

## REFERENCES

Agarwal, K.K. (1994). Tectonic evolution of the Almora Crystalline Zone, Kumaun Lesser Himalaya : A reinterpretation. Jour. Geol. Soc. India, V.43, pp.5-14.

Agrawal, N.C. and Kumar, G. (1973). Geology of the upper Bhagirathi and Yamuna valleys, Uttar-Kashi District, Kumaun Himalaya. Him. Geol., V.3, pp.1-23.

Agrawal, L., Pandey, A.R. and Powar, K.B. (1972). Petrogenesis of granitic rocks of Almora Crystalline mass. Him. Geol., V.3, pp.145-167.

Ahmad, A. (1975). Geology and structure of the area north of Bageshwar, District Almora, (U.P.). Him. Geol., V.5, pp.194-207.

Ahmad, A., Saxena, A. and Sidhanta, B.K. (1980). Structural analyses of eastern Kumaun Himalaya and related problems. Him. Geol., V.10, pp.280-303.

Anderson, O. (1928). The genesis of feldspars from granite pegmatites. Nord. Geologisk. Tidsskr., V.9, pp.116-207.

Ashgirzi, G.D. (1975). Thrust tectonics of Himachal Pradesh Himalayas, Tectonic problems of Alpine system (Ed. Mahel, M.). pp.341-347.

Auden, J.B. (1933). Age of Certain Himalayan granites. Rec. Geol. Surv. Ind., V.66, pp.461-471.

Auden, J.B. (1934). The Geology of the Krol Belt. Rec. Geol. Surv. Ind., V.67, 4, pp.357-454.

Auden, J.B. (1937). Structure of the Himalaya in Garhwal. Rec. Geol. Surv. Ind., V.71, 4, pp.407-433.

Bahuguna, V.K. and Saklani, P.S. (1988). Tectonics of the Main Central Thrust in Garhwal Himalaya, U.P. Geol. Soc. Ind., V.31, pp.197-209.

Barbarin, B. (1990). Granitoids : main petrogenetic classifications in relation to origin and tectonic setting. Geol. Jour., V.25, pp.227-238.

Bates, R.L. and Jackson, J.A. (1980). Glossary of geology. Am. Geol. Inst. Virginia, 751 p.

Belousov, V.V. (1962). Basic problems in Geotectonics. Mc Graw Hill, New York, 320 p.

Bhanot, V.B., Gill, J.S., Arora, R.P. and Bhalla, J.K. (1974).  
Radiometric dating of the Dalhousie granite. Curr. Sci., V.43,  
208.

Bhanot, V.B., Bhandari, A.K., Singh, V.P. and Goel, A.K. (1976).  
The petrographic studies and the age determination of Koidal  
Gneiss, Kumaun Himalaya. Curr. Sci., V.45, 18.

Bhanot, V.B., Singh, V.P., Kansal, A.K. and Thakur, V.C. (1977 a).  
Early Proterozoic Rb - Sr whole rock age for Central  
Crystalline gneiss of Higher Himalaya, Kumaun. Jour. Geol.  
Soc. India., V.18, pp.90-91.

Bhanot, V.B., Pande, B.K., Singh, V.F. and Thakur, V.C. (1977 b).  
Rb-Sr whole rock age of the granitic gneiss from the Askot  
area, eastern Kumaun and its implication on the tectonic  
interpretation of the area. Him. Geol., V.7, pp.118-122.

Bhanot, V.B., Pande, B.K., Singh, V.B. and Kansal, A.K. (1980).  
Rb-Sr ages for some granitic and gneissic rocks of Kumaun and  
Himachal Himalaya. Stratigraphy and correlation of Lesser  
Himalayan Formations (eds. K.S. Valdiya and S.B. Bhatia).  
Hind. Publ. Corp. Delhi, pp.139-142.

Bordet, P. (1973). On the position of the Himalayan Main Central Thrust within Nepal Himalaya. Proc. Sem. Geod. Him. Region, Hyderabad, pp.148-155.

Bowden, P., Batchelor, R.A., Chappel, B.W., Didier, J. and Lameyre, S. (1984). Petrological, geochemical and source criteria for the classification of granite rocks : a discussion. Physics of the Earth and planetary Interiors, V.35, pp.1-11.

Brown, G.C. (1982). Calc-alkaline intrusive rocks. Their diversity, evolution, and relation to Volcanic arcs. Andesites (ed. Thrope, R.S.), John Wiley and Sons, pp.437-461.

Burrard, S.B. and Hayden, H.H. (1933). A sketch of the geography and geology of the Himalaya Mountain and Tibet. Govt. of India Press, Calcutta, 369 p.

Chamyal, L.S. (1984). Geological studies around Loharkhet-Dhakuri area in Kumaun Himalaya with special reference to the metabasics and the Main Central Thrust. Unpubl. Ph.D. Thesis, M.S.U., Baroda.

Chamyal, L.S. (1987). Some petrographic studies on the Crystalline rocks of Dhakuri area in Kumaun Himalaya. Jour. Ind. Acad. Geosci. Hyderabad, V.30, pp.1-15.

Chamyal, L.S. (1991). Stratigraphy of Lesser Himalayan rocks in Kumaun. Proc. Ind. Acad. Sci. (Earth planet. Sci.), V.100, pp.293-306.

Chamyal, L.S. and Merh, S.S. (1984). Metabasics of Loharkhet in Kumaun and their stratigraphic significance. Currents trends in geology (eds. A.K. Bhattacharya, M.S. Srinivasan, R.K. Lal and V.K. Gairola) Today and Tomorrows printers and publishers, New-Delhi, V.11, pp.91-106.

Chamyal, L.S. and Vashi, N.M. (1989). Tectonic framework and structural characteristics of the crystalline rocks of Kumaun Himalaya. Current trends in geology (ed. P.S. Saklani), Today and Tomorrows Printers and Publishers, New-Delhi, V.11, pp.91-106.

Chamyal, L.S. and Manudip Kaur (1994). Structural set up in northern part of Kumaun Himalaya. Proc. Ind. Acad. Sci. (Earth Planet. Sci.), V.103, pp.37-46.

Chamyal, L.S. Vashi, N.M. and Merh, S.S. (1984). On the nature of the Main Central Thrust in Kumaun Himalaya. Proc. I.G.C. (ed. B.B. Rao), Bombay, pp.77-84.

Chappel, B.W. and White, A.J.R. (1974). Two contrasting granite types. Pacific Geol., V.8, pp.173-174.

Clarke, D.B. (1992). Granitoid rocks : Topics in the earth sciences. Chapman and Hall London, 283 p.

Clarke, F.W. and Washington, H.S. (1924). The composition of the earth's crust. U.S. Geol. Survey, Profess. Paper 127, 117 p.

Crawford, A.R. (1974). A greater Gondwanaland. Science, V.184, pp.1179-1181.

Das, B.K. (1969). Petrology of the pelitic schists and gneisses of Dudatoli Mountain, Garhwal Himalaya. Publ. Cent. Adv. Stud. Geol. Punjab Univ., Chandigarh, V.6, pp.66-67.

Das, B.K. (1971). Petrology of pelitic schists and gneisses of Chauhatia-Ranikhet area, Almora, U.P. Geol. Rundschau, V.60, pp.552-568.

Das, B.K. (1979). Petrology and structure of the granitic gneiss and the associated mesograde metamorphites of the Dwarahat area, lower Kumaun Himalaya. Structural Geology of the Himalaya (ed. P.S. Saklani), Today and Tomorrow's Publishers, Delhi, pp.41-58.

De La Roche, H. (1978). Sur L' expression graphique des relations entre La composition chimique et al. Composition mineralogique quantitative des roches cristallines. Presentation d'un diagramme destine a l'etude chemicommineralogique des massifs grantiques or granodiorifiques, application aux voses cristallines. Sci. de la Terre. V.9, pp.293-337.

Desai, S.J. (1968). Geology of the area around Majkhali, dist. Almora, U.P. unpublished Ph.D. Thesis, M.S. Univ. of Baroda.

Desai, S.J. (1973). Mode of origin and Tectonic setting of gneissic rocks of Siasi Devi area, Dist. Almora, U.P. Him. Geol., V.3, pp.345-356.

Dewey, J.F. and Bird, J.M. (1970). Plate tectonics and geosynclines. Tectonophysics, V.10, pp.625-638.

Divakara Rao, V., Radhakrishna, T. and Srikantia, S.V. (1978). Geochemistry and origin of acidic rocks from Jaspa and Rohtang, H.P. Jour. Geol. Soc. India, V.19, 563-570.

Engel, A.E.J. and Engel, C.G. (1958). Progressive metamorphism and granitization of the major para-gneiss northwest Adirondack Mountains. Bull. Geol. Soc. Am., V.69, pp.1-58.

Eremenko, N.A. and Datta, A.K. (1968). Tectonic framework of outer Himalaya. Bull. O.N.G.C., V.4, pp.65-73.

Eskola, P.E. (1932). On the origin of granitic magma., Miner. Petrol., V.42, pp.455-481.

Frank, W., Thoni, M and Purtschelles, F. (1976). Geology and petrography of Kulu-South Lahul Area. Colloqu. Inter., C.N.R.S., No.268., Ecologie et Géologie de l' Himalaya, Paris, pp.147-172.

Fuchs, G. (1975). Contribution to the geology of the northwestern Himalayas. Abh. Geol. B.-A., V.32, pp.1-59.

Fuchs, G. (1992). Pre-Alpine and Alpine orogenic phases in the Himalaya. Himalayan orogen and global tectonics (ed. A.K. Sinha), Oxford and I.B.H. Publ., pp.19-34.

Fuchs, G. and Frank, W. (1970). The geology of West Nepal between the rivers Kali, Gandaki and Thulobheri. Jahrb. Geol. Bundes., V.18, pp.1-103.

Gairola, V.K. (1975). On the petrology and structure of Central Crystallines of the Garhwal Himalaya. Him. Geol., V.5, pp.455-468.

Gairola, V.K. and Ackerman, D. (1988). Geothermobarometry of the Central Crystallines from the Garhwal Himalaya. Jour. Geol. Soc. Ind., V.31, pp.230-242.

Gansser, A. (1964). Geology of the Himalaya. Interscience Publ., London, 273 p.

Garrels, R.M. and Mackenzie, F.T. (1971). Evolution of Sedimentary rocks. W. W. Norton, New-York, 397 p.

Greisbach, C.L. (1881). Geology of the Central Himalayas. Mem. Geol. Surv. Ind., V.23, pp.1-232.

Greisbach, C.L. (1891). Geological notes. Rec. Geol. Surv. Ind., V.13, 83 p.

Gromet, L.P. and Silver, L.T. (1978). Implications of rare earths distribution among minerals in a granodiorite, Peninsular range batholith, Southern California. EOS, Trans. Am. Geophys. Union, V.59, pp. 399-400.

Gupta, L.N. (1985). Structure and metamorphism of the Crystalline rocks of the Dhauladhar range. Publ. Cent. Adv. Stud. Geol. Panjab Univ. Chandigarh, V.1, pp.209-230.

Hagen, T. (1959). Über die Geologischen Bau des Nepal Himalaya.  
Jahrb. St. Gallischen Naturf. Gesel., 78 p.

Hansen, G.N. (1980). Rare earth elements in petrogenetic studies  
of igneous systems. Ann. Rev. Earth Planet. Sci., V.18,  
pp.371-406.

Haselton, H.T., Jr., Hovis, G.L., Hemmingway, B.S. and Robbie, R.A.  
(1983). Calorimetric investigation of the excess entropy  
mixing in albite-sanidine solid solution: lack of evidence for  
Na, K short range order and implications for two feldspar  
geothermometry. Am. Mineral., V.68, pp.398-413.

Heim, A and Gansser, A. (1939). Central Himalayas, geological  
observations of the Swiss Expedition, 1936. Mem. Soc. Helv.  
Sci. Nat. V.73, 245 p.

Hess, H.H. (1955). Serpentines, orogeny and speirogeny. Spec. Pap.  
Geol. Soc. Amer., V.62, pp.391-408.

Henoc, J. and Maurice, F. (1978). Microanalysis and scanning  
electron microscopy. Les Editors de physique (eds. Muria, F.,  
Mery, L. and Trivier, R.). Orogay, pp.281-307.

Hietanen, A. (1954). On the geochemistry of metamorphism. J. Tenn.  
Acad. Sc., V.29, pp.286-296.

Holmes, A. (1944). Principles of physical geology. First edition, Thomas Nelson and sons Ltd., London.

Holmes, A. (1965). Principles of physical geology. Thomas Nelson, London, Edinburgh, 1288 p.

Hussain, S., Raju, S., Dayal, B. and Fareeduddin (1994). Petrochemistry and tectonic setting of the Champawat granite suite of Lesser Himalaya, Pithoragarh District, Uttar Pradesh. Jour. Geol. Soc. India, V.44, pp.8-17.

Islam, R. and Thakur, V.C. (1988). Metamorphic history of Bhilangna valley, Garhwal Himalaya, Publ. Cent. Adv. Stud. Geol., P.V. Chandigarh, V.3, pp.127-138.

Islam, R., Purohit, K.K. and Thakur, V.C. (1991). The birth history of two granitic plutons of the Bhilangna valley of Garhwal Himalaya : a geochemical approach. Jour. Geol. Soc. Ind., V.38, pp.23-35.

Jowhar, T.N. (1989). Determination of lattice parameters and structural state of alkali feldspars - A rapid X-ray diffraction method. Ind. Jour. Earth Sciences, V.16, pp.173-177.

Karanth, R.V. (1977). Studies on the granitic rocks and the associated metamorphics of the Kapleshwar area (Dist. Almora and Nainital) in Kumaun Himalaya. Unpubl. Ph.D. Thesis, M.S. Univ., Baroda.

Karanth, R.V. (1985). New petrographic data on the metapelites of Almora. Jour. Geol. Soc. Ind., V.26, pp.435-452.

Karanth, R.V. and Shah, A.N. (1977). An interpretation of the origin and tectonic setting of the granitic rocks of Almora in Kumaun Himalaya. Him. Geol., V.7. pp.398-415.

Kashyap, S.R. (1972). Migmatites of Ramgarh area, Dist. Nainital. U.P. Him. Geol., V.2, pp.302-314.

Kharkwal, A.D. (1951). Study of Gneissose granites and associated metamorphic rocks of Lohaghat, Almora district. Quart. Jour. Geol. Min. Metal. Soc. Ind., V.23, pp.135-146.

Kumar, G. and Agarwal, N.C. (1975). Geology of the Srinagar Nandprayag area (Alaknanda Valley), Chamoli Garhwal and Tehri Garhwal districts, Kumaun Himalaya. Him. Geol., V.5, pp.29-59.

Kumar, G., Mehdi, S.R. and Prakash, G. (1972). A review of the stratigraphy of parts of Uttar Pradesh, Tethys Himalaya. Jour. Palaeont. Soc. Ind., V.15, pp.86-98.

Kumar, G., Prakash, G. and Singh, K.N. (1974). Geology of Deoprayag-Dwarahat area, Garhwal, Chamoli and Almora districts, Kumaun Himalaya, U.P. Him. Geol., V.4, pp.321-346.

Kuno, H. (1968). Differentiation of basaltic magmas. The Poldervaart Treatise, on rocks of basaltic composition (eds. H.H. Hessan and A. Poldervaart). Inter Science Publishers, pp.632-688.

Lal, R.K. (1969). Petrology of pelitic schists and gneisses of the area east of Masi Bazar. Pub. Cent. Adv. Stud. Geol., Chandigarh, V.6, pp. 55-65.

Lal, R.K. (1991). Empirical calibration of the Ti contents of biotite and muscovite for geothermometry and their application to low to high grade metamorphic rocks. Proc. third Indo-Soviet symp. on experimental mineralogy and petrology, New-Delhi.

Lapadu Hargues (1945). Sur l' existence et al nature de l' apport chimique dans certaines series cristallophylliennes. Bull. Soc. Geol. France, V.15, pp.225-310.

Le Forte, P. (1975 a). Himalaya : The collided range. Present knowledge of the continental arc. Am. Jour. Sci., V.275 A, pp.1-44.

Le Forte, P. (1975 b). The anatetic Himalayan leucogranites with emphasis on the Manaslu tourmaline granite. Rec. Res. Geol. Hindustan Publ. Delhi, V.2, pp. 76-90.

Le Forte, P., Debon, F., Peches, A., Sonet, J., and Vidal, P. (1986). The 500 Ma magmatic event in alpine southern Asia, a thermal episode at Gondwana scale. In : Mem. Sci. Terr. (Ed. Fond. Sci. de la Geol. et de ses Appl.) Nancy, V.47, pp.191-209.

Loczy, L. Von. (1907). Beobachutungen in Ostalichen Himalaya. Foldr. Kazlem, V.35, pp.1-24.

Mallet, F.R. (1874). On the geology and mineral resources of Darjeeling district and Western Dwars. Mem. Geol. Surv. India, V.11, pp.1-50.

Maniar, P.D. and Piccoli, P.M. (1989). Tectonic discrimination of granitoids. Geol. Soc. Amer. Bull., V.101, pp.635-643.

Marmo, V. (1956). On the emplacement of granites. Am. Jour. Sci., V.254, pp.479-492.

McMahan, C.A. (1887). The gneissose granites of Himalayas. Geol. Mag., V.5, 312 p.

Meddlicott, H.B. (1864). On the geological structure and relations of the southern portion of the Himalayan ranges between the rivers Ganges and Ravee. Mem. Geol. Surv. Ind., V.3, pp.1-212.

Mehdi, S.H., Kumar, S. and Prakash, G. (1972). Tectonic evolution of eastern Kumaun Himalaya : a new approach. Him. Geol., V.2, pp.481-501.

Mehta, P.K. (1977). Rb-Sr geochronology of the Kulu-Mandi Belt, its implications for Himalayan tectogenesis. Geol. Rdsch., V.66, pp.156-175.

Merh, S.S. (1968). A preliminary note on the structural history of the Central Kumaun Himalaya. Bull. Geol. Soc. Ind., V.5, pp.1-7.

Merh, S.S. (1977). Structural studies in the parts of Kumaun Himalaya. Him. Geol., V.7, pp.26-42.

Merh, S.S. (1984). A reinterpretation of the structural set up of Kumaun Himalaya. Proc. Fifth Ind. Geol. Cong. (ed. B. Bhaskar Rao), Bombay, pp.57-64.

Merh, S.S. and Vashi, N.M. (1965). Structure and metamorphism of Ranikhet area of Almora district, U.P. Ind. Min., V.6, pp.58-66.

Merh, S.S. and Vashi, N.M. (1966). On the nature of South Almora Thrust near Upradi, south of Ranikhet Dist. Almora, U.P. Pub. Cent. Adv. Stud. Geol. Punjab Univ. Chandigarh, V.2, pp.330-341.

Merh, S.S. and Vashi, N.M. (1976). The problem of the South Almora Thrust. Him. Geol., V.6, pp.508-516.

Merh, S.S., Chamyal, L.S. and Vashi, N.M. (1986). Geochemistry and geodynamic significance of the amphibolites of Kumaun Himalaya. Ophiolites and Indian plate Margin (eds. N.C. Ghose and S. Varadarajan), pp.109-122.

Middlemiss, C.S. (1880). Gneiss of two ages in Himalaya. Rec. Geol. Surv. Ind. V.13.

Middlemiss, C.S. (1888). Crystalline and metamorphic rocks of the Lower Himalayas, Garhwal and Kumaun Section (III). Rec. Geol. Surv. Ind., V.21, pp.11-28.

Middlemiss, C.S. (1890). Physical geology of the Sub-Himalayas of Garhwal and Kumaun. Mem. Geol. Surv. Ind., V.24, pp.59-200.

Misra, R.C. and Banerjee, D.M. (1968). Stratigraphy, correlation and tectonics of Sarju-Pungar valley areas, Districts Almora-Pithoragarh, U.P. Pub. Cent. Adv. Stud. Geol. Panjab Univ., Chandigarh, V.5, pp.101-113.

Misra, R.C. and Bhattacharya, A.R. (1972). Geology of the area around Kapkot, District Almora, U.P. Him. Geol., V.2, pp.252-270.

Misra, R.C. and Bhattacharya, A.R. (1976). The Central Crystalline zone of Northern Kumaun Himalaya : its lithostratigraphy, structure and tectonics with special reference to plate tectonics. Him. Geol., V.6, pp.133-154.

Misra, R.C. and Valdiya, K.S. (1961). The Calc-Zone of Pithoragarh, with special reference to the occurrence of stromatolites and the origin of magnesite. Jour. Geol. Soc. India, V.2, pp.78-90.

Misra, R.C., Sharma, R.P. and Sinha, A.K. (1973). Petrochemistry of the Almora Crystalline, Kumaun Himalaya. Him. Geol., V.3, pp.411-435.

Misra, S. and Sarkar, S.S. (1991). Linear discrimination among M-, I-, S- and A- granite. Ind. Jour. Earth Sciences, V.18, pp.84-93.

Miller, C.F. (1984). Are strongly peraluminous magmas derived from pelitic sedimentary sources ?. Jour. of Geol., V.93, pp.673-689.

Molnar, P. and Tapponnier, P. (1975). Cenozoic tectonics of Asia: Effects of a continental collision. Science, V.189, pp.419-426.

Molnar, P. and Tapponnier, P. (1977). The collision between India and Eurasia. Scient. Am., V.236, pp. 30-41.

Nance, W.B. and Taylor, S.R. (1976). Rare earth element patterns and crustal evolution. Australian post-Archean sedimentary rocks. Geochim. Cosmochim Acta, V.40, pp.1539-51

Naqvi, S.M., Divakara Rao, V., and Hari Narain (1974). The protocontinental growth of the Indian sheild and the antiquity of its rift valleys. Precamb. Res., V.1, pp.345-398.

Nautiyal, S.P. (1941). A study of granites and metamorphic rocks of Almora. Abst. Proc. Ind. Sci. Cong. V.28, 134.

Nautiyal, S.P. (1955). Director General's report for 1943-44 on Nainital district. Rec. Geol. Surv. India, V.79, pp.590-598.

O'Conner, J.T. (1965). A classification for quartz-rich igneous rocks, based on feldspar ratio. U.S. Geol. Surv. Prof. Paper, 525 B, pp.79-84.

Oldham, R.D. (1883). Note on the geology of Jaunsar and the Lower Himalayas. Rec. Geol. Surv. Ind., V.16, pp.93-198.

Oxburgh, E.R. (1972). Flake tectonics and continental collision. Nature, V. 239, pp.202-204.

Pande, I.C. (1949). A note on the epidiorite sill of Ramgarh area, Dist. nainital, U.P. Q.J.M.M.G. India, V.21, pp.7-14.

Pande, I.C. (1950). A geological note on the Ramgarh area. District Nainital, U.P. Quart. Jour. Geol. Min. Met. Soc., V.22, pp.15-23.

Pande, I.C. (1956). Migmatites of Ramgarh, District Nainital. Jour. Sci. Res. Banaras Hindu Univ. Varanasi, V.7, pp.88-105.

Pande, I.C. (1967). Palaeotectonic evolution of the Himalaya. Pub. Cent. Adv. Stud. Geol. Punjab Univ. Chandigarh, V.3, pp.107-116.

Pande, I.C. and Powar, K.B. (1968). Petrology and emplacement of the Almora granite, Kumaun Himalaya. Bull. Ind. Geol. Assoc., V.1, pp.57-64.

Pande, I.C. and Saxena, M.N. (1968). Birth and development of Himalaya. Publ. Cent. Adv. Stud. Geol. Punjab Univ. Chandigarh, V.4, pp.1-19.

Pande, I.C., Powar, K.B. and Das, B.K. (1963). The migmatites of Kumaun Hills, U.P. Nat. Geog. Jour. Ind., V.9, pp.96-103.

Pandey, B.K., Singh, V.P., Kwatra, S.K. and Bhanot, V.B. (1980). Rb-Sr Isotopic studies of the granitic and gneissic rocks of Baijnath crystallines, Kumaun Himalaya, U.P. Him. Geol., V.10, pp.256-263.

Patel, J.P. (1971). Geology of the Ramgarh area, District Nainital, U.P. with special reference to the structure and metamorphism. Unpubl. Ph.D. Thesis, M.S.U. Baroda.

Pearce, J.A., Harris, N.B.W. and Tindle, A.G. (1984). Trace element discrimination diagrams for the tectonic interpretation of granitic rocks. Jour. Petrol., V.25, pp.956-983.

Petermisch (1949). Metasomatic granitisation of batholithic dimensions. Amer. Jour. Sci., V.347, pp.209-245.

Pilgrim, G.E. and West, W.D. (1928). The structure and correlation of the Simla rocks. Mem. Geol. Surv. India, V.53, 140 pp.

Powar, K.B. (1972). Petrology and structure of the Central Crystalline Zone, North-East Kumaun. Him. Geol., V.2, pp.34-46.

Powar, K.B. (1980). Stratigraphy of the Lesser Himalayan sediments of Nainital-Almora area, Kumaun Himalaya. Stratigraphy and correlations of Lesser Himalayan Formations (eds. K.S. Valdiya and S.B. Bhatia), Hindustan Publ. Corp., New Delhi, pp.49-58.

Powar, K.B. (1983). Granitic rocks of eastern Kumaun Himalayas. Granites of Himalayas, Karakoram and Hindukush, (ed. Prof. F.A. Shams) Inst. of Geol. Punjab Univ., Lahore, Pakistan, pp.217-234.

Powar, K.B. and Bhale, A.Y. (1978). Petrogenesis of granitic rocks of Masi area, Kumaun Himalaya. Rec. Res. in Geol., V.4, pp.79-114.

Powell, M. and Powell, R. (1977). Plagioclase alkali feldspar geothermometer revisited. Mineral. Mag., V.41, pp.253-256.

Price, J.G. (1985). Ideal mixing in solid solution, with an implication to two-feldspar geothermometry. *Am. Mineral.*, V.70, pp.696-701.

Raiverman, V. (1992). Trans-Asiatic lineaments and Himalayan orogeny. *Himalayan Orogen and Global Tectonics* (ed. A.K. Sinha), pp.121-156.

Rao, D.S.K. and Kumar, R. (1981). Migmatization in Khadraia area, Simla Hills (H.P.). Current Trends in Geol. (ed. P.S. Saklani), V.4, pp.101-110.

Read, H.H. (1957). The granite controversy. Thomas Murphy and Co., London.

Reynolds, D.L. (1946). The sequence of geochemical changes leading to granitisation. *Quart. Jour. Geol. Soc. Lond.*, V.102, pp.389-446.

Ronov, A.B. and Migdisov, A.A. (1971). Geochemical history of the crystalline basement and the sedimentary cover of the Russian and North American platforms. *Sedimentology*, V.16, pp.137-185.

Roy, A.B. and Valdiya, K.S. (1988). Tectonometamorphic evolution of the Great Himalayan Thrust sheets in Garhwal Region, Kumaun Himalaya. Jour. Geol. Soc. Ind., V.32, pp.106-124.

Saklani, P.S. (1970). Metamorphism in rocks of Garhwal nappe of Garhwal Himalaya. Pub. Cent. Adv. Stud. Geol., Panjab Univ., Chandigarh, V.7, 115-118.

Saklani, P.S. (1973). A review of the Himalayan orogenesis. Cas. Min. Geol. Czechoslovakia, V.18, pp.93-198.

Sarkar, S.N. (1980). Precambrian stratigraphy and geochronology of Peninsular India : A review. Ind. Jour. Earth Sci., V.7, pp.12-26.

Sarkar, S.N., Reddy, V.S. and Nair, P.K.R. (1965). Tectonic pattern of a part of Almora Nappe Zone around Almora. Dr. D.N. Wadia commemorative volume, Min. Geol. Metall. Inst. Ind., pp.668-702.

Saxena, P.R. and Divakara Rao, V. (1988). A note on the significance of Uranium and Thorium distribution in granitoids from Joshimath - Badrinath of Central Crystalline axis. Kumaun Himalaya. Jr. Geol. Soc. India, V.31, pp.488-490.

Schermerhorn, L.J.G. (1961). Orthoclase, microcline and albite in granites. Schweiz. Mineral. Petrog. Mitt., V.41, pp.13-36.

Shah, A.N. (1972). Structure and metamorphism of the rocks around Almora (U.P.). Unpubl. Ph.D. Thesis, M.S.U. Baroda.

Shah, S.K. and Sinha, A.K. (1974). Stratigraphy and tectonics of the 'Tethyan Zone' in a part of western Kumaun Himalaya. Him. Geol., V.4, pp.1-27.

Sharma, K.K. (1977). Contribution to the geology of Satluj valley, Himachal Pradesh, India. Himalaya Sciences de la Terra, CNRS, Paris, V.268, pp.369-378.

Sharma, K.K. (1983). Granitoid belts of the Himalayas. Granites of Himalayas, Karakoram and Hindukush. Publ. Inst. Geol. Punjab Univ., (ed. F.A.Shams) Lahore, Pakistan, pp.11-37.

Sharma, R.S. (1970). Plagioclase composition and some aspects of the gneissic rocks of Almora-Dudatoli region, Lower Kumaun Himalaya. Publ. Cent. Adv. Stud. Geol. Chandigarh, V.7, pp.10-22.

Shaw, D.M. (1954). Trace elements in pelitic rocks. Bull. Geol. Soc. Am., V.65, pp.1151-1152.

Shaw, D.M. (1956). Geochemistry of pelitic rocks, part III. Major elements and general geochemistry. Bull. Geol. Soc. Am., V.6, pp.919-1034.

Singh, B.N., Goel, O.P., Mallikarjan, J. and Sheraton, J.W. (1993). Geochemistry and petrogenesis of the Champawat granitoids occurring around Dhunaghat, District Pithoragarh, Uttar Pradesh, India. Jour. Geol. Soc. Ind., V.42, pp.289-302.

Singh, I.B. (1979). Some thoughts on the evolution of Himalaya and the northern limit of the Indian Shield. Geol. Rdsch., V.68, pp.342-350.

Singh, K.P. and Pande, I.C. (1985). Repeated metasomatism of Jutogh metasediments around Sarahan-Bushair area, H.P., India. Pub. Cent. Adv. Stud. Geol., P.U., Chandigarh, V.6.

Sinha, A.K. (1989). Geology of the Higher Central Himalaya, John Wiley and Sons, Chichester, U.K., 236p.

Sinha, A.K. (1992). Himalayan Mountain building and the tectonic processes involved in it. Him. Orogen and global tectonics (ed. A.K. Sinha), Oxford and IBH, pp.3-18.

Sinha Roy, S. (1976). A possible Himalayan microcontinent. Nature, V.263, pp.117-119.

Stolizcka (1865). Geological sections across the Himalayan mountains on the river Sutlej to Sumdo on the Indus. Mem. Geol. Surv. Ind., V.5, 154p.

Stormer, J.C. (1975). A practical two-feldspar geothermometer. Am. Mineral., V.60, pp.667-674.

Strachey, R. (1851). On the Geology of part of the Himalayan Mountains and Tibet. Quart. Jour. Geol. Soc. London, V.7, pp.292-310.

Sun, S.S. and Nesbitt, R.W. (1978). Petrogenesis of Archean ultrabasic and basic volcanics: evidence from rare earth elements. Contrib. Mineral Petrol. V.65, pp.301-325.

Sychanthavong, S.P.H. and Merh, S.S. (1978). The Aravalli-Delhi proto-plate tectonics and the evolution of the Himalayas. Paper read at Int. Geodyn. Conf. Kathmandu, Nepal.

Thakur, V.C. (1980). Tectonics of the Central Crystallines of Western Himalaya. The Alpine-Himalayan Region (ed. J.M. Tater), Tectonophysics, V.62, pp.151-154.

Thakur, V.C. (1981). An overview of thrust and nappes of Western Himalaya. Thrust and Nappe tectonics (eds. N.S. Price and K. McKlay), Geol. Soc. London, pp.381-392.

Thakur, V.C. (1983). Granites of Western Himalayas and Karakoram – Structural framework, Geochronology and Tectonics. Granites of Himalayas, Karakoram and Hindukush (ed. Prof. F.A.Shams). Publ. Inst. Geol., Punjab Univ., Lahore, Pakistan, pp.327–339.

Thakur, V.C. and Chaudhary, B.K. (1983). Deformation, metamorphism and Tectonic relations of Central Crystallines and Main Central Thrust in Eastern Kumaon Himalaya. Himalayan shears (ed. P.S. Saklani). Publ. Himalayan Books, New Delhi, pp.45–57.

Trivedi, J.R., Gopalan, K. and Valdiya, K.S. (1984). Rb-Sr ages of Granitic rocks within the Lesser Himalayan Nappes, Kumaun, India, Geol. Soc. Ind., V.25, pp.641–654.

Valdiya, K.S. (1962 a). Note on the discovery of stromatolitic structure from the lower Shali limestone of Tatapani, near Simla, U.P. Curr. Sci., V.31, pp.64–65.

Valdiya, K.S. (1962 b). An outline of the stratigraphy and structure of the southern part of Pithoragarh district, U.P. Quart. Jour. Geol. Min. and Met. Soc. India, V.35, pp.167–180.

Valdiya, K.S. (1962 c). A study of the Champawat granodiorites and associated metamorphics of the Lohaghat subdivision , District Almora, U.P., with special reference to petrology and petrogenesis. Ind. Min., V.3, pp.6-37.

Valdiya, K.S. (1964 a). The unfossiliferous formations of the Lesser Himalaya and their correlation. Proc. 22nd Int. Geol. Cong., V.11, pp.15-36.

Valdiya, K.S. (1964 b). A note on the tectonic history and the evolution of the Himalaya. Proc. 22nd Int. Geol. Cong., V.11, pp.269-282.

Valdiya, K.S. (1970). Simla slates : the Precambrian flysch of Lesser Himalaya, its turbidites, sedimentary structures and paleocurrents. Geol. Soc. Am. Bull., V.81, pp. 451-468.

Valdiya, K.S. (1973). Lithological subdivision and tectonics of the 'Central Crystalline Zone of Kumaun'. Proc. Sem. Geod. Him. Region., Nat. Geophy. Res. Inst. Hyderabad (abst), pp.304-305.

Valdiya, K.S. (1976). Himalayan transverse faults and folds and their parallelism with subsurface structures of North India plains. Tectonophysics, V.32, pp.353-386.

Valdiya, K.S. (1978). Extension and analogues of the Chail Nappe in the Kumaun Himalaya. Ind. Jour. Earth Sci., V.5, pp.1-19.

Valdiya, K.S. (1979). An outline of the structural set-up of the Kumaun Himalaya. Jour. Geol. Soc. Ind., V.20, pp.145-157.

Valdiya, K.S. (1980). The two intracrustal boundary thrusts of the Himalaya. Tectonophysics, V.66, pp.323-348.

Valdiya, K.S. (1980 b). Geology of Kumaun Lesser Himalaya, W.I.H.G., Dehradun, 291p.

Valdiya, K.S. (1981). The tectonics of the Central Sector of the Himalaya. Zagros-Hindukush-Himalaya (eds. H.K.Gupta and F.M. Delang) : Geodynamic Evolution, Amer. Geophy. Union, Washington, pp.87-110.

Valdiya, K.S. (1983). Tectonic setting of the Himalayan granites. Granites of Himalaya, Karakorum and Hindukush (ed. F.A. Shams), Panjab Univ., Lahore, Pakistan, pp.39-53.

Valdiya, K.S. (1984). Evolution of the Himalayas. Tectonophysics, V.105, pp.229-248.

Valdiya, K.S. (1987). Trans-Himadri Thrust and domal upwarps immediately south of collision zone and tectonic implications. Current Science, V.56, pp.200-209.

Valdiya, K.S. (1988). Geology of Kumaun : An outline. Kumaun Land and People (ed. K.S. Valdiya). Publ. Gyanodaya Prakashan, Nainital, pp.37-72.

Valdiya, K.S. (1988 b). Trans-Himadri Intracrustal fault and basement upwarps south of Indus- Tsangpo Suture Zone. Sp. Pub. Geol. Soc. Amer. Boulder.

Valdiya, K.S. (1991). Quaternary tectonic history of northwest Himalaya. Curr. Sci., V.61, pp. 664-668.

Valdiya, K.S. (1993). Uplift and geomorphic rejuvenation of the Himalaya in the Quaternary period. Curr. Sci., V.64, pp.873-885.

Valdiya, K.S. and Goel, O.P. (1983). Lithological subdivision and petrology of the Great Himalayas, Vaikrita Group in Kumaun. Proc. Ind. Aca. Sci. (Earth and Planetary Sciences), V.92, pp.141-163.

Varadarajan, S. (1978). K-Ar ages of the Amritpur granite, District Mainital, Kumaun Himalaya and its stratigraphic position. Jr. Geol. Soc. Ind., V.19, pp.380-382.

Vashi, N.M. and Laghate, S.K. (1972). Structural and metamorphic studies of the rocks to the west of Peora in Kumaun Himalaya. Him. Geol., V.2, pp.515-526.

Vashi, N.M. and Merh, S.S. (1974). Fold history of the Almora synform. Him. Geol., V.4, pp.247-258.

Virdi, N.S. (1980). Problems of the root zone of Nappes in the Western Himalaya, a critical review. Him. Geol., V.10, pp.54-77.

Virdi, N.S. (1981). Occurrence of paired metamorphic belts in the Himalaya. Jour. Geol. Soc. Ind., V.22, pp.447-554.

Virdi, N.S. (1986). Indus-Tsangpo suture zone in the Himalaya crustal expression of a paleosubduction zone. Anale. Soc. Geol. Poloniae, V.56, pp.3-31.

Wadia, D.N. (1931). The syntaxis of north west Himalaya; its rocks, tectonics and orogeny. Rec. Geol. Surv. India, V.65, pp.189-220.

Wadia, D.N. (1957). Geology of India (3rd edition). Macmillan, London.

West, W.D. (1949). Structure of the Shali window near Simla. Rec. Geol. Surv. India, V.74, pp.133-163.

Whalen, J.B., Currie, K.L. and Chappell, B.W. (1987). A-type granites : geochemical characteristics, discrimination and petrogenesis. Contrib. Miner. Petrol., V.95, pp.407-419.

White, A.J.R. and Chappel, B.W. (1977). Ultrametamorphism and granitoid genesis. Tectonophysics, V.43, pp.7-22.

Whitney, J.A. and Stormer, Jr. J.C. (1977). The distribution of NaAlSi<sub>3</sub>O<sub>8</sub> between co-existing microcline and plagioclase and it's effect on geothermometric calculations. Am. Mineral., V.62, pp.687-691.

Wright, T.L. (1968). X-ray and optical study of alkali feldspar. II. An X-ray method of determining the composition and structural state from measurement of 2θ values for three reflections. Am. Min., V.53, pp.88-104.