Curriculum- Vitae

Name: Dr. Yogeshchandra Sharma, M.Sc., Ph.D. (Physics)

Designation: Dean, Research and Development and Professor of Physics

Teaching Experience: Twenty three (23) years

1. Dean, Research and Development and Professor of Physics, Vivekananda Global University, Jaipur from September 1, 2016.
2. Dean, Basic and Applied Sciences and Professor of Physics, Vivekananda Global University, Jaipur from September 1, 2016 to August 31, 2017.
3. Vice Principal, Professor and Head, Department of Physics, Vivekananda Institute of Technology, East, Jaipur from June 30, 2010 to August 14, 2016.
4. Professor of Physics, Bhartiya Institute of Engineering and Technology, Sikar from August 26, 2008 to June 29, 2010.
5. Reader and Head, Department of Physics, Swami Keshvanand Institute of Technology, Jaipur from April 01, 2008 to August 25, 2008.
6. Senior Lecturer, Department of Physics, Swami Keshvanand Institute of Technology, Jaipur from April 01, 2007 to March 31, 2008.
7. Lecturer, Department of Physics, Swami Keshvanand Institute of Technology, Jaipur from September 01, 2003 to March 31, 2007.
8. Lecturer and Head, Department of Physics, Sobhasaria Engineering College, Sikar from August 14, 1999 to August 30, 2003.

Ph. D. thesis guided: 12 (Completed), 01 (Submitted), 03 (Ongoing)

M. Sc. Dissertation guided: 20 **B. Tech. projects guided: 25**

Ph. D. supervision:

Awarded: 11

S. No.	Scholar Name	Title of the thesis	Date of Registration	Date of award
1	Sarbajeet Singh	Study of thermoelectric properties of Molybdenum Silicide (Mo-Si) Thin Films	Jul-18	04-05-2022
2	Pervez Ansari	Development of Chalcogenide multilayer thin film structures for solar Cell devices	Jul-17	25-03-2021
3	Harsha Sharma	Synthesis & Characterization of Bismuth Selenide (Bi_2Se_3) & its thin films.	Jul-16	16-12-2020
4	Manisha Kumari	Fabrication & Characterization of selenium doped thin films of Sb_2Te_3/Bi_2Te_3	Jul-16	17-12-2020
5	Rekha Prajapat	Synthesis & Characterization of Copper Zinc Tin Selenide (CZTSe) thin films.	Jul-16	30-10-2019
6	Nitesh Kumar Dixit	Vibration Energy Harvesting System	Jul-13	30-03-2019
7	Ravindra Kumar	Studies on Low Pressure Nitriding of Steels with Various Alloying Concentrations	Jul-17	08-03-2019
8	Kausar Ali	Evaluation of Femtocell: Future Solution for Reliable Indoor Cellular Communication	Jul-13	27-07-2018
9	Nidhi Tiwari	Ultra-low power digital VLSI Design: Design, Implementation and Analysis of Low Power High-Speed SRAM	Jul-13	07-07-2018
10	Amol Purohit	Preparation and Characterization of some Thin Films of Tellurium Alloys for Thermoelectric DeviceApplications	Jul-13	26-02-2018
11	Ruchi Sharma	Design of Robust Power System Stabilizer (PSS) for SMIB Power System Based on Adaptive Techniques	Jul-13	24-02-2018

12	Swati Arora	Design, Fabrication, and Characterization of Thin Film Metal Metalloid Field Effect Transistor	Jul-13	09-02-2018

Ongoing: 05

S. No.	Scholar Name	Title of the thesis	Date of Registration
1	B S Rathore	Optimization of Zinc Telluride (ZnTe), Cadmium Selenide (CdSe) and Molybdenum (Mo) Thin Films for Solar Cell Applications	Jul-17
2	Sanjay Sharma	Studies on low pressure plasma nitriding of Inconel 625 alloy	Jul-18 **(Submitted December, 2021)**
3	Snehal Devidas Patil (Co-Supervisor)	Studies on Nano structured ZnO-Bi_2O_3 based LPG sensors	Jul-19
4	Harshal Nikam (Co-Supervisor)	Studies on Nano structured MnO_2-MoO_3 based ammonia sensors	Jul-19

Research Projects: 08

S. No.	Title of the project	Agency	Present status
1.	Ion beam induced effects on thermoelectric properties of Sb_2Te_3 multilayered thin films	IUAC, New Delhi	Completed
2.	Preparation and Characterization of Antimony Telluride thin films	INUP, IITB	Completed
3.	Study of temperature dependent Magneto resistance in Antimony Telluride thin films.	INUP, IITB	Completed
4.	Feasibility study of multilayer periodic thin films of tellurium alloys for thermoelectric efficiency	DRDO	Completed

	improvement		
5	Study of Surface modification of Inconel 625 alloy	IUAC, New Delhi	Ongoing
6	Studies on Low Pressure Plasma Nitriding of INCONAL 625 Alloy	RTU, TEQIP	Ongoing
7	Preparation of Copper Zinc Tin Selenide (CZTSe) thin films for solar cell applications	RTU, TEQIP	Ongoing
8	Preparation and Characterization of Mg-(M=Ni,Ti&Al) thin film metal hydrides for hydrogen storage applications	RTU, TEQIP	Ongoing

Membership of professional bodies: 06

Member of American Physical Society

Life Member Materials Research Society of India

Life Member Indian Society for Technical Education

Life Member Indian Physics Association

Life Member India Society for Radiation Physics

Life Member Indian Association of Physics Teachers

Major Academic and Administrative responsibilities undertaken:

Dean, Faculty of Basic and Applied Sciences

Dean, Research and Development

Principal

Chief Proctor

Center Superintendent- University Examinations

In-charge Department of Physics

In-charge Admissions

Proctor

In-charge Examinations

Programme officer NSS

Coordinator Youth Red Cross Club

Coordinator Red Ribbon Club

Publications:

<u>In Journals</u>: 54

1. M. K. Jangid, S. S. Sharma, Jaymin Ray, D. Arora, D. Mathur and Y.C. Sharma, "A Review on Mg-based Metal Hydrides for Hydrogen Storage Applications", SKIT Research Journal, 12 (1), 22-26 (2022).
2. S. Singh, R. G. Bhavane, Y. C. Sharma, "Comparative analysis of thermoelectric behavior of molybdenum silicide ($MoSi_2$) and bismuth telluride (Bi_2Te_3)", Chalcogenide Letters, 18 (8), 467- 472 (2021).
3. S. Sharma, D. Arora, V. Baranwal, V. Yadav, S. K. Gupta, J. P. Bhamu, A. C. Pandey, Y. C. Sharma, "Study of helium ion-irradiated Inconal 625 alloy treated in various environments", Journal of Non-Oxide Glasses, 13 (3), 43-50 (2021).
4. M. K. Jangid, S. S. Sharma, D. Mathur, Y. C. Sharma, "Optical, electrical and structural study of Mg/Ti bilayer thin film for hydrogen storage applications", Materials Letters: X, 10, 100076 (2021).
5. Y. C. Sharma, P. Ansari, R. Sharma, D. Mathur, R. A. Dar, "Bandgap tuning of optical and electrical properties of Zinc selenide", Chalcogenide Letters, 18 (4), 183-189, (2021).
6. H. Sharma and Y. C. Sharma, "Investigation of structural and thermoelectric properties of bismuth selenide thin films", Journal of Current Physical Chemistry, 11 (1), 58-68, (2021).
7. R. Kumar, Y. C. Sharma, V. V. Sagar, D. Bhardwaj, "Characterization of low temperature plasma ion nitriding (PIN) of Inconel 600 and 601 alloys", Iranian Journal of Materials Science and Engineering, 17 (2), 20-29 (2020).
8. H. Sharma and Y.C. Sharma, "Synthesis and characterization of bismuth selenide thin films by thermal evaporation technique", Nanosystem: Physics, Chemistry, Mathematics, 11 (1), 92-98 (2020).
9. H. Sharma and Y. C. Sharma, "Experimental Investigation of Electrical Properties of Bismuth Selenide Thin Films", Chalcogenide Letters, 17 (4), 173-177 (2020).
10. Y. Sharma, "Synthesis and characterisation of CZTSe bulk materials for thermoelectric applications", Nanosystems: Physics, Chemistry, Mathematics, 11 (2), 195-204 (2020).
11. H. Sharma and Y. C. Sharma "A review on topological insulator: Bismuth Selenide (Bi2Se3) material and thin films" i- manager's Journal of Material Science, 8(1), 17-25 (2020).
12. M. Kumari and Y. C. Sharma, "Effect of alternate layers of Bi2Te3 - Sb2Te3 thin films on structural, optical and thermoelectric properties" Chalcogenide letters, 17(2), 59-67 (2020).
13. P. Ansari, R. A. Dar and Y C Sharma, "Investigation of optical and electrical properties of multilayer thin films of ZnTe/CdSe", published in International Journal of Advanced Science and Technology, 29(11s), 885 – 889 (2020).

14. P. Ansari, Y. C. Sharma and R. A. Dar, “Investigation of optical and structural properties of multilayer thin films of Cadmium Selenide”, published in International Journal of Advanced Science and Technology, 29(9s), 5553 – 5560 (2020).
15. Y. C. Sharma, P. Ansari and R. A. Dar, “Investigation of optical and electrical properties of multilayer thin films of ZnSe/ZnTe/CdSe”, published in International Journal of Advanced Science and Technology, 29(9s), 5547 – 5552 (2020).
16. R. Prajapat and Y. C. Sharma, Study of $Cu_2ZnSnSe_4$ thin films prepared by E-Beam evaporation of solid state reacted compound, Chalcogenide letters, 16 (11), 565 (2019).
17. R. Prajapat and Y. C. Sharma, Morphological characterization and microstructural study of $Cu_2ZnSnSe_4$ thin films with compositional variation, Mater. Res. Express 6 (11), 116459 (2019).
18. Y. C. Sharma and R. Prajapat, Surface statistical properties of solid state reacted CZTSe compounds prepared in five different ratios, Mater. Res. Express 6 (10), 105028 (2019).
19. R. Prajapat and Y. C. Sharma, Study of mixing behavior of Cu-Sn-Se precursors using annealing process to prepare Cu_2SnSe_3 thin films, Chalcogenide letters, 16 (9), 457 (2019).
20. Y. C. Sharma and R. Prajapat, Study of mixing behaviour of Cu, Zn, Sn and Se multilayer structure by annealing, Mater. Res. Express 6 (8), 086418 (2019).
21. S. Sharma and Y. C. Sharma, Cordia Dichotoma as Corrosion Inhibitor for Aluminum Alloy (AA6063) in Hydrochloric Acid, Portugaliae Electrochimica Acta, 37(1), 1-22 (2019).
22. M. Kumari and Y.C. Sharma, “Effect of doping with Se on structural, optical, electrical and thermal properties of multilayers of Bi2Te2.7Se0.3/Sb2Te3 to enhance thermoelectric performance” Nanosystem: Physics, chemistry, Mathematics, 10, 686-693 (2019).
23. Ravindra Kumar, Y. C. Sharma, Vajja Vidyasagar and Dheeraj Bhardwaj, Wear Behavior of Plasma Nitrided Inconel 690 Alloy, AIP Conference Proceedings, 2115, 030282 (2019).
24. M. Kumari and Y.C. Sharma, “A review on recent enhancement in thermoelectric properties in telluride compounds” i-Manager Journal of Material Science, 7(1), 12-20 (2019).
25. M. Kumari and Y.C. Sharma, “Study of effect of thickness on electrical and thermal properties of multilayers of Bi2Te3 and Sb2Te3 compounds” Journal of Nature and Environment, 23(1), 22-28 (2018).
26. H. Sharma and Y. C. Sharma “Synthesis of bulk bismuth selenide and its thin films and their electrical properties” Khoj-An Interdisciplinary Journal of Research, 4(2), 23 (2018).
27. Yogesh Chandra Sharma, Ravindra Kumar, Vajja Vidyasagar and Dheeraj Bhardwaj, Low temperature plasma ion nitriding (PIN) of Inconel 690 alloy, Mater. Res. Express 6 (2), 026559 (2018).
28. R. Prajapat and Y. C. Sharma, Review on the Impact of Deposition Conditions on Reactively Deposited CZTSe Thin Films, i-manager’s Journal on Material Science, 6(3), 50-55 (2018).

29. Ravindra Kumar, Dheeraj Bhardwaj and Yogeshchandra Sharma, Characterization Techniques for Plasma Ion Nitrided Alloys, Khoj-An Interdisciplinary Journal of Research, 4(2), 47-53 (2018).
30. Ravindra Kumar, Dheeraj Bhardwaj and Y. C. Sharma, A Review on Plasma Ion Nitriding (PIN) Process, i-manager's Journal on Material Science, 6 (1), 31-44 (2018).
31. Nitesh Kumar Dixit, Kamal J Rangra, Y.C. Sharma, Design of Energy Harvesting Circuit for Low Power Application, Asian Journal of Electrical- Sciences, 7 (2), 5-7 (2018).
32. Nitesh Kumar Dixit, Kamal J Rangra, Y.C. Sharma, Review Study on Piezoelectric Energy Harvesters and Their Applications, International Journal of Computer Sciences and Engineering, 6 (9), 607-616 (2018).
33. Nitesh Kumar Dixit, Kamal J Rangra, Y.C. Sharma, Design and Simulation of Energy Harvesters for Automobile Vibration Energy, International Journal of Management, Technology and Engineering, 8 (12), 5613-5619 (2018).
34. Ruchi Sharma, Y. C. Sharma, Kota Solomon Raju, Comparative study between reduced order model based Robust power system stabilizer, International Journal of Creative Research thoughts, 6 (1), 965-976 (2018).
35. Kausar Ali , Dr. R. P. Gupta , Dr. Y. C. Sharma, Simulation & Performance Analysis of LTE Network: Femtocell Perspective, International Journal of Advanced Research in Electronics and Communication Engineering, 7 (4), 384-389 (2018).
36. Kausar Ali , Dr. R. P. Gupta , Dr. Y. C. Sharma, A Brief Overview of Wireless Cellular Networks: LTE HetNets Perspective, International Journal of Latest Trends in Engineering and Technology, 10 (1), 096-104 (2018).
37. Nidhi Tiwari, Vaibhav Neema, Kamal J. Rangra, Yogesh Chandra Sharma, Comparative Analysis of Different SRAM cells Architecture at 70nm, Journal of VLSI Design Tools & Technology. 8(2), 33–41 (2018).
38. Nidhi Tiwari, Vaibhav Neema, Kamal J Rangra, Yogesh Chandra Sharma, Performance parameters of Low power SRAM cells: a review, i-manager's Journal on Circuits and Systems, 6(1), 25-34 (2018).
39. A. Purohit , Y. C. Sharma, Synthesis of Antimony telluride thin films by thermal annealing, International Journal for Research in Applied Science and Engineering Technology, 6 (2), 2195-2199 (2018).
40. A. Purohit , Y. C. Sharma, Structural, morphological and Electrical properties of thermoelectric thin films of Sb_2Te_3 deposited by co-evaporation on silicon substrate, International journal of current engineering & Scientific Research, 4(12), 24-29 (2017).
41. A. Purohit , Y. C. Sharma, Effect of annealing temperature on nano structured bi-layer thin films of Antimony tellurium, International Journal of Technical Innovation in Modern Engineering & Science, 3(11), 204-205 (2017).
42. Yogeshchandra Sharma and Shashi Sharma, Corrosion Inhibition of Aluminum by *Psidium Guajava* Seeds in HCl Solution, Portugaliae Electrochimica Acta, 34(6), 365-382

(2016).

43. Yogesh Chandra Sharma, Amol Purohit, Tellurium based thermoelectric materials: New directions and prospects, Journal of Integrated Science & Technology, 4(1), 29 (2016).
44. Yogesh Chandra Sharma, Amol Purohit, Y K Vijay, Structural, optical and electrical properties of nanocrystalline AlSb thin films, International Journal of Innovations in Engineering & Technology, 7(3) 271 (2016).
45. D. Mankotia, Y. C. Sharma and S. K. Sharma, Review of Highly ordered anodic porous alumina membrane development, International Journal of Recent Research Aspects, 1(2), 171 (2014).
46. S. Boolchandani, S. Arora, S. Srivastava, Y. C. Sharma and Y. K. Vijay, Synthesis and characterization of layered ZnTe thin films, Khoj: an interdisciplinary Journal of Research 1 (2), 1 (2014).
47. Y. K. Vijay and Y. C. Sharma, Nanotechnology: A perspective, Khoj: an interdisciplinary Journal of Research 1 (1), 1 (2014).
48. G. Sharma, K.B. Joshi, M.C. Mishra, R.K. Kothari, Y.C. Sharma, V. Vyas and B. K. Sharma, Electronic structure of AlAs: A Compton profile study, Journal of Alloys and Compounds 485 (1-2), 682 (2009).
49. Y. C. Sharma, V. Vyas, K. B. Joshi and B. K. Sharma, Compton profile study of A15 Compounds: V_3Ge and Cr_3Ge, Pramana- J. Physics 70 (2), 323 (2008).
50. V. Vyas, Y. C. Sharma, V. Purvia, N. L. Heda, Y. Sharma, B. L. Ahuja, and B. K. Sharma, Compton profile study of Aluminium Nitride, Z. Naturforsch. 62a, 703 (2007).
51. V. Vyas, V. Purvia, Y. C. Sharma, K. B. Joshi and B. K. Sharma, Compton profile study of ZnSe, Phy. Stat. Sol. (b) 243, 1253 (2006).
52. Y. C. Sharma, V. Purvia, V. Vyas and B. K. Sharma, Electronic structure study of Gold by Compton scattering, Proc. Nat. Acad. Sci. India, 76 (A) II, 157 (2006).
53. V. Vyas, V. Purvia, Y. C. Sharma, K. B. Joshi and B. K. Sharma, Compton profile study of ZnSe, Solid State Physics (India) 50, 589 (2005): Proceedings of SSP Symposium.
54. Y. C. Sharma, V. Purvia, V. Vyas and B. K. Sharma, Electronic structure of Gold by Compton scattering, Solid State Physics (India) 49, 579 (2004): Proceedings of SSP Symposium.

In Conferences/ Seminars/ Workshops: 53

1. Study of thermoelectric properties of multilayers of Bi2Te3 /Bi2Te2.7Se0.3, Virtual Conference on Thermoelectrics (VCT-2020) on 21-23, July 2020.
2. Synthesis and characterization of bismuth selenide compounds and their thin films, International conference on Present Scenario of Technology and Sciences (PSTS-2020) organized by Payam Scientific Publishing on dated 8-9 August, 2020.
3. Investigation of optical and electrical properties of multilayer thin films of ZnTe/CdSe, National Conference On Recent Advances in Synthesis, Characterization Techniques and

Applications of Materials, at K.J. Somaiya College of Science & Commerce, 29-30 November, 2019.

4. Structural and Microstructural characterization of an Indian Ayurvedic medicine: Swarn Bindu, Y. C. Sharma, P. P. vyas, R. Vyas, D. Sharma, S. Jain, D. P. Lata, V. Swami and K. Soni, 47th National Seminar on Crystallography, Bhabha Atomic Research Centre (BARC), Mumbai during 19-22 June, 2019.
5. Study of thermoelectric Properties of multilayers of Bi_2Te_3 and Sb_2Te_3 compounds, R. Vyas, Y. C. Sharma, H. Jha, V. Swami, Y. Jha, D. P. Lata, D. Sharma and M. Kumari, 47th National Seminar on Crystallography, Bhabha Atomic Research Centre (BARC), Mumbai during 19-22 June, 2019.
6. Study of low temperature nitriding of Inconel 600 alloy, Y. C. Sharma, D. P. Lata, S. Jain, V. Swami, K. Soni, D. Sharma, Y. Jha, R. Vyas and R. Kumar, 47th National Seminar on Crystallography, Bhabha Atomic Research Centre (BARC), Mumbai during 19-22 June, 2019.
7. Effect of doping with Se on structural, optical, electrical properties of multilayers of Bi2Te2.7Se0.3 / Sb2Te3 to enhance thermoelectric performance, International conference on Recent Trends in Environmental Sustainable Development (RTESD), Vivekananda Global University, Jaipur, 17-19, Oct. 2019.
8. Experimental investigation of optical properties of bismuth selenide thin films, International conference on Recent Trends in Environment sustainable Development (RTESD) in Vivekananda Global University, Jaipur, 17-19, Oct-2019.
9. Study of thermoelectric properties of multilayers of Bi_2Te_3 and Sb_2Te_3 compounds, Y. C. Sharma and Y. K. Vijay, Diamond Jubilee Workshop on "Frontiers in Research for Defense Applications", Defense Laboratory, Jodhpur during 15-16 May, 2019.
10. Investigation of optical properties of multilayer thin films of CdSe, 2nd International Conference on "Recent Trends in Environment and Sustainable Development" at Vivekananda Global University, Jaipur during 17-19 October, 2019.
11. Investigation of optical and electrical properties of multilayer thin films of ZnSe/ZnTe/CdSe, International Conference On Advanced Nano materials & Nanotechnology (ICANN - 2019), at Sonopant Dandekar Arts, V.S. Apte Commerce & M.H. Mehta Science College, Palghar during 26-28 November, 2019.
12. Effect of annealing treatment on the morphological features of CZTSe thin films, 2nd International Conference on "Recent Trends in Environment and Sustainable Development" at Vivekananda Global University, Jaipur during 17-19 November, 2019.
13. Band gap tuning and electrical properties of multilayer ZnSe thin films, International Conference On Advanced Nano materials & Nanotechnology (ICANN - 2019), at Sonopant Dandekar Arts, V.S. Apte Commerce & M.H. Mehta Science College, Palghar during 26-28 November, 2019.
14. Wear Behavior of Plasma Nitrided Inconel 690 Alloy, Ravindra Kumar, Y. C. Sharma, Vajja Vidyasagar and Dheeraj Bhardwaj, 63rd DAE Symposium on Solid State Physics, Guru Jambheshwar University Hissar, Haryana, during 18-22 December 2018.
15. Surface Properties of Plasma Nitrided Inconel 600 Alloy, Ravindra Kumar, Y. C. Sharma, Vajja Vidyasagar and Dheeraj Bhardwaj, International Conference on Materials for Energy Application, Subodh PG College, Jaipur, during 06-08 December 2018.
16. Characterization of Pulsed Plasma Ion Nitrided Inconel Alloy, Ravindra Kumar, Y. C. Sharma, Vajja Vidyasagar and Dheeraj Bhardwaj, International Conference on Materials for Energy Application, Subodh PG College, Jaipur, during 06-08 December 2018.

17. Study of effect of thickness on electrical and thermal properties of multilayers of Bi2Te3 and Sb2Te3 compounds, National conference on Energy, Material & Sustainable Society (EMSS), Kanoria Mahila Mahavidyalaya Jaipur, 24-25 Jan. 2018.
18. Study of Effect of Thickness on Structural, Morphological, Electrical And Thermal Properties of Multilayers of Bi2Te3 and Sb2Te3 Compounds, International Conference on Material for Energy Applications (ICME), S.S. Jain Subodh P.G. College Jaipur, 6 - 8 Dec. 2018.
19. Synthesis of bulk bismuth selenide and its thin films and their characterization, International Conference on Material for Energy Applications (ICME) on S.S Jain Subodh P.G. College Jaipur, 6-8 Dec-2018.
20. Investigation of Cu2SnSe3 precursors for Cu2ZnSnSe4 thin films, International Conference on "Materials for Energy Applications" at S.S. Jain Subodh P.G. College, Jaipur during 6-8 December, 2018.
21. Synthesis and characterization of Bismuth Selenide and its thin films, National conference on Energy, Material & Sustainable Society (EMSS) in KMM Jaipur, 24-25 Jan-2018.
22. Growth and characterization of Cu2ZnSnSe4" in National Conference on "Energy, Material and Sustainable Society" at Kanoria PG Mahila Mahavidyalaya, Jaipur during 24-25 January, 2018.
23. Synthesis and characterization of Bismuth Selenide thin films, International symposium on Selenium Chemistry & Biology (SSCB) held in BARC, Mumbai, 9-11 Nov, 2017.
24. Synthesis and characterization of multilayer thin film structure of telluride compounds (doped and undoped with Selenium) for enhanced thermoelectric performance, International symposium on Selenium Chemistry & Biology (SSCB) held in BARC Mumbai, 9-11, Nov., 2017.
25. Synthesis and characterization of multilayer thin films structure of Bi_2Te_3/Sb_2Te_3, National Workshop on Instrumentation Technique for Research in Chemical Sciences (WITRCS) held in KMM Jaipur, 22-23, Dec., 2017.
26. Synthesis and characterization of structural properties of Bismuth Selenide thin films, National Workshop on Instrumentation Technique for Research in Chemical Science (WITRCS) held in KMM Jaipur, 22-23 Dec-2017.
27. Band gap engineering via thermal annealing for enhanced thermoelectric performance in stannite type-Cu2ZnSnSe4, International Symposium on Selenium Chemistry & Biology SSCB-2017", DAE-Convention Centre, Anushaktinagar, Mumbai, India 9-11 November, 2017.
28. Preparation and Characterization of Cu2ZnSnSe4 (CZTSe) thin films" in National Workshop on "Instrumentation Techniques for Research in Chemical Sciences" at Kanoria PG Mahila Mahavidyalaya, Jaipur during 22-23 December, 2017.
29. Preparation and Characterization of some thin films of tellurium alloys for thermoelectric device applications, National Conference on Materials & their Energy Applications 2016 organized by S S Jain Subodh PG (Autonomous) College, Jaipur.
30. Study of Structural, Morphological and Electrical characteristics of thin films of Antimony Telluride, III National Hindi- Science Conference, Rajasthan University, Jaipur, 16-17 December, 2016.
31. Study of Structural, Morphological and Electrical characteristics of thin films of Antimony Telluride, A Purohit, Y.C. Sharma, Y.K. Vijay, III National Hindi- Science Conference, Rajasthan University, Jaipur, 16-17 December, 2016.
32. Study of Sb_2Te_3 (doped with Al and In) thin films, Y. C. Sharma, A. Purohit, M. K. Tiwari, S. Srivastava and Y. K. Vijay, Presented in the National Conference on Materials and their

Energy Applications (NCME- 2014) organized by S S Jain Subodh PG (Autonomous) College, Jaipur 22-24 December, 2014.

33. Preparation and characterization of Sb_2Te_3 thin films, Y. C. Sharma, A. Purohit, M. K. Tiwari, S. Srivastava and Y. K. Vijay, Presented in the National Conference on Materials and their Energy Applications (NCME- 2014) organized by S S Jain Subodh PG (Autonomous) College, Jaipur 22-24 December, 2014.
34. Fabrication and characterization of thin films of aluminium antimonide (AlSb), Y. C. Sharma, A. Purohit, A. K. Sharma, A. Dixit, U. Kumawat, S. Ojha and Y. K. Vijay, Presented in the National Workshop on "Advanced Functional Materials (AFM-2013)" organized by Malaviya National Institute of Technology, Jaipur on September 5, 2014.
35. Effect of thermal annealing on the bandgap and optical properties of vacuum evaporation deposited zinc telluride (ZnTe) thin films, Y. C. Sharma, S. Boolchandani, A. Purohit, M. Kaur, K. J. Rangra and Y. K. Vijay, Presented in the National Workshop on "Advanced Functional Materials (AFM-2013)" organized by Malaviya National Institute of Technology, Jaipur on September 5, 2014.
36. Structural, optical and electrical properties of nanocrystalline InSb thin films, Y. C. Sharma, A. Purohit, S Srivastava, S. Ojha and Y. K. Vijay, Presented in the National Workshop on "Advanced Functional Materials (AFM-2013)" organized by Malaviya National Institute of Technology, Jaipur on September 5, 2014.
37. Electronic structure study of some superconducting compounds, Y. C. Sharma and S. Sharma, Presented in the 25th Annual General Meeting (AGM) of Materials Research Society of India (MRSI) and Theme Symposium "Electronic Materials for Energy and Environment" held at Indian Institute of Sciences (IISc), Bangalore from February 12 to 14, 2014.
38. Electron correlation effect in Compton spectroscopy, Y. C. Sharma, V. Vyas, V. Purvia, K. B. Joshi and B. K. Sharma, Presented in the International workshop on Correlated Electron Systems in High Magnetic Fields at the Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany during October 13 - 17, 2008.
39. Study of electron-electron correlation in A15 compounds, Y. C. Sharma, V. Vyas, V. Purvia, K. B. Joshi and B. K. Sharma, Presented in the International workshop on Local Correlation Methods: From Molecules to Crystals at the Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany during September 12 - 15, 2007.
40. Compton profile study of As and As_2Se_3, Y. C. Sharma, V. Vyas, N. L. Heda, B. L. Ahuja and B. K. Sharma, Presented in the Summer School on the ab initio simulation of crystalline and defective solids with CRYSTAL code (Ab initio Modeling in Solid State Chemistry-MSSC2007) at the Theoretical Chemistry Group of the Torino University, Torino, Italy during 2-7 September 2007.
41. Formation of Ge^{68} as a Positron Emitter, S. Srivastava, Y. C. Sharma, B. K. Sharma, S. Agarwal, S. Kumar, P. Gupta, R. Nathawat, M. Singh and Y. K. Vijay, Presented in the International Conference on Condensed Matter Physics and 5th Annual Convention of Rajasthan Physics Association (ICCMP-2007) during November 25-28, 2007 at University of Rajasthan, Jaipur.
42. Directional Compton profile study of β-brass, V. Vyas, Y. C. Sharma, V. Sharma, A. Rathore, B. L. Ahuja and B. K. Sharma, Presented in the International Conference on Condensed Matter Physics and 5th Annual Convention of Rajasthan Physics Association (ICCMP-2007) during November 25-28, 2007 at University of Rajasthan, Jaipur.

43. Compton profile study of polycrystalline AlN and As_2Se_3, B. K. Sharma, V. Vyas, Y. C. Sharma and B. L. Ahuja, Presented in the 6th International Conference on Inelastic X-ray Scattering (IXS07), held on May 7-11, 2007 at Awaji Yumebutai Conference Center, Hyogo, Japan and organized by SPring8, Japan.
44. Electronic structure study of Arsenic using Compton spectroscopy, Y. C. Sharma, V. Vyas, S. Mathur, B. L. Ahuja and B. K. Sharma, Presented in CMMP-2007, Department of Physics, University of Rajasthan, Jaipur, February 1-3, 2007.
45. Electronic structure of AlN by Compton profile, V. Vyas, Y. C. Sharma, V. Purvia, G. Sharma, B. K. Sharma, N. L. Heda, B. L. Ahuja and K. B. Joshi, Presented in CMMP-2007, Department of Physics, University of Rajasthan, Jaipur, February 1-3, 2007.
46. Directional Compton profile study of α-brass, V. Vyas, Y. C. Sharma, V. Purvia and B. K. Sharma, Presented in CMMP-2007, Department of Physics, University of Rajasthan, Jaipur, February 1-3, 2007.
47. Compton profile study of bonding in A15 compound: V_3Ge, Y. C. Sharma, V. Vyas, K. B. Joshi and B. K. Sharma, Presented in *DAE-SSP Symposium (2006)* Bhopal, December 26-30, 2006.
48. Compton profile study of Vanadium Germanide and Chromium Germanide, Y. C. Sharma, V. Vyas, V. Purvia, K. B. Joshi and B. K. Sharma, Presented in International workshop *MESODIS 2006*, held at IIT Kanpur, December 4-8, 2006.
49. Anisotropy in the momentum density of α- brass, V. Vyas, Y. C. Sharma, V. Purvia, S. Mathur, B. L. Ahuja and B. K. Sharma, Presented in International workshop *MESODIS 2006*, held at IIT Kanpur, December 4-8, 2006.
50. Electron-momentum distribution and charge-transfer study of Arsenic triselenide, Y. C. Sharma, V. Vyas, V. Purvia and B. K. Sharma, Presented in *NASI Conference*, Mumbai (2006) held at IIT Bombay, October 6-8, 2006.
51. Electronic Structure of V_3Ge and Cr_3Ge by LCAO method, K. B. Joshi, Y. C. Sharma and B. K. Sharma, Presented in MSSC2006 (School on *Ab initio* Modeling in Solid State Chemistry) University of Torino, Italy (3-8, September, 2006).
52. Study of bonding in ZnSe by Compton scattering Technique, V. Vyas, V. Purvia, Y. C. Sharma and B. K. Sharma, Presented in NASI Conference, Jaipur (2004) and NSMRA (Patiala) (2004).
53. Compton profile calculations of Ca, Sr and Ba using renormalized free atom model, Y. C. Sharma, S. S. Asawat, B. L. Ahuja and B. K. Sharma, Presented in National Symposium on current trends in Physics (2001) (Ajmer).

Refresher courses attended

The Indian Academy of Sciences Refresher Course in Theoretical Physics, October 1- 14, 2002 Department of Physics, St. Stephen's College, University of Delhi, New Delhi.

Talks delivered: 15

1. Delivered a talk on "Developments in Compton spectroscopy" at the Department of Physics "Galileo Galilei", University of Padova, Padova, Italy on 19th September, 2007.
2. Delivered invited talk on from "From Micro to Nano" in the National conference on Micro and Nano Electronic Devices and Systems (MINO-2011) at Vivekananda Institute of Technology (East), Jagatpura, Jaipur, 11-12 March, 2011.
3. Delivered a talk on "Teaching to Learn v/s Learning to Teach" in the Induction Training

Programme through ICT organized by NITTTR, Chandigarh from 7th to 11th January 2013.

4. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 7, 2014.
5. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on December 15, 2015.
6. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 27, 2016.
7. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 23, 2017.
8. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 17, 2018.
9. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 29, 2019.
10. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on May 25, 2020.
11. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on November 25, 2020.
12. Delivered a talk on “IPR and Patents” at Vivekananda Global University, Jaipur on May 26, 2021.
13. "AN INTERNATIONAL WORKSHOP ON INNOVATIVE EXPERIMENTS”, Department of Mathematics and Applied Sciences, Middle East college, Muscat, Oman on 25TH APRIL, 2021.
14. Introduction to FTIR spectroscopy Rajasthan Technical University, Kota and Vivekananda Institute of Technology, Jaipur are organizing RTU (ATU) TEQIP-III sponsored online FDP on "Recent Advances in Materials Characterization Techniques" from 15/02/2021 to 19/02/2021.
15. Nano Science and Technology for the society, Rajasthan Technical University, Kota and Vivekananda Institute of Technology, Jaipur are organizing RTU (ATU) TEQIP-III sponsored online FDP on "Nano-Materials and its Applications in Science and Technology" from 07/09/2020 to 09/09/2020.

Books published: 03

Engineering Physics, College Book Centre, Jaipur (2008); Ramesh Book Depot, Jaipur (2007).

Academic visits:

International: **04**

1. Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany, October 13 - 17, 2008.
2. Department of Physics "Galileo Galilei", University of Padova, Padova, Italy, September 17-19, 2007.
3. Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany, September 12 - 15, 2007.
4. Theoretical Chemistry Group of the Torino University, Torino, Italy, September 2-7, 2007.

National: 20

1. BARC, Mumbai
2. DRDO Lab, Jodhpur
3. HBCSE, TIFR, Mumbai
4. IIT, Gandhi Nagar
5. Raja Ramanna Centre for Advanced Technology (RRCAT), Indore from September 4 to 8, 2017.
6. Inter University Accelerator Consortium (IUAC), New Delhi from July 10 to 15, 2017.
7. Department of Physics, Indian Institute of Technology Kanpur (IITK), Kanpur during February 10-12, 2017.
8. Indian Institute of Technology Bombay (IITB), Mumbai during September 7 to 11, 2015.
9. Indian Institute of Technology Bombay (IITB), Mumbai during May 25 to 26, 2015.
10. Raja Ramanna Centre for Advanced Technology (RRCAT), Indore from July 27 to 29, 2015.
11. Raja Ramanna Centre for Advanced Technology (RRCAT), Indore from October 7 to 11, 2014.
12. Indian Institute of Sciences (IISc), Bangalore from February 12 to 14, 2014.
13. Indian Institute of Technology Jodhpur (IITJ), Rajasthan from December 16 to 22, 2013.
14. Indian Institute of Technology Gandhinagar (IITGn), Gujarat on September 6, 2013.

15. Tata Institute of Fundamental Research (TIFR), Bombay during December 3-5, 2009.
16. Indian Institute of Technology Bombay (IITB), Bombay during May 29 to June 4, 2009.
17. Department of Physics and Electronics, Barkatullah University, Bhopal during December 26-30, 2006.
18. Department of Physics, Indian Institute of Technology Kanpur (IITK), Kanpur during December 4-8, 2006.
19. Indian Institute of Technology Bombay (IITB), Bombay during October 6-8, 2006.
20. Department of Physics, St. Stephen's College, University of Delhi, New Delhi during October 1- 14, 2002.

Conferences organized: 18

1. 5th National Conference on "Micro and Nano Electronic Systems and Devices-2017" held at Vivekananda Institute of Technology (East), Jaipur from 11-12 October, 2017.
2. Ist National conference on Innovations in Science and Teaching (IST-I) organized at the VIT Campus, Jaipur on 14-16 July, 2017.
3. 4th National Conference on "Micro and Nano Electronic Systems and Devices-2016" held at Vivekananda Institute of Technology (East), Jaipur from March 18 to 19, 2016.
4. 3rd awareness workshop on Intellectual property rights and patents (IPR-2016) organized at the VIT Campus, Jaipur on 8 October, 2016.
5. 7th International workshop on polymer metal nanocomposites at Jaipur, India from 2-5 November, 2015
6. 18th international conference on 'Radiation Effects in Insulators', at Jaipur, India from 26-31 October, 2015
7. 2nd awareness workshop on Intellectual property rights and patents (IPR-2015) organized at the VIT Campus, Jaipur on 16 September, 2015.
8. 3rd one day workshop on "Contribution of School Teachers in Higher Education and Technological Advancement" was organized at the VIT Campus, Jaipur on February 15, 2015.

9. National Seminar on “Materials and Society” & Meeting of MRSI Rajasthan Chapter was organized at the VIT Campus, Jaipur on May 27, 2014.
10. 2nd one day workshop on “Contribution of School Teachers in Higher Education and Technological Advancement” was organized at the VIT Campus, Jaipur on January 18, 2014.
11. 1st awareness workshop on Intellectual property rights and patents (IPR-2013) organized at the VIT Campus, Jaipur on October 19, 2013.
12. 1st one day workshop on “Contribution of School Teachers in Higher Education and Technological Advancements” was organized at the VIT Campus, Jaipur on April 6, 2013.
13. 3rd National Conference on "Micro and Nano Electronic Systems and Devices-2013" held at Vivekananda Institute of Technology (East), Jaipur from March 20 to 21, 2013.
14. 2nd National Conference on "Micro and Nano Electronic Systems and Devices-2012" held at Vivekananda Institute of Technology (East), Jaipur from August 8 to 9, 2012.
15. A one day National Workshop on ‘Recent Trends in Physical Sciences’ (RTPS-2012) was organized at the VIT Campus, Jaipur on November 24, 2012.
16. A one day National Workshop on Science and Society “NSS-2012” was organized on April 14, 2012 at Vivekananda Institute of Technology (East), Jaipur in association with Society for Scientific Values, New Delhi.
17. 1st National Conference "Micro and Nano Electronic Systems and Devices-2011" held at Vivekananda Institute of Technology (East), Jaipur from March 11 to 12, 2011.
18. International Conference on Condensed Matter Physics and 5th Annual Convention of Rajasthan Physics Association (ICCMP-2007), November 25-28, 2007 University of Rajasthan, Jaipur.

Conferences/ Seminars/ Workshops/ Summer schools attended:

International: 07
National: 40

1. Invited to perform ADXRD measurements at beamline on BL-12 bending magnet port of

the Indus-2 synchrotron from July 27 to 29, 2015 by RRCAT, Indore.

2. Invited to perform XRF measurements on BL-16 XRF microprobe during October 7 to 11, 2014 by RRCAT, Indore.
3. A one day National Conference on “Recent Trends in Science and Technology- RTST" on November 8, 2014 held at Vivekananda Global University, Jaipur.
4. Vice Chancellors’ Conference of Rajasthan on Integrating Ethics & Values in Higher Education held at Pacific Academy of Higher Education and Research University, Udaipur on September 29, 2014.
5. National Workshop on “Advanced Functional Materials (AFM-2013)” organized by Malaviya National Institute of Technology, Jaipur on September 5, 2014.
6. Seminar on “Atomic Energy for Robust National Development” at Malaviya National Institute of Technology, Jaipur, September 5 to 6, 2014.
7. The Defence Research Forum 2014 at 7, Scope Complex, Lodhi Road New Delhi on July 24, 2014.
8. Accelerator users committee (AUC-56) meeting from July 6 to 7, 2014 at Inter University Accelerator Center (IUAC), New Delhi.
9. A short term course on characterization of materials at Malaviya National Institute of Technology, Jaipur from June 17 to 21, 2013.
10. 25th Annual General Meeting (AGM) of Materials Research Society of India (MRSI) and Theme Symposium “Electronic Materials for Energy and Environment” held at Indian Institute of Sciences (IISc), Bangalore from February 12 to 14, 2014.
11. A brainstorming workshop to discuss the creation of a Centre which will encourage interdisciplinary studies that will integrate science/technology and culture/heritage on September 6, 2013 at IIT Gandhinagar, Gujarat.
12. International workshop on Design of Sub-systems for CSP Technologies at Indian Institute of Technology, Jodhpur from December 16 to 22, 2013.
13. ISTE Workshop on Research Methods in Educational Technology

    February 2 to 9, 2013 IIT Bombay, at remote centre VIT, Jaipur.

14. Induction Training Programme through ICT

    January 7th to 11th, 2013 NITTTR, Chandigarh, at remote centre VIT, Jaipur.

15. 12th INUP Hands on Training Workshop on Nanofabrication Technologies

    October 29 to November 2, 2012, Centre of Excellence in Nanoelectronics,

    Department of Electrical Engineering, IITB, Bombay.

16. Seminar and Workshop on Laboratory Innovations

    March 5-6, 2010 Department of Physics, University of Rajasthan, Jaipur

17. Public Lecture on "Past (and Future) Revolutions in Computing and Impacts on Society" by Ian Foster, Director, Computation Institute, University of Chicago and Argonne National Laboratory, USA

    February 23, 2010 Central University of Rajasthan and LNMIIT, Jaipur

18. 5th National Quality Conclave "Quality for Empowering the Billion"

    February 19-20, 2010 Quality Council of India, New Delhi

19. Bhabha Centenary Symposium

    December 3-5, 2009 Tata Institute of Fundamental Research, Mumbai

20. First Indian Seminar on Electron Beam Lithography for Applications in Nanotechnology-INDIA-NANO 2009.

    June 3, 2009 Institute of Technology Bombay, Mumbai.

21. 2nd INUP Workshop on Nanofabrication Technologies

    May 30 – 31, 2009 Indian Institute of Technology Bombay, Mumbai.

22. 4th National Quality Conclave "Quality for Empowering the Billion"

    February 5-6, 2009 Quality Council of India, New Delhi.

23. Correlated Electron Systems in High Magnetic Fields (CORMAG08)

    October 13-17, 2008 Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany.

24. 20th International Conference on Ultra-Relativistic Nucleus- Nucleus collisions "Quark Matter- 2008", February 4-10, 2008 Jaipur, India

25. National Seminar on “Strategies for energy sufficient India”

    February 8-9, 2008 Swami Keshvanand Institute of Technology, Jaipur.

26. International Conference on Condensed Matter Physics and 5th Annual Convention of Rajasthan Physics Association (ICCMP-2000),

    November 25-28, 2007 University of Rajasthan, Jaipur.

27. International workshop on Local Correlation Methods: From Molecules to Crystals (LCC2007)

    September 12 - 15, 2007 Max-Planck-Institute for Physics of Complex Systems, Dresden, Germany.

28. Summer School on the ab initio simulation of crystalline and defective solids with CRYSTAL code (Ab initio Modeling in Solid State Chemistry-MSSC2007) September 2-7, 2007 Theoretical Chemistry Group of the Torino University, Torino, Italy.

29. National Seminar on “Emerging Areas in Condensed Matter Physics”

    March 28-29, 2007 Department of Physics, University of Rajasthan, Jaipur.

30. 2nd National Conference on Condensed Matter and Material Physics "CMMP-2007" February 1-3, 2007 Department of Physics, University of Rajasthan, Jaipur.

31. 51st Department of Atomic Energy Solid State Physics Symposium "DAE-SSPS 2006" December 26-30, 2006 Department of Physics and Electronics, Barkatullah University, Bhopal.

32. International Workshop on the "Physics of Mesoscopic and Disordered Materials" December 4-8, 2006 Department of Physics, Indian Institute of Technology, Kanpur.

33. International Seminar on Surfaces & Interfaces (Techniques and Applications) November 10-13, 2006 Department of Physics, University of Rajasthan, Jaipur.

34. International Workshop on “Hydrogen Energy Production, Storage and Application” November 5-9, 2006 Department of Physics, University of Rajasthan, Jaipur .

35. 76th Annual Session of NASI and National Symposium on “Science and Technology in the Service of Society”

    October 6-8, 2006 Indian Institute of Technology Bombay, Mumbai.

36. National Conference on “Recent Trends in Condensed Matter Physics”

March 28-29, 2006 Department of Physics, University of Rajasthan, Jaipur.

37. 15th National Symposium and Workshop on Thermal Analysis "Thermans- 2006" February 06-10, 2006 Department of Physics, University of Rajasthan, Jaipur.
38. Workshop on "Physics of Accelerator Driven Sub critical Systems for Energy and Transmutation"
    January 23-25, 2006 Department of Physics, University of Rajasthan, Jaipur.
39. Awareness workshop on "The Facilities of UGC- DAE Consortium for Scientific Research" November 18-19, 2005 Department of Physics, University of Rajasthan, Jaipur.
40. Seminar on "Overview of Major Developments in Physics in 20th century"
    December 24, 2005 Department of Physics, University of Rajasthan, Jaipur.
41. 74th Annual Session of NASI & National Symposium on "Science and Technology for Desert Development"
    December 2-4, 2005 Birla Institute of Scientific Research and Department of Physics, University of Rajasthan, Jaipur.
42. Seminar on "Frontiers in Physics".
    May 28-29, 2004 Department of Physics, University of Rajasthan, Jaipur.
43. Workshop on Patent Awareness.
    April 30, 2003 Sobhasaria Engineering College, Sikar.
44. National Conference on Recent Advances in Microwaves, Antennas & Propagation "Microwave-2001".
    November 2- 4, 2001 Department of Physics, S S Jain Subodh College, Jaipur.
45. National Symposium on "Current Trends in Physics".
    February 12 – 14, 2001 Department of Physics, Dayanand College, Ajmer.
46. National Seminar on Higher Education".
    July 21, 2000 University of Rajasthan, Jaipur.
47. Workshop on "Economic Viability of Private Engineering Colleges". March 16, 2000 Sobhasaria Engineering College, Sikar.

Academic Career:

Exam	Year	Div.	Subject/ (s)

Ph. D.	2007		Physics
Post Graduation (M.Sc.)	1997	I	Physics
Graduation (B.Sc.)	1994	I	Physics, Chemistry and Mathematics
Senior Secondary (XII^{th})	1991	I	Physics, Chemistry, Mathematics, Hindi and English
Matriculation (X^{th})	1989	I	Mathematics, Science, Social Science etc

Title of thesis: Compton profile study of some elemental solids and compounds.

Post-Doctoral Fellowship: Offered for the Post-doctoral fellowship on "Van der Waals inclusion in the Density Functional Theory" at the Department of Physics "G. Galilei ", University of Padua, Padua (Italy).

Address: 1282, I floor, Vinay Path, Barkat Nagar, Tonk Phatak (Jaipur)- 302 015.

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(Dr. Yogeshchand ra Sharma)