1	Name of Faculty	Dr. K VINAY KUMAR REDDY
2	Designation	Associate Professor
3	Nature of Job/Appointment	Regular
4	Date of Joining	11 - 02 - 2008
5	E-mail	kvinay_physics@cbit.ac.in
6	Education Qualifications	Name of the Degree Class
	Ph. D	Doctor of Philosophy (Physics) Awarded
	PG	M. Sc First with
	UG	B. Sc. First
7	Work Experience	
	Teaching	16 Years
	Research	21 years
	Industry	
	Others	
8	Area of Specialization	Environmental Radioactivity
9	Professional Memberships	LM, Indian Association of Physics Teachers
10	Responsibilities held at Institution Level	<ol> <li>Member, Hostel Committee</li> <li>Member, Admissions Committee</li> <li>Member, IQAC</li> <li>Co-in-Charge, Academic and Examinations Cell (from 16.10.2017 till April, 2023)</li> <li>Mentor, Student Induction Program (2019-20, 2018-19,</li> </ol>
11	Responsibilities held at Department	2017-18) 1. In-Charge, Time Table
12	Research Guidance	
13	Awards Received	<ol> <li>Junior Research Fellowship, Atomic Energy Regulatory Board sponsored research project</li> <li>Young Scientist Fellowship, Andhra Pradesh State Council of Science and Technology</li> </ol>
14	Courses Handled at Under Graduate / Post Graduate Level.	Waves, Optics and Introduction to Quantum Mechanics; Optics and Semiconductor Physics; Engineering Physics; Applied Physics and Labs
15	No. of Papers Published	National Journals – 06 International Journals – 18
		National Conference – 03 International Conference – 05
16	Projects Carried out	<ol> <li>Telangana State Council of Science and Technology Sponsored Research Project (Grant Rs. 5, 00, 000/- No. Lr.No.4/TSCOST/LSR PROJ/2016-17, dated 18-03-2017)</li> <li>Telangana State Council of Science and Technology Sponsored Research Project (Grant Rs. 75, 000/- TSCOST No.3/TSCOST/DST- PRG/2021-22 dated 21.03.2022)</li> </ol>
17	Patents	
18	Technology Transfer	
19	Invited Speaker	
20	No. of Books/Chapter Published with details	
21	Details of Short-Term Training Programs/Faculty Development	

Programs/Seminars/ Workshops. Other Trainings (Attended and/or Organized).

- 1. One Week Faculty Development Programme on Data Science in Engineering (June 5-9, 2023) NITTTR
- 2. Raspberry Pi and its Interfacing, (Feb 27 Mar 03, 2023), NITTTR
- One Week Faculty Development Programme on Fundamentals of Technology Enabled Learning (February 20-24, 2023) NITTTR
- 4. Smart Materials Processing and Applications (July 25-29, 2022) NITTTR
- 5. International e-conference on recent advances in chemical, physical and biological sciences
- 6. National e-seminar on IPR and patent filing
- 7. Five Day National Level Webinar Series on New Educational Policy 2020
- 8. ICT tools for effective teaching learning
- 9. AICTE-STTP-Series-II: Fabrication and Characterization of Nanoelectronic Devices
- 10. FDP on recent trends in advanced materials and engineering technology
- **11. ATAL academy FDP on Quantum Computing**
- 12. 5-day Online FDP on Universal Human Values for DEEKSHARAMBH (Student Induction Program)
- 13. International e-Conference on Materials Processing & Characterization (ICMP&C-2020)
- 14. One Week Online Faculty Development Programme on "Student Induction and Universal Human Values"
- 15. One Day National level Webinar in Physics on "Innovative practices of Teaching & Learning in Sciences"
- 16. One Week Online FDP on "Engineering Physics and Materials Science",
- Successfully completed the "Effective and efficient teaching in the age of Corona, A hands on Workshop" on 23rd May 2020 organized by IITB
- 14. Successfully completed a course on "Learning Physics through Simple Experiments" organized by IIT, Kanpur (April 02 -June 10, 2020)
- 15. Short Term Training Programme through ICT Mode on "Development of Laboratory Instruction" organized by NITTTR, Kolkata from 08/06/2020 to 12/06/2020 [duration: 1 Week]
- 16. A One Week Online Faculty Development Program on "Materials: Recent Trends and Engineering Applications", during 02nd to 07th June, 2020 organized by GRIET.
- 17. A One Week Faculty Development Program on "Outcome based Education and NBA accreditation process (UG)", during 28th May to 1st June, 2020 organized by CBIT.
- A One Week Faculty Development Program on "Advanced \*NDT techniques & Applications in Industry", during 25th -29th May, 2020 organized by Indian Society for Non-Destructive Testing, Hyderabad chapter.
  - 19. One day Seminar on "Physics and its applications in Engineering" held on March 13, 2019 at Chaitanya Bharathi Institute of Technology, Hyderabad.
  - 20. STTP through ICT mode on Development of laboratory instruction and manual organized by NITTTR from 04.02.2019 to 08.02.2019.
  - 21. 4th National Conference on Applied Physics and Materials Science (AMPS-17) held during March 10-11, 2017.

Details of Journal Publications/ 22 Conferences (National and International) (Latest)

## International Journal

1. K. Vinay Kumar Reddy, G. Srinivas Reddy, P. Muralikrishna, S. Shravan Kumar Reddy, and B. Sreenivasa Reddy. "Natural background outdoor gamma radiation levels and mapping of associated

risk in Siddipet district of Telanagana State, India." Nuclear and Particle Physics Proceedings 339 (2023): 114-119. (Elsevier)

- Suman, G., M. Sreenath Reddy, K. Vinay Kumar Reddy, Ch Gopal Reddy, and P. Yadagiri Reddy. "Natural background gamma radiation levels: A village, Peddamula, in the vicinity of proposed uranium mineralized area, Nalgonda District, Telangana State, India." Nuclear and Particle Physics Proceedings 339 (2023): 5-9. (Elsevier)
- Srinivas Reddy, G., K. Vinay Kumar Reddy, B. Sreenivasa Reddy, B. Linga Reddy, M. Sreenath Reddy, Ch Gopal Reddy, and P. Yadagiri Reddy. "Mapping of ambient gamma radiation levels and risk assessment in some parts of Eastern Deccan Plateau, India." International Journal of Environmental Analytical Chemistry 103, no. 17 (2023): 5355-5367. (Taylor and Francis)
- Suman, G., K. Vinay Kumar Reddy, M. Sreenath Reddy, D. Vidyasagar, Ch Gopal Reddy, and P. Yadagiri Reddy. "Dose assessment due to natural gamma radiation levels and radioactive nuclides in the environment of Dasarlapally, Nalgonda District, Telangana State, India." International Journal of Environmental Analytical Chemistry 102, no. 19 (2022): 7409-7418. (Taylor and Francis)
- G. Suman, K. Vinay Kumar Reddy, M. Sreenath Reddy, Ch. Gopal Reddy and P. Yadagiri Reddy (2021). Radon and thoron levels in the dwellings of Buddonithanda: a village in the environs of proposed uranium mining site, Nalgonda district, Telangana state, India. Scientific Reports, 11, 6199. <u>https://doi.org/10.1038/s41598-021-85698-1</u>. (Nature Publishing Group)
- M. Srinivas Reddy, G. Suman, K. Vinay Kumar Reddy, M. Sreenath Reddy, Ch. Gopal Reddy and P. Yadagiri Reddy (2021). Natural background gamma radiation dose estimation in the surrounding villages of Devarakonda Town, Telangana State, India. J Radioanal Nucl Chem (2021). https://doi.org/10.1007/s10967-021-07875-w (Springer)
- B Linga Reddy, G Srinivas Reddy, K Vinay Kumar Reddy, B Sreenivasa Reddy (2021). Inhalation dose due to residential radon and thoron exposure in rural areas: a case study at Erravalli and Narasannapet model villages of Telangana state, India. Radiat Environ Biophys 60, 437–445 <u>https://doi.org/10.1007/s00411-021-00912-y</u> (Springer)
- G. Srinivas Reddy, K. Vinay Kumar Reddy, B. Sreenivasa Reddy, B. Linga Reddy, M. Sreenath Reddy, Ch. Gopal Reddy & P. Yadagiri Reddy (2021) Assessment of indoor radon activity concentration levels in four northern districts of Telangana state, India. J Radioanal Nucl Chem (2021) https://doi.org/10.1007/s10967-021-07929-z. (Springer)
- G. Suman, K. Vinay Kumar Reddy, M. Sreenath Reddy, Ch. Gopal Reddy and P. Yadagiri Reddy (2021) Estimation of natural background gamma radiation dose in the environs of uranium mineralized area: A case study at Megavath Thanda, Nalgonda District, Telangana State, India, AIP Conference Proceedings, 2352, 050006, <u>https://doi.org/10.1063/5.0052401</u>
- M. Srinivas Reddy, G. Suman, K. Vinay Kumar Reddy, M. Sreenath Reddy, Ch. Gopal Reddy and P. Yadagiri Reddy (2021) Ambient Natural Gamma Radiation Dose Measurement in Devarakonda Town, Nalgonda district, India, AIP Conference Proceedings, 2352, 050007, <u>https://doi.org/10.1063/5.0052396</u>
- G. Srinivas Reddy, K. Vinay Kumar Reddy, B. Sreenivasa Reddy, B. Linga Reddy, M. Sreenath Reddy, Ch. Gopal Reddy and P. Yadagiri Reddy (2021) Thoron studies in dwellings of certain northern districts of Telangana State, India, AIP Conference Proceedings, 2352, 050008; <u>https://doi.org/10.1063/5.0052399</u>
- K Vinay Kumar Reddy, Reddy BS, Reddy BL. (2020) Natural background gamma radiation levels in dwellings constructed under the Double Bedroom Housing Scheme at Erravalli and Narasannapet model villages of Telangana state, India. Indoor and Built Environment., 29(7):1038-1044. doi:10.1177/1420326X19865998 (Sage)
- G Suman, K Vinay Kumar Reddy, M Sreenath Reddy, Ch Gopal Reddy, P Yadagiri Reddy, (2020)Indoor radon and thoron in the vicinity of proposed uranium mining site: A case study at Dasarlapally village, Telangana state, India, Radiation Protection Dosimetry, Volume 189, Issue 2, April 2020, Pages 205–212, <u>https://doi.org/10.1093/rpd/ncaa032</u> (OXford University Press)
- G. Srinivas Reddy, K. Vinay Kumar Reddy, B. Sreenivasa Reddy (2016). Preliminary Results of Radiological Impact Studies on the Usage of Granites in Hyderabad, Telangana State, India. Universal Journal of Geoscience, 4(4), 89 - 92. DOI: 10.13189/ujg.2016.040402.
- 15. K. Vinay Kumar Reddy, Reddy, M. S., Reddy, C. G., Reddy, P. Y., & Reddy, K. R. (2012). Spatial and vertical distribution of radon and thoron in a typical Indian dwelling. Journal of Radioanalytical and Nuclear Chemistry, 292(3), 1089-1092. (Springer)
- Vinay Kumar Reddy, K., Gopal Reddy, C., Vidya Sagar, D., Yadagiri Reddy, P., & Rama Reddy, K. (2012). Environmental radioactivity studies in the proposed Lambapur and Peddagattu uranium mining areas of Andhra Pradesh, India. Radiation protection dosimetry, 151(2), 290-298. (OXford University Press)
- Sreenivasa Reddy, B., Vinay Kumar Reddy, K., Gopal Reddy, Ch., Yadagiri Reddy, P. and Rama Reddy, K. (2012) Radon and Thoron levels in fertilizer stockyards of urban Hyderabad, India. Advances in Applied Research, 4 (1), Pages 5-9.
- Vinay Kumar Reddy, K., Sreenivasa Reddy, B., Sreenath Reddy, M., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K. (2003). Baseline studies of radon/thoron concentration levels in and

around the Lambapur and Peddagattu areas in Nalgonda district, Andhra Pradesh, India. Radiation Measurements, 36(1-6), 419-423. (Elsevier)

## National

- Suman, G., M. Sreenath Reddy, K. Reddy, Ch Gopal Reddy, and P. Yadagiri Reddy. "Radiological Risk Assessment due to Radon and Thoron in the Dwellings of Peddamula Village, Nalgonda District, Telangana, India." (2023).
- Reddy, G. Srinivas, K. Vinay Kumar Reddy, B. Linga Reddy, and B. Sreenivasa Reddy. (2019) Natural Background Gamma Radiation Levels in the Environs of Proposed Petro-chemical Industry Near Jadcherla, Telangana State, India. Nature Environment and Pollution Technology, 18, no. 4, 1333-1338.
- 21. Srinivas Reddy G, Vinay Kumar Reddy K, Sreenivasa Reddy B, Ch. Gopal Reddy, Yadagiri Reddy P, Rama Reddy K. (2015) Preliminary Investigation on Natural Background Radiation Levels in and around Karimnagar, Telangana State, India. Science & Technology, 1(2), 80-83.
- 22. Vinay Kumar Reddy, K., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K. (2006). Study on radon and thoron levels in different types of dwellings of Lambapur area of Nalgonda District, AP, India. Environmental Geochemistry, 9(1), 109-111.
- 23. Yadagiri Reddy, P., Vinay Kumar Reddy, K., Gopal Reddy, C., & Rama Reddy, K. (2005). Indoor radiation levels in the proposed uranium mining areas of Andhra Pradesh, India. Environmental Geochemistry, 8(1-2), 104-107.
- Vinay Kumar Reddy, K., Sreenivasa Reddy, B., Sreenath Reddy, M., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.(2003). Natural radioactivity levels in some villages near Nagarjuna Sagar, Nalgonda, Andhra Pradesh. Radiation Protection and Environment, 26(1-2, pt. 2), 488-491.

## Proceedings in Books

- G. Srinivas Reddy, K. Vinay Kumar Reddy, M. Sreenath Reddy, B. Linga Reddy, B. Sreenivasa Reddy (2020) Natural Background Gamma Radiation Levels in few dwellings of RajannaSircilla district, Telangana State, India. Proc. International e-conference on materials processing and characterization.
- B. L. Reddy, K. V. K. Reddy, G. S. Reddy, B. S. Reddy. (2020) Radon levels in different mining environs of Telangana state, India: A review, 1st International Conference on Advances in Science Hub.
- 27. G. S. Reddy, K. V. K. Reddy, B. S. Reddy, B. L. Reddy. A comprehensive review on statistical evaluation of student performance in online teaching, 1st International Conference on Advances in Science Hub.
- Sreenivasa Reddy, B., Vinay Kumar Reddy, K., Vidya sagar, D., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.Correlation Studies on Environmental Radioactivity Levels in Khammam District of Andhra Pradesh, India. In Geo Hazards: Recent Research Editors: R.C. Ramola, G. S. Gusain 2015
- Vinay Kumar Reddy, K., Sreenivasa Reddy, B., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.Natural Background Radiation levels in Telangana: A bird view. Proc. 2<sup>nd</sup> National Conference on Applied Physics and Materials Science.2014
- Sreenivasa Reddy, B., Vinay Kumar Reddy, K., Vidya sagar, D., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.Natural Radioactivity levels in the soil samples of Khammam District, Andhra Pradesh.Mitigation of pollutants for clean environment (Nat. Symp on Environment).2007
- Vinay Kumar Reddy, K., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.A study on the indoor inhalation doses in the environs of Lambapur and Peddagattu areas of AP, India.Proc. Nat. Symp. Environ., 2004
- Sreenivasa Reddy, B., Vinay Kumar Reddy, K., Gopal Reddy, C., Yadagiri Reddy, P., & Rama Reddy, K.Estimation of Gamma radiation levels in fertilizer stockyards of Hyderabad, AP, India using TLDs. Proc. ICLA-2004