1. **Name of faculty:** ***Dr. Rishi Kumar Singhal***

2. **Department:** ***Physics***

3. **Designation:** ***Associate Professor***

4. **Age as on 01.01.2016:** ***51 and a half years***

5. **Educational Qualifications:** ***Ph.D.***

6. **Teaching Experience as on 01.01.2016:** ***28 years***

7. **Address (Local):** ***T-46, Sanghi Farm, Mahavir Nagar, Tonk Road, Jaipur 302018***

   Address (Permanent): ***Same as above***

8. **Phone / Mobile Number:** ***+917597925336***

9. **Email ID: singhal46@yahoo.co.in**

10. **Details of Research Projects:**

S. N.	Title of project	Co-investigator if any	Funding Agency	Year of sanction	Year of completion	Funds received (in Lacs)
1	Study cuprate perovskites to explore phenomenological details pertaining to formation of stripes and pseudo-gap and possible correlations between them	None	TWAS, Italy	2003	2005	US$ 5000
2	Study of some aspects related to Electronic structure of some perovskites	I was co-investigator	UGC	2004	2009	11 lakhs for 5 years
3	Electronic structure- A key to understand CMR materials	I was co-investigator	UGC	2004	2007	6.8 lakhs for 3 years
4	Study of electronic structure of cuprate perovskite systems	None	UGC	2004	2006	1 lakh

11. List of Publications:

Papers published in Refereed Journals

1. X-ray Absorption Study of Electronic Structure in Pristine Bulk Room Temperature Ferromagnetic CeO_2

   A Samariya1, S.C. Sharma, M. Dhawan, P.K. Sharma, S.Pareek, S.N. Dolia, S. Kumar and R. K. Singhal

   Advanced Electrochemistry, Vol. 2, 1–6, 2015, p. 40-45

2. Investigating the mechanism of ferromagnetic exchange interaction in non-doped CeO_2 with regard to defects and electronic structure

   R.K. Singhal, S. Kumar, A. Samariya, M. Dhawan, S.C. Sharma, Y.T. Xing

   Materials Chemistry and Physics 132 (2012) **p. 534** [IMPACT FACTOR 2.39]

3. Magnetization enhancement in nanocrystalline $Co_{0.4}Zn_{0.6}Fe_2O_4$ by 200 MeV Ag^{15+} ion irradiation

   S.N. Dolia, M. Dhawan, A. Prasad, S. Kumar, A. Samariya, R.K. Singhal, R. Kumar

   Radiation Effects and Defects in Solids 166 (2012) p. 558 [IMPACT FACTOR 0.44]

4. Swift heavy ion irradiation induced changes in magnetic & dielectric properties of Mn–Ca ferrite

   S.N. Dolia, P.K. Sharma, M. Dhawan, S. Kumar, A. Prasad, A. Samariya, S. Pareek, R.K. Singhal, K. Asokan, Y T Xing, M. Alzamora and E. Saitovitch

   Applied Surface Science **258** (2012) P 4207 [IMPACT FACTOR 2.11]

5. Evidence of defect-induced ferromagnetism and its "switch" action in pristine TiO_2 bulk

   R. K. Singhal, S. Kumar, P. Kumari, Y. T. Xing, E. Saitovitch

   Applied Physics Letters 98 (2011) p. 092510 [IMPACT FACTOR 3.79]

6. A comparative study of Pr substitution at Y and Ba sites in $YBa_2Cu_3O_{7-\delta}$

   R.K. Singhal

   Materials Letters 65 (2011) p. 325 [IMPACT FACTOR 2.32]

7. Room Temperature Ferromagnetism and its "Switch" Behaviour in some Dilute Magnetic Oxides: an Electronic Structure and Magnetization Study

   R.K. Singhal, M. Dhawan, S.K. Gaur and E. Saitovitch

   Solid State Phenomena 171 (2011) p. 19 [IMPACT FACTOR 0.49]

8. Role of electronic structure and oxygen defects in driving ferromagnetism in non-doped CeO_2

   R. K. Singhal, P. Kumari, A. Samariya, S. Kumar, S. Sharma, Y. Xing, E. Saitovitch

   Applied Physics Letters 97 (17) (2010) p. 172503 [IMPACT FACTOR 3.79]

9. How the substitution of Zn for Cu destroys superconductivity in YBCO system?

   R. K. Singhal

   J. Alloys and Compounds (2010) 495 (2010) p. 1 [IMPACT FACTOR 2.39]

10. A close correlation between induced ferromagnetism and oxygen deficiency in Fe doped In_2O_3

R.K. Singhal, A. Samariya, S. Kumar, S.C. Sharma, Y.T. Xing, U.P. Deshpande, T. Shripathi, E. Saitovitch

Applied Surface Science 257 (2010) p. 1053. [IMPACT FACTOR 2.11]

11. Comments on "Effect of annealing temperature on structure, magnetic properties and optical Characteristics in $Zn_{0.97}Cr_{0.03}O$ nanoparticles" by Liu et al., Appl. Surf. Sc. 256 (2010) 3559" R.K. Singhal

    Applied Surface Science 257 (2010) p. 1808. [IMPACT FACTOR 2.11]

12. On the longevity of H-mediated ferromagnetism in Co doped TiO_2: Study of electronic and magnetic interplay

    R.K. Singhal, A. Samariya, S. Kumar, Y.Xing, D. Jain, U. Deshpande, T.Shripathi, E. Saitovitch,

    Solid State Communications 150 (2010) p. 1154. [IMPACT FACTOR 1.65]

13. Electronic and magnetic properties of Co-doped ZnO diluted magnetic semiconductor

    R.K. Singhal, A. Samariya, Y.Xing, S. Kumar, S.Dolia, T. Shripathi, U.Deshpande, E. Saitovitch

    J. Alloys and Compounds 496 (2010) p. 324 [IMPACT FACTOR 2.39]

14. Defect-induced reversible ferromagnetism in Fe-doped ZnO semiconductor: An electronic structure and magnetization study

    A Samariya, R.K. Singhal, S. Kumar, Y.T. Xing, D.C. Jain, S.N. Dolia, U. Deshpande, T. Shripathi, E. Saitovitch

    Materials Chemistry and Physics, 123 (2010) p. 678 [IMPACT FACTOR 2.395]

15. Influence of ageing on H-induced ferromagnetism in $Zn_{1-x}M_xO$ (M = Co, Fe, Mn) R.K. Singhal, Arvind Samariya, Sudhish Kumar, Y.T. Xing, Elisa Saitovitch

    Materials Letters, 64 (2010) p. 1846 [IMPACT FACTOR 2.32]

16. Mechanism of Quenching of Superconductivity in $YBa_2Cu_3O_7$ on substitution of Zn for Cu

    K.B. Garg, S.K. Gaur, R K Singhal, P. Pal, B.R. sekhar, P. Nordblad, S. Carlson

    Int. J. Mod. Physics B 24 (2010) p. 2135. [IMPACT FACTOR 0.4]

17. Defect-induced reversible ferromagnetism in hydrogenated ZnO:Co

    R.K. Singhal, Arvind Samariya, Sudhish Kumar, Y.T. Xing, Elisa Saitovitch

    J. Magn. Magn. Mater. 322 (2010) p. 2187 [IMPACT FACTOR 1.83]

18. Room temperature ferromagnetism in Mn doped dilute ZnO semiconductor: an electronic structure study using x-ray photoemission

    R K Singhal, M Dhawan, S K Gaur, S N Dolia, S Kumar, T Shripathi, U P Deshpande, Y Xing, E. Saitovitch, K B Garg

    J. of Alloys and Compounds 477 (2009) p. 379 [IMPACT FACTOR 2.39]

19. Temperature and field Dependent Mössbauer Study of $CeSn_3$ and $CeSn_{3.1}$ Crystals

    R K Singhal, S K Gaur, D R Sanchez, E. Saitovitch, K B Garg

    International J. of Mod. Physics B 23 No. 2 (2009) p. 265 [IMPACT FACTOR 0.4]

20. Room temperature Ferromagnetism in Mn doped ZnO semiconductor

R K Singhal, S N Dolia, M Dhawan, S Kumar, K B Garg, Y Xing, E. Saitovitch

International J. of Mod. Physics B 23 No. 8. (2009) p. 2029 [IMPACT FACTOR 0.4]

21. A Temperature Dependent Mössbauer Study of $CeSn_3$ and $CeSn_{3.1}$ Single Crystals.

    R K Singhal, S K Gaur, S N Dolia, K B. Garg, J Larrea, D R Sanchez, E Saitovitch.

    J. Magn. & Magn. Mat. 320 (2008) p. 25 [IMPACT FACTOR 1.83]

22. Doped holes and Mn valence in manganites: a polarized soft x-ray absorption study of

    $LaMnO_3$ and quasi-2D manganite systems

    K B Garg, N L Saini, B R Sekhar, R K Singhal, B Doyle, S Nannarone, F Bondino, E Magnano, E Carleschi, T Chatterji

    J. Phys.: Condensed Matter 20 (2008) p. 055215 [IMPACT FACTOR 2.55]

23. Electronic structure of Mn-doped ZnO by x-ray emission and absorption spectroscopy

    F Bondino, K B Garg, E Magnano, E Carleschi, M Heinonen, R K Singhal, S K Gaur

    J. Phys.: Condensed Matter 20 (2008) p. 275205 [IMPACT FACTOR 2.55]

24. A study of suppression mechanism of superconductivity by Pr^{3+} substitution for Ba^{2+} in the YBCO (123) System.

    S K Gaur, R K Singhal, K B Garg, T Shripathi, U P Deshpande, E M Bittar, P G Pagliuso, Elisa Saitovitch.

    J. Phys.: Condensed Matter 19 (2007) p. 326201 [IMPACT FACTOR 2.55]

25. Electronic Structure of $Pr_{0:67}Ca_{0:33}MnO_3$ near the Fermi level studied by ultraviolet photoemission and x-ray absorption spectroscopy

    M K Dalai, P Pal,B Sekhar, N Saini, R.K. Singhal, KB Garg, BP Doyle, S Nannarone, F Studer

    Physical Review B. 74 (2006) p. 165119 [IMPACT FACTOR 3.32]

26. An X-ray absorption Study of dependence of the density of holes on Tc and/or the diamagnetic fraction in oxycarbonates superconducting system $Hg_{1-x}M_xSr_4Cu_2(CO_3)O_{6+\square}$(M=Mo, Cr)

    R K Singhal, S K Gaur, S K Gupta, A Gupta, H J Lin, C T Chen

    Solid State Communications 139 (2006) p. 250 [IMPACT FACTOR 1.65]

27. XANES Study of oxycarbonates $Hg_{1-x}M_xSr_4Cu_2(CO_3)O_{6+\square}$(M=Mo, Cr)

    R K Singhal, S K Gaur, B R Sekhar, D Pelloquin, H J Lin, C T Chen

    Radiation Physics and Chemistry (Elsevier) 75 (2006) p. 1630 [IMPACT FACTOR 0.93]

28. Temperature dependent study of itinerant holes in $Bi_2Sr_2Ca_{1-x}Pr_xCu_2O_{8-\square}$

    B Dalela, R K Singhal, S. Dalela, N L Saini, C T Chen K B Garg

    Solid State Communications 130 (2004) p .143 [IMPACT FACTOR 1.65]

29. Core level photoemission study of electronic structure of MgB_2 system

    K B Garg, T Chatterji, S Dalela, B Dalela, R K Singhal, N L Saini,

    Solid State Communications 131 (2004) p. 343 [IMPACT FACTOR 1.65]

30. An electronic structure study of $La_{8-x}Sr_xCu_8O_{20-d}$ (8820) single crystal using polarised x-ray absorption spectroscopy

    S K Gaur, R K Singhal, N L Saini, S Dalela, C T Chen, H J Lin, K B Garg

    Solid State Communications 132 (2004) p .279 [IMPACT FACTOR 1.65]

31. Study of itinerant holes in planer and apical oxygen in two different BSCCO (2212) single crystals using polarized x-ray absorption

    B Dalela, R K Singhal, S. Dalela, N L Saini, C T Chen, K B Garg

    International J. of Mod. Phys. B 18 (2004) p. 2841 [IMPACT FACTOR 0.4]

32. XANES Study of the dependence of the itinerant hole density in the Pr & superconducting $Hg_{0.5}Bi_{0.5}Sr_2Ca_{1-x}R_xCu_2O_{7-\square}$ system

    S K Gaur, R K Singhal, N L Saini, D Pelloquin, F Studer, C T Chen, S Agrawal, K B Garg

    International J . of Mod. Physics B 18 (2004) p. 2849 [IMPACT FACTOR 0.4]

33. Study of anomalous temperature dependence of itinerant holes in under- and over- doped $La_{2-x}Sr_xCuO_4$ single crystals using polarised soft x-ray absorption spectroscopy

    R K Singhal, N L Saini, S. Dalela, B R Sekhar, D C Jain and K B Garg

    Nucl. Inst. Methods in Physics B (Elsevier) 199 (2003) p. 280 [IMPACT FACTOR 1.1]

34. A comparative study of the electronic structure of borocarbides by XPS technique

    K Kumari, R K Singhal, K B Garg, M Heinonen, J Leiro and L C Gupta

    International J. of Mod. Phys. B 17(3) (2003) p. 361 [IMPACT FACTOR 0.4]

35. Polarized XAS study of anomalous temperature dependence of aggregation of itinerant holes and pair formation in a $YBa_2Cu_3O_{7-\delta}$ single crystal

    K B Garg, S Dalela, N L Saini, R K Singhal, D C Jain and C T Chen

    Physica C 399 (2003) p. 98 [IMPACT FACTOR 0.74]

36. Photoemission study of Ba2+ and Nd 3+ substitution in the BSCCO (2212) system

    K Kumari, R K Singhal, K B Garg, M Heinonen, J Leiro, A Gupta and S K Agrawal

    Indian J. of Physics 77A(4) (2003) p. 333 [IMPACT FACTOR 0.23]

37. A Comparative study of Electronic structure of some natural and synthetic Emeralds by measuring the 3d impurity Cr K and Fe K edge absorption spectra

    P Parikh, N L Saini, R P Gupta, R K Singhal and K B Garg

    Bull. of Mater. Science, 25(7) (2002) p. 653 [IMPACT FACTOR 0.57]

38. Polarised x-ray absorption Study of importance of Inter-block vis-à-vis Intra-block Coupling in Evolution of T_c in Halide Molecules Intercalated BSCCO (2212)

    R K Singhal, N L Saini, B Dalela, S Dalela, J H Choy, D Chaturvedi, B.R. Sekhar, D.C. Jain, K.B. Garg, Hong ji Lin and C.T. Chen

    J. Phys.: Condensed Matter 14 (2002) p. 6675 [IMPACT FACTOR 2.55]

39. Polarised XANES study of superconducting $La_{2-x}Sr_xCuO_{4-y}$ under and over- doped crystals C Goncha, J Garcia, J Blasco, K B Garg, R K Singhal

International J. of Mod. Phys. B 16(9) (2002) p.1327 [IMPACT FACTOR 0.4]

40. Study of local srructure in underdoped $La_{2-x}Sr_xCuO_{4-y}$ by polarised EXAFS

    K B Garg, J Garcia, J Blasco, R K Singhal, S Dalela and N L Saini

    International J. Mod. Phys. B 16(11) (2002) p.1641 [IMPACT FACTOR 0.4]

41. An Electronic structure study of c- axis oriented NdBCO (123) thin films using polarised soft X-ray absorption spectroscopy on Cu L_3 and O K edges

    R K Singhal, S Dalela, D Chaturvedi, B Dalela, N L Saini, B R Sekhar, K B Garg, B Mercey, C T Chen, H.J. Lin, T Y Hou

    J. Phys.: Condensed Matter 13 (2001) p. 6865 [IMPACT FACTOR 2.55]

42. Polarization Dependent XANES Study of $Bi_2Sr_2Ca_{1-x}Pr_xCu_2O_{8-\square}$ Insulating Single Crystal

    K B Garg, S Dalela, B Dalela, J F Lee, J H Choy, D Chaturvedi, R K Singhal, J Garcia-Ruiz

    Journal of Synchrotron Radiation 8 (2001) p. 842 [IMPACT FACTOR 2.73]

43. Simultaneous measurement of XANES In Halide-Intercalated BSCCO(2212) using Electron and Fluorescence Yield to compare their performance,

    S G Saxena, B Dalela, D Chaturvedi, R K Singhal , P Pareek, D C Jain and K B Garg

    Journal of Synchrotron Radiation 8 (2001) p. 821 [IMPACT FACTOR 2.73]

44. K and Cu LIII Edge Study of Itinerant Holes in I_2-, HgI_2- and $HgBr_2$-Intercalated BSCCO(2212) Single Crystals

    K B Garg, S Dalela, S. Venkatesh, J H Choy, D Chaturvedi, R K Singhal and J Garcia-Ruiz

    Journal of Synchrotron Radiation 8 (2001) p 818 [IMPACT FACTOR 2.73]

45. Polarised EXAFS Study Of In-Plane Distortion In Pr-Doped BSCCO (2212) Single Crystal

    S Dalela, J F Lee, J H Choy, B Dalela, D Chaturvedi, R K Singhal, D C Jain & K B Garg

    International J. of Mod. Phys. B 14 (2000) p. 3432 [IMPACT FACTOR 0.4]

46. Study of site geometry of the Sn cations in the Sn-added Tl-Pb(1223) superconducting system using Mossbauer and Auger emission technique

    K Kumari, R K Singhal, KB Garg, E.Saitovitch, S Azavedo, J Gomez, M Heinonen, Y Wang

    International J. of Modern Physics B 13 (23) (1999) p. 2887 [IMPACT FACTOR 0.4]

47. A structural model for $LaCa_xBa_yCu_3O_7$ superconducting system from EXAFS study

    S J Gurman, J C Amiss, S Venkatesh, K Kumari, R K Singhal and K B Garg

    Journal of Synchrotron Radiation 6 (1999) p. 761. [IMPACT FACTOR 2.73]

48. X-ray absorption study of valence fluctuation in the SmSe with SmSb

    R K Singhal, Usha Chandra & K.B. Garg

    J. Magn. & Magn. Mater. 123 (1993) p. 311 [IMPACT FACTOR 1.78]

49. Study of some Ce intermetallics by core level photoemission

    R K Singhal, K B Garg, N L Saini, J Kanski, L Ilver and P O Nilsson, R Kumar, L C Gupta

    J. Phys.: Condensed Matter 5 (1993) p. 4013 [IMPACT FACTOR 2.55]

50. Valence Fluctuation in $Sm_{1-x}Eu_xS$ system

    R K Singhal, U Chandra and K B Garg

    J. Magn. & Magn. Mater. 116 (1992) p. 238 [IMPACT FACTOR 1.78]

51. XANES study of valence fluctuation in some cation doped systems

    R K Singhal and K B Garg

    Physica Scripta 44 (1991) p. 500 [IMPACT FACTOR 1.2]

52. XANES study of intermediate valence in $SmSe_{1-x}As_x$ alloys

    R K Singhal, K V R Rao. U Chandra, K B Garg, D C Jain and R B Beeken.

    Physica Scripta 41 (1990) p.284 [IMPACT FACTOR 1.2]

53. X-ray Absorption study of intermediate valence in $Sm_{1-x}Gd_xS$ alloys

    R K Singhal, K V R Rao, U Chandra, D C Jain, K B Garg

    International J. of Mod. Phys. B 4 (1990) p. 1567 [IMPACT FACTOR 0.4]

54. Intermediate valence in $Sm_{1-x}La_xSe$ alloys: X-ray absorption and lattice parameters studies

    R K Singhal, U Chandra, K.B Garg, D C Jain, H S Chauhan

    International J. of Mod. Phys. B 4 (1990) p. 1707 [IMPACT FACTOR 0.4]

55. Valence fluctuation in $Sm_{0.85}Eu_{0.15}S$ system

    K B Garg, R K Singhal, U Chandra A Marcelli and A Bianconi

    Review of Solid State Sciences 4 (1990) p. 119 [IMPACT FACTOR 0.42]

56. RESPES and XAS study of some cerium intermetallics

    K B Garg, R K Singhal, M Fanfoni, A Marcelli, A Bianconi, H Chauhan, KV Rao

    Physica B: Cond. Matter 163 (1990) p. 581 [IMPACT FACTOR 0.92]

57. X-Ray absorption study of mixed valence in Sm(1-x)R(x)Se (R=Nd, La) alloys

    R K Singhal, U Chandra, KB Garg, H Chauhan, DC Jain, A Jayaraman

    Physica B: Cond. Matter 158 (1989) p. 593 [IMPACT FACTOR 1.33]

58. X-ray absorption study of YBCO superconducting system

    KVR Rao, R K Singhal, D Jain, U Chandra, N L Saini, KB Garg, N Rao, S K Agrawal, AV Narlikar

    Modern Phys. Letters. B 3 (150) (1989) p. 1157 [IMPACT FACTOR 0.47]

59. XANES study of Cu valence and mechanism of superconductivity in $YBa_2Cu_3O_{7-\square}$

    K B Garg, R K Singhal, K V R Rao, U Chandra, J Singh, K S Jerath and D C Jain.

    Physica Status Solidi (b) 147 (1988) p. 343. [IMPACT FACTOR 1.15]

60. XANES study of phase transition in some vanadium oxides

    K B Garg, H S Chauhan, U Chandra, R K Singhal and K V R Rao

    Indian J. of Physics 62 A (8) (1988) p. 869 [IMPACT FACTOR 0.23]

61. XANES and EXAFS in Cu-Ti and Ni-Zr glasses;

K B Garg, K S Jerath, U Chandra, R K Singhal and K V R Rao

Pramana J. of Physics 31(3) (1988) p. 233 [IMPACT FACTOR 0.57]

62. Study of quenched YBCO system by XANES technique

KV Rao, R K Singhal, HS Chauhan, DC Jain, U Chandra, KB Garg, LC Gupta, R V. Raghavan

Review of Solid State Sciences 2 (2,3) (1988) p. 357 [IMPACT FACTOR 0.42]

63. XANES STUDY OF Se-Te GLASSES

D.C. Jain, K. Jerath, H.S.Chauhan, K.B. Garg, R.K. **Singhal**, E.S.R. Gopal

Key Eng. Mater, 13 (1986), Page 148 **[**IMPACT FACTOR 0.43]

12. List of Books Published:

Authors names	Title of Book	Name of Publisher	Year
R K Singhal	Latest Trends in Condensed Matter Physics	Trans Tech Publications, Switzerland	2011
NS Saxena, DC Jain, R K Singhal	Solid State Physics	Kota Open Univ., Rajasthan	2009
NS Saxena, R. Nepaliya, R K Singhal	Physics Pt II, Class 11	Rajasthan Board, Ajmer	2008

13. List of Conferences / Symposium/ Refresher Courses Attended

(a) Conferences / Symposium:

Name of the seminar/Conf./ Symposium/Workshop etc.	Name of sponsoring Agency	Place and Date
1. Nat. Symp. on "Materials for…."	MRSI, Bangalore	Feb. 9-11, 2015, Jaipur
2. Nat. Seminar on Materials & Society	VGI Univ., Jaipur	May 27, 2014, Jaipur
3. Int. Conf. on light	NIT, Calicut	May 23-25, 2011, Calicut, India
4. AIU 2nd Workshop	Univ. of Raj & Delhi	Aug. 9-10, 2010, Jaipur
5. National Symp. on Radiation Physics	MLS Univ, Udaipur	Nov. 19-21 2009, Udaipur, India
6. Int. Conf. on Magnetism	KIT, Germnay	Jul 26-31,2009, Karlsru, Germany
7. Int.Conf. on superconductivity&Magn.	Antalya Univ. Turkey	Aug. 22-26 2008, Antalya, Turkey
8. Int. Conf. on Strongly Correlated Electron Systems	CNPq Brazil	Aug. 27-31 2008, Búzios, Brazil
9. Int. Conf. on x-ray & inner-shells Proc...	Univ. of Melbourne	Jul 4-8, 2005, Melbourne, Australia
10. W'shop on Novel States and Phase	ICTP, Italy	Jul 12-23,2005, Trieste Italy

transition in Highly correlated Matter		
11. Awareness W'shop on facilities of UGC-DAE CSR, Indore	UGC CSR Indore	Nov 18-19, 2005, Jaipur, India
12. Seminal on Frontiers in Physics	Univ. of Raj. Jaipur	May 28-29, 2004, Jaipur, India
13. Nat. Conf. thermo-physical properties	Univ. of Raj. Jaipur	Dec 2002, Jaipur, India
14. Int. conf. on synchrotron radiation in material science	Univ. of Singapore	Jan 21-24 2001, Singapore
15. Int. W'shop on HT_c superconductivity	Univ. of Raj. Jaipur	Dec 5-9 1996, Jaipur, India
16. DAE SSP Symosium	DAE & Univ. of Raj.	Dec 27-31, 1994, Jaipur, India
17. Int. W'shop on Surface EXAFS	Univ. of Raj. Jaipur	Aug18-20, 1992Jaipur, India
18. Twin Int. workshops on XAFS	Univ. of Raj. Jaipur	Dec 11-22, 1989, Jaipur, India
19. Int. Conf. on superconductivity	Univ. of Raj. Jaipur	Dec 1988, Jaipur, India
20. Summer school "Use of Microcomputer in Physics Labs"	CDPE, Univ. of Raj.	Feb 7-27, 1988, Jaipur, India
21. Int. Conf. on Valence Fluctuation	IISc, TIFR	Jan 5-9, 1987, Bangalore, India
22. DAE Solid State Physics Symposium	DAE, India	Dec 20-23, 1986, Pantnagar, India

(b) Orientation/Refresher Course/Summer Schools

Name of the Course/ Summer School	**Place**	**Duration**	**Sponsoring Agency**
1. Orientation Programme	Univ. of Raj, Jaipur	02.09.2013- 28.09.2013	ASC, UOR, Jaipur
2. Refresher Course on Material Sciences	Univ. of Raj, Jaipur	10.08.2009 - 29-08.2009	ASC, UOR, Jaipur
3. Refresher Course on Environment	Univ. of Raj, Jaipur	15.12.2008 - 03.01.2009	ASC, UOR, Jaipur
4. Refresher Course on Mathematical & Experimental Phys.	Univ. of Raj, Jaipur	24.08.1992 - 12.09.1992	ASC, UOR, Jaipur
5. Workshop on Novel States and Phase Transition in Highly Correlated Matter	Trieste, Italy	12.07.2004 - 23.07.2004	ICTP, Itly

14. Papers in Conference Proceedings:

1. S. C. Sharma, A. Samariya, M. Dhawan, P. K. Sharma, S. Kumar and R.K. Singhal "Magnetization and XPS Study of pristine bulk In_2O_3" AIP Conf. Proc. 1536, (2013) p. 975; doi: 10.1063/1.4810557
2. A. Samariya, S. C. Sharma, M. Dhawan, P.K. Sharma, S. Kumar, K.B. Sharma, S.N. Dolia and R.K. Singhal "Electronic And Magnetic Correlations In Mn doped ZnO Nano-rods" AIP Conf. Proc. 1536, (2013) p. 127; doi: 10.1063/1.4810133.
3. P. K. Sharma, A. Samariya, M. S. Dhawan and R. K. Singhal "Study of substitution of Zn for Cu in $YBa_2Cu_3O_7$ system" International J. of Modern Phys.: Conf. Series Vol. 22 (2013) 583–588.
4. P.K. Sharma, S. Kumar, S.N. Dolia, R.K. Singhal "Pr Substitution at Y and Ba sites in YBCO (123) System" AIP Conf. Proc. 1349 (2011), p. 905-906.
5. S. Kumar, S.N. Dolia, R.K. Singhal "Application of Rietveld Method to the Structural Characteristics of some Bulk and Nanocrystalline Materials" AIP Conf. Proc. 1391 (2011), p. 65-67.
6. P.K. Sharma, A Prasad, A Samariya, M Dhawan, S.N. Dolia, R.K. Singhal, S. Kumar "Synthesis, structural and magnetization studies of nanocrystalline $Cu_{1-x}Zn_xFe_2O_4$" AIP Conf. Proc. 1349 (2010) p. 389.
7. R K Singhal, A. Samariya, Y T Xing, S N Dolia, S. Kumar, U P.Deshpande, T Shripathi "Study of Room Temperature Ferromagnetism for Cobalt and Manganese doped ZnO Diluted Magnetic Semiconductor" E. Saitovitch *Journal of Physics: Conf. Ser. (IOP Publ.)* 200 (2010) p. 062029.
8. R.K. Singhal "XAS and XPS Study of some ZnO and TiO_2 based dilute magnetic semiconductors" "Recent Trends in Radiation Physics" eds. B.L. Ahuja, Proc. Nat. Conf. on Radiation Physics, Udaipur, (2010) p. 59.
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14. R K Singhal, K V R Rao, U Chandra, D C Jain and K B Garg "X-ray Absorption study of intermediate valence in $Sm_{1-x}Gd_xS$ alloys" *Proc. of DAE Symp 31C (1988)* p.35.
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15. National / International Awards received

TWAS-UNESCO Associate Membership awarded for 2005-2008, 2008-2011

16. Membership of technical societies / academic bodies/ National or international organizations (if any)

- Material Research Society of India- Life Member
- Indian Vacuum Society-Life Member
- Indian Physics Association –Life Member
- TWAS-UNESCO (Italy) International Associateship (2005-2011).

17. Details of Ph. D. students supervised:

Name of student	**Year of award**	**Title of thesis**
Sunil K. Gaur	2009	Study of Anomalous Temperature and Doping Dependence of Itinerant Holes and Their Correlation with Charge Aggregation and Cooper Pair Formation in Cuprate Perovskite Superconductors
Bhavna Dalela	2009	Study of Electronic Structure of Cuprate Perovskites to Comprehend Mechanism of High Temperature Superconductivity
Mahendra Dhawan	2011	Study of electronic and magnetic properties of some nanocrystalline spinel ferrites and some spintronics materials $Zn_{1-x}M_xO$ (M=Mn, Fe, Co etc.)
Arvind Samariya	2012	Study of electronic and magnetic properties of some dilutely doped magnetic semiconductors like $Zn_{1-x}M_xO$ (where TM= Mn, Co, Fe, Cr etc.) and some nanocrystalline ferrites coated with poly-aniline AND POLY-pyrrole
Pramod K. Sharma	2014	Study of electronic and magnetic and dielectric properties of some nanocrystalline spinel ferrites and some Pr and Zn doped YBCO (123) Cuprates
Shivcharan Sharma	2014	Study of electronic and magnetic properties of defect induced ferromagnetism in some dilute magnetic semiconductors $Zn_{1-x}M_xO$ and $(In_{1-x}M_x)_2O_3$ (M=some 3d elements)