

# CURRICULUM-VITAE

## Personal information

**Name** : Priya Mahadevan

**Date and place of birth** : 19<sup>th</sup> August, 1970, Bangalore, India

**Nationality** : Indian.

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**Present position** : Associate Professor,  
S.N. Bose National Center for Basic Sciences,  
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## Academic Qualifications

1. Degree : Bachelor of Science (B.Sc.), 1991 (degree awarded 1992)  
Institute : Bangalore University, Bangalore, India
2. Degree : Master of Science (M.Sc.), 1993 (degree awarded 1995)  
Specialization : Physics  
Institute : Indian Institute of Science, Bangalore, India
3. Degree : Ph.D, August, 1998 (degree awarded 1999)  
Research Topic : Electronic Structure of Strongly Correlated Systems  
from *Ab-initio* and Model Hamiltonian Approaches  
Thesis Supervisor : Prof. D. D. Sarma and Prof. T.V. Ramakrishnan  
Institute : Indian Institute of Science, Bangalore, India

## Past Positions

1. Post-doctoral fellow, Theory Group, Joint Research Centre for Atom Technology, Tsukuba, Japan (1998-2000).
2. Research Associate, Prof. D.D. Sarma's Group, Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore, India (April 2000-Oct 2000).
3. Post-doctoral fellow, Solid State Theory Group, National Renewable Energy Laboratory, Golden, USA (Oct 2000-Sept. 2003).
4. Assistant Professor, Department of Physics, IIT Madras, Chennai, India (Sept. 2003-June 2005).
5. Visiting Scientist, National Institute of Materials Science, Tsukuba, (Feb. 2006-Apr. 2006).
6. Visiting Scientist, KTH Stockholm, Sweden, (June 2007 - July 2007).
7. Reader, Department of Material Science, S.N.Bose National Centre for Basic Sciences, Kolkata (July 2005-February 2009).

## Awards and Fellowships

1. Fifth rank in Bachelor of Science, Bangalore University (1991).
2. Senior Research Fellow of CSIR, 1995-1998.
3. Martin Foster Medal for best PhD in Division of Physical and Mathematical Sciences, Indian Institute of Science, Bangalore (2000).
4. L.A. Meera prize for best PhD, in Department of Physics, Indian Institute of Science, Bangalore (2000).
5. Junior Associate, ICTP Trieste, Italy (2005-2010).
6. TWOWS Prize for young woman scientist in Physics/Mathematics in Asia region for 2010.
7. NASI-SCOPUS young scientist award in Physics for 2010.
8. Executive Board member, MRSI Kolkata chapter.
9. Council member, MRSI.
10. Editorial board member, Chinese Journal of Physics.

# Publications

(\*=corresponding author)

1.  $K_2O_2$  : The most stable oxide of K, A.K. Nandy, **Priya Mahadevan\*** and D.D. Sarma, Phys. Rev. B. (in press).
2. Size dependence of the bulk modulus of semiconductor nanocrystals from first-principles calculations, R. Cherian, C. Gerard, **Priya Mahadevan\***, N.T. Cuong and R. Maezono, Phys. Rev. B **82**, 235321 (2010).
3. Dependence of magnetism on the  $GdFeO_3$  distortion in the  $t_{2g}$  system  $ARuO_3$  (A=Sr, Ca), S. Middey, **Priya Mahadevan\*** and D.D. Sarma, Phys. Rev. B **83**, 014416 (2011).
4. Absence of rippling in graphene under biaxial tensile strain, Bipul Rakshit and **Priya Mahadevan\***, Phys. Rev. B **82**, 153407 (2010).
5. Size-Dependent Tuning of  $Mn^{2+}$  d-Emission in  $Mn^{2+}$ -doped CdS Nanocrystals: Bulk vs. Surface, A. Nag, R. Cherian, **Priya Mahadevan**, Achanta Venu Gopal, A. Hazarika, A. Mohan, A.S. Vengurlekar and D.D. Sarma, Journal Physical Chemistry C, **114** 18323 (2010).
6.  $KO_2$ : Realization of orbital ordering in a  $p$ -orbital system, A.K. Nandy, **Priya Mahadevan\***, P. Sen and D.D. Sarma, Phys. Rev. Lett. **105**, 056403 (2010).
7. Charge ordering induced ferromagnetic insulator :  $K_2Cr_8O_{16}$ , **Priya Mahadevan\***, Abhinav Kumar, D. Choudhury and D.D. Sarma, Phys. Rev. Lett. **104**, 256401 (2010).
8. Origin of enhanced photoluminescence from semiconductor CdSeS nanocrystals, D.D. Sarma, A. Nag, P. Santra, A. Kumar, S. Sapra and **Priya Mahadevan**, Journal of Physical Chemistry Letters, **1** 2149 (2010).
9. Evolution of the electronic structure of a ferromagnetic metal - case of  $SrRuO_3$ , **Priya Mahadevan\***, F. Aryasetiawan, A. Janotti and T. Sasaki, Phys. Rev. B **80**, 035106 (2009).
10. In search of a two-dimensional metallic oxide, **Priya Mahadevan\*** and Kapil Gupta, in "Functional Metal Oxide Nanostructures", (Springer-Verlag) ed. J. Wu, W. Han, H. Kim, A. Janotti and J. Cao.
11. Role of Coulomb interactions in semi-core Ga  $d$  levels of GaX semiconductors: Implication on band offsets, R. Cherian, **Priya Mahadevan\*** and C. Persson, Solid State Comm **149**, 1810 (2009).
12. Metal-insulator transition of  $Na_xWO_3$  studied by angle resolved photoemission spectroscopy, S. Raj, T. Sato, T. Takahashi, D.D. Sarma and **Priya Mahadevan**, Modern Physics Letters B **23**, 2819 (2009).
13. Trends in Ferromagnetism in Mn doped dilute III-V alloys from a density functional perspective, Roby Cherian, **Priya Mahadevan\*** and Clas Persson, Phys. Rev. B **79**, 195211 (2009).
14. Strain driven magnetism in thin films of  $LaCoO_3$ , Kapil Gupta and **Priya Mahadevan\***, Phys. Rev B **79**, 020406 (2009).

15. Three-dimensional band structure of highly metallic  $\text{Na}_{0.8}\text{WO}_3$  by angle-resolved photoemission spectroscopy, S. Raj, A. Chakraborty, D. Choudhury, T. Sato, T. Takahashi, **Priya Mahadevan**, J. Fujii, I. Vobornik and D.D. Sarma, Phys. Rev. B **79**, 035119 (2009).
16. Pressure effects on the magnetic transition temperature in ordered double perovskites, D. DiCastro, P. Dore, R. Khasanov, **Priya Mahadevan**, S. Ray, D.D. Sarma and P. Postorino, Phys. Rev. B **78**, 184416 (2008).
17. Effects of non-stoichiometry on the lattice constant of semiconductor nanocrystals: CdSe and GaAs, Roby Cherian and **Priya Mahadevan\***, Journal of Nanoscience and Nanotechnology **9**, 5564 (2009).
18. Effects of quantum confinement on the conduction band minimum of semiconductors, Roby Cherian, Abhinav Kumar and **Priya Mahadevan\***, Journal of Nanoscience and Nanotechnology **9**, 5673 (2009).
19. Can nano silicon be made optically active, Roby Cherian, Ashis Nandy, **Priya Mahadevan\*** and D.D. Sarma, Journal of Nanoscience and Nanotechnology **9**, 5673 (2009).
20. Size dependence of lattice constants of semiconductor nanocrystals, Roby Cherian and **Priya Mahadevan\***, Appl. Phys. Lett. **92**, 043130 (2008).
21. High temperature ferromagnetism in single crystal dilute magnetic oxide: A story of intrinsic disorder and magnetism in Fe-doped  $\text{BaTiO}_3$ , Sugata Ray, **Priya Mahadevan**, Suman Mandal, S. R. Krishnakumar, Carlos Seiti Kuroda, T. Sasaki, Tomoyasu Taniyama, and Mitsuru Itoh, Phys. Rev. B **77**, 104416 (2008).
22. Theoretical investigation of the spin reorientation transition in epitaxial films of NiO, S. Sen Gupta, **Priya Mahadevan\***, S. Mandal, S.R. Krishnakumar and D.D. Sarma, AIP Conference Proceedings **1003**, 28 (2008).
23. Validity of a localized spin model for  $\text{SrRuO}_3$  and  $\text{CaRuO}_3$ , S. Middey, **Priya Mahadevan\*** and D.D. Sarma, AIP Conference Proceedings **1003**, 148 (2008).
24. Chemical pressure effects on  $T_c$  in double perovskite oxides  $\text{A}_2\text{FeMoO}_6$  (A= Ba,Sr), A.K. Nandy, **Priya Mahadevan\*** and D.D. Sarma, AIP Conference Proceedings **1003**, 166 (2008).
25. Electronic structure of  $\text{Ca}_2\text{CuO}_2\text{Cl}_2$ , S. Jana, **Priya Mahadevan\*** and D.D. Sarma, AIP Conference Proceedings **1003**, 175 (2008).
26. Direct evidence for hidden one-dimensional fermi surface of hexagonal  $\text{K}_{0.25}\text{WO}_3$ , S. Raj, T. Sato, S. Souma, T. Takahashi, D.D. Sarma, **Priya Mahadevan**, J.C. Campuzano, M. Greenblatt and W.H. McCarroll, Phys. Rev. B **77**, 245120 (2008).
- 27.. Bulk and nanoscale GaN: Role of Ga  $d$  states, Roby Cherian and **Priya Mahadevan\***, Phys. Rev. B **76**, 75205 (2007).
28. Electronic structure of sodium tungsten bronze  $\text{Na}_x\text{WO}_3$  from high resolution angle resolved photoemission spectroscopy, S. Raj, H. Matsui, S. Souma, T. Sato, T. Takahashi, S Ray, A. Chakraborty, D. D. Sarma, **Priya Mahadevan**, S. Oishi, W. H. McCarroll, and M. Greenblatt, Phys. Rev. B **75**155116 (2007).

29. Modeling ferromagnetism in dilute magnetic semiconductors: Insights from microscopic calculations, **Priya Mahadevan\***, International Journal of Modern Physics B (Special issue on Spintronics) **22**, 57 (2008).
30. Metal-insulator transition in sodium tungsten bronzes,  $\text{Na}_x\text{WO}_3$ , studied by angle-resolved photoemission spectroscopy S. Raj, D. Hashimoto, H. Matsui, S. Souma, T. Sato, T. Takahashi, S. Ray, A. Chakraborty, D. D. Sarma, **Priya Mahadevan**, S. Oishi, W. H. McCarroll, M. Greenblatt, Journal of Magnetism and Magnetic Materials **310**, E231 (2007).
31. Elastic properties of Carbon Nanotubes: An atomistic approach, Roby Cherian and **Priya Mahadevan\***, Journal of Nanoscience and Nanotechnology **7**, 1779 (2007).
32. Suitability of  $p$ -type conditions for ferromagnetism in GaN:Mn, **Priya Mahadevan\*** and S. Mahalakshmi, Phys. Rev. B **73**, 153201 (2006).
33. Angle resolved photoemission spectroscopy of the insulating  $\text{Na}_x\text{WO}_3$ : Anderson localization, polaron formation and remnant fermi surface, S. Raj, D. Hashimoto, H. Matsui, S. Souma, T. Sato, T. Takahashi, D. D. Sarma, **Priya Mahadevan**, and S. Oishi, Phys. Rev. Lett. **96**, 147603 (2006).
34. Understanding the bulk electronic structure of  $\text{Ca}_{1-x}\text{Sr}_x\text{VO}_3$ , K. Maiti, U. Manju, S. Ray, **Priya Mahadevan**, I.H. Inoue, C. Carbone and D.D. Sarma, Phys. Rev B **73**, 052508 (2006).
35. Practical rules for orbital-controlled ferromagnetism of 3d impurities in semiconductors, Y.J. Zhao, **Priya Mahadevan** and Alex Zunger, Journal of Applied Physics **98**, 113901 (2005).
36. Angle-resolved photoemission spectroscopy of the metallic sodium tungsten bronzes  $\text{Na}_x\text{WO}_3$ , S. Raj, D. Hashimoto, H. Matsui, S. Souma, T. Takahashi, S. Ray, A. Chakraborty, D.D. Sarma, **Priya Mahadevan**, W.H. McCarroll and M. Greenblatt, Phys. Rev B **72**, 125125 (2005).
37. Clustering in dilute magnetic semiconductors: origin and consequences, **Priya Mahadevan\***, J.M Osorio-Guillen and Alex Zunger, Appl. Phys. Lett. **86**, 172504 (2005).
38. Unusual direction dependence of exchange energies in GaAs:Mn - Is the RKKY description relevant, **Priya Mahadevan\***, Alex Zunger and D.D. Sarma, Phys. Rev. Lett. **93**, 177201 (2004). *See Nature News and Views* **442**, 359 (2006).
39. Trends in ferromagnetism, hole localization and acceptor level depth for Mn substitution in GaN, GaP, GaAs and GaSb, **Priya Mahadevan\*** and Alex Zunger, Appl. Phys. Lett. **85**, 2860 (2004). *Also featured article on the cover, Oct 4th 2004 issue.*
40. First principles investigation of the assumptions underlying Model Hamiltonian approaches to ferromagnetism of 3d impurities in GaAs, **Priya Mahadevan\*** and Alex Zunger, Phys. Rev. B **69**, 115211 (2004).
41. Comparison of the predicted ferromagnetic tendencies of Mn substituting Ga site in III-V and I-III-VI<sub>2</sub> chalcopyrite semiconductors, Y.J. Zhao, **Priya Mahadevan** and Alex Zunger, Appl. Phys. Lett. **84**, 3753 (2004).
42. Ferromagnetism in Mn doped GaAs due to substitutional-interstitial complexes, **Priya Mahadevan\*** and Alex Zunger, Phys. Rev. B **68**, 075202 (2003).

43. Strong correlation effects in the electronic structure of  $\text{Sr}_2\text{FeMoO}_6$ , Sugata Ray, **Priya Mahadevan**, Ashwani Kumar, D.D. Sarma, R. Cimino, M. Pedio, L. Ferrari and A. Pesci, *Phys. Rev. B* **67**, 085109 (2003).
44. Origin of room-temperature ferromagnetism in Mn doped semiconducting  $\text{CdGeP}_2$ , **Priya Mahadevan\*** and Alex Zunger, *Phys. Rev. Lett.* **88**, 047205 (2002).
45. Study of valence and covalence as well as spin states of late transition metal oxides by x-ray absorption spectroscopy, Z. Hu, **Priya Mahadevan**, D. D. Sarma, G. Kaindl and L. T. Tjeng, in *Recent Research Developments in Physics*, (Transworld Research Network).
46. Difference in spin state and covalence between  $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$  and  $\text{La}_{2-x}\text{Sr}_x\text{Li}_{0.5}\text{Co}_{0.5}\text{O}_4$ , Z. Hu, C. Grazioli, M. Knupfer, M. S. Golden, J. Fink, **Priya Mahadevan**, A. Kumar, S. Ray, D. D. Sarma, S. Warda, D. Reinen, S. Kawasaki, M. Takano, C. Schussler-Langeheine, C. Mazumdar and G. Kaindl, *J. Alloy and Comp.* **343**, 5 (2002).
47. Spin, charge and orbital ordering in  $\text{La}_{0.5}\text{Sr}_{1.5}\text{MnO}_4$ , **Priya Mahadevan\***, K. Terakura and D.D. Sarma, *Phys. Rev. Lett.* **87**, 066404 (2001).
48. Electronic band structure of cadmium chromium chalcogenide spinels:  $\text{CdCr}_2\text{S}_4$  and  $\text{CdCr}_2\text{Se}_4$ , N. Shanthi, **Priya Mahadevan** and D.D. Sarma, *Journal of Solid State Chemistry*, **155**, 198 (2000).
49. Electronic structure of and covalency-driven metal-insulator transition in  $\text{BaCo}_{1-x}\text{Ni}_x\text{S}_2$ , S.R. Krishnakumar, T. Saha-Dasgupta, N. Shanthi, **Priya Mahadevan** and D.D. Sarma, *Phys. Rev. B* **63**, 045111 (2000).
50. Electronic structure of  $\text{Sr}_2\text{FeMoO}_6$ , D.D. Sarma, **Priya Mahadevan**, T-Saha Dasgupta, Sugata Ray and Ashwani Kumar, *Phys. Rev. Lett.* **85**, 2549 (2000).
51. Hole distribution between the Ni 3d and O 2p orbitals in  $\text{NdSrNiO}_4$ , Z. Hu, M.S. Golden, J.Fink, G.Kaindl, S.A.Warda, D.Reinen, **Priya Mahadevan** and D.D.Sarma, *Phys. Rev. B* **61**, 3739 (2000).
52. Calculation of x-ray absorption spectra from strongly correlated systems, **Priya Mahadevan** and D.D.Sarma, *Phys. Rev. B* **61**, 7402 (2000).
53. Electronic Structure of  $\text{NiS}_{1-x}\text{Se}_x$ , S.R. Krishnakumar, N. Shanthi, **Priya Mahadevan** and D.D. Sarma, *Phys. Rev. B* **61**, 16370 (2000).
54. Low-temperature spin dynamics of doped manganites: roles of Mn  $t_{2g}$ , Mn  $e_g$  and  $\text{O}_{2p}$  states, **Priya Mahadevan\***, I.V. Solovyev and K. Terakura, *Phys. Rev. B* **60**, 11439 (1999).
55. Evolution of electronic structure with dimensionality in divalent nickelates, K. Maiti, **Priya Mahadevan** and D.D. Sarma, *Phys. Rev. B* **59**, 12457 (1999).
56. Metal-insulator transition in a degenerate Hubbard model, **Priya Mahadevan** and D.D. Sarma, *Phys. Rev. B* **59**, 1739 (1999).
57. Evolution of the spectral function in a doped Mott insulator: surface versus bulk contributions, K. Maiti, **Priya Mahadevan** and D.D. Sarma, *Phys. Rev. Lett.* **80**, 2885 (1998).

58. Auger transitions from orbitally degenerate systems: Effects of screening and multielectron excitations, D.D. Sarma and **Priya Mahadevan**, Phys. Rev. Lett **81**, 1658 (1998).
59. Electronic and magnetic transitions in a multiband model for  $\text{La}_2\text{NiO}_4$ , **Priya Mahadevan**, K. Sheshadri, D.D. Sarma, H.R. Krishnamurthy and Rahul Pundit, Phys. Rev B **55**, 9203 (1997).
60. Electronic structure of  $\text{LaCrO}_3$ ,  $\text{LaMnO}_3$  and  $\text{LaFeO}_3$  from *ab-initio* spin-polarised calculations, **Priya Mahadevan**, N. Shanthi and D.D. Sarma, J. Phys. Condens. Matter **9**, 3129 (1997).
61. *Ab-initio* approach to electronic excitation spectra in perovskite  $\text{LaMO}_3$  oxides, D.D. Sarma and **Priya Mahadevan**, in *Frontiers in Materials Modelling and Design*, Eds. Vijay Kumar, Surajit Sengupta and Baldev Raj (Springer Verlag, Heidelberg), 1997.
62. Electronic and magnetic transitions in undoped transition metal compounds, D.D. Sarma and **Priya Mahadevan**, in *Condensed Matter Theories*, Vol. 12, (Nova Science Publishers, New York), 1997.
63. Electronic excitation spectra from *ab-initio* band structure results for  $\text{LaMO}_3$ , D.D. Sarma, N. Shanthi and **Priya Mahadevan**, Phys. Rev. B **54**, 1622 (1996).
64. Estimates of electronic interaction parameters for  $\text{LaMO}_3$  compounds ( $M=\text{Ti-Ni}$ ) from *ab-initio* approaches, **Priya Mahadevan**, N. Shanthi and D.D. Sarma, Phys. Rev B **54**, 11 199 (1996).
65. Electronic structure and metal-insulator transition in  $\text{LnNiO}_3$  ( $\text{Ln} = \text{La, Pr, Nd, Sm}$  and  $\text{Ho}$ ), D.D. Sarma, N. Shanthi, S.R.Barman, and **Priya Mahadevan**, in Perspectives in Solid State Chemistry, Ed. K.J. Rao, Narosa - New Delhi 1995, pp. 285.
66. Electronic structure and metal-insulator transition in  $\text{LnNiO}_3$  ( $\text{Ln}=\text{La, Pr, Nd, Sm}$  and  $\text{Ho}$ ) : Band structure results, D.D. Sarma, N. Shanthi and **Priya Mahadevan**, J. Phys. Condens. Matter **6**, 10467 (1994).
67. Electronic structure of 3d transition metal perovskites,  $\text{LaMO}_3$  from band structure calculations, D.D. Sarma, N. Shanthi and **Priya Mahadevan**, Physica C **235-240**, 2115 (1994).

## Talks

1. Talk at Department of Theoretical Physics, TIFR, Mumbai, May 2011.
2. Talk at Department of Physics, University Wien, Vienna, April 2011.
3. Invited talk at Discussion meeting on frontiers of electronic structure calculations and their applications, ARCHEM, University of Hyderabad, January 2011.
4. Invited talk at Current Trends in Condensed Matter Physics 2010, NISER Bhubhaneshwar, December 2010.
5. Talk at One day discussion meeting on graphene, Indian Association for the Cultivation of Sciences, Kolkata, November 2010.
6. Contributed talk at the International conference on magnetic materials (ICMM 2010), Kolkata, October 2010.
7. Talk at Institute of Solid State Research, Forschungszentrum, Julich, Germany, September 2010.
8. Invited talk at International Conference on Physics of Novel Oxide Materials, Pohang, Korea, July 2010.
9. Invited talk at TWOWS(Third World Organization for Women in Science) Fourth General Assembly and International Conference in Beijing, China, June 2010.
10. Invited talk at Villa Conference on Complex Oxide Heterostructures, Santorini, Greece, June 2010.
11. Talk at Nanosystem Research Institute, Tsukuba, Japan, April 2010.
12. Talk at Department of Physics, University of Tokyo, Tokyo, Japan, April 2010.
13. Talk at Department of Physics, National Taiwan University, Taiwan, March 2010.
14. Invited talk at International workshop on frontiers in electronic structure calculations: techniques and applications, Pune, India, Feb 2010.
15. Invited talk at Recent trends in strongly correlated electron systems, Guwahati, India, Jan 2010.
16. Invited talk at JNCASR research conference on Physics of Materials, Kolkata, India, Jan 2010.
17. Invited talk at ICTS conference on Condensed Matter, Mahabaleshwar, India, Dec. 2009.
18. Invited talk at Indo-UK Second Networking conference on low carbon futures, Kolkata, India, Dec 2009.
19. Invited talk at Gurudas College, Kolkata, India, in event organised by Indian Physics Association, Nov. 2009.
20. Contributed talk at Magnetism, Superconductivity and Phase Transitions in Novel and Complex Materials, Kolkata, India, Nov. 2009.

21. Invited talk at Discussion meeting on Statistical and Condensed Matter Physics, Guwahati, India, Oct. 2009.
22. Talk at the Department of Physics, Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil, June 2009.
23. Talk at Centenary Conference, Department of Physics, Indian Institute of Science, Bangalore, India, May 2009.
24. Talk at 30 years of SST, NREL, Golden USA, March 2009.
25. Contributed talk at APS March meeting, Pittsburg USA, March 2009.
26. Invited talk in Recent Trends in Strongly Correlated Electron Systems, Kolkata, India, March 2009.
27. Invited talk at Physics and Chemistry of Oxides, Kolkata, India, February 2009.
28. Invited talk at International conference on clusters and nanomaterials, Allahabad, India, February 2009.
29. Lectures at the 4th SERC School on Nanomaterials, Kolkata, India, January 2009.
30. Invited talk at India-Singapore networking conference, Kolkata, India, January 2009.
31. Invited talk at spintronics conference, Puri, India, January 2009.
32. Talk at Indo-Japan workshop on nanostructured materials, Tokyo, Japan, October 2008.
33. Talk at Laboratoire de Physique des Solides, University de Paris Sud, Orsay, France, June 2008.
34. Invited talk at Indo-Japan workshop on Multiferroics, Kolkata, India, Feb. 2008.
35. Invited talk at DAE Solid State Physics Symposium, Mysore, India, Dec. 2007.
36. Contributed talk at International Conference on Magnetic Materials - ICMM 2007, Kolkata, India, Dec. 2007.
37. Lectures at Summer School on Nanomaterials, KTH Stockholm, Sweden, June 2007
38. Lectures at Summer School on Condensed Matter Physics, HRI Allahabad, India, June 2007.
39. Invited talk at Workshop on Spintronics, Institute of Advanced Study, Nanyang Technological University, Singapore, May 2007.
40. Contributed talk at APS meeting, Denver, USA, March 2007.
41. Invited talk at Indo Japan meeting on magnetism, GMR in oxides and related phenomena, Tokyo, Japan, Feb. 2007.
42. Invited talk in workshop on the electronic structure of emerging materials experiments and theory, Lonavla, India, Feb. 2007.

43. Invited talk in Indo-UK networking conference on Nanomaterials, Kolkata, India, Nov. 2006.
44. Invited talk in 9th Asian Workshop on First-Principles Electronic Structure Calculations, KIAS, Seoul, Korea, Nov. 2006.
45. Invited talk at DAE-BRNS Theme Meeting on Materials Modeling at Different Length Scales, Bhabha Atomic Research Center (BARC), Mumbai, India, Oct. 2006.
46. Talk at Saha Institute of Nuclear Physics, Kolkata, India, June 2006.
47. Talk at First-Principles Theory Group, National Institute for Materials Science, Tsukuba, March 2006.
48. Talk at Fujimori-Mizokawa Group, University of Tokyo, Kashiwa, Japan, March 2006.
49. Invited talk in Indo-Japan Workshop on Spintronics and related phenomena, Bangalore, Feb. 2006.
50. Invited talk in DAE Workshop in Spintronics, Mumbai, Dec. 2004.
51. Invited talk in Asian Electronic Structure Workshop, Tsukuba, Japan, Nov. 2003.
52. Contributed talk in APS Meeting, Austin, USA, March 2003.
53. Contributed talk in APS Meeting, Indianapollis, USA, March 2002.
54. Contributed talk in APS Meeting, Seattle, USA, March 2001.
55. Contributed talk in APS Meeting, Minneapollis, USA, March 2000.