P.E.S. College of Engineering, Mandya - 571401

(An Autonomous Institution, affiliated to VTU, Belagavi)

Faculty Profile

General

Name	*Dr. T. S. Shashikumar*
Designation,	*Assistant Professor*
Department & Affiliated Institution	*Department of Physics, P.E.S College of Engineering, Mandya – 571 401*
Research Area	*Environmental Radioactivity*
Contact Number	*+91 9880279750*
Email ID	*shashi.mu@gmail.com*

Academic Profile

Educational Qualifications

Degree	College	University	Year of Passing	% ge	Class
Ph. D	*Department of Studies in Physics*	*University of Mysore, Mysuru*	*2010*	-	-
M. Sc.,	*Department of Studies in Physics*	*University of Mysore, Mysuru*	*2004*	*64*	*I - Class*
B. Sc.,	*Yuvaraja's College*	*University of Mysore, Mysuru*	*2002*	*53*	*II - Class*

Professional Experience

Organization & Department	Designation	Period	Total Experience
Department of Studies in Physics, University of Mysore, Mysuru	*Research Scholar*	*2005-2009*	*4 Years*
BETHE, Bharathinagara, Mandya District	*Asst. Professor*	*2011-2014*	*3 Years*
P.E.S. College of Engineering, Mandya	*Assistant Professor*	*2014 to Till date*	*6 year 6 months*

Reports on Academic and Research Activities

Academic Activities

Course/Topic Taught	Teaching Records (Details of courses taught)
B.E.	***B.E.: Engineering Physics :*** *Unit – II :Elastic & Dielectric properties of materials, Unit – IV : Lasers & Optical fibers, Unit – V : Superconductivity* ***B.E.: Practicals:*** *12 Experiments were completed in each semester in different branches* ***B.E.: Open Elective:*** *Unit – I: Nuclear reactions, Unit – II: Interaction of Nuclear Radiation with matter and Unit – III: Detector for Nuclear Radiations.*

Research Guidance (Candidates Awarded / Pursuing Ph.D / M.Sc., Engg.)

Degree	Ph. D.	M.Sc., Engg.
Awarded	*Nil*	*Nil*
Pursuing	*02*	*Nil*

Sponsored Research Projects (List of Projects taken up /completed and funds receiver & funding sources)

Project Title	Project Funded by	Grants Sanctioned	Grants Received
Nil	*Nil*	*Nil*	*Nil*

Research Publications in Refereed Journals and Conferences/Symposia

No. of Publications in	National	International
Journals	*07*	*09*
Conferences/Symposia	*06*	*02*

Other Important Responsibilities held in the College

1. *Coordinator for NBA Criterion-8, (2019-2020).*
2. *Department Coordinator for IQAC.*
3. *Department Coordinator for Research Activity.*
4. *BoS & BoE member.*
5. *Department Coordinator for Learning Management System.*
6. *Department Coordinator for ICT Academy, PESCE.*

LIST OF PUBLICATION

I. List of Papers published in National & International Journals:

1. Ashok, G. V., Narasimhamurthy, K. N., **Shashi kumar, T. S.,** Nagaiah, N., and Karthik kumar, M. B. (2020). A Study on the radiation dose due to dissolved ^{222}Rn in water samples of Mandya city, Karnataka, India. (**Communicated to Journal of Radiation Measurements on 7th September 2020**).
2. Yashaswini, T., Ningappa, C., Subbaramu, M. C., Niranjan, R. S., **Shashikumar, T. S.,** and Suresh, S. (2020). Studies on radon and thoron levels in few dwellings of Kabini River Basin, Karnataka State, India. Journal of Radioanalytical and Nuclear Chemistry, ISSN: 0236-573X, pp 01-11. DOI: 10.1007/s10967-020-07328-w.
3. Narasimhamurthy, K. N., Ashok, G. V., **Shashikumar**, **T. S.,** and Nagaiah, N. (2020). Studies on ^{222}Rn and ^{220}Rn concentrations in some dwellings of Mandya city and its surroundings, Karnataka, India. Indoor and Built Environment, UK, ISSN: 1420-326X**,** pp 1-10. DOI: 10.1177/1420326X20931590.
4. **Shashikumar, T. S.**, Ningappa, C., Shivalinge Gowda, and Chandrasekhar. (2020). Studies on gamma dose rates in indoor and outdoor environment of Hassan city, Karnataka. Radiation Protection Dosimetry, UK, ISSN: 0144-8420, Volume 188 Issue 4, pp 516-521. DOI:10.1093/rpd/ncaaa03.
5. **Shashikumar, T. S.**, Revanna, S., Ramachandra, M. N., Ashok, G. V., Ningappa, C., and Shivalinge Gowda. (2019). Measurement of Radon soil gas in and around Bharathinagara, Mandya District. Radiation Protection Dosimetry, UK, ISSN: 0144-8420, Volume 187 Issue 1, pp 83-87, DOI:10.1093/rpd/ncz143.
6. Ashok, G. V., Nagaiah, N., Narasimhamurthy, K. N., Manjunatha, H. C., Prema, A. N., **Shashikumar**, **T. S.,** Madhukeshwara, R. S. (2018). The study of effective atomic number and electron densities of some steel alloy coronary stents. (Intellectuals Society for Socio-Techno welfare) ISST Journal of Applied Physics, ISSN: 0976-903X, Volume 9 Issue 1, pp 42-43.
7. Govindaiah, T. N., Ramakrishna, B. N., and **Shashikumar, T. S.** (2018). Electro-optical phase transition studies of chiral smectic phase of nematic and cholesteric materilas. Asian Journal of Science and Applied Technology, ISSN: 2249-0698, Volume 7 Issue 2, pp 24-26.
8. Narasimhamurthy, K. N., Ashok, G. V., Prema, A. N., **Shashikumar, T. S.,** and Madhukeshwara, R. S. (2018). Photon interaction studies of cobalt alloy steel stents in the energy range 1 KeV to 100 GeV. Tumbe Group of International Journals (A Multidisciplinary Journal), ISSN: 2581-8511, Volume 1 Issue-2, pp 16-19.
9. **Shashikumar**, **T. S.** Radon Concentration in the Water Samples of Hassan District, Karnataka, India. (2016). International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, Volume 10 Issue 8, pp 1028-1032.
10. Chandrashekar, Radhika, R. T., Venkatesha, B. M., Ananda, S., Shivalingegowda, **Shashikumar, T. S.,** and Ramachandra, H. (2016). Oxidation of Amitriptyline by Bromamine-T in Acidic Buffer Medium: A

kinetic and Mechanistic Approach. International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, Volume 10 Issue 8, pp 1070-1075.

11. Shivakumara, B. C., Chandrashekara, M. S., Paramesh, L., **Shashikumar, T. S.,** and Karunakara, N. (2014). Analysis of ^{226}Ra, ^{232}Th and ^{40}K in the host rock and the soil samples and assessment of radiological risks for Mandya region, India. International Journal of Integrative Sciences, Innovation and Technology, ISSN: 2278-1145, Volume 3 Issue 2, pp 18-24.
12. **Shashikumar, T. S.**, Chandrashekara, M. S., and Paramesh, L. (2014). Radioactivity Concentration of ^{226}Ra, ^{232}Th and ^{40}Kin Soil, Rock and Water samples around Mysore city and its Biological Effects. International Research Journal of Applied sciences, ISSN: 2348-9022, Volume 1 Issue 1, pp 22-25.
13. **Shashikumar, T. S.**, Chandrashekara, M. S., and Paramesh, L. (2011). Studies on Radon in soil gas and Natural radionuclides in soil, rock and ground water samples around Mysore city. International Journal of Environmental Sciences, ISSN: 0976-4402, Volume 1 Issue 5, pp 786-797.
14. **Shashikumar, T. S.**, Chandrashekara, M. S., Nagaiah, N., and Paramesh, L. (2009). Variations of Radon and Thoron concentrations in different types of dwellings in Mysore city, India. Radiation Protection Dosimetry, UK, ISSN: 0144-8420, Volume 133 Issue 1, pp 44-49. DOI: 10.1093/rpd/ncp001.
15. **Shashikumar, T. S.**, Ragini, N., Chandrashekara, M. S., and Paramesh, L. (2009). Radon in soil and its concentration in the atmosphere around Mysore. Indian Journal of Physics, ISSN: 0973-1458, Volume 83 Issue 8, pp 1163-1169.
16. Shivakumara, B. C., Paramesh, L., **Shashikumar, T. S.,** and Chandrashekara, M. S. (2012). Study on natural radioactive elements in soil and rock samples around Mandya district, India. Journal of Radiation Protection and Environment, ISSN: 0972-0464, Volume 35 Issue 1, pp 29-33.
17. Chandrashekara, M. S., Rajesh, B. M., **Shashikumar, T. S.,** and Paramesh, L. (2010). Variations of ion pair production rate and inhalation dose due to radon and its progeny at different locations in Mysore city, India. Indian Aerosol Science and Technology Association Bulletin, ISSN: 0971-4570, Volume 19 Issue 1&2, pp 283-288.
18. **Shashikumar, T. S.**, Chandrashekara, M. S., Ragini, N., Rajesh, B. M., and Paramesh, L. (2010). Studies on variations of trace gases and particulate matters in Mysore City, India. Indian Aerosol Science and Technology Association Bulletin, ISSN: 0971-4570, Volume 19 Issue 1&2, pp 579-581.
19. **Shashikumar, T. S.**, Ragini, N., Chandrashekara, M. S., and Paramesh, L. (2008). Studies on radon in soil, its concentration in the atmosphere and gamma exposure rate around Mysore city, India. Current Science, ISSN No: 0011-3891, Volume 94 Issue 9, pp 1180-1185.
20. Ragini, N., Chandrashekara, M. S., Paramesh, L., **Shashikumar, T. S.,** and Sannappa, J. (2008). Atmospheric electrical conductivity near the ground surface related to radioactivity and air pollution at three different locations in Mysore. Environmental Science: An Indian Journal, ISSN No: 0974-7451, Volume 3 Issue 1, pp 64-70.
21. Ragini, N., **Shashikumar**, **T. S.,** Chandrashekara, M. S., Sannappa, J., and Paramesh, L. (2008). Temporal and vertical variations of atmospheric electrical conductivity related to radon and its progeny

concentrations at Mysore. Indian Journal of Radio and Space Physics, ISSN: 0367-8393, Volume 37 Issue 4, pp 264-271.

22. Ragini, N., **Shashikumar**, **T. S.,** Chandrashekara, M. S., and Paramesh, L. (2007). Studies on atmospheric electrical conductivity related radon and its progeny concentrations at two different places in Mysore (12^{o} N, 76^{o} E), India. Indian Aerosol Science and Technology Association Bulletin, ISSN: 0971-4510, Volume 18 Issue 1&2, pp 234-236.

II. List of Papers published in National & International Symposium/Conferences:

23. Ashok, G. V., Nagaiah, N., Narasimhamurthy, K. N., Manjunatha, H. C., Prema, A. N., **Shashikumar**, **T. S.,** Madhukeshwara, R. S. (2018). Photon interaction studies of Cr-Ni-Mo steel alloy coronary stents in the energy range 1 KeV to 100 GeV. Proceedings of National Conference on Radiation Physics and its applications in Material Science and Medicine, ISBN: 978-93-5682-405-8, Volume II, pp 69-70.
24. Shivakumara, B. C., Chandrashekara, M. S., Paramesh, L., and **Shashikumar**, **T. S.** (2014). Analysis of ^{226}Ra and ^{222}Rn concentration in natural water of Mandya District, Karnataka State, India. Proceedings of National Seminar on Materials science and Engineering, ISBN: 978-81-929372-0-5, pp 40-43.
25. **Shashikumar**, **T. S.,** Shivakumara, B. C., Pruthvi Rani, K. S., Chandrashekara, M. S., and Paramesh, L. (2013). Studies on variation of ^{222}Rn/^{220}Rn and their decay products in few villages around Mysore city, India. Current perspectives on Environmental protection, Proceedings of Eighteenth National Symposium on Environment, BARC, ISBN: 978-81-7800-287-3, pp 163-166.

III. Awards & Fellowships:

- **Senior Research Fellow:** University Grant Commission - Rajiv Gandhi National Fellowship for SC/ST candidates (2007-2010).
- **Junior Research Fellow:** University Grant Commission - Rajiv Gandhi National Fellowship for SC/ST candidates (2005-2007).
- **Junior Research Fellow:** University Post-graduate Research Fellowship awarded by Special Cell for SC/ST candidates, University of Mysore (2005-2007).
- **Best Poster Presentation Award** for the research paper "Radon in soil and its concentration in the Atmosphere around Mysore", in Fifteenth National Symposium on Solid State Nuclear Track Detectors and Their Applications (SSNTD-15) held on June 21-23, 2007 by Department of Physics, H.N.B. Garhwal University, Badshahi Thaul Campus, Tehri Garhwal, Uttaranchal, India.
- **Best Oral Presentation Award** for the research paper "Radon concentration in the water samples of Hassan district, Karnataka, India", in 18th International Conference on Applied Physics (ICAP-2015) held by World Academy of Science, Engineering and Technology (WASET) - An International Scientific Research and Experimental Development Committee), at Wembley, London, United Kingdom during August 25-26, 2016.

- **"Chaired a Session"** in 18th International Conference on Applied Physics (ICAP-2015) held by World Academy of Science, Engineering and Technology (WASET) - An International Scientific Research and Experimental Development Committee), at Wembley, London, United Kingdom during August 25-26, 2016.