crcpress.com/Groundwater-Assessment-Modeling-and-Management/Thangarajan-Singh/p/book/9781498742849

Memoirs

1. Erram, V. C., Ghodake, V.R., Gupta, G., Sabale, S.M., Narayanpethkar, A.B., **Maiti, S**., and Kadam,B.D., Delineation of groundwater potential zones in the hard rock terrain of Deccan Volcanic Province using electrical resistivity data. *Memoir. Journal of the Geological Society of India*, No. 80, pp 51-66, 2012.

List of Journal Paper Publications (Web of Science)

39. Das, G., **Maiti, S.** 2025. Ensemble learning-based interpretable method for pore pressure prediction using multivariate well logging data of IODP site U1517. *Earth Sci Inform* **18**, 206 https://doi.org/10.1007/s12145-025-01709-z

[SCI Impact Factor =2.7: Q2]

38. **Maiti, S.,** Gupta, S., and Gupta, P.K., 2024. Prediction of groundwater quality index and identification of key variables using Bayesian neural network. *Water, Air, & Soil Pollution*, **235 (10)**, 664 https://doi.org/10.1007/s11270-024-07459-w

[SCI Impact Factor =3.8: Q2]

37. Biswas, A., Rao, G.S., **Maiti, S**., 2024. Spatial variations in effective elastic thickness and loading ratio in the Indo-Burma subduction zone based on the joint inversion of Bouguer coherence and admittance, *Journal of Asian Earth Sciences*, Volume 270, 106192, ISSN 1367-9120, https://doi.org/10.1016/j.jseaes.2024.106192.

[SCI Impact Factor =2.7: Q2]

36. Mondal, S.R., Ghosh, R., Ojha, M. and **Maiti, S**., 2024 Well log evaluation of the gas-bearing reservoirs in the Bombay offshore basin, Gulf of Cambay, western coast of India. *Exploration Geophysics* . **55 (2),** 191-212 https://doi.org/ 10.1080/08123985.2023.2288958

[SCI Impact Factor =0.6: Q4]

35. **Maiti, S*.,** Chiluvuru, R.K., 2024. A deep CNN-LSTM model for predicting interface depth from gravity data over thrust and fold belts of North East India, *Journal of Asian Earth Sciences*, Volume 259, 105881, https://doi.org/10.1016/j.jseaes.2023.105881 **[Among the most downloaded articles in the last 90 days; Dec. 06, 2023]**

[SCI Impact Factor =2.7: Q2]

34. Das, G., and **Maiti, S*.,** 2023. A machine learning approach for the prediction of pore pressure using well log data of Hikurangi Tuaheni Zone of IODP Expedition 372, New Zealand. *Energy Geoscience*. **5(2),**100227 https://doi.org/10.1016/j.engeos.2023.100227 **[Among the most downloaded articles in the last 90 days; Nov,02, 2023]**

33. Karmakar, M., and **Maiti, S***., 2023. Statistical machine learning augmented interpretation of pore pressure of well1344A located at slope setting of sites IODP, *Journal of Earth System Science*, **132**, 103 https://doi.org/10.1007/s12040-023-02114-0

[SCI Impact Factor =1.3: Q3]

32. Gupta, S., and **Maiti, S.,** 2023. Comparison between Self-Organizing Map and Principal Component analysis for water quality assessment and hydro-geochemical characterization in dyke intruded complex geological settings, *Water and Environment Journal, **37**(3), 512-526* https://doi.org/10.1111/WEJ.12855

[SCI Impact Factor =1.7: Q3]

31. Gupta, P.K., **Maiti, S**. 2023. Novel Efficient Method for Automatic Inversion of Vertical Electrical Sounding Data: Case Study from Sindhudurg District, Maharashtra, India. *Pure Appl. Geophys.* **180**, 243–259. https://doi.org/10.1007/s00024-022-03213-7

[SCI Impact Factor =1.9: Q2]

30. Sengupta, M., Ghosh, R., Sen, A., and **Maiti, S.,** 2023. Capillary pressure equilibrium theory mapping of 4D seismic inversion results to predict saturation in a gas-water system. *Geophysics* **88(2)**, M49–M58. https://doi.org/10.1190/geo2022-0054.1

[SCI Impact Factor =3.0: Q1]

29. Gupta, P.K., **Maiti, S.,** 2023. Enhancing the prediction of hydraulic parameters using machine learning, integrating multiple attributes of GIS and geophysics. *Hydrogeology Journal* . **31**, pages501–520 https://doi.org/10.1007/s10040-022-02567-5

[SCI Impact Factor =2.4: Q2]

28. Gupta, P.K., **Maiti, S.,** 2022. Enhancing data-driven modeling of fluoride concentration using new data mining algorithms. *Environ Earth Sci* **81,** 89. https://doi.org/10.1007/s12665-022-10216-z

[SCI Impact Factor =2.8: Q2]

27. Ray, A., Khoudaiberdiev, R., Bennett, C., Bhatnagar, P., Boruah, A., Dandapani, R., **Maiti, S.,** and Verma, S., 2022. Attribute assisted interpretation of deltaic system using enhanced 3D seismic data. Offshore Nava Scotia*Journal of Natural Gas Science and Engineering*, **99**, 104428, https://doi.org/10.1016/j.jngse.2022.104428

[SCI Impact Factor =4.9: Q1]

26. Mondal, S.R., Ghosh, R., Ojha, M. and **Maiti, S**., 2022. Predicting Resource Potential of Hydrocarbon in the Gulf of Cambay, West Coast of India, by Integrating Rock Physics and Multi-attribute Linear Regression Transform. *Nat Resour Res* . **31**, 643-661,https://doi.org/10.1007/s11053-021-09999-y

[SCI Impact Factor =5.4: Q1]

25. Chiluvuru, Ravi Kumar., Raj, S., Pathak, B., **Maiti, S.,** and Kasturi, N.,. 2020. High density crustal intrusive bodies beneath Shillong plateau and Indo Burmese Range of northeast India revealed by gravity modeling and earthquake data. *Physics of the Earth and Planetary Interior*, **307**,106555, https://doi.org/10.1016/j.pepi.2020.106555

[SCI Impact Factor: 2.4: Q2]

24. Chiluvuru. Ravi Kumar., Kesiezie, N., Pathak, B. **Maiti, S*.,** and Tiwari, R.K., 2020 Depth estimation of basement structure beneath the KohimaSynclinorium, North East India via Bouguer gravity data modelling. *Journal of Earth System Science,* **129**:56, https://doi.org/10.1007/s12040-019-1326-z

[SCI Impact Factor: 1.6:Q3]

23. Kumar, S., Rawat, G., Dhamadharan, S., Sen, K., and **Maiti, S.,** 2019. Dimensionality analysis of MT impedances of Tso-MorariDome:Implication for structural interpretation, *Himalayan Geology,* **40** (2), 190-198.

[SCI Impact Factor: 1.1:Q3]

22. **Maiti, S*.,** Chiluvuru. R.K., Sarkar, P., and Tiwari, R.K., and Uppala, S., 2020. Interface depth modelling of gravity data and altitude variations: A Bayesian neural network approach", *Neural Computing and Applications*. **32**, 3183–3202, https://doi.org/10.1007/s00521-019-04276-9

[SCI Impact Factor: 4.5:Q2]

21. Karmakar, M., and **Maiti, S*.,** 2019. Short Term Memory Efficient Pore Pressure Prediction via Bayesian Neural Networks at Bering Sea Slope of IODP Expedition 323, *Measurement* , **135**,pp-852-868, https://doi.org/10.1016/j.measurement.2018.12.034

[SCI Impact Factor: 5.2: Q1]

20. Karmakar, M., **Maiti, S*.,** Singh, A., Ojha, M., Maity, B., 2018. Mapping of rock types using a joint approach by combining the multivariate statistics, self-organizing map and Bayesian neural networks: an example from IODP 323 site, *Marine Geophysical Research*, **39(3)**, pp-407-419, http://dx.doi.org/10.1007/s11001-017-9327-2

[SCI Impact Factor: 1.6: Q2]

19. **Maiti, S***., Das, A., Shah, R., and Gupta, G., 2017. Application of automatic relevance determination model for groundwater quality index prediction by combining hydro-geochemical and geo-electrical data , *Modeling Earth Systems and Environment*, vol. **3**(4), pp. 1371-1382, http://dx.doi.org/10.1007/s40808-017-0369-x

[ESCI Impact Factor: 2.7:Q3]

18. Singh, A., **Maiti, S*.,** Tiwari, R.K., 2017. Selection of optimum wavelet in CWT analysis of geophysical downhole data. *Journal of Indian Geophysical Union,* Vol **21**(2), pp.153-166, **[ESCI Impact Factor: 0.1:Q4**]

17. Das, A., **Maiti, S*.,** Naidu, S., and Gupta, G., 2017. Estimation of spatial variability of aquifer parameters from geophysical methods: A case study of Sindhudurg district, Maharashtra, India, *Stochastic Environmental Research and Risk Assessment*, **31(7)**, pp-1709-1726, http://dx.doi.org/10.1007/s00477-016-1317-4

[SCI Impact Factor: 3.9:Q1]

16. Singh, A., **Maiti, S*.,** Tiwari, R.K., 2016. Modelling discontinuous well log signal to identify lithological boundaries via wavelet analysis: An example from KTB borehole data. *Journal of Earth System Science*, vol **125(4)**, pp.761-776, http://link.springer.com/article/10.1007/s12040-016-0701-2

[SCI Impact Factor: 1.6:Q3]

15. Ojha, M., and **Maiti, S**., 2016. Sediment classification using neural networks: an example from the site-U1344A of IODP Expedition 323 in the Bering Sea. *Deep-Sea Research Part II :Topical Studies in Oceanography,* vol **125-126**, pp 202-213, http://dx.doi.org/10.1016/j.dsr2.2013.03.024,

[SCI Impact Factor: 3.0:Q2]

14. Gupta, G., Patil, J.D., **Maiti, S.,**Erram, V.C., Pawar, N.J., Mahajan, S.H., and Suryawanshi, R.A., 2015. Electrical resistivity imaging for aquifer mapping over Chikotra basin, Kolapur District, Maharashtra. *Environmental Earth Sciences,* vol **73**(12), pp. 8125-8143, http://dx.doi.org/10.1007/s12665-014-3971-5

[SCI Impact Factor: 2.8:Q2]

13. Gupta, G., Erram, V. C., and **Maiti, S**., 2015. Geoelectrical investigation for potential groundwater zones in parts of Ratnagiri and Kolhapur districts, Maharashtra. *Journal Indian Geophysical Union,* vol. **19**(1), pp.27-38.

[ESCI Impact Factor: 0.1:Q4]

12. Gupta, G., **Maiti, S.,** and Erram, V.C., 2014. Analysis of electrical resistivity data in resolving the saline and fresh water aquifers in west coast Maharashtra, India. *Journal of the Geological Society of India,* vol **84**(5), pp 555-568, http://link.springer.com/article/10.1007/s12594-014-0163-6#page-1

[SCI Impact Factor: 1.3:Q4]

11. **Maiti, S***., and Tiwari, R.K., 2014. A comparative study of artificial neural networks, Bayesian neural networks and adaptive neuro-fuzzy inference system in Groundwater Level Prediction. *Environmental Earth Sciences,*vol**71(7)**, pp 3147-3160, http://dx.doi.org/10.1007/s12665-013-2702-7,

[SCI Impact Factor: 2.8:Q2]

10. **Maiti, S*.,**Erram, V.C., Gupta,G., Tiwari, R.K., Kulkarni, U.D., and Sangpal, R.R., 2013. Assessment of groundwater quality: A fusion of geochemical and geophysical information via Bayesian Neural Networks, *Environmental Monitoring and Assessment,*vol**185(4)**,pp 3445-3465, http://dx.doi.org/10.1007/s10661-012-2802-y,

[SCI Impact Factor: 3.0:Q3]

9. **Maiti, S*.,** Gupta, G., Erram,V.C., and Tiwari, R.K., 2013. Delineation of shallow resistivity structure around Malvan, Konkan region, Maharashtra by neural network inversion using vertical electrical sounding measurements. *Environmental Earth Sciences,* vol. **68(3)**, pp 779-794, http://dx.doi.org/10.1007/s12665-012-1779-8,

[SCI Impact Factor: 2.8:Q2]

8. **Maiti, S*.,**Erram,V.C., Gupta, G., and Tiwari, R.K.., 2012. ANN based inversion of DC resistivity data for groundwater exploration in hard rock terrain of western Maharashtra (India). *Journal of Hydrology,* vol. **464-465**, pp.281-293, http://dx.doi.org/10.1016/j.jhydrol.2012.07.020,

[SCI Impact Factor: 5.9:Q1]

7. Tiwari, R.K., and **Maiti, S.**, 2011. Bayesian neural network modeling of tree-ring temperature variability record from the Western Himalayas. *Nonlinear Processes in Geophysics,* vol.**18(2)**, pp.515-528, http://dx.doi.org/10.5194/npg-18-515-2011,

[SCI Impact Factor: 1.7:Q2]

6. **Maiti, S*.,** Gupta, G., Erram,V.C., and Tiwari, R.K., 2011. Inversion of Schlumberger resistivity sounding data from the critically dynamic Koyna region using Hybrid Monte Carlo-based neural network approach. *Nonlinear Processes in Geophysics,* vol.**18(2)**, pp.179-192, http://dx.doi.org/10.5194/npg-18-179-2011,

[SCI Impact Factor: 1.7:Q2]

5. **Maiti, S***., and Tiwari, R.K., 2010. Neural network modeling and an uncertainty analysis in Bayesian framework: A case study from the KTB borehole site, *Journal of Geophysical Research,* vol.**115**, B10208, http://dx.doi.org/10.1029/2010JB000864,

[SCI Impact Factor: 3.9:Q1]

4. **Maiti, S***., and Tiwari, R.K., 2010. Automatic discriminations among geophysical signals via the Bayesian neural networks approach, *Geophysics*, vol. **75(1)**, pp E67-E78, http://dx.doi.org/10.1190/1.3298501,

[SCI Impact Factor: 3.0:Q1]

3. **Maiti, S***., and Tiwari, R.K., 2009. A Hybrid Monte Carlo method based artificial neural networks approach for rock boundaries identification: A case study from KTB borehole, *Pure and Applied Geophysics*, vol**166(12)**, pp 2059-2090, http://dx.doi.org/10.1007/s00024-009-0533-y, **[SCI Impact Factor: 1.9:Q2]**

2. **Maiti, S***., Tiwari, R.K., and Kuempel Hans-Joachim., 2007. Neural network modeling and classification of litho-facies using well log data: A case study from KTB borehole site, *Geophysical Journal International*, vol**169(2)**, pp733-746, http://dx.doi.org/10.1111/j.1365-246X.2007.03342.x, **[SCI Impact Factor: 2.8:Q2]**

1. **Maiti, S***., and Tiwari, R.K., 2005. Automatic detection of lithologic boundaries using the Walsh transform: A case study from the KTB borehole. *Computers and Geosciences*, vol. **31(**8), pp.949-955, http://dx.doi.org/10.1016/j.cageo.2005.01.016, **[SCI Impact Factor: 4.2: Q1]**

[Total SCI Impact Factor=101.5: @2023 JCR]

Other Full Length Research Publications (Non-Web of Science)

28. Dabi, S., Vishwakarma, A., **Maiti, S.,** 2022. Joint Implementation of Ensemble and Deep Learning Regression Techniques to Predict Missing Density Logs,_Paper Number: IPTC-22454-MS, Paper presented at the International Petroleum Technology Conference, Riyadh, Saudi Arabia, February 2022. https://doi.org/10.2523/IPTC-22454-MS

27. Dabi, S., and **Maiti, S.,** 2021. Implementation of Machine Learning Ensemble Techniques for 3D Inversion of Gravity Data AGU Fall Meeting 2021https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/952871

26. Dabi, S., Vishwakarma,A.,**Maiti, S.,** 2021. Prediction of Shear Sonic Time log Using Machine Learning Techniques and Empirical Relations AGU Fall Meeting 2021 https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/948652

25. Bhowmick, D., Gupta, D. K., **Maiti, S**., and Shankar, U., 2019. Stacked autoencoders based machine learning for noise reduction and signal reconstruction in geophysical data. arXivarXiv:1907.03278

24. Bhowmick, D., Gupta, D. K., **Maiti, S**., and Shankar, U., 2018. Deep Autoassociative Neural Networks for Noise Reduction in Seismic data.arXiv:1805.00291 [cs.CE] https://www.cornell.edu/

23. Bhowmick, D., Gupta, D. K., **Maiti, S**., and Shankar, U., 2018.Velocity-porosity super model: A deep neural networks based concept.arXiv:1804.07112 [cs.CE] https://www.cornell.edu/

22. Shah, R., and **Maiti, S.**, 2018. Artificial Neural Networks using Regularized Logistic Regression Cost Function: A Robust Lithofacies Classifier. 80th EAGE Conference & Exhibition 2018, 11-14 June 2018, Copenhagen, Denmark. http://dx.doi.org/10.1007/10.3997/2214-4609.201801740

21. Das, A., and **Maiti, S.,** 2017. Groundwater quality prediction using Bayesian automatic relevance determination modelling. *Society of Petroleum Geophysicists (SPG)*, November 17-19, Jaipur, India, Extended Abstract. 180 (on CDROM), pp.1-5, http://www.spgindia.org/

20. Kumar R. Ch., Kesiezie N., Singh , N., and **Maiti, S.,** 2016. Seismic site response studies for microzonation and hazard assessment of Kohima, Nagaland, North Eastern Region of India. *Indian Journal of Geosciences*, Vol. 71(3), pp. 501-518, https://www.researchgate.net/publication/342588664_Seismic_site_response_studies_for_microzonation_and_hazard_assessment_of_Kohima_Nagaland_North_Eastern_Region_of_India

19. Priyadarshi, SK **Maiti, S.,** Rekapalli, R Tiwari, RK 2016. A hybrid PSOGSA-based inversion of noisecorrupted seismic data using singular spectrum-based time slice denoising, SEG Technical Program Expanded Abstracts, 4835-4839 https://doi.org/10.1190/segam2016-13871026.1

18. Singh, B.B., Srivardhan, V., and **Maiti, S.,** 2016 Integrated particle swarm optimization based inversion of self potential anomaly for mineral detection, 78th EAGE Conference and Exhibition, Vienna, Austria, May 30-02 June 2016 ,Extended Abstract, http://dx.doi.org// 10.3997/2214-4609.201601269

17. Bhowmick, D., Shankar, U., and **Maiti, S.**, 2016. Revisiting supervised learning in the context of predicting gas hydrate saturation, 78th EAGE Conference and Exhibition, Vienna, Austria, May 30-02 June 2016 ,Extended Abstract, http://dx.doi.org//10.3997/2214-4609.201600900

16. **Maiti, S.,** and Ojha, M., 2015. Modeling and classification of marine sediment using multivariate statistics and hybrid neural computation. 11th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG)*, Jaipur, Extended Abstract. 179(on CDROM), pp.1-6, http://www.spgindia.org/

15. Seth, V., Srivardhan, V., **Maiti, S.,** 2015. Evaluation of formation shaliness using factor analysis of site –U1344A of IODP expedition 323 in the Bering Sea. 77th EAGE Conference and Exhibition 2015, pp.1-3.

14. Erram, V.C., Gupta, G.,**Maiti, S.,** and Anand, S.P., 2012. Structure and tectonics of Konkan coastal belt of Maharashtra from ground magnetic studies, *In: Proc. 5th International Groundwater Conference (IGWC-2012*), pp.570-577.

13. Gupta, G., Sijo, T.P., Erram, V.C.,**Maiti, S.,** and Mahajan, S.H., 2012. Electrical characterization of groundwater salinazation in Konkan coastal aquifers, Maharashtra. *In: Proc. 5th International Groundwater Conference (IGWC-2012*), pp.1208-1221,

12. **Maiti, S.,** Gupta, G., and Erram, V.C., 2012.Inversion of Schlumberger resistivity sounding data from the Malvan, Konkan region using hybrid Monte Carlo based neural network approach, *Proc. of 4th International Groundwater Conference (IGWC-2011), Madurai, on Water Resources Assessment, Recharge and Modeling,* pp.75-85

11. Erram, V.C., Gupta, G., and **Maiti, S.,** 2012. Delineation of weathered fractured aquifer in the hard rock terrain of Deccan Volcanic Province using vertical electrical resistivity data, *Proc. of 4th International Groundwater Conference (IGWC-2011), Madurai, on Water Resources Assessment, Recharge and Modeling,* pp.34-38.

10. **Maiti, S.,**Erram, V.C.,Gupta, G., Nandi., R., and Pal., S., 2012. Direct Current VES Data Inversion using Singular Value Decomposition Method for Delineating Seawater Intrusion in parts of Konkan, Western Maharashtra, 9 th Biennial International Conference & Exposition on Petroleum Geophysics, *Society of Petroleum Geophysicists (SPG)*, Hyderabad, Extended Abstract (on CDROM), pp.1-6, http://www.spgindia.org/

9. **Maiti,S.,** and Tiwari, R. K.., 2012. Modeling of Rock Boundary using Walsh Domain Sequency Filtering: An Example from the German Continental Deep Drilling Program (KTB) Borehole Site, 9 th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG)*, Hyderabad, Extended Abstract (on CDROM), pp.1-6, http://www.spgindia.org/

8. **Maiti, S.,**Erram, V.C.,Gupta, G., and Tiwari, R.K., 2012. Inversion of Schlumberger Vertical Electrical Sounding Data using a Hybrid Monte Carlo Based Bayesian Neural Network Approach, 9 th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG)*, Hyderabad, Extended Abstract (on CDROM), pp.1-6, http://www.spgindia.org/

7. Gupta, G., Erram, V. C. **Maiti, S.,**Kachate, N. R and Patil, S. N., 2010. Geoelectrical studies for delineating seawater intrusion in parts of Konkan coast, western Maharashtra, *International Journal of Environment and Earth Sciences,* vol.**1**, pp.62-79.

6. Gupta, G., Erram,V. C., and **Maiti, S**., 2010. Geoelectric investigation of hot springs in western Maharashtra. *Journal of Advances in Science and Technology,* vol.**13**, No.1, pp.86-95.

5. **Maiti,S.,** and Tiwari, R. K., *2010.* Automatic detection of litho-Facies via the Hybrid Monte Carlo based Bayesian neural networks approach, 8 th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG),Hyderabad, Extended Abstract **188**(on CDROM), pp.1-7.*

4. **Maiti, S**., and Tiwari, R. K., 2008. Classifications of lithofacies boundaries using the KTB borehole data: A Bayesian neural network modeling, 7 th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG),*Hyderabad, Extended Abstract **80**(on CDROM),pp.1-7.

3. **Maiti, S**., and Tiwari, R. K., 2005. Identifying litho-facies boundaries using super self adaptive back propagation neural network (SSAB): A Case study from the KTB borehole, *Petrotech,* Delhi, Extended Abstract **465**(on CDROM),pp.1-6.

2. Tiwari, R. K., Srilakshmi, S., and **Maiti, S**., 2004. Non-linear forecasting approach to distinguish chaos and random fractals from earthquake observations: application to northeast India earthquakes: *Department of Science and Technology (DST) Project report* (File No: DST/23(248) ESS/2001).

1. **Maiti, S**., and Tiwari, R. K., 2004. Interpretation of gravity anomaly over symmetric sedimentary basin using Walsh transforms techniques. Proceedings 5th Conference and Exposition on Petroleum Geophysics on "Geophysics: Leveraging Technologies for E&P Business", *Society of Petroleum Geophysicists (SPG),* Hyderabad, pp.975-979. http://www.spgindia.org/

Conference Abstract (National & International)

80. **Maiti, S**., 2024. Resource Characterization and Modelling using AI/ML, 47th Association of Exploration Geophysicists (AEG) Conference, on "*Geo-exploration for Critical Minerals and Precious Metals*" during 12-13 December 2024, Hyderabad, India,

79 . Das, G.**, Maiti, S.,** 2024. Deep learning-based estimation of multivariate pore pressure using borehole logging parameters of IODP expedition 372. SEG|AAPG Annual Meeting, "IMAGE-24" , 26-29TH August 2024, Houseton, Texas, USA. https://imageevent.aapg.org/portals/26/abstracts/2024/4094075.pdf

78 . Lohan, I**., Maiti, S.,** 2024. Improving Offshore Pore Pressure Prediction and Oceanic Well Safety with Machine Learning. 2024 Ocean Sciences Meeting.

77. Das, G., and **Maiti, S.,** 2023. Pore pressure prediction using decision tree regression analysis of well U1517A located at landslide complex of sites IODP 372. Paper presented in the 60th Annual Convention of IGU (Indian Geophysical Union Conference & Exhibitions) will be held during 22-24, November 2023 at CUSAT University, Kochi, Kerala, India.

76. Das, G., and **Maiti, S.,** 2023. A Machine Learning-based Prediction of Pore Pressure from Geophysical Logs: Hinkurangi Tuaheni Zone. Paper presented in 2nd Indian Near Surface Geophysics Conference 2023 (International Conference & Exhibitions) organized by the European Association of Geoscientists and Engineers (EAGE) and Aqua Foundation Academy (AFA) on November 7-8, New Delhi, India. https://doi.org/10.3997/2214-4609.202375027

75. Sengupta, M., Ghosh, R., **Maiti, S**., 2021. A capillary pressure-based rock physics model for saturation estimation in Sleipner field. (Oral presentation, August 2021, Abstract published: J6, Marine Geophysics, Sr No: 84, IAGA-IASPEI)

74. Dabi, S., and **Maiti, S.,** 2021. Implementation of Machine Learning Ensemble Techniques for 3D Inversion of Gravity Data AGU Fall Meeting 2021https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/952871

73. Gupta, S., and **Maiti, S.,**The Groundwater Quality Assessment using Multivariate Statistics and Self Organising Map (SOM).AGU Fall Meeting 2021 https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/976970

72. Dabi, S., Vishwakarma,A.,**Maiti, S.,**Prediction of Shear Sonic Time log Using Machine Learning Techniques and Empirical Relations AGU Fall Meeting 2021 https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/948652

71. **Maiti, S.,** Robust machine learning and inversion for basement depth estimation from gravity data, FIGA, NGRI-Hyderabad, November 12-16, 2019

70. Gupta, S., and **Maiti, S**., Formulation of empirical relation among physico-chemical parameters and GWQI using regression analysis. FIGA, NGRI-Hyderabad, November 12-16, 2019

69. Sarkar, P., and **Maiti, S.,** The robust estimation of fault parameters from Bouguer gravity data: A case study from Eastern Indian Shield. 55th Annual Convention on Changing Water Cycle and Water Resources, *Indian Geophysical Union (IGU),* December 5-7, 2018, at Rabindranath Tagore University, Bhopal

68. Gupta, PK, **Maiti, S.,** and Sarkar, P., A comparative study on hybrid optimization methods for inversion of vertical electrical sounding data. 55th Annual Convention on Changing Water Cycle and Water Resources, *Indian Geophysical Union (IGU),* December 5-7, 2018, at Rabindranath Tagore University, Bhopal

67. Karmakar, M., and **Maiti, S.,** Comparative study of pore pressure prediction using four different intelligent models. 55th Annual Convention on Changing Water Cycle and Water Resources, *Indian Geophysical Union (IGU),* December 5-7, 2018, at Rabindranath Tagore University, Bhopal

66. Karmakar, M., and **Maiti, S.,** Rock types mapping by the use of Bayesian neural networks: An example from IODP 323 site. 55th Annual Convention on Changing Water Cycle and Water Resources, *Indian Geophysical Union (IGU),* December 5-7, 2018, at Rabindranath Tagore University, Bhopal

65. **Maiti, S.,** A comparative study of support vector machines, Gaussian process, Bayesian neural networks and adaptive neuro-fuzzy inference system in sediment depth prediction 55th Annual Convention on Changing Water Cycle and Water Resources, *Indian Geophysical Union (IGU),* December 5-7, 2018, at Rabindranath Tagore University, Bhopal

64. **Maiti, S.,** Sediment Depth Prediction from Gravity Anomaly Data using Machine Learning Algorithm and Variogram Modelling. 40th Annual Convention, Seminar and Exhibition on Exploration Geophysics, *Association of Exploration Geophysicists (AEG)*, November 1-3, 2018, at Department of Earth Sciences, IIT, Bombay

63. **Maiti, S.,** and Karmakar, M.,Classification of Rock Types using Statistical Machine Learning Algorithm: An Example from IODP 323 Site,. 40th Annual Convention, Seminar and Exhibition on Exploration Geophysics, *Association of Exploration Geophysicists (AEG),* November 1-3, 2018, at Department of Earth Sciences, IIT, Bombay

62. Shah, R., and **Maiti, S.**, Artificial Neural Networks using Regularized Logistic Regression Cost Function: A Robust Lithofacies Classifier. *80th EAGE Conference & Exhibition* 2018, 11-14 June 2018, Copenhagen, Denmark.

61. **Maiti, S.,** Data Driven Computational Learning Framework for Assessment of Groundwater: A Review of Potential Techniques. Diamond Jubilee National Conference on "*Emerging Trends in Geophysical Research for Make-in-India(ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

60. **Maiti, S.,** Determination of Sediment Depth Using Artificial Intelligence Techniques. Diamond Jubilee National Conference on "*Emerging Trends in Geophysical Research for Make-in-India(ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

59. Sarkar, P., Gupta, P.K., and **Maiti, S.**, Fault Parameters Estimation Using Bouguer Gravity Data Inversion: A Case Study from Eastern Indian Shield. Diamond Jubilee National Conference on "*Emerging Trends in Geophysical Research for Make-in-India(ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

58. Kumar, N., and **Maiti, S.,** Density Modelling of the Kachchh Basin, Gujarat using Egm 2008 Gravity. Diamond Jubilee National Conference on *"Emerging Trends in Geophysical Research for Make-in-India (ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

57. Karmakar, M., and **Maiti, S.,**Pore Pressure Analysis by the Use of Conventional Methods and Bayesian Neural Network Model. Diamond Jubilee National Conference on "*Emerging Trends in Geophysical Research for Make-in-India(ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

56. **Maiti,** S., Ravi Kumar, Ch., and Sarkar P., Mapping of basement depth from gravity data: A machine learning approach. 54th Annual Convention on "Geosciences for Sustainability" *Indian Geophysical Union (IGU),Indian Geophysical Union (IGU),* December 3-7, 2017, CSIR-NGRI, Hederabad-500007 TS.

55. Priyadarshi, S.K., and **Maiti, S.,** A comparative review on application of various heuristic algorithms for the case of resistivity inversion. 53th Annual Convention on "Geosciences for Sustainability" *Indian Geophysical Union (IGU),* November 8-10, 2016, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004.

54. **Maiti, S.,** Das, A., Naidu, S., and Gupta, S., Spatial variability of aquifer parameters from geo-electrical and hydro-geochemical data: Application of geo-statistics and soft computing method. 53th Annual Convention on "Geosciences for Sustainability" *Indian Geophysical Union (IGU),* November 8-10, 2016, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004.

53. Singh, A., and **Maiti, S.,** Modelling of discontinuous signal via wavelet transform supplemented with Bayesian neural networks: An example from KTB bore hole. 53th Annual Convention on "Geosciences for Sustainability" *Indian Geophysical Union (IGU),* November 8-10, 2016, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004.

52. Priyadarshi, SK **Maiti, S.,**Rekapalli, R Tiwari, RK A hybrid PSOGSA-based inversion of noisecorrupted seismic data using singular spectrum-based time slice denoising, *SEG Technical Program*, May 16-21. 2016, Dallas, Texas, US.

51. Singh, B.B., Srivardhan, V., and **Maiti, S.,** Integrated particle swarm optimization based inversion of self potential anomaly for mineral detection, *78th EAGE Conference and Exhibition*, Vienna, Austria, May 30-02 June 2016 ,Extended Abstract, DOI: 10.3997/2214-4609.201601269
50. Bhowmick, D., Shankar, U., and **Maiti, S.**, Revisiting supervised learning in the context of predicting gas hydrate saturation, *78th EAGE Conference and Exhibition*, Vienna, Austria, May 30-02 June 2016 ,Extended Abstract,DOI: 10.3997/2214-4609.201600900
49. Singh, A.,and **Maiti, S.,** Optimum wavelet selection: Application to geophysical well log data. 52th Annual Convention on "Near Surface Earth System Sciences" *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804. p 26

48. **Maiti, S.,** Fault geometry estimation via Bayesian neural network inversion of gravity data. 52th Annual Convention on "Near Surface Earth System Sciences" *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804, p.27

47. Singh, A.,and**Maiti, S.,** Classification of lithology: Use of multivariate statistics and hybrid neural network modelling. 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804,p66

46. Das, A., **Maiti, S.,** Gupta, G., and Erram, V.C., Estimation of aquifer parameters from surface geo-electrical method. 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804, p68

45. Singh, B., Srivardhan, V., and **Maiti, S.,** Detection of minerals using particle swarm optimization based inversion of self potential data. 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804, p.77

44. **Maiti, S.,**Sen, M.K., Das, A., Gupta, G., and Erram, V.C., Groundwater quality index forecasting using automatic relevance determination model. 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804, p122

43. Priyadarshi, S., and **Maiti, S.,** Effect of de-noising strategies in seismic wavelet estimation using generalized inversion. 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804,p128

42. Karmakar, M., **Maiti, S.,** and Ojha, M., Pore pressure study using downhole data of integrated ocean drilling program (IODP) Expedition 323, 52th Annual Convention on "Near Surface Earth System Sciences " *Indian Geophysical Union (IGU),* November 3-5, 2015, National Centre for Antarctic and Ocean Research (NCAOR), Goa-403804, p151

41. **Maiti, S.,** Advancement of neural network modeling: Insights for Earth Probing. 50th Annual Convention on "Sustainability of Earth System-The Future Challenges" *Indian Geophysical Union (IGU),* January 9-12, 2014, National Geophysical Research Institute (NGRI), Hyderabad-500007.

40. Singh, A., **Maiti, S.,** Lithology boundary identification using wavelet transform: An example from KTB borehole site. 50th Annual Convention on "Sustainability of Earth System-The Future Challenges" *Indian Geophysical Union (IGU),* January 9-12, 2014, National Geophysical Research Institute (NGRI), Hyderabad-500007.

39. Das, A., **Maiti, S.,** ANFIS modelling and classification of litho-facies using well log data: A case study from KTB Borehole Site. 50th Annual Convention on "Sustainability of Earth System-The Future Challenges" *Indian Geophysical Union (IGU),* January 9-12, 2014, National Geophysical Research Institute (NGRI), Hyderabad-500007.

38. Das, A., **Maiti, S.,** Application of cross-plotting techniques for characterization of reservoir from well log data. *Annual General Meeting of the Geological Society of India and International Conference on Future Challenges in Earth Sciences for Energy and Mineral Resources (ESEMR)*, November 14-16, 2013, Dept. of Applied Geology, Indian School of Mines, Dhanbad.

37. **Maiti, S.,** Erram, V. C., Gupta, G., Tiwari, R.K., Kulkarni, U. D., Sangpal, R.R., Cognitive groundwater quality model: Confluence with geophysics and geochemistry, *International conference on perspectives of computer confluence with sciences (ICPCCS12)*, 10th -12th December 2012, NowrosjeeWadia College, Pune

36. **Maiti, S.,**Erram, V.C., Gupta, G., The Utility of Bayesian Neural Networks in Hydrogeochemical Studies: An Example from West Coast, India, *5th International Groundwater conference*, 17-21 December 2012, Aurangabad.

35. Gupta, G., Sijo, T.P., Erram, V.C., **Maiti, S.,** and Mahajan, S.H., Electrical characterization of groundwater salinization in Konkan coastal aquifers, Maharashtra. *5th International Groundwater conference*, 17-21 December 2012, Aurangabad.

34. Erram, V.C., Gupta, G., **Maiti, S.,** and Ananad, S.P., Structure and Tectonics of Konkan Coastal belt of Maharashtra, from Ground Magnetic Studies. *5th International Groundwater conference*, 17-21 December 2012, Aurangabad.

33. Erram, V.C., Gupta, G., Pishte, J.B., **Maiti, S.,** Identification of groundwater potential zones using geoelectrical studies in southern Deccan Volcanic Province, Maharashtra, India. *International Conference on "Sustainable Water Resource Development and Management*", 20-21 December, 2012, Kolhapur.

32. Gupta, G., Erram, V.C., Raut, P.D., **Maiti, S.**, Geoelectrical and geochemical studies for delineating saline water incursion in parts of west coast Maharashtra, India. *International Conference on "Sustainable Water Resource Development and Management*", 20-21 December, 2012, Kolhapur.

31. **Maiti, S.,**Erram, V.C., Gupta, G., DC resistivity inversion for groundwater exploration in hard rock terrain of western Maharashtra (India): A Bayesian neural network approach, 49 th*Indian Geophysical Union (IGU)* 2012 held in Gandhinagar, Gujarat during 29-31 October 2012.

30. Erram, V.C., Gupta, G., **Maiti, S.**, Geoelectrical investigations for potential groundwater in parts of Ratnagiri and Kolhapur districts, Maharashtra, *National Conference on 'Environmental Surveillance for Natural Resource Management' (ESNRM – 2012),* January 9-10, 2012, North Maharashtra University, Jalgaon.

29. Gupta, G.., **Maiti, S.**, Erram, V.C., Kumar, S., Kadam, B.D., Analysis of resistivity sounding data to decipher the occurrence and movement of groundwater in seismically active Koyna region, Maharashtra,*National Conference on 'Environmental Surveillance for Natural Resource Management' (ESNRM – 2012)*, January 9-10, 2012, North Maharashtra University, Jalgaon.

28. Gupta, G., Erram, V.C., **Maiti, S.**, Mapping of saline and fresh water interface in west coast, Maharashtra using Dar-Zarrouk parameters, *International Conference on Multidisciplinary approaches in Applied Geology (MAAG-2012),* January 20-21, 2012, G.K. Gokhale College, Kolhapur.

27. Erram, V.C., Gupta, G., **Maiti, S.**, Ingress of saline water in Konkan coastal belt of Maharashtra,*International Conference on Multidisciplinary approaches in Applied Geology (MAAG-2012)*, January 20-21, 2012, G.K. Gokhale College, Kolhapur.

26. **Maiti, S.,**Erram, V.C.,Gupta, G., Nandi., R., and Pal., S., Direct Current VES Data Inversion using Singular Value Decomposition Method for Delineating Seawater Intrusion in parts of Konkan, Western Maharashtra, *9 th Biennial International Conference & Exposition on Petroleum Geophysics, Society of Petroleum Geophysicists(SPG),* February 16-18, 2012,Hyderabad.

25. **Maiti, S.**, and Tiwari, R. K.., Modeling of Rock Boundary using Walsh Domain Sequency Filtering: An Example from the German Continental Deep Drilling Program (KTB) Borehole Site,*9 th Biennial International Conference*

& Exposition on Petroleum Geophysics, Society of Petroleum Geophysicists(SPG), February 16-18, 2012,Hyderabad.

24. **Maiti, S.**, Erram, V.C.,Gupta, G., and Tiwari, R.K., Inversion of Schlumberger Vertical Electrical Sounding Data using a Hybrid Monte Carlo Based Bayesian Neural Network Approach, *9 th Biennial International Conference & Exposition on Petroleum Geophysics, Society of Petroleum Geophysicists(SPG)*, February 16-18, 2012,Hyderabad.

23. **Maiti, S.,**Erram, V.C.,Gupta, G., Groundwater Quality Assessment via Bayesian Neural Network: An example from Shiroda-Sawantwadi Region, Konkan, Western Maharashtra, 48 th*Indian Geophysical Union (IGU)* 2011 held in Visakhapatnam, Andhra Pradesh during 20-22 December 2011

22. **Maiti, S.,** and Tiwari, R.K., Reconstruction of Tree-Ring Temperature Variability Record from the Western Himalayas using Neural Networks, 48 th*Indian Geophysical Union (IGU)* 2011 held in Visakhapatnam, Andhra Pradesh during 20-22 December 2011

21. **Maiti, S.**, and Tiwari, R.K., Bayesian Neural Network Modeling and an Uncertainty Analysis: A Case Study from the KTB Borehole Site, ***International Union of Geodesy and Geophysics(IUGG),* Melbourne, Australia**, June 28-July 07, 2011

20. **Maiti, S.**, Gupta, G., and Erram, V.C., Inversion of Vertical Electrical Sounding Data from the Critically Dynamic Koyna Region using the Hybrid Monte Carlo-Based Neural Network Approach, ***International Union of Geodesy and Geophysics (IUGG)*, Melbourne, Australia,** June 28-July 07, 2011

19. Sadane, K.M., Gupta,G, Erram, V. C., **Maiti, S** and Kadam, B.D. Analysis of Dar-Zarrouk parameters in resolving the saline and fresh water aquifers in west coast, Maharashtra, *Environmental Innovations for Resource Sustainability (EIRS- 2011)*, held at North Maharashtra University, Jalgaon, India, January 21-22, 2011

18. **Maiti, S**., and Tiwari, R.K., 2010, Distinguishing chaos from random sequences from tree-ring temperature variability record of western Himalaya: A novel approach, 47 th*Indian Geophysical Union* (IGU) 2010 held at Osmania University, Hyderabad during 8-10 December 2010

17. **Maiti, S**., Gupta, G., Erram,V., and Tiwari, R.K., 2010,Delineation of shallow resistivity structure around Malvan, Konkan region, Maharashtra by neural network inversion of vertical electrical sounding measurements, 47 th*Indian Geophysical Union(IGU)* 2010 held at Osmania University, Hyderabad during 8-10 December 2010.

16. Sunil, P.S., **Maiti, S**., Reddy, C.D., and Dhar, A., GPS and the Bayesian Neural Network Approach in Tidal-Level Forecasting of Nivlisen Ice Shelf, East Antarctica, India,*Asia Oceania Geosciences Society*(AOGS), India, 5-9 July, 2010.

15. Tiwari, R.K., and **Maiti, S**., Bayesian Neural Network Modeling of Temperature Variability Record from the Western Himalaya, India,*Asia Oceania Geosciences Society* (AOGS) , India, 5-9 July, 2010.

14. **Maiti, S.,**Gupta,G., Erram V., and Tiwari, R.K., Non-linear Modeling of Schlumberger Resistivity Sounding Data of Koyna Region: A Hybrid Monte Carlo Based Neural Network Approach, India,*Asia Oceania Geosciences Society(AOGS)* ,India, 5-9 July, 2010.

13. Gupta,G., Erram V., and **Maiti, S**., Geophysical Signatures of Hot Springs over Konkan Coastal Belt in Deccan Traps, Maharshtra, India,*Asia Oceania Geosciences Society(AOGS)* ,India, 5-9 July, 2010.

12. Gupta, G., Erram, V. C., Kumar, S., Kadam, B.D., and **Maiti, S.,** Occurrence and movement of groundwater in tectonically active Koyna region, Maharashtra, Presented at the National Conference on *Groundwater Resource Development and Management in hard rocks,* , University of Pune, Pune, February 12-13, 2010

11. Erram, V.C., Ghodake, V.R., Gupta, G., Sabale, S.M., Narayanpethkar, A.B., **Maiti, S**., and B.D. Kadam., Delineation of groundwater potential zones in the hard rock terrain of Deccan Volcanic province using electrical resistivity data, Presented at the National Conference on *Groundwater Resource Development and Management in hard rocks*, , University of Pune, Pune, February 12-13, 2010.

10. Gupta, G., Erram, V.C., and **Maiti, S.,**Geoelectric investigation of hot springs in western Maharashtra, Presented at the Conference on *Natural Resource Management for Sustainable Development* (NRMSD- 2010), , School of Environmental & Earth Sciences, North Maharashtra University, Jalgaon, February 1-2, 2010

9. **Maiti,** S., and Tiwari, R. K., Automatic detection of litho-Facies via the Hybrid Monte Carlo based Bayesian neural networks approach, 8 th Biennial International Conference & Exposition on Petroleum Geophysics,*Society of Petroleum Geophysicists(SPG)*, Hyderabad, 1-3 February,2010.

8. Sunil, P.S., **Maiti, S**., Reddy, C. D and Dhar, A.,Observation, Analysis and Prediction of Tidal Height/ effects on Nivlisen Ice Shelf, East Antarctica using GPS and Bayesian Neural Network Modeling Studies, National conference on *Climate Change during the Quarternary : Special Reference to Polar Regions and Southern Oceans*, Goa, 21-23 October, 2009

7. **Maiti, S**., and Tiwari, R.K., Bayesian Neural Network Approach for Forecasting of Temperature Profiles in the Western Himalaya, National conference on *Climate Change during the Quarternary : Special Reference to Polar Regions and Southern Oceans*, Goa, 21-23 October, 2009

6. **Maiti, S**., and Tiwari, R.K., Recent advances in neural networks: Application to geophysical well log data, Presented at 46th Annual Convention of *Indian Geophysical Union* Meeting, Wadia Institute of Himalayan Geology, Dehradun, October 5-7, 2009

5. **Maiti, S.,**Gupta,G., and Erram. V., Inversion of resistivity sounding data of Koyna region: A Hybrid Monte Carlo based neural network approach, Presented at 46th Annual Convention of *Indian Geophysical Union* Meeting, Wadia Institute of Himalayan Geology, Dehradun, October 5-7, 2009.

4. **Maiti, S.,**Neural Network Modeling of Geophysical Well Log Data: A Case Study from German Continental Deep Drilling Program (KTB) Site, *5 thKAGI21 International Summer School*, Japan, 21st August-3rd September 2009

3. **Maiti, S.,** and Tiwari R.K., Classification of Lithofacies Boundaries Using the KTB Borehole Data: A Bayesian Neural Network Modeling, 7 thBiennial International Conference & Exposition, *Society of Petroleum Geophysicists (SPG)*, Hyderabad, 14-16 January,2008.

2. **Maiti, S**., and Tiwari, R.K., Interpretation of gravity anomaly over symmetric sedimentary basin using Walsh Transforms techniques. Proceedings 5th Conference and Exposition on Petroleum Geophysics on "Geophysics: Leveraging Technologies for E&P Business", *Society of Petroleum Geophysicists (SPG),* Hyderabad, 2004.

1. **Maiti, S**., and Tiwari, R.K., An automatic method for detecting and analyzing geophysical signal using Walsh transform. Proceedings 40th Annual Convention and Meeting on "Sustainability Science and Environmental Geophysics",*Indian Geophysical Union*, University of Madras, Chennai, 2003.

PhD Awarded

8. Mr. Praven Kumar Gupta (17DR000543) [24/8/2017-17/10/2023]: *Data-driven techniques for enhanced modelling of aquifer parameters. Sole Guideship via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.17/10/2023,* Praveen now works for Coal India Limited. GOI

7. Mrs. Moumita Sengupta (17DP000261) [13/3/2017-17/10/2023]: *Development and application of rock physics techniques for geophysical mapping of the time-lapse elastic properties of reservoirs for CO_2 sequestration and EOR. Principal Guideship via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.17/10/2023,* Moumita now works for Crain India

6. Mrs. Sikha Rani Mondal (17DP000230) [9/2/2017-15-09-2023]: *An integrated approach of well log, seismic and rock physics modeling to delineate hydrocarbon prospects at the Gulf of Khambhat, Mumbai offshore*. *Principal Guideship via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.15/09/2023,* Sikha now works for DGH, GOI

5. Mr. Amit Kumar Ray (17DP000154) [03/08/2016-02/03/2023] *Enhanced seismic characterization of deltaic channel sands using attribute analysis and machine learning*. Amit now works for Telesto Energy; Sole Guideship, via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.17/03/2023

4. Mr. Ch. Ravi Kumar (2016DR1025)[24/07/2015-16/04/2022]:*Integrated Geophysical Studies for Deciphering Crustal Structure and Seismotectonics in parts of North Eastern Region, India.* Ravi now works for Geological Survey of India (GSI), GOI. *Principal Guideship via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.24/04/2022*

3. Ms.Mampi Karmakar, (2015DR0070)[17/04/2015-09/06/2020]: *Pore Pressure and Lithology Prediction using Machine Learning Techniques.* Mampi now works Halliburton Company *in Machine Learning and Data Science Group. Boroda. Principal Guideship, via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.20/06/2020*

2. Mrs.Anasuya Das (2013DR/0156)[24/07/2013-16/11/2018]: *Aquifer Characterisation in parts of Sindhudurg District, Maharashtra, India using Geo-electrical and Hydro-geochemical data.* Anasuya now works for Geological Survey of India (GSI), GOI. *Sole Guideship, via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.16/11/2018*

1. Mrs. Amrita Singh (2013DR0158) [24/07/2013-29/03/2017]: *Modelling of Discontinuous Geophysical Signal using Wavelet Transform.* Amrita now works at NGRI, Hyderabad as SERB Postdoc on Gas Hydrate exploration and geo-environmental problems. *Sole Guideship, via ref. no. Exam/219905/Ex.Bd./2007-08(Vol.III) dt.29/03/2017*

PhD Thesis Submitted

Mr. Anirban Biswas *(*18DR0028) [28-07-2018----------]: "*Lithospheric structure and mechanical strength variations over the Indo-Burma Subduction zone, Southeast Asia.* (with Dr. G.S.Rao, IIT Bombay)

PhD Ongoing

1. Ms. Surabhi Gupta (18DR0141)[28/7/2018---------]:*Fractured Rock Characterization using Neural Network Modelling of Geoelectrical Data.* Surabhi works for ONGC, PSU, Govt. of India
2. Ms. Goutami Das (20DR0048)[23/08/2020--------):*Deep Learning/ Machine Learning Applications to Reservoir Characterization.*
3. Mr. Anuj Kumar Srivastava (22DR0053)[08-08-2022]: *Reservoir parameter estimation via AI/ML*, Anuj works for CIL, PSU, Govt. of India
4. Ms. Pragati Chaurasia (22DR0175)[08-08-2022]: *Potential-field data analysis with deep learning*, Pragati works for GSI, Govt. of India
5. Mr. Aditya Raj (23DP0042) [22-12-2023…….]: Deep learning with Multi-Mineral System Prediction, Aditya works for GSI, Govt. of India
6. Mr. Subhra Kangsabanik (24DR0195)[27-06-2024……..]: AI/ML with Reservoir Studies

R&D Project

4. SERB DST sponsored Project No: DST(SERB)(216)/2018-2019/628/AGP **2019-2022**

Title: "Dyke intruded fractured rock characterization using discrete dual porosity and neural network modelling of geo-electrical data for water resource management"

Funding Agency: Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Govt. Of India

Status: Completed.

PI: Saumen Maiti, Co-PI: Nil

Sanctioned Amount: Rs. 26, 22,000/-

Sanctioned Letter No. CRG/2018/001368 dt. 26/02/2019

3. MoES sponsored Project No: MoES (7)/2015-2016/416/AGP **2015-2019**

Title: "Delineation of blind faults and its geometry around Kishanganj via Bayesian neural network inversion of gravity data"

Funding Agency: Ministry of Earth Science (MoES), Govt. of India

Status: Completed

PI: Saumen Maiti. Co-PI: Nil

Sanctioned Amount: Rs. 38, 56,700/-

Sanctioned Letter No. MoES/P.O./(Geosci)/44/2015 dt. 12/06/2015

2. TexMin sponsored Project No. TexMin/SEED/2021-2022/03/AGP **2021-2022**

Title : "Optimizing Exploration Drill Location with Existing Data using Artificial Intelligence"

PI: Saumen Maiti. Co-PI: Shalivahan, & U.K. Singh

Funding Agency: TexMin/ Department of Science and Technology (DST), Govt. Of India

Status: Completed

Sanctioned Letter No. PSF-IH-1Y-007 dt. 13/05/2021
Sanctioned Amount: Rs. 7,40,000/-

1. FRS Project No: FRS (49)/2013-2014/AGP **2014-2017**
Title: "Multi-valued function approximation using neural networks: application to geophysical well log data"
Funding Agency: ISM under FRS scheme
Status: Completed
PI: Saumen Maiti, Co-PI: Nil
Sanctioned Amount: Rs. 5.2 lakhs
Sanctioned Letter No. FRS(49)/2013-2014/AGP

Consultancy Project

2. Consultancy Project No. CONS/3694/2017-2018 **2017-2018**
Title "Hydrological Study of Ground Water in Bera Colliery, Bastacolla"
Funding Agency: Bharat Coking Coal Limited (BCCL)
CI: Sanjit. K. Pal, **Co-CI**: **Saumen Maiti,** Member: Saurabh Datta Gupta.
Status: Completed
Sanctioned Amount: Rs. 3.38 lakhs
Sanctioned Letter No.: CONS/3694/2017-2018 dt. 19/11/2017

1. Consultancy Project No. CONS/3807/2017-2018 **2017-2018**
Title "Hydrological Study at Pakri Barwardih Coal Mine to Delineate Water Saturated and Dry Formations". .
Funding Agency: Bharat Coking Coal Limited (BCCL)
CI: Sanjit. K. Pal, **Co-CI**: **Saumen Maiti**
Status: Completed
Sanctioned Amount: Rs. 10.00 lakhs
Sanctioned Letter No. CONS/3807/2017-2018 dt. 27/03/2018

Workshop/EDP Course/Short Term Course/Training

7. GIAN Course (Course ID: 2414024) [**No.: DRD/GIAN/COURSE/0163/2024-25]** **2024-2025**
Global Initiative of Academic Network (GIAN) course on **"*Inverse Methods and Machine Learning: Applications in Geosciences*" (Course ID: 2414024)"** June **23-27, 2025**, at **IIT(ISM), Dhanbad**.
Sanctioned Amount: Rs. 6.64 lakhs
https://www.linkedin.com/posts/gian-india_brochure-activity-7275402384711839747-vyFO/?utm_source=share&utm_medium=member_android

6. EDP Course (Hybrid) (No: EDP/7247/2024-25) **2024-2025**
EDP Course on the topic" ***Resource Parameter Estimation and Forecasting Using Skillful and Interpretable AI/ML of Geoscience Data***" was conducted during 8th July-12th July 2024 at at IIIF, IIT(ISM) Delhi Center, Okla, Phase 1, Delhi. (EDP No.: No EDP/7247/2024-25).
Speakers: Academic & Industry, *9*
Participants: More than 50!
CI: Saumen Maiti, Co-CI: Partha Pratim Mandal.
Funding Agency: ONGC, OIL, IOCL, Telesto Energy Pte. Ltd., Industry and/or Academic Participants Registration/Sponsorship.
Sanctioned Amount: Rs. 5.9 lakhs

5. Workshop (Physical) (No.: IIT(ISM)(Workshop)/2023-2024/45/AGP) **2023-2024**
Prof. Jagdeo Singh Memorial Lecture & Workshop on the topic" ***AI and Automation for Geophysical Exploration and Sustainable Resources Management***" was conducted on 5th November 2022 at GJLT, IIT(ISM) Dhanbad. (No.: IIT(ISM)(Workshop)/2023-2024/45/AGP).
Speakers: Academic & Industry,
Participants: More than 120!
CI: Saumen Maiti, CI: Saurabh Datta Gupta.
Funding Agency: Telesto Energy Pte. Ltd., Industry and/or Academic Participants Registration/Sponsorship.
Sanctioned Amount: Rs. 2.2 lakhs

4. Workshop (Online): **2021-2022**

Workshop conducted on "***Measurement, Computation and Deep Learning in Geosciences***" on August 18, 2021 5.00PM-8.30P.M.(IST)

Coordinator: Saumen Maiti, Co-Coordinator: G.S. Rao

Speakers:

Prof. Mrinal K Sen, Associate Director, Institute for Geophysics, Jackson School of Geosciences, The University of Texas at Austin delivered talk on "*Inverse Problems and Machine learning in Geosciences*"

Prof. Subhashis Mallick, The University of Wyoming, P.O. Box 3006 Laramie, Wyoming delivered talk on" *Geosciences and Changing Climate*"

Prof. Tapan Mukerji, Department of Energy Resources Engineering-Energy Resources Engineering, Stanford University delivered talk on "*Recent advances in Machine learning and Geophysics: Pitfalls and opportunities*"

Prof. Ramesh Singh, Department of Physics, Computational Science and Engineering, Schmid College of Science, Chapman University, Hashinger #219, One University Drive, Orange, CA 92866 delivered talk on "*Dynamic Nature of Earth Systems Using Broad Band Electromagnetic Waves"*

3. Webinar Series (Online): **2021-2022**

Webinar Series on the topic "**Imaging & Interrogating the Earth's Subsurface**" during December 15-16, 2021 & Time: 4:30-6:15 PM (IST).

Coordinator: Saumen Maiti

Speaker:

Prof. Andrew Curtis, University of Edinburgh, **U.K.** (https://blogs.ed.ac.uk/curtis/)

Talks with following details;

Talk 1: 1 hour 45 mins (with questions and a break in the middle)

Topic: *Bayesian imaging & interrogation, focusing on Monte Carlo methods*

https://www.youtube.com/watch?v=TRwfKwZb6UI

Talk 2: 1 hour 45 mins (with questions and a break in the middle)

Topic: *Bayesian imaging with uncertainty analysis, focusing on machine learning methods*.

https://www.youtube.com/watch?v=Lan5cdC0Z4M

Abstract: Inversion and machine learning methods have been used in a variety of contexts to image the interior of the Earth using data recorded on the surface. Far less attention has been paid to imaging uncertainties in those results - the range of other models that would also fit the data. This talk focuses on methods to image the family of *all* interior models that are consistent with the data within some class of model constraints imposed by parameterizations and prior information, and to constrain the Bayesian posterior probability density across that class of models. This allows us to answer geoscientific questions by interrogating the posterior distribution: an example will be shown where we infer the probability distribution of the volume of subsurface basins from seismic surface wave data, and provide an estimate of the optimal (least-biased) answer.

Bio-data: Andrew Curtis is Professor of Mathematical Geoscience at the University of Edinburgh. He originally studied Mathematics in Edinburgh, but converted to Geophysics during his D. Phil. (Ph. D.) in the University of Oxford where he modeled ground deformation due to earthquake rupture and used seismic tomography to image the structure beneath Tibet. He decided to focus on seismology and inverse theory, which led him to an industrial research position in Schlumberger Cambridge Research for 8 years, before moving back to the University of Edinburgh in 2005. Since 2010 he has run the industrially-funded research consortium, the Edinburgh Imaging Project, which focuses on imaging and uncertainty analysis. He first worked on machine learning during the first wave of neural networks' popularity in the 1990's, and never really stopped!

2. Short-Term Course under TEQIP-III **2020-2021**

Course Coordinator for conducting a 5-days short term course on the topic "***Artificial Intelligence and Applications in Geosciences***" sponsored by TEQIP-III, GOI, during 11-15th January, 2021.

1. Training (Online) Scientific Social Responsibility Policy (SSRP) (File No: CRG/2018/001368) **2020-2021**

A one day online training on the topic of "***Artificial Intelligence in Exploration Geosciences***" for the research scholar of other IITs/Central University/IIGM/DST Labs is conducted on 31/07/2020 under (SERB)/DST Scientific Social Responsibility Policy (SSRP) of the research and development (R&D) project entitled " ***Dyke intruded fractured rock characterization using discrete dual porosity and neural network modelling of geo-electrical data for water resource management***" (File No: CRG/2018/001368).

Funding Agency: SERB, Govt. of India

PI: Saumen Maiti

Sanctioned Amount: Rs. 0.7 lakhs

Invited Talk

- **Maiti, S**., 2024. Resource Characterization and Modelling using AI/ML, 47th Association of Exploration Geophysicists (AEG) Conference, on "*Geo-exploration for Critical Minerals and Precious Metals*" during 12-13 December 2024, Hyderabad, India,

- **Maiti,S.,** Clustering methods on Short Term Virtual Course on the topic "*Inversion and Machine Learning Applications for the Geoscience Data Analysis*" sponsored by MoES, GOI, 08-27th March, 2021 https://www.ngri.org.in/cms/skill-development.php

- **Maiti,S.,** Clustering using well logs on Short Term Virtual Course on the topic "*Inversion and Machine Learning Applications for the Geoscience Data Analysis*" sponsored by MoES, GOI, 08-27th March, 2021 https://www.ngri.org.in/cms/skill-development.php

- **Maiti, S.,** Data Driven Computational Learning Framework for Assessment of Groundwater: A Review of Potential Techniques. Diamond Jubilee National Conference on "*Emerging Trends in Geophysical Research for Make-in-India (ETGRMI)-2018*" March 9-11, 2018, at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004

- **Maiti, S.,** Artificial Neural Networks: Theory and Practices in Geophysical Data Analysis. In Short Term Training on "*Geophysical Software Practices for Subsurface Imaging*" sponsored by SERB, DST, GOI, New Delhi, December 12-17, 2016 at Department of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004.

- **Maiti, S.,** What does a geophysicist do? Training Programme on "*Basic Geophysical Techniques*" sponsored by DST, GOI, New Delhi, January 18-25, 2015 at Department of Applied Geophysics, Indian School of Mines, Dhanbad-826004.

- **Maiti, S.,** Advancement of neural network modeling: Insights for Earth Probing. 50th Annual Convention on "*Sustainability of Earth System-The Future Challenges*" *Indian Geophysical Union (IGU),* January 9-12, 2014, National Geophysical Research Institute (NGRI), Hyderabad-500007.

- **Maiti, S.,**Neural Network Modeling of Geophysical Well Log Data: A Case Study from German Continental Deep Drilling Program (KTB) Site, *5 thKAGI21 International Summer School*, Japan, 21st August-3rd September 2009

Appointments

- **Coordinator** of Executive Development Program (EDP) course on the topic" ***Resource Parameter Estimation and Forecasting Using Skillful and Interpretable AI/ML of Geoscience Data***", 8th -12th July 2024 at at IIIF, IIT(ISM) Delhi Center, Okla, Phase 1, Delhi. (No.: No EDP/7247/2024-25).
- **Member** of the Assessment Committee for regular staff/employee of CSIR-NGRI, Govt. of India, since 2024
- **Member** of the DFSC, Department of Applied Geophysics, IIT(ISM) Dhanbad-826004, since 2024
- **Panelist,** on the workshop on the topic "***Use of Emerging Technologies for Mineral Exploration*** "organised by Southern Region, Geological Survey of India, Hyderabad on 22nd December 2023.
- **Convener** of Prof. Jagdeo Singh Memorial Lecture & Workshop on the topic" ***AI and Automation for Geophysical Exploration and Sustainable Resources Management***", 5th November 2022 at GJLT, IIT(ISM) Dhanbad (No.: IIT(ISM)(Workshop)/2023-2024/45/AGP).
- **Convener** of Webinar Series on the topic "**Imaging & Interrogating the Earth's Subsurface**" during December 15-16, 2021 & Time: 4:30-6:15 PM (IST).
- **Convener** for the workshop conducted on "***Measurement, Computation and Deep Learning in Geosciences***" on August 18, 2021 5.00PM-8.30P.M.(IST)
- **Panelist,** on the Theme "***Inversion and Machine Learning Techniques for Geophysical Data***" of the **VAIBHAV Summit**, session V13H4S2 by Govt. of India, on 17th Oct 2020, https://vaibhav.gov.in/v11.php
- **Convener**, DUGC, Department of Appl. Geophysics, IIT(ISM) Dhanbad since 5/10/2020

- **Convener** of a session on "Quantification and Modelling of Nonlinear Processes in Climate Change and Extreme Events" under the main theme of "Quantification of Non-linear Geological Processes" at *36th International Geological Congress (IGC)*, 2020(to be re-scheduled!), New Delhi, India http://www.36igc.org/theme41.php.
- **Organizing Secretary** of Diamond Jubilee National Conference on the Topic "Emerging Trends in Geophysical Research for Make-in-India (ETGRMI-2018), organized by Department of Applied Geophysics, IIT(ISM) Dhanbad-826004 during March 9-11, 2018 at IIT(ISM) Dhanbad-826004
- **Co-convener** of a session on "Critical Phenomena in the Earth's System Processes: Applications of Fractal, Chaos and Catastrophe Theory" at AOGS conference, Hyderabad, 5th - 9th July, 2010. http://www.asiaoceania.org/society/public.asp?view=aogs2010/listBySectionSessions

Professional Affiliation

Indian Geophysical Union (IGU), Hyderabad (Life Member)
Society of Exploration Geophysicists (SEG), USA (Member)

Reviewers of Journals

- *Geophysical Prospecting*: Wiley Publisher
- *Computational Geosciences*: Springer Publisher
- *Neural Computing and Application*: Springer Publisher
- *Geophysical Journal International*: Wiley Publisher
- *Journal of Geophysical Research-Solid Earth*, Wiley Publisher
- *Journal of Earth System Science*: Springer Publisher
- *Journal of Hydrology*: Elsevier Publisher
- *Journal of the Geological Society of India*: Springer Publisher
- *Earth Interactions*: American Geophysical Union Publisher
- *International Journal of Electrical Power and Energy Systems*: Elsevier Publisher
- *CLEAN - Soil, Air, Water*: Wiley Publisher
- *Geophysics*: SEG, US
- *Science of the Total Environment:* Elsevier Publisher
- *Measurement:* Elsevier Publisher
- *Neural Processing Letters:* Springer Publisher
- *IEEE Access*: IEEE Publisher
- *Journal of Applied Geophysics*: Elsevier Publisher
- *Transport in Porous Media:* Springer Publisher
- *Transport in Porous Media:* Springer Publisher
- *IEEE Transactions on Neural Networks and Learning Systems:* IEEE Publisher
- *Journal of Natural Gas Science and Engineering:* Elsevier Publisher
- *Advanced Engineering Informatics*: Elsevier Publisher
- *Arabian Journal of Geosciences:* Springer Publisher
- *Neurocomputing:* Elsevier Publisher
- *Earth Science Informatics:* Springer Publisher
- *Geomechanics and Geophysics for Geo-Energy and Geo-Resources*: Springer Publisher
- *Scientific Reports:* Springe *Nature* Publisher,

Personal Information

- Nationality : Indian.
- Date of birth : November 14, 1978.
- Place of birth : Contai, West Bengal, India.
- Marital Status : Married.
- Language : Fluent English spoken / written, Hindi, Bengali.
- Hobbies : Playing Carom, Cricket, Football, Reading Articles.

Last updated: 31/01/2025