

REFERENCES

- Barrel, J. (1912). The Laitaure Delta, a study of deltaic morphology and processes. *Geogr. Ann.*, 49 A, 1-127.
- Basan, P. B. (1978). Trace fossil concepts. *SEPM Short Course Number 5* Oklahoma, USA, 181 pp.
- Bell, F. G., and Jermy, C. A. (2002). A geomechanical survey of some different facies in relation to stability at a mine in the Eastern Transvaal Coalfield, South Africa. *Engineering Geology*, Elsevier, 64, 19-39.
- Blatt, H., Middleton, G., and Murray, R. (1980). *Origin of sedimentary rocks*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 782 pp.
- Bristow, C. S. (1987). Brahmaputra River: Channel migration and deposition. *In: Ethridge, F. G., Flores, R. M., and Harvey, M. D., (Ed.). Recent developments in fluvial sedimentology*. Society Economic Palaeontologists and Mineralogists, Special Publication, 39, 63-74.
- Busch, D. A. (1971). Genetic units in delta prospecting. *American Association of Petroleum Geologists Bulletin*, 55, 1137-1154.
- Cadle, A. B. (1982). Sedimentary control on coal distribution in the north-western Highveld Coalfield. *Sedimentology. Abstr., 3rd Symposium Sedimentological Division*, Geological Society of South Africa, Johannesburg, 13-14.

- Cadle, A. B. (1995). Depositional systems of the Permian Vryheid Formation Highveld Coalfield, South Africa. Their relationship to coal seam occurrence and distribution. *Unpublished Ph.D. Thesis*, University of Witwatersrand, Johannesburg, 316 pp.
- Cadle, A. B., and Hobday, D. K. (1977). A subsurface investigation of the Middle Ecca and Lower Beaufort in the southern Transvaal and northern Natal. *Transactions Geological Society of South Africa*, 80, 111-115.
- Cadle, A. B., Cairncross, B., Christie, A. D. M., and Roberts, D. L. (1993). The Karoo Basin of South Africa: type basin for the coal-bearing deposits of southern Africa. *International Journal of Coal Geology*, 23, 117-157.
- Cairncross, B. (1979). Depositional framework and control of coal distribution and quality, Van Dyks Drift area, northern Karoo Basin. *Unpublished M.Sc. Thesis*, University of Natal, Pietermaritzburg, 89 pp.
- Cairncross, B. (1980). Anastomosing river deposits: palaeoenvironmental control on coal quality and distribution, northern Karoo Basin. *Transactions Geological Society of South Africa*, 83, 327-332.
- Cairncross, B. (1986). Depositional environments of the Permian Vryheid Formation in the east Witbank Coalfield, South Africa: A framework for coal seam stratigraphy, occurrence and distribution. *Unpublished Ph.D. Thesis*, University of Witwatersrand, Johannesburg, 232 pp.

- Cairncross, B. (1988). Paleodepositional environments and tectono-sedimentary controls of the postglacial Permian coals, Karoo Basin, South Africa. *International Journal of Coal Geology*, 12, 365-380.
- Cairncross, B., and Cadle, A. B. (1988a). Depositional environments of the Permian Vryheid Formation in the east Witbank coalfield, South Africa. *South African Journal of Geology*, 91, 1-17.
- Cairncross, B., and Cadle, A. B. (1988b). Palaeoenvironmental control on coal formation, distribution and quality in the Permian Vryheid Formation, East Witbank coalfield, South Africa. *International Journal of Coal Geology*, 9, 343-370.
- Cairncross, B., and Winter, M. F. (1984). High constructive lobate deltas in the lower Permian Vryheid Formation, Rietspruit, South Africa. *Transactions of the Geological Society of South Africa*, 87, 101-111.
- Christie, A. D. M. (1988). Sedimentary models for coal formation in the Klip River Coalfield. *Unpublished Ph.D. Thesis*, University of Natal, Durban, 282 pp.
- Cloud, P. E. Jnr. (1955). Physical Limits of glauconite formation, *American Association of Petroleum Geologists Bulletin*, 39, 484-492.
- Colella, A., and Prior, B. D. (1990). Coarse grained deltas. *Special publication*, 10. International Association of Sedimentologists, Blackwell Scientific Publications. Oxford, 357pp.
- Coleman, J. M., and Gagliano, S. M. (1965). Sedimentary structures: Mississippi River deltaic plain. *Society Economic Palaeontologists and Mineralogists, Special Publication*, 12, 133-148.

- Conolly, J. R., and Ferm, J. C. (1971). Permo-Triassic sedimentation patterns, Sydney Basin, Australia. *American Association of Petroleum Geologists Bulletin*, 55, 2018-2032.
- Conybeare, C. E. B. (1979). *Lithostratigraphic analysis of sedimentary basins*. Center for Resource and Environmental Studies, Australian National University Canberra, Australia. Academic Press, Inc., USA, 555 pp.
- Davis, A. R. Jr. (1983). *Depositional systems. A genetic approach to sedimentary geology*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, USA, 669 pp.
- Diessel, K. F. (1992). *Coal bearing depositional systems*, Springer-Verlag, Australia, 721 pp.
- Du Toit, A. L. (1954). *The geology of South Africa*. Oliver and Boyd, Edinburgh, Scotland, 611 pp.
- Elliot, T. (1986). Deltas. In: Reading, H. G., (Ed.). *Sedimentary environments*. Blackwell Scientific Publications, Oxford, 113-154.
- Falcon, R. M. S. (1986). A brief review of the origin, formation and distribution of coal in Southern Africa. In: Anhaeusser, C.R., and Maske, S., (Ed.). *Mineral Deposits of Southern Africa*, I & II. Geological Society of South Africa, Johannesburg, 1879-1899.
- Falcon, R. M. S. (1989). Macro- and micro- factors affecting coal-seam quality and distribution in Southern Africa with particular reference to the No. 2 seam, Witbank Coalfield, South Africa. *International Journal Coal Geology*, 12, 681-731.

- Ferm, J. C. (1976). Depositional models in coal exploration and development, *In: Saxena. R. S., (Ed.). Sedimentary Environments and Hydrocarbons*. American Association of Petroleum Geologists, and Society of Economic Paleontologists Mineralogists. Annual meeting short course. New Orleans, LA, 60-78.
- Ferm, J. C., and Horne, J. C. (1979). *Carboniferous depositional environments in the Appalachian region*. University of South Carolina, Carolina Coal Group. Columbia, South Carolina, 760 pp.
- Ferm, J. C. and Melton R. A. (1975). Roof fall study, Pocahontas # 3 seam: *American Bureau Mines Interim Rept. H0230028*, 74 pp.
- Fisher, W. L., Brown, L. F. Jnr., Scott, A.J., and McGowen, J. H. (1969). *Delta systems in the exploration for oil and gas*. American Society of Economical Geologists, Austin, Texas, 78 pp.
- Flores, M. R. (1978). Coal depositional models in some Tertiary and Cretaceous coal fields in the U. S. Western Interior. American geological Survey, Denver. *Organic Geochemistry*, 1, Pergamon Press Ltd, Great Britain, 225-235.
- Folk, R. L. (1974). *Petrology of sedimentary rocks*. Hemphill, Austin, Texas, 182 pp.
- Francis, W. (1961). *Coal, Its formation and composition*. Edward Arnold (Ed.) Ltd. London (2nd edit.), 806 pp.
- Galloway, W. E. (1975). Process framework for describing the morphological and stratigraphic evolution of deltaic depositional systems. *In: Broussard, M. S. L., (Ed.). Deltas models for exploration*. Houston Geological Society, 87-98.

- Galloway, W. E., and Hobday, D. K. (1996). *Terrigenous clastic depositional systems: Application to petroleum, coal and uranium exploration* (2nd edit.). Springer-Verlag, New York, 489 pp.
- Graham, A. C. (1931). The coals of the Witbank district (Transvaal). Part I, *Geology, Mining, and Marketing of Witbank coals*. The Transvaal Chamber of Mines, Collieries Committee. Hortors Limited, Johannesburg, 1-21.
- Gressly, A. (1838). Observation geologiques sur le ura Soleurois. N. *Denkschr. allg. schweiz. Ges. ges. Naturw.*, 2, 1-112.
- Gustavson, T. C. (1975). Sedimentation and physical limnology in proglacial, MaLaspina Lake, southeastern Alaska. *Society of Economical Paleontologists and Mineralogists, Special Publication*, 23, 249-263.
- Hamilton, G. N. G. and Cooke, H. B. S. (1965). *Geology for South African students*. Central news Agency, Ltd. South Africa. Cape and Transvaal printers Ltd., Parow, 257-282.
- Harms, J.C., Southard, J. B., Spearing, D.R., and Walker, R.G. (1975). Depositional environments as interpreted from primary sedimentary structures and stratification sequences. *Society of Economic Paleontologists and Mineralogists Short Course Notes 2*, 161 pp.
- Harms, J.C., Southard, J. B., and Walker, R. G. (1982). Structures and sequences in clastic rocks. *Society of Economic Paleontologists and Mineralogists Short Course Notes 9*, Calgary, 249 pp.
- Hart, G. F. (1966). Lower Karoo biostratigraphy of parts of Southern Africa. *Unpublished Report, Bernard Price Institute for Palaeontological Research*, University of the Witwatersrand, Johannesburg, 305 pp.

- Haughton, (1969). *Geological history of South Africa*. The Geological Society of South Africa, South African Chamber of Mines. Cape and Transvaal Printers Ltd., Cape Town, 406 pp.
- Hobday, D. K. (1987). Gondwana coal basins of Australia and South Africa: Tectonic setting, depositional systems and resources. *In*: Scott, A. C., (Ed.). *Coal and coal-bearing strata: Recent advances*. Geological Society of South Africa, Special Publication, 32, 219-233.
- Holland, M., Cadle, A. B., Pinheiro, R., and Falcon, R. M. S. (1989). Depositional environments and coal petrography of the Permian Karoo sequence: Witbank Coalfield, South Africa. *International Journal of Coal Geology*, 11, 143-169.
- Horne, J. C., Ferm, J. C., Caruccio F. T., and Baganz, B. P. (1978). Depositional models in coal exploration and mine planning in the Appalachian region. *American Association of Petroleum Geologists Bulletin*, 62, 2379-2411.
- Jeremic, M. (1985). *Strata mechanics in coal mining*. A. A. Balkema/Rotterdam/Boston. Netherlands, 556 pp.
- Jordaan, J. (1986). Highveld Coalfield. *In*: Anhaeusser, C.R., and Maske, S. (Ed.). *Mineral Deposits of Southern Africa*, I & II. Geological Society South Africa, Johannesburg, 1985-1994.
- Kane, F. W., Milici, C. R., and Gathright, II M. T. (1993). Geologic Factors Affecting Coal Mine Roof Stability in the Eastern United States. *Bulletin of the Association of Engineering Geologists*, XXX, 2, 165-179.

- Klein, G. de V. (1975). *Sandstone depositional models for exploration for fossil fuels*. Continuing education publishing company. Illinois, USA, 108 pp.
- Le Blanc Smith, G. (1979). High constructive deltaic sedimentation and coal accumulation Witbank basin. Abstracts 2. *Geological Society of South Africa*, 18th Congress, 88-92.
- Le Blanc Smith, G. (1980). Genetic stratigraphy and palaeoenvironmental controls on coal distribution in the Witbank Basin Coalfield. *Unpublished Ph.D. Thesis*, University of Witwatersrand, Johannesburg, 242 pp
- Lyons P. C., and Alpern B. (1989). *Peat and coal: origin, facies, and depositional models*. Elsevier Science Publishers B. V. Netherlands, 882 pp.
- McPherson, J. G., Shanmugan, G., and Moiola, R. J. (1987). Fan Deltas and braid deltas: varieties of coarse-grained deltas: *American Association of Petroleum Geologists Bulletin*, 99, 331-340.
- McRae, S. G. (1972). Glauconite. *Earth Science Reviews*, 3, 397-440.
- Miall, A. D. (1977). A review of the braided river depositional environment. *Earth Science Reviews*, 13, 1-62.
- Miall, A. D. (1978). Lithofacies types and vertical profile models in braided river deposits: a summary. In: Miall, A. D. (Ed.), *Fluvial Sedimentology*. Canadian Society of Petroleum Geologists Memoir, 5, 597-604.

- Miall, A. D. (2000). *Principles of Sedimentary Basin Analysis*. Springer-Verlag. Berlin, Heidelberg, Germany, 616 pp.
- Middleton, G. V. (1973). Johannes Walther's Law of correlation of facies. *American Association of Petroleum Geologists Bulletin*, 84, 979-988.
- Middleton, G. V. (1978). *Facies*. In: Fairbridge, R.W. and Bourgeois, J., (Ed.). *Encyclopedia of Sedimentology*. Dowden, Hutchinson and Ross Publishing Company, Stroudsburg, Pennsylvania, 323-325.
- Moebis, N. N., and Ellenberger, J. E. (1982). Geologic structures in coal mine roof: *United States Bureau of Mines Report of Investigations RI*, 8620, 16 p.
- Moore, R. C. (1949). Meaning of facies. *American Association of Petroleum Geologists Memoir*, 39, 1-34.
- Moore, P. D., and Bellamy, D. J. (1973). *Peatlands*. Paul Elek (Scientific Books), London, 221 pp.
- Nicholas, G. N. (1999). *Sedimentology and Stratigraphy*. Blackwell Science, Oxford, United Kingdom, 335 pp.
- Oti, N. M., and Postma, G. (1995). *Geology of Deltas*. A. A. Balkema, Rotterdam, Netherlands, 315 pp.
- Pettijohn, F. J. (1957). *Sedimentary Rocks* (2nd edit.). Harper & Brothers, New York, 718 pp.

- Postma, G. (1990). Depositional architecture and facies of river and fan deltas: a synthesis. *International Association of Sedimentologists Special Publication*, 10, 13-27.
- Reading, G. H. (1995). *Sedimentary facies analysis*. Blackwell Science Ltd. Great Britain, 384 pp.
- Reinecke, H. E., and Singh, J. B. (1980). *Depositional Sedimentary Environments* (2nd edit.). Springer-Verlag, New York, 549 pp.
- Roberts, D. L. (1986). Depositional framework and controls on peat accumulation in the Vryheid Formation of northern Natal (Utrecht and Newcastle areas). *Unpublished Ph.D. Thesis*, University of Natal, Durban, 233pp.
- Ross, A. C., and Ross R. P. J. (1984). *Geology of coal*. Hutchinson and Ross Publishing Company, Stroudsburg, Pennsylvania, 349 pp.
- Rubidge, B. S. (1995). Biostratigraphy of the Beaufort Group (Karoo Supergroup). *Biostratigraphic Series*, 1. Council for Geoscience, Pretoria, 46 pp.
- Rust, B. R., Gibling M. R., and Legun, A. S. (1984). Coal deposition in an anastomosing - fluvial system: The Pennsylvanian Cumberland Group south of Joggins, Nova Scotia, Canada. *In*: Rahmani, R. A., and Flores, R. M (Ed.). *Sedimentology. of coal and coal-bearing sequences*. International Association of Sedimentologists, Special Publication, 7, 105-120.
- S. A. C. S. (South African Committee for Stratigraphy) (1980). Stratigraphy of South Africa. Part I (Compiled by L. E. Kent). *Handbook Geological Survey of South Africa*, 8, 690 pp.

- Schumm, S. A. (1968). River adjustment to altered hydrologic regimen, Murrumbidgee River and palaeochannels, Australia. *American Geological Survey Professional Paper*, 598, 65 pp.
- Sehlke, K. H. L., and Van der Merwe, S. W. (1959). Die steenkoolveld Standerton. State van Boorgate 1-13, *Geological Survey of South Africa, Bulletin*, 30.
- Seilacher, A. (1967). Bathymetry of trace fossils. *Marine Geology*, 5, 413-429.
- Shepherd, J., and Gale, W. (1982). Colliery roof stability and the role of geology: review. *The Australian Journal of Coal Mining Technology and Research*, 1, 47-67.
- Smith, R. M. H. Eriksson, P. G. and Botha, W. J. (1993). A review of the stratigraphy and sedimentary environments of the Karoo-aged basins of Southern Africa. *Journal African Earth Science*, 16, 143-169.
- Snyman, C. P. (1998). Coal. In: Wilson, M.G.C., and Anhaeusser, C.R., (Ed.). *The Mineral Resources of South Africa*. Handbook 16. Council for Geoscience, Pretoria, 136-205.
- Stanistreet, I. G., Le Blanc Smith, G., and Cadle, A. B. (1980). Trace fossils as sedimentological and paleoenvironmental indices in the Ecca Group (Lower Permian) of the Transvaal. *Transactions Geological Society of South Africa*, 83, 333-344.
- Stanistreet, I. G., and McCarthy, T. S. (1993). The Okavango Fan and the classification of subaerial fan systems. *Sedimentary Geology*, 85, 1-4, 143-154.

- Stavrakis, N. (1989). Sedimentology of Karoo Coal-Measures in the Eastern Transvaal, South Africa. *Unpublished Ph.D. Thesis*, University of Strathclyde, Glasgow, G1, 1 X J, Scotland, UK, 203 pp.
- Swift, D. J. P., and Thorne, J. A. (1991). Sedimentation on continental margins, I: A general model for shelf sedimentation. *International Association of Sedimentologists Special Publication*, 14, 3-32.
- Takahashi, J. (1939). Synopsis of glauconitization, Recent marine sediments. *American Association of Petroleum Geologists Bulletin*, 51, Tulsa, 503-512.
- Tankard, A. J., Jackson, M. P. A., Eriksson, K. A., Hobday, D. K., Hunter, D. R., and Minter, W. E. L. (1982). *Crustal Evolution of Southern Africa, 3.8 Billion Years of Earth History*. Springer-Verlag. New York, Heidelberg, Berlin, 364-402.
- Tavener-Smith, R., Mason, T. R., Christie, A. D. M., Roberts, D. L., Smith, A. M., Van der Spuy, A. (1988). Sedimentary models for coal formation in the Vryheid Formation, Northern Natal. *Geological Survey of South Africa Bulletin*, 94, 1-46.
- Walker, R. G., and James, N. P. (1992). Facies models: Response to sea level change. *Geological Society of Canada*, St. Johns, Canada, 409 pp.
- Ward R. C. (1984). *Coal geology and coal technology*. Blackwell Scientific Publications. Melbourne, Australia, 345 pp.
- White, D. (1925). Environmental conditions of deposition of coal. *Transactions American Institute of Mining Metallurgical Engineers*, 71, 3-34.

- Winter M. F. W. (1985). Lower Permian palaeoenvironments of the northern Highveld Coalfield and their relationship to the characteristics of coal seams. *Unpublished Ph.D. Thesis*, University of Witwatersrand, Johannesburg, 254 pp.
- Wright, L. D. (1978). River deltas, *In*: Davis, R. A., Jnr., (Ed.), *Coastal Sedimentary Environments*. Springer - Verlag, New York, 5-68.
- Wybergh, W. J. (1922). The coal resources of the Union of South Africa, 1. The Coalfields of Witbank, Springs and Heidelberg and the Orange Free State. *Memoir Geological Survey of South Africa*, 19, 134.

