CURRICULUM VITAE: Prof. Rengaswamy Ramesh

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Place and Date of Birth:	**Alwarthirunagari (Tirunelveli, Tamil Nadu), June 02, 1956.**
Education and Professional Experience:	**Ph.D.,** (Phys. at PRL) Gujarat University (1984): **Visiting Member,** Physical Research Laboratory, Ahmedabad (1978-84); **Post Doctoral Fellow** Physical Research Laboratory, Ahmedabad (1985-86); **Research Associate**, Physical Research Laboratory, Ahmedabad (1987) **Scientist-D,** Physical Research Laboratory, Ahmedabad (1987-94); **Visiting Research Associate,** Scripps institution of Oceanography, San Diego, USA (1992, 1994); **Reader**, Physical Research Laboratory, Ahmedabad (1994-99) **Associate Professor,** Physical Research Laboratory, Ahmedabad (1999-2001); **Professor,** Physical Research Laboratory, Ahmedabad (2002-2007); **Senior Professor**(2008-13); **Outstanding Scientist** (since July, 2013) at, PRL, Ahmedabad
Present Position:	**Prof. Satish Dhawan Professor,** at PRL Ahmedabad **Distinguished Guest Professor**, IIT Powai, Mumbai (2013-15) **Visiting Professor**- University of Hyderabad (2012-2016) **Member**, Science faculty, University of Delhi **Member**, Science faculty, Sardar Patel University, Anand
Awards and Recognitions:	**Merit certificate from the Ministry of Education** (1972) for excellence in SSLC **All India Bengali Literary Conference Medal** (1973) for excellence in Hindi **Kabir Medal** (1975) for excellence in Hindi **Jawaharlal Nehru Memorial Find Award** (1976) for B.Sc. Physics II Rank, University of Madras **K S Krishnan Gold Medal** (1978) for M.Sc. Physics I Rank **P E Subramanya Iyer Medal (**1978) for M.Sc. Physics I Rank **Jagirdar of Arni medal** (1978) for M.Sc. Physics I Rank, University of Madras **Young Scientist Medal:** Indian National Science Academy (1987) for Ph.D. work; **Shanti Swarup Bhatnagar Prize** in Earth Sciences (1998). **TWAS Prize for Earth Science** (2006) **IPCC Nobel Peace Prize-2007: special citation from IPCC**

and also from the Hon'ble Prime Minister of India (2007)

K. R. Ramanathan Gold Medal (2011)

Performance Excellence Award of ISRO (2016)

Fellow: Indian Natl. Science Academy, (New Delhi); **Fellow:** Indian Academy of Sciences, (Bangalore); **Fellow:** The National Academy of Sciences (Allahabad); **Fellow**: Third World Academy (Trieste); **Fellow** (Geological Society of India)

Services to Scientific Bodies Reviews and Planning Meetings (Present) :

Project Director: Indian Space Research Organization Geosphere Biosphere Programme.(Paleoclimate)
Convener, CSIR NET Examination (2010 onwards)
Member- INSA Council
Member- IAS (Bengaluru) council
Member- Res. Adv. Council NGRI, Hyderabad
Member: Current Science Editorial Board
Member: Editorial Board, Resonance
Member: Board of Studies, Sardar Patel University, Anand

Membar: Editorial board-Journal of climate Change

Services to Scientific Bodies Reviews and Planning Meetings (past)

Lead Author: Intergovernmental Panel on Climate Change, Assessment Reports 4 and 5, World Meteorological Organization, & United Nations Organization (2004-2007;2011-2014)
M**ember:** SCOR/IMAGES working groups, sponsored by Scientific Committee for Ocean Research: WG 113: Evolution of the Indian monsoon in Marine records: comparison between Indian and East Asian subsystems WG 177: Synthesis of Decadal to millennial climate records of the last 80ky. (1999-2002); **Member**: Intl. Review Comm. Ehime University, Japan (2002). Member: International Advisory Board for Handbook of Geochemistry (2010) **Member**- Res. Adv. Council IITM, Pune (2002-2004) **Member:** Governing Council, BSIP, Lucknow (2011-2013) **Chairman:** INSA SCOR National Committee (2009- 2011); **Member:** Program Advisory Committee on Atmospheric Sciences, DST (2001 -2003); **Member:** Earth, Marine, Atmosphere and Environmental Sciences and Environmental Technology Research Committee, CSIR (2004-2007); **Member:** Project Advisory Committee DOD cell on Ocean science and Technology, Mangalore University (2006-2008), **Member:** Editorial Board, Current science (1999-2001). **Chairman**: Scientific Committee for purchase of Weather aircraft, IMD (2012).

Services to PRL:

Chairman: Scientific Advisory Committee (2015-)
Chairman: Planetary and Geosciences Division (2003-2005);
Chairman: PDF committee (2010-2013)
Member Academic Committee (2000-2003; 2009-2011)
Member Computational Services Committee (2004-2007)

Research Interest:

Global Change, Stable Isotope Mass Spectrometry, Mathematical modeling, Oceanography and Paleoclimatology Most of these programmes rely on

the use of environmental stable isotopes.

Publications: ~200, List attached.

Selected Invited Talks (i) University College, Cardiff, UK in July , 1986.(ii) Max Planck Institute, Mainz, Germany, in Oct. 1989.(iii) Scripps Institution of Oceanography, San Diego, USA in May, 1992 (iv) Western Michigan University, Kalamazoo, USA, in May, 1992 (v) Western Michigan University, Kalamazoo, USA, in Jan. 1994. (vi) IGBP- PAGES PEP II Workshop, Beijing, China in April, 1994.(vii) Asian- Pacific Dendrochronology conference, Tokyo, Japan, in March, 1995.(viii) Indo-Brazilian joint workshop on Climate, Pune, India, December, 1996.(ix) Indian Academy of Science Discussion meeting on monsoons, Coorg, India, November,1997.(x) International Conference on isotopes in the Solar System, Ahmedabad, India, November, 1997.(xi) Scientific Committee on Ocean Research, Shanghai, China, May, 1998.(xii) Scientific Committee on Ocean Research, Amsterdam, April, 1999. (xiii) International Atomic Energy Agency, Vienna, Austria, June, 1999 (xiv) INSA (India) –SCOR (USA) meeting, Goa, Oct. 1999 (xv) PAGES workshop, Pune, Feb. 2000 (xvi) High resolution Holocene Climate Conference, Avignon, France, Oct.2000. (xvii) 66th Annual Meeting of the Indian Academy of Sciences: micro-symposium on "Climate, monsoon and India's water", Goa, India, Nov. 2000 (xviii) Mid- year meeting of the Indian Academy of Sciences, Jul. 2001(xix) Dept. of Agricultural Sciences, Ehime University, Matsuyama, Japan, Dec. 2002. (xx) Western Michigan University, USA, July, 2003.(xxi) AOGS conference, July 2010 (xxii) ICTP Workshop on Paleoclimate and human dispersal during marine Isotope Stage 3e, Dec. 2011 (xxiii) Space Climate Symposium Jan 2011 (xxiv) Sir Albert Charles Seward Memorial lecture, BSIP, Lucknow, Nov. 2012 (xxv) International Scoping Workshop of the Belmont Forum, Goa, Oct. 2013 (xxvi) INTROPMET, SRM University, Feb 2014 (xxvii) "Climate Change: Possible new areas of research" at the National Geophysical Research Institute, Hyderabad, 9 May, 2014 (xxviii) "Observed changes in Indian monsoon from paleoclimate and proxy records", at the 6th Annual Workshop on Climate Change, INCOIS, Hyderabad,1-2 Sep., 2014 (xxix) "Climate Change: Indian records"INSA lecture at IIT Powai, Mumbai on 22 Aug 2014 (xxx) Key note address for the 7th International Conference on geoscience Education, University of Hyderabad, on 5th Sep., 2014 (xxxi) "Environmental controls on new and primary production in the northern Indian Ocean", Ocean Science Society Conference, National Institute of Oceanography, 23 March 2015 (xxxii) "Ecology in Space and Time", Indian Institute of Science, April, 2015. Keynote address at Pondicherry University, Oct 2016

Complete list of publications of Dr. R Ramesh

Journals

1. **R.Ramesh,** S.K. Bhattacharya & K. Gopalan, (1985) Dendroclimatological implications of isotope coherence in trees from Kashmir Valley, India. *Nature* **317,** 802-804.

2. M M Sarin ,K S Rao, S.K. Bhattacharya, **R. Ramesh** & B.L.K. Somayajulu (1985) Geochemical studies of river estuarine systems of Krishna and Godavari. *Mahasagar* **18**(2)129-143.

3. **R. Ramesh,** S.K. Bhattacharya & K. Gopalan (1986) Climatic correlations of the stable isotope records of silver fir (*Abies pindrow*) trees from Kashmir, India. *Earth. Planet. Sci. Lett.* **79**, 66-74

4. **R. Ramesh,** S.K. Bhattacharya & K. Gopalan (1986) Stable isotope systematics in tree cellulose as paleoenvironmental indicators- a review. *J. Geol. Soc. Ind.* **27**,154 –167.

5. V.N. Nijampurkar, N. Bhandari, S. K. Bhattacharya & **R. Ramesh** (1986) Climatic significance of D/H ratios in a temperate glacier in Sikkim. *Curr. Sci.* **55**(18)910-912.

6. **R. Ramesh,** S.K. Bhattacharya & K. Gopalan (1988) Climatic significance of variations in width and stable isotope ratios of tree rings. *British Archeological Records* **196** 591-609.

7. **R. Ramesh**, S.K. Bhattacharya & G.B. Pant (1989) Climatic significance of δD variations in a tropical tree species from India. *Nature* **337,** 149-150.

8. Sarkar, **R. Ramesh,** S. K. Bhattacharya & G Rajagopalan (1990) $\delta\,^{18}$O evidence for increased north east monsoon current during the last glaciations. *Nature* **343,** 549-551.

9. Sarkar, **R. Ramesh &** S. K. Bhattacharya (1990) Effect of sample pretreatment and size fraction on the δ^{18}O and δ^{13}C values of foraminifera in Arabian Sea sediments. *Terra Nova* **2,** 489-493.

10. **R. Ramesh** & R. A. Jani (1991) Stable isotopic evidence for the origin of ground water in Lakshadweep Islands. *Curr. Sci.* **61,** 537-539.

11. R. Sukumar & **R. Ramesh** (1992) Stable carbon isotope ratios in Asian elephant collagen: implications for dietary studies. *Oecologia* **91,** 536-539.

12. **R. Ramesh** & M.M. Sarin (1992) Stable isotope study of Ganga- Brahmaputra river system. *J. Hydrology*, **139,** 49-62(31).

13. S. Krishnaswami, J. R. Trivedi ,M. Sarin, **R. Ramesh** & K.K. Sharma (1992) Strontium isotopes in the Ganga- Brahmaputra river system : Role in

temporal variations in the $^{87}Sr/^{86}Sr$ of the oceans during the past ^{40}Ma. *Earth. Planet. Sci.Lett.* **109**, 243-253.

14. P. K. Saraswati & **R. Ramesh** (1992) Eocene-Oligocene stable isotope stratigraphy of Kutch. *J. Geol. Soc. Ind.* **39**, 427-432.

15. T.R. Venkatesan & **R. Ramesh** (1993) Consideration of analytical uncertainties when plotting histograms. *J. Geol. Soc. Ind.* **41,** 313-317.

16. R. Sukumar, **R. Ramesh,** R.K. Pant & G. Rajagopalan (1993) A $\delta^{13}C$ record of the late Quaternary climate change from tropical peat in southern India *Nature* **364**, 703-706.

17. **R. Ramesh,** R. A. Jani & R. Bhushan (1993) Stable isotopic evidence for the origin of water in the salt lakes of Rajasthan and Gujarat. *J. Arid. Environments* **25,** 117-123.

18. S. Chakraborty & **R. Ramesh** (1993) Monsoon induced sea surface temperature changes recorded in Indian corals. *Terra Nova* **5**, 545-551.

19. P.K. Saraswati & **R. Ramesh** (1993) Paleogene isotopic temperatures in western India, *Lethaia*, **26**, 89-98.

20. M.M. Sarin, S. Krishnaswami, **R. Ramesh** & B.L.K. Somayajulu (1994) ^{238}U decay series nuclides in the north-eastern Arabian Sea : scavenging rates and cycling processes. *Continental Shelf Res.* **14, 2/3**, 251-265.

21. **R. Ramesh** & D. Lal (1994) A critical analysis of the processes governing the nutrient profiles in the Ocean. *Proc. Ind. Acad. Sci. (Earth. Planet. Sci.)* **103(1)** 1-15.

22. S.Chakraborty, **R.Ramesh** & S.Krishnaswami (1994) Air sea exchange of CO_2 in the Gulf of Kutch, northern Arabian Sea based on bomb carbon in corals and tree rings. *Proc. Ind. Acad. Sci. (Earth & Planet. Sci.)* **103** ,329-340**.**

23. S. Bartarya, S.K. Bhattacharya, **R. Ramesh** & B. L. K. Somayajulu (1995) $\delta^{18}O$ and δD systematics in the surficial waters of the Gaula river catchment area, Kumaun Himalaya. *J. Hydrol.* **167,** 369-379.

24. R. Sukumar, H. S. Suresh & **R. Ramesh** (1995) Climate change and its impact on tropical montane ecosystems in southern India. *J. Biogeography* **22***,* 533-537.

25. S. Kusumgar, D.P. Agrawal, R.D. Deshpande, **R. Ramesh,** C. Sharma & M.G. Yadava (1995) A comparative study of monsoonal and non-monsoonal Himalayan Lakes. *Radiocarbon* **37:2,** 191- 195.

26. B.L.K. Somayajulu, M.M. Sarin & **R. Ramesh** (1996) Denitrification in the eastern Arabian Sea: evaluation of the role of continental margins using Ra

isotopes. *Deep Sea Res.* **43:1,** 111- 117.

27. A. K. Singhvi, D. Banerjee, **R. Ramesh** , S.N. Rajaguru & V. Gogte (1996) A luminescence method for dating dirty pedogenic carbonates for paleoenvironmental reconstruction. *Earth Planet. Sci. Lett.* **139,** 321-332.

28. S.Chakraborty & **R. Ramesh** (1997) Environmental significance of carbon and oxygen isotope ratios of banded corals from Lakshadweep, India. *Quaternary International* **37:1,** 55-65.

29. Geeta Rajagopalan, R. Sukumar, **R. Ramesh,** R.K. Pant & G. Rajagopalan (1997) Late Quaternary vegetational and climatic changes from tropical peat in southern India- An extended record up to 40000 years BP. *Curr. Sci.* **73(1)** 60-63.

30. B.S. Kotlia, M.S. Bhalla, C. Sharma, G Rajagopalan, **R. Ramesh,** M.S. Chauhan, P.D. Mathur, S. Bhandari & S.T. Chako (1997) Paleoclimatic conditions in the upper Pleistocene and Holocene Bhimtal- Naukuchiatal lake basin in south- central Kumaun, North India. *Paleogeo. Paleoecol. Paleoclim.* **130**, 307-322.

31. **R. Ramesh** & R.V. Krishnamurthy (1998) $\delta^{13}C$ of marine organic matter and ocean pH. *Geochem. Journal*, **32,1,** 65-69.

32. S.K. Singh, J.R. Trivedi, K. Pande, **R. Ramesh** & S.Krishnaswami (1998) Chemical and Sr, O, C isotopic compositions of carbonates from the Lesser - Himalaya: Implications to the Sr isotopic composition of the source waters of the Ganga, Ghaghara and the Indus rivers. *Geochim. Cosmochim Acta,* **62,5,** 743-755 (51).

33. J. S. Ray & **R. Ramesh** (1998) Stable carbon and oxygen isotope analysis of natural calcite and dolomite mixtures using selective acid extraction. *J. Geol. Soc. Ind* **52.,** 323-332.

34. S. Chakraborty & **R. Ramesh** (1998) Stable isotope variations in a coral (*Favia speciosa*) from the Gulf of Kutch during 1948-1989 A.D.: environmental implications. *Proc. Ind. Acad. Sci. (Earth. Planet. Sci.)* **107, 4,** 331-341.

35. R.P. Dhir, S.K. Tandon, S.N. Rajaguru, **R. Ramesh** (1998) Calcretes: Their genesis and significance in paleoenvironment reconstruction in arid Rajasthan. *Paleoecology of Africa* **25**, 223-230.

36. Y. Enzel, L.L. Ely, S. Mishra, **R. Ramesh**, R. Amit, S.N. Rajaguru, V. R. Baker, B.Lazar, & A. Sandler, (1999) High resolution Holocene environmental changes in the Thar Desert, NW India. *Science*, **284**, 125-128.

37. J. S. Ray, **R. Ramesh** & K. Pande (1999) Carbon isotopes in Kerguelen Plume derived carbonatites: evidence for recycled inorganic carbon in carbonatites. *Earth and Planetary Science Letters*, **170**, 205-214.

38. M. G. Yadava & **R. Ramesh** (1999) Speleothems – useful proxies for past monsoon rainfall. *J. Sci. Ind. Res.*, **58**, 339-348.

39. D. Jagadheesha, R. Nanjundaiah & **R. Ramesh** (1999) Orbital forcing of Monsoonal climates in NCAR CCM2 with two horizontal resolutions. *Palaeoclimates, Data and Modelling*, **3(4)**, 279-301.

40. D. Jagadheesha, R. Nanjundaiah & **R. Ramesh** (1999) Sensitivity of an AGCM to orbital parameters and glacial boundary conditions. *Vayu Mandal*, special issue on Asian Monsoon and pollution over the monsoon Environment (Ed.s S.K. Dube et al), **29(1-4)**, 359-369.

41. J. S. Ray & **R. Ramesh** (1999) A water-rock interaction model for the carbon and oxygen isotope variations in altered carbonatites. *J. Geol. Soc. Ind.*, **54**, 179-186.

42. J. S. Ray & **R. Ramesh** (1999) Evolution of carbonatite complexes of Deccan Flood Basalt province: stable carbon and oxygen isotopic constraints. *J. Geophys. Res.***B12, 104,** 29471-29483.

43. Geeta Rajagopalan, **R. Ramesh** & R. Sukumar (1999) Climatic implications of $\delta^{13}C$ and $\delta^{18}O$ ratios from C_3 and C_4 plants growing in a tropical montane habitat in southern India. *J. Biosci.*, **24**(4),491-498.

44. J. S. Ray, **R. Ramesh**, K. Pande, J. R. Trivedi, P.N. Shukla & P.P. Patel (2000) Isotope and rare-earth analyses of samples from carbonatite-alkaline complexes of Deccan Province: implications to magmatic and alteration processes. *J. Asian Earth Sci.*, **18/2**, 177-194.

45. J. S. Ray & **R. Ramesh** (2000) Rayleigh fractionation of stable isotopes from a multicomponent source. *Geochem. Cosmochim. Acta*, **64**, 2, 299-306.

46. K. Pande, J. T. Padia, **R. Ramesh** & K. K. Sharma (2000) Stable isotope systematics of surface water bodies in the Himalayan and Trans-Himalayan (Kashmir) region. *Proc. Ind. Acad. Sci. (Earth. Planet. Sci.)*, **109, 1,** 109-115.

47. M. G. L. Baillie, J. R. Pilcher, M. Pollard & **R. Ramesh** (2000) Climatic significance of D/H and $^{13}C/^{12}C$ ratios in Irish oak cellulose. *Proc. Ind. Acad. Sci. (Earth.Plane. Sci.)* **109, 1,** 117-127.

48. S. Chakraborty, **R. Ramesh** & J.M. Lough (2000) Effect of intra-band variability on stable isotope and density time series obtained from banded corals. *Proc. Ind. Acad. Sci. (Earth Planet. Sci.)* **109, 1,** 145-151.

49. Sarkar, **R. Ramesh**, S. K. Bhattacharya & N.B. Price (2000) Paleomonsoon and paleoproductivity records in $\delta^{18}O$, $\delta^{13}C$ and $CaCO_3$ variations in the northern Indian Ocean sediments. *Proc. Ind. Acad. Sci. (Earth Planet. Sci.)* **109, 1,** 157-169.

50. Asish Sarkar, **R. Ramesh**, B.L.K. Somayajulu, R. Agnihotri , A.J.T. Jull & G.S.

Burr (2000) High resolution Holocene monsoon record from the eastern Arabian Sea. *Earth Planet. Sci. Lett.*, **177(3-4)**, 209-218.

51. A.S. Khadkikar, L. S. Chamyal & **R. Ramesh** (2000) The character and genesis of calcretes in Late Quaternary sub-humid to semi-arid alluvial deposits, Mainland Gujarat, Western India. *Paleogeo. Paleoclim. Paleoecol* (**162**), 239-261.

52. M. Sarnthein, and other Trins workshop participants (including **R. Ramesh**) (2000) Exploring late Pleistocene climate variations. *EOS, Transactions of the American Geophysical Union*, **81**, **51**, 625, 629-630.

53. D. Jagadheesha & **R. Ramesh** (2001) Past monsoons: A review of proxy data and modeling, *Mausam*, special issue on Global and Regional Climate Change (ed. G. B. Pant) **52**, 275-284.

54. M. G. Yadava & **R. Ramesh** (2001) Past rainfall and trace element variations in a tropical speleothem from India, *Mausam*, special issue on Global and Regional Climate Change (ed. G. B. Pant) **52**, 307-316.

55. **R. Ramesh** (2001) High resolution Holocene monsoon records from different proxies, an assessment of their consistency. *Curr. Sci.* **81**, 11, 1432-1436.

56. M. Sarnthein, J.P. Kennett, J.R.M. Allen, J. Beer, P. Grootes, C. Laj, J. McManus, **R. Ramesh,** SCOR-IMAGES Working Group 117 (2002) Decadal-to-millennial-scale climate variability-chronology and mechanisms: summary and recommendations. *Quaternary Science Reviews*, **21**, 10, 1121-1128.

57. R. Korisettar and **R. Ramesh**, (2002) The Indian Monsoon: Roots, relations and relevance, in: Archaeology and Interactive Disciplines, Indian Archaeology in retrospect. Vol. III, ed. s S. Settar and R. Korisettar, Indian Council of Historical Research, Manohar Publications, pp.23-59.

58. M. G. Yadava, **R. Ramesh** and G B Pant (2004) Past monsoon rainfall variations in peninsular India, recorded in a 331 year old speleothem. *The Holocene*, **14**, 4, 517-524.

59. Sanjeev Kumar, **R. Ramesh**, S. Sardesai and M S Sheshshayee (2004) High new production in the Bay of Bengal: possible causes and implications. *Geophys. Res Lett.*, 31, L18304 doi:10.1029/2004GL021005.

60. R. P. Dhir, S. K. Tandon, B. K. Sareen, **R. Ramesh**, T K G Rao, A Kailath and N Sharma (2004) Calcretes in the Thar Desert: Genesis, Chronology and Paleoenvironment. *Proc. Ind. Acad. Sci. (Earth & Planet. Sci.)*, **113, 3**, 473-515.

61. Sanjeev Kumar, **R. Ramesh**, N. B. Bhosle, S. Sardesai and M S Seshshayee (2004) Natural isotopic composition of nitrogen in suspended particulate matter in the Bay of Bengal. *Biogeosciences* (EGU journal), **1**, 63-70.

62. M. G. Yadava and **R. Ramesh** (2005) Monsoon reconstruction from

radiocarbon dated tropical Indian speleothems. *The Holocene*, **15**, 1, 48-59.

63. Sanjeev Kumar, **R. Ramesh**, M S Seshshayee, S. Sardesai and P. P. Patel (2005) Signature of terrestrial influence on nitrogen isotopic composition of suspended particulate matter in the Bay of Bengal. *Curr. Sci.***88**(5) 770- 774.

64. Sanjeev Kumar and **R. Ramesh** (2005), Productivity measurements in the Bay of Bengal using the ^{15}N tracer: implications to the global carbon cycle. *Ind. J. Mar.Sci*.,**34(2)**, 153-162.

65. **R. Ramesh** and M. G. Yadava (2005), Climate and water resources of India. *Curr.Sci*. **89**(5) 818-824.

66. N. Sharma, R.A. Jani and **R. Ramesh** (2005) Oxygen isotope studies in an Ice wall near Maitri, Indian Antarctic Station, in: Antarctic Geoscience: Ocean-Atmosphere Interaction, and Paleoclimatology (ed.s S. Rajan and P. C. Pandey) *Special publication of NCAOR, Goa,* 91-99.

67. M. Tiwari, **R. Ramesh**, B. L. K. Somayajulu, A.J.T. Jull and G.S. Burr (2005) Solar Control of the Southwest Monsoon (SWM) on Centennial Time Scales. *Current Science,* **89**(9) 1583-1588.

68. S.G. Viladkar, **R. Ramesh**, R. K. Avasia and P.B. Pawaskar (2005) Extrusive phase of carbonatite alkaline activity in Amba Dongar Complex, Chhota Udaipur, Gujarat. *J. Geol. Soc. Ind*., **66**(3) 273-276.

69. M. Tiwari, **R. Ramesh**, B. L. K. Somayajulu, A.J.T. Jull and G. S. Burr (2005) Early deglacial (~19-17 ka) strengthening of the Northeast monsoon, *Geophys. Res. Lett.* **32**, L19712, doi:10.1029/2005GL024070.

70. M. S. Sheshshayee, H. Bindumadhava, **R. Ramesh**, T.G. Prasad, M.R. Lakshminarayana and M. Udayakumar (2005) Oxygen Isotope Enrichment ($\Delta\,^{18}O$) as a time averaged measure of transpiration rat. *J. Exp. Botany,* doi:10.1093/jxb/eri300, **56**(422):3033-3039

71. S. Kumar, **R.Ramesh**, S. Sardesai and M S Sheshshayee (2005) Effect of incubation time and substrate concentration on N-uptake rates by phytoplankton in the Bay of Bengal. *Biogeosciences Discussions*, **2**,1331-1352.

72. M. Tiwari, **R. Ramesh**, B. L. K. Somayajulu, A.J.T. Jull and G. S. Burr (2005) Monsoon record from an equatorial sediment core: correlation with high latitude climate and implications. *Geomarine Letters* 0276-0460 (Paper) 1432-1157(Online) doi:10.1007/s00367-005-0012-0.

73. J. S. Ray and **R. Ramesh** (2006) Stable carbon and oxygen isotopic compositions of Indian carbonatites. *International. Geology reviews*, **48**,17-45.

74. M. Tiwari, **R. Ramesh**, M. G. Yadava, B. L. K. Somayajulu, A.J.T. Jull, G. S. Burr (2006) Persistent Control of Monsoon Winds by Precipitation During the Late Holocene. *Geochemistry, Geophysics, Geosystems*, **7**(3),1-7.

75. M. G. Yadava and **R. Ramesh** (2006) Stable oxygen and carbon isotope variations in speleothems as monsoon proxies: a comparative study of four different locations in India. *J. Geol. Soc. Ind.* **68**, 461-475.

76. M. Tiwari, **R. Ramesh**, R. Bhushan, B. L. K. Somayajulu, A.J.T. Jull and G. S. Burr (2006) Paleoproductivity variations in the equatorial Arabian Sea: implications for east African and Indian summer monsoon rainfall and the el Nino frequency. *Radiocarbon*, **48**,1 17-29.

77. S.M Ramasamy, J. Saravanavel, M G Yadava & **R. Ramesh** (2007) Radiocarbon dating of some paleochannels in Tamil Nadu and their significance. *Curr. Sci.*, **91**,12, 1609-1630.

78. Satya Prakash and **R. Ramesh** (2007) Is the Arabian Sea getting more productive?. *Curr. Sci.*, **92**,5,667-671.

79. S. Kumar and **R. Ramesh** (2007) ^{15}N enrichment in the surface particulate organic nitrogen of the north-eastern Arabian Sea from the middle to the waning phase of the winter monsoon: possible causes. *Ocean Sciences Discussion*, **4**, 245-264.

80. **R. Ramesh** and M. Tiwari (2007) Comment on "Monsoon related changes in sea surface productivity and water column denitrification in the eastern Arabian Sea during the last glacial cycle by VK Banakar, T. Oba, AR Chodankar, T Kuramoto, M. Yamamoto, M. Minagawa. *Marine Geology*, **238**, 119-120.

81. M.G. Yadava, K.S. Saraswat, I.B. Singh and **R. Ramesh** (2007) Evidences of early human occupation in the limestone caves of Bastar, Chhattisgarh. *Curr. Sci.*, **92**, 6, 820-823.

82. M. G. Yadava and **R. Ramesh** (2007) Significant long term periodicities in the proxy record of the Indian monsoon rainfall. *New Astronomy*, doi:10.1016/j.Newast.2007.04.001,**12**,544-555.

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