

REFERENCES

- Allen C. B. et al. (1996) New production and photosynthetic rates within and outside a cyclonic mesoscale eddy in the north Pacific subtropical gyre, *Deep Sea Research*, **43**, 917-936.
- Anderson F. R., (2003) What regulates the efficiency of the Biological pump in the Southern Ocean, *U.S. JGOFS News*, **12(2)**, 1-4.
- Bange H. W. et. al., (2000) A revised nitrogen budget for the Arabian Sea, *Global Biogeochemical Cycle*, **14**, 1283-1297.
- Bange H.W. et al., (2005) The nitrogen cycle in the Arabian Sea, *Progress in Oceanography*, **65**, 145-158.
- Banase K., (1987) Seasonality of phytoplankton chlorophyll in the central and northern Arabian Sea, *Deep Sea Res I*, **34**, 713-723.
- Barber R.T., (1992) Introduction to the WCE88 cruise: An investigation into why the equator is not greener, *Journal of Geophysical Research*, **97**, 609-610.
- Barber R.T., Murray J.W., and McCarthy J.J., (1994) Biogeochemical interactions in the equatorial Pacific, *Ambio*, **23**, 62-66.
- Bates N. R. et al., (2006a) Ocean carbon cycling in the Indian Ocean: 1. Spatio-temporal variability of inorganic carbon and air-sea CO₂ gas exchange, *Global Biogeochemical Cycles*, **20**, GB3020, doi: 10.1029/2005GB002491
- Bates N. R. et al., (2006b) Ocean carbon cycling in the Indian Ocean: 2. Estimates of net community production, *Global Biogeochemical Cycles*, **20**, GB3021, doi: 10.1029/2005GB002492
- Bender M., Ducklow H., Kiddon J., Marra J. and Martin J. (1992) The carbon balance during the 1989 spring bloom in the North Atlantic Ocean, 47°N, 20°W. *Deep Sea Res.*, **39**, 1707-1725.
- Bianchi, M. et al., (1997) Nitrification rates, ammonium and nitrate distribution in the upper layers of the water column and in sediments of the Indian sector of the Southern Ocean, *Deep-Sea Research II*, **44(5)**, 1017-1032.
- Bienfang P.K. et. al., (1990) Nitrate and ammonium uptake by phytoplankton populations during the spring bloom in Auke Bay, Alaska, Estuarine, *Coastal and shelf sciences*, **30(5)**, 509-524
- Bhattathiri et al., (1996) Phytoplankton production and chlorophyll distribution in the eastern and central Arabian Sea in 1994-1995, *Current Science*, **71(11)**, 857-862

- Blain S. et al., (2007) Effect of natural Iron fertilization on carbon sequestration in the Southern Ocean, *Nature*, **446**, doi:10.1038/nature05700
- Borole D.V., (2002) Analysis of ²¹⁰Pb in sediment trap samples and sediments from the northern Arabian Sea: evidence for boundary scavenging, *Deep Sea Research I*, **49**(6), 1055-1069.
- Boyd P.W. and Law C.S., (2001) The Southern Ocean Iron Release experiment (SOIREE) – introduction and summary, *Deep Sea Research II*, **48**, 2425-2438
- Broecker W. S., (1982) glacial to interglacial changes in ocean chemistry, *Progress in oceanography*, **11**, 151-197.
- Broecker W.S. and Peng T. H., (1982) *Tracers in the Sea*, Eldigio, Palisades, New York.
- Bronk D.A., Glibert P.M., and Ward B.B., (1994) Nitrogen uptake, dissolved nitrogen release and new production, *Science*, **265**, 1843-1846.
- Buesseler K. O. et al., (1998) Upper ocean export of particulate organic carbon in the Arabian Sea derived from Thorium-234, *Deep Sea Research II*, **45**, 2461-2487.
- Buesseler K.O., (1991) Do upper-ocean sediment traps provide an accurate record of particle flux?, *Nature*, **353**, 420-423
- Burkill P.H., Mantoura R.F.C. and Owens N.J.P. (1993) Biogeochemical cycling in the northwestern Indian Ocean: a brief overview, *Deep Sea Research II*, **40** (3), 643-649.
- Capone D.G. et al., (1997) *Trichodesmium*, a globally significant marine cyanobacterium, *Science*, **276**, 1221-1229.
- Chisholm W.S., Falkowaski P.G., and Cullen J.J., (2001), Dis-crediting Ocean fertilization, *Science*, **294**, 309-310.
- Coale et al., (1996) A massive phytoplankton bloom induced by an ecosystem-scale iron fertilization experiment in the equatorial Pacific Ocean, *Nature*, **383**, 495-501.
- Coale et al., (2004) Southern Ocean Iron Enrichment Experiment: Carbon cycling in high and low-Si waters, *Science*, **304**, 408-417.
- Collos Y. and Slawyk G., (1986) ¹³C and ¹⁵N uptake by marine phytoplankton IV: Uptake ratios and the contribution of nitrate to the productivity of Antarctic waters (Indian Ocean sector), *Deep-Sea Research*, **33**, 1039-1051.

- Constable A. J., and Nicol S., (2003) Southern Ocean productivity in relation to spatial and temporal variations in the physical environments, *Journal of Geophysical Research*, **108**, C4, doi:10.1029/2001JC001270.
- de Baar J.W.H. et al., (2005) Synthesis of Iron Fertilization experiments: From the iron age in the age of enlightenment, *Journal of Geophysical Research*, **110**, doi:10.1029/2004JC002601.
- De Souza et al., (1996) Seasonal variability in oxygen and nutrients in the central and eastern Arabian Sea, *Current Science*, **71**(11), 847-851
- DiTullio G.R. and Laws E.A. (1991) Impact of an atmospheric-oceanic disturbance on phytoplankton community dynamics in the North Pacific Central Gyre, *Deep Sea Res*, **38**, 1305-1329.
- Dore J. E. and Karl D. M. (1996) Nitrification in the euphotic zone as a source of nitrite, nitrate, and nitrous oxide at station ALOHA, *Limnology and Oceanography*, **41**(8), 1619-1628.
- Dugdale, R.C., and Goering, J. J., (1967) Uptake of new and regenerated forms of nitrogen in primary productivity, *Limnology and Oceanography*, **12**, 196-206.
- Dugdale, R.C. and Wilkerson, F. P., (1986) The use of ^{15}N to measure nitrogen uptake in eutrophic oceans: experimental considerations, *Limnology Oceanography*, **31**, 673-689
- Dugdale R.C., Wilkerson F.P., Barber R. T. and Chavez F.P. (1992) Estimating new production in the Equatorial Pacific Ocean at 150° W, *Journal of Geophysical Research*, **97**(C1), 681-686.
- Ducklow H.W. and Harris R. (1993) Introduction to the JGOFS North Atlantic Bloom Experiment, *Deep Sea Research II*, **40**, 1-8.
- Ducklow H.W. (1995) Ocean Biogeochemical fluxes: New production and export of organic matter from the upper ocean, *Review of Geophysics*, Supplement, 1271-1276.
- Dupelssy J.C, (1982) Glacial to interglacial contrasts in the northern Indian Ocean, *Nature*, **295**, 319-321.
- Dwivedi R.M. et al., (2006) Influence of northeasterly trade winds on intensity of winter bloom in the northern Arabian Sea, *Current Science*, **90**(10), 1397-1406

- Emerson S., Quay P., Karl d., Winn C., Tupas L. and Landry M. (1997) Experimental determination of organic carbon flux from open Ocean surface waters, *Nature*, **389**, 951-954.
- Eppley R.W., Sharp J.H., Renger E.H., Perry M.J. and Harrison W.G. (1977) Nitrogen assimilation by phytoplankton and other microorganism in the surface waters of the central North Pacific Ocean, *Mar. Biol.*, **39**, 111.
- Eppley R.W. and Peterson B.J. (1979) Particulate organic matter flux and planktonic new production in the deep ocean, *Nature*, **282**, 677-680.
- Falkowski P.G. et al., (1998) Biogeochemical controls and feedbacks on ocean primary production, *Science*, **281**, 200-206.
- Falkowaski P.G. et al., (2000) The global carbon cycle: A test of our knowledge of Earth as a system, *Science*, **290**, 291-296.
- Falkowski P.G., Laws E.A., Barber R.T. and Murray J.W. (2003) Phytoplankton and their role in primary new and export production, In: *Ocean Biogeochemistry* (Eds) M.J.R. Fasham, 99-121, Springer, Heideberg.
- Fernandez C., et al., (2005), An estimation of annual new production and carbon fluxes in the northeast Atlantic Ocean during 2001. *Journal of Geophysical Research* **110**, C07S13, doi:10.1029/2004JC002616.
- Field C.B. et al., (1998) Primary production of the biosphere: Integrating terrestrial and oceanic components, *Science*, **281**, 237-240.
- Fischer J., Schott F.A., and Stramma L., (1996) Currents and transports of the Great Whirl-Socotra Gyre system during the summer monsoon August 1993, *Journal of Geophysical Research*, **101**, 3573–3587.
- Gall et al., (2001) Phytoplankton processes. Part 1: Community structure during the Southern Ocean Iron RElease Experiment (SOIREE), *Deep Sea Research II*, **48**, 2551-2570
- Geider, R. J., and Roche, J. La., (1994) The role of Iron in phytoplankton photosynthesis and the potential of iron limitation of primary productivity in the sea, *Photosynthetic Research*, **39**, 275-301.
- Gervais F. and Riebesell U., (2002) Changes in the primary productivity and chlorophyll-a in the response to iron fertilization in the southern frontal zone, *Limnology and Oceanography*, **47(5)**, 1324-1335.

- Gilbert P. M. et al., (1982) Isotope dilution models of uptake and re-mineralization of ammonium by marine phytoplankton, *Limnology and Oceanography*, **27**(4), 639-650
- Godfrey J.S., (1996) The effect of the Indonesian throughflow on ocean circulation and heat exchange with the atmosphere: A review, *J. Geophys. Res.*, **101**, 12217-12238.
- Goes J et. al., (2005) Warming of the Eurasian landmass is making the Arabian Sea more productive, *Science*, **308**, 545-547.
- Godfrey J S., (1996) The effect of the Indonesian throughflow on ocean circulation and heat exchange with the atmosphere: A review, *Journal of Geophysical Research*, **101**, 12,217–12,237
- Godfrey, J. S., Johnson, G. C., McPhaden, M. J., Reverdin, G., & Wijffels, S. (2001). The tropical ocean circulation. In J. Church, J. Gould, & G. Siedler (Eds.), *Ocean circulation and climate* pp. 215–245 London: Academic Press.
- Gordon A. and Fine R., (1996) Pathways of water between the Pacific and Indian Oceans in the Indonesian seas, *Nature*, **379**, 146-149.
- Gregg et al., (2002) Ocean primary production and climate: Global decadal Changes, *Geophysical Research Letters*, **30**(15), doi:10.1029/2003GL016889
- Gregg W. W., N. W. Casey, C. R. McClain (2005), Recent trends in global ocean chlorophyll, *Geophys. Res. Lett.*, **32**, L03606, doi:10.1029/2004GL021808.
- Hall T. M. et al., (2004) Estimates of anthropogenic carbon in the Indian Ocean with allowance for mixing and time-varying air-sea CO₂ disequilibrium, *Global Biogeochemical Cycle*, **18**, doi:10.1029/2003GB02120
- Hansell D.A., Whitley T.E. and Goering J.J. (1993) Patterns of nitrate utilization and new production over the Bering -Chukchi Shelf, *Continental Shelf Research*, **13**, 601-627.
- Hansen P.J. et al., (2004) Green *Noctiluca Scintillans*: a dinoflagellate with its own greenhouse, *Marine Ecology Progress Series*, **275**, 79-87.
- Harrison W. G. et al., (1987) *f*-ratio and its relationship to ambient nitrate concentration in coastal waters, *Journal of plankton research*, **9**(1), 235-248).
- Hellerman S. and Rosenstein M. (1983) Normal monthly wind stress over the world ocean with error estimates, *Journal of Physical Oceanography*, **13**, 1093–1104.

- Hood R. R. et al., (2006) Carbon Cycling and biogeochemical variability in the Indian Ocean, *CLIVER Exchanges*, **11(4)**, 24-28.
- Holm-Hansen O. and Mitchell B.G.(1991) Spatial and temporal distribution of phytoplankton and primary production in the western Bransfield Strait region, *Deep Sea Research*, **38**, 961-980,1991.
- Honjo S. and Manganini S.J. (1993) Annual biogenic particle fluxes to the interior of the North Atlantic Ocean studied at 34°N, 21°W and 48°N, 21°W, *Deep Sea Research II*, **40**, 587-607.
- Huntley M., Karl D.M., Niller P. and Holm-Hansen O. (1991) Research on Antarctic Coastal Ecosystem Rates (RACER): An interdisciplinary field experiment, *Deep Sea Research*, **38**, 911-941.
- Hutchins D. A., (1995) Iron and the marine phytoplankton community, *Prog. Phycol. Res.*, **11**, 1-49.
- Intergovernmental Panel on Climate Change (IPCC) report no. IV, (2007) Cambridge University Press, ISBN 978-0-521-88009-1
- Ittekkot V. (1991) Particle flux studies in the Indian Ocean, *EOS*, **72(47)**, 527-530.
- JGOFS Report No. 19. (1996) Protocol for the Joint Global Ocean Flux Study (JGOFS) core measurements, 145-150, SCOR, Bergen, Norway.
- Karl D. et al., (1997) The role of nitrogen fixation in biogeochemical cycling in the subtropical north Pacific Ocean, *Nature*, **388**, 533-538.
- Levitus et al., (2000) Warming of the world Ocean, *Science*, **287**, 2225-2229
- Levitus S., Burgett R. and Boyer T.P. (1994) World Ocean Atlas 1994, Vol. 5, Salinity. NOAA Atlas NESDIS, Vol. 3, US Government Printing Office, Washington DC, 99pp.
- Lohrenz S.E. et al. (1992) Seasonal variability in primary production and particle flux in the northwestern Sargasso Sea: U.S. JGOFS Bermuda Atlantic Time Series Study, *Deep Sea Research*, **39**, 1373-1391.
- Madhupratap M et. al., (1996) Mechanism of the biological response to winter cooling in the Northeastern Arabian Sea, *Nature*, **386**, 549-552.
- Martin, J H. et al., (1991) The case of Iron, *Limnology Oceanography*, **36(8)**, 1793-1802.

- Martin J. H. and Fitzwater S.E., (1988) Iron deficiency limits phytoplankton growth in the north-east subarctic, *Nature*, **331**, 341-343.
- Martin J.H., Gordan R.M. and Fitzwater S.E., (1990) Iron in Antarctic waters, *Nature*, **345**, 156-158
- Martin J., et al., (1991) The case of Iron, *Limnology and Oceanography*, **36(8)**, 1793-1802.
- Malone T.C., Pike S.E., Conley, D.J. (1993) Transient variations in phytoplankton productivity at the JGOFS Bermuda time series station, *Deep Sea Research*, **40**, 903-924.
- Marinov et al. (2006) The Southern Ocean biogeochemical divide, *Nature*, **441**, doi:10.1038/nature04883.
- McCarthy J.J., Garside C., Nevins J.L. and Barber R.T. (1996) New production along 140°W in the equatorial Pacific during and following the 1992 El Nino event, *Deep Sea Research II*, **43**, 1065-1093.
- McCarthy J.J., Garside C. and Nevins J. (1999) Nitrogen dynamics during the Arabian Sea northeast monsoon, *Deep Sea Research II*, **46**, 1623-1664.
- Mengesha S. et al., (1998) Seasonal variations of phytoplankton community structure and nitrogen uptake regime in the Indian sector of the Southern Ocean, *Polar Biology*, **20**, 259-172.
- Michaels A.F., Siegel D.A., Johnson R.J., Knap A.F. and Galloway J.N. (1993) Episodic inputs of atmospheric nitrogen to the Sargasso Sea: Contribution to new production and phytoplankton blooms, *Global Biogeochemical Cycles*, **7**, 339-351.
- Michaels A.F., Bates N.R., Buesseler K.O., Carlson C.A., Knap H.H. (1994) Carbon cycle imbalances in the Sargasso Sea, *Nature*, **372**, 537-540.
- Miller C.B. et al. (1991) Ecological dynamics in the subarctic Pacific, a possibly iron limited ecosystem, *Limnology and Oceanography*, **36**, 1600-1615.
- Miller C.B. (1993) Pelagic production processes in the subarctic Pacific, *Progress in Oceanography*, **32**, 1-15.
- Minas J. H. et al., (1986) Productivity in upwelling areas deduced from hydrographic and chemical fields, *Limnology and Oceanography*, **31**, 1182-1206.
- Mitchell, G., et al. (1991) Light limitation of phytoplankton biomass and macronutrient utilization in the Southern Ocean, *Limnology and Oceanography*, **36(8)**, 1662-1677.

- Miyama T et al., (2003) Structure and dynamics of the Indian Ocean cross equatorial cell, *Deep Sea Research II*, **50**, 2023-2047.
- Mullin M.M. et al., (1975) Nutrient regeneration by oceanic zooplankton: a comparison of methods, *Mar. Sci. Comm.*, **1**, 1-13
- Murray J.W., The 1988 Black Sea Oceanography Expedition: Introduction and Summary, *Deep-Sea Res*, **38** (Supplement 2) (1991): S655-S661
- Murtugudde R., Signorini S., Christian J., Busalacchi A., McLain C. and Picaut J. (1999) Ocean color variability of the tropical Indo-Pacific basin observed by SeaWiFS during 1997–98, *Journal of Geophysical Research*, **104**, 18351–18366.
- Nair R.R. et al., (1989) Increased particle flux to the deep ocean related to monsoons, *Nature*, **338**, 749-751.
- Naqvi et al., (1982) Denitrification in the Arabian Sea, *Deep Sea Research*, **29**, 459-469.
- Naqvi, S.W.A. and Jaykumar, D.A., (2000) Ocean biogeochemistry and atmospheric composition: Significance of the Arabian Sea, *Current Science*, **78**, 289-299.
- Neess, J.C., R.C., Dugdale, and J.J, Goering, (1962) Nitrogen metabolism in lakes, Measurement of nitrogen fixation with ^{15}N , *Limnology and Oceanogr*, **7**, 163-169.
- O'Reilly J. et. al., (1998) Ocean colour chlorophyll algorithms for SeaWiFS, *Journal of Geophysical Research*, **103**, 24,937-24,953.
- Oslon R.J. (1980) Nitrate and Ammonium uptake in Antarctic waters, *Limnology and Oceanography*, **25**, 1064-1074.
- Owens N. J. P. and Rees A. P. (1989) Determination of nitrogen-15 at sub-microgram levels of nitrogen using automated continuous-flow isotope ratio mass spectrometer, *Analyst*, **114**, 1655-1657.
- Owens N. J. P. et al. (1993) Size-fractionated primary production and nitrogen assimilation in the northwestern Indian Ocean, *Deep Sea Research II*, **40(3)**, 607-709.
- Parab S. G. et al., (2006) Monsoon driven changes in phytoplankton populations in the eastern Arabian Sea as revealed by microscopy and HPLC pigment analysis, *Continental Shelf Research*, **26**, 2538-2558.

Pfannkuche O. and Lochte K., (2000) The biogeochemistry of the deep Arabian Sea: overview, *Deep Sea Research II*, **47**, 2615-2628.

Platt T., and Sathyendranath S., (1988) Oceanic primary production: estimation by remote sensing at local and regional scales, *Science*, **241**, 1613-1620.

Poisson A., N Metzl., C. Brunet, B. Schauer, B. Bres, D. Ruiz-Pino and F. Louanchi, (1994) Variability of sources and sinks of CO₂ in the Western Indian and Southern Oceans during the year 1991, *Journal of Geophysical Research*, **98**, 22,759-22,778.

Prasanna Kumar S. et al., (2001a) High biological productivity in the central Arabian Sea during the summer monsoon driven by Ekman pumping and lateral advection, *Current Science*, **81(12)**, 1633-1638

Prasanna Kumar S., et al., (2001b) High biological in the central Arabian Sea during the summer monsoon driven by Ekman pumping and lateral advection, *Current Science*, **81(12)**, 1633-1638

Prasanna Kumar S. and Prasad T.G., (1996) Winer cooling in the northern Arabian Sea, *Current Science*, **71**, 834-841.

Probyn T.A., and Painting S.J., (1985) Nitrogen uptake by size-fractionated phytoplankton population in Antarctic surface waters, *Limnology and Oceanography*, **30(6)**, 1327-1332.

Raimbault P. et al., (1999) Carbon and nitrogen uptake and export in the equatorial Pacific at 150W: evidence of an efficient regenerated production cycle, *Journal of Geophysical Research*, **104(C2)**, 3341-3356.

Ramaswamy V., Sarin M. M. and Rengarajan R., (2005) Enhanced export of carbon by salps during the northeast monsoon period in the northern Arabian Sea, *Deep Sea Research II*, **52**, 1922-1929.

Rao, R. R , Molinari, R. L. and Festa, J., (1989) Evolution of the near surface thermal Structure of the tropical Indian Ocean. Part I: Description of mean monthly mixed layer depth and surface temperature, surface current and surface meteorological field. *J. Geophys. Res.*, **94**, 10801-10815.

Reay et al., (2001) Regulation by low temperature of phytoplankton growth and nutrient uptake in the southern Ocean, *Marine Ecology Progress Series*, **219**, 51-64.

Redfield A.C. (1934) On the proportions of organic derivatives in seawater and their relation to the composition of plankton, *James Johnstone Memorial Volume*, Liverpool, 176p.

Rees A. P. et. al., (2002) Size-fractionated nitrogen uptake and carbon fixation during a developing coccolithophore bloom in the North Sea during June 1999, *Deep-Sea Research II*, **49**, 2905-1927.

Rees A.P., Woodward E.M.S., and Joint I. (2006). Concentrations and uptake of nitrate and ammonium in the Atlantic Ocean between 60°N and 50°S. *Deep Sea Research II*, **53(14-16)**, 1649-1665.

Roman M.R., Dam H.G., Gauzens, A.L. and Napp J.M. (1993) Zooplankton biomass and grazing at the JGOFS Sargasso Sea time series station, *Deep Sea Research*, **40**, 883-901.

Sabine C. L. et al., (2000) Seasonal CO₂ fluxes in the tropical and sub-tropical Indian Ocean, *Marine Chemistry*, **72**, 33-53.

Sahayak S. et al., (2005) Red tide of *Noctiluca milliaris* off south of Thiruvananthapuram subsequent to the 'stench event' at the southern Kerala coast, *Current Science*, **89(9)**, 1472-1473.

Sambrotto R.N., Martin J.H., Broenkow W.W., Carlson C.A. and Fitzwater S.E. (1993) Nitrate utilization in surface waters of the Iceland Basin during spring and Summer of 1989, *Deep Sea Research II*, **40**, 441-457.

Sambrotto R. N., and Mace B. J. (2000) Coupling of biological and physical regimes across the Antarctic Polar Front as reflected by nitrogen production and recycling, *Deep Sea Research II*, **47**, 3339-3367.

Sambrotto R. N., (2001) Nitrogen production in the Arabian Sea during spring intermonsoon and southwest monsoon seasons, *Deep Sea Research II*, **48**, 1173-1198.

Sanjeev Kumar and Ramesh R., (2005) Productivity measurements in the Bay of Bengal using the ¹⁵N tracer: Implications to the global carbon cycle, *Indian Journal of Marine Sciences*, **34(2)**, 153-162.

Sanjeev Kumar et al., (2004) High new production in the Bay of Bengal: Possible causes and implications, *Geophysical Research Letters*, **31**, L18304, doi:10.1029/2004GL021005.

Sanjeev Kumar et al., (2008) Effect of winter cooling on nitrogen uptake in the northeastern Arabian Sea, *AGU Monograph*, (under review).

Sarangi R. K., Prakash Chauhan and Nayak S.R., (2005) Inter-annual variability of phytoplankton blooms in the northern Arabian Sea during winter monsoon

period (February-March) using IRS-P4 OCM data, *Indian Journal of Marine Sciences*, **34**, 163-173.

Sarkar A., Ramesh, R., Bhattacharya, S.K., and Rajagopalan, G.S., (1990) Oxygen isotope evidence for a stronger winter monsoon current during the last glaciation, *Nature*, **343**, 548-551.

Sarin M. M., Rengarajan R., and Ramaswamy V., (1996) ^{234}Th scavenging and particle export fluxes from the upper 100 m of the Arabian Sea, *Current Science*, **71**, 888-893.

Sarmiento J. L. et al., (2003) High-latitude controls the thermocline nutrients and low latitude biological productivity, *Nature*, **247**, doi:10.1038/nature02127.

Sarmiento J.L., and Gruber N., (2002) Sinks for Anthropogenic Carbon, *Physics Today*, **8**, 30-36.

Sathyendranath S., (2000) Remote sensing of Ocean Colour in coastal, and other optically complex waters, Reports of the International Ocean-Colour Coordinating group, Report No. 3.

Savoye N et al., (2004) Regional variations of spring N-uptake and new production in the Southern Ocean, *Geophysical Research Letters*, **31**, L03301, doi:10.1029/2003GL018946.

Schott F.A. et al., (2002) The shallow overturning circulation of the Indian Ocean, *Progress in Oceanography*, **53**, 57-103.

Schott F.A. and McCreary P. Jr. (2001) The monsoon circulation of the Indian Ocean, *Progress in Oceanography*, **51**, 1-123.

Schott F. A., & Fischer J., (2000), Winter monsoon circulation of the northern Arabian Sea and Somali Current. *Journal of Geophysical Research*, **105**, 6359–6376.

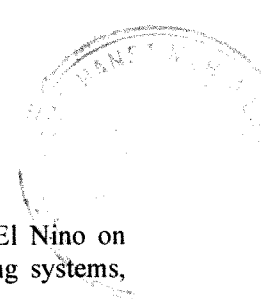
Semeneh M. et al., (1998) Nitrogen uptake regime and phytoplankton community structure in the Atlantic and Indian sectors of the Southern Oceans, *Journal of Marine Systems*, **17**, 159-177.

Shankar D, Vinayachandran P.N., and Unnikrishnan A.S., (2002) The monsoon currents in the north Indian Ocean, *Progress in Oceanography*, **52**, 63-120.

Slawyk G., (1979) ^{13}C and ^{15}N uptake by phytoplankton in the Antarctic upwelling area: Results from the Antipod I cruise in the Indian Ocean sector, *Aust. J. Mar. Freshwater Res.*, **30**, 431-448.

- Smith W.O. and Nelson D.M. (1990) Phytoplankton growth and new production in the Weddell Sea marginal ice zone in the austral spring and autumn, *Limnol. Oceanogr.*, **35**, 809-821.
- Smith W.O. et al., (1997) New production in the northeast water Polynya, *Journal of Marine Systems*, **10**, 199-209.
- Smith S.L., (2001) Understanding the Arabian Sea: Reflections on the 1994-1996 Arabian Sea expedition, *Deep Sea Research II*, **48**, 1385-1402.
- Sparrow M.D., and Heywood, K. J., (1996) Current Structure of the south Indian Ocean, *Journal of Geophysical Research*, **101(C3)**, 6377-6391.
- Stramma, L., (1992) The South Indian Ocean Current, *Journal of Physical Oceanography*, **22**, 421-430.
- Srivastava R., Ramesh R., Satya Prakash, N. Anil Kumar, M. Sudhakar (2007) Oxygen isotope and salinity variations in the Indian sector of the Southern Ocean, *Geophys. Res. Lett.*, **34**, L24603, doi:10.1029/2007GL031790
- Sullivan C.W., Arrigo K.R., McClain C.R., Comiso J.C. and Firestone J. (1993) Distribution of phytoplankton blooms in the Southern Ocean, *Science*, **262**, 1832-1837.
- Sweeney B.M. (1971) Laboratory studies of a green *Noctiluca* from New Guinea, *Journal of Phycology*, **7**, 53-58
- Takahashi et al., (2002) Global sea-air CO₂ flux based on climatological surface ocean pCO₂, and seasonal biological and temperature effects, *Deep Sea Research II*, **49**, 1601-1622.
- Toggweiler J.R., (1999) An ultimate limiting nutrient, *Nature*, **400**, 511-512.
- Townsend D.W., Keller M.D., Sieracki M.E. and Ackleson S.G. (1992) Spring phytoplankton blooms in the absence of vertical water column stratification, *Nature*, **360**, 59-62.
- Treguer, P., and Jacques, G., (1992) Dynamics of nutrients and phytoplankton, and fluxes of carbon, nitrogen and silicon in the Antarctic Ocean, *Polar Biology*, **12**, 149-162.
- Tyrell T. (1999) The relative influence of nitrogen and phosphorus on oceanic primary production, *Nature*, **400**, 525-531
- Tyrell T and Law C.S., (1997) Low Nitrate: Phosphate ratio in the global Ocean, *Nature*, **387**, 793-796.

- Van Cappellen P. and Ingall E., (1994) Benthic phosphorus regeneration, net primary production, and ocean anoxia: A model of the coupled marine biogeochemical cycles of carbon and phosphorus, *Paleoceanography*, **9(5)**: doi: 10.1029/94PA01455
- Van Leeuwe M. A., et al., (1997) Iron enrichment experiment in the Southern Ocean: physiological responses of plankton communities, *Deep Sea Research II*, **44**, 189-207.
- Varela D. E. and Harrison P. J. (1999) Seasonal variability in nitrogenous nutrition of phytoplankton assemblages in the northeastern subarctic Pacific Ocean, *Deep Sea Research II*, **46**, 2505-2538.
- Villareal T.A., Altabet M.A. and Culver-Rymsza K. (1993) Nitrogen transport by vertically migrating diatom mats in the North Pacific Ocean, *Nature*, **363**, 709-712.
- Vinayachandran et al., (2004) Biological response of the sea around Sri Lanka to summer monsoon, *Geophysical Research Letters*, **31**: doi:10.1029/2003GL018533
- Vyas N.K., et al., (2007) Utility of OCEANSAT-1 OCM data in deciphering Antarctic features, *Current Science*, **93(3)**, 292-294.
- Watts L.J. and Owens N.J.P. (1999) Nitrogen assimilation and f-ratio in the northwestern Indian Ocean during an Intermonsoon period, *Deep Sea Research II*, **46**, 725-743.
- Wiebe P.H., Boyd S. and Cox J.L. (1975) Relationship between zooplankton displacement volume, wet weight, dry weight, and carbon, *Fishery Bulletin*, **73(4)**, 777-786.
- Wheeler P. A. and Kokkinakis S. A. (1990) Ammonium recycling limits nitrate use in the oceanic subarctic Pacific, *Limnology and Oceanography*, **35**, 1267-1278.
- Wiggert J. D. et al., (2000) The Northeast Monsoon's impact on mixing, plankton biomass and nutrient cycling in the Arabian Sea, *Deep-Sea Research II*, **47**, 1353-1385
- Wiggert et al., (2002) Processes controlling interannual variations in wintertime (Northeast Monsoon) primary productivity in the central Arabian Sea, *Deep-Sea Research II*, **49**, 2319-2343



Wilkerson F.P., Dugdale R.C. and Barber R.T., (1987) Effects of El Nino on new, regenerated and total production in eastern boundary upwelling systems, *Journal of Geophysical Research*, **92**, 14347-14353.

Wyrski K., (1973) An equatorial jet in the Indian Ocean, *Science*, **181**, 262-264.

Wyrski K., (1988) Oceanographic Atlas of the International Indian Ocean Expedition, Amerind Publishing Co. Pvt. Ltd., New Delhi, India.