

Dr. TEJBIR SINGH

Associate Professor & Head
Department of Physics
Sri Guru Granth Sahib World Univerity
Fatehgarh Sahib – 140407,
Punjab, INDIA.



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E-mail Address : dr.tejbir@gmail.com

Residential Address: S/o S. Surjit Singh
103, Professor Colony
Opp. Punjabi University
Patiala - 147004, Punjab.

Date of Birth : April 3rd, 1978

Sex : Male

Marital Status : Married

EDUCATIONAL QUALIFICATION:

Doctorate of Philosophy in Physics (2007) Awarded

Specialization : **Radiation Physics**
Topic of the Thesis : **Study of Multiple Scattering of Gamma Rays in Composite Materials**
Supervisor (s) : Dr. Gurmel Singh and Dr. Parjit S. Singh
Nuclear Science Laboratories
Punjabi University, Patiala - 147004.

Masters of Science in Applied Physics (August 2000 – May 2002) 68.75%

Department of Physics
Punjabi University, Patiala - 147004.

Post Graduate Diploma in Computer Applications (June 1999 - July 2000) 67%

University Computer Centre
Punjabi University, Patiala - 147004.

Certificate in Computing (July 1999 – December 1999) 61%

Indira Gandhi National Open University
New Delhi-110068.

TEACHING EXPERIENCE: (about 12 Years)

- Presently working as '**Associate Professor and Head of Physics Department**', (Oct. 2014 – till date) at **SGGSW University**, Fatehgarh Sahib - 140406, Punjab.
- Worked as '**Assistant Professor in Physics**', (Aug. 2012 – Oct. 2014) at **SGGSW University**, Fatehgarh Sahib - 140406, Punjab.
- About three and half years experience as '**Assistant Professor in Physics**', (Feb. 2009 – July 2012) at **M.M. University**, Mullana - 133207, District Ambala, Haryana.
- About seven months experience as '**Assistant Professor in Physics**', (June 2008 – Feb. 2009) at **Swami Devi Dyal Institute of Engineering & Technology**, Barwala, District Panchkula, Haryana. Teaching physics to **B. Tech. classes** (as per K.U. Kurukshetra syllabi).
- About one year experience as '**Senior Lecturer in Physics**', (Aug 2007 - June 2008) at **Lovely Professional University**, Phagwara, Punjab. Taught Physics to B. Tech., Computational Physics to **M. Sc. (Physics)** and Radiation Physics to **M. Phil. (Physics)** classes at L.P.U. Phagwara.
- One year experience as a '**Lecturer in Physics**' (July 2006 - Aug 2007) at **SGGS Khalsa College**, Mahilpur, Punjab. Taught Quantum physics to B.Sc. – II (Non-Medical) and Nuclear and Particle Physics to **M.Sc. classes** (as per Panjab Univ. Chandigarh syllabi).
- About one year teaching experience (July 2005 - Mar. 06) as a '**Lecturer in Physics**' at **Patel Memorial National College**, Rajpura, Punjab. Taught Classical physics, Quantum physics and Nuclear physics to **B. Sc. classes** (as per Punjabi. Univ. Patiala syllabi).

RESEARCH EXPERIENCE: (about 15 years)

- About **90 research publications** at national and international level.
- Supervised dissertation work of **11 M. Phil.** students.
- Presently supervising the dissertation work of **4 Ph.D. scholars**
- Participated in about **15** conferences/symposia/workshops.
- Participated in **4** international conferences
- API Score > 500 points.

PERSONAL

- ❖ Chairman, **Research Degree Committee** of Physics, SGGSWU
- ❖ Member, **Research Degree Board**, SGGSWU
- ❖ Member, **Academic Council**, SGGSWU
- ❖ Member, **Board of Studies** of Physics, SGGSWU
- ❖ Member, **Board of Studies** of Physics at Khalsa College, Patiala
- ❖ Proficient in English, Hindi and Punjabi
- ❖ **NCC 'C' certificate** with A grading
- ❖ Life member "**Indian Society for Radiation Physics (Patiala Chapter)**"
- ❖ Life Member "**Nuclear Track Society of India**"
- ❖ Life Member "**Indian Association of Physics Teachers**"
- ❖ Life Member "**Bhav Sagar: Physics Association** at SGGSWU"
- ❖ On the panel of Referees for Physical Journals: Elsevier, IOP and Springer.

SUMMARY

- Extensive knowledge of diverse areas of modern physics.
- Goal oriented and hard working individual determined to succeed.
- Highly inquisitive, creative and resourceful.
- Excellent training in computers.

Date:

Place:

(**Dr. TEJBIR SINGH**)

LIST OF PUBLICATIONS OF Dr. TEJBIR SINGH

In International Journals: -

1. Energy and chemical composition dependence of mass attenuation coefficients of building materials
Charanjeet Singh, **Tejbir Singh**, Ashok Kumar and Gurmel S. Mudahar
Ann. Nucl. Energy 31 (2004) 1199.
2. Variation of photon intensities in transmitted photon spectra of ^{60}Co as a function of dimensions of soil medium
Charanjeet Singh, G.S. Sidhu, A. Kumar, **Tejbir Singh**, P.S. Singh and G.S. Mudahar
Radiat. Measurements 39 (2005) 451.
3. Parameters of dosimetric interest of some vanadium and nickel compounds
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
Asian J. Chem. 18 (2006) 3325.
4. Effective atomic numbers and electron densities of some HCO materials as a function of weight fraction of constituent elements
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
Asian J. Chem. 18 (2006) 3340.
5. Effect of geometrical constraints on the intensity of multiple scattered gamma photons in soil medium
Tejbir Singh, Gurmel S. Mudahar and Parjit S. Singh
Asian J. Chem. 18 (2006) 3361.
6. Intensity of transmitted photon spectra as a function of transverse and longitudinal dimensions of soil medium using ^{137}Cs
Gurdeep S. Sidhu, **Tejbir Singh**, Gurmel S. Mudahar and Parjit S. Singh
Radiat. Prot. Dosi. 121 (2006) 317.
7. A study of photon interaction parameters in some commonly used solvents
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
J. Radiol. Prot. 27 (2007) 79.
8. Variation of mass attenuation coefficient, effective atomic number and electron density with incident photon energy of some organic acids
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
Nucl. Sci. Engg. 151 (2007) 229.
9. Variation in energy absorption buildup factors with incident photon energy and penetration depth of some commonly used solvents
Parjit S. Singh, **Tejbir Singh** and Paramjeet Kaur
Ann. Nucl. Energy 35 (2008) 1093.
10. Chemical composition dependence of exposure buildup factors for some polymers
Tejbir Singh, Naresh Kumar, Parjit S. Singh
Ann. Nucl. Energy 36 (2009) 114.

11. Investigations of building materials as gamma ray shielding materials
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
Asian J. Chem. 21 (2009) 225.
12. Interaction of gamma ray photons with some biological samples
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
Asian J. Chem. 21 (2009) 229.
13. A Study of Photon Interaction and Photon Energy Absorption Effective Atomic Numbers for Some Amino Acids
Tejbir Singh, Shivali Tandon, Updesh Kaur and Parjit S. Singh
Nucl. Sci. Engg. 165 (2010) 240
14. Photon energy absorption parameters for some polymers
Tejbir Singh, Rajni, Updesh Kaur and Parjit S. Singh
Ann. Nucl. Energy 37 (2010) 422.
15. Photon Interaction Parameters for some borate glasses
Nisha Mann, Updesh Kaur, **Tejbir Singh**, J.K. Sharma and Parjit S. Singh
AIP Conf. Proc. 1324 (2010) 407.
16. Experimental investigation of the multiple scattering of gamma rays in Portland cement in the energy range 279 - 1332 keV
Tejbir Singh and Parjit S. Singh
Phys. Scr. 84 (2011) 65804.
17. Comparative studies of different concretes on the basis of some photon interaction parameters
Updesh Kaur, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
Appl. Radiat. Isot. 70 (2012) 233.
18. Effective atomic numbers for some Calcium-strontium-borate glasses
Renu Sharma, Vandana Sharma, Parjit S. Singh and **Tejbir Singh**
Ann. Nucl. Energy 45 (2012) 220.
19. Vanadium Compounds: As Gamma Rays Shielding Material
Ravinder Kumar and **Tejbir Singh**
Asian J. Engg. Appl. Tech 1 (2012) 53.
20. Study of Gamma Ray Exposure Buildup Factor for Some Ceramics with Photon Energy, Penetration Depth and Chemical Composition
Tejbir Singh, Gurpreet Kaur and Parjit S. Singh
J. Ceramics 2013 (2013) 721606
21. Total as well as Partial Photon Interaction Effective Atomic Numbers for Some Concretes
Tejbir Singh and Parjit S. Singh
J. Nucl. Phys. Mat. Sci. Radiat. Appl. 1 (2013) 103.

22. Energy Absorption Buildup Factors for Some Cellulose Derivatives
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
Int. J. Engg. Res. Tech. (IJERT) AMRP-2013 Conference Proceedings (2013) 63-65.
23. Experimental Investigation of Exposure Buildup Factor at Different Thicknesses of Perspex
Shilpi Kalia, Vijay Gandhi, Parjit S. Singh and **Tejbir Singh**
Int. J. Engg. Res. Tech. (IJERT) AMRP-2013 Conference Proceedings (2013) 87-89.
24. Determination of Mass Attenuation Coefficients for Some Building Materials
Vijay Gandhi, Shilpi Kalia, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
Int. J. Engg. Res. Tech. (IJERT) AMRP-2013 Conference Proceedings (2013) 110-112.
25. Variation of photon interaction parameters with energy for some Cu-Pb alloys
Tejbir Singh, Sarpreet Kaur, Parminder Kaur, Harvinder Kaur, and Parjit S. Singh
AIP Conf. Proc. 1675 (2015) 020057.
26. Photon Interaction Parameters for ZnO-Al₂O₃-Fe₂O₃-P₂O₅ Glass Systems
Preet Kaur, **Tejbir Singh** and Devinder Singh
Curr. Rep. Sci. & Tech. 1 (2) (2015) 29-37.
27. Investigation of Saturation Thickness of Sn using Backscattering Technique
Renu Sharma, J.K. Sharma and **Tejbir Singh**
British J. Appl. Sci. & Tech. 16(4) (2016) 1-4.
28. Effective Atomic Numbers for Some Alloys at 662 keV Using Gamma Rays Backscattering Technique
Renu Sharma, J.K. Sharma and **Tejbir Singh**
Phys. Sci. Int. J. 11(1) (2016) 1-6.
29. Heavy Metal Oxide Glasses As Gamma Rays Shielding Material
Preet Kaur, Devinder Singh and **Tejbir Singh**
Nucl. Engg. Des. 307 (2016) 364-376.
30. Optical, photoluminescence and physical properties of Sm³⁺ doped lead alumino phosphate glasses
Preet Kaur, Devinder Singh and **Tejbir Singh**
J. Non-Cryst. Solids 452 (2016) 87-92.
31. Scope of Pb-Sn Binary Alloys As Gamma Rays Shielding Material
Sarpreet Kaur, Amandeep Kaur, Parjit S. Singh and **Tejbir Singh**
Prog. Nucl. Energy 93 (2016) 277-286.
32. Gamma Radiations Shielding Parameters for Some Pb-Cu Alloys
Amandeep Kaur, Sarpreet Kaur, Parjit S. Singh and **Tejbir Singh**
Radiat. Phys. Chem. (2016) Submitted

33. Experimental Investigation of Effective Atomic Numbers for some Binary Alloys
Renu Sharma, Taranjot Kaur, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
Nucl. Engg. Tech. (2016) Submitted

In the Proceedings of Conferences/Symposia: -

1. A buildup factor studies in Flyash
Karamjit Singh, **Tejbir Singh**, S. Kumar, G.S. Sidhu, G.S. Mudahar & P.S. Singh
6th Punjab Science Congress, S.L.I.E.T. Longowal (2003).
2. Study of mass attenuation coefficients of building materials
Karamjit Singh, **Tejbir Singh**, S. Kumar, G.S. Sidhu, G.S. Mudahar and P.S. Singh
6th Punjab Science Congress, S.L.I.E.T. Longowal (2003).
3. Low energy component of multiple scattered gamma radiation
Tejbir Singh, Sanjeev Kumar, P.S. Singh and G.S. Mudahar
Recent Advances in Radiation Physics, Punjabi University, Patiala (2003).
4. Buildup factor studies in some biological materials
Karamjit Singh, **Tejbir Singh**, C. Singh, P.S. Singh and Gurmel S. Mudahar
15th Natl. Symp. Radiat. Phys., B.A.R.C. Mumbai (2003)
5. G.P. fitting method for calculations of buildup factors of water at low penetration depth
Charanjeet Singh, **Tejbir Singh**, A. Kumar, Parjit S. Singh and Gurmel S. Mudahar
15th Natl. Symp. Radiat. Phys., B.A.R.C. Mumbai (2003).
6. Measurement of secondary to primary ratio for 662 keV photons in Flyash.
Tejbir Singh, Sanjeev Kumar, Jarnail Singh, G.S. Sidhu and Gurmel S. Mudahar
7th Punjab Science Congress, G.N.D. University Amritsar (2004).
7. Effective atomic number studies of some low-Z materials
Charanjeet Singh, Karamjit Singh, **Tejbir Singh**, A. Kumar, Parjit S. Singh and Gurmel S. Mudahar
7th Punjab Science Congress, G.N.D. University Amritsar (2004).
8. Mass attenuation coefficients of building materials as a function of weight fractions of constituted elements
Charanjeet Singh, **Tejbir Singh**, G.S. Sidhu, Parjit S. Singh and Gurmel S. Mudahar
Natl. Symp. on Radiat. Measurements & Appl., Punjabi University Patiala (2004).
9. Mass attenuation coefficient studies of the mixture of Flyash and Soil
Jarnail Singh, **Tejbir Singh**, Sukhpal Singh, Parjit S. Singh and Gurmel S. Mudahar
Natl. Symp. on Radiat. Measurements & Appl., Punjabi University, Patiala (2004).
10. Multiple scattering studies of gamma rays in Plaster of Paris
Tejbir Singh, Jarnail Singh, Parjit S. Singh and Gurmel S. Mudahar
16th Natl. Symp. Radiat. Phys., Kalpakkam Chennai (2006).
11. Variation of exposure buildup factors of building materials with effective atomic number
Charanjeet Singh, **Tejbir Singh**, Sukhpal Singh, P.S. Singh & G.S. Mudahar
16th Natl. Symp. Radiat. Phys. Kalpakkam, Chennai (2006).

12. Exposure buildup factor studies in concrete for extended penetration depth up to 100 mfp
Charanjeet Singh, **Tejbir Singh**, G.S. Sidhu, Parjit S. Singh and Gurmel S. Mudahar
16th Natl. Symp. Radiat. Phys. Kalpakkam, Chennai (2006)
13. Parameters of dosimetric interest of some vanadium and nickel compounds
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
National Conference on Lasers, Smart Materials and Radiation Physics, SLIET, Longowal (2006).
14. Effective atomic numbers and electron densities of some HCO materials as a function of weight fraction of constituent elements
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
National Conference on Lasers, Smart Materials and Radiation Physics, SLIET, Longowal (2006).
15. Effect of geometrical constraints on the intensity of multiple scattered gamma photons in soil medium
Tejbir Singh, Gurmel S. Mudahar and Parjit S. Singh
National Conference on Lasers, Smart Materials and Radiation Physics, SLIET, Longowal (2006).
16. Photon interaction parameters of some commercially used solvents
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
10th Int. Symp. Radiat. Phys. Univ. of Coimbra, Portugal (2006)
17. Energy absorption buildup factors of some biological materials at some experimentally available photon energies
Parjit S. Singh, Paramjeet Kaur and **Tejbir Singh**
Symp. Radiat. Sources, Detection & Appl., Punjabi University, Patiala (2007)
18. Dependence of energy absorption buildup factors on incident photon energy and penetration depth for some commonly used solvents
Parjit S. Singh and **Tejbir Singh**
Symp. Radiat. Sources, Detection & Appl, Punjabi University, Patiala (2007)
19. Effective atomic numbers for some explosive materials: A comparative study
Tejbir Singh, Paramjeet Kaur & Parjit S. Singh
17th Natl. Symp. Radiat. Phys. S.I.N.P. Calcutta (2007)
20. Energy absorption buildup factors of some biological materials at some experimentally available incident photon energy and penetration depth
Paramjeet Kaur, **Tejbir Singh** & Parjit S. Singh
17th Natl. Symp. Radiat. Phys. S.I.N.P. Calcutta (2007)
21. Polymers: as radiation shielding materials
Tejbir Singh, Suman Lal, Updesh Kaur, Aarti Sharma, Paramjit Kaur & P.S. Singh
11th Punjab Science Congress, Thapar University, Patiala (2008).

22. Gamma rays energy absorption buildup factor for some alloys as a function of chemical composition and incident photon energy
Tejbir Singh, Naresh Kumar, Updesh Kaur, Paramjeet Kaur & Parjit S. Singh
11th Punjab Science Congress, Thapar University, Patiala (2008).
23. Comparative study of different methods to compute effective atomic numbers for some building materials
Tejbir Singh and Parjit S. Singh
National Seminar on Radiation and Materials, Punjabi University, Patiala (2008)
24. Investigations of building materials as gamma ray shielding materials
Tejbir Singh, Paramjeet Kaur and Parjit S. Singh
National Conference on Advanced Materials and Radiation Physics, SLIET, Longowal (2009).
25. Interaction of gamma ray photons with some biological samples
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
National Conference on Advanced Materials and Radiation Physics, SLIET, Longowal (2009).
26. Effective atomic number studies for some chalcogenide thin films
Tejbir Singh, J.K. Sharma and Jeewan Sharma
National Conference on Emerging Perspectives and Sustainable Developments in Physics, DAV Abohar (2009)
27. Experimental investigations of multiple scattering of gamma rays in portland cement
Tejbir Singh and Parjit S. Singh
16th Natl. Symp. Solid State Nucl.Track Detect. & Their Appl. G.N.D. Univ. (2009)
28. Gamma ray exposure buildup factor for some ceramics
Parjit S. Singh, Gurpreet Kaur and **Tejbir Singh**
16th Natl. Symp. Solid State Nucl.Track Detect. & Their Appl. G.N.D. Univ. (2009)
29. Photon energy absorption parameters for some saccharides
Updesh Kaur, **Tejbir Singh**, Parjit S. Singh and Paramjeet Kaur
18th Natl. Symp. Radiat. Phys. M.L.S. University, Udaipur (2009)
30. Photon Interaction Parameters for some borate glasses
Nisha Mann, Updesh Kaur, **Tejbir Singh**, J.K. Sharma and Parjit S. Singh
Int. Conf. Meth. Models Sci. Tech., NITTTR Chandigarh (2010)
31. Use of Polymer Waste As A Shielding Material for Nuclear Waste
Renu Sharma, Vandana Sharma, Parjit S. Singh and **Tejbir Singh**
Natl. Symp. Radiat. Phys. Nanomaterials-11, Punjabi Univ. Patiala (2011)
32. Study of Error Analysis in the Computation of Effective Atomic Numbers for some Biological Materials
Updesh Kaur, Parjit S. Singh, J.K. Sharma, Paramjeet Kaur and **Tejbir Singh**
Natl. Symp. Radiat. Phys. Nanomaterials-11, Punjabi Univ. Patiala (2011)

33. Comparative studies of photon interaction effective atomic numbers for some semi-conductors
Renu Sharma, Vandana Sharma, Parjit S. Singh, Paramjeet Kaur and **Tejbir Singh**
2nd National Conference on Advanced Materials and Radiation Physics, SLIET, Longowal (2011).
34. Total as well as Partial Photon Interaction Effective Atomic Numbers for Some Concretes
Updesh Kaur, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
2nd National Conference on Advanced Materials and Radiation Physics, SLIET, Longowal (2011).
35. Photon absorption parameters of dosimetric interest for some stimulant drugs
Tejbir Singh, Parjit S. Singh and Paramjeet Kaur
International Conference on Emerging Trends in Physics for Environmental Monitoring and Management, Punjabi University, Patiala (2012).
36. Feasibility of Natural Minerals as Gamma Rays Shielding Materials
Harpreet Singh, Jeewan Sharma, Parjit S. Singh and **Tejbir Singh**
National Conference on Preservation of Environment: Challenges before Humanity, SGGSWU, Fatehgarh Sahib (2013)
37. Shielding of Nuclear Power Plants' Harmful Radiations: Topic of Prime Concern for Environmentalists
Renu Sharma, Vandana Sharma, Parjit S. Singh and **Tejbir Singh**
National Conference on Preservation of Environment: Challenges before Humanity, SGGSWU, Fatehgarh Sahib (2013)
38. Experimental Investigation of Exposure Buildup Factor at Different Thicknesses of Perspex
Shilpi Kalia, Vijay Gandhi, Parjit S. Singh and **Tejbir Singh**
3rd National Conference on Advance Materials and Radiation Physics (AMRP-2013), SLIET, Longowal (2013). RP-P-23.
39. Determination of Mass Attenuation Coefficients for Some Building Materials
Vijay Gandhi, Shilpi Kalia, J.K. Sharma, Parjit S. Singh, and **Tejbir Singh**
3rd National Conference on Advance Materials and Radiation Physics (AMRP-2013), SLIET, Longowal (2013). RP-P-26.
40. Energy Absorption Buildup Factors for Some Cellulose Derivatives
Paramjeet Kaur, **Tejbir Singh** and Parjit S. Singh
3rd National Conference on Advance Materials and Radiation Physics (AMRP-2013), SLIET, Longowal (2013). RP-P-31.
41. Photon Interaction Parameters for Some Building Materials at Intermediate Photon Energy
Vijay Gandhi, Shilpi Kalia, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
National Conference on Emerging Horizons in Science & Technology, SGGSWU, Fatehgarh Sahib (2014) 170.

42. Effective Atomic Numbers for Some Polymers in Energy Range of 2 - 233 keV
Renu Sharma, J.K. Sharma, Vandana Sharma, Parjit S. Singh and **Tejbir Singh**
National Conference on Emerging Horizons in Science & Technology, SGGSWU, Fatehgarh Sahib (2014) 173.
43. Exposure Buildup Factor for Perspex at Intermediate Photon Energy
Shilpi Kalia, Vijay Gandhi, J.K. Sharma, Parjit S. Singh and **Tejbir Singh**
National Conference on Emerging Horizons in Science & Technology, SGGSWU, Fatehgarh Sahib (2014) 174.
44. Heavy Metal Oxide Glasses As Gamma Rays Shielding Materials: A Review
Preet Kaur, Devinder Singh and **Tejbir Singh**
National Physics Conference - 1, Khalsa College Patiala (2014) P1.
45. Mass Attenuation Coefficients and Effective Atomic Numbers for Some Cu-Sn Alloys
Parminder Kaur, Harwinder Kaur, Parjit S. Singh and **Tejbir Singh**
National Physics Conference - 1, Khalsa College Patiala (2014) P4.
46. Photon Energy Absorption Parameters for Some Vitamins & Proteins
Paramjeet Kaur, Parjit S. Singh and **Tejbir Singh**
National Physics Conference - 1, Khalsa College Patiala (2014) P9.
47. Photon Interaction Parameters for Some Cu-Pb Alloys
Sarpreet Kaur, Parjit S. Singh and **Tejbir Singh**
National Physics Conference - 1, Khalsa College Patiala (30th Oct. 2014) P14.
48. Effective Atomic Numbers for Some Cu-Sn-Pb tertiary Alloys
Taranjot Kaur, Jeewan Sharma and **Tejbir Singh**
National Physics Conference - 1, Khalsa College Patiala (30th Oct. 2014) O14
49. Scope of Ag-Cu-Sn Alloy Systems in Gamma Rays Shielding
Parminder Kaur, Sarpreet Kaur and Tejbir Singh
National Conference on Emerging Trends in Physics & Nano Science, DAV College Dasuya (4th March 2015).
50. Photon Interaction Parameters for ZnO-Al₂O₃-Fe₂O₃-P₂O₅ Glass Systems
Preet Kaur, Devinder Singh and **Tejbir Singh**
National Conference on Current Advances in Physical Sciences, Khalsa College Amritsar (11 March, 2015).
51. Variation of Photon Interaction Parameters with Energy for Some Cu-Pb Alloys
Tejbir Singh, Sarpreet Kaur, Parminder Kaur, Harvinder Kaur, Parjit S. Singh
4th National Conference on Advanced Materials and Radiation Physics (13-14 March 2015) SLIET, Longowal RP-37

52. Equivalent Atomic Numbers for Some Polymers
Renu Sharma, JK Sharma and **Tejbir Singh**
2nd International Multi-Track Conference on Sciences, Engineering and Technical Innovations, CT Institute of Engineering, Management and Technology, Jalandhar (22-23 May, 2015).
53. Optimum Thickness for Measuring Mass Attenuation Coefficients for Some Sn-Pb Alloys
Renu Sharma, Taranjot Kaur, JK Sharma and **Tejbir Singh**
National Conference on Physics Industry Interface Kurukshetra University, Kurukshetra (Sept. 2-4, 2015)
54. Saturation Thickness of Tin at Gamma Rays of 122 keV, 511 keV and 662 keV
Renu Sharma, Taranjot Kaur, JK Sharma and **Tejbir Singh**
National Conference on Physics Industry Interface Kurukshetra University, Kurukshetra (Sept. 2-4, 2015)
55. Energy Dependence of Saturation Depth for Backscattered Photons from Nickel Target
Renu Sharma, Taranjot Kaur, J.K. Sharma and **Tejbir Singh**
20th National Symposium on Radiation Physics (NSRP-20) Mangalore University, Mangalore (28-30 Oct., 2015).
56. Effect of PbO on Optical Characteristics of sm³+Doped Phosphate Glasses
Preet Kaur, Devinder Singh, **Tejbir Singh**
International Conference on Recent Advances in Emerging Technologies (ICRAET-2016), SGGSWU Fatehgarh Sahib (Punjab) on (22-23 Feb. 2016).P5
57. Effect of Frequency on Capacitance of Nanocrystalline zno Based Capacitive Cell
Harinder Singh, Jeewan Sharma, B.S. Bansod, Taranjot Kaur, **Tejbir Singh**
International Conference on Recent Advances in Emerging Technologies (ICRAET-2016), SGGSWU Fatehgarh Sahib (Punjab) on (22-23 Feb. 2016).N-54 P100
58. Synthesis of Pristine and Doped Graphene and ITS Photocatalytic Applications
Manmeet Singh, Jeewan Sharma, **Tejbir Singh**, Pritpal Singh
International Conference on Recent Advances in Emerging Technologies (ICRAET-2016), SGGSWU Fatehgarh Sahib (Punjab) on (22-23 Feb. 2016).N-4 P76
59. Photon Interaction Parameters for Some Pb-Cu Alloy Systems
Amandeep Kaur, Sarpreet Kaur and **Tejbir Singh**
Recent Advancements in Science, Commerce & Technology 2016” (NCRSCT’16)
Mata Sahib Kaur Girls College, Talwandi Sabo, Bathinda (5 - 6 April, 2016).
60. Variation of exposure buildup factor with incident photon energy and penetration depth for some Pb-Sn alloy system
Sarpreet Kaur and **Tejbir Singh**
2nd International Congress of Technology, Management and Social Sciences-16 at Monte Carlo Inn, Airport Suites Mississauga, Toronto, Canada (25-26 June 2016)

61. Radiation shielding parameters for some Pb-Cu alloy systems

Amandeep Kaur and **Tejbir Singh**

2nd International Congress of Technology, Management and Social Sciences-16 at
Monte Carlo Inn, Airport Suites Mississauga, Toronto, Canada (25-26 June 2016)

List of Conferences/Symposia/Workshops Attended: -

- 2003** Recent Advances in Radiation Physics (Pbi. Univ. Patiala).
15th National Symposium on Radiation Physics (B.A.R.C. Mumbai)
- 2004** 7th Punjab Science Congress (G.N.D.U. Amritsar).
National Symposium on Radiation Measurements & Applications (Pbi. Univ. Patiala).
Workshop on Computer Laboratory Training in Physics (Pbi. Univ. Patiala).
Workshop on Computer Simulation in Physics (DAV College Jalandhar)
National Conference on Lasers, Smart Materials & Radiation Physics (S.L.I.E.T. Longowal)
Workshop on Use of Monte Carlo Techniques for Design and Analysis of Radiation Detectors (Univ. of Coimbra, Portugal)
10th International Symposium on Radiation Physics (Univ. of Coimbra, Portugal)
Workshop on Computer Laboratory Training in Physics (Pbi. Univ. Patiala).
- 2007** Workshop on 'Physics with Homemade Equipment and Innovative Experiments' (I.U.A.C., New Delhi)
Symposium on Radiation Sources, Detection & Applications (Pbi. Univ. Patiala).
Workshop on 'Phoenix' (I.U.A.C., New Delhi)
17th National Symposium on Radiation Physics (SINP, Calcutta).
- 2008** National Seminar on Radiation and Materials (Punjabi University, Patiala)
Workshop on Computer Laboratory Training in Physics (P.U. Patiala).
National Conference on Advance Materials & Radiation Physics (S.L.I.E.T. Longowal)
16th National Symposium on Solid State Nuclear Track Detectors and their Applications (G.N.D.U. Amritsar)
18th National Symposium on Radiation Physics (M.L.S. University, Udaipur)
Workshop on Optical Thin Film Coating and Its Applications (IDDC, Ambala)
One Day Workshop on Phoenix Training Program (M.M. University, Mullana)
International Conference on Methods & Models in Science & Technology (NITTTR Chandigarh)
- 2011** National Symposium on Radiation Physics and Nanomaterials, Punjabi Univ. Patiala.
2nd National Conference on Advanced Materials and Radiation Physics, SLIET, Longowal.

2012 International Conference on Emerging Trends in Physics for Environmental Monitoring and Management, Punjabi University, Patiala.

2013 National Conference on Preservation of Environment: Challenges before Humanity, SGGSWU, Fatehgarh Sahib.

3rd National Conference on Advance Materials and Radiation Physics (AMRP-2013), SLIET, Longowal.

2014 National Conference on Emerging Horizons in Science & Technology, SGGSWU, Fatehgarh Sahib.

National Physics Conference - 1, GGSDSS Khalsa College, Patiala.

2015 National Conference on Emerging Trends in Physics & Nano Science, DAV College Dasuya.

National Conference on Physics Industry Interface Kurukshetra University, Kurukshetra

Nine days training course on "Radiation Safety Aspects in Research Applications of Ionizing Radiation" RA-46 held at BARC, Mumbai during Dec. 7-15, 2015.

2016 International Conference on Recent Advances in Emerging Technologies (ICRAET-2016), SGGSWU, Fatehgarh Sahib

Recent Advancements in Science, Commerce & Technology 2016" NCRSCT'16) Mata Sahib Kaur Girls College, Talwandi Sabo, Bathinda.

Chairperson

National Physics Conference - 1, Khalsa College Patiala (30th Oct. 2014).

Invited/Expert Talks:

1. '**Fortran**' at Mata Sahib Kaur Girls College, Talwandi Sabo, Bathinda on Nov. 09, 2013.
2. '**Efficient Use of Radioactive Sources**' during 56th Refresher Course in Physical Sciences at Human Resource Development Centre, Punjabi University, Patiala on June 25, 2016.

LIST OF Ph.D. STUDENTS OF Dr. TEJBIR SINGH

S. No.	Name of the student	Title of Dissertation Work	Status
1.	Ms. Renu Sharma MMU, Mullana	Investigation of effective atomic number for some composite materials	Thesis Submitted 2015
2.	Ms. Preet Kaur SGGSWU, Fatehgarh Sahib	Scope of Phosphate Glasses in Gamma Rays Shielding and Detection	Registered 2014
3.	Ms. Taranjot Kaur SGGSWU, Fatehgarh Sahib	Study of Gamma Rays' Shielding Parameters for Zn- Cd-Sn-Pb Alloy Systems	Registered 2015
4.	Mr. Harinder Singh SGGSWU, Fatehgarh Sahib	Electrical, Optical & Radiation Shielding Properties of ZnTe based nano alloys	Registered 2015
5.	Mr. Harpreet Singh PTU, Jalandhar	Study of Photon Interaction Parameters for Cu-Sn-Pb Alloy Systems	Enrolled 2015

LIST OF M. PHIL. STUDENTS OF Dr. TEJBIR SINGH

S. No.	Name of the student	Title of Dissertation Work	Year of Completion
1.	Mr. Naresh Kumar (LPU Phagwara)	Gamma ray buildup factors for some polymers	2008
2.	Mr. Suman Lal (LPU Phagwara)	Photon interaction parameters for some alloys	2008
3.	Ms. Shivali Tandon (VMU Tamilnadu)	Parameters of dosimetric interest for some amino acids	2008
4.	Mr. Ravi Kant (MSU Tirunelveli)	Investigations of mass attenuation coefficient and effective atomic number for some solvents	2008
5.	Ms. Gurpreet Kaur (MMU Mullana)	Gamma ray exposure buildup factor for some ceramics	2009
6.	Mr. Mehtab Singh (MMU Mullana)	Multiple scattering effects of gamma rays in biological materials	2009
7.	Ms. Rajni (MMU, Mullana)	Photon energy absorption parameters for some polymers	2009
8.	Ms. Nisha Mann (MMU, Mullana)	Gamma ray shielding parameters for some glasses	2010
9.	Mr. Gurdeep Singh (MMU Mullana)	Building Materials: As Radiation Shielding Materials	2010
10.	Mr. Ravinder Kumar (MMU Mullana)	Vanadium Compounds: As Gamma Rays Shielding Materials	2012
11.	Ms. Shilpi Kalia (MMU Mullana)	Experimental Investigation of extent of multiple scattering of X-rays with the thickness of Perspex sheet	2013

List of Students Completed Minor/Major Project Under Dr. TEJBIR SINGH

S. No.	Name of the student	Title of Dissertation Work	Year of Completion
1.	Ms. Parminder Kaur M.Sc. Physics	Pb-Zn Alloy System As Gamma Rays Shielding Material	2015
2.	Ms. Harwinder Kaur M.Sc. Physics	Measurement of Shielding Parameters of Gamma Rays of Sn-Zn Alloys	2015
3.	Ms. Sarpreet Kaur B. Tech. Engg. Phys.	Experimental Investigation of Gamma Radiations Shielding Parameters of Some Sn-Pb Alloys	2015
4.	Mr. Baldeep Singh M.Sc. Physics	Variation of Linear Attenuation Coefficient with Energy and Density for some Binary Alloys	2016
5.	Ms. Jaspreet Kaur M.Sc. Physics	Comparative study of methods for computing effective atomic number for some alloys	2016
6.	Ms. Amandeep Kaur M.Tech. Engg. Phys.	Feasibility of Pb-Cu Alloys in gamma rays shielding	2016
7.	Ms. Sarpreet Kaur M.Tech. Engg. Phys.	Scope of Pb-Sn Alloys in shielding gamma photons	2016