

REFERENCES CITED

- Al-Aasm, I.S., and Veizer, J., 1982. Chemical stabilisation of low Mg-calcite. An example of brachiopods. *Journal of Sedimentary Petrology*, 52, 1101-1109.
- Archbold, N.W., 1988. Permian Brachiopoda and Bivalvia from Sahul Shoals No. 1, Ashmore Block, Northwestern Australia. *Proceedings of the Royal Society of Victoria*, 100, 33-38.
- Archbold, N.W., and Dickins, J.M., 1991. Australian Phanerozoic timescales: Permian, a standard for the Permian System in Australia. Bureau of Mineral Resources, Australia, Record, 1989/36.
- Australian Aquitaine Petroleum Ltd, 1982. Tern 3 well completion report (unpublished).
- Backhouse, J., 1993. Palynology and correlation of Permian sediments in the Perth, Collie, and Officer Basins, Western Australia. *Geological Survey of Western Australia, Report 34*, 111-128.
- Baillie, P.W., and Jacobson, E., 1994. Structural evolution of the Carnarvon Terrace, Western Australia. *Australian Petroleum Exploration Association Journal*, 35, 321-332.
- Balme, B.E., 1964. The palynological record of Australian pre-Tertiary floras. In Cranwell, L.M. (Editor). *Ancient Pacific Floras, the pollen story*. University of Hawaii Press, Honolulu, 49-80.
- Balme, B.E., 1968. Whicher Range-1 palynology report (unpublished).
- Balme, B.E., 1969. The Triassic system in Western Australia. *Australian Petroleum Exploration Association Journal*, 67-78.
- Balme, B.E., 1970. Palynology of Permian and Triassic strata in the Salt Range and Surghar Range, West Pakistan. In Kummel, B. & Teichert, C., *Stratigraphic Boundary Problems: Permian and Triassic of West Pakistan*. University of Kansas, Special Publication 4, 305-453.
- Balme, B.E., 1979. Palynology of Permian and Triassic boundary beds at Kap Stosch, East Greenland. *Meddelelser om Gronland. Bd, 200*, 1-37, 3pls.
- Baud, A., Magaritz, M. and Holser, W.T., 1989. Permian-Triassic of the Tethys: Carbon isotope studies. *Geologische Rundschau*, 78, 649-77.
- Banner, J. L. and Kaufman, J., 1994. The isotopic record of ocean chemistry and diagenesis preserved in non-luminescent brachiopods from Mississippian carbonate rocks, Illinois and Missouri. *Geological Society of America Bulletin*, 106, 1074-1082.
- Bates, N.R., and Brand, U., 1991. Environmental and physiological influences on isotopic and elemental compositions of brachiopod shell calcite: Implications for the isotopic evolution of Paleozoic oceans. *Chemical Geology (Isotope Geoscience Section)*, 94, 67-78.
- Beauchamp, B., 1994. Permian climatic cooling in the Canadian Arctic. In G.D. Klein (Editor) *Pangea: Palaeoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America Special Paper 288, 139-157.
- Benton, M.J., 1995. Diversification and extinction in the history of life. *Science*, 268, 52-58.
- Berner, R.A., and Raiswell, R., 1983. Burial of organic carbon and pyrite sulfur in sediments over Phanerozoic time: a new theory. *Geochimica et Cosmochimica Acta*, 47, 855-862.
- BHP Petroleum, 1993. Fishburn -1 well completion Report (unpublished).
- Bishop, D.G., 1965. The geology of the Clinton District, South Otaga. *Transactions of the Royal Society of New Zealand*, 2, 205-230.
- BOCAL, 1970. Sahul Shoals No. 1 Well Completion Report. Bureau of Mineral resources, Australia, Petroleum Search Subsidy Acts File 69/2042 (unpublished).
- Boeckelmann, K., 1991. The Permian-Triassic of the Gartnerkofel-1 Core and the Reppwand outcrop section (Carnic Alps, Austria). *Abhandlungen der Geologischen Bundesanstalt*, 45, 17-36.
- Boreham, C.J., 1995. Origin of Petroleum in the Bowen and Surat Basins: Geochemistry revisited. *Australian Petroleum Exploration Association Journal*, 35, 579-612.
- Bowen, R., 1992. *Isotopes and Climates*. Elsevier Applied Science, London, 485 p.
- Bradley, G.M., Yoo, E.K., Moloney, J., Beckett, and Richardson, S.J., 1985. *Petroleum Data Package Sydney Basin New South Wales*. New South Wales Geological Survey Report GS 1985/004.

- Brand, U., 1989. Biogeochemistry of late Palaeozoic North American brachiopods and secular variation of seawater composition. *Biogeochemistry*, 7, 159-193.
- Brand, U. and Veizer, J., 1980. Chemical diagenesis of a multicomponent carbonate system, 1. Trace elements. *Journal of Sedimentary Petrology*, 50, 1219-1236.
- Brand, U., 1991. Strontium isotope diagenesis of biogenic aragonite and low-Mg calcite. *Geochimica et Cosmochimica Acta*, 55, 505-513.
- Briggs, D. J. C., 1993a. Chronostratigraphic correlation of Australian Permian depositional sequences. Twenty seventh Newcastle Symposium on Advances in the study of the Sydney Basin. 52-58.
- Briggs, D. J. C., 1993b. Permian depositional sequences of the Sydney Bowen Basin. Twenty seventh Newcastle Symposium on Advances in the study of the Sydney Basin. 247-254. .
- Broecker, W.S., 1970. A boundary condition on the evolution of atmospheric oxygen. *Journal of Geophysical Research*, 75, 3553-3557.
- Broecker, W.S., and Peng, T-H., 1982. Tracers in the sea. Eldigio Press, Palisades, New York, 690 pp.
- Broecker, W.S., and Woodruff, F., 1992. Discrepancies in the oceanic carbon isotope record for the last fifteen million years? *Geochimica et Cosmochimica Acta*, 56, 3259-3264.
- Broglio Loriga, C., and Casinis, G., 1992. The Permo-Triassic boundary in the Southern Alps (Italy) and in adjacent Periadriatic regions. In Sweet, W.C., Zunyi, Y, Dickins, J.M., and Yin, H., (Editors), Permo-Triassic events in the Eastern Tethys, Cambridge University Press, Cambridge, 78-97.
- Broglio Loriga, C, Conti, M.A., Farabegoli, E., Fontana, D., Mariotti, N., Massari, F., Neri, C., Nicosia, U., Pasini, M., Perri, M.C., Pittau, P., Posenato, R., Venturini, C., and Veil, G., 1986. Upper Permian and P/T boundary in the area between carnica and the Adige Valley. In, Permian and Permian-Triassic Boundary in the South-Alpine segment of Western Tethys. IGCP 203, Brescia, Excursion Guidebook, 23-28.
- Burke, W.H., Denison, R.E., Hetherington, E.A., Koepnick, R.B., Nelson, H.F. and Otto, J.B., 1982. Variation of seawater $^{87}\text{Sr}/^{86}\text{Sr}$ throughout the Phanerozoic. *Geology*, 10: 516-519.
- Campbell, I.H., Czamanske, G.K., Fedorenko, V.A., Hill, R.I. and Stepanov, V., 1992. Synchronism of the Siberian Traps and the Permian-Triassic boundary. *Science*, 258, 1760-1763.
- Chaudhuri, S., Stille, P., and Clauer, N., 1992, Sm-Nd isotopes in fine-grained clastic sedimentary materials: clues to sedimentary processes and recycling growth of the continental crust. In Clauer, N., and Chaudhuri, S., (Editors), *Isotopic Signatures and Sedimentary Records*, Springer-Verlag, Berlin, 287-320.
- Chen, J.-S., Chu, X.L., Shao, M.-R. and Zhong, H., 1991. Carbon isotope study of the Permian-Triassic boundary sequences in China. *Chemical Geology (Isotope Geoscience Section)*, 89, 239-51.
- Clarke, M.J., 1989. Lower Parmeener Supergroup. In Burrett, C.F. and Martin, E.L., (Editors), *Geology and Mineral Resources of Tasmania*. Geological Society of Australia Special Publication 15, 295- 309.
- Claoué-Long, J.C., Zhang, Z.C., Ma, G.G., and Du, S.H., 1991. The age of the Permian-Triassic boundary. *Earth and Planetary Science Letters*, 105, 182-190.
- Clemmenson, L., Holser, W.T., and Winter, D., 1985. Stable isotope study through the Permian-Triassic boundary in east Greenland. *Geological Society of Denmark Bulletin*, 33, 253-260.
- Cockbain, A.E., 1990 Perth Basin. In: *Geology and mineral resources of Western Australia* West Australian Geological Survey, Memoir 3, 495-524.
- Conaghan, P.J., Shaw, S.E., and Veevers, J.J., 1994. Sedimentary evidence of the Permian-Triassic global crisis induced by the Siberian Hotspot. In Beauchamp, B., Embry, A.F., and Glass, K., (Editors), *Pangea: Global Environments and Resources*, Canadian Society of Petroleum Geologists, Memoir 17, 785-795.
- Compston, W., 1960. The carbon isotopic compositions of certain marine invertebrates and coals from the Australian Permian. *Geochimica et Cosmochimica Acta*, 18, 1-22.
- Craig, H., 1957. Isotopic standards for carbon and oxygen and correction factors for mass spectrometric analysis of carbon dioxide. *Geochimica et Cosmochimica Acta*, 12, 133-149.
- Crowe, R.W.A., Towner, R.R. and Gibson, D.L., 1978. Permian and Mesozoic geology, Derby and Mt. Anderson 1:250000 sheet areas, Western Australia. BMR Report 1978/8. In Towner R.R. and Gibson D.L.,

1983. Geology of the onshore Canning Basin, Western Australia. Bureau of Mineral Resources, Geology and Geophysics Bulletin, 215, (Appendix 4).
- Crowley, T.J., 1994. Pangean climates. In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America Special Paper 288, 139-157.
- Dalrymple, G.B., Czamanske, G.K., Fedorenko, V.A., Simonov, O.N., Lanphere, M.A., Likhachev, A.P., 1995. A reconnaissance Ar-40/Ar-39 geochronologic study of ore-bearing and related rocks, Siberian Russia. *Geochimica et Cosmochimica Acta*, 59, 2071-2083.
- David, T.W.E., and Browne, T.R., 1950. *The Geology of the Commonwealth of Australia*, Arnold, Sydney.
- Delhi Australia Petroleum Ltd, 1965. Merrimelia-3 unpublished well completion report.
- Denison, R.E., Koepnick, R.B., Fletcher, A., Howell, M.W. and Callaway, W.S., 1994. Criteria for the retention of original seawater $^{87}\text{Sr}/^{86}\text{Sr}$ in ancient shelf limestones. *Chemical Geology*, 112, 131-143.
- Denison, R.E., Koepnick, R.B., Burke, W.H., Heatherington, E.A. and Fletcher, A., 1994. Construction of the Mississippian, Pennsylvanian and Permian seawater $^{87}\text{Sr}/^{86}\text{Sr}$ curve. *Chemical Geology*, 112, 145-167.
- DePaolo, D.J., 1981. Neodymium isotopes in the Colorado Front Range and crust-mantle evolution in the Proterozoic. *Nature*, 291, 193-196.
- Dickins, J.M., 1992. Permo-Triassic orogenic, paleoclimatic, and eustatic events and their implications for biotic alteration. In Sweet, W.C., Zunyi, Y, Dickins, J.M., and Yin, H., (Editors), *Permo-Triassic events in the Eastern Tethys*, Cambridge University Press, Cambridge, 169-174.
- Dickins, J.M., 1993. Climate of the Late Devonian to Triassic. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 100, 89-94.
- Dickins, J.M. and McTavish, R.A., 1963. Lower Triassic marine fossils from the Beagle Ridge Bore, Perth Basin, Western Australia. *Journal of Geological Society of Australia*, 10, 123-40.
- Ding, M., 1992. Conodont sequences in the Upper Permian and Lower Triassic of South China and the nature of conodont faunal changes at the systemic boundary. In Sweet, W.C., Zunyi, Y, Dickins, J.M., and Yin, H., (Editors), *Permo-Triassic events in the Eastern Tethys*, Cambridge University Press, Cambridge, 109-119.
- Dolby, J.H. and Balme, B.E., 1976. Triassic palynology of the Carnarvon Basin, Western Australia. *Review of Palaeobotany and Palynology*, 22, 105-68.
- Draper, J.J., 1983. Origin of pebbles in mudstones in the Denison Trough. In *Permian Geology of Queensland*. Geological Society of Australia, Queensland Division, Brisbane, 305-316.
- Draper, J.J and Green, P.M., 1983. Stratigraphic drilling report-GSQ Eddystone 4 and 5. *Queensland Government Mining Journal*, 84, 308-317.
- Embleton, B.J.J., and McDonnell, K.L., 1980. Magnetostratigraphy in the Sydney Basin, southeastern Australia. *Journal of Geomagnetism and Geoelectricity*, 32, SIII 1- SIII 10.
- Erwin, D.H., 1993a. *The great Paleozoic crisis: Life and death in the Permian*. New York, Columbia University Press, 327 p.
- Erwin, D.H., 1993b. Was the end-Permian extinction caused by a run-away greenhouse? *Pangea Conference Proceedings Calgary (abstract)*, 90.
- Erwin D. H., 1994. The Permo-Triassic extinction. *Nature* 367: 231-236.
- Eshet, Y., 1992. The palynofloral succession and palynological events in the Permo-Triassic boundary interval in Israel. In Sweet, W.C., Zunyi, Y, Dickins, J.M., and Yin, H., (Editors), *Permo-Triassic events in the Eastern Tethys*, Cambridge University Press, Cambridge, 134- 145.
- Evans, P.R., 1966. Mesozoic stratigraphic palynology in Australia. *Australasian Oil and Gas Journal*, 12, 58-63.
- Evans, P.R., 1967. Review of the Permian palynology of the Sydney Basin, New South Wales. Australian Bureau of Mineral Resources, Geology and Geophysics- Record 1967/103 (unpublished).
- Faure, K., de Witt, M.J., Willis, J.P., and Monteiro, P.M.E., 1994. Late Permian global coal discontinuity & Permian-Triassic Boundary "events". *Geological Society of Australia, Abstracts no. 37*, 106-107.

- Faure, K., de Witt, M.J., and Willis, J.P., 1995. Late Permian global coal hiatus linked to C-13-depleted CO₂ flux into the atmosphere during the final consolidation of Pangea. *Geology*, 23, 507-510
- Fawcett, P.J., Barron, E.J., Robinson, V.D., and Katz, B.J., 1994. The climatic evolution of India and Australia from the Late Permian to Mid-Jurassic: A comparison of climate model results with the geologic record. In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America Special Paper 288, 139-157
- Flügel, E., 1994. Pangean shelf carbonates: Controls and paleoclimatic significance of Permian and Triassic reefs. In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America Special Paper 288, 247-266.
- Foster, C.B., 1982. Spore-Pollen assemblages of the Bowen Basin, Queensland (Australia): Their relationship to the Permian-Triassic boundary. *Review of Palaeobotany and Palynology*, 36, 165-83.
- Frakes, L.A., Francis, J.E., and Skytus, J.I., 1992. *Climate Modes of the Phanerozoic*. Cambridge University Press, 274p.
- Geldsetzer, H.H.J., and Wang, K., 1994. The Permian-Triassic boundary at Selong, Southern Tibet: Evidence for changes of productivity and climate? *Erlanger Geologische Abhandlungen*, 122, 23.
- Geological Survey of Queensland, 1978. Denison NS20 coal section geological log (unpublished).
- Given, R.K., and Lohmann, K.C., 1985. Derivation of the original isotopic composition of Permian marine cements. *Journal of Sedimentary Petrology*, 55, 430-439.
- Glenister, B.F., Baker, C., Furnish, F.M. and Dickins, J.M., 1990. Late Permian Ammonoid Cephalopod *Cyclolobus* from Western Australia. *Journal of Paleontology*, 64, 399-402.
- Gorter, J.D., 1978. Triassic environments in the Canning Basin, Western Australia. *BMR Journal of Australian Geology and Geophysics*, 3, 25-33.
- Gorter, J.D., 1994. Triassic Sequence Stratigraphy of the Carnarvon Basin, Western Australia. in P.G. Purcell and R.R. Purcell (Editors) *Proceedings of the West Australian Basins Symposium Perth, Western Australia*, 1994. 397-413
- Grebe, H., 1970. Permian plant microfossils from the Newcastle Coal Measures/Narrabeen Group boundary, Lake Munmorah, New South Wales. *Records of the Geological Survey of New South Wales*, 12, 125-136.
- Green, P. M., 1982. Stratigraphic drilling report- GSQ Springsure 19. *Queensland Government Mining Journal*, 83, 457-464.
- Gray, A. R. C., 1980. Stratigraphic relationships of Permian strata in the southern Denison Trough. *Queensland Government Mining Journal*, 81, 110-130.
- Grossman, E.L., 1994. The carbon and oxygen isotope record during the evolution of Pangea: Carboniferous to Triassic. In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America Special Paper 288, 207-228.
- Grossman, E.L., Zhang, C. and Yancey, T.E., 1991. Stable-isotope stratigraphy of brachiopods from Pennsylvanian shales in Texas. *Geological Society of America Bulletin*, 103, 953-965.
- Gruszczynski, M. Halas, S., Hoffmann, A., and Malkowski, K., 1989. A brachiopod calcite record of the oceanic carbon and oxygen isotope shifts at the Permian-Triassic transition. *Nature*, 337, 64-8.
- Gruszczynski, M. Hoffmann, A., Malkowski, K., Zawidzka, K., Halas, S. and Yong, Z., 1990. Carbon isotopic drop across the Permian- Triassic boundary in SE Sichuan, China. *Neues Jahrbuch. Geol. Palaont. Montatshefte*, 600-6.
- Gruszczynski, M., Hoffman, A., Malkowski, K. and Veizer, J., 1992. Seawater strontium isotopic perturbation at the Permian-Triassic boundary, West Spitsbergen, and its implications for the interpretation of strontium isotopic data. *Geology*, 20, 779-782.
- Gulson, B.L., Diessel, C.F.K., Mason, D.R., and Kough, T.E., 1990. High precision radiometric ages from the northern Sydney Basin and their implications for the Permian time interval and sedimentation rates. *Australian Journal of Earth Sciences*, 37, 459-469.
- Gunn, P.J. and Ly, K.C., 1989. The petroleum prospectivity of the Joseph Bonaparte Gulf area northwestern Australia. *APEA Journal* 29 509-526.

- Haag, M., and Heller, F., 1991. Late Permian to Early Triassic magnetostratigraphy. *Earth and Planetary Science Letters*, 107, 42-54.
- Hallam, A., 1994. Strontium isotope profiles of Triassic-Jurassic boundary sections in England and Austria. *Geology*, 22, 1079-1082.
- Haq, B.U., Hardenbol, J., and Vail, P.R., 1988. Mesozoic and Cenozoic chronostratigraphy and cycles of sea-level change. Society of Economic Paleontologists and Mineralogists, Special Publication 42, 71-108.
- Harland, W.B., Armstrong, R.L., Cox, A.V., Craig, L.E., Smith, A.G. and Smith D.G. 1990. A geologic time scale 1989. Cambridge University Press, 263 p.
- Hayes, J.M., Kaplan, I.R. and Wedeking, K.W., 1983. Chapter 5. Precambrian organic geochemistry, preservation of the record. In, Schopf, J.W. (Editor), *Earth's Earliest Biosphere: Its Origin and Evolution*. Princeton University Press, Princeton, 93-134.
- Hayes, J.M., Popp, B.N., Takgiku, R., and Johnson, M.W., 1989. An isotopic study of biogeochemical relationships between carbonates and organic carbon in the Greenhorn Formation. *Geochimica et Cosmochimica Acta*, 53, 2961-2972.
- Helby, R.J., 1970. A biostratigraphy of the Late Permian and Triassic of the Sydney Basin. Ph.D. Thesis University of Sydney, 479 p. (unpublished).
- Helby, R.J., 1973. Review of the Late Permian and Triassic palynology of New South Wales. Special Publication of the Geological Society of Australia, 4, 141-155.
- Helby, R.J., 1975. A palynological reconnaissance of the Paradise diamond drill holes. (Unpublished well completion report to Esso Australia.)
- Helby, R.J., 1983. Tern No. 3 Palynological Report. (Unpublished Australian Aquitaine Petroleum Pty. Ltd. palynology report).
- Helby, R.J., 1993. Fishburn-1 Palynological Report. (Unpublished BHP Petroleum palynology report).
- Helby, R.J., Morgan, R., and Partridge, A.D., 1987 A palynological zonation of the Australian Mesozoic. *Memoirs of the Association of Australasian Palaeontologists*, 4, 1-94.
- Heller, F., Chen, H., Dobson, J., and Haag, M., 1995. Permian-Triassic magnetostratigraphy - new results from South China. *Physics of the Earth and Planetary Interiors*, 89, 281-295.
- Heller, F., Lowrie, W., Li, H., and Wang, J., 1988. Magnetostratigraphy of the Permo-Triassic boundary section at Shangsi (Guangyuan, Sichuan Province, China). *Earth and Planetary Science Letters*, 88, 348-365.
- Hess, J.C. and Lipolt, H.J., 1986. $^{40}\text{Ar}/^{39}\text{Ar}$ ages of tonstein and tuff sandines: New calibration points for the improvement of the Upper Carboniferous timescale. *Chemical Geology (Isotope Geoscience Section)*, 59, 143-154.
- Heywood, P.B., 1978. Stratigraphic drilling report- GSQ Eddystone 1. *Queensland Government Mining Journal*, 79, 407-417.
- Hocking, R.M., Moors, H.T. and Van de Graaf, J.E., 1985. Geology of the Carnarvon Basin Western Australia. *Geological Survey of Western Australia Bulletin*, 133, 107-120.
- Hocking, R.M., 1990. Carnarvon Basin. In: *Geology and mineral resources of Western Australia*. West Australian Geological Survey, Memoir 3, 457-95.
- Holland, H.D., 1978. *The Chemistry of the Atmosphere and Oceans*. Wiley, New York, 351p.
- Holser, W.T. and Magaritz, M., 1987. Events near the Permian- Triassic Boundary. *Modern Geology* 11, 155-80.
- Holser, W.T., Schidlowski, M., Mackenzie, F.T., and Maynard, J.B., 1988. Geochemical cycles of carbon and sulfur. In Gregor, C.B., Garrels, R.M., Mackenzie, F.T. and Maynard, J.B. (Editors.), *Geochemical Cycles in the Evolution of the Earth*. New York, John Wiley and Sons, 105-173.
- Holser, W.T., Schönlaub, H-P, Attrep, M., Boeckelmann, K., Klein, P., Magaritz, M., Orth, C.J., Fenninger, A., Jenny, C., Kralik, M., Mauritsch, H., Pak, E., Schramm, J-M., Statteger, K. and Schmöller, R., 1989. A unique geochemical record at the Permian-Triassic boundary. *Nature* 337, 39-44.

- Holser, W.T., Schönlaub, H.P., Boeckelmann, K., Magaritz, M., and Orth, C. 1991. The Permian-Triassic of the Gartnerkofel-1 Core (Carnic Alps, Austria): Synthesis and conclusions. *Abhandlungen der Geologischen Bundesanstalt*, 45, 213-232.
- Hudson, J.D., 1977. Stable isotopes and limestone lithification. *Journal of the Geological Society, London*, 133, 637-660.
- Hudson, J.D., and Anderson, T.F., 1989. Ocean temperatures and isotopic compositions through time. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, 80, 183-192.
- Irving, E., and Parry, L.G., 1963. The magnetisation of some Permian rocks from New South Wales. *Geophysical Journal of Research of the Astronomical Society*, 7, 395-411.
- Jones, C.E., Jenkyns, H.C., Coe, A.L., and Hesselbo, S., 1994. Strontium isotopic variations in Jurassic and Cretaceous seawater. *Geochimica et Cosmochimica Acta*, 58, 3061-3074.
- Jones, J.G., Conaghan, P.J., McDonnell, K.L., Flood, R.H., and Shaw, S.E., 1984. Papuan Basin analogue and a foreland basin model for the Bowen-Sydney Basin. In Veevers, J.J., (Editor). *Phanerozoic Earth History of Australia*, Oxford, Clarendon Press, 243-261.
- Jones J.G., and Veevers, J.J., 1984. Morphotectonics of the platform regions focussed on the highlands. In Veevers, J.J., (Editor). *Phanerozoic Earth History of Australia*, Oxford, Clarendon Press, 115-167.
- Jones, M., 1986. Well display log of Eddystone No.5. AAR Limited CSR Oil and Gas Division, (unpublished).
- Jones, P.J. and Nicoll, R.S., 1985. Late Triassic conodonts from Sahul Shoals No. 1, Ashmoore Block, northwestern Australia. *BMR Journal of Australian Geology & Geophysics* 9, 361-64.
- Kantsler, A.J., and Cook, A.C., 1979. Maturation patterns in the Perth Basin. *Australian Petroleum Exploration Association Journal*, 19, 94- 107.
- Karhu, J.A., and Epstein, S., 1986. The implications of the oxygen isotope records in coexisting cherts and phosphates. *Geochimica et Cosmochimica Acta*, 50, 1745-1756.
- Karhu, J.A., 1993. Proterozoic evolution of the carbon isotope ratios of sedimentary carbonates in the Fennoscandian Shield. *Geological Survey of Finland, Bulletin* 371.
- Kemp, E.M., Balme, B.E., Helby, R.J., Kyle, R.A., Playford, G. and Price, P.L., 1977. Carboniferous and Permian palynostratigraphy in Australia and Antarctica, a review. *BMR Journal of Australian geology and Geophysics*, 2, 177-208.
- Knoll, A.H., 1991. End of the Proterozoic Eon. *Scientific American*, 265, 4, 42-49.
- Knoll, A.H., Hayes, J.M., Kaufman, A.J., Sweet, K., and Lambert, I.B., 1986. Secular variation in carbon isotope ratios from Upper Proterozoic successions of Svalbard and East Greenland. *Nature*, 321, 832-838.
- Koch, P.L., Zachos, J.C. and Gingerich, P.D., 1992. Correlation between isotope records in marine and continental reservoirs near the Palaeocene/ Eocene boundary. *Nature* 358, 319-22.
- Koepnick, R.B., Denison, R.E., Burke, W.H., Heatherington, E.A. and Dahl, D.A., 1990. Construction of the Triassic and Jurassic portion of the Phanerozoic curve of seawater $^{87}\text{Sr}/^{86}\text{Sr}$. *Chemical Geology*, 80, 327-349.
- Kosch, M., and Gulson, B.L., 1986. Nd and Pb isotopic studies of an Archaean layered mafic - ultramafic complex, Western Australia, and implications for mantle heterogeneity. *Geochimica et Cosmochimica Acta*, 50, 1-10.
- Kvenvolden, K.A., 1988. Methane hydrates and global climate. *Global Biogeochemical Cycles*, 2, 221-229.
- Kvenvolden, K.A., 1993. Gas hydrates- geological perspective and global change. *Reviews of Geophysics*, 31, 173-187.
- Lackie, M.A., and Schmidt, P.W., 1993. Remagnetisation of Strata during the Hunter-Bowen Orogeny. *Exploration Geophysics*, 24, 269- 274.
- Lavoie, D., 1993. Early Devonian marine isotopic signatures: Brachiopods from the Upper Gaspé Limestones, Gaspé Peninsula, Québec, Canada. *Journal of Sedimentary Petrology*, 63, 620-627.
- Lele, K.M., 1976. Paleoclimatic implications of Gondwana flora. *Geophytology*, 6, 207-229.

- Machel, H. G., 1985, Cathodoluminescence in calcite and dolomite and its chemical interpretation. *Geoscience Canada*, 12, 139- 147.
- Magaritz, M., Krishnamurthy, R.V. and Holser W.T., 1992. Parallel trends in organic and inorganic carbon isotopes across the Permian-Triassic boundary. *American Journal of Science*, 292, 727- 39.
- Marshall, J.D., 1992. Climatic and oceanographic isotopic signals from the carbonate rock record and their preservation. *Geological Magazine*, 129, 143-160.
- Matsuda, T. Late Permian to Early Triassic conodont paleobiogeography in the "Tethys Realm". 1985. In Nakazawa, K. and Dickins, J.M., (Editors), *The Tethys, her paleogeography and paleobiogeography from Palaeozoic to Mezozoic*. Takai University Press, Tokyo, 157-170.
- McClung, G., 1977. Permian marine invertebrate macrofossils - GSQ Taroom 10. *Queensland Government Mining Journal*, 78, 574-578.
- McClung, G., 1978. Permian marine invertebrate macrofossils from GSQ Eddystone 1. *Queensland Government Mining Journal*, 79, 420-423.
- McCrea, J.M., 1950. On the isotopic chemistry of carbonates and a paleotemperature scale. *Journal of Chemical Physics*, 18, 849-857.
- McKellar, J.L., 1977. Palynostratigraphy of samples from GSQ Taroom 10. *Queensland Government Mining Journal*, 78, 579-584.
- McKellar, J.L., 1978. Palynostratigraphy of samples from GSQ Eddystone 1. *Queensland Government Mining Journal*, 79, 424-434.
- McMinn, A., 1984. Palynology of DM Awaba DDH2, GS1984/162, (Unpublished).
- McTavish, R.A., 1965. Completion report B.M.R. 10 and 10A Beagle Ridge Western Australia. Report, Bureau of Mineral Resources Geology and Geophysics, 80.
- McTavish, R.A. and Dickins, J.M., 1974. The age of the Kockatea Shale (Lower Triassic), Perth Basin- A reassessment. *Journal of the Geological Society of Australia*, 21, 195-201.
- Mearns, E.W., 1988. A samarium-neodymium isotopic survey of modern river sediments from northern Britain. *Chemical Geology (Isotope Geoscience Section)*, 73, 1-13.
- Meyers, P.A., and Kowalski, E.A., 1994. Enhanced accumulation of continental organic matter in coastal sediments of northern Gondwana during the Late Triassic: Evidence from the Wombat plateau and the Carnarvon Basins, Northwest Australia, and the Himalayas. In Beauchamp, B., Embry, A.F., and Glass, K., (Editors), *Carboniferous to Jurassic Pangea*, Canadian Society of Petroleum Geologists Memoir 17, 439-448.
- Meyers, W.J., 1974. Carbonate cement stratigraphy of the Lake Valley Formation (Mississippian), Sacramento Mountains, New Mexico. *Journal of Sedimentary Petrology*, 44, 837-861.
- Middleton, M.F., 1990. Canning Basin. In: *Geology and mineral resources of Western Australia*. West Australian Geological Survey, Memoir 3, 425-457.
- Morante, R., 1993a. Determining the Permian-Triassic boundary in Australia through C-isotope chemostratigraphy. In Flood, P.G. and Aitchison, J.C. (Editors) *New England Oregon, eastern Australia*, University of New England. 293-98.
- Morante, R., 1993b. The Permian-Triassic Extinction: A function of greenhouse overshoot? In *Program and Abstracts of 1st International Symposium on Applied Isotope Geochemistry: Kjeller, Norway, Institutt for Energiteknikk, Geiranger, Norway*, (abstract) 2pp.
- Morante, R., Andrew, A.S., Veevers, J.J. and Hamilton, P.J., 1993c. Determining the Permian-Triassic boundary in Australia using C-isotope chemostratigraphy. *American Association of Petroleum Geologists 1993 Annual Convention Program*. (abstract) 153.
- Morante, R., and Herbert, C., 1994. Carbon isotopes and sequence stratigraphy about the Permian-Triassic Boundary in the Sydney Basin. *Twenty eighth Newcastle Symposium on Advances in the Study of the Sydney Basin*, 102-109.
- Morante, R., Veevers, J.J., Andrew, A.S. and Hamilton, P.J., 1994. Determining the Permian-Triassic boundary in Australia using C-isotope chemostratigraphy. *Australian Petroleum Exploration Association Journal*, 34, 330-336.

- Mory, A.J., 1988. Regional geology of the Offshore Bonaparte Basin Northwestern Australia. In Purcell, P.R. and Purcell R.R (Editors), The North West Shelf, Australia, Proceedings of Petroleum Exploration Society Australia Symposium. Perth, 1988, 287-310.
- Mory, A.J., 1990. Bonaparte Basin. In: Geology and mineral resources of Western Australia. West Australian Geological Survey, Memoir 3, 380-415.
- Mory, A.J., 1991. Geology of the offshore Bonaparte Basin north western Australia. West Australian Geological Survey, Report 29.
- Neri, C., Pasini, M., and Posenato, R., 1986. The Permian-Triassic boundary and the early Scythian sequence-Tesero Section, Dolomites. In Permian and Permian-Triassic boundary in the south-Alpine segment of the Western Tethys, IGCP 203, Brescia, Excursion Guidebook, 111-116.
- Newell, N.D., 1994. Is there a precise Permian-Triassic boundary? *Permian*, 24, 46-48.
- Nicoll, R.S., and Foster, C.B., 1994. Late Triassic conodont and palynomorph biostratigraphy and conodont thermal maturation, North West Shelf, Australia. *AGSO Journal of Australian Geology and Geophysics*, 15, 101-118.
- Noé, S.U., 1987. Facies and Paleogeography of the marine Upper Permian and of the Permian-Triassic boundary in the southern Alps (Bellerophon Formation, Tesero Horizon). *Facies*, 16, 89-142.
- NSW Geological Survey, 1973. Report GS1973/362: The Coorangong-Kulnura Coal Drilling Programme (unpublished).
- Oberhänsli, H., Hsu, K.J., Piasecki, S. and Weissert, H., 1989. Carbon isotope anomaly in Greenland and in the Southern Alps. *Historical Biology*, 2: 37-49.
- O'Leary, M., 1988. Carbon isotopes in photosynthesis. *Bioscience*, 38, 328-336.
- P J R G (Pakistani-Japanese Research Group), 1985. Permian and Triassic Systems in the Salt Range and Surghar Range, Pakistan. In Nakazawa, K. and Dickins, J.M., (Editors), *The Tethys, her paleogeography and paleobiogeography from Paleozoic to Mesozoic*. Takai University Press, Tokyo, 221-312.
- Palmieri, V., 1983. Biostratigraphic appraisal of Permian Foraminifera from the Denison Trough in the Bowen Basin (Central Queensland). In *Permian Geology of Queensland, Brisbane*. Geological Society of Australia, Queensland Division, 139-154.
- Palmieri, V., 1990. Permian foraminifera in Australia. *Geological Society of Australia Abstracts*, 25, 53-54.
- Palmieri, V., Foster, C.B. and Bondareva, E.V., 1994. First record of shared species of Late Permian small foraminiferids in Australia and Russia: time correlations and plate reconstructions. *AGSO Journal of Australian Geology & Geophysics*. 15, 359-365.
- Park, R., and Epstein, S., 1960. Carbon isotope fractionation during photosynthesis. *Geochimica et Cosmochimica Acta*, 21, 110-126.
- Paten, R.J., 1966. Mines Administration Pty Limited Palynological Laboratory Report 13/17 to Delhi Australian Petroleum on D.S. Merrimelia Nos 1, 3 and 4 wells (unpublished).
- Paull, R.K. and Paull, R.A., 1994. *Hindeodus parvus*- proposed index fossil for the Permian-Triassic boundary. *Lethaia*, 27, 271-272.
- P T B W G (Permian-Triassic Boundary Working Group) Newsletter no. 3, 1994.
- Popp, B.N., Anderson, T.F., and Sandberg, P.A., 1986a. Brachiopods as indicators of original isotopic composition in some Paleozoic limestones. *Geological Society of America Bulletin*, 97, 1262-1269.
- Popp, B.N., Podosek, F.A., Brannon, J.C., Anderson, T.F. and Pier, J., 1986b. $^{87}\text{Sr}/^{86}\text{Sr}$ ratio in Permian-Carboniferous sea water from the analyses of well-preserved brachiopod shells. *Geochimica et Cosmochimica*, 50, 1321-1328.
- Popp, B.N., Takigiku, R., Hayes, J.M., Louda, J.W., and Baker, E.W., 1989. The Post-Paleozoic chronology and mechanism of ^{13}C depletion in primary marine organic matter. *American Journal of Science*, 289, 436-454.

- Pretorius, L.E., 1985. Stable isotope, sedimentological and chemical aspects of the lower Beaufort Group uranium province in the southwestern Karoo Basin, South Africa. Ph.D. thesis, University of Queensland, Australia, 233 p.
- Price, P.L., 1983. A Permian palynostratigraphy for Queensland. In Permian Geology of Queensland. Brisbane, Geological Society of Australia, Queensland Division, 155-211.
- Price, P.L., Filatoff, J., Williams, A.J., Pickering, S.A., and Wood, G.R., 1985. Late Paleozoic and Mesozoic palynostratigraphical units. CSR Oil and Gas Division Palynology Facility Report No. 274/25, p. 1-20 (unpublished).
- Rao, C.P., and Green, D.C., 1982. Oxygen and carbon isotopes of Early Permian cold-water carbonates, Tasmania, Australia. *Journal of Sedimentary Petrology*, 52, 1111-1125.
- Rao, C.P., 1988. Oxygen and carbon isotope composition of cold-water Berriedale Limestone (Lower Permian), Tasmania, Australia. *Sedimentary Geology*, 60, 221-231.
- Rau, G.H., Takahashi, T., and Des Marais, D.J., 1989. Latitudinal variations in plankton $\delta^{13}\text{C}$: implications for CO_2 and productivity in past oceans. *Nature*, 341, 516-518.
- Renne, P.R., 1995. Excess Ar-40 in biotite and hornblende from the Norilsk 1 intrusion, Siberia- implications for the Age of the Siberian Traps. *Earth and Planetary Science Letters*, 131, 165-176.
- Retallack, G.J., 1980. Late Carboniferous to Middle Triassic megafossil floras from the Sydney Basin. *New South Wales Geological Survey Bulletin*, 26, 162-168.
- Retallack, G.J., 1995. The Permo-Triassic life crisis on land. *Science*, 267, 77-80.
- Retallack, G.J., Renne, P.R., and Kimbrough, D.L., 1993. New radiometric ages for Triassic floras of Southeast Gondwana. In Lucas, S.G. and Morales, M. (Editors), *The Nonmarine Triassic*. New Mexico Museum of Natural History and Science Bulletin No.3, 415-418.
- Retallack, G.J., Veevers, J.J., and Morante, R. Global coal gap between Permian-triassic extinction and Middle Triassic recovery of peat forming plants. *Geological Society of America Bulletin*, (in press).
- Roberts, J., Briggs, D., Claoué-Long, J., Foster, C and. Maidment, D., 1994a. Permian SHRIMP ages and correlations within eastern Australia. *Twenty eighth Newcastle Symposium on Advances in the study of the Sydney Basin*. 24-30.
- Roberts, J., Claoué-Long, J., Maidment, D., Jones, P. and Foster, C., 1994b. Shrimp calibration of the Eastern Australian Late Palaeozoic. *Geological Society of Australia, Abstracts No. 37, 12th Australian Geological Convention, Perth, September 1994*. p. 378-379.
- Roemmich, D., and McGowan, J., 1995. Climatic warming and the Decline of Zooplankton in the California Current. *Science*, 267, 1324- 1326.
- Ross, C.A., and Ross, J.R.P., 1987. Late Paleozoic sea levels and depositional sequences. In Ross, C.A. and Haman, (Editors), *Timing and depositional history of eustatic sequences: constraints on seismic stratigraphy*. Cushman Foundation for Foraminiferal Research, Special Publication, 24, 131-149.
- Ross, C.A., and Ross, J.R.P., 1994. Permian sequence stratigraphy and fossil zonation. In Beauchamp, B., Embry, A.F., and Glass, K., (Editors), *Pangea: Global Environments and Resources*, Canadian Society of Petroleum Geologists, Memoir 17, 219-231.
- Ruben, J., 1992. Permo-Triassic biopspheric hypoxia. *Modern Geology*, 16, 383-385.
- Rush, P.F., and Chafetz, H.S., 1990. Fabric retentive, non-luminescent brachiopods as indicators of original $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ composition: A test. *Journal of Sedimentary Petrology*, 60, 968-981.
- SANTOS Petroleum, 1988. Petrel-4 well completion report (Unpublished).
- Schidlowski, M., 1988. A 3800-million-year isotopic record of life from carbon in sedimentary rocks. *Nature*, 333, 313-318.
- Schidlowski, M., Hayes, J.M., and Kaplin, I.R., 1983. Isotopic inference of ancient biochemistries: Carbon, sulfur, hydrogen and nitrogen. In Schopf, J.W. (Editor), *Earth's Earliest Biosphere, its Origin and Evolution*. Princeton University Press, 149-186.
- Schidlowski, M., and Aharon, P., 1992. Carbon cycle and carbon isotope record: Geological impact of life over 3.8 Ga of Earth history. In Schidlowski, M., Golubic, S., Kimberley, M.M., and Trudinger, P.A. (Editors),

- Early Organic Evolution: Implications for Mineral and Energy Resources. Berlin Heidelberg, Springer-Verlag, 147-175.
- Schopf, T.J.M., 1974. Permo-Triassic extinctions: relation to sea floor spreading. *Journal of Geology*, 82, 129-143.
- Shackleton, N.J., and Kennett, J.P., 1975. Paleotemperature history of the Cenozoic and the initiation of Antarctic glaciation: oxygen and carbon isotope analyses in DSDP Sites 277, 279 and 281. In Kennett, J.P., Houtz, R.E. et al., Initial Reports of the Deep Sea Drilling Project, 29. US Government Printing Office, Washington D.C., 743-755.
- Sheng, J.Z., Chen, C.Z., Wang, Y.G., Rui, L.Liao, Z.T., Bando, Y., Ishii, K. Nakazawa, K., and Nakamura, K., 1984. Permian-Triassic boundary in middle and eastern Tethys. *Journal of the Faculty of Sciences, Hokkaido University, Series 4*, 21, 133-181.
- Siegenthaler, U., and Sarmiento, J.L., 1993. Atmospheric carbon dioxide and the ocean. *Nature*, 365, 119-125.
- Simms, M.J., and Ruffel, A.F., 1989. Synchronicity of climate change and extinctions in the Late Triassic. *Geology*, 17, 265-268.
- Skwarko, S.K., and Kummel, B., 1974. Marine Triassic molluscs of Australia and Papua New Guinea. Bureau of Mineral Resources, Australia, Bulletin 150, 111-127.
- Smalley, P.C., Higgins, A.C., Howarth, R.J., Nicholson, H., Jones, C.E., Swinburne, N.H.M. and Bessa, J., 1994. Seawater Sr isotope variations through time: A procedure for constructing a reference curve to date and correlate marine sedimentary rocks. *Geology*, 22, 431-434.
- Spitz, A. and Degens, E.T., 1985. Modelling stable isotope fluctuations through geologic time. *Mitteilungen von Geologisch-Palaontologischen Institut der Universität Hamburg* 59, 155-66.
- Stanley, S.M., and Yang, X., 1994. A double mass extinction at the end of the Palaeozoic era. *Science*, 266, 1340-1344.
- Steiner, M., Ogg, J., Zhang, Z., and Sun, S., 1989. The Late Permian/Early Triassic magnetic polarity time scale and plate motions of South China. *Journal of Geophysical Research*, 94, B6, 7343-7363.
- Summons, R.E., and Hayes, J.M., 1992. Principles of molecular and isotopic biogeochemistry. In, Schopf, J.W. and Klein, C. (Editors), *The Proterozoic Biosphere*, Cambridge University Press, 153-155.
- Summons, R.E., Boreham, C.J., Foster, C.B., Murray, A.P. and Gorter, J.D., 1995. Chemostratigraphy and the composition of oils in the Perth Basin, Western Australia. *Australian Petroleum Exploration Association Journal*, 35, 613- 632.
- Sweet, W.C., 1992. A conodont based high-resolution biostratigraphy for the Permo-Triassic boundary interval. In Sweet, W.C., Zuyi, Y, Dickins, J.M., and Yin, H., (Editors) *Permo-Triassic events in the Eastern Tethys*, Cambridge University Press, Cambridge, 120-133.
- Sweet, W.C., Zuyi, Y, Dickins, J.M., and Yin, H., 1992. Permo-Triassic events in the eastern Tethys- an overview. In Sweet, W.C., Zuyi, Y, Dickins, J.M., and Yin, H., (Editors) *Permo-Triassic events in the Eastern Tethys*, Cambridge University Press, Cambridge, 1-8.
- Thackery, J.F., van der Merwe, N.J., Lee-Thorpe, J.A., Sillen, A., Lanham, J.L., Smiths, R., Keyser, A., and Monteiro, P.M.S., 1990. Changes in carbon isotope ratios in the late Permian recorded in therapsid tooth apatite. *Nature*, 751-753.
- Thomasson, J.R., Nelson, M.E., and Zakrewski, R.J., 1986. A fossil grass (Gramineae: Chloridoideae) from the Miocene with Kranz anatomy: *Science*, 233, 876-878.
- Tieszen, L.J., 1991. Natural variations in the carbon isotope values of plants: Implications for archaeology, ecology, and paleoecology. *Journal of Archeological Sciences*, 18, 227-248.
- Tozer, E.T., 1986. Definition of the Permian-Triassic boundary: The question of the age of the *Otoceras* beds. *Mem. Soc. Geol. Italiana*, 36: 291-302.
- Tozer, E.T., 1988. Towards a definition of the Permian-Triassic boundary. *Episodes*, 11: 251-255.
- Uren, R.E., 1980. Notes on the Clifton Sub-Group, northeastern Sydney Basin. *New South Wales Geological Survey Bulletin*, 26, 162-168.

- Urey, H.C., Lowenstam, H.A., Epstein, S., H.A., and McKinney, C.R., 1951. Measurement of paleotemperatures of the upper Cretaceous of England, Denmark, and the southeastern United States. *Geological Society of America Bulletin*, 62, 399-416.
- Urey, H.C., Epstein, S., H.A., McKinney, C.R., and McCrea, J., 1948. Method for measurement of paleotemperatures. *Geological Society of America Bulletin*, 62, 1359-1360.
- van der Merwe, N.J., and Medina, E., 1991. The canopy effect, carbon isotopes and foodwebs in Amazonia. *Journal of Archaeological Science*, 18, 87-96.
- Veevers, J.J., 1971. Phanerozoic history of Western Australia related to continental drift. *Journal of the Geological Society of Australia*, 18, 87-96.
- Veevers, J.J., 1994. Pangea: Evolution of a supercontinent and its consequences for Earth's paleoclimate and sedimentary environments. In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America, Special Paper 288. 13-23.
- Veevers, J.J., Conaghan, P.J. and Powell, C.Mc.A., 1994a. Eastern Australia. In Veevers, J.J., and Powell, C.Mc.A (Editors), *Permian-Triassic Pangean Basins and Foldbelts Along the Panthalassan Margin of Gondwanaland*. Boulder, Colorado, Geological Society of America Memoir 184, 11-172.
- Veevers, J.J., Jones, J.G., Powell, C.McA., and Talent, J.A., 1984. Synopsis. In Veevers, J.J., (Editor). *Phanerozoic Earth History of Australia*, Oxford, Clarendon Press, 351-364.
- Veevers, J.J., Conaghan, P.J. and Shaw, S.E., 1994b. Turning point in Pangean environmental history at the Permian-Triassic . In G.D. Klein (Editor) *Pangea: Paleoclimate, tectonics, and sedimentation during accretion, zenith and breakup of a supercontinent*. Geological Society of America, Special Paper 288: 187-196.
- Veizer, J., 1989. Strontium isotopes in seawater through time. *Annual Review of Earth and Planetary Science*, 17, 141-167.
- Veizer, J., Fritz, P., and Jones, B., 1986. Geochemistry of brachiopods: oxygen and carbon isotopic records of Paleozoic oceans. *Geochimica et Cosmochimica Acta*, 50, 1679-1696.
- Veizer, J., and Hoeffs, J., 1976. The nature of $^{18}\text{O}/^{16}\text{O}$ and $^{13}\text{C}/^{12}\text{C}$ secular trends in sedimentary carbonate rocks. *Geochimica et Cosmochimica Acta*, 40, 1387-1395.
- Veizer, J., Holser, W.T., and Wilgus, C.K., 1980. Correlation of $^{13}\text{C}/^{12}\text{C}$ and $^{34}\text{S}/^{32}\text{S}$ secular variations. *Geochimica et Cosmochimica Acta*, 44, 579-587.
- Wahlen, M., 1993. The global methane cycle. *Annual Reviews of Earth and Planetary Science*, 21, 407-426.
- Walker, J.C.G., 1986. Global geochemical cycles of carbon, sulfur and oxygen. *Marine Geology*, 70, 159-174.
- Wang, C-Y, 1995. Conodonts of the Permian-Triassic boundary beds and biostratigraphic boundary. *Acta Palaeontologica Sinica*, 34, 129-151.
- Wang, K., Geldsetzer, H.H.J. and Krouse, H.R., 1994. Permian-Triassic extinction: Organic $\delta^{13}\text{C}$ evidence from British Columbia, Canada. *Geology*, 22, 580-584.
- Warris, B.J., 1993. The hydrocarbon potential of the Paleozoic basins of Western Australia. *Australian Petroleum Exploration Association Journal*, 33, 123-137.
- Whitford, D.J., Hamilton, P.J., and Scott, J., 1994. Sedimentary provenance studies in Australian basins using neodymium model ages. *Australian Petroleum Exploration Association Journal*, 34, 320-329.
- Wignall, P.B., and Hallam, A., 1992. Anoxia as a cause of the Permian-Triassic mass extinction: facies evidence from northern Italy and the western United States. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 93, 21-46.
- Wright, J., Schrader, H., and Holser, W.T., 1987. Paleoredox variations in ancient oceans recorded by rare earth elements in fossil apatite. *Geochimica et Cosmochimica Acta*, 51, 631-644.
- Xu, D-Y and Yan, Z., 1993. Carbon isotope and iridium event markers near the Permian-Triassic boundary in the Meishan section, Zhejiang Province, China. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 104, 171-75.
- Yemane, K., 1993. Contribution of Late Permian palaeogeography in maintaining a temperate climate in Gondwana. *Nature*, 361, 51-54.

- Yin, H., 1993. A proposal for the global stratotype section and point (GSSP) of the Permian-Triassic boundary (Chinese Working Group on the Permian-Triassic boundary). *Albertiana*, 11: 4-30.
- Yin, H. Wu, S., Din, M., Zhang, K., Tong, J. and Yang, F., 1994. The Meishan section- candidate of the global stratotype section and point (GSSP) of Permian-Triassic boundary (PTB). *Albertiana*, 14, 15-31.
- Zeissl, W., and Mauritsch, H., 1991. The Permian-Triassic of the Gartnerkofel-1 Core (Carnic Alps, Austria): Magnetostratigraphy. *Abhandlungen der Geologischen Bundesanstalt*, 45, 193-207.
- Zhang, K.X., 1987. The Permo-Triassic conodont fauna in Changxing area, Zheliang province and its stratigraphic significance. *Earth Science, Journal of China University of Geosciences*, 12: 193-200.
- Abstracts of the International Geological Congress, 1994, Abstracts and Programme of the 34th Australian Academic Symposium (AASAP), 1994, Perth, Western Australia, Macquarie University, Sydney New South Wales, 1994.
1. STOKER, T.L. R., 1991. Carbon isotope stratigraphy across the Permian-Triassic boundary in western and northern Australia. In: Proceedings of IAGLR, Perth, 1991. Mineralogical Association of Australia, Perth, 1991, University of Adelaide, 1994. *Geological Abhandlungen*, 122, 61.
2. MURPHY, E. L., KIRKMAN, F.J., CAMPBELL, A.S. & HAMILTON, P.J., 1994. Determination of the Permian-Triassic Boundary in Australia using carbon isotope stratigraphy. *AFA Journal*, 14, 353-356.
3. KIRKMAN, F.J., R., 1994. Transition from the carbon isotope chemostratigraphy across the Permian-Triassic boundary in Australia. In: Proceedings of AASAP, 1994, Perth, WA, Australia. G.D. & Turpin, B.D. (Editors) Abstracts of the 34th Australian Academic Symposium, Geochronology and Isotopic Geology, U.S. Geological Survey Bulletin, 1994.
4. STOKER, T.L. R. & MURPHY, E. L., 1994. Carbon isotopes & sequence stratigraphy about the Permian-Triassic boundary in the Gertnerkofel, Tirol, Austria. Twenty-fifth Newcastle Symposium on Advances in the study of the Permian-Triassic, 15-17 Nov.
5. MURPHY, E. L., 1994. Establishing the Permian/Triassic boundary in Australia using carbon isotope chemostratigraphy. An Australian paleontological Convention Abstract, Macquarie University, 42.
6. STOKER, T.L. R., ANDREWS, A.S., CAMPBELL, F.J. & HAMILTON, P.J., 1994. Carbon isotope chemostratigraphy across the Permian-Triassic boundary in Australia. *ION Australian Geological Conference*, Perth, 52, 305.
7. MURPHY, E. L., 1993. The Permian-Triassic boundary: A function in greenhouse overcool? First International Symposium on Applied Isotope Geochemistry (AIG-G), Institut für Geochemie, 13-15 Oct 1993, 93-957, Norway, 2pp.
10. MURPHY, E. L., 1993. Determining the Permian-Triassic boundary in Australia through C-isotope chemostratigraphy. In: Murphy, E. L. & Campbell, A.S. (eds) *New England Orogeny Abstracts Australia*, University of New England, 291-293.