

REFERENCES

- Agarwal, G.C. (1986). Structures and tectonics of exposed tertiary rocks between Narmada and Kim rivers in South Gujarat. Jour. Geol. Soc. Ind., v. 27, pp.531-542.
- Ahmed, F.(1986) Geological evidence bearing on the origin of the Rajasthan Desert.Proc.Ind.Natn.sci.Acad., v. 52, A, No.6, pp.1285-1306.
- Allchin, B., Goudie, A., and Hegde, K.T.M. (1978) The prehistorical palaeogeography of the Great Indian Desert. Academic Press, London, 370p.
- Allen, C.R.(1975). Geological criteria for evaluating seismicity. Geol. Soc. Am. Bull., v. 86, pp.1041-1057.
- Allen, G.P. and Posamentier, H.W. (1993) Sequence stratigraphy and facies model of an incised valley fill : The Gironde estuary, France. Jour. Sed. Pet., v. 63, pp. 378-391.
- Allen, J.R.L. (1984). Sedimentary structures, their character and physical basis; Elsevier, 325p.
- Allen, J.R.L. and Banks, N.L. (1972). An interpretation and analysis of recumbent folded deformed cross-bedding; Sedimentology, v. 19, pp.257-283.
- Arora, B.R. and Reddy, C.D. (1991). Magnetovariational study over a seismically active area in the Deccan trap province of western India. Phy. Earth and planet. Inter., v. 66, pp.118-131.
- Bedi, N. (1978) Geomorphology of Mahi river basin in Gujarat, India. Proc.Symp.on Morphology and Evolution of landforms, (eds.Verma,V.K. ,Tandon,S.K. and Kumar, R.) pp. 26-40.
- Bedi, N. And Vaidhyanadhan, R. (1982). Effect of neotectonics on the morphology of Narmada river in Gujarat, Western India, Z.F. Geomorphologie, v. 26, pp.87-102.
- Bhandari, N., Gupta, S.K., Sharma, P., Sagar, P., Ayachit, V. And Desai, B.T. (1986) Hydrological investigations in Sabarmati and Mahi basins and coastal Saurashtra using radioisotope and chemical tracers. Nat . Inst. Hydrol., Roorkee.
- Biswas, S.K. (1982). Rift basins in western margin of India and their hydrocarbon prospects with special reference to Kutch Basin. Amer. Assoc. Petrol. Geol., v. 10, pp.1497-1513.

- Biswas, S.K. (1987). Regional tectonic framework, structure and evolution of western marginal basins of India, *Tectonophysics*, v. 135, pp. 307-327.
- Biswas, SK. and Desapande, S.V. (1983) Geology and hydrocarbon prospects of Kutch, Saurashtra and Narmada basin. *Pet. Asia Jour.*, v. 6, pp. 111-126.
- Blanford, W.T. (1869) Geology of Taptee and lower Narmada valleys and some adjoining districts. *Mem. G.S.I.*, 6 Pt.3.
- Bose, M.K. (1980). Magnetically defined tectonic framework of the Deccan volcanic province. *Neues. Mineral. Jb.*, v. 8, pp. 373-384.
- Burke, K. and Dewey, J.F. (1973). Plume generated triple junctions: key indicators in applying plate tectonics to old rocks. *J. Geol.*, v. 81, pp. 406-433.
- Bull, W.B. (1990) Stream-terrace genesis : Implications for soil development. *Geomorphology*, v. 3, pp. 351-367.
- Chadha, R.K. (1992) Geological contacts, thermal springs and earthquakes in Peninsular India. *Tectonophysics*, v. 213, pp. 367-374.
- Chamyal, L.S. and Merh, S.S. (1992). Sequence stratigraphy of the surface Quaternary deposits in the semi-arid basins of Gujarat. *Man and Environ.*, v. 27, pp. 33-40.
- Chamyal, L.S. and Merh, S.S. (1995). The Quaternary Formations of Gujarat. *Mem. Geol. Soc. Ind.*, No. 32, pp. 246-257.
- Chamyal, L.S., Khadkikar, A.S., Malik, J.N. and Maurya, D.M. (1997). Sedimentology of the Narmada Alluvial Fan, Western India. *Sed. Geol.*, v. 109, pp. 263-279
- Chappell, J. And Shackleton, N.J. (1986) Oxygen isotopes and sea level. *Nature*, v. 324, pp. 137-140.
- Choubey, V.D. (1971). Narmada-Son lineament, India. *Nature*, v.2332, pp. 38-40.
- Coulson, A.L. (1933). The geology of Sirohi state, Rajasthan. *Mem. Geol. Soc. Ind.*, v. 53, 220p.
- Chorley, R.J. (1967) Models in geomorphology. In : Chorley, R.J. and Hagett. P. (Eds) *Models in geography*. Methuen, pp. 59-96.
- Courtillot, V.E. and Ciswoski, S. (1987) The cretaceous-Tertiary boundary events, external or internal causes? *EOS, Trans. Amer. Geophys. Un.*, v. 68, pp. 193-200.

- Das, B and Patel, N.P. (1983) Nature of Narmada-Son lineament, India. Jour. Geol. Soc. Ind., v. 25, pp. 267-276.
- Foot, R.B. (1998). The geology of Baroda State. Baroda State Press, 1-122.
- Gazetteer of Kheda District (1974) Government of Gujarat.
- Gupta, H.K., Indra Mohan and Hari Narain (1972). The Broach earthquake of March 23, 1970. Bull. Seis. Soc. Amer., v. 62, pp. 47-61.
- Gupta, H.K., Chadha, R.K., Rao, M.N., Narayna, B.L., Mandal, P., Ravikumar, M. and Kumar, N. (1997). The Jabalpur earthquake of May 22, 1997. Jour. Geol. Soc. Ind., v. 50, pp. 85-91.
- Gupta, B.C. and Mukherjee, P.N. (1938). Geology of Gujarat and Southern Rajputana, Rec. Geol. Surv. Ind. 73, pp. 163-208.
- Gupta, M.L. (1970) Terrestrial heat flow and tectonics of Cambay basin, Gujarat. Tectonophysics, v. 9, pp. 147-163.
- Gupta, M.L. and Gaur, V.K. (1984) Surface heat flow and probable evolution of Deccan volcanism. Tectonophysics, v. 105, pp. 309-318.
- Gupta, M.L., Sharma, S.R. and Sundra, A. (1989) Heat flow map of India. (Unpublished).
- Hashimi, N.H., Nigam, R., Nair, R. R. And Rajgopalan, G. (1995) Holocene sea level fluctuations on western Indian continental margin : An update. Jour. Geol. Soc. Ind., v. 46, pp. 157-162.
- Heron, A.M. and Ghosh, P.K. (1938) The geology of Palanpur, danta and parts of Idar states., Rec. Geol. Surv. Ind., 72, pp. 369-411.
- Hubert, J.F., Butera, J.G, and Rice, R.F. (1972) Sedimentology of Upper Cretaceous Coccy-Parkman delta, southwestern Parden river. Bull. Geol. Soc. Amer., v. 83, pp. 1649-1670.
- Joshi, D.D., Dharman, R., Saxena, A.K., and Mulkraj (1997). Jaisalmer Earthquake of 1991; its effects and tectonic implications. Jour. Geol. Soc. Ind., v. 49, pp. 433-436.
- Kaila, K.L., Krishna, V.G. and Mall, D. (1981) Crustal structure along Mehmabad-Billimora profile in the Cambay basin, India from deep seismic soundings. Tectonophysics, v. 76, pp. 99-130.

- Kaila, K.L., Tewari, H.C., Krishna, V.G., Dixit, M.M., Sarkar, D. And Reddy, M.S. (1990) Deep seismic sounding studies in the north Cambay and Sanchor basins, India. *Geophys. J. Int.*, v. 103, pp. 621-637.
- Kaila, K.L., Krishna, V.G. and Mall, D.M. (1981a) Crustal structure along Mehmabad-Billimora profile in the Cambay basin, India, from deep seismic soundings, *Tectonophysics*, v. 76, pp. 99-130.
- Kaila, K.L., Tewari, H.C. and Krishna, V.G. (1981b) An indirect seismic method for determining the thickness of the low velocity layer underlying a high velocity layer. *Geophysics. J.*, v. 46, pp. 1003-1006.
- Kaila, K.L., Tewari, H.C., Krishna, V.G., Dixit, M.M. Sarkar, D. and Reddy, M.S. (1990) Deep Seismic sounding studies in the north Cambay and Sanchor basins, India. *Geophys. Jour. Int.*, v. 103, pp. 621-637.
- Kailasam, L.N., Murthy, B.G.K. and Chayanulu, A.V.S.R., 1972. Regional gravity studies of the Deccan trap areas of peninsular India. *Curr. Sci.*, v. 41, pp. 403-407.
- Kailasam, L.N. and Quereshi, M.N. (1964) On some anomalous Bouger gravity anomalies in India. In *Advancing frontiers in Geology and Geophysics* (Subramanam, A.P. and Balakrishna S. (Eds). pp. 135-146.
- Kale, V.S. and Rajaguru, S. N. (1985) Neogene and Quaternary transgressional and regressional history of the west coast of India : An overview. *Bull. Decc. Coll. Postgrad. Res. Inst.*, v. 44, pp. 153-167.
- Khadkikar, A.S., Chamyal, L.S., Malik, J.N., Maurya, D.M. and Merh, S.S. (1996) Arid-humid cycles over the last 350 ka : Evidence from Mahi river basin, Western India. *Jour. Geol. Soc. Ind.*, v. 46, 289-299.
- Khan, A.A. and Banerjee, S.N. (1984) geological and Geomorphological studies around Tapti-Vaghur confluence. *Dist, Jalgaon, Maharashtra. Rec. Geol. Surv. Ind.*, 113, pp. 99-130.
- Khatti, K.N., Roger, A.M., Perkin, D.M. and Algermissen, S.T. (1984) A seismic hazard map of India and adjacent areas. *Tectonophysics*, v. 108, pp. 93-134.
- Krishnaunni, U. (1976) Megalineament pattern of Gujarat. *Photonirvachak*.
- Kusumgar, S., Rachna, R., Chamyal, L.S. and Yadav, M.G. (1998). Holocene paleoenvironmental changes in the lower Mahi basin, Western India. *Radiocarbon*, (in press).

- Laville, E and Petit, J.P. (1984) Role of synsedimentary strike slip faults in the formation of Moroccan Triassic basins. *Geology*, v. 12, pp. 424-427.
- Lowe, D.R. (1975). Water escape structures in coarse grained sediments. *Sedimentology*, v. 22, pp. 157-204.
- Leeder, M.R. (1993) Tectonic control upon drainage basin development, river channel migration and alluvial architecture: implications for hydrocarbon reservoir development and characterization. From North, C.P. & Prosser, D.J. (eds), *Characterisation of fluvial and aeolian reservoirs*, Geol. Soc. Spe. Pub. No. 73, pp. 7-22.
- Maltman, A. (1984). On the term 'soft sediment deformation': *Jour. Struct. Geol.*, v. 6, 589-592.
- Markevich, V. P. (1976). Prognostic assessment of oil and gas prospects of India and main guidelines for future exploration. Unpublished ONGC report, 1976.
- Mathur, L.P., Rao, K.L.N. and Chaube, A.N. (1968). Tectonic framework of Cambay basin, India, *Bull., O.N.G.C.*, v. 5, pp. 7-28.
- Maurya, D.M., Chamyal, L.S. and Merh, S.S. (1995). Tectonic evolution of the Central Gujarat plain, Western India, v. 69, *Curr. Sci.*, pp. 610-613.
- Maurya, D.M., Malik, J.N., Rachna R. and Chamyal, L.S. (1997a). Soft-sediment deformation in the Quaternary sediments of the Lower Mahi Basin, Western India, *Curr. Sci.*, v. 72, pp. 519-522.
- Maurya, D.M., Malik, J.N., Rachna R. and Chamyal, L.S. (1997b). The Holocene valley fill terrace on the lower Mahi valley, Gujarat. *Curr. Sci.*, v. 73, pp. 539-542.
- Maurya, D.M., Rachna, R., and Chamyal, L.S. (1998) Seismically induced Deformational structures from Mid-Late Holocene terraces in lower Mahi valley, Gujarat. *Jour. Geol. Soc. Ind.*, v. 51, pp. 755-758.
- Mayer, L. (1986): Tectonic Geomorphology of Escarpments and Mountain Fronts.- *Active Tectonics* (Wallace R.E., Ed.), pp. 125-135.
- Merh, S.S. and Chamyal, L.S. (1997). Quaternary Geology of Gujarat Alluvial Plains, *Proc. Ind. Natn. Sci. Acad.*, v. 63, pp. 1-98.
- Merh, S.S. (1992). Quaternary sea-level changes along Indian coast. *Proc. Ind. Natn. Sci. Acad.*, v. 58, pp. 461-472.

- Merh, S.S. (1993). Neogene Quaternary sequence in Gujarat: A review. *Jour. Geol. Soc. Ind.*, v. 21, pp. 259-276.
- Merh, S.S. and Chamyal (1993). The Quaternary sediments in Gujarat, *Curr. Sci.* V. 64, pp. 823-827.
- Merh, S.S. (1995). *Geology of Gujarat*. Geol. Soc. Ind., 222p.
- Middlemiss, C. S. (1921) *Geology of Idar state*. Mem Geol. Surv. Ind., 44, pp. 1-66.
- Milakovskiy, F.E. (1972). Continental rift zones, their arrangement and development *Tectonophysics*, v. 15, pp. 65-81.
- Mohindra, R., and Bagati, T.N. (1996) Seismically induced soft-sediment deformation structures (Seismites) around Sumdo in the lower Spiti valley (Tethys Himalaya). *Sed. Geol.*, v. 101, pp. 69-83.
- Murthy, J.V.S., (1975). Conjunctive use of water resources along the Mahi river between Poicha and Vasad, Gujarat, *Proc. Natn. Sym. on Hydrology*, Roorkee: University of Roorkee, pp. 2-5,
- Murthy, M.V.N. (1981) Late mesozoic-early Tertiary volcanism in the trans-Deccan trap areas of the Indian shield : a synthesis. In : K.V. Subbarao and R.N. Sureshwar (Eds), *Deccan volcanism*. Mem. Geol. Soc. Ind., 3, pp. 93-100.
- Negi, B.S. (1951) Gravity and magnetic surveys in subsurface structures in the Borsad area, Kheda district. Unpubl. Rep. Geol. Surv. Ind.
- Nayak, S. R. and Sahai, B. (1984) Coastal morphology of the Gulf of Kambhat. *Proc. Symp. Quat. Episodes in India*, (S.S. Merh and N.M. Vashi, Eds.) Dept. Of Geol. M.S.U. Baroda, pp. 86-96.
- Ouchi, S. (1985): Response of alluvial rivers to slow active tectonic movement. *Geol. Soc. Am. Bull.*, v. 96, pp. 504-515.
- Owens, G. (1987). Deformation processes in unconsolidated sands; Deformation of sediments and sedimentary rocks. Jones, M.E. and Preston, R.M.F (Eds) *Geol. Soc. London Spl. Publ.*, pp. 11-24.
- Pant, R.K. and Chamyal, L.S. (1990). Quaternary sedimentation pattern and terrain evaluation in Mahi river basin, Gujarat, India. *Proc. Ind. Nat. Sci. Acad.*, v. 56, pp. 501-511.
- Preston, R.M.F. (1987) Deformation of sediments and sedimentary rocks. (Jones, M.E. and Preston, R.M.F. Eds.) *spl. Publ. Geol. Soc. London*.

- Powell (1979) A speculative tectonic history of Pakistan and surrounding s; some constraints from the Indian Ocean, In : Farah, A. And Dejaung, K.A. (eds) Geodynamics of Pakistan: Pakistan Geological Survey , pp. 5-24.
- Pye, K. (1983). Red beds. Chaemicals sediments and Geomorphology (Eds. Goudie, A.S. and Pye.K.) Academic Press, London, pp. 227-263.
- Qureshey, M.N., (1982). Gravity anomalies, isostasy and crust-mantle relations in Deccan Trap and contiguous regions, India. In: K.V. Subbarao and R.N. Sukheswala (Eds), Deccan Volcanism. Geol. Soc. Ind. Mem., 3, pp. 184-197.
- Quershey, M.N. (1982). Geophysical nad Landsat lineament mapping- an approach illustrated from west-central and south India. Photogrammetria, v. 37, pp. 161-184.
- Rachna, R. and Chamyal, L.S. (1998). Significance of the microfauna in the Holocene valley fill terraces of Lower Mahi valley, Gujarat. Jour. Pal. Soc. Ind., (In press).
- Rachna, R., Maurya, D.M. and Chamyal, L.S. (1998) Late Quaternary sea level changes in western India : Evidence from lower Mahi valley. Curr. Sci. V. 74, pp. 910-914.
- Rao, N.D.J. (1968) An interpretation of Gravity data of Cambay basin. ONGC Bull., v. 4, pp. 74-80.
- Rao, P.V., Verraya, M., Thamban, M. and Wagle, B.G. 1996. Evidences of late Quaternary neotectonic activity and sea-level changes along the Western Continental margin of India. Curr. Sci., v. 71, pp. 213-219.
- Ravi Shanker (1988). Heat flow map of India and discussion on its geological and economic significance. Indian Minerals, v. 42, pp. 89-110.
- Raju, A.T.R. (1968) Geological evolution of Assam and Cambay tertiary basins of India. Bull. Amer. Assoc. Petrol. Geol., v. 52, pp. 2422-2437.
- Raju, A.T.R. (1979) Basin analysis and petroleum exploration with some examples from Indian sedimentary basins of India. Jour. Geol. Soc. Ind., v. 20, pp. 49-60.
- Raju, A.T.R. and Srinivasan, S. (1983). More hydrocarbon from well explored Cambay basin. In : L.L. Bhandari, B.S.Venkatachala, R.Kumar, S.N. Swamy, P.Garga and D.C. Srivastava (Eds.) Petroliferous basins of India. Petrol Asia Journal, v. 6, pp. 25-35.
- Rawal, U. (1995) Geodynamics of the tectonomagnetic and geophysical signatures within mobile parts of the transect. Mem. Geol. Soc. Ind., No. 31, pp. 37-61.

- Reinick, H.E. and Singh, I.B. Depositional sedimentary environments, Springer-Verlag, Berlin, 1980, 549p.
- Retallack, G.J. (1990). Soils of the past: An introduction to palaeopedology. Unwin Hyman, London:520p.
- Roy, T.K. (1991) Structural styles in southern Cambay basin and role of Narmada geofracture in the formation of giant hydrocarbon accumulation. Bull. O.N.G.C., v. 27, pp. 15-38.
- Roychaudhary, S.C., Mathur, R.B. and Mishra, G.S. (1972). Subsurface stratigraphy of the Tharad-Serati area, Gujarat, Bull. O.N.G.C., v. 9, pp. 57-74.
- Royden, L., Selater, J.G. and Herzen, R.P. (1980). Continental margin subsidence and heat flow: important parameter in formation of petroleum hydrocarbons: AAPG Bull., v. 64, pp. 173-187.
- Sankalia, H.D. (1946). Investigations into the prehistoric Archaeology of Baroda, Gujarat, Baroda State Press.
- Sareen, B.K., Tandon, S.K. and Bhola, A.M. (1993). Slope deviatory alignment, stream network and lineament orientation of the Sabarmati river system- neotectonic activity in the mid-to-late Quaternary. Current Science, v. 64, pp. 827-836.
- Sareen, B.K. and Tandon, S.K. (1995) Petrology, Micromorphology and Granulometry of Mid to Late Quaternary continental deposits of the semi-arid sabarmati basin, western India. Mem.Geol. Soc. Ind. 32, pp. 258-276.
- Sastry, C.V.S. singh, G., Bhasin, A.L., Badda, S.N. Pati, b. And Chaturvedi, R.K. (1984) Possible leads for future exploration in Cambay basin. Petrol. Asia Jour., v. 7, pp. 71-81.
- Sen, D. and Sen, S. (1983). Post-Neogene tectonism along the Aravalli range, Rajasthan, India. Tectonophysics, v. 93, pp. 75-98.
- Singh, B.P., Mita Rajaram and Basavaiah, N. (1989). Inversion of magnetic and gravity data in the Indian region. In: R.F. Mereu, S. Mueller and D.M. Fountain (Eds), Properties and Processes of Earth's lower crust. Geophys. Monogr. 51 IUGG, 6, pp. 271-278.
- Sims, J.D. (1973). Earthquake induced structures in sediments of Van Norman Lake, San Fernando, California. Science, v. 182, pp. 161-163.

- Sims, J.D. (1975). Determining earthquake recurrence intervals from deformational structures in young lacustrine sediments. *Tectonophysics*, v. 29, pp. 141-152.
- Snow, D.T. (1982). Hydrogeology of induced seismicity and tectonism: case histories of Kariba and Koyna. *Geol. Soc. Am. Sp. Pap.* 189, 317p.
- Sridhar, V., Chamyal, L.S. and Merh, S.S. (1994). North Gujarat river : Remnants of a superfluvial system. *J. Geol. Soc. Ind.*, v. 44, pp. 427-434.
- Sridhar, V. And Chamyal, L.S. (1995) Studies on surface and buried soils of north Gujarat and their palaeoenvironmental implications. *Proc. Sem. Rec. Rec. Geol. West. Ind., M. S. Univ. Baroda*, pp. 231-140.
- Sridhar, V., Merh, S.S. and Chamyal, L.S. (1997). Role of tectonism in the alluvial plains of north Guajrat. *Proc. Indn. Natn. Sci. Acad.* V. 63A, pp. 59-70.
- Subbarao, K. V. (1988). Introduction of Deccan flood basalts, *Mem. Geol. Soc. Ind.*, No. 10, pp. 5-13.
- Tandon, S.K. Sareen, B.K. Someshwar Rao, M. And singhvi, A.K. (1997) Aggradation history and luminescence chronology of the Sabarmati basin, Gujarat, Western India. *Palaeogeog. Palaeoclimat. Palaeoecol.*, v. 128, pp. 339-357.
- Thompson, T.L. (1976) Plate tectonics in oil and gas exploration of continental margins. *AAPG Bull.*, v. 60, pp. 1463-1501.
- Underhill, J.R. and Woodcock, N.H. (1987). Faulting mechanism in high porosity sandstones, New red sandstones, Arran, Scotland; deformation of sediements and sedimentary rocks, Jones, M.E. and Preston, R.M.F (Eds) *Geol. Soc. London Spl. Publ.* 91-105.
- Venkateshan, T.R., Pande, K. And Gopalan, K. (1986). $^{40}\text{Ar}/^{39}\text{Ar}$ dating of Deccan basalts, *J. Geol. Soc. India*, v. 27, pp. 102-109.
- Verma, R.K., Gupta, M.L., Hamza, V.M., Venkateshwar Rao, G. And Rao, R.U.M. (1968) Heat flow and crustal structure near Cambay, Gujarat, India. *Bull, Nat. Geophys. Res. Inst.*, v. 16, pp. 153-166.
- Wainwright, G. J. (1964). The Pleistocene deposits of the Lower Narmada river and an early stone age industry from the River Chambal. *M.S. University Archaeology and Ancient History Series*, 7. Baroda.
- West, W.D. (1962). The line of the Narmada and Son vallys. *Curr. Sci.*, v. 31, pp. 143-144.

- Whiting, B.M., Karner, G.D. and Driscoll, N.W. (1994) Flexural and stratigraphic development of the west Indian continental margin. *Jour. Geophys. Res.*, v. 99, pp. 13791-13811.
- White, N.J., Jackson, J.A. and Mckenzie, D.P. (1986) The relationship between the geometry of normal faults and that of the sedimentary layers in their hanging walls. *Jour. Struct. Geol.*, v. 8, pp. 897-909.
- Woodcock, N.H. (1976). Structural style in slump sheets Ludlow series, Powys, Wales. *J. Geol. Soc. London*, v. 132, pp. 399-415.
- Zeuner, F.E. (1950) Stone age and pleistocene chronology in Gujarat Deccan College, Poona, 46p.
- Zeuner, F.E. (1963) Environment of early man with special reference to tropical regions. The Maharaja Sayajirao Memorial lecture-1960-61, M. S. University of Baroda.
- Zubov, I.P., Naugolny, I.K., Zapivalov, N.P. and Chandra, P.K. (1966) Problem and correlation and distribution of hydrocarbon bearing horizons in the Eocene of Cambay basin. *ONGC Bull.*, v. 3, pp. 9-13.