

REFERENCES

- "Code of Stratigraphic Nomenclature", American Commission of
Stratigraphic Nomenclature. **Bull. Am. Asso. petro.
Geol. Vol.45, No.5, p 648 - 660.**
- Agashe, L.V. and Gupta, R.S. (1966), Some significant features of
Deccan Trap. Proc. Seminar on Cretaceous - Tertiary
Formations of South India Bangalore, June 1966. **Geol.
Soc. Ind. Bull. Special Number. pp. 33**
- Ahmed, N. & Jones. R.L. & Beavers. A. H.(1966) , Genesis
mineralogy and related properties of West Indian
soils. **Proc. Soil Sci. Soc, Am., Vol II pp. 315-328**
- Ahmed, N. & Jones. R.L. (1969) Occurrence of aluminous
lateritic soils(bauxite) in the Bahamas and Cayman
Islands. **Econ. Geol., Vol 64, No.7 pp. 804-808**
- Allen, V.T. (1962), permeability and lateral circulation in
bauxite genesis. **col. Soc. Am. Ann. Meeting.**
- Alevala, G. J. J. (1981), Bauxite and other duricrusts on the
Gauiana shield South America. **Lateritisation Processes
(1981), pp. 261-269 .**
- Alexander, L.T & Cady, J. G. (1962) , Genesis and hardening of

laterite in soils. U.S. Dept. Agric. Soil Conservation Service Tech. Bull. No. 1282

Allen, N. F. (1970) , Duricrust - an Australian dilemma. Paper presented at 1970 meeting of association of Canadian Geographers.

American Geological Institute, (1962), "Dictionary of Geological Terms", New York.

Andrew, G. (1954), Iron ores in the Anglo-Egyptian Sudan. In Symposium sur les Gisements de fer du Monde". (Blondel, F. and Marvier, L., Eds) C.R. 19th. Int. Geol. Congr., Algiers, 1, 187 - 189.

Altschuler, Z.S. Dwornik, E.J. and Kramer, Menry. (1963), Transformation of montmorillonite to Kaolinite during weathering. science. Vol. 141, No. 3576. pp. 148 - 152.

Auden, J.B. (1949a) , Dykes in western India, A discussion of their relationship with Deccan Traps. Trans. Nat. Inst. Sci. India., Vol. 3, pp. 123-187.

Babington, B. (1821), Remarks on the geology of the country between Tellicherry and Madras. Trans. Geol. Soc. Lond. 5, 328 - 339.

Bain, A. G. (1852), On the Geology of South Africa. Trans. Geol. Soc. 7, 175 - 192.

Balasubramaniam, M.S. (1970), Bauxite deposits of Western region. Mineral Convention, Ahmedabad. pp. 15 - 22.

Balasubramaniam, K. S. (1970) , A study on the formation of Bauxite of Tumgar Hill - Bassein , Bombay. Geol. Bull. Ind. Inst. Tech. Bombay. Vol. 1. No. 1.

Balasubramaniam, K. S. (1972) , Mineralogy and genesis of laterites and bauxite, Tumgar Hill, Bassein, Bombay: npub. Ph. D. thesis Ind. Inst. Tech. Bombay.

- Balasubramaniam, K. S. & Paropkari A. L. (1975), Mineralogy and genesis of bauxite of Nagardaswadi Plateau, Kolhapur district, Maharashtra State (India). **Canadian Miner.** Vol. 3, Pt. 3, pp. 222 - 226
- Balasubermanam, K. S. & Sabale, S. G. (1976) , Mineralogy, geochemistry and genesis of certain bauxite profiles from Kutch district, Gujarat State. **Presented at the Sympo. Deccan Trap and Bauxite, Pune. Oct 1976. Geol. Surv. Ind.**
- Bardossy, G. (1959), The geochemistry of Hungarian bauxite. **Acta. Geol. Acad. Sci. Hung.** 6, pp. 1 - 47.
- Bardossy, GY. (1973), Evaluation quantitative desbauxites de Karst, 3rd Int. Congr. for the study of Bauxites, Alumina and Aluminium, Nice, 17-24, SEDAL.
- Bardossy, GY. (1979), The role of rectionism in the formation of bauxite deposits. **Travaux de I' ICSOBA (ZAGREB)**, 15, 15-34.
- Bardossy, G. Y. (1981) , Palaeoenivironments of lateritie and lateritic bauxites-effect of global tectonism on bauxite formation. **Lateritisation Processes (1981). Oxford and IBH Press. pp. 287 - 294.**
- Bardossy, GY. (1983), A comparision of the main lateric bauxite regions of our globe. In **Lateritisation Process, Proc. II Int. Seminar on Lateritisation Process, Sao Paulo, Brazil, 1982, Eds. A. J. Melfi and A. Carvalho, 15-52.**
- Baver, L. D. (1956), "Soil Physics" (3rd edn.) New York.
- Bateman, A. M. (1952) , Economic Mineral Deposits. **John Wiley and Sons. Inc, New York, pp. 213-228, 555-568, 708-745, 772-797.**

- Bayliss, P.S., and F.C. Loughnan (1963), Mineralogical evidence for the Penecontemporaneous lateritization of basalts from New England, N.S.W., *Am. Mineralogist* 48, pp. 410-414.
- Beater, B.E. (1940), Concretions and refractory deposits in some Natal coastal soils. *Soil Sci.* 50, 313 - 329.
- Bentelspacher, H. Vander Marel, H.W. (1968), Atlas of Electron microscopy of clay mixtures and their Admixture. Elsevier Publ. Co. Amsterdam, London, New York.
- Benza, P. M. (1836). Memoir of the geology of the Neelgherry and Koondah Mountains. *Madras J. Lit. Sci* 4 (13), 241-299.
- Berge, J. W. (1971). Iron formation and supergene iron ores of the Goe Range area, Liberia. *Econ. Geol.* 66, 947-960.
- Bhatt, J. J. (1966), Ti/Al ratio as Chemical index of Paleoenvironment. *Econ. Geol.* Vol. 61.
- Bhatt, J. V. (1971), Laterite - bauxite belts in Bhavnager district. *Mineral Weath.* Vol. 7 No. 2 pp. 23 -24.
- Bisset, C. B. (1937), Hill-top hollows in Masaka District. *Uganda J.* 5, pp. 130 - 133
- Biswas, S. K. (1965), A new classification of the Tertiary rocks of Kutch, Western India. *Ind. Geol. Min. Metall. Soc. Ind.* No. 35 pp. 1-6.
- Biswas, S. K. (1971), Note on Geology of Kutch. *Quart. Jour. Geol. Min. Metall. Soc. Ind.*, Vol. 43 no. 4.
- Biswas, S. K. (1973), A note on the mode of eruption of the Deccan trap lavas, with special reference to Kutch. *Jour. Geol. Soc. Ind.* Vol. 14. No. pp. 134-141.
- Biswas, S.K. (1974), Landscape of Kutch - A Morphotectonic Analysis. "Indian Journal of Earth Sciences" Vol.1;

No.2 pp.177-190.

Biswas, S.K. & Despande, S.V. (1970) , Geological and Tectonic maps of Kutch. *ull. Oil. Natu. Gas commi. Vol.7, No.2.*
pp. 115-123

Biswas, S. K. & Raju, S. W. (1971) , Note on the rock stratigraphic classification of the Tertiary sediments of Kutch. *Quart. Jour. Geol. Min. Metall. Soc. Ind. Vol.43, No.3.*

Blanford, W. T. (1867), On the Geology of portion of Kutch.
Men. Geol. Surv. Ind., Vol. 6 ., pt 1, pp.1 -38.

Blondel , F. (1954) , Les gisements de'fer de'Afrique Occidentale Francaise. In symposium Sur les gisements de fer du monde (Blondel ,F and Marvier , L. Eds) *C.R. 19th. Int.Geol Congr. Algiers, pp. 5-34.*

du Bois, L. G. B. and Jeffery, P. G. (1955). Laterites on Entebbe Peninsula. *Colon. Geol. Miner. Resour. 5(4), 387-408.*

Brown, E. H. (1968). Unpublished report to RS/RGS Brazil Expedition Committee.

Buchanan, F. (1807). "A Journey from Madras through the Countries of Mysore, Kanara and Malabar", Vol.2, 436-461, 559; Vol. 3, 66, 89, 251, 258, 378. East India Co., London.

Burridge , J. C. and Ahn, P. M . (1965), A spectrographic survey of representative Ghana forest soils. *J. Soil Sci. 16(2). 296 - 309.*

Bushinsky, G. I. (1964) , A hypothesis on the lateritic sedimentary origin of bauxite. *Rept. 22nd. session Inter. Geol. Congress. India, pt.14 . pp.102 - 115.*

Bushinsky, G. I. (1971) , Common feature and difference of

accumulation of Al, Fe, Mn, and P sedimentary ores.

Geol. Inst. Acad. Sci. U.S.S.R. Moscow.

Butt, C.R.M. (1981), Some aspects of geochemical exploration in lateritic terrain in Australia. **Lateritisation Processes Oxford and IBH Press. pp. 369 - 380.**

Button, A. M. (1981) Microbes as agents of geological change. Unpublished dissertation, Department of Microbiology, University of Reading, Reading, UK, 42 PP.

Byers, B. K. (1974) Iron transport in gram-positive and acid fast bacilli. Chapter 4 in Microbial Iron Metabolism - **A Comprehensive Treatise, Ed. Neilands, Academic Press.**

Campbell, J. M. (1917) , Laterite, **Min.Mag.(Lond.). pp. 17, 67-77, 120-128, 171-179, 220-229.**

Campbell , J. M. (1971), Origin of laterite. **Trans. Inst. Min. Metall., Vol 19 pp. 432 - 443**

Carroll , D. (1962) , Rainwater as a chemical agent of geologic processes U.S. Geol. Survey Water-Supply paper No-1535. **G. 18.p..**

Carroll , D. (1970) , "Rock Weathering " **Plenum Press. New York.**

Chapman , R. W. and M. A. Greenfield, (1949) Spheroidal weathering of igneous rocks. **Am.J. Sci.247. pp. 407 - 429.**

Chatterjee , A. K. and Mathur , V. B. (1966), Note on the Nari series of Kutch, Gujarat. **Geol. Soc.Ind. Bull. Vol.3, No. 1**

de Chetelat , E. (1938)., Le modele laterique de la Guinee Francsise. **Revue. Geoge. Phys. Geol. dyn. 11(1), 5 - 120.**

- Chovley , R. J. (1975), The Rate of water in rock disintegration.
Introduction to fluvial Processes. Edited By. Choley,
R.J. Mehtuess & Co. Ltd. London., pp. 53 - 73.
- Clare, K. E. (1960). Roadmarking gravels and soils in Central
Africa. Rd. Res. overseas Bull., 12.
- Comer, J. B. (1975) , Genesis of Jamaican bauxite. Econ. Geol. ,
Vol. 70, No. 8. pp. 1466 - 1487.
- Cornwall , I.W. (1958) , "Soils for the Archaeologist ". Phoenix
House, Landon. 230 pp.
- Correns , C . W . (1949) , Einfuhrang in die Mineralogie, -
Springer-Verlog , Berlin.
- d ' Costa, V., Ghor Obada, W., Hinga, G. and Makin, J. (1966),
The soils of the country around Mumias. Appendix to
Kenya Govt. Report on sugar potential, Soil Survey
Unit, Kenya.
- Craig , D. C. (1963) , Geochemical and mineralogical aspects of
the weathering of some basaltic rocks from New South
wales. Unpub. M.Sc. Thesis. Univ. New South Wales.
- Craig , D. C. and Loughnan, F. C. (1964), Chemical and
mineralogical transformation accompanying the
weathering of basic volcanic rocks from N.S. Wales
Aust. J. Soil Res. 2,218-234.
- Crook, T. (1909). On the use of the term lateric. Geol. Mag. 46,
524-526.
- Darwin, C. R. (1844). "Geological Observations on the Volcanic
Islands and Parts of South America Visited During the
Voyage of H. M. S. Beagle". Smith, Elder and Co.,
London. 2nd edition, 1876, 647 pp.

- Day , M. K. and Hill V. J. (1954) ., Thermal transformations of aluminas. **Jour. Phy. Chem.**, Vol.57, No.9.
- Desikan , N., Thothathiri, G. and Vembam, N.A. (1976), Geology around Wandh, Mandvi taluka, Kutch district, with a note on bentonite deposits. Presented at the Symp. Deccan Trap and Bauxite, Pune, Oct., 1976 **Geol. Surv. Ind.**
- Dury, G. M. (1969), Rational descriptive classification of duricrusts. **Earth Science Journal(waikato)** , 3(2), pp.77 - 86.
- Erhardt, H. (1951). Sur l'importance des phenomenes biologiques dans la formation des cuirasses ferrugineuses en zone tropicale. **C. r. hebdo seanc. Acad. Sci., Paris** 233, 805-808.
- Evans, J. W. (1910 a). The meaning of the term "laterite". **Geol. Mag.** 47, 189-190.
- Fairbridge , Rhodes W. (1968) , Encyclopedia of Geomorphology. Reinhold Book Corporation. New York. pp. 14 - 15.
- Fermor, L.L. (1911), What is laterite ? **Geol. Mag.**, Vol.48. pp. 454 - 462, 507 - 516 , 559 - 566.
- Fermor, L. L. (1931) , General report of the Geol. Surv. Ind. for the year 1930. **Rec. Geol.Surv. Ind. Vo. 65. pt.1** pp. 35.
- Fisher , N. H. (1958) , Notes on lateritization and mineral deposits. **Aust. Inst. Min. Metall. F.L. Stillwell Anniv. V. pp. 133 - 142.**
- Fox , (1829), In Patel. (1978).
- Fox , C. S. (1923) , The bauxite and aluminous laterite occurrences of India. **Mem. Geol. Surv. Ind. Vol.37. pp. 370 - 389.**

- Fox, C. S. (1827) "Bauxites", Crosby, Lockwood and Son, London.
- Fox , C. S. (1932) , Bauxite and aluminous laterite. 2nd ed.
Crosby. Lockwood and Sons. London. pp. 312.
- Fox , C. S. (1936), Buchanan's laterite of Malabar and Kanara
Rec.Geol.Surv. Ind. Vol. 69, pt. 4, pp. 369 - 442.
- Frakes , L. A. & Kemp E. M.(1972) , Influence of continental
position on Early Tertiary climates. *Nature*, V.240,
no.5376,pp.97 - 100.
- Frasche , D. F. (1941) , Origin of the Surigao iron ores. *Econ
Geol.* 36, pp. 280 - 305.
- Frederickson , A. F. (1952) , The genetic significance of
mineralogy. A. I. M. E. (New York) Symp. vol., **Problems
of Clay and Laterite Genesis.** pp. 1 - 11.
- Garrels , R. M . and Christ, C. L. (1965) , Solution, Minerals
and Equilibria. **Harper and Row, New York 450 p.**
- Gear D. J. (1955). The electrical resistivity problem in the
location of the groundwater in the decomposed igneous
metamorphic rocks of Uganda and Sudan. Thes. Doct.
Univ. London.
- Gerassimov, J. P. (1964) , Recent laterites and their formation.
Rept. 22nd Session. **Inter. Geol. Congre. India. Pt. 14.**
pp. 117 - 125.
- Ghare, M. A. and Badve, R. M. (1976), Some observation on the
coastal laterite and bauxite from Thana, Kolaba and
North Ratnagiri districts. **Presented at the Symp.
Deccan Trap and Bauxite , Pune. Oct. 1976 Geol. Surv.
Ind.**
- Goldich, S. S. (1938) , A study in rock weathring. *Jour. Geol.,*
Vol. 46 pp. 17 - 58.

- Goldich, S. S. and Bergquist, H. R. (1947), Aluminous laterite soil off the Sierra de Bahoruca area, , Dominic Republic, .I.U.S. Geol. Surv. Bull, 953-C, pp.53-84.
- Goldich , S. S. and Bergquist, H.R. (1948), Aluminous laterite soil of Republic of Haiti, V.I.U.S. Geol. Surv. Bull. 954-c pp. 63-111.
- Goswami , A. B. (1981), Hydrogeology of the laterite terrain at Bonkura and Midnapore districts, West Bengal, India. **Proceedings of the International Seminar on Lateritisation Processes (Trivandram, India 1979).** Oxford and IBH press, pp. 407-410.
- Gaudie, A. (1973), Duricrusts in Tropical & Subtropical Landscapes. **Oxford Research Studies in Geography.** Oxford University Press, London 174 p.
- Gozan, B. M. and Vera E. C. (1962), Aluminous laterite deposits in northern Mindanao. Potential sources of refractory raw material. Minerals News Serv. **Philipp. Isl. No. 46.**
- Grant, (1837), In Nayak (1979).
- Grim, R. E. (1942), Modern concepts of clay minerals. **Jour. Geol., vol. 50, pp. 225 - 275.**
- Grim, R. E. (1953), Clay Mineralogy. **McGraw-Hill, New York 384 p.**
- Grubb, P. L. C. (1963), Critical factors in the genesits. Extent and grade of some residual bauxite deposits. **Econ. Geol. 58(8), 1267 - 1277.**
- Gupta, B. C. and Mukerjee P. N. (1938), The geology of Gujrat and Southern Rajputana. **Rec. Geol. Surv. Ind., Vol.73. pt.2 pp. 201.**

- Hanlon, F. N. (1945) , The bauxites of N. S. Wales. their distribution, composition and probable origin J. **Proc. R.Soc. N. S. W.** 78, pp. 94 - 122.
- Harden, G. and Bateson, J. H. (1963), A geochemical approach to the problem of bauxite genesis in British Guiana. **Econ. Geol.** 58, pp. 1301 - 1308.
- Harder, E. C. (1951), Examples of Bauxite deposits illustrating variations in origin. **Problems of clay and laterite Genesis, Symp. A.I.M.E. No.**, 35 - 64.
- Harrison, J. B. (1933) , The katabolism of igneous rocks under humid tropical conditions. **Imp. Bur. Soil. Sci. Tech. Commun (Harpenden)**. 74 p.
- Harrison, J. B. and Reid K. D. (1910) , The residual earths of British Guiana commonly termed "Laterite". **Geol. Mag. Vol 47.** pp. 439 - 452, 553 - 562.
- Hartman, J. A. (1955). Origin of heavy minerals in Jamaican bauxite. **Econ. Geol.** 50 (7), 736-747.
- Haung, W. H. and Keller, W. D. (1970). Dissolution of rock-forming silicate minerals in organic acids : simulated first-stage weathering of fresh mineral surfaces. **Am. Mineral.** 55, 2076-2084.
- Hays, J. (1964) , The relations between laterite and land surface in the Northern part of the Northern Territory of Australia. **Rept. 22nd Session, Inter. Geol. Congre. India.** pp. 14 - 20.
- Hearth, J. W. (1963), The mineralogical composition of some laterites and lateritic soils of Ceylon. **Ind. Miner.** Vol. 4, Nos. 1 and 2, pp. 36 - 42.
- Heintze, S. G. (1946), Manganese deficiency in peas and other

- crops in relationship to the availability of soil manganese. *J. agric. Sci.* 36(4), pp. 227 - 238.
- Heintze, S. G. and Mann, P. J. G. (1947), Soluble complexes of mangano manganese *J. agric. Sci.* 37(1), 23 - 26.
- Hem, J. D. and Robeson, C. E. (1967), Form and stability of aluminum hydroxide complexes in dilute solution.
- ~~U.S. Geol. Survey Water-Supply Paper No. 1027, pp. 55,~~
- Hepworth, J. V. (1951) , The laterite between Banda and Nazigo Kyaggwe. Unpublished Report. Geol Surv. Uganda, JVH/2.
- Holmes, A. (1914) , The lateritic deposits of Mozambique. *Geol. Mag.* 51, pp. 529 - 537..
- Holmes, A (1975) , Principles of physical Geology. 2nd edn. The English Language Book Society and Nelson, London. 1288.p.
- d' Hooere, J. (1954). L'accumulation des sesquioxides libres dans les sols tropicaux. *Publs. Inst. natn Etude agron. cango belge, Ser. Sci, 62, 132 pp.*
- Humbert, R. P. (1948) , The genesis of Laterite. *Soil Sci., Vol.65,pp.281 - 290.*
- Imperial Bureau of Soil & Science (1932). Laterite and laterite soils. I. B. S. S. Tech. Comm. No. 24.
- I.S.I. (1962) , Methods of chemical analysis of bauxite. IS: 2020 - 1962.
- I.S.I. (1962) , Methods of sampling Bauxite. Is. 1999 - 1962
- Indian Bureau of Mines, (1977), Bauxite. Monograph. Ministry of Steel and Mines, Nagpur. No. 5.
- Islah, M.A. and Elahi M.A. (1954), Reversion of ferric iron of ferrous iron under water-logged conditions and its relation to available phosphorous. *J. agric. Sci.* 45.

1-8

- Isphording, W.C. and Hinton, G.E. (1972), Geochemistry of Caribbean laterites and their relationship to the Jamaica bauxite problem. *Econ. Geol.* Vol 67. no. 7. pp. 1005 -1008.
- Johnson, R. J. (1959). Physiographic evolution of western Buganda District. Unpublished report, Geol. Surv. Uganda, RJJ/23.
- † Karunakaran, C. and Roy, S.S. (1970) , "Laterite of Birbhum district West Bengal. Their origin and Age. *Rec. Geol. Sur. Ind.* Vol. 98, pt. 2, pp.1 - 19.
- Karunakaran, C. & Sinha C. Roy(1981) , Laterite profile development linked with polycyclic geomorphic surfaces in South Kerala. *Lateritisation Processes.* Oxford & IBH Press. PP. 221 - 231.
- Keller, W. D. (1958), Argillation and direct bauxitization in terms of hydrogen and metal cations at surface of hydrogen aluminum silicates. *Am. Asso. Petro. Geol.* Vol. 42 No.2 pp. 233 - 245.
- Keller, W. D.(1957) , The Principles of Chemical Weathering. Lucas Bros. Columbia, Mo. 111 p.
- Kelley, W. C. (1942), Modern clay researches in relation to agriculture. *Jour. Geol.* Vol. 50, pp. 307 - 319.
- Kennedy, G. C. (1959) , Phase relations in the system $Al_2O_3 - H_2O$ at high temperature and pressures. *Am. Jour. Sci.* Vol. 257, No. 8 . pp. 563 - 573.
- King, L. C. (1962) "Morphology of Earth". Oliver and Boyd, London. 699 pp.
- Konta, J (1958), Proposed classification and terminology of

rocks in the series bauxite - clay - iron ore. Jour.

Sedi. Petro. Vol. 28, pp. 83 - 86.

Krauskapf, K.B. (1959), The Geochemistry of Silica in sedimentary environments Silica in sediments. Soc. Econ. Paleontologists Symp. 7, pp. 4 - 18.

Krishnan, M.S. (1935), Lateritization of Khondalites. Rec.Geol. Surv. Ind. Vol. 68. pt. 4, pp. 392 - 399.

Krishnan, M.S. (1958), General report of Geol. Surv. Ind. for the year 1953. Rec. Geol. Surv. Ind. Vol.87. pt. 1, pp..68 - 69.

Krishnan, M. S. (1958), The structural and tectonic history of India. Men. Geol.Surv. Ind., Vol. 81.

Krumbein, W. C. and Garrels R. M. (1952), Origin and classification of chemical sediments in term of pH and oxidation - reduction potential. Jour. Geol. Vol. 60,pp. 1 - 33.

Kronberg, B. I. and A. J. Melfi (1987). Geochemical evolution of lateritic terrains. Z. Geomorph. Suppl. Bd. 64, 25-32.

Lahiri, A. (1975), Minerals and Metals. 2000 A.D. A long Range perspective for India. ORG, Baroda. pp. 31 - 49.

Lelong, F. (1966). Regime des nappes phreatiques contenues dans les formations d'alteratioon tropicale. Consequences pour la pedogenese. Sci. Terre 11, 203-244.

Libbey, P. W. Lowry W. D. and Mason R.S. (1946), Ferruginous bauxite deposists. Econ. Geol. Vol. 41. pp. 246 - 265.

Loughnan, F. C., Grim, R. E. and Vernet, J. (1962). Weathering of some Triassic shales in the Sydney area. J. Geol. Soc. Aust., Adelaide, 8(2), 245-257.

Loughanan, F. C. (1969), "Chemical Weathering of the Silicate

- Mabbutt J. A. (1961), A stripped land surface in Western Australia. *Trans. Inst. Br. Geogr.* 29, pp. 101 - 114.
- Maclaren, M. (1906). On the origin of certain laterites. *Geol. Mag.* 43, 536-547.
- Maignien, R. (1966), "Review of Research on Laterites". *Unesco, Natural Resources Research se., IV., Paris.*
- Majumdar, A. and Ahmed, G.(1976) , A comparative study of the laterite bauxite of Kalyanpur and Porbander belts, Saurashtra, Gujrat. *Quart. Jour. Geol. Min. Metall. Soc. Ind.* Vol.48, No.1, pp.45 - 62.
- Mallet, F. R. (1883), On laterites and other Manganese ore occuring at Gosulpur , Jabalpur district. *Rec. Geol. Surv. Ind., Vol. 16, pt. 2, pp. 113.*
- Mason, B. (1952), Principles of Geochemistry. 3rd edn. John, Wiley and Sons. Inc. New York. 329.p.
- Mathur, S. M. (1976), A note on the laterite in the Vikramabad area, Hyderabad district, A.P. Presented at the Symp. Deccan Trap and Bauxite. Pune. Oct. 1976. *Geol. Surv. Ind.*
- Mathur, Y. K. (1972), Plant fossils from the Kaur Bet. Pachham Island, Kutch. *urr, Sci., Vol. 41, pp. 466 - 469.*
- Mathur, Y. K. Soodan, K. S., Mathur K., Bhatia, M. C. Juyal, N. P. and Pant, J. (1970), MicoFossil evidences on the presence of Upper Cretaceous and paleocens Sediments in Kutch *Bull Oil and Nat. Gas Commi., Vol. 7. pp. 100 - 114.*
- Maud, R. R. (1965) , Laterite and lateritic soils in coastal Natal South Africa. *J. Soil Sct. 16 (I). pp. 60 -72.*

- Maufe, H. B. (1933). Laterite. **Geol. Mag.** 70, 144.
- McFarlane, M. J. (1969), Lateritisation and Landscape development in parts of Ugandas . **Thes Doot. Univ. London.**
- Mcfarlane, M. J. (1971) , Lateritisation and Landscape development in Kyagwe, Uganda. **Q. JI. Geol. Soc. Landon** 126, pp. 501 - 539.
- McFarlane, M. J. (1976) , Laterite and Landscape. **Academic Press** London.
- McGee, W. J. (1880), The "Laterite" at the Indian peninsula. **Geol. Mag.** 17. pp. 310 - 313.
- McKenzie, D. P. and Sclater J. G. Royal Astron Soc. (1971) **Geophys. Jour.** V - 25, pp. 437 -528.
- Medlicott, H. B. (1829), In Nene et. al. (1976).
- Medlicott, H. B. Blanford, W. T. :Ball. V. and Mallet. F. R. A., (1879). **A manual of Geology of India and Burma, Calcutta.**
- Mennell F. P. (1909), IV; . Notes on Rhodesian laterite. **Geol. Mag.** 46, pp. 350-352
- Middlemiss (1921) , The geology of the Idar state. **Mem Geol. Sury. Ind. Vol. 44. pt. 1, pp. 1-50.**
- Millot, G. ;Lucas J. and Paquet H. (1966), In valetton (1972)
- Millot, G. (1970), Geology of Clays. **Chapman and Hall. London,** pp. 112 - 134.
- Mosses, J. H. and Michell, W. D. (1963). Bauxite deposits of British Guiana and Surinam in relation to underlying unconsolidated sediments suggesting two step origin. **Econ. Geol. Vol. 58. No. 2, pp. 250 - 262.**
- Mulcahy, M. J. (1960). Laterites and lateritic soils in southwestern Australia. **J. Soil. Sci.** 11, pp. 206 -226.

- Mulcahy, M. J. (1961), Soil distribution in relation to landscape development. **Z. Geomorph. (NS). 5, pp. 211-225.**
- Nagell, R.H. (1962), Geology of the Serra do Navio Manganese District, Brazil. **Econ. Geol. 57 (4), pp. 481 -498.**
- Nayak, S. R. (1979), Geology of the bauxite deposits Kutch and Valsad dist. (Gujarat State) with special reference to their mode of occurrence, Genesis and Economic utility. **Un. Pub. Ph. D. Thesis M. S. Uni. Baroda. India.**
- Nayak, S. R. and Desai. S. D. (1976), Nature of occurrence of bauxite deposits of Kutch. **Presented at the Symp. Deccan Trap and Bauxite., Pune. Oct. 1976. Geol. Surv. Ind.**
- Nayak, S. R. , Patel, P. K. and Desai, S. D. (1977), Formation of laterite of South Gujarat in Quaternary environments. **Presented at the Nat. Semi. Quaternary Environments with special Reference to western India. M. S. Uni. Baroda.**
- Nazaroff, P. S. (1931). Notes on the spongy ironstone of Angola. **Geol. Mag. 68, 443-448.**
- Nene, S. G. Rizvi M. J. and Chatterjee A. K. (1976), Relationship of basalts with bentonites in Kutch (Gujarat). **Presented at the Symp. Deccan Trap and Bauxite, Pune, Oct. 1976. Geol Surv. Ind.**
- Neuzil, J. and Kuzvart M. (1964), Lateritic and kaolinitic weathering of Ghana. **Rept. 22nd Session Inter. Geol. Congress. India. pt. 14. pp. 182 - 212.**
- Newbold, T. J. (1844),, Notes, chiefly geological, across the peninsula from Masulipatam to Goa, comprising remarks on the origin of the regur and laterite: **J. Asiat. Soc. Beng. 13, pp. 984 -1004.**

- Newbold, T. J. (1846a). Notes chiefly geological on the Western coast of South India. *J. Asiat. Soc. Beng* 15, 204-213, 224-231, 380-396.
- Niyogi, D. and Mallick. S. (1973), Quaternary laterite of west Bengal: Its geomorphology, stratigraphy and genesis. *Quart. Jour. Geol. Min. Metall. Soc. Ind.* Vol. 45, No. 7, pp. 157 = 174;
- Norton, S. A. (1972), Bauxitization and lateritization during the precambrian - A possible key to the origin of banded formations. *Econ. Geol.* Vol. 67. No. 7. pp. 1008 - 1009.
- Norton, S. A. (1973), , Laterite and bauxite formation. *Econ. Geol.*, Vol 68, No. 3, pp. 353 - 361.
- Oertel, G. (1956), Studie uber einen Laterit in Goa. *Neues Jb. Geol. Palaont. Abh.*, Stuttgart, 104(2), pp. 148 - 180.
- Okamoto, G., T. Okura and K. Goto (1957) Properties of silica in water. *Geochim. Cosmochim. Acta*, 12, 123-132.
- Oldham, R. D. (1893). "A Manual of the Geology of India". (2nd edn), Calcutta, 369-390.
- Ollier, C.D. (1959), A two cycle theory of tropical pedology *Jour. Soil Sci.* Vol. 10, No. 2, pp. 137 - 148.
- Ollier, C. D. (1969) , Weathering. Oliver and Boyd. Edinburgh. 304 P.
- Oxford & IBH Press. (1981), roceeding of the international seminar on Lateritisationa processes. (Trivandum, India December 1979). 450 P.
- Pallister, J. W. (1954), Erosion levels and laterite in Buganda Province, Uganda. *C.r. 18th. Int. Geol. Congre. Algiers, Fasc. 21.* pp. 193 - 199.

- Patel, P. K. (1978),. Geology of bentonite deposits of Kutch 357
Gujarat, with special reference to threir occurrence
origin and industrial applications. Un. Pub. Ph.d. Thes.
Univ. Baroda, India.
- Patel, P. K. (1987), Lateritization and bentonitization of basalt
in Kutch, Gujarat State, India. **Sedimentary Geology**,
Vol. 53 (3/4), pp. 327 - 346.
- Pascoe, H. E. (1964), A manual of the Geology of India and Burma.
Geol. Surv. Ind. Calcutta.
- Penck, W. (1953). "Morphological Analysis of Land-forms" (Trans.
by H. Czech and K. C. Boswell, of **Die Morphologische
Analyse**). Macmillan, London. 429 pp.
- Pendleton, R. L. and Sharasuvana, S. (1946). Analyses of some
Siamese laterites. **Soil Sci. 62, 423-440.**
- Perviz, M. (1983) A possible microbial involvement in
mineral leaching from a laterite in artificial vadose
and phreatic environments. Unpublished Report,
Department of Microbiology, Reading University,
Reading, UK.
- Petersen, U. (1971), Laterite and bauxite formation. **Econ. Geol.**
Vol. 66, No 7, pp. 1070 - 1082.
- Pettijohn, F. J. (1975) , sedimentary Rocks, 3rd edn. **arper and
Row publishers, New York. 628. p.**
- Pickering, R. J. (1962) , Some leaching experiments on three
quartz -free silicate rocks and their contribution to
the understanding of lateritization. **con. Geol., Vol.**
57, pp. 1185 - 1206.
- Piper, C. S. (1931) , The availability of manganese in the soil.
j. agric. Sci. 21, pp. 762 - 779.
- Poddar, M. C. (1953), In Krishnan, (1958).

Poddar, M.C. (1955) , In Roy, (1961).

Poddar, M.C. (1959) , Stratigraphy and oil possibilities in Kutch, Western India. **Proc. 1st. symo. Dev. Petrol. Resour. of Asia and Far East. No. 11. pp. 146 - 148.**

Poddar, M.C. (1963), Geology and oil possibilities of Tertiary Rocks of Western India. **Proc. 2nd Symp. Dev. Petrol. Resour. of Asia and Far East; No. 18; pp 220 = 220;**

du. Preez, J. W. (1949), Laterite. A general discussion with a description of Nigerian occurrences **Bull. agr. Conga belage 40 , p. 53 - 66.**

Prescott, J. A. and Pendleton R. L. (1952) , Laterite and lateritic soils **Commonwealth Bur. Soil Sci. Teach. Commun. Vol. 47. 51. p.**

Raghavan, Nambiar A. & Sakumaran, P.V. (1981), Lateritisation of Anorthosite, Gabbro, Granophyre and charnockite. **Proceedings of the International Seminar on Lateritisation Processes (Trivandram India 1979). Oxford abd IBH Press. pp. 120-126.**

Raja, Rao C. S. (1976), The geological control for formation of laterite in Western Maharastra. **Presented at the symp. Deccan Trap and Bauxite. Pune, Oct. 1976. Geol. Surv. Ind.**

Rao, G. k. and Rao. C. B. (1976) , Decomposition of primary minerals and process of bauxitization in Shevaroy and Kolli Hills, Salem districts, Tamil Nadu. **Jour. Geol. Soc. Ind. Vol.17, No. 4, pp. 530 - 538.**

G. K., Rao, C. B. and sunder. Y. S. (1974), Mineralogical studies on bauxite from Shevaroy Hills, Tamilnadu State. **Jour. Soc. Ind. Vol. 15, No 1.**

- Rao, U. D. G. (1975) , A review of the bauxite resources for Gujarat Alumina project. **Mineral Wealth. Vol. 11 , No. 1.**
- Rao, U.D.G. (1976) , Bauxite deposits of Gujarat state. **Presented at the symp. Deccan trap and Bauxite, Pune. Oct. 1976. Geol. Surv. Ind.**
- Read H. M. (1947), "Rutley's Elements of Mineralogy". (24th edn.) **Murby., London. 525 p.**
- Reiche, P. (1950). A survey of weathering processes and products. **Univ. New Mex Publs Geol. No. 1.**
- Robinson, P.L. (1973), Implications of continental drift to the earth sciences, (eds.) D.H Tarlung and S.K. Rancern, **Academic Press, London, Vol. 240, pp. 451.**
- Ross, C. S. (1943) , Clays and soils in relation to geologic processes. **Jour. Wash. Acad. Sci. Vol. 33. pp. 225 - 235.**
- Roy - Chowdhary M. K.; Venkatesh, V. and paul D.K. (1964a). Laterite and bauxite of Amarkantaka plateau, India. **Rept. 22nd.Session Inter. Geol. Congre. India. Pt. 14 PP. 45 - 63.**
- Roy Chowdhury, M. K., Anandalwar, M. A. and Paul, D. K. (1965). Recent concepts of the origin of Indian laterite. **Proc. natn. Inst. Sci. India Part A, 31 (6), 547-558.**
- Roy., R and Osborn. E. F. (1952) , Studies in the system alumina - silica- water. **A.I.M.E. (New York), Sym.Vol. Clay and Laterite Genesis. pp. 76 - 80.**
- Russell, I. C.(1889). Sub-aerial decay of rocks and origin of red colour in certain formations. **U. S. Geol Soc. Bull. No. 52.**

- Segalen, D. (1971). Metallic oxides and hydroxides in soils of the warm and humid areas of the world : formation, identification, evolution. *Nat. Res. Res. UNESCO II*, 25-38.
- Sabot, J. (1954) , Les laterites. 19th Inter. Geol. Congres. Algiers. pt. 21. pp. 181 - 192.
- Sabot, J. (1966), n Rao (1976).
- Sahasrabudhe, Y. S. (1959) , In Roy (1962).
- Sahasrabudhe, Y. S. (1964), The origin of bauxite deposits of Gujarat, India. *dvancing Frontiers in Geology and Geophysics*. Indian Geophysical Union, Hyderabad, pp. 461-480.
- Sahasrabudhe, Y. S. (1966), Geology and genesis of the bauxit deposits of Gujarat State, India. *Unpubl. Ph.D. Thesis, Poona University*.
- Samanta, B.K. (1974), The limits and sub-divisions of the paleocene with remarks on marine occurrences recorded in India - Pakistan region. *Contribution to the Earth and Planetary sciences Geol. Min. Metall. Soc. Ind., Golden Jubililee, Vol.*, pp. 183 - 205.
- Sato, M (1960), Oxidation of sulfide ore bodies. 1: Geochemical environments in terms of Eh and Ph. *Eoon. Geol.* 55, pp. 928 - 961.
- Solater, J. G. and Fisher R. L. , (1974), *Geol. Soc. Am. Bull.* V. 85, pp. 683 - 702
- Scrivenor, J. B. (1909), The use of the word "Laterite". *Geol. Mag Vol. 46.* pp. 431 -432, 574 -575.
- Scrudato, R. J (1933), Laterite. *Geol. Mag* 70, pp. 191.
- Scrudato, R. J. (1969), Origin of East-Cebtral Georgia Kaolin

- deposits. **Econ. Geol.** Vol 64, No. 7, pp. 834.
- Selected powder diffraction data for minerals (1974), Data book,
First edition. publication - DBM -123. Published by
Joint Committee on powder diffraction standards.
- Sherman, G. D. (1949), Factors influencing the development of
laterite and lateritic soils in The Hawaiian
Islands. **Pacific Sci.** Vol. 3, pp. 307 - 314.
- Sherman, G.D. (1950) , Genesis and morphology of the Hawaiian
ferruginous laterite. **Pacific Sci.** Vol.4.pp. 315 - 322.
- Sherman, G. D. (1952), The genesis and morpholgy of alumina rich
laterite clays. **A.I.M.E. (New York), Symp. Vol., Clay
and Laterite Genesis.** pp. 154 - 161.
- Sherman, G. D. :Foster Z. C.and Fujimoto C. K. (1949), Properties
of the ferruginous hymic latosols of the Hawaiian
Island **Proc.Soil. Sci. Soc. Amer.** Vol-13. pp 471 - 476.
- Sherman, G. D., H Ikawa, G. Uehara, and E. Okasaki (1962), Types
of occurrence of nontronite and nontronite like
minerals in Soils, **Pac, Sci.** 16, pp. 57 - 62.
- Simpson, E. S. (1912) , Notes on laterite in Western Australia
Geol. Mag. 49, pp. 399 - 406.
- Smith, W.W. (1957) , The silica budget in the sedimentary cycle
Am. Mineralogist 42. pp. 821 - 841.
- Stamp, L. D. (Ed.) (1961). "A Glossary of Geographical Terms".
Longman, London. 539 pp.
- Stevens, R. E. and M.K. Carron (1948), Simple field test for
distinguishing minerals by abrasion pH. **Am.
Mineralogist**, 33. pp.31 - 39.
- Strakhov, N. M. (1967), Principles of lithogenesis, Vol. 1(J.P.
Fitsimmons , S. I. Tomkeieff, and J. E. Hemibgwoay,

translators). Oliver and Boyd, London.

Subramanian, K. S. (1978), How old are laterites in the Indian Peninsula. A suggestion. *Jour. Geol. Soc. Ind.* V.19. No. 6, pp. 289-292.

de Swardt, A. M. J. (1964), Lateritisation and landscape development in parts of Equatorial Africa. *Z. Geomorph.* (NS), 8(3), pp. 313 - 333.

Sychanthavong, S.P.H. & Patel, P. K., Laterites and lignites for northwestern India and their relevance to the drift tectonics of the Indian Plate. *Current Science*. V. 56, No.10, pp.469 -475.

Talati, D. J. (1966), On the petrochemical of calculations and petrology of bauxite from Kutch, Gujarat State. *Mineral Wealth*. Vol. 2, No. 3.

Talati, D. J. (1970), On the origins, classifications and review of Bhavnagar Bentonite, Gujarat State. *Min. wel.* Vol. 6, No.2, pp.15 - 18.

Tandon, K. K. (1971), Occurrence of *Venericardia beaumonti* d'Archaic and Haime from Nareda, South Western Kutch, India. *Geophytology*, Vol.1, pp. 70 -74.

Taylor, J.C., Jr. and Oza, M. M. (1964) . , Geology and ground water of the Dudhai area, Eastern Kutch (India). *Bull. Geol. Soc. Ind. Series B*, No. 5. pp. 6 - 13.

Taylor, R. M. and Mckenzie, R. M. (1964), The mineralogy and chemistry of manganese in some Australian soils. *Aust. J. Soil Res.* 2, pp. 235 - 246.

Thiel, G. A. (1925)k . Manganese precipitation by micro-organisms *Econ. Geol.* 20(4), pp. 301 - 310.

Thomas, M. F. (1974). "Tropical Geomorphology". Focal problems in

- geography, Macmillan, London. 332 pp.
- Tiller, K. G. (1963), Weathering and soil formation on dolerite in Tasmania with particular reference to several trace elements. **Aust. J. Soil Res. 1, pp. 74 - 90.**
- Torkar, K, and Krischner H. (1963), In Valetton, (1972).
- Torkar, K. (1960) , in Valetton, (1972).
- Trendall, A. F. (1962). The formation of apparent peneplains by a process of combined lateritisation and surface wash. **Z. Geomorph. (NS) 6(2), 183-197.**
- U. S. DEPARTMENT OF AGRICULTURE (1965), SOIL TAXONOMY.
- Valetton, I, (1964), Problems of boehmitic and diasporic bauxites. In. G. C. Amstutz (Editor) **Sedimentology and ore Genesis Vol. 2, p. 123 - 129. Elsevier publishing company, Amsterdam.**
- Valetton, I. (1971), Tubular fossils in the bauxites and the underlying sediments of Surinam and Guyana. **Geologic en Mijnbouw. Vol. 50. No. 6 pp. 733 - 741.**
- Valetton, I. (1972), , Bauxites. **Elsevier Publishing co, Amsterdam. 226.p.**
- Valetton, I. (1973), Pre-bauxite sediments and sedimentary relics in Surinam bauxites. **Geologic. En. Mijnbouw, Vol. 52. No. 6, pp. 317 - 322.**
- Valetton, I. (1983), palaeoenvironment of lateritic bauxites with vertical and lateral differentiation. Residual Deposits: Surface Related Weathering Processes and Materials. Edited by R.C.L. Wilson. **Published for Geological Society of London by Blackwell scientific publ. London. pp. 77 -91.**
- Van Bemmelen, R. W. (1941). Origin and mining of bauxite in

- Netherlands India. **Econ. Geol.** 36, 630-640.
- Van der Merwe C. R. and Heystek. H. (1952), Clay minerals of South African soil groups. I: Laterites and related soils, **Soil Sci. Vol. 74. pp. 383 - 401.**
- Vankatappayya, N. (1955), In Roy (1961).
- de Vletter, D. R. (1955), How Cuban nickel are was formed - a lesson in laterire genesis. **Engg. Min, J 156 (10), pp. 84-87.**
- Vann, J. H. (1963). Developmental processes in laterite terrain in Amapa. **Geog. Rev. 53 (3), 406-417.**
- Wadia, D. N, krishnan M.S. and Mukerjee. P.N. (1935), Introductory note on geological foundations of the soils of India "Laterite & lateritic soils". **Rec. Geol. Surv. Ind. Vol. 58. pt. 4, pp. 363 -393.**
- Walther , J (1915) , Laterit in West Australien. **Z dt Geol Ges. 67B(4), pp. 113 - 140.**
- Walther, J. (1916). Das geologische Alter und die Buildung des Laterits. **Petermanns geogr. Mitt. 62, 1-7, 46-53.**
- Wayland E. J. (1935), Short account of the geology of Ankole District. **Un-published Manuscript Geol. Surv. Uganda.**
- de Weiss G. (1954), Note surquelques types de laterite de la, Guinee portugaise. **C. R. 19th .Int. Geol. Congr. Algiers, Fasc.21, pp. 171 - 179.**
- Williams, H. D. (1981) Micro-organisms as agents of geological change. Unpublished Report, Department of Microbiology, Reading University, Reading, UK 26pp.
- Woolnough, W. G. (1918), The physiographic significance of laterite in Western Australia. **Geol. Mag. 5, pp. 385 - 393. (Decade 6.)**

- Wynne, A. B. (1869), Preliminary notes on the Geology of Kutch, Western India. Record Geol. Survey of India, V. 2. pt. 3, pp. 51.-58.
- Wynne, A. B. (1872) , Memoir on the geology of Kutch. Mem. Geol. Surv. Ind. Vol, 9. pt. 1, pp. 44 - 61.
- Young, R. S. (1955) , Solubility of cobalt in soil. J Soil Sci. 6(2), pp. 233-240.
- Zans, V. A. (1959), Recent views on the origin of bauxite. Geonotes. Vol. 1, pp. 123 - 132.
- Zapp, A. D. and Clark, L.D. (1965), Bauxite in areas adjacent to and between the Springvale and Andersonville districts, Georgia, U.S. Geol. Surv. Bull. 1199-H.