List of Publications, abstracts, reports, and specialized courses:

<u>Publications in SCI journals</u>:

- 1. Goswami, A., Mohanty, S. P., Sarangi, S., Das, S., Mohanty, D., Barik, A(2025) Ocean paleo-redox condition during early Lomagundi-Jatuli event: records from major and trace element proxies in carbonate rocks of the Aravalli Supergroup, India. International Journal of Earth Sciences (under revision).
- 2. Sarangi, S., Das, S., Debnath, R.,(2023) Study of REE potential in the lamprophyre dykes, Lower Gondwana Coal Fields, parts of eastern India. Goldschmidt 2023 Abstract https://doi.org/10.7185/gold2023.15482.
- Goswami , A., Sarangi, S., Mohanty,S. P., Patil, D.J., Sarkar,A.,Ray, J.S.,Das,S., Mohanty, D., S. Ahmad, M., Pradhan, R.M., Barik,A.,(2023) Negative δ¹³C_{carb} excursions within early part of the Lomagundi event recorded in the Paleoproterozoic sedimentary carbonates, Aravalli Supergroup, Rajasthan India: Chemostratigraphy and basin evolution. Precambrian Research, V. 309, pp.107240. <u>https://doi.org/10.1016/j.precamres.2023.107240 Q-1</u>
- Maurya, Rai. S., Sharma,S.K., C.P., Rawat, S., Chandana, K.R., Dhabi, A., Bhushan, R., Sarangi, S., (2022) Paleo-vegetation and climate variability during the last three millennia in the Ladakh, Himalaya. CATENA, V.217, 106500. Q-1.
- 5. Maurya, S, Ghosh, R., Sehgal, R.K., Srivastava, P., Shukla, U/K., Singh, A.K., **Sarangi, S. (2022)** Stable Isotopic studies of the herbivorous mammals from the Marginal Ganga Plain, India: implication for the palaeo-environmental reconstruction. **Geological Journal**. 1–14, DOI: 10.1002/gj.4522 Q-3.
- Das, S., Rai, S.K., Rahaman, W., Singhla, S, Sarangi, S (2021) Chemical weathering and Sr flux from the silicate lithology dominated fluvial system: Insights from major ions, dissolved Sr and ⁸⁷Sr/⁸⁶Sr of the Teesta headwaters, Sikkim Himalaya. Applied Geochemistry, V. 137, pp. 105171 (accepted).Q-3
- Monika S., Sarangi, S., Srinivasan, R, Balakrishnan, S, Hegde V. S., (2021). Zircon SHRIMP U–Pb geochronology, geochemical and Nd isotope systematics of Neoarchean granitoids, Gadag Greenstone Belt, Dharwar Craton, southern India: Petrogenesis and tectonic significance. Journal of Earth System Science (In press) DOI: <u>https://doi.org/10.1007/s12040-021-01580-8</u>. Q-4.
- Das, S., Tripathy, G. R., Rai, S. K., Danish, Md., Thakur, D., Dutt, S., Sarangi, S (2021). The Role of Sulfuric Acid in Continental Weathering: Insights From Dissolved Major Ions and Inorganic Carbon Isotopes of the Teesta River, Lower Brahmaputra System. Geochemistry, Geophysics, Geosystems. https://doi.org/10.1029/2020GC009324. Q-2.
- Arif, Md. Dey, S., Gond, A. K., Zong, K., Liu, Y., Mitra, A. , Mitra, A., Sarangi, S (2021) Mesoarchean continental intraplate volcanism and sedimentation: The case of the Simlipal basin, Singhbhum Craton, eastern India. Precambrian Research. <u>https://doi.org/10.1016/j.precamres.2021.106245</u>. Q-1.
- R.S.Ahluwalia, S.P. Rai, P.N. Meetei, S. Kumar, S. Sarangi (2021) <u>Spatial-diurnal variability of snow/glacier</u> melt runoff in glacier regime river valley: Central Himalaya, India. Quaternary International, <u>V. 585</u>, pp.183-194. <u>https://doi.org/10.1016/j.quaint.2021.01.003</u> Q-3
- Meetei, P.N., Ahluwalia, R. S., Rai, S.P., Khobragade, S., Sarangi, S., Goel, M., Kumar, S (2020). Spatiotemporal analysis of snow cover and effect of terrain attributes in the Upper Ganga River Basin, central Himalaya. Geocarto International, DOI: 10.1080/10106049.2020.1762764. Q-1
- Kesarwani, M., Sarangi S., Srinivasan R., George BG, Singh SK, Bhattacharya S, Vasudev VN(2019). Origin of granodiorite hosted Neoarchaean orogenic gold ore deposits: Stable isotopic and geochemical constraints with example from the Dharwar craton, southern India. Ore Geology Review V. 107, pp 754-779. <u>https://doi.org/10.1016/j.oregeorev.2019.03.001</u> Q-1.
- **13.** Swain S.K., **Sarangi S.**, Srinivasan R., Sarkar A., Kesarwani M, Mazumdar A., Satyanarayanan M. (**2018**) Stable isotope (C-O-S) and geochemical studies of auriferous quartz carbonate veins, Neoarchaean orogenic Ajjanahalli and Gadag Gold Field, Chitradurga schist belt, Dharwar Craton, southern India: Implication for the source of gold mineralizing fluids. **Ore Geology Review V.95, pp 456-479. Q-1**.
- Sarangi S., Mohanty S P., Barik A. (2017) Rare earth element characteristics of Paleoproterozoic cap carbonates pertaining to the Sausar Group, Central India: Implications for ocean paleoredox condition. Journal of Asian Earth Sciences V. 148, pp. 31–50. Q-2.
- 15. Sinha H.N., Preety Kumari, Rai Priti, Mohanty D., **Sarangi S. (2017)** The petroleum potential of the Arangi and Kajrahat Limestone formations from the Semri Group, Chopan, Uttar Pradesh, India Geo Res J V.13 pp.59-65.
- 16. Swain SK, Sarangi S, Srinivasan R, Sarkar A, Bhattacharya S, Patel SC, Pasayat RM, Sawkar RH (2015), Isotope (C and O) composition of auriferous quartz carbonate veins, Central Lode System, Gadag Gold Field, Dharwar Craton, India: Implications to source of ore fluids. Ore Geology Review, V 70, 305-320. Q-1.

- Mohanty SP, Barik A, Sarangi S, Sarkar A (2015) Carbon and oxygen isotope systematics of a Paleoproterozoic cap-carbonate sequence from the Sausar Group, Central India. Palaeogeography, Palaeoclimatology, Palaeoecology (Reply to comments, in press), V.438, pp 425-427 Q-2.
- 18. Mohanty SP, Barik A, Sarangi S, Sarkar A (2015) Carbon and oxygen isotope systematics of a Paleoproterozoic cap-carbonate sequence from the Sausar Group, Central India. Palaeogeography, Palaeoclimatology, Palaeoecology 417 (2015) 195–209. Q-2.
- 19. Sarangi S, Srinivasan R, Balaram V(2013) REE characteristics of Auriferous Quartz Veins of Archaean Orogenic gold deposits, Chitradurga Schist Belt, Dharwar Craton. Geoscience Frontiers V.4, pp 231-239. Q-1.
- Sarangi, S, Sarkar, A, Srinivasan, R. and Patel, S.C. (2012) Carbon Isotope studies of auriferous Quartz Carbonate Veins from two Orogenic gold deposits from the Neoarchean Chitradurga Schist Belt, Dharwar Craton, India: evidence for mantle /magmatic source of auriferous fluid. Journal of Asian Earth Sciences V. 52 pp. 1–11. Q-2.
- Sarangi S, Gopalan K and Srinivasan R (2007) Pb-Pb isochron from single small samples of marble from the Sargur Supracrustal rocks, Dharwar craton, Southern India. Precambrian Research, V.152, No 1-2,pp.83-91. Q-1.
- 22. Sarangi S, Srinivas B, Das Sharma S, Gopalan K and Roy AB (2006). Pb-Pb age of Jhamarakotra Formation: constraints on the Age of Aravalli Supergroup, Rajasthan. Journal of the Geological Society of India, V.67, pp.442-446. Q-4
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- 24. Sarkar A, Sarangi S, Ray AK and Bhattacharya SK (2004) Carbon isotopes studies across the Eocene-Oligocene boundary sequence of Kutch, Western India: Implications to ocean productivity and pCO₂ change Geophysical Research Letters. V.30, No11, pp.42.1-42.4. Q-1
- 25. Sarkar A, Sarangi S, Sarin MM, Ebihara M, Bhattacharya SK and Ray AK (2004). Carbonate geochemistry across the Eocene-Oligocene boundary of Kutch, Western India: Implications to oceanic anoxia and foraminiferal extinction. Chemical Geology, V.201, pp.281-293. Q-1.
- 26. Sarangi S, Sarkar A, Sarin MM, Bhattacharya SK, Ebihara M and Ray AK (2001) Growth rate and life span of Eocene-Oligocene *Nummulites* tests: inferences from Sr/Ca ratio. Terra Nova.,V.13, No.4, pp.264-269. Q-1.
- 27. Sarangi S, Sarkar A, Bhattacharya SK and Ray AK (1998) Isotopic evidence of a rapid cooling and continuous sedimentation across the Eocene-Oligocene Boundary of Wagapadhar and Waior, Kutch. Journal of the Geological Society of India., V. 59,pp.245-248. Q-4
- 28. Sarangi S and Mohanty S (1998) Structural patterns around the Chhotanagpur Gneissic Complex near Gomoh, Dhanbad District, Bihar. Indian Journal of Geology, V.70, pp.73-80.

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- Sarangi, S, Sarkar, A, Balaram, V and Srinivasan, R. (2011) Low oxygen fugacity mantle derived auriferous fluids for Archaean Orogenic gold deposit of Ajjanahalli, Chitradurga Schist belt, Dharwar Craton, India. Mineralogical Magazine, V. 75(3), p. 1798. Q-2
- 2. S Sarangi, S, Sarkar, A, Srinivasan, R. and Patel, S.C. (2010) Magma/Mantle origin for auriferous CO₂ rich fluids at the Archaean lode gold deposit of G.R.Halli, Chitradurga greenstone belt, southern India. Geochimica et Cosmochimica Acta, V.74, A910. Q-1
- 3. S Sarangi, S, Sarkar, A, Srinivasan, R. and Patel, S.C. (2009) Mantle origin for auriferous CO₂ rich fluids at the Archaean lode gold deposit of Ajjenahalli, Chitradurga greenstone belt, southern India Geochimica et Cosmochimica Acta, V, 73, A1158. Q-1
- Goplalan K, Sarangi S, and Kumar S (2002) Pb-Pb age of earliest megascopic, eukaryotic algae bearing Vindhyan sediments, India. Geochimica et Cosmochimica Acta, V, 66, Issue 15A, pp. A168. Q-1

Abstracts and presentations in International Seminars/Conferences:

- Manisha Kesarwani, S.Sarangi, B.G.George, J.S.Ray, R.Srinivasan, V.N.Vasudev (2017) C and O isotope geochemistry of auriferous Quartz Carbonate Veins of Jonnagiri Gold Deposit, Eastern Dharwar Craton, southern India: Implication for source of mineralizing fluids in granodiorite hosted gold deposits. *Goldschmidt Abstracts*, 1920.
- Singh M, Sarangi S, George BG, Ray JS, Sawkar RH (2017) C and O Isotope Systematics of Auriferous Quartz Carbonate Veins, Western Lode Systems, Archaean Gadag Gold Field, Dharwar Craton, India: Implication to the Source of Mineralizing Fluids for Orogenic Gold Deposits *Goldschmidt Abstracts*, 3663.
- 3. Sarangi S, Swain SK, Srinivasan R, Sarkar A, Majumadr A and Satyanarayanan M (2017) Isotope (C-O-S) and Geochemical Evidence of Juvenile Origin for the Neoarchaean Orogenic Gold Deposits at Ajjanahalli and Gadag Gold Field, Chitradurga Schist Belt, Dharwar Craton, India. *Goldschmidt Abstracts*, 3509.
- Sagar SKS, Sarangi S, Srinivassan RS, Anindya AS, Aninda AM Mantle/Juvenile Magmatic Source for Auriferous Ore Fluids of Hutti Gold Deposit, Hutti-Maski Greenstone Belt, Southern India: Evidence from C, O, S Isotopic Systematics *Goldschmidt Abstracts*, 3458
- **5. S. Sarangi,** R. Srinivasan, D. Behera, S.K.Swain, V.S. Hegde, Allen Nutman A (**2016**) critique of sutured cratonic blocks in the Archean Dharwar craton of southern India Goldschmidt Conference Abstracts pp.2998.
- S.K.Swain, S.Sarangi, R.Srinivasan, A.Sarkar, A.Mazumdar, M.Satyanarayanan (2016) Stable isotope (C-O-S) and REE study of BIF hosted Ganajur gold deposit, Neoarchean Dharwar craton, India: Evidence for Mantle/Magmatic source of mineralizing fluid Goldschmidt Conference Abstracts pp.2683
- 7. Swain SK, Sarangi S, Sarkar A, Patel SC, Srinivasan R, Sawkar RH (2013) $\delta^{13}C_{CO2}$ and $\delta^{18}O_{H2O}$ composition of fluids calculated from carbonate $\delta^{13}C_{pdb}$ and $\delta^{18}O_{smow}$ data of quartz carbonate veins of Gadag gold deposits, Chitradurga Schist Belts: Implication to the source of auriferous fluids. In Abstract volume "Annual General Meeting of the Geological Society of India and International Conference on "Future challenges in Earth Sciences for Energy and Mineral Resources (ESEMR 2013).
- Kesrwani Manisha, Singh Monica, Sarangi S. (2013) REE geochemistry of auriferous Quartz Carbonate Veins, from Neoarchean orogenic deposits, G.R.Halli, Chitradurga Schist Belt: Implication to source of ore fluids. In Abstract volume "Annual General Meeting of the Geological Society of India and International Conference on "Future challenges in Earth Sciences for Energy and Mineral Resources (ESEMR 2013).
- 9. Singh Monica, Kesrwani Manisha, **Sarangi S. (2013)** REE geochemistry of Chalybite dyke and Carbonate Alteration area, G.R.Gold Deposits, Chitradurga Schist Belt: Implication to source of ore fluids. In Abstract volume "Annual General Meeting of the Geological Society of India and International Conference on "Future challenges in Earth Sciences for Energy and Mineral Resources (ESEMR 2013).
- Sarangi, S, Sarkar A, Balaram, V and Srinivasan, R (2011) Low oxygen fugacity mantle derived auriferous fluids for Archaean Orogenic gold deposit of Ajjanahalli, Chitradurga Schist belt, Dharwar Craton, India. Presented orally at Gioldschmidt International Conference held at Prague, Czech Republic on 18 Aug-2011.
- 11. Sarangi, S, Sarkar, A, Srinivasan, R and Patel, SC (2011) Mantle/Magmatic source of auriferous fluids for Orogenic gold deposits at Ajjanahalli And Guddadarangavvanahalli,

Dharwar Craton, India: based on Carbon And Oxygen Isotope Studies Of Carbonates. Presented at Indian Geological Congress meeting, Indian School of Mines, Dhanbad.

- Sarangi, S, Sarkar, A, Srinivasan, R and Patel, SC (2010) Stable isotope data evidence for a mantle/magma origin of chalybite dyke and auriferous fluids, Archaean Orogenic gold deposit of G.R..Halli, Dharwar craton, southern India. In abstract volume of 7th Annual meeting of Asia Oceania Geosience Society, held at Hyderabad. International convention centre, 5-9July 2010 (Presented orally).
- 14. **Sarangi, S**, Sarkar, A, **Srinivasan. R**, Balaram, V. (2011). REE patterns of carbonate facies BIF, Ajjanahalli gold deposit, Chitradurga Schist Belt, Dharwar Craton: Implication to environment of deposition of Archaean BIFS. Presented at Annual General Meeting of **JGSI**.
- 15. **Sarangi S and Sarkar A (2010)** Geochemical and stable isotope evidence of an anoxic marine depositional condition during late eocene-early oligocene transition period in kutch, western india: implications to hydrocarbon exploration. Abstract presented in Geological and Technological Facets of CBM, Shale Gas, Energy Resources and CO₂ Sequestration (CSESC) conference organized by Dept of Applied Geology held at Indian School of Mines, Dhanbad.
- 16. Sarangi S, Sarkar A, Srinivasan R, Patel SC (2010) Stable isotope data evidence for a mantle/magma origin of chalybite dyke and auriferous fluids, Archaean Orogenic gold deposit of G.R..Halli, Dharwar craton, southern India. In abstract volume of 7th Annual meeting of Asia Oceania Geosience Society, held at Hyderabad. International convention centre, 5-9July 2010 (Presented orally).
- 17. Sarangi S, Tripathy AK, Kumar A, Samantray R, Reddy TG and Reddy KVS (2008) Peninsular Gneissic Complex Or Peninsular Granitoids? Results of mapping carried out around Madanapalle, South of Veligallu Schist Belt, Chittoor district, Andhra Pradesh. National Seminar on Crustal Evolution and Associated Mineralisation, Bangalore University, Dec 3-5.
- Sarangi S, Tripathy AK., Kumar A and Reddy GT (2006) Specialized Thematic Mapping of the Granite-Greenstone Terrain south of Veligallu Schist Belt, Andhra Pradesh. Rec. Geol. Surv. Ind. Vol. 139, PT.-5, pp. 7-9.
- 19. Sarangi, S., Goplalan K and Kumar S (2003). Pb-Pb dating of Marbles from Sargur Supergroup, implication for Archaean Metamorphism, ISMAS Symposium, held at National Institute of Oceanography, Goa. (Presented orally).
- 20. **Sarangi S** and Gopalan K (**2001**). Direct dating of Lower Vindhyan Carbonates by Lead –Lead method. Abstracts in the 38th Annual Convention and meeting on Natural Hazards and Management of Role of Earth System Scientists. IGU2001.
- 21. **Sarangi,S.**, Sarkar,A.,Ray A,K.,Bhattachary,S.K., and Hansen,H.J.,**1999**. 'Rapid change in atmospheric pCO₂ across the Eocene-Oligocene boundary: organic carbon isotope evidence from Kutch Palaeogene sequence' **ISMAS Symposium**, held at Hyderabad (Presented as poster).
- 22. Sarkar, A., Ray, A. K., and Sarangi, S., 1999. 'Warm early Paleogene tropical shoreline: stable isotope and faunal evidence from Kutch, Western India'. (Abstract in the International Meeting on Early Paleogene Warm Climates and Biosphere Dynamics' Gotenberg University, Sweden. (oral presentation by Dr.Sarkar).
- 23. Sarangi, S., Sarkar, A., Bhattacharya, S. K., and Ray, A.K., 1997. 'Low latitude cooling across Eocene-Oligocene Boundary: Oxygen isotope evidence from Kutch Palaeogene in the sequence' International Conference on Isotopes In The Solar System, held at Physical

Research Laboratory Ahmedabad. (Presented by poster at PRL and MS University, Vadodara).

- 24. Sarkar, A., Sarangi. S., Bhattacharya, S.K., Ozaki, H., Ebihara, M., 1997. 'Eustatic change, annoxia and Foraminiferal extinction across the Eocene- Oligocene Boundary of Kutch, Gujrat: Evidences from REE Geochemistry and Carbon isotopes'. International Conference on Isotopes in the Solar System, held at Physical Research Laboratory, Ahmedabad. (Presented as poster)
- 25. Sarangi. S. And Sarkar, A., 1996. 'Stable Isotope evidence of a catastrophic climatic change across the Eocene –Oligocene Boundary of Kutch, Golden Jubilee Conference on Physical and. Biological Changes Across Major Geological Boundaries held at Birbal Sahni Institute of Palaeobotany, Lucknow. (Presented as poster).

Reports (unpublished):

- **1.** S.Sarangi and R.Hanumantha (2009) Report on Study of role and origin of CO₂ and SO₂ via C,O, and S-isotope studies in Archaean greenstone gold deposit of Ajjanahalli and Sangli mine of Chitradurga Schsit Belt, Karnataka. Draft progress report submitted to the Petrology, Petrochemistry, and Ore Dressing Laboratory, Airborne Mineral survey and Exploration Wing, Geological Survey of India, Bangalore.
- 2. Sarangi S, Samantharay, R and Reddy KVS (2008) Report on Specialized Tthematic Mapping of the Granite-Greenstone Terrain south of Veligallu Schist Belt, Chittoor Districts, Andhra Pradesh. Progress report of the Geological Survey of India, for the FS 2005-2006.
- **3.** Sarangi S, Tripathy AK.,Kumar A and Reddy GT (2006) Report on Specialized Thematic Mapping of the Granite-Greenstone Terrain south of Veligallu Schist Belt, Chittoor Districts, Andhra Pradesh. Progress report of Geological Survey of India, for the FS 2004-2005.

IV. Specialized courses attended:

- (i) Specialised training on petrographic techniques organized by GSITI in September 2005. Geological mapping in the sedimentary terrain of Lower Gondwana coal field around West Bokaro coal field at Kuju, Hazaribagh, organized by-Geological Survey of India Training Institute of Kuju; Sponsored by Department of Science and Technology, from 29.10.95 to 25.11.95.
- (ii) **Contact course on Isotope Geochemistry**: Organised by Physical Research Laboratory, Ahmedabad; Sponsored by Department of Science and Technology, from 14th to 22nd July, 1997.
- (iii) 26th Orientation Courses for Geologists organized by GSITI of Geological Survey of India from Nov 2003 to August 2004.