

## Curriculum Vitae : A. K. Grover

1. Name in full : **Arun Kumar Grover**
2. Date of birth : **December 12, 1951**
3. Nationality : **Indian**
4. Designation and address : **Vice Chancellor, Panjab University,**  
Chandigarh – 160 014, India  
Email: [vc@pu.ac.in](mailto:vc@pu.ac.in); [arunkgrover@gmail.com](mailto:arunkgrover@gmail.com)
5. Personal details : Married, one son.
6. Academic career and professional attainments :
  - (a) Academic qualifications: **B.Sc. Hons. School (Physics), 1971; M.Sc. Hons. School (Physics), 1972, Panjab University, Chandigarh ; Ph.D. (Physics) T.I.F.R. / University of Bombay, 1979**
  - (b) Academic Profile :  
Career at TIFR :

Position / Rank	Duration
Visiting Member	1972-1977
Research Associate	1977-1982
Fellow	1982-1988
Reader	1988-1995
Associate Professor	1995-1998
Professor	1998-2009
Senior Professor	2009-

Appointments elsewhere :

Position	Institution	Duration
S.E.R.C. Post-doctoral Research Assistant	Blackett Laboratory, <b>Imperial College, London, UK</b>	<b>March 1980-April 1982</b>
Professor	Dept. of Physics, <b>Panjab University, Chandigarh</b>	<b>February 1991 to April 1994</b>
Vice Chancellor	<b>Panjab University, Chandigarh</b>	<b>Commenced from 23<sup>rd</sup> July 2012, for 3 years</b>

(c) Awards / Special recognitions :

1. National Science Talent Search (NSTS) Scholar (1967-1976)
2. First BRUKER Young Scientist Award for NMR application in Physical Sciences, 1982.
3. Research Award for Foreign Specialists by Science and Technology Agency of Government of Japan, 1991 and 1993.
4. Homi Bhabha Science and Technology Award of BARC and Department of Atomic Energy, 1995.
5. Materials Research Society of India Medal, 1996.
6. Elected Fellow, Indian Academy of Sciences, Bangalore, India, 1997.
7. Elected Fellow, The National Academy of Sciences, India, 1997.
8. Honorary Fellow, Punjab Academy of Sciences, 2012.
9. DAE – C. V. Raman Lecture, 2012-13, awarded by Indian Physics Association.

(d) Other professional information :

1. Coordinator, JNCASR Discussion meeting on Electromagnetic Response in Superconductors and Magnetic Materials, held at Indian Institute of Science, Bangalore, February 1994.
2. Co-editor, Advances in Superconductivity : New Materials, Critical Current and Devices, New Age International Ltd., Publishers, New Delhi, 1997 (Proceedings of a TIFR Golden Jubilee Symposium, 1996).
3. Co-editor, Advances in Superconductivity and Magnetism : Materials, Mechanism and Devices, Indian Academy of Sciences, Bangalore, 2002 (Proceedings of an International Symposium hosted by DCMPMS, TIFR, 2001).
4. Co-ordinator, Discussion meeting on Ten Years of Borocarbide Superconductors, held at TIFR, Mumbai, January 2004.
5. Co-ordinator, Tenth International Vortex State Studies Workshop (IVW-10), held at TIFR, Mumbai, January 2005.
6. Host (at TIFR) of Golden Jubilee Solid State Physics Symposium (SSPS) of Department of Atomic Energy (DAE), Government of India, December 2005.
7. Co-editor, Current Trends in Vortex State Studies, Indian Academy of Sciences, Bangalore, 2006 (Commemorative Volume on the occasion of IVW10 hosted at TIFR, 2005).
8. Member, Governing Council IUCAA, Pune, 2007-2009 and 2013-2015.
9. Conceived and coordinated bi-institutional TIFR-Weizmann Interaction Meetings (TWIM-2006, 2008, 2010) and TIFR-Australian Nuclear Science Technology Organization (ANSTO) Collaboration Initiative, August 2008.
10. Member, Expert panel to review UGC Inter-University Centers in Physical Sciences (IUAC, IUCAA and UGC-DAE CSR), 2008.
11. Host (at TIFR) of Homi Bhabha Birth Centenary **DAE-SSPS**, December 2008.
12. Guest Editor, Special Homi Bhabha Birth Centenary issue of Physics News, March 2009.
13. Member, Basic Sciences Committee of BRNS (D.A.E.) , 2008-10.
14. Member, Advisory Committee, International Vortex Workshops (since 2003).
15. Chairman, Search Committee, DCMP&MS, TIFR (2002-07).
16. Convener, Homi Bhabha Birth Centenary Commemoration Committee, TIFR, 2008-2011.
17. Member, Sectional Committee (Physics), Indian Academy of Sciences, Bangalore (2010-12).
18. Co-convener, TIFR Endowment Fund Committee ( 2001-03, 2011-13)
19. Co-coordinator : Superconductivity @100 : Current Research Issues @ TIFR, April 13, 2011.
20. Session Chair at Five International Conferences abroad during last seven years (since 2006): International Vortex Workshops at Wroclaw, Poland (2006) and Lake Yamanaka, Japan (2009), Chicago, USA (2011) and Nanjing, China (2013) and Kammerlingh Onnes, Birth Centenary Commemorative 25<sup>th</sup> Low Temperature Physics Conference (LT-25) at Amsterdam, The Netherlands, 2008.

21. Editor, Physics News, 2012-2014.
22. Member, Governing Council, IUAC, New Delhi, 2013-15.
23. Member, General Assembly, Indian Council for Cultural Relations, New Delhi.
24. Member, Advisory Committee, Regional Office, Chandigarh, Indian Council for Cultural Relations.
25. Member, Executive Council, Indian Institute of Public Administration, New Delhi.
26. Member, Indian Institute of Mass Communication Society, New Delhi for two years.
27. Member, First Court of Central University of Punjab, Bathinda for three years.
28. Member, Research Council of National Physical Laboratory, New Delhi
29. Member, Academic Advisory Committee, UGC-Academic Staff College, Kurukshetra University, Kurukshetra.
30. Member, Administrator's Advisory Council, Chandigarh Administration.
31. Nominated Member of Institute Body of PGIMER, Chandigarh
32. Nominated Member of the Senate IIT, Ropar w.e.f. July, 2012
33. Member of Academic Senate, IISER Mohali
34. Nominated to the General Assembly of the Indian Council for Cultural Relations (ICCR) for the term of three years w.e.f. 17<sup>th</sup> October, 2012
35. Chairman, State Higher Education Council of UT, Chandigarh under Rashtriya Uchhatar Shiksha Abhiyan (RUSA)
36. Member, State Higher Education Council in Punjab.
37. Member, First Court of Central University of Haryana, Mahendergarh.
38. Nominated Member of State University of Performing and Visual Arts, Rohtak for the term of two years w.e.f. February, 2015.

(e) Selected Invited Talks delivered since 2006 :

1. Phase Transformations in the Vortex Matter: A perspective; A Plenary Talk delivered in Conference on Nano and Novel Materials, Department of Physics, Panjab University, Chandigarh, March 8-9, 2006.
2. Flux Jumps, dHvA oscillations, Second Magnetization Peak anomaly and peak effect phenomenon in weakly pinned LuNi<sub>2</sub>B<sub>2</sub>C crystals, Eleventh International Vortex Matter Workshop, Wroclaw, Poland, July, 2006.
3. New features in rare-earth based zero magnetization spin ferromagnets, Annual DAE-SSP Symposium, Mysore, December 26-31, 2007.
4. Vortex phase transformations and dynamical effects in weakly pinned systems, 4th East Asia Symposium on Superconducting Electronics, Dec. 11-15, 2007, IIT Delhi.
5. An update on explorations in Zero-magnetization spin ferromagnets at TIFR, 2nd TIFR-Weizmann Interaction Meeting (TWIM-2008), WIS Rehovot, Israel, May 26-29, 2008.
6. Recent TIFR Studies in Zero Magnetization Spin Ferromagnets, TIFR-ANSTO Collaborative Initiative Meeting, TIFR, Mumbai, August 23-24, 2008.
7. Zero-Magnetization Spin-Ferromagnets, Workshop on Cryogenics and Low Temperature Physics, University of Hyderabad, March 20-21, 2009.
8. Magnetization studies on superconductors : New revelations on Vortex Phase Diagrams in Borocarbides and Niobium, Workshop on Cryogenics and Low Temperature Physics, University of Hyderabad, March, 2009.
9. An update on hidden treasure in conventional admixed rare earth intermetallic compounds, Indian Institute of Science Centenary Condensed Matter Physics Conference, Bangalore, May 25-29, 2009.
10. Novel features in ferromagnetic Rare Earths inter-metallic compounds : Materials useful for Spintronics, IPA Colloquium, Department of Physics, Banaras Hindu University, July 27, 2009.
11. Novel features in admixed Rare Earths inter-metallic compounds : Materials useful for Spintronics, Research Meeting on 'Magnetic Structural Analysis of Magnetic Materials', Tokai, Japan, September 18, 2009.

12. Search and discovery of materials with large spin polarization, self magnetic compensation and tunable exchange bias, National Conference on Recent Advances in Correlated Electron Systems (RACES 2010), Department of Physics, Indian Institute of Technology, Guwahati, January, 2010.
  13. Magnets with no magnetization: Materials useful for spintronics, Bhabha Centenary Conference, Kurukshetra University, Kurukshetra, Haryana, January 24, 2010.
  14. Novel behavior in admixed rare earth systems : Exchange bias, repeated magnetic compensation and self compensation (Plenary talk), IIT-Kanpur Golden Jubilee Conference on Interaction, Instability, Transport & Kinetics : Glassiness and Jamming, Jan. 30-Feb. 7, 2010.
  15. Magnets with zero-magnetization: Materials useful for Spintronics, First DST Inspire Camp, Shri Mata Vaishno Devi University, Katra, J& K, April 18-23, 2010.
  16. Fluctuating state and the phase transition(s) in driven vortex matter, TIFR-Weizmann Interaction Meeting (TWIM-2010), December 16-20, 2010.
  17. A status report on rare-earth based novel functional materials for spintronics, ICACNM, Dept. of Physics, PU Chandigarh, Feb. 23-25, 2011.
  18. Novel behaviour elucidating crossover from compressed flux regime to Abrikosov vortex state, Commemorative Discussion Meeting, SC@100: Current research Issues @TIFR , April 13, 2011.
  19. Jamming, un-jamming, and critical behavior in driven vortex matter, First China International Workshop on superconducting Vortex Matter, Zhejiang University, Jinhua, China, May 27-31, 2011.
  20. Surface superconductivity and novel behaviour elucidating crossover from compressed flux regime to Abrikosov vortex state, 13<sup>th</sup> International Workshop on Vortex Matter in Superconductors, Chicago, Illinois, USA, July 31-Aug. 5, 2011.
  21. Spin-ferromagnets with zero-magnetization : Novel functional materials and their physics, Colloquium at IISER, Mohali, Sept. 23, 2011.
  22. New revelations about nucleation of Abrikosov flux line lattice from giant vortex states in type-II superconductors, Current Topics in Condensed Matter (CTCM-2011), IISER, Kolkata, October 7-9, 2011.
  23. A fluctuating state and the critical behavior at the depinning threshold of plastically deformed vortex matter in superconductors, 56<sup>th</sup> Annual DAE-SSP Symposium, SRM University, Chennai, December 19-23, 2011.
  24. Critical behavior underlying a dynamical phase transition in driven vortex matter in superconductors, Current Issues in Condensed Matter Science ( CICSMS-2012), IISc. Bangalore, Jan.31-Feb.2, 2012.
  25. Rare Earths based magnetic compensated *Spin-ferromagnets* as novel functional materials, 23<sup>rd</sup> AGM of MRSI, Thapar University, Patiala, Feb. 13-15, 2012.
  26. Admixed ferromagnetic Rare Earth alloys as interesting functional materials, India Singapore Joint Physics Symposium, IIT Delhi, Feb. 20-22, 2012.
  27. Zero-magnetization Systems : Materials for niche applications, National Conference in Materials Science ( NCMS-2012), DAV College, Jalandhar, March 2-3, 2012.
  28. Critical behaviour at the de-pinning of jammed driven vortex matter in superconductors, Department of Physics, University of Hyderabad, Hyderabad, April 9, 2012
- Presentation as Vice Chancellor, Panjab University**
29. Search and Applications of Magnets with No Magnetization, DST INSPIRE CAMP, ISF College of Pharmacy, Moga, August 23, 2012
  30. A new class of magnetic materials for niche applications: Magnetic STM Imaging and Spin Valves, CSIO Foundation Day, CSIR-Central Scientific Instruments Organization, Sector 30, Chandigarh, October 10, 2012.
  31. Science for Shaping the future of India, 100<sup>th</sup> year of celebration of Indian Science Congress Association (ISCA), Patiala Chapter of ISCA, Senate Hall, Punjabi University, Patiala, January 24, 2013.

32. Shanti Swarup Bhatnagar to Homi Bhabha: Some reflections on their visions for national development, Golden Jubilee Hall, Panjab University Campus, Chandigarh, February 21, 2013, First SSB UICET Commemorative Lecture on Birthday of Dr. S.S. Bhatnagar.
33. Rare Earths based Spin-Ferromagnets with net-zero magnetization for niche applications: Magnetic STM Imaging and Spin Valve Devices, 1<sup>st</sup> I.A.P.T. National Student Symposium on Physics, Department of Physics, P.U., Chandigarh, February 25-27, 2013.
34. Application potential of magnets with no-magnetization, National Technology Day Celebrations, DRDO-Terminal Ballastic Research Laboratory, Panchkula, Haryana, May 13, 2013.
35. Identification of re-entrant characteristic *a la* inverse melting and evidence for spinodal characteristic of second magnetization peak anomaly in low  $T_c$  superconductors, 14<sup>th</sup> International Workshop on Vortex Matter in Superconductors, Nanjing, China, May 21-26, 2013.
36. Shanti Swarup Bhatnagar to Homi Bhabha and 150 years of Higher Education in Punjab, India International Centre, New Delhi, July 9, 2013.
37. Ruchi Ram Sahni to Homi Bhabha via Birbal Sahni and Shanti Swarup Bhatnagar: A perspective, ASET Colloquium, TIFR, Mumbai, July 12, 2013.
38. S.S. Bhatnagar, C.V. Raman, Homi Bhabha and research in Physics at Lahore and Chandigarh, DAE – C.V. Raman Lecture of Indian Physics Association, Department of Physics, P.U., Chandigarh, August 7, 2013.
39. Organization of Research in India by Shanti Swarup Bhatnagar and Homi J Bhabha, CSIR-IMECH, Chandigarh, September 26, 2013.
40. Dr Shanti Swarup Bhatnagar and the research in CSIR, TIFR and the Universities, Evening Lecture, 58<sup>th</sup> DAE-Solid State Physics Symposium, Thapar University, Patiala, December 17, 2013.
41. Panjab University: Its Heritage, National and International Rankings, National Education Summit, Gandhinagar, January 10, 2014.
42. Legacy of Dr Shanti Swarup Bhatnagar and the research in Universities and National Laboratories: A perspective, Evening Lecture, 101<sup>st</sup> Indian Science Congress, University of Jammu, February 4, 2014.
43. Spin ferromagnets with net zero magnetization: Novel functional materials and their physics, Invited Lecture, Mid-Year meeting of Indian Academy of Sciences, IISc., Bangalore, July 4, 2014.
44. Dr. Shanti Swarup Bhatnagar and the research in CSIR, DAE and the Universities, Invited presentation, IIM, Lucknow, NOIDA Campus, NOIDA, U.P., August 19, 2014.
45. Academic Bilateral Collaborations as Harbingers to Promote Trade and Investment, Haydn, Garden Institute of Innovation and Entrepreneurship, University of Nottingham, Nottingham, U.K., August 29, 2014.
46. Panjab University Chandigarh: Its Heritage, Present Stature and Nucleation of CRIKC, Birmingham University, U.K., September 1, 2014.
47. Dr. Shanti Swarup Bhatnagar and Scientific Research in National Laboratories & the Universities of India, IAPT Annual Conference, Khalsa College, Sector 26, Chandigarh, October 12, 2014.
48. 'Rare Earths based Novel Functional Materials' at International Conference on Condensed Matter Physics, November 4, 2014 at HP University, Shimla
49. 'Skill Development Initiatives @ Panjab University, Chandigarh', Workshop on Skill in Higher Education by MHRD-UGC-AICTE, Vigyan Bhavan, New Delhi, December 6, 2014.
50. Presided over Inaugural talk by AIU Chief at North Zone Vice Chancellors Meet, Aligarh Muslim University, Aligarh December 15, 2014.
51. 'New Functional Materials for Spintronics and Magnetic STM Imaging', 30<sup>th</sup> N R Kamath & Mrs. Ruzena Kamath Oration, Sixty Seventh Annual Meeting of Institution of Chemical Engineers (CHEMCON 2014), P U Auditorium, Chandigarh, December 28, 2014.
52. Dr. S. S. Bhatnagar and the scientific research in Punjab and the UGC system, 47<sup>th</sup> Annual Day, NITTR, Sector 26, Chandigarh, December 30, 2014.

(f) Convocation and Foundation Day Addresses :

1. 17<sup>th</sup> Foundation Day Lecture, Punjab Technical University, Punjab Technical University, Jalandhar, January 16, 2013.
2. Annual Convocation, G.G.D.S.D. College, Haryana, Hoshiarpur, February 16, 2013.
3. Annual Convocation, D.A.V. College, Jalandhar, February 17, 2013.
4. Annual Convocation, Master Tara Singh College, Ludhiana, February 27, 2013.
5. 27<sup>th</sup> College Annual Convocation, Post Graduate Government College for Girls, Sector 42, Chandigarh, March, 13 2013.
6. 14<sup>th</sup> Annual Convocation, B.C.M. College of Education, Ludhiana, March 15, 2013.
7. 56<sup>th</sup> Annual Convocation, Post Graduate Government College for Girls, Sector 11, Chandigarh, March 29, 2013.
8. Annual Convocation, Gujranwala Guru Nanak Khalsa College, Ludhiana, March 26, 2013.
9. 2<sup>nd</sup> Annual Convocation, Sri Aurobindo College of Commerce and Management, Ludhiana, March 26, 2013.
10. 2<sup>nd</sup> Annual Convocation, Gobindgarh Public College, Alour, Khanna, April 2, 2013.
11. Annual Convocation, Sukhdev Krishna College for Girls, Ferozepur Road, Moga, May 4, 2013.
12. Organisation of research in India by Shanti Swarup Bhatnagar and Homi Jehangir Bhabha, CSIR-IMTECH Foundation Day Lecture, September 26, 2013.
13. Annual Convocation, DAV College Hoshiarpur, January, 2014.
14. Annual Convocation, DAV College, Amritsar, March 23, 2014.
15. Annual Convocation, MCM DAV College, Chandigarh, April 14, 2014.
16. Annual Convocation, Doraha College of Education, Doraha, Ludhiana Distt., May 2, 2014.
17. Annual Convocation, CDAC. Mohali, May 10, 2014.
18. First Convocation, Panjab University Regional Centre, Ludhiana, August 21, 2014.
19. Foundation Day Lecture, Central University of Himachal Pradesh, Dharamshala, Kangra, January 20, 2015.

(g) Radio and TV Broadcasts

1. PTC Channel Talk Show 'Punjab Speaks' titled Role of Panjab University in Indian Sciences, PTC Channel Mohali, October 07, 2012.
2. Ek Mulakat, Jalandhar Doordarshan, October 16, 2012
3. Plans for Panjab University as Vice Chancellor P.U., All India Radio, Chandigarh, November 20, 2012.
4. Panjab University Vice Chancellor Interview, All India Radio, Chandigarh, February 13, 2013.
5. PTC Channel Talk Show 'Privatisation of Higher Education', PTC Channel Mohali, June 18, 2013.
6. Broadcast on Prof. Ruchi Ram Sahni for National Science Magazine, Vigyan Bharati on Indraprastha Channel 819 KHz, All India Radio, New Delhi, June 26, 2013.
7. PTC Channel Talk Show 'Knowledge Hub', PTC Channel, Mohali, July 20, 2013.
8. Day & Night News Channel, Fare & Square: Interaction with VC, PU, January 19, 2014.

## Complete List of Publications of A. K. Grover

(a) In Refereed International Journals

1. A. K. Grover, L. C. Gupta and R. Vijayaraghavan,  
**NMR and susceptibility measurements in LaPt<sub>3</sub>, CePt<sub>3</sub> and PrPt<sub>3</sub>**  
Physica **86-88** B+C, 81-82 (1977)
2. J. Itoh, A. K. Grover, L. C. Gupta and R. Vijayaraghavan, K. Shimizu, H. Mizutani,  
**Hyperfine fields in Rhodium based Heusler alloys**  
J. Phys. Soc. Japan **42**, 1777-1778 (1977)
3. R. Vijayaraghavan, A. K. Grover, L. C. Gupta, V. Nagarajan, J. Itoh, K. Shimizu and H. Mizutani,  
**Hyperfine field studies in Cobalt based Heusler alloys**  
J. Phys. Soc. Japan **42**, 1779-1780 (1977)
4. R. Vijayaraghavan, K. Shimizu, J. Itoh, A. K. Grover and L. C. Gupta,  
**Hyperfine field studies in magnetically ordered Samarium and Terbium alloys**  
J. Phys. Soc. Japan **43**, 1854-1856 (1977)
5. A. K. Grover, Le Dang Khoi and P. Veillet,  
**NMR study of ferromagnetic Gold based Heusler alloys**  
J. Phys. F, **8**, 1557-1562 (1978)
6. N. K. Jaggi, K.R.P.M. Rao, A. K. Grover, L. C. Gupta, R. Vijayaraghavan and Le Dang Khoi  
**Mossbauer and NMR studies of site preference and local environment effects in Co<sub>2</sub>FeGa and Fe<sub>2</sub>CoGa**  
Hyperfine Interactions **4**, 402-406 (1978)
7. A. K. Grover, S. K. Dhar, L.C. Gupta, S. K. Malik and E. V. Sampathkumaran,  
**Paramagnetic state NMR and susceptibility measurements in Cobalt based Heusler alloys**  
Solid State Communications **30**, 141-144 (1979)
8. A. K. Grover, L. C. Gupta, R. Vijayaraghavan, M. Matsumura, M. Nakano and K. Asayama,  
**Host and impurity NMR studies in CoGa alloys - A cluster spin glass system**  
Solid State Communications **30**, 457-460(1979)
9. A. K. Grover, S. K. Malik, C. Radhakrishnamurthy and R. Vijayaraghavan,  
**AC susceptibility measurements in presence of DC magnetic field in CoGa alloys - a cluster spin glass system**  
Solid State Communications **32**, 1323-1325 (1979)
10. A. K. Grover, S. K. Malik, R. Vijayaraghavan and K. Shimizu,  
**Hyperfine fields in Sm<sub>1-x</sub>Gd<sub>x</sub>Al<sub>2</sub> alloys - microscopic evidence for ferromagnetic coupling between rare earth spins**  
J. App. Physics **50**, 7501-7503 (1979)

11. A. K. Grover, R. G. Pillay, V. Nagarajan and P. N. Tandon,  
**Hyperfine fields at nonmagnetic atoms on various sites in ferromagnetic Alloys**  
Physica Status Solidi (b) **98**, 495-505 (1980)
12. S. K. Dhar, A. K. Grover, S. K. Malik and R. Vijayaraghavan,**Peaks in low field AC susceptibility of ferromagnetic Heusler alloys**Solid State Commun. **33**, 545-547 (1980)
13. R. G. Pillay, A. K. Grover, P. N. Tandon, Le Dang Khoi and P. Veillet,**NMR and Mossbauer effect studies in ferromagnetic Rh<sub>2</sub>MnPb and Rh<sub>2</sub>MnSb**  
J. Magn. Magn. Mat **15-18**, 647-648 (1980)
14. A. K. Grover, L. C. Gupta, C. Radhakrishnamurthy, S. K. Malik, R. Vijayaraghavan, M. Matsumura, M. Nakano and K. Asayama,  
**Host and impurity NMR in a cluster spin glass**  
J. Magn. Magn. Mat. **15-18**, 663-664 (1980)
15. A. K. Grover, R. G. Pillay, V. Nagarajan and P. N. Tandon,  
**Site preference and local environment effects in ferromagnetic ternary alloys**  
J. Magn. Magn. Mat. **15-16**, 699-700 (1980)
16. A. K. Grover, B.R. Coles, B.V.B. Sarkissian and H.E.N. Stone,  
**The Y-Co System: A partial phase diagram study**  
J. Less Common Metals **86**, 29-36 (1982)
17. B.V.B. Sarkissian, A. K. Grover and B. R. Coles,  
**Magnetic and superconducting behaviour of Y<sub>36</sub>Co<sub>28</sub>("Y<sub>4</sub>Co<sub>3</sub>")**  
Physica, **109 & 110B**, 2041-2044 (1982)
18. B.V.B. Sarkissian and A. K. Grover,  
**The hybrid state of magnetic superconductor Y<sub>9</sub>Co<sub>7</sub>**  
J. Phys. F **12**, L107-L113 (1982)
19. A. K. Grover and B.V.B. Sarkissian,  
**Influence of impurities on the magnetism and superconductivity of Y<sub>9</sub>Co<sub>7</sub>**  
J. Magn. Magn. Mat. **31-34**, 515-516 (1983)
20. V. S. Patil, R. G. Pillay, A. K. Grover, P. N. Tandon and H. G. Devare,  
**RuFeSi - A new magnetic system**  
Solid State Commun. **48**, 945-947 (1983)
21. V. S. Patil, R. G. Pillay, A. K. Grover, P. N. Tandon and H. G. Devare,  
**Novel behaviour of iron magnetic moments in new magnetic systems RuFeSi and RuFeB**  
Phys. Letts. **98A**, 469-473 (1983)
22. P. N. Tandon, V. S. Patil, A. K. Grover, R. G. Pillay and H. G. Devare,  
**Anomalous behaviour of hyperfine fields at iron in new magnetic systems Ru<sub>x</sub>Fe<sub>y</sub>Si and RuFeB**  
Hyperfine Interactions **15/16**, 709-712 (1983)



23. J. V. Yakhmi, I. K. Gopalakrishnan and A. K. Grover,  
**Electrical resistivity studies on the Heusler alloys  $\text{Co}_2\text{Ti}_{1-x}\text{Al}_{1+x}$  ( $T = \text{T or Zr}$ )**  
Phys. Stat. Sol. (a) **85**, K89-K92 (1984)
24. S. N. Mishra, D. Rambabu, A. K. Grover, R. G. Pillay, P. N. Tandon, H. G. Devare and R. Vijayaraghavan,  
**Do Ruthenium atoms possess local moment in the magnetically ordered system  $\text{Fe}_{3-x}\text{Ru}_x\text{Si}$**   
Solid State Commun. **53**, 321-325 (1985)
25. S. N. Mishra, D. Rambabu, A. K. Grover, P. N. Tandon, H. G. Devare and R. Vijayaraghavan,  
**Mossbauer and magnetization studies in  $\text{Fe}_{3-x}\text{Ru}_x\text{Si}$**   
J. App. Phys. **57**, 3258-3260 (1985)
26. S. N. Mishra, D. Rambabu, A. K. Grover and P. N. Tandon,  
**Magnetic behaviour of Heusler alloy  $\text{Ru}_2\text{FeSi}$**   
J. Mag. Mag. Mater. **51**, 359-364 (1985)
27. D. Rambabu, S. N. Mishra, A. K. Grover, P. N. Tandon, H. G. Devare and R. Vijayaraghavan,  
**Magnetization and Mossbauer studies in  $\text{RuSiFe}$**   
J. Mag. Mag. Mater. **54-57**, 947-948 (1986)
28. S. N. Mishra, D. Rambabu, A. K. Grover, R. G. Pillay, P. N. Tandon, H. G. Devare and R. Vijayaraghavan,  
 **$^{57}\text{Fe}$  Mossbauer investigations in the series  $\text{Fe}_{4-2x}\text{Ru}_x\text{Si}_x$  ( $1.0 < x < 1.7$ )**  
Hyperfine Interactions **28**, 471-473 (1986)
29. S. N. Mishra, V. Balasubramanian, S. D'Souza, D. Rambabu, R. G. Pillay, A. K. Grover and P. N. Tandon,  
 **$^{57}\text{Fe}$  Mossbauer studies in a new cluster spin glass system  $\text{Ru}_x\text{FeGa}$  ( $0.5 < x < 1.5$ )**  
Hyperfine Int., **34**, 519-522 (1987)
30. A. K. Grover, R. G. Pillay, S. N. Mishra, D. Rambabu and P. N. Tandon,  
**Mossbauer studies in reentrant spin glass  $(\text{Pd}_x\text{Pt}_{1-x})_3\text{Fe}$**   
Hyperfine Int., **34**, 523-526 (1987)
31. R.G. Pillay, A.K. Grover, S.N. Mishra, D. Rambabu and P.N. Tandon,  
**Whither phase transitions in reentrant spin glasses**  
Hyperfine Interactions **34**, 527-531 (1987)
32. D. Rambabu, S. N. Mishra, R. G. Pillay, A. K. Grover and P. N. Tandon,  
**Melt-spun  $\text{RuFeSi}$ : A cluster spin glass**  
Hyperfine Int. **34**, 533-536 (1987)
33. E. V. Sampathkumaran, P. L. Paulose, A. K. Grover, V. Nagarajan and S. K. Dhar  
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