

## Publication list of CARER

### a. In Journals

#### Publication through International Collaboration

1. Determination of radon concentration in soil gas by gamma-ray spectrometry of olive oil  
Darwish Al-Azmi. and N. Karunakara  
*Journal of Radiation Measurements*, Vol. 42, 486 – 490, 2007.
2. Natural radioactivity in soil samples of Botswana  
Murthy V. R. K. and N. Karunakara  
*Journal of Radiation Measurements*, 43; 1541–1545; 2008.
3. Indoor and outdoor radon levels and its diurnal variations in Botswana  
Murthy V. R. K., King, J. G., N. Karunakara, Raju V.C.C.  
*Nuclear Instruments and Methods in Physics Research A*, Available online since 25 October, 2009.
4. A Study on Radon Absorption Efficiencies of Edible Oils Produced in India  
N. Karunakara and Darwish Al-Azmi  
*Health Physics*, 98(4), 621-627, 2010.
5. A simple radon chamber for use with soil gas for calibration of radon measuring devices and instruments  
Darwish Al-Azmi. and N. Karunakara  
*International Journal of Low Radiation*, 8 No. 5/6, 429-439, 2011.
6. Application of the Monte Carlo method for the efficiency calibration of CsI and NaI detectors for gamma-ray measurements from terrestrial samples  
S. Baccouche, Darwish Al-Azmi, N. Karunakara and A. Trabelsi  
*Applied Radiation and Isotopes* 70, No. 1, 227-232, 2012.
7. Radon adsorbed in activated charcoal - a simple and safe radiation source for teaching practical radioactivity in schools and colleges  
D. Al-Azmi, A. Mustapha and N. Karunakara  
*PHYSICS EDUCATION*, 47(4), 471-475, 2012.
8. Teaching about natural background radiation.  
D. Al-Azmi, A. Mustapha and N. Karunakara.  
*PHYSICS EDUCATION*, 48 (4), 506-511, 2013.
9. Measurements of fission yield in 8 MeV bremsstrahlung induced fission of  $^{232}\text{Th}$  and  $^{238}\text{U}$   
H. Naik, B. S. Shivashankar, H. G. Raj Prakash, Deves Raj, Ganesh Sanjeev,  
N. Karunakara, H. M. Somashekarappa, S. Ganesan, G. N. Kim, A. Goswami  
*Journal of Radioanalytical and Nuclear Chemistry*, 299:127–137, 2014.
10. Phosphate solubilizing uranium tolerant bacteria associated with monazite sand of a natural background radiation site in South-West coast of India.  
Sowmya Shreedhar & Rekha Panchapady Devasya, Naregundi Karunakara & Chiu-Chung Young and Arun Ananthapadmanabha Bhagwath  
*Annals of Microbiology*, Springer, Available online since Feb. 2014.

11. Problems with the dating of sediment core using excess  $^{210}\text{Pb}$  in a freshwater system.  
Mark Baskaran, Joseph Nix, and Naregundi Karunakara  
*Journal of Environmental Radioactivity*, 138, 341-342, 2014.
12. Assessment of  $\gamma$ -radiation levels and associated dose rates from surface soils in the eastern part of Botswana  
Alfred Sello Likuku, N. Karunakara, Gothatamang Patrick Nthoiwa  
*International Journal of Low Radiation*, Vol. 9, Nos. 5/6, 344-354, 2014
13. Special issue of Journal of Environmental Radioactivity on 2nd International Conference on Po and radioactive Pb isotopes.  
Edited by N. Karunakara, M Baskaran *Journal of Environmental Radioactivity* 138, 341-342, 2014
14. Baseline studies on radionuclide concentration in food materials and estimation of the committed radiation dose around the phosphate industrial area of south Tunisia.  
Sonia Machraoui, M. P. Mohan, N. Karunakara, Salam Labidi *Radiation Protection Dosimetry* 208, 1-11, (2018).
15. Gamma dose rates in the high background radiation area of Mangalore region, India  
Darwish Al-Azmi, K. Sudeep Kumara, M. P. Mohan and N. Karunakara  
*Radiation Protection Dosimetry*, pp. 1–4, (2019).
16. Assessment of radionuclide transfer factors and transfer coefficients near phosphate industrial areas of South Tunisia  
Sonia Machraoui & Mohan Mandya Purushotham, Karunakara Naregundi and Salam Labidi  
*Environmental Science and Pollution Research*, Springer Nature, <https://doi.org/10.1007/s11356-019-05786-8>
17. A Walk-In Type Calibration Chamber Facility For  $^{222}\text{Rn}$  Measuring Devices and Inter-Comparison Exercises  
S. Trilochana, H.M. Somashekarappa, K. Sudeep Kumara, M.P. Mohan, S. Rashmi Nayak, Renita Shiny D'Souza, Srinivas S. Kamath, B.K. Sahoo, J.J. Gaware, B.K. Sapra, M. Janik, Darwish Al-Azmi, Y.S. Mayya And N. Karunakara  
*Radiation Protection Dosimetry* (2019), Pp. 1–16 Doi:10.1093/Rpd/Ncz188

#### **Other Publications in International Journals**

18. Prominent alpha emitting radionuclides in Kaiga environs  
Karunakara N., Somashekarappa H. M., Narayana Y., Balakrishana K. M. and Siddappa K. *Indian Journal of Environmental Protection*, Vol. 14, No. 4, 241-245, 1994.
19. Distribution and enrichment of radionuclides in the newly discovered high background area in Ullal on the south west coast of India  
Narayana Y., Radhakrishna A. P., Somashekarappa H. M., Karunakara N., Balakrishna K. M. and Siddappa K.  
*Health Physics* (USA), Vol. 69, No. 2, 178-186, 1995.

20. Distribution of some natural and artificial radionuclides in the environment of coastal Karnataka of south India  
Narayana Y., Radhakrishna A. P., Somashekarappa H. M., Karunakara N., Balakrishna K. M. and Siddappa K.  
*Journal of Environmental Radioactivity (UK)*, Vol. 28, No. 2, 113-139, 1995.
21. Internal exposure to the population of coastal Karnataka of south India from dietary intake  
Narayana Y., Radhakrishna A. P., Somashekarappa H. M., Karunakara N., Balakrishna K. M. and Siddappa K.  
*Radiation Protection Dosimetry (UK)*, Vol. 62, No. 3, 131-138, 1995.
22. Indoor radon levels in coastal Karnataka on the south west coast of India  
Narayana Y., Somashekarappa H. M., Karunakara N., Balakrishna K. M., Siddappa K., Kumar S., Gopalani D. & Ramaseshu P.  
*Bulletin of Radiation Protection (India)*, Vol. 19, No. 2 & 3, 12-15, 1996.
23. Bioindicators in the tropical forest vegetation of Kaiga environment  
Somashekarappa H. M., Radhakrishna A. P., Narayana Y., Karunakara N., Balakrishna K. M. and Siddappa K.  
*Journal of Environmental Radioactivity (UK)*, Vol. 31, No. 2, 189-198, 1996.
24. Seasonal variation of indoor radon levels in coastal Karnataka on the south west coast of India  
Narayana Y., Radhakrishna A. P., Somashekarappa H. M., Karunakara N., Balakrishna K. M. and Siddappa K.  
*Radiation Measurements, USA*, Vol. 29, No. 1, 19-25, 1998.
25. Cesium-137 concentration in Kaiga environment  
Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M., Balakrishna K. M. and Siddappa K.  
*Radiation Physics and Chemistry, UK*, Vol. 51, No. 4-6, 623-624, 1998.
26. Radioactivity and radiation levels in the environs of Kaiga  
Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Environmental Geochemistry, India*, Vol. 1, No. 1, 1- 4, 1998.
27.  $^{238}\text{U}$ ,  $^{210}\text{Pb}$  and  $^{210}\text{Po}$  concentrations in water samples of Coastal Karnataka and Kaiga environs  
Mahesh H. M., Avadhani D. N., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Environmental Geochemistry, India*, Vol. 1, No. 2, 59-62, 1998
28. Polonium-210 concentration in food and diet samples of the Goa environs, India  
Avadhani D. N., Mahesh H. M., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Environmental Geochemistry, India*, Vol. 2, No. 1, 1-4, 1999.

29. Prominent artificial radionuclides in the environment of coastal Karnataka of south west coast of India  
Narayana Y., Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M. and Siddappa K.  
*Journal of Radiological Protection*, UK Vol. 20, 295-300, 2000.
30. Distribution and enrichment of  $^{210}\text{Po}$  in the environment of Kaiga in south India  
Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Journal of Environmental Radioactivity*, UK, 51, 349-362, 2000.
31. Distribution and behavior of  $^{210}\text{Po}$  and  $^{210}\text{Pb}$  in soil samples of Goa, south west coast of India  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Journal of Radiation Protection and Environment*. India. Vol. 24, Nos. 1&2, 401-405, 2001.
32.  $^{210}\text{Pb}$  concentration in air and water samples in the environment of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Journal of Radiation Protection and Environment*, India. Vol. 24, Nos. 1&2, 406-409, 2001.
33. Natural radioactivity in the environment of Goa of south-west coast of India  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Journal of Radiation Protection and Environment*, India. Vol. 24, Nos. 1&2 (Suppl.), S136-S142, 2001.
34. Natural radioactivity in beach sands of Goa of South-West coast of India.  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Journal of Radiation Protection and Environment*. Vol 24. No.4, 2001.
35.  $^{210}\text{Po}/^{210}\text{Pb}$  Ratio in Air and Rain water samples in the Environment of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Journal of Radiation Protection and Environment*, India. Vol. 24, Nos. 1&2 (Suppl.) S71-S75, 2001.
36. Distribution of Natural radionuclides in soil samples of coastal Karnataka of south west coast of India  
Narayana Y., Karunakara N., Somashekarappa H. M., Avadhani D. N., Mahesh H. M. and Siddappa K.  
*Health Physics*, USA, Vol. 80, No.1, 24-33, 2001.
37.  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  and  $^{40}\text{K}$  concentrations in soil samples of Kaiga of south west coast of India

- Karunakara N, Somashekarappa H M, Narayana Y, Avadhani D N, Mahesh H M and Siddappa K  
*Health Physics*, USA, No.5, 470-476, 2001.
38.  $^{137}\text{Cs}$  Concentration in Environment of Kaiga in the south west coast of India  
Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Health Physics*, USA, Vol. 81, No 2, 148-155, 2001.
39. Dietary intake of  $^{210}\text{Po}$  and  $^{210}\text{Pb}$  in the environment of Goa of south west coast of India  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*Health Physics*, USA, Vol.81, No. 4, 438-445, 2001.
40. Radon-222 concentration in Ground waters and associated health effects in the environment of coastal Karnataka and Kaiga on south west coast of India  
Mahesh H. M., Avadhani D. N., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*Health Physics*, USA, Vol.81, No. 6, 724-728, 2001.
41.  $^{226}\text{Ra}$ ,  $^{40}\text{K}$  and  $^7\text{Be}$  activity concentrations in plants in the environment of Kaiga of south west Coast of India  
Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M. and Siddappa, K.  
*Journal of Environmental Radioactivity*, Vol. 65, 255-266, 2003.
42. Distribution and behaviour of natural radionuclides in soil samples of Goa on the southwest coast of India  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M., and Siddappa, K.  
*Radioactivity in the Environment*, Vol. 7, ISSN 1569-4860, 1131-1140, 2005.
43. Natural radioactivity in South West Coast of India  
Karunakara N., Somashekarappa H. M. and Siddappa, K.  
*International Congress Series*, Vol. 1276, 346-347, 2005.
44. Indoor and outdoor radon levels and their diurnal variations in the environs of southwest coast of India  
Karunakara N., Somashekarappa H. M. and Siddappa, K.  
*International Congress Series*, Vol. 1276, 341-343, 2005.
45. Transportation of radionuclides from Western Ghats to Arabian Sea through some major rivers of south India  
Rajshekara K. M., Narayana Y., Karunakara N., and Siddappa, K.  
*International Congress Series*, Vol. 65, 348-349, 2005.
46. Distribution and behaviour of natural radionuclides in soil samples of Goa on the southwest coast of India  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*Journal of Radioactivity in the Environment*, Vol. 7, 1131-1140, 2005.

47.  $^{210}\text{Pb}$  measurement in soils - A comparison of gamma ray spectrometry and alpha counting methods  
Karunakara N.  
*Radiation Protection and Environment*, Vol. 30 (1-4), 104-106, 2007.
48. Concentrations of Concentrations of  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  and  $^{40}\text{K}$  in the Soils of Bangalore Region, India  
Shiva Prasad N. G., Nagaiah N., Ashok G. V. and Karunakara N.  
*Health Physics Health Phys.* Vol. 94(3); 264 –271; 2008.
49. Study on radionuclides in granite quarries of Bangalore rural district, Karnataka, India  
Ningappa C., Sannappa J. and Karunakara N.  
*Radiation Protection Dosimetry*, Vol. 131, No. 4, 495–502; 2008.
50. Site specific transfer factors of  $^{226}\text{Ra}$ ,  $^{228}\text{Ra}$ ,  $^{40}\text{K}$  and  $^{137}\text{Cs}$  for vegetables in Kaiga region  
Chetan Rao, Ujwal Prabhu, Karunakara N., Somashekarappa H. M., Nayak, P. D. and Ravi P. M.  
*Radiation Protection and Environment*, Vol. 31, No. 1-4, 435-455, 2008.
51. Natural Radioactivity in Udupi and Karkala Taluks of Coastal Karnataka  
Gerald Pinto, N. Karunakara, H. M. Somashekarappa, Chetan Rao, Ujwal Prabhu and I. Yashodhara  
*Indian Journal of Pure and Applied Physics*, Vol. 48, 527-529, 2010.
52. Radiation levels and radionuclide distributions in soils of Gogi region, a proposed uranium mining region in North Karnataka.  
Yashodhara, I., Karunakara, N., Sudeep Kumara, K., Rudramurthy., and Tripathi, R. M.,  
*Journal of Radiation Protection and Environment*. Volume 34, Issue 4, pp 267-269. 2011.
53. Estimation of grass to milk transfer coefficient for Cesium for emergency situations.  
Ujwal P., Karunakara N., Yashodhara I., Dileep B. N., Ravi P. M.  
*Journal of Radiation Protection and Environment*, Vol. 34 (3), 210-212, 2012.
54. Determination of concentration of iodine in grass and cow milk by NAA methods using reactor neutrons  
P. V. Geetha, N. Karunakara, Ujwal Prabhu, P. M. Ravi, J. Sudhakar , Nicy Ajith, K. K. Swain, R. Acharya, A. V. R. Reddy  
*Journal of Radioanalytical Nuclear Chemistry*, Vol. 294, 435–438, 2012.
55. Concentration of  $^{222}\text{Rn}$  in drinking water along coastal Kerala and evaluation of ingestion doses.  
Primal D’Cunha, Y. Narayana, N. Karunakara, I. Yashodhara and Sudeep Kumar  
*Journal of Radiation Protection and Environment*. Vol. 34 (3), 197-200, 2012.
56. Deposition based passive monitors for assigning radon, thoron inhalation doses for epidemiological studies.  
Y. S. Mayya, R. Mishra, R. Prajith, A. C. Gole, B. K. Sapra, M. P. Chougankar, R. R. K. Nair, R. C. Ramola, N. Karunakara, P. K. M. Koya  
*Journal of Radiation Protection Dosimetry*. Vol. 152 (1-3), 18-24, 2012.
57. Residential radon exposure in some areas of Bangalore city, India

- Ashok G V, Nagaiah N, Shiva Prasad N G, Ambika M R, Sathish L A, Karunakara. N. *Radiation Protection and Environment*, 35 (2), 59, 2012
58. Soil to rice transfer factors for  $^{226}\text{Ra}$ ,  $^{228}\text{Ra}$ ,  $^{210}\text{Pb}$ ,  $^{40}\text{K}$  and  $^{137}\text{Cs}$ : a study on rice grown in India.  
N. Karunakara, Chetan Rao, P. Ujwal, I. Yashodhara, Sudeep Kumara, P.M. Ravi  
*Journal of Environmental Radioactivity*, Vol. 118, 80-92, 2013.
  59. Photo-neutron cross-section measurement in the 8 and 10 MeV bremsstrahlung induced reaction of  $^{238}\text{U}$   
H. Naik, Rita Crasta, S. V. Suryanarayana, Ganesh Sanjeev, B. S. Shivashankar, H. G. Raj Prakash, N. Karunakara, H. M. Somashekarappa, M. Kumar, V. T. Nimje, K. C. Mittal, A. Goswami  
*Journal of Radioanalytical and Nuclear Chemistry*, Published online April 2013.
  60. Studies on soil to grass transfer factor (Fv) and grass to milk transfer coefficient (Fm) for cesium in Kaiga region.  
N. Karunakara, P. Ujwal, I. Yashodhara, Chetan Rao, K. Sudeep Kumara, B.N. Dileep, P.M. Ravi. *Journal of Environmental Radioactivity*, Vol. 124, 101-112, 2013.
  61. Study of natural radioactivity and estimation of radiation dose in the environment of Tumkur, Karnataka, India.  
Jayasheelan, A, Manjunatha S, Yashodhara I and Karunakara N.  
*Radiation Protection Dosimetry*, Vol. 58 (1):73-78, 2014.
  62. Assessment of Ambient Gamma Dose Rate around a Prospective Uranium Mining Area of South India – A Comparative Study of Dose by Direct Methods and Soil Radioactivity Measurements.  
Karunakara N., Yashodhara I., Sudeep Kumara K., Tripathi, R. M., S. N. Menon, S. Kadam, and M. P. Chougankar.  
*Results in Physics, Elsevier, Open access journal*, 4, 20-27 (2014).
  63. Influence of physico-chemical parameters on the distribution of uranium in the ground water of Bangalore, India  
Ningaiah Nagaiah, Gladys Mathews, Karthik Kumar Mysore Balakrishna, Ambika Madalakote Rajanna, Karunakara Naregundi  
*Radiation Protection and Environment*, 36 (4), 175-180, (2014).
  64. Study of concentration of uranium and physicochemical parameters in ground water and the ingested radiation dose to the population of Bangalore, South India  
N Nagaiah, G Mathews, MBK Kumar, M R Ambika, N Karunakara  
*Environment and Sustainability*, 154, 251, 2014
  65. Analysis of  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  and  $^{40}\text{K}$  in the host rock and the soil samples and assessment of radiological risks for Mandya region, India  
B.C.Shivakumara, M. S. Chandrashekar, L. Paramesh, T. S. Shashikumar, N. Karunakara.  
*International Journal of Integrative sciences, Innovation and Technology*. Vol.3, Iss 2, (2014) pg 18-24

66. Effect of humidity on thoron adsorption in charcoal bed  
Sudeep Kumara K., Karunakara N., Yashodhara I., Sapra B. K., Sahoo B. K., Gaware J. J., Kanse S. D., and Mayya Y. S.  
*Radiation Protection and Environment*, 37 (2), 77, 2014
67. Evaluation of radon adsorption characteristics of a coconut shell-based activated charcoal system for radon and thoron removal applications  
Karunakara N., Sudeep Kumara K., Yashodhara I., Sahoo B K, Gaware J. J., Sapra B. K., Sahoo B. K., and Mayya Y. S.  
*Journal of Environmental Radioactivity*, 142, 87-95, 2015
68. Grass to cow milk transfer coefficient ( $F_m$ ) for Iodine for equilibrium and emergency conditions.  
Geetha P.V., Ujwal Prabhu., Yashodhara I., Sudeep Kumara K., Rupali Karpe, Ravi P.M., Nicy Ajith., Swain K.K., and Karunakara, N.  
*Journal of Radiation Protection and Environment*. Volume 37, Issue 1, pp 14-20. 2015
69. Thoron Mitigation System based on charcoal bed for applications in thorium fuel cycle facilities (part 1): Development of theoretical models for design considerations. Sahoo B. K., Sudeep Kumara K., Karunakara. N., Gaware J. J., Sapra B K., Mayya Y. S.  
*Journal of Environmental Radioactivity*, 172 (2017) 237-248
70. Thoron Mitigation System based on charcoal bed for applications in thorium fuel cycle facilities (part 2): Development, characterization, and performance evaluation  
Sudeep Kumara K., Sahoo B. K., Gaware J. J., Sapra B. K., Mayya Y. S. and Karunakara N.  
*Journal of Environmental Radioactivity*, 172 (2017) 249-260.
71. Measurement of environmental gamma dose levels around Udipi district of coastal Karnataka, India.  
P. G. Shetty, S. K. Sahu, R. A. Takale, M. Swarnkar, N. Karunakara, G. G. Pandit.  
*J Radioanal Nucl Chem*. 2017. pp 1-5.
72. Estimation of Air- to- Grass Mass Interception Factors for Iodine  
N. Karunakara, P. Ujwal, I. Yashodhara, K. Sudeep Kumara, M.P.Mohan, K. Bhaskar Shenoy, P.V.Geetha, B.N. Dileep, Joshi P. James, P.M. Ravi  
*Journal of Environmental Radioactivity*, Available online since Sept. 2017.
73. Estimation of Air- to- Grass Mass Interception Factors for Iodine  
N. Karunakara, P. Ujwal, I. Yashodhara, K. Sudeep Kumara, M.P.Mohan, K. Bhaskar Shenoy, P.V.Geetha, B.N. Dileep, Joshi P. James, P.M. Ravi  
*Journal of Environmental Radioactivity*, J Environ Radioact. 2018 Jun;186:71-77.
74. Concentration of uranium in groundwater and its correlation with the gamma activity of primordial radionuclides in the bedrock samples: A study from northeastern part of Bengaluru city, India Gladys Mathews,  
N. Nagaiah, M. B. Karthik Kumar, M. R. Ambika, N. Karunakara, B. C. Prabhakar  
*Radiation Protection and Environment*, Volume 41, Issue 1, pp 3-7, 2018



75. Tritium concentration in ambient air around Kaiga Nuclear Power Plant  
Srinivas S. Kamath, B. Narayana, Renita Shiny D'Souza, Rashmi Nayak , M. P. Mohan, B. N. Dileep, A. Baburajan, P. M. Ravi, N. Karunakara  
Radiation Protection and Environment, Volume 41, Issue 1, pp 16-19, 2018
76. A new method for D<sub>2</sub>O to H<sub>2</sub>O leak detection and identification of leaky heat exchanger in PHWR by Cerenkov photon counting technique  
Dileep Blangat, Ravi Pazhayathu Mana, Karunakara Nerugundi, Sangameshwar Managana, Raj Mangal Tripathi  
Nuclear Technology & Radiation Protection. Vol. 33, No. 4, pp. 325-333, 2018.
77. A study of temporal variations of <sup>7</sup>Be and <sup>210</sup>Pb concentrations and their correlations with rainfall and other parameters in the South West Coast of India.  
M.P. Mohan, Renita Shiny D'Souza, S. Rashmi Nayak, Srinivas S. Kamath, Trilochana Shetty, K. Sudeep Kumara, Y.S. Mayya, N. Karunakara  
Journal of Environmental Radioactivity 192, 194-207.(2018).
78. Influence of rainfall on atmospheric deposition fluxes of <sup>7</sup>Be and <sup>210</sup>Pb in Mangaluru (Mangalore) at the Southwest Coast of India.  
M.P. Mohan, Renita Shiny D'Souza, S. Rashmi Nayak, Srinivas S. Kamath, Trilochana Shetty, K. Sudeep Kumara, Y.S. Mayya, N. Karunakara  
Atmospheric Environment 202, 281-295. (2019).
79. Optimization of a Method for Estimation of Organically Bound Tritium in Environmental Matrices.  
Rashmi Nayak, S, Renita Shiny DSouza, Srinivas S Kamath, Mohan M.P, Bharath S, Trilochana Shetty, Sudeep Kumara K, Narayana B, Dileep B.N, Ravi P.M, Karunakara N (2019). Journal of Radio analytical Nuclear Chemistry. 319, 917-926.
80. Organically bound and tissue free tritium in rice plant grown around Tarapur Atomic Power Station, west coast of India.  
A. Baburajan, R. H. Gaikwad, V. Sudheendran C. A. Shah, P. M. Ravi, N. Karunakara  
Journal of Radio analytical Nuclear Chemistry. 320, 15-25. (2019).
81. Site specific data on carbon content in environmental samples for accurate determination of carbon-14 specific activity.  
Renita Shiny D'Souza, Rashmi Nayak S., Bharath, Mohan M. P., Dileep B. N., Ravi P. M., Karunakara N.  
*J Radioanal Nucl Chem.* 2019. Doi:10.1007/s10967-019-06683-7
82. <sup>137</sup>Cs – a potential environmental marker for assessing erosion-induced soil organic carbon loss in India  
Debashis Mandal , Nishita Giri,, Pankaj Srivastava1 , Chinmay Sah, Ravi Bhusan, Karunakara Naregundi  
*CURRENT SCIENCE, 117, NO. 5, 10, 865-871, 2019*
83. Tritium in water bodies around the Kaiga generating station  
Srinivas S. Kamath, B. Narayana, Renita Shiny D'Souza, S. Rashmi Nayak, M. P. Mohan, B. N. Dileep, A. Baburajan, P. M. Ravi, N. Karunakara  
*Journal of Radioanalytical and Nuclear Chemistry*, <https://doi.org/10.1007/s10967-019-06742-z>. 2019

84. Tissue free water tritium (TFWT) and organically bound tritium (OBT) in marine eco system at Tarapur on the west coast of India  
A. Baburajan, V. Sudheendran, R. H. Gaikwad, P. M. Ravi, Rashmi S. Nayak, Shiny Renita D'Souza & N. Karunakara  
Journal of Radioanalytical and Nuclear Chemistry, DOI 10.1007/s10967-019-06861-7. 2019.
85. Optimization of a batch thermal combustion method using a tube furnace oxidation system (Pyrolyser) and LSC for Carbon-14 determination in environmental matrices  
Renita Shiny D'Souza, S. Rashmi Nayak, Srinivas Kamath S., Bharath S., K. Arya Krishnan, M. P. Mohan, A. Dieguez, L. Agulló, I. Gómez-Martinez, F.J. Santos-Arevalo, R. García-Tenorio, P.M. Ravi, N. Karunakara  
Journal of Environmental Radioactivity 226 (2021), 106345  
<https://doi.org/10.1016/j.jenvrad.2020.106345>.
86. Determination of organically bound tritium (OBT) concentration in fish by thermal oxidation and liquid scintillation counting method  
Rashmi Nayak S., Renita Shiny D'Souza, Srinivas Kamath S., Mohan M. P., Bharath, Dileep B. N., Ravi P. M., Karunakara N. 2020.  
Health Phys. DOI: 10.1097/HP.0000000000001279.
87. Experimental database on water equivalent factor (WEQp) and organically bound tritium activity for tropical monsoonal climate region of South West Coast of India  
Rashmi Nayak S., Renita Shiny D'Souza, Srinivas Kamath S., Mohan M. P., Bharath, Ravi P. M., Karunakara N. 2020.. Appl. Radiat. Isot. 166,109390.  
DOI:10.1016/j.apradiso.2020.109390
88. Grass transfer factor (Fv) and grass to milk transfer coefficient (Fm) for Strontium around an operating nuclear power station.  
N. Karunakara, P. Ujwal, I. Yashodhara, Chetan Rao, K. Sudeep Kumara, B.N. Dileep, P.M. Ravi.  
*Environmental International* (submitted).
- b. Papers presented in International Conferences (with proceedings)**
1. Transportation of radionuclides from Western Ghat area to major river estuaries of coastal Karnataka-India  
Siddappa K., Narayana Y., Radhakrishna A. P., Somashekarappa H. M., Karunakara N. and Balakrishna K. M.  
*6<sup>th</sup> International Symposium on the Natural Radiation Environment*, Montreal, Quebec, Canada, June 5-9, 1995.
2. Cesium-137 concentration in the environment of Kaiga  
Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M., Balakrishna K. M. and Siddappa K.  
*7<sup>th</sup> International Symposium on Radiation Physics (ISRP-7)*, Jaipur, India, Feb. 24-28, 1997.

3. Distribution and behaviour of  $^{210}\text{Po}$  and  $^{210}\text{Pb}$  in soil samples of Goa of south west coast of India.  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M., and Siddappa K.  
*International conference of IARP (IARP-25)*, BARC, Mumbai, India, Feb. 20-23, 2001.
4. Uptake of radionuclides by plants in the environment of Kaiga of South West Coast of India.  
Karunakara N., Somashekarappa H. M., Avadhani D. N., Mahesh H. M., Narayana Y. and Siddappa K.  
*International conference of IARP (IARP-25)*, BARC, Mumbai, India, Feb. 20-23, 2001
5.  $^{210}\text{Pb}$  concentrations in air and water samples in the environment of coastal Karnataka and Kaiga.  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*International conference of IARP (IARP-25)*, BARC, Mumbai, India, Feb. 20-23, 2001.
6. Distribution and Behaviour of Natural Radionuclides in Soil samples of Goa of South-West coast of India.  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Natural Radiation Environment VII*, Athens, Greece, May, 2002.
7. Radiation mapping along south west coast of India.  
Karunakara N., Somashekarappa H. M., , Narayana Y., Avadhani D. N., Mahesh H. M. and Siddappa K.  
*Natural Radiation Environment VII*, Athens, Greece, May, 2002.
8. Concentration, Distribution and Transportation of  $^{222}\text{Rn}$  and its Progenies in the Environment of coastal Karnataka of South West coast of India.  
Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y., Avadhani D. N., and Siddappa K.  
*Natural Radiation Environment VII*, Athens, Greece, May, 2002.
9. Natural radioactivity in South West Coast of India  
Karunakara N., Somashekarappa H. M. and Siddappa, K.  
*6<sup>th</sup> International Conference on high levels of natural radioactivity and radon areas*, Kinki University, Osaka, Japan, Sept. 5-10, 2004.
10. Indoor and outdoor radon levels and their diurnal variations in the environs of southwest coast of India  
Karunakara N., Somashekarappa H. M. and Siddappa, K.  
*6<sup>th</sup> International Conference on high levels of natural radioactivity and radon areas*, Kinki University, Osaka, Japan, Sept. 5-10, 2004.
11. Transportation of radionuclides from Western Ghats to Arabian Sea through some major rivers of south India  
Rajshekara K. M., Narayana Y., Karunakara N., and Siddappa, K.  
*6<sup>th</sup> International Conference on high levels of natural radioactivity and radon areas*, Kinki University, Osaka, Japan, Sept. 5-10, 2004.

12.  $^{226}\text{Ra}$  and  $^{210}\text{Pb}$  Concentration in the soils of South West Coast region of India  
Karunakara N.  
*2nd International Conference on Radioactivity in the Environment, Nice, France, Oct. 2-7, 2005.*
13. Natural Radionuclides concentration in the soils of Botswana  
Murthy V. R. K., Karunakara N. and Nayak N. G.  
*2nd International Conference on Radioactivity in the Environment, Nice, France, Oct. 2-7, 2005.*
14. A radon chamber without radium source for detector calibration and radon measurement  
Darwish Al-Azmi and Karunakara N.  
*Ninth Arab Conference on the Peaceful Uses of Atomic Energy, Beirut, Lebanon, 13-16 December 2008.*
15. Studies on  $^{210}\text{Pb}$  and  $^{210}\text{Po}$  concentrations in West Coast region of India  
N. Karunakara, Chetan Rao, I. Yashodhara, P. Ujwal and P. M. Ravi  
*International Tropical Conference on Po and Radioactive lead isotopes, Seville, Spain, Oct 26 – 28, 2009.*
16.  $^{210}\text{Pb}$ ,  $^7\text{Be}$  and  $^{137}\text{Cs}$  in rice and vegetables  
N. Karunakara, Chetan Rao, I. Yashodhara, P. Ujwal and P. M. Ravi  
*International Tropical Conference on Po and Radioactive lead isotopes, Seville, Spain, Oct 26 – 28, 2009.*
17. Determination of radon concentration in soil gas by gamma-ray spectrometry  
D. Al-Azmi and N. Karunakara  
*5<sup>th</sup> International Symposium on Naturally Occurring Radioactive Material (NORM V), 19-22 March 2007, Seville, Spain. Abstract number P-2-4, page 78.*
18. Calibration of radon detectors using a simple calibration chamber and soil gas  
D. Al-Azmi and N. Karunakara  
*International Conference on Advancements in Nuclear Instrumentation, Measurement Methods and their Applications (ANIMMA), Marseille, France (7-10 June, 2009), Abstract number 186, page 98, 2009.*
19. Indoor and outdoor radon levels and its diurnal variations in Botswana  
Murthy V. R. K., King J. G., Karunakara N., Raju V.C.C.  
*1<sup>st</sup> International Conference on Radiation Physics (ISRP-11) ... the world to the University of Melbourne (Australia) on September 20–25, 2009,*
20. A comparative study of absorption of radon by olive oil with different edible oils of India  
D. Al-Azmi and N. Karunakara  
*Third Asian and Oceanic Congress on Radiation Protection, IRPA "AOCR-3", Tokyo, Japan (24-28 May 2010), Abstract number 1-P-2, page 73, 2010.*
21. Experimental and simulation results of CsI(Tl) detector for gamma-ray measurements from terrestrial samples  
D. Al-Azmi, S. Baccouche and N. Karunakara (2010)  
*The Solid State Dosimetry 16th International Conference "SSD16", Sydney, Australia (19-24 September, 2010). Abstract book, poster number 32 (Instrumentation/Detectors) page 99, 2010.*

22. Determination of concentration of iodine in grass and cow milk by NAA methods using reactor neutrons  
P. V. Geetha, N. Karunakara, Ujwal Prabhu, P. M. Ravi, J. Sudhakar, Nicy Ajith, K. K. Swain, R. Acharya, A. V. R. Reddy  
Fourth International Symposium on Nuclear Analytical Chemistry (NAC-IV), Bhabha Atomic Research Centre, Mumbai, India, November 15-19, 2010.
23. Studies  $^{222}\text{Rn}$  and  $^{238}\text{U}$  in ground waters of Gogi region, a prospective Uranium mining region  
Karunakara N., Yashodhara I., Chetan Rao, Ujwal P. and Thripathi R. M.  
7<sup>th</sup> International Conference on High Levels of natural radiation and radon areas (7HLNRRA), Bhabha Atomic Research Centre, Mumbai, India, November 24-26, 2010.
24. Indoor and outdoor  $^{222}\text{Rn}$  and  $^{220}\text{Rn}$  progeny measurements in Gogi region, a prospective uranium mining area, using direct progeny sensors  
Karunakara N., Mishra R., Yashodhara I., Thripathi R. M., Prajith, Sapra B. K. and Mayya Y. S.  
7<sup>th</sup> International Conference on High Levels of natural radiation and radon areas (7HLNRRA), Bhabha Atomic Research Centre, Mumbai, India, November 24-26, 2010.
25. Measurements of Ambient Gamma Radiation Levels as Practical Teaching for Physics Students.  
D. Al-Azmi, N. Karunakara and A. O. Mustapha (2012)  
13th International Congress of the International Radiation Protection Association (IRPA13), Glasgow, Scotland, UK (13-18 May, 2012), 2012.
26. Concentration of  $^{210}\text{Pb}$  and  $^{210}\text{Po}$  in soil samples around Gogi Uranium mining region.  
Yashodhara I., Karunakara N., Sudeep Kumara and Tripathi R. M.  
2<sup>nd</sup> International Conference on Po and radioactive Pb isotopes (INCO-PoPb-2013), Mangalore University, February 10-13, 2013.
27. Transfer factor for  $^{210}\text{Pb}$  from soil to vegetables in the surrounding environment of Kaiga nuclear power station.  
Chetan Rao, Karunakara N., Yashodhara I., Ravi P. M.  
2<sup>nd</sup> International Conference on Po and radioactive Pb isotopes (INCO-PoPb-2013), Mangalore Pb University, February 10-13, 2013.
28. Study on the use of well-type NaI(Tl) detector for  $^{210}\text{Pb}$  measurements.  
Darwish Al-Azmi, Mustapha A. O. and Karunakara. N.  
2<sup>nd</sup> International Conference on Po and radioactive Pb isotopes (INCO-PoPb-2013), Mangalore University, February 10-13, 63, 2013.
29. Soil to rice transfer factors for  $^{210}\text{Pb}$ : A study on rice grown in India.  
Karunakara N., Chetan Rao, Ujwal P., Yashodhara I., Sudeep Kumara, Somashekarappa, H.M., Bhaskara Shenoy K. and Ravi P.M.  
2<sup>nd</sup> International Conference on Po and radioactive Pb isotopes (INCO-PoPb-2013), Mangalore University, February 10-13, 223-232, 2013.

30. Assessment of gamma radiation levels and associated dose rates from surface soils in the eastern part of Botswana  
Alfred Likuku and Karunakara. N.  
7<sup>th</sup> International Conference, on Environmental Science and Technology, Crowne Plaza, Houston, Texas, USA, June 9 -13, 2014 (Accepted)
  
31. A comparative study on grass to milk cesium transfer coefficients for equilibrium and emergency situations.  
Karunakara N, Ujwal P, Yashodhara I, Dileep B N and Ravi, P. M.  
Asian and Oceanic Congress on Radiation Protection (AOCRP-4), Kuala Lumpur, Malaysia, May 12-15, 2014 (Accepted).
  
32. Estimation of grass to milk transfer coefficient for strontium for emergency situations.  
Karunakara N., Ujwal, P., Yashodhara I., Sudeep Kumara K., Dileep B. N., and Ravi P. M.  
Proceedings of the 4<sup>th</sup> Assian and oceanic congress on Radiation protection (AOCRP), May 12-16 Kuala Lumpur, Malaysia. 2014.
  
33. Investigation on the influence of grain size in <sup>222</sup>Rn and <sup>220</sup>Rn concentrations in the monazite deposits of HBRA.  
Primal V. Pinto., Sudeep Kumara K., Karunakara N., and Narayana Y.  
8<sup>th</sup> International Conference on High Levels of Natural Radiation and Radon Areas (ICHLNRRRA 2014). September 1–5, Prague, Czech Republic. 2014.
  
34. A comparative study of transfer coefficient of iodine from grass to cow milk under equilibrium and postulated accidental scenario.  
P. V. Geetha, N. Karunakara, Ujwal Prabhu, I. Yashodhara, P. M. Ravi, B. N. Dileep, Rupali Karpe.  
International workshop on New Horizons in Nuclear Reactor Thermal Hydraulics and Safety, January 13-15, Mumbai, India. 2014.
  
35. The impact of seasonal changes on distribution of natural radioactivity along high background radiation areas.  
Primal V. Pinto., Sudeep Kumara K., Karunakara N., and Narayana Y.  
ENVIRA 2015 International Conference, Thessaloniki, Greece. 2015.
  
36. Operating Experience with On-line D<sub>2</sub>O to H<sub>2</sub>O leak Monitoring Systems in PHWRs and Development of a New system to Identify Steam Generator leak,  
Dileep B N., Ravi P M., Karunakara N., Rajeev M S., Managanvi S S., Raichur P G., Tripathi R M.  
Proceedings of International workshop CANSAS –2015 (CANDU Safety Association for Sustainability) & NRTHS –2015 (New Horizons in Nuclear Reactor Thermal Hydraulics and Safety) Anushaktinagar, Mumbai, India, 8 –11 December, 2015,

37. Estimation of air to grass - dry and wet deposition rates, velocities, and mass interception factors for iodine for a postulated accidental scenario.  
Karunakara N, Ujwal P. Yashodhara I., Sudeep Kumara K, Geetha P. V., Dileep B. N., Joshi P. James and Ravi P. M.  
2<sup>nd</sup> International conference on Radioecological Concentration Process, Seville, Spain, Nov. 2016.
38. Assessment of radionuclides concentration around the phosphate industries of Tunisia.  
Machrauoui S, Labidi Salam S, and Karunakara N.  
2<sup>nd</sup> International conference on Radioecological Concentration Process, Seville, Spain, Nov. 2016.
39. Activated Charcoal Adsorber Bed as a <sup>222</sup>Rn Hold-up System for Application in Uranium Mining Industries.  
K. Sudeep Kumara, B.K.Sahoo, J.J. Gaware, B.K. Sapra, Y.S. Mayya, N. Karunakara.  
Indian Association for Radiation in Physics -International Conference-2018, 16-20 January, 2018, BARC, Mumbai.
40. Molecular Sieves for Long Term Atmospheric Tritium Monitoring - A Feasibility Study.  
Srinivas. S. Kamath, B. Narayana, Renita Shiny D'Souza, Rashmi Nayak, Mohan. M. P, B. N. Dileep, Babu Rajan A, P. M. Ravi and N. Karunakara.  
Indian Association for Radiation in Physics -International Conference-2018, 16-20 January, 2018, BARC, Mumbai.
41. Atmospheric Deposition Fluxes and Mass Interception Factor of <sup>7</sup>Be and <sup>210</sup>Pb.  
M.P.Mohan, Renita Shiny D'Souza, S. Rashmi Nayak, Trilochana Shetty, Srinivas Kamath, K. Sudeep Kumara, I. Yashodhara, and N. Karunakara.  
Indian Association for Radiation in Physics-International Conference-2018, 16-20 January, 2018, BARC, Mumbai.
42. Validation of the Quench Curve for the Analysis of Organically Bound Tritium in Environmental Matrices by Liquid Scintillation Spectrometry.  
S. Rashmi Nayak, Renita Shiny D'Souza, Srinivas Kamath, M.P.Mohan, B. Narayana, B.N.Dileep, P.M.Ravi, and N.Karunakara.  
Indian Association for Radiation in Physics- International Conference-2018, 16-20 January, 2018, BARC, Mumbai.
43. Validation of the Quench Curves for Carbon-14 Analyses in Environmental Matrices by Liquid Scintillation Spectrometry.  
Renita Shiny D'Souza, S. Rashmi Nayak, Srinivas Kamath, M.P. Mohan, B.Narayana, B. N. Dileep, P.M. Ravi, and N. Karunakara. Indian Association for Radiation in Physics - International Conference-2018, 16-20 January, 2018, BARC, Mumbai.

44. Calibration of Activated Charcoal Based Passive  $^{222}\text{Rn}$  Detectors in a Walk-in Type Calibration chamber at CAREER, India.  
Trilochana Shetty, K. Sudeep Kumara, I. Yashodhara, M. P. Mohan, B. K. Sahoo, J. J. Gaware, B. K. Sapra, H. M. Somashekarappa, Y. S. Mayya and N. Karunakara.  
Indian Association for Radiation in Physics- International Conference-2018, 16-20 January, 2018, BARC, Mumbai.
45. Evaluation of Trapping Efficiency of a Automated Sampling System (MRB 500) for Atmospheric Carbon-14 Measurements.  
Bharath, Renita Shiny D'Souza, Rashmi Nayak S, Srinivas Kamath, Mohan M. P, Narayana B, Dileep B. N, Babu Rajan, Ravi P. M, and Karunakara N.  
Indian Association for Radiation in Physics -International Conference-2018, 16-20 January 16-20, 2018, BARC, Mumbai.
46. Experience of an Inter-laboratory Exercise for the Determination of Carbon-14 in Biological Samples".  
A. Baburajan, S. Rajaram, Renita Shiny D'Souza, Rasmi Nayak, N. Karunakara, P.M. Ravi and R.M. Tripathi  
Indian Association for Radiation in Physics -International Conference-2018, 16-20 January 16-20, 2018, BARC, Mumbai..
47. Validation of the traceability of radon and thoron facilities among Asian countries.  
Mirosław Janik, Shinji Tokonami, Iwaoka K, Karunakara N, Al-Azmi, D, Trilochana Shetty, Mohan M P, Sudeep K, Yashodhara I, Zhuo W, Zhao C, Chanyotha S, Kranrod C, Kurihara O.  
5<sup>th</sup> Asian and Oceanic Congress on Radiation Protection (AOCRP-5), Melbourne, Australia. – May 20-23, 2018.
48. Radionuclide Contents in Bananas Imported to Kuwait.  
D. Al-Azmi, Sudeep Kumara, Mohan M.P., Renita Shiny D'Souza, Rashmi Nayak, and Karunakara N. (2018).  
Paper submitted to the Fourteen Arab Conference on the Peaceful Uses of Atomic Energy, Sharm El-Sheikh, Arab Republic of Egypt, to be held on 16-20 December 2018.
49. Gamma dose rates in the high background radiation area of Mangalore district, India.  
D. Al-Azmi, Sudeep. Kumara, M.P Mohan and N. Karunkara (2018).  
Abstract accepted in the 9th International Conference on High Level Environmental Radiation Areas - For Understanding Chronic Low-Dose-Rate Radiation Exposure Health Effects and Social Impacts (ICHLERA 2018) to be held in Hirosaki, Japan (24-27 Sept. 2018).



50. Comparison of radon and thoron concentrations in air and soil gas in lateritic and sea shore locations.  
D. Al-Azmi, Sudeep. Kumara, M.P Mohan and N. Karunakara (2018). The 6th International Geo-hazards Research Symposium, Dresden, Germany (4-9 March 2018). Book of Abstracts, page 32
51. An improvised method for Carbon-14 measurement in gaseous effluents  
Bharath, R.S. D'Souza, S.R. Nayak, Dileep B. N., S.S. Manganvi, Ravi P.M, N. Karunakara  
5th International Conference on Environmental Radioactivity ENVIRA 2019: Variations of Environmental Radionuclides 8 – 13 September 2019, Praha, Czech Republic (BEST PAPER AWARD)
52. Water Equivalent Factor (WEQp) and Organically Bound Tritium Concentration for Tropical Monsoon Climate Region of South West Coast of India.  
Rashmi Nayak S., Renita Shiny D'Souza, Srinivas Kamath, Mohan M. P., Narayana B., Dileep B. N., Ravi P. M., and Karunakara N. 2019.  
5th international conference on Environmental Radioactivity, ENVIRA 2019. PP:196.
53.  $^{14}\text{C}$  activity in terrestrial biota in the vicinity of PHWRNPP at Kaiga.  
Renita Shiny D'Souza, Bharath, Arya Krishnan K., Rashmi Nayak S., Srinivas Kamath, Narayana B., Dileep B.N., Ravi P.M., Karunakara N., 2021.  
Proceedings of the 34<sup>th</sup> National conference on Radiation safety in nuclear and core industries, health care and environment (IARPNC- 2021).
- c. Papers presented in National Conferences (with proceedings)**
54. Uptake of Ra-226 and Po-210 by vegetation in Kaiga environs  
Karunakara N., Somashekarappa H. M., Narayana Y., K. M. Balakrishana and Siddappa K.  
*Tenth National Symposium on Radiation Physics*, Kalpakkam & Madras, India, Aug. 17-20, 1993, 330-332.
55. Indoor radon levels in coastal Karnataka  
Narayana Y., Somashekarappa H. M., Karunakara N., Radhakrishna A. P., K. M. Balakrishana and Siddappa K.  
*4th National Symposium on Environment*, Anna University, Madras, India, Feb. 7-10, 1995, pp. 190-193.
56. Seasonal variation of indoor radon levels in coastal Karnataka on the south west coast of India  
Narayana Y., Somashekarappa H. M., Karunakara N., Radhakrishna A. P., K. M. Balakrishana.  
*11th National Symposium on Radiation Physics*, Patiala, India, Oct. 26-29, 1995, 131-134.
57. Depth profile studies of radionuclide activities in Kaiga  
Karunakara N., Somashekarappa H. M., Narayana Y., K. M. Balakrishana and Siddappa K.

- National Symposium on Environment*, VECC, Calcutta, India, Feb. 28 - March 1, 1996, 61-64.
58. Radon profile in soil - A new approach  
Karunakara N., D. V. Gopinath and Siddappa K.  
*12th National Symposium on Radiation Physics (NSRP-12)*, Defence Laboratory, Jodhpur, India, Jan. 28 - 30, 1998.
  59. Radiation Level and radionuclide distribution in the environment of Goa  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M., Balakrishna K. M. and Siddappa K.  
*12th National Symposium on Radiation Physics (NSRP-12)*, Defence Laboratory, Jodhpur, India, Jan. 28-30, 1998.
  60. Diurnal and seasonal variations of atmospheric radon concentration in the environs of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y., Balakrishna K. M. and Siddappa K.  
*12th National Symposium on Radiation Physics (NSRP-12)*, Defence Laboratory, Jodhpur, India, Jan. 28-30, 1998.
  61. Distribution of Sr-90 and Cs-137 radionuclides in the environment of coastal Karnataka  
Narayana Y., Karunakara N., Somashekarappa H. M., Avadhani D. N., Mahesh H. M., Balakrishna K. M. and Siddappa K.  
*12th National Symposium on Radiation Physics (NSRP-12)*, Defence Laboratory, Jodhpur, India, Jan. 28-30, 1998.
  62. Studies on radioactivity in aquatic and atmospheric environs of coastal Karnataka, Kaiga and Goa  
Siddappa K., Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N. and Mahesh H. M.  
*7th National Symposium on Environment (NSE-7)*, Dhanbad, India, Feb. 5-7, 1998.
  63. Polonium-210 concentration in food and diet samples of Goa environs  
Avadhani D. N., Mahesh H. M., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*National Symposium on Geochemistry*, Osmania University, Hyderabad, June 26-27, 1998.
  64. Radioactivity and radiation levels in the environs of Kaiga  
Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*National Symposium on Geochemistry*, Osmania University, Hyderabad, June 26-27, 1998.
  65.  $^{238}\text{U}$ ,  $^{210}\text{Pb}$  and  $^{210}\text{Po}$  concentration in water in the environment of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*National Symposium on Geochemistry*, Osmania University, Hyderabad, June 26-27, 1998.

66. Indoor radon levels in Mangalore and coastal Karnataka  
Narayana Y., Somashekarappa H. M., Karunakara N., Avadhani D. N., Mahesh H. M. and Siddappa K.  
*19th Annual Conference on Indian Association of Biomedical Scientist*, Kasturba Medical College, Mangalore, India, Oct. 30-Nov. 1, 1998.
67. Distribution and Intake of Polonium-210 in the environment of Goa  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*24th Annual conference on Indian Association of Radiation Protection (IARP-24)*, Kakrapara Atomic Power Station, Kakrapara, India, Jan. 20-22, 1999.
68. Uranium concentration in water samples in the environment of coastal Karnataka, Kaiga and Goa  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*24th Annual conference on Indian Association of Radiation Protection (IARP-24)*, Kakrapara Atomic Power Station, Kakrapara, India, Jan. 20-22, 1999
69. Natural radioactivity in soil samples of coastal Karnataka  
Narayana Y., Karunakara N., Avadhani D. N., Mahesh H. M., Somashekarappa H. M. and Siddappa K.  
*24th Annual conference on Indian Association of Radiation Protection (IARP-24)*, Kakrapara Atomic Power Station, Kakrapara, India, Jan. 20-22, 1999.
70.  $^{210}\text{Po}$  concentration in air and water samples in the environment of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Karunakara N., Somashekarappa H. M., Narayana Y. and Siddappa K.  
*8th National Symposium on Environment (NSE-8)*, Kalpakkam, India, June 22-25, 1999.
71. Distribution of Uranium, Lead-210 and Polonium-210 concentration in potable water samples of Goa environment  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*9th National Symposium on Environment (NSE-9)*, Bangalore University, Bangalore, India, June 5-7, 2000.
72. Distribution and intake of Lead-210 in the environment of Goa  
Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*9th National Symposium on Environment (NSE-9)*, Bangalore University, Bangalore, India, June 5-7, 2000.
73. Distribution of Ra-226 and Ra-228 in the environment of coastal Karnataka  
Narayana Y., Somashekarappa H. M., Karunakara N., Avadhani D. N., Mahesh H. M. and Siddappa K.  
*9th National Symposium on Environment (NSE-9)*, Bangalore University, Bangalore, India, June 5-7, 2000.
74. Cs-137 Concentration in the environment of Kaiga

- Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M., and Siddappa K.  
*9th National Symposium on Environment (NSE-9)*, Bangalore University, Bangalore, India, June 5-7, 2000.
75. Diurnal variation of radon daughters, radon, equilibrium factor and soil exhalation rate in the environs of coastal Karnataka, Kaiga and Goa  
 Mahesh H. M., Avadhani D. N., Karunakara N., Narayana Y., Somashekarappa H. M. and Siddappa K.  
*9th National Symposium on Environment (NSE-9)*, Bangalore University, Bangalore, India, June 5-7, 2000.
76. Natural radioactivity in the Environment of Goa of south-west coast of India.  
 Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Satellite Meeting of International Conference IARP-IC-2K1*, Kaiga, India, Feb. 26-27, 2001.
77.  $^{210}\text{Po}/^{210}\text{Pb}$  ratio in air and rain water samples in the environment of coastal Karnataka and Kaiga.  
 Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*Satellite Meeting of International Conference IARP-IC-2K1*, Kaiga, India, Feb. 26-27, 2001.
78. Radionuclides in plants in the environment of Kaiga in Karnataka.  
 Karunakara N., Somashekarappa H. M., Avadhani D. N., Mahesh H. M., Narayana Y. and Siddappa K.  
*10th National Symposium on Environment (NSE-10)*, Bhabha Atomic Research Centre, Mumbai June, India, 4-6, 2001.
79. Determination of strength of an alpha source by an etched track detector.  
 Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N. and Siddappa K.  
*12th National Symposium on Solid State Nuclear Track Detectors (12th SSNTD)*, DAV College, Jalandhar, October 27-31, 2001.
80. Radon and Thoron progeny concentrations in Tiled and concrete dwellings in the environment of Mangalore.  
 Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N. and Siddappa K.  
*12th National Symposium on Solid State Nuclear Track Detectors (12th SSNTD)*, DAV College, Jalandhar, October 27-31, 2001.
81. Distribution and intake of Radium-226 in the Environment of Goa.  
 Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*14th National Symposium on Radiation Physics (14th NSRP)*, Gurunanak Dev University, Amritsar, November 1-3, 2001.
82. Radiation Dose due to Radon-222 from Ground waters of coastal Karnataka and Kaiga.

- Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*14th National Symposium on Radiation Physics (14th NSRP)*, Gurunanak Dev University, Amrithsar, November 1-3, 2001.
83. Distribution of  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  and  $^{40}\text{K}$  in the Environs of Mangalore.  
 Somashekarappa H. M., Karunakara N., Mahesh H. M., Avadhani D. N. and Siddappa K.  
*14th National Symposium on Radiation Physics (14th NSRP)*, Gurunanak Dev University, Amrithsar, November 1-3, 2001.
84. Influence of soil properties on Cs-137 and Sr-90 sorption in the environment of West Coast of India  
 Karunakara N., Somashekarappa H. M., Avadhani D. N., Mahesh H. M., Narayana Y. and Siddappa K.  
*11<sup>th</sup> National Symposium on Environment (NSE-11)*, Rajasthan College of Agriculture, Udaipur, June 5-7, India, 79-85, 2002.
85. Distribution of Po-210 in the environment of Coastal Karnataka.  
 Narayana Y., Karunakara N., Avadhani D. N., Mahesh H. M., and Siddappa K.  
*11<sup>th</sup> National Symposium on Environment (NSE-11)*, Rajasthan College of Agriculture, Udaipur, June 5-7, India, 86-89, 2002.
86. Uranium and radium concentrations in Groundwater in the environment of Coastal Karnataka and Kaiga.  
 Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N., Narayana Y. and Siddappa K.  
*11<sup>th</sup> National Symposium on Environment (NSE-11)*, Rajasthan College of Agriculture, Udaipur, June 5-7, India, 245-248, 2002.
87. Distribution of Cs-137 in soil samples of Goa Environment.  
 Avadhani D. N., Mahesh H. M., Karunakara N., Narayana Y., Somashekarappa H. M., and Siddappa K.  
*11<sup>th</sup> National Symposium on Environment (NSE-11)*, Rajasthan College of Agriculture, Udaipur, June 5-7, India, pp 79-85, 2002.
88. Activity of  $^{210}\text{Po}$  in the Riverine Environment of Coastal Karnataka  
 Rajashekar K. M., Narayana Y., Karunakara N., Pramoda Kumara Shetty and Siddappa K.  
*13<sup>th</sup> National Symposium on Environment (NSE-13)*, North-Eastern Hill University, Shillong), June 5-7, 2004.
89. Studies on indoor and outdoor radon levels and its diurnal variations in the environs of West Coast of India  
 Karunakara N. Somashekarappa H. M., and Siddappa, K.  
*16<sup>th</sup> National Symposium on Radiation Physics, Chennai, Jan. 18-20, 2006.*
90.  $^{210}\text{Pb}$  measurement in soils - A Comparison of gamma ray spectrometry and alpha counting methods  
 Karunakara N. and Somashekarappa H. M.  
*Conference on Accelerator and Low Level Radiation Safety Nuclear Science Centre, New Delhi, April 26-28, 2007.*

91.  $^{222}\text{Rn}$  and  $^{220}\text{Rn}$  concentrations in soil gas and Exhalation rate in the environs of West Cost of India  
Karunakara N.  
*Conference on Accelerator and Low Level Radiation Safety Nuclear Science Centre, New Delhi, April 26-28, 2007.*
92. Radioactivity in the vicinity of granite quarries of Bangalore region  
Shiva Kumar G., Nagaiah N. and Karunakara N.  
*15<sup>th</sup> National Symposium on Environment (NSE-15), Coimbatore University, Tamil Nadu, June 5-7, 2007.*
93. Radioactive Aerosols in Granitic Regions of Karnataka State  
Ningappa C., Sannappa J., Karunakara N. and Somashekarappa H. M., *Indian Aerosol Science and Technology Association Conference - 2007 (IASTA-2007), Auditorium, National Physical Laboratory, New Delhi, November 14 – 16, 2007.*
94. Radon and Thoron Measuring Techniques  
Karunakara N., Somashekarappa H. M. and Siddappa K.  
*Theme Meeting on Radon – 2008, BARC, April 11-13, 2008.*
95. Estimation of Loss of  $^{40}\text{K}$  During Different Cooking Procedures of Rice  
Aparna K. R., Aparna K. R., Selvi B. S., Joshi R. M. , Karunakara N. and Ravi P. M.  
*16<sup>th</sup> National Symposium on Environment (NSE-16), July 5-7, Hisar, 2008.*
96. Site specific transfer factors of  $^{226}\text{Ra}$ ,  $^{228}\text{Ra}$ ,  $^{40}\text{K}$  and  $^{137}\text{Cs}$  for vegetables in Kaiga region  
Chetan Rao, Ujwal Prabhu, Karunakara N., Somashekarappa H. M., Nayak P. D. and Ravi P. M.  
*28<sup>th</sup> Indian Association for Radiation Protection National Conference (IARPNC-2008), Jodhpur, India, Nov. 19-21, 2008.*
97.  $^7\text{Be}$  and  $^{210}\text{Pb}$  in air and plants in the environs of Kaiga Nuclear Power Station.  
N. Karunakara, I. Yashodhara, P. Ujwal, Chetan Rao, H. M. Somashekarappa, P. M. Ravi.  
*National Conference on Accelerator and Low Level Radiation Safety, New Delhi, Nov. 18-20, PP53, 102, 2009.*
98. Natural radioactivity in Udupi and Karkala taluks of Coastal Karnataka.  
Gerald Pinto, H. M. Somashekarappa, N. Karunakara  
*National Conference on Accelerator and Low Level Radiation Safety, New Delhi, Nov 18-20, PP53, 102, 2009.*
99. Study of Environmental Gamma Radiation Level in and around Chittradurga, Karnataka, India – A Preliminary Report  
M. C. Shivaprakash, B. N. Ananadaram, N. Karunakara and B. S. Sheshadri  
*National Conference on Accelerator and Low Level Radiation Safety, New Delhi, Nov. 18-20, 45, 94, 2009.*
100. Soil to Paddy transfer factors for  $^{40}\text{K}$  and  $^{137}\text{Cs}$  for Kaiga region.  
Chetan Rao, Ujwal Prabhu, I. Yashodhara, N. Karunakara, P. D. Nayak and P. M. Ravi  
*18<sup>th</sup> National Symposium on Radiation Physics, Udaipur, Nov. 19-21, G20, 165, 2009.*
101. A comparative study on radionuclide concentrations in forest & farmland soils around Kaiga region.

- Chetan Rao, Ujwal P., Yashodhara I., Karunakara N., Somashekarappa H. M., Nayak P. D., Ravi P. M.  
*National Conference on Accelerator and Low Level Radiation Safety*, New Delhi, Nov. 18-20, PP51, 100, 2009.
102. A comparative study on  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  and  $^{40}\text{K}$  concentrations near granite quarries and other regions around Bangalore  
 Shiva Prasad N. G., Nagaiah N., Ashok G. V. and Karunakara N.  
*National Conference on Accelerator and Low Level Radiation Safety*, New Delhi, Nov. 18-20, PP51, 100, 2009.
103. A simple technique for the measurement in soil gas using LLRDS  
 Karunakara N.  
 The Indian Association for Radiation Protection (IARP) 29th National Conference (IARPNC-2010) on "Recent Advances in Radiation Dosimetry", BARC, Mumbai, February 3-5, 2010.
104. Radioactivity and radionuclide distributions in soils of Gogi region, a proposed Uranium mining region in North Karnataka.  
 Yashodhara I., Karunakara N. and Tripathi, R. M.  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
105. Estimation of grass to milk transfer coefficient for Cesium for emergency situations.  
 Ujwal P., Karunakara N., Yashodhara I., Dileep B. N., Ravi P. M.  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
106. Studies on soil to grass to cow milk transfer of  $^{137}\text{Cs}$  in Kaiga region.  
 Ujwal P., Karunakara N., Yashodhara I., Chetan Rao, Dileep B. N., Ravi P. M.  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
107. Site specific studies on sediment to fish concentration ratios for Kaiga region.  
 Chetan Rao, Karunakara N., Ujwal P., Yashodhara I., Somashekarappa H. M. and Ravi P. M.  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
108. Soil to leafy vegetable transfer factors for  $^{226}\text{Ra}$ ,  $^{210}\text{Pb}$ ,  $^{40}\text{K}$  and  $^{137}\text{Cs}$  in Kaiga region.  
 Chetan Rao, Karunakara N., Ujwal P., Yashodhara I., Somashekarappa H. M. and Ravi P. M.  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
109. Dissolved  $^{222}\text{Rn}$  Concentration in Water samples of a Natural Hot Water Spa of Puttur, Coastal Karnataka.  
 Radhakrishna A. P., Antony Praksh, Yashodhara I., Karunakara N  
 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.

110. Concentration of  $^{222}\text{Rn}$  in drinking water along coastal Kerala and evaluation of ingestion doses.  
Primal D'Cunha, Y. Narayana, N. Karunakara, I. Yashodhara and Sudeep Kumar  
30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
111. Study for Transfer coefficient of Iodine from grass to cow milk.  
P. V. Geetha, N. Karunakara, Ujwal Prabhu, Rupali Karpe, P. M. Ravi, Nicy Ajith and K. K. Swain  
30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
112. Residential radon exposure in some areas of Bangalore city, India.  
G. V. Ashok, N. Nagaiah, N. G. Shiva Prasad, M. R. Ambika, L. A. Sathish and N. Karunakara  
30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
113. Radioactivity measurement in granites and mineral ores of Chitradurga, India.  
Shivaprakash M. C., Anandaram B. N., Seshadri B. S. and Karunakara N.  
30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.
114. Studies on soil-grass-cow-milk transfer of Strontium in Kaiga region.  
Ujwal P., Karunakara N., Yashodhara I., Chetan Rao, Dileep B. N., Ravi P. M.  
19<sup>th</sup> National Symposium on Radiation Physics (NSRP-19), Chennai, December 12-14, 2012.
115. Estimation of grass to milk transfer coefficient for Strontium for emergency situations.  
Ujwal P, Karunakara N., Yashodhara I., Sudeep Kumara K., Dileep B. N. and Ravi P.M.  
Proceedings of the 19<sup>th</sup> National Symposium on Radiation Physics (NSRP-19), Chennai, December 12-14, 2012 481-483, 2012.
116. Activity concentrations of  $^{226}\text{Ra}$  and  $^{238}\text{U}$  in water samples and estimation of radiation dose around the proposed uranium mining region in Gogi.  
Yashodhara I., Sudeep Kumara, Tripathi, R. M. and Karunakara N.  
19<sup>th</sup> National Symposium on Radiation Physics (NSRP-19). 525-528, 2012.
117. Studies on radon and thoron mitigation using charcoal based systems.  
Sudeep Kumara, Yashodhara I., Karunakara N., Sapra B. K., Sahoo B. K., Gaware J. J., Kanse S. D. and Mayya Y. S.  
19<sup>th</sup> National Symposium on Radiation Physics (NSRP-19). 544-546, 2012.
118. Radon and thoron concentrations in indoor air of Gogi region, a proposed uranium mining region of north Karnataka.  
Yashodhara, I., Sudeep Kumara K., Rosaline Mishra., Mayya, Y. S., Tripathi R. M. and Karunakara N. National conference on Solid State Nuclear Track Detectors (SSNTDs-18), Faridabad, October 18-20, 2013.



119. Effect of humidity on thoron adsorption in charcoal bed  
Sudeep Kumara K., Karunakara N., Yashodhara I., Sapra B. K., Sahoo B. K., Gaware J. J., Kanse S. D., and Mayya Y. S.,  
Proceedings of the IARPNC-2014, BARC, Mumbai, March 19-21. (BEST POSTER AWARD). 2014.
120. Estimation of radon & thoron adsorption coefficient values for coconut shell based activated charcoal system for application in radon and thoron removal applications.  
Sudeep Kumara K., Karunakara N., Sahoo B.K., Gaware J.J., Sapra B.K., and Mayya. Y.S.  
National Symposium on Environment-19 (NSE-19). Kottayam, Kerala. December 11-13. 2014.
121. Development and Characterization of a Charcoal based Thoron Mitigation System for Application in Thorium Processing Facilities.  
Sahoo, B.K., Gaware, J.J., Sapra, B.K., Babu, DAR. Sudeep Kumara, K., Karunakara, N., and Mayya, Y.S.  
National Conference on Power from Thorium: Present Status and Future Directions. BARC, Mumbai. December 22-24. 2014.
122. Radiation levels and radionuclide distributions in terrestrial, atmospheric and aquatic environs of Gogi uranium mining region of North Karnataka.  
Yashodhara, I., Sudeep Kumara K., Karunakara, N. and Tripathi, R. M  
Proc. 5<sup>th</sup> BRNS-DAE Symposium on Nuclear Analytical Chemistry-V, Mumbai, January, 20-24, 2014.
123. Estimation of air to grass dry and wet deposition rates, velocities and mass interception factors for iodine for postulated accidental scenario.  
Karunakara, N., Ujwal P., Yashodhara I., Sudeep Kumara K., Geetha P. V., Dileep B. N., Joshi P. James and Ravi P. M.  
5<sup>th</sup> BRNS-DAE Symposium on Nuclear Analytical Chemistry-V, Mumbai, January 20-24, 2014.
124. Thoron Mitigation Using Charcoal Based System  
Sudeep Kumara K., Karunakara, N., Yashodhara, I., Sapra B. K., Sahoo, B. K., Gaware, J. J., Kanse, S. D. and Mayya, Y. S.  
5<sup>th</sup> BRNS-DAE Symposium on Nuclear Analytical Chemistry-V, Mumbai, January 20-24, 2014. BEST PAPER AWARD
125. Studies on concentration of radionuclides in medicinal plants.  
Chandra Shekar, K., Yashodhara, I., Karunakara, N., Radhakrishna, A.P. and Somashekarappa, H.M., 2014.  
5<sup>th</sup> BRNS-DAE Symposium on Nuclear Analytical Chemistry-V (NAC-V), Mumbai, January 20-24, 2014.

126. Radiation levels and radionuclide distributions in terrestrial, atmospheric and aquatic environs of Gogi uranium mining region of north Karnataka.  
Yashodhara, I., Sudeep Kumara, K., Karunakara, N., and Tripathi, R M.  
5<sup>th</sup> BRNS-DAE Symposium on Nuclear Analytical Chemistry-V, Mumbai, January 20-24,2014.
127. Experimental and theoretical considerations for designing an optimal activated charcoal bed for <sup>220</sup>Rn mitigation.  
Sudeep Kumara, K., Karunakara, N., Sahoo, B.K., Gaware, J.J., Sapra, B.K., and Mayya, Y.S..  
First National Conference on Radiation Awareness and Detection in Natural Environment (RADNET-I). Tehari Garhwal, June 15-17. 2015
128. Study on dependence of breakthrough time on flow-rate of the carrier gas in <sup>220</sup>Rn adsorber bed.  
Sudeep Kumara, K., Trilochana Shetty., Karunakara, N., Sahoo, B.K., Gaware, J.J., Sapra, B.K., and Mayya. Y.S.  
First National Conference on Radiation Awareness and Detection in Natural Environment (RADNET-I). Tehari Garhwal, June 15-17. 2015 (BEST POSTER AWARD).
129. Natural radioactivity in soils from Challakere region, Karnataka.  
Mohan, M. P., Sudeep Kumara, K., Yashodhara, I., Karunakara, N., and Chandrashekara, A.  
First National Conference on Radiation Awareness and Detection in Natural Environment (RADNET-I). Tehri Garhwal, June 15-17. 2015.
130. Design, development and characterization of a Charcoal based thoron mitigation system for Application in thorium processing facilities.  
Sudeep Kumara, K., Karunakara, N., Sahoo, B.K., Gaware, J.J., Sapra, B.K., and Mayya, Y.S.  
Proceedings of the 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20), Mangalore University, (ISBN 978-93-82845-96-6). 2015.) (ISRP-NUCLEONIX AWARD). 2015.
131. Activity ratios of primordial radionuclides in soils of natural heavy metal mineralized region.  
Yashodhara, I., Karunakara, N., Sudeep Kumara, K., Mohan, M.P., and Tripathi R. M.  
Proceedings of the 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20), Mangalore University, (ISBN 978-93-82845-96-6). 2015.
132. Natural radioactivity in soils of Challakere region of Karnataka, India.  
Mohan, M. P., Sudeep Kumara, K., Yashodhara, I., Karunakara, N., and Chandrashekara, A.  
Proceedings of the 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20), Mangalore University, (ISBN 978-93-82845-96-6). 2015.

133. Condensational behaviour of iodine vapours in presence of aerosols.  
 Mariam, Manish Joshi, Sudeep Kumara, K., Karunakara, N., and Sapra, B. K.  
 Proceedings of the 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20), Mangalore University, (ISBN 978-93-82845-96-6). 2015.
134. A new Method of Detection of Heavy Water Leak from Heat Exchanger of PHWR by Cerenkov Photon Counting Technique.  
 Dileep, B N., Ravi, P M., Karunakara, N., Cruz, S J D., Managanvi, S S., Raichur, P G., Tripathi, R M.,  
 Proceedings of the 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20), Mangalore University, (ISBN 978-93-82845-96-6). 2015.
135. Optimization of sample weight for the estimation of <sup>14</sup>C in environmental matrices using Pyrolyser  
 Renita Shiny D'Souza, Rashmi Nayak, Srinivas Kamath, Mohan M. P., B Narayana, Dileep, B. N., Ravi, P. M., and Karunakara. N.  
 13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, KIIT University, Bhubaneswar, Odisha, India, 2017, .
136. Update on <sup>7</sup>Be and <sup>210</sup>Pb concentrations in atmospheric and terrestrial environment of Kaiga region  
 Mohan M. P., Sudeep Kumara K., Yashodhara I., and Karunakara N.  
 13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, KIIT University, Bhubaneswar, Odisha, India, 2017.
137. Tritium in air and water around Kaiga Generating Station  
 Srinivas S Kamath, B Narayana, Renita Shiny D'Souza, Rashmi Nayak, Mohan M. P., Dileep B. N., Babu Rajan A., Ravi P. M., and Karunakara N  
 13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, 2017, KIIT University, Bhubaneswar, Odisha, India. (BEST PAPER AWARD).
138. A walk-in type <sup>222</sup>Rn calibration chamber for calibration of radon and progeny measuring devices and intercomparison measurements  
 Trilochana Shetty, Somashekarppa H M, Sudeep Kumara K., Yashodhara I., Mohan M. P., Sahoo B.K., Gaware J.J., Sapra B. K. and Karunakara N.  
 13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, KIIT University, Bhubaneswar, Odisha, India, 2017.
139. Standardization of methods for determination of OBT in environmental matrices using Pyrolyser  
 Rashmi Nayak, Shiny Renita D'Souza, Srinivas Kamath, B. Narayana, Dileep, B. N., and Ravi, P. M., and N. Karunakara  
 13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, 2017, KIIT University, Bhubaneswar, Odisha, India, 2017. (BEST PAPER AWARD).

140. Standardization of an analytical method for Carbon-14 in air and its associated uncertainties.  
A. Baburajan, S.S. Dalvi, V. Sudheendran, P.M. Ravi and N. Karunakara.  
13<sup>th</sup> DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), February 6-10, 2017, KIIT University, Bhubaneswar, Odisha, India, 2017. (BEST PAPER AWARD).
141. An Advanced Calibration facility for <sup>222</sup>Rn and Progeny Measuring Devices.  
Trilochana Shetty, H. M. Somashekarappa, K. Sudeep Kumara, I. Yashodhara, M. P. Mohan, B. K. Sahoo, J. J. Gaware, B. K. Sapra and N. Karunakara .  
20<sup>th</sup> National Conference on Solid State Nuclear Track Detectors and Their Applications, 26-28, October, 2017.
142. Beryllium-7 and Lead-210 in West Coast of India.  
Mohan. M. P, Renita Shiny D'Souza, Rashmi Nayak, Srinivas S Kamath, Trilochana Shetty, K. Sudeep Kumara, Yashodhara I and Karunakara. N.  
National Conference on Reached the Unreached through Science and Technology, 8- 9 September, 2017, Mangalore University.
143. Determination of organically bound tritium in environmental matrices.  
Rashmi Nayak S, Renita Shiny D'Souza, Srinivas Kamath, Mohan M P, Bharath, Narayana B, Dileep B N, Ravi P M, and Karunakara N.  
National Conference on Reached the Unreached through Science and Technology, 8- 9 September, 2017, Mangalore University.
144. Estimation of <sup>14</sup>C Concentration in Environmental Matrices.  
Renita Shiny D'Souza, Rashmi Nayak S, Srinivas Kamath, M. P. Mohan, Bharath, B. Narayana, B. N. Dileep, P. M. Ravi and N. Karunakara.  
National Conference on Reached the Unreached through Science and Technology, 8- 9 September, 2017, Mangalore University.
145. <sup>7</sup>Be and <sup>210</sup>Pb in Soil and Vegetation in the Environment of West Coast of India.  
Mohan. M. P, Sunil Kumar. A. C, Radhakrishna A. P, Renita Shiny D'Souza, Rashmi Nayak, Srinivas S Kamath, Trilochana Shetty, K. Sudeep Kumara, Yashodhara. I and Karunakara. N.  
National Conference on Radiation Physics, NCRP-2017, 23-24 November, 2017, Bangalore University, 120.
146. Performance Evaluation of Automatic Sample Oxidation System for Organically Bound Tritium Determination in Environmental Matrices.  
Rashmi Nayak S, Renita Shiny D'Souza, Srinivas Kamath, Mohan M P, Narayana B, Dileep B N, Ravi P M, and Karunakara N.  
National Conference on Radiation Physics, NCRP-2017, 23-24 November, 2017, Bangalore University.
147. Tritium Concentration in Ambient Air Around Kaiga Nuclear Power Plant.

- Srinivas. S. Kamath, B. Narayana, Renita Shiny D'Souza, Rashmi Nayak, Mohan. M. P., Dileep B.N., Babu Rajan A, Ravi P. M and Karunakara N.  
National Conference on Radiation Physics, NCRP-2017, 23-24 November, 2017, Bangalore University.
148. Performance Evaluation of Sample Oxidation System for Carbon-14 Determination in Environmental Matrices.  
Renita Shiny D'Souza, Rashmi Nayak S., Srinivas Kamath, Mohan M. P., Narayana B., Dileep B. N., Ravi P. M., and Karunakara N.  
National Conference on Radiation Physics, NCRP-2017, 23-24 November, 2017, Bangalore University, 174
  149. Performance Evaluation of Two Oxidation Systems for Tritium Measurements in Environmental Matrices.  
Rashmi Nayak S., Renita Shiny D'Souza, Srinivas Kamath, Mohan M. P., Narayana B., Dileep B. N., Ravi P. M., and Karunakara N.  
21<sup>st</sup> National symposium on Radiation Protection (NSRP 21). 05-07 March 2018, Raja Ramanna Centre for Advanced Technology, Indore Indore, PP: 112.
  150. Site Specific Data on Water Equivalent Factor for Determination of Organically Bound Tritium Concentration.  
Rashmi Nayak S., Renita Shiny D'Souza, Srinivas Kamath, Mohan M. P., Narayana B., Dileep B. N., Ravi P. M., and Karunakara N.  
20<sup>th</sup> National symposium on Environment (NSE-20) 20-23 May 2018, PP: 461-462.
  151. A "Semi-dynamic" Technique for Achieving Temporal Stability of <sup>222</sup>Rn Concentration in a Walk-in Type of Calibration Chamber.  
S. Trilochana, K. Sudeep, M.P. Mohan, B.K. Sahoo, J.J. Gaware, B.K.Sapra, H.M. Somashekarappa, Y.S. Mayya and N.Karunakara  
21<sup>st</sup> National Symposium on Radiation Protection (NSRP 21), 5-7 March, 2018,.
  152. Importance of site specific data on total carbon content for the estimation of Carbon-14 specific activity in environmental samples  
Renita Shiny D'Souza, Rashmi Nayak S., Srinivas Kamath, Mohan M. P., Dileep, B. N., Ravi P. M., Ferrari A.D., Garcia L.A., Martinez I. G., Arevalo F. J. S., and Karunakara N.  
Proceedings of 21<sup>st</sup> National symposium on Radiation Protection (NSRP 21). 2018. PP: 113.
  153. A New Passive Method for Long Term Atmospheric Tritium Sampling Using Glycerol.  
Srinivas. S. Kamath, B. Narayana, Renita Shiny D'Souza, Rashmi Nayak, M. P Mohan, B. N. Dileep, Babu Rajan A, P. M Ravi and N. Karunakara. Proceedings of National Symposium on Radiation Physics-2018, 5-7<sup>th</sup> March, RRCAT, Indore.
  154. Evaluation of spatial homogeneity of <sup>222</sup>Rn in a walk in calibration chamber using CR-39 based passive detectors.

Trilochana, S., Sudeep, K. K., Mohan, M.P., Somashekarappa, H. M., Sahoo, B. K., Gaware, J. J., Sapra, B. K., Mayya, Y. S., Janik, M., Darwish, A., Karunakara, N  
Proceedings of 20<sup>th</sup> National symposium on Environment (NSE-20), 13 – 15 December, 2018, IIT Gandhinagar, Ahmedabad.

155. Radon as a Tracer for Estimation of Indoor Air Change Rate (ACR).  
K.Sudeep Kumara., Trilochana Shetty., M.P.Mohan., Y.S.Mayya., N.Karunakara.  
Proceedings of 20<sup>th</sup> National Symposium on Environment (NSE-20), p,455-456. 2018
156. Air sampling for Tritium measurement using ethylene glycol- Evaluation of dependence of collection efficiency with ambient temperature and humidity.  
Srinivas. S. Kamath, B. Narayana, Renita Shiny D'Souza, Rashmi Nayak, Mohan. M. P, B. N. Dileep, Babu Rajan A, Ravi P. M and N. Karunakara.  
Proceedings of 20<sup>th</sup> National Symposium on Environment-2018, 13-15<sup>th</sup>December, Indian Institute of Technology, Gandhinagar.2018.
157. <sup>14</sup>C activity in environmental matrices in west coast region of India  
Renita Shiny D'Souza, Rashmi Nayak S., Srinivas Kamath, Mohan M. P., Narayana B., Dileep, B. N., Ravi P. M., and Karunakara N.  
Proceedings of 20<sup>th</sup> National symposium on Environment (NSE-20). PP: 457-458. 2018
158. HTO and Organically Bound Tritium (OBT) in Marine Ecosystems at Tarapur  
A.Baburajan,V.Sudheendran, R.H.Gaikwad, P.M. Ravi and N. Karunakara  
Proceeding of 20<sup>th</sup> Biennial DAE BRNS Symposium on Nuclear and Radiochemistry (NUCAR-2019), January15-19, 2019, at BARC, Mumbai Page No: 281

**d. Conference Presentations (Abstracts)**

159. Alpha counting techniques in environmental radioactivity investigations  
Avadhani D. N., Narayana Y., Karunakara N., Somashekarappa H. M., Mahesh H. M. and Siddappa K. *National Symposium on One Hundred years of Electron Discovery (NSED-97)*, Kuvempu University, Shimoga, India, Dec. 29-30, 1997.
160. GERMON Station at Mangalore University - A Nodal Centre.  
Somashekarappa H. M., Narayana Y., Mahesh H. M., Karunakara N., Avadhani D. N. and Siddappa K.  
*National Symposium on One Hundred years of Electron Discovery (NSED -97)*, Kuvempu University, Shimoga, India, Dec. 29-30, 1997.
161. Gamma spectrometry for probing the environment.  
Karunakara N., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M., Balakrishna K. M. and Siddappa K.  
*National Symposium on One Hundred years of Electron Discovery (NSED-97)*, Kuvempu University, Shimoga, India, Dec. 29-30, 1997.
162. Low background high efficiency beta counting system for low level counting

- Mahesh H. M., Somashekarappa H. M., Karunakara N., Avadhani D. N. and Siddappa K.  
*National Symposium on One Hundred years of Electron Discovery (NSED -97)*, Kuvempu University, Shimoga, India, Dec. 29-30, 1997.
163. Natural alpha activity in the environment of Kaiga  
Karunakara N., Somashekarappa H. M., Narayana Y., K. M. Balakrishana and Siddappa K.  
*National seminar on Radiation, Environment and Man*, Mysore University, Mysore, India, Oct. 8-9, 1992.
164. Natural radiation level in the environment of Goa  
Avadhani D. N., Mahesh H. M., Karunakara N., Somashekarappa H. M., Narayana Y., Balakrishna K. M. and Siddappa K.  
*Seminar on Impact of Discovery of Radioactivity on Modern Society (IDRMS-96)*, Kuvempu University, Shimoga, India, Nov. 4-5, 1996.
165. Radiation dose due to radon daughters in Mangalagangothri  
Mahesh H. M., Avadhani D. N., Karunakara N., Somashekarappa H. M., Narayana Y., Balakrishna K. M. and Siddappa K.  
*Seminar on Impact of Discovery of Radioactivity on Modern Society (IDRMS-96)*, Kuvempu University, Shimoga, India, November 4 -5, 1996.
166. Radium-226 and Po-210 activities in Kaiga environs  
Karunakara N., Balakrishna K. M., Somashekarappa H. M., Narayana Y., Avadhani D. N., Mahesh H. M. and Siddappa K.  
*Seminar on Impact of Discovery of Radioactivity on Modern Society (IDRMS-96)*, Kuvempu University, Shimoga, India, Nov. 4 -5, 1996.
167. Cesium-137 and Strontium-90 concentration in coastal Karnataka and Kaiga environs  
Karunakara N., Narayana Y., Somashekarappa H. M., Radhakrishna A. P., Avadhani D. N., Mahesh H. M., Balakrishna K. M. and Siddappa K.  
*National Seminar on Coastal Zone Environment Management: an appraisal of the contemporary research and development*, Mangalore University, Mangalore, India, Feb. 12-14, 1997.
168. Radon and thoron progeny concentrations in dwellings in the environment of Mangalore  
Somashekarappa H. M., Karunakara N., Mahesh H. M., Avadhani D. N. and Siddappa K.  
*National Symposium on prospectus and problems of environment in the new millennium*, Mangalore University, Mangalore, India, Dec. 14-16, 2000.
169. Concentration and distribution of polonium-210 in air and water samples in the environment of coastal Karnataka and Kaiga  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N. and Siddappa K.  
*National Symposium on prospectus and problems of environment in the new millennium*, Mangalore University, Mangalore, India, Dec. 14-16, 2000.
170. Distribution of natural radionuclides in potable waters of Goa environs.  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N. and Siddappa K.

*National Symposium on Emerging Trends in Radiation Sources and their Applications*, Kuvempu University, Shimoga, India, January 9-10, 2001

171. Concentrations of  $^{210}\text{Po}$  and  $^{210}\text{Pb}$  in atmosphere in the environment of coastal Karnataka and Kaiga.  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N. and Siddappa K. *National Symposium on Emerging Trends in Radiation Sources and their Applications*, Kuvempu University, Shimoga, India, Jan. 9-10, 2001
172. Uranium concentration in water samples in the environment of coastal Karnataka and Kaiga.  
Mahesh H. M., Avadhani D. N., Somashekarappa H. M., Karunakara N. and Siddappa K. *National Seminar on Atomic Energy, Ecology and Environment*, Jamal Mohammed College, Tiruchirappalli, India, Feb. 8-9, 2001.
173. Natural radiation level and radionuclides distribution in beach sand of Goa.  
Avadhani D. N., Mahesh H. M., Somashekarappa H. M., Karunakara N. and Siddappa K. *National Seminar on Atomic Energy, Ecology and Environment*, Jamal Mohammed College, Tiruchirappalli, India, Feb. 8-9, 2001.

**e. Books/editing the proceedings**

1. Edited the proceedings of the 2<sup>nd</sup> International Conference on Po and radioactive Pb isotopes (INCOPoPb-2013), Mangalore University, February 10-13, 2013.  
Karunakara N. and Mark Mahalingam Baskaran (Annexure 12)
2. Edited the book of abstracts of the 30<sup>th</sup> IARP National Conference (IARPNC-2012), Mangalore University, March 15-17, 2012.  
D. N. Sharma, N. Karunakara, Pushparaja, M. S., Kulkarni, D. S. Patkulkar, V. D. Puranik, R. G. Purohit, P. M. Ravi, Manish K. Mishra, Sugandhi Suresh (Annexure 13).
3. Edited the book of proceedings of 20<sup>th</sup> National Symposium on Radiation Physics (NSRP-20). "Radiation Measurements: Challenges in lowering of detection limits". Mangalore University, during Oct 28-30, 2015.  
Karunakara. N. Sapra B. K., Mayya, Y. S. and Kannan. V. ISBN 978-93-82845-96-6 ((Annexure 14).
4. Edited Book of proceedings of the conference on "Applications of Radioisotopes and radiation Technology". Nov. 29-30, 2006, Mangalore University.  
N. Shivaprasad, P. J. Chandy, T. K. Jayakumar, H. M. Somashekarappa and N. Karunakara

**f. Reports/ Popular articles other types publications**

1. Studies on radioactivity in atmospheric and aquatic environs of Coastal Karnataka, Kaiga and Goa  
Siddappa K., Somashekarappa H. M., Narayana Y., Karunakara N.  
BRNS, DAE, Govt. of India sponsored Research Project Report (1995-99).
2. To study radon/thoron levels in Mangalore area  
Siddappa K., Somashekarappa H. M., Narayana Y., Karunakara N.



- BRNS, DAE, Govt. of India sponsored coordinated Research Project Report (1996-2000).
3. Studies on environmental radioactivity and impact assessment of Kaiga power reactors (2000-2004)  
Siddappa K., Somashekarappa H. M., Narayana Y. and Karunakara N.  
BRNS, DAE, Govt. of India sponsored Research Project Report (1996-2000), sponsored by BRNS, DAE, Govt. of India, 2004.
  4. Studies on site specific transfer factors for radionuclides and trace elements in Kaiga region  
Karunakara N, Chetan Rao, Yashodhara I., Ujwal P. and Ravi P. M.  
BRNS, DAE, Govt. of India sponsored Research Project Report (2006-10).
  5. Baseline database on radiation level, radionuclides and trace elements concentration in environmental matrices around Gogi  
Karunakara N., Yashodhara I., and Tripathi R. M.  
BRNS, DAE, Govt. of India sponsored Research Project Report (2010-13).
  6. Study of  $^{220}\text{Rn}$  adsorption in charcoal and vegetable oils for  $^{220}\text{Rn}$  mitigation application in off-gas stream  
Karunakara N, Sudeep Kumara, Sahoo B. K., Sapra B. K. and Mayya Y. S.  
BRNS, DAE, Govt. of India sponsored Research Project Report (2010-13).