Curriculum Vitae

Dr. Ramanna Rangappa
Email: ramanna.rt@gamil.com
ramannart@rediffmil.com
Mobile No. 85050168450
Address: H.No. 150
Dondambali (Post)
Deodurga (Tq)
Raichur- 584111 (Dt)
Karnataka, India

Education

- **Ph.D.** (Physics) – 2015
  Department of Physics, Gulbarga University, Gulbarga-India
- **Master of Science** (Physics) – 2010
  Gulbarga University, Gulbarga-India
- **Bachelor of Science** (Physics, Chemistry, Mathematics) – 2008
  Gulbarga University, Gulbarga-India

Title of Ph.D. thesis:

"EXPERIMENTAL STUDIES OF MAGNETIC MULTILAYERS"

Research and Teaching experience

- Teaching Experience in KLE's Basavaprabhu Kore Arts, Science and Commerce College Chikodi (26th Feb 2018 – Till date).
- Worked as Research Associate from April 2017 to February 2018 in Indian Institute of Science Bangalore.
- I was a Project-Associate under ISRO Sponsored during September 2016 to March 2017 in Indian Institute of Science Bangalore.
- Four years research experience in the fields of thin films, glasses and polymers at Department of Physics, Gulbarga University, Gulbarga (2011-2015).
- Worked As Guest Faculty in Govt. Degree College, Yadagir
  (2015 – 2016 Academic Year).
- Worked as Lecturer in Shree Murgharajendra Pre-university College Gulbarga (2010- 2011).

Awards & Fellowships and Member

- I was a Project-Associate under ISRO Sponsored during September 2016 to March 2017 in Indian Institute of Science Bangalore.
- I was a Project-Fellow under UGC-MRP during October 2011 to January 2014.
- Life Member of Indian Science Congress Association.

Area of Interest

- Metal Thin Films
- Oxide Glasses
- Polymers

Experience and Skills

- Familiar with operating High Vacuum coating Unit and deposit thin films using thermal and electron beam gun evaporation techniques.

- Familiar with experimental techniques such as Grazing Incidence X-ray Diffraction (GIXRD), Scanning Electron Microscope (SEM), Atomic Force Microscope (AFM), Vibrating Sample Magnetometry (VSM) and low temperature resistivity measurements.

- Familiar with operating High temperature furnace and Muffle furnace.

- Familiar with experimental techniques such as Impedance Analyzer and DB502 Resistive bridge

- Capable of analyzing data using Origin graphics.

- Familiar with Nanoscope software for analyzing AFM image.

Research Publications in Journals

1. Magnetic and Low Temperature Electrical Properties of Ni/Fe Multilayer, **R.Ramanna**, P.J.Sadashivaiah, T.Sujatha, T.Sankarappa, Santoshkumar, P.Saravanan, A.K.Bhatnagar, Journal of Electrical Engineering Research Vol. 1 Iss. 4, 96, (2013).

2. Electronic Transport at Low Temperature in Ni/Al/Ni Films, **R. Ramanna**, P. J. Sadashivaiah, T. Sankarappa, T. Sujatha, J. S. Ashwajeet, A. W. Manjunath and Santosh Kori, International Research Journal of Pure & Applied Chemistry 4(6): 785, (2014).

3. Electronic Transport at Low Temperature in Some Sandwich Films, **R. Ramanna**, P. J. Sadashivaiah, T. Sankarappa, T. Sujatha, J. S. Ashwajeet, A. W. Manjunath and Santosh Kori, Asian Journal of Applied Sciences 7 (8): 685-695, (2014).

4. Low temperature magnetic and electrical properties of (Co/Al) multilayers, **R.Ramanna**, T.Sankarappa, J.S. Ashwajeet, T. Sujatha, and P.J.Sadashivaiah International Journal of Current Research, Vol. 6, Issue, 12, 10537, (2014).

5. Magnetic and electrical properties of Electron Beam gun deposited [Mn/Al] Multilayered films, **R.Ramanna**, T.Sankarappa, T. Sujatha, J.S. Ashwajeet, and P.J. Sadashivaiah, Journal of Advances in Physics, Vol. 8, No. 3, 2231, (2015).

6. Thickness dependence of structural and magnetic properties of Ni/Al/Ni films, **R.Ramanna**, T.Sankarappa, J.S. Ashwajeet and T. Sujatha, Research Journal of Physical Sciences, Vol. 3(10), 1-5, (2015).

7. Low Temperature Electrical Resistivity Studies in Lead Thin Films, A.W. Manjunath, T. Sankarappa, **R. Ramanna**, J.S. Ashwajeet, T. Sujatha, P. Sarvanan, Journal of Nano- and Electronic Physics, Vol. **5** No 3, 03026-1 (2013).

8. Effect of se Substitution on the Phase Change Properties of $Ge_2Sb_2Te_5$, Roopali Shekhawat, **Ramanna Rangappa**, E.S.R. Gopal and K. Ramesh, AIP Conference Proceedings, Vol. 1953 (2018).

9. Local structure and electrical switching in Al 20 Te 75 X 5 (X= Si, Ge, As, Sb) glasses, P T Wilson, **R Ramanna**, Shweta Chahal, Roopali Shekhawat, M Madesh Kumar and K. Ramesh, Applied Physics A , Vol. 126, 1-8 (2020).

10. Thermal and Electrical properties of (B_2O_3-TeO_2-Li_2O-CoO) Glasses, J.S. Ashwajeet, T. Sankarappa, T.Sujatha and **R. Ramanna,** Journal of Non-Crystalline Solids, Vol. 486, 52-57 (2018).

11. Study of polaron Transport Mechanisms in Two Transition Metal Ions Doped Borophosphate Glasses, J.S. Ashwajeet, T. Sankarappa, **R. Ramanna** and T.Sujatha, Glass Physics and Chemistry, Vol. 42, No. 1, 27-32 (2016).

12. Dielectric Properties and Conductivity Studies of CuO Doped Borotellurite Glasses, Sujatha T, Sankarappa T, Ashwajeet J.S, **Ramanna R**, and Hanagodimath S M, International Journal of Current Research, Vol. 7, Issue, 01, 11366, (2015).

13. Study of Conduction Mechanisms in CuO Doped Borotellurite Glasses, T. Sujatha, T. Sankarappa, J.S. Ashwajeet, **R. Ramanna** and S.M. Hanagodimath Journal of Chemistry and Materials Research, Vol. 2 (2), 49, (2015).

14. Electrical Conduction in V_2O_5 Doped Borophosphate Glasses, T. Sujatha, T. Sankarappa, J.S. Ashwajeet, **R. Ramanna**, S.M. Hanagodimath, published in Journal of Advanced Chemical Sciences 1(4) 157, (2015).

15. Electrical Conduction in Borophosphate Glasses Doped With CoO and Li_2O, J. S. Ashwajeet, T. Sankarappa, **R. Ramanna**, T.Sujatha, N. Nagaraja and B. Vijayakumar, Research Journal of Material Sciences, Vol. 3(4), 1-6, September (2015).

16. Dielectric Studies in Li_2O and CoO Doped Borophosphate Glasses, J.S. Ashwajeet, T. Sankarappa, **R. Ramanna**, K. Praveenkumar published in Journal of Advances in Physics, Vol. 8 No. 3 (2015).

17. Glass transition temperature and conductivity in Li_2O and Na_2O doped borophosphate glasses, J.S. Ashwajeet, T. Sankarappa, **R. Ramanna**, T. Sujatha, and A. M. Awasthi, Advanced Materials and Radiation Physics (AMRP-2015) AIP Conference Proceedings. 1675, 020017-1–020017-6, (2015).

18. Dielectric and AC Conductivity Studies in Two Alkali Doped Borophosphate Glasses, J.S. Ashwajeet, T. Sankarappa, **R. Ramanna**, T. Sujatha, Journal of Chemistry and Materials Research, Vol. 4 (1), 2-5, (2015).

19. Electrical Conductivity in Polypyrrole Nano Particles, K. Praveen Kumar, T. Sankarappa, Jyoti Kattimani, Chandraprabha Gurunath Bhat, J.S. Ashwajeet **R.Ramanna** and T. Sujatha International Scientific Journal on Science Engineering & Technology. Vo1ume 17, No. 07, 772 (2014).

20. Structure and Temperature Dependence of Electrical Conductivity in Polythiophene Nanoparticles, Jyoti Kattimani, T. Sankarappa, K. Praveen Kumar, J.S. Ashwajeet, **R.Ramanna**, and T. Sujatha International Journal of Advanced Research in Physical Science (IJARPS) Volume 1, Issue 7, 17, (2014).

21. Structural and Dielectric Properties of PPy/ZnO Composites, Tanveer Fatima, T. Sankarappa, J.S.Ashwajeet and **R.Ramanna** International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 2, 204, (2015).

22. Frequency and Temperature dependence studies in PTh-V_2O_5 composites, Jyoti Kattimani, T. Sankarappa, **R. Ramanna** and J. S. Ashwajeet Research Journal of Chemical Sciences, Vol. **5(6),** 59, (2015).

23. Dielectric Properties of Polythiophene-CoO Composites, Jyoti Kattimani, T. Sankarappa , K. Praveen Kumar, Chandraprabha G, J. S. Ashwajeet and **R.Ramanna** Global Journal of Physics, Vol. 2, No 1, 79, (2015).

24. DC Conduction in Polythiophene Nanocomposites doped with V_2O_5, Jyoti Kattimani, T. Sankarappa, J. S. Ashwajeet, **R. Ramanna**, K. Praveenkumar and Chandraprabha G Research Journal of Material Sciences, Vol. **3(3),** 1, (2015).

25. Electronic transport in PPy-Ag composite nanoparticles, K. Praveenkumar, T. Sankarappa, Jyoti Kattimani, Chandraprabha G, J. S. Ashwajeet and **R. Ramanna** 2nd International Conference on Nanotechnology, 696 (ICNT – 2015).
26. Conduction Mechanisms in Polypyrrole-Copper Nanocomposites, K. Praveenkumar, T. Sankarappa, J.S. Ashwajeet, **R. Ramanna**, T. Sujatha, Jyoti Kattimani, G.Chandraprabha, Journal of Nano and Electronic Physics, Vol. 7 No 2, 02043, (2015).

27. Frequency dispersion and Temperature variation of Dielectric properties in PPy-Cu Nanocomposites, K. Praveenkumar, T. Sankarappa, J. S. Ashwajeet, **R. Ramanna**, Jyoti Kattimani and Chandraprabha G Research Journal of Physical Sciences, Vol. **3(5),** 6, (2015).

28. Conductivity Studies on Polythiophene-CoO Nano-Composites, K. Jyoti, T. Sankarappa, J.S. Ashwajeet, **R. Ramanna**, Journal of Advanced Chemical Sciences 1(4), 139, (2015).

29. Dielectric and AC Conductivity Studies in PPy-Ag Nanocomposites, K. Praveenkumar, T. Sankarappa, J. S. Ashwajeet, **R. Ramanna**, Hindawi Publishing Corporation Journal of Polymers 1, (2015).

30. A Study of Air Quality Index in and Around Belagavi City, Karnataka State, India, K.S. Goverdhan Rathla, T. Sankarappa, J.S. Ashwajeet and **R. Ramanna** published in Research Journal of Physical Sciences, Vol. **3(4),** 1, (2015).

31. Effect of Temperature, Humidity and other Physical Parameters on Air Pollution in and Around Belagavi, Karnataka, India K.S. Goverdhan Rathla, T. Sankarappa, J.S. Ashwajeet and **R. Ramanna**, International Research Journal of Environmental Sciences, Vol. **4(7),** 55, (2015).

32. DC Conductivity studies of PPy/ZnO Composites, Tanveer Fatima, T. Sankarappa and **R.Ramanna** Research Journal of Material Sciences, Vol. **3(5),** 1-5, (2015).

33. Electrical Transport Studies in PPy/SnO2 Composites, Tanveer Fatima, T. Sankarappa and **R.Ramanna** International Journal of Advanced Research in Physical Science (IJARPS), Vol. **3(1),** 7-12, (2015).

34. Structure and Conductivity Studies of PTh-Ni Composites, Chandraprabha G, T. Sankarappa, Jyoti Kattimani, K. Praveenkumar, J.S. Ashwajeet and **R. Ramanna**, Research Journal of Physical Sciences Vol. **3(9),** 5-10, (2015).

35. Dielectric Studies in PTh-Ni Composites, Chandraprabha G, T. Sankarappa, K. Praveenkumar, J.S. Ashwajeet and **R. Ramanna**, Journal of advanced chemical Sciences Vol. **2(1),** 208-211, (2016).

36. Structural and dielectric studies on Magneto Electric Nano-Composites, S. Abdul Khader, T. Sankarappa, T. Sujatha, J.S. Ashwajeet and **R. Ramanna,** Elsevier Science Direct, Materials Today:Proceedings, 2, 4334-4343 (2015).

Presentations in International and National Conferences

1. Structural and Low Temperature Magnetic properties of [Co/Al] Multilayers, **R.Ramanna**, T.Sankarappa, G. B. Devidas, J.S. Ashwajeet, T. Sujatha P.J. Sadashivaiah presented in International Conference on Physics of Materials & Nanotechnology in Mangalore University, during 19-21 September 2019.

2. Structural and Magnetic Studies of Some Multilayered Films, **R.Ramanna**, T.Sankarappa, J.S. Ashwajeet, P.J. Sadashivaiah and B.M. Irappa presented in National Conference on Recent Advances in Engineering Technology and Science in Shridevi Institute of Engineering & Technology, Tumkur.

3. Magnetic Properties of Ni/Fe Multilayer Thin Films, P.J. Sadashivaiah T. Sankarappa, and **R.Ramanna**, presented in National Conference on Recent Advances in Engineering Technology and Science in Shridevi Institute of Engineering & Technology, Tumkur.

4. Local Structure and glass formation in Al20Te80 glass, Karuppannan Ramesh, P.T. Wilson, **Ramanna Rangappa** and Madesh Kumar, presented 15th International Conference on the Physics of Non-Crystalline Solids and 14th European Society of Glass Conference in Saint Malo, France, during 9-13 July 2018.

5. Unraveling the origin of 5-fold coordinated Al in $Al_{20}Te_{80}$ chalcogenide glasses, P.T. Wilson, **R. Ramanna** and K. Ramesh presented at the 7th Asia pacific NMR and 23rd NMRS symposium in Indian Institute of Science, Bangalore during 16-19 February 2017.

6. Electrical Switching, local structure and thermal crystallization in Al-Te glasses, Pumlian Munga, **R. Ramanna** and K. Ramesh presented in inhouse Symposium in Indian Institute of Science, Bangalore during 2016.

7. Structure and Magnetic Property Studies in Ni/Al/Ni films, **R.Ramanna**, T.Sankarappa, T.Sujatha, J.S. Ashwajeet, and Ramababu presented at the 103rd Indian Science Congress held at University of Mysore, Mysuru Karnataka during 3-7 January 2016.

8. Structural and Magnetic Properties of Manganese/Aluminium Multilayered films, **R.Ramanna**, T.Sankarappa, J.S. Ashwajeet, T. Sujatha, P.J. Sadashivaiah, and Santoshkumar Kori presented at 27th Kerala Science Congress, Allapuzha, Kerala during 27-29, January 2015.

9. XRD, AFM and Magnetic studies of some Multilayered Films, **R.Ramanna**, T.Sankarappa, T. Sujatha, J.S. Ashwajeet, and P.J. Sadashivaiah presented at KSTA Regional Conference on Science & Society held in Veerashaiva College, Ballari during 16-17 january 2015.

10. Structural and Magnetic Properties of Ni/Al/Ni films, **R.Ramanna**, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, J.S. Ashwajeet, and Digge Basanna presented at the 102nd Indian Science Congress held in Mumbai University, Maharastra during 3-7 January 2015.

11. Studies of Structural and Magnetic Properties in some Ni/Al/Ni films, **R.Ramanna**, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, J.S. Ashwajeet presented at the Second National Conference on Physics and Chemistry of Solids held in SR & BGNR Govt. Arts & Science College, Khammam, Andra Pradesh during 29-30, March 2014.

12. Low Temperature Electrical Resistivity of Some Sandwich Films, **R.Ramanna**, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, J.S. Ashwajeet, A.W. Manjunath and Santosh Kori presented at the 101st Indian Science Congress held in Jammu University, Jammu Kashmir during 3-7 February 2014.

13. Electronic Transport at Low Temperature in Some Sandwiched Films, **R.Ramanna**, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, A.W. Manjunath, J.S. Ashwajeet, and Santosh Kori presented at the International Conference on Thin Films and its Applications held in SASTRA University, Thanjavur, Tamil Nadu during 11-13 September 2013.

14. Low Temperature Electrical Resistivity Studies in Lead Thin Films, A.W.Manjunath, T.Sankarappa, **R.Ramanna,** J.S. Ashwajeet and T.Sujatha, presented at the National Conference on Solar Energy and Its Applications held in Maharani's Science College for Women, Bangalore during 19th April 2013.

15. Structural and Resistivity Studies of Multilayered Films, P.J.Sadashivaiah, A. Manjunath T.Sankarappa, **R.Ramanna** et al. presented at the 100th Indian Science Congress held in Calcutta University, Kolkata during 3-7 January 2013.

16. XRD and Low Temperature Resistivity Studies in Some Sandwich Films, **R.Ramanna**, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, A.W. Manjunath, J.S. Ashwajeet, and Santosh Kori presented at the 100th Indian Science Congress held in Calcutta University, Kolkata during 3-7 January 2013.

17. Magnetic and Low Temperature Electrical Properties of Ni/Fe Multilayer, P.J.Sadashivaiah, T.Sankarappa, T.Sujatha, **R.Ramanna,** Santoshkumar, A. Manjunath, P. Saravanan and A. K. Bhatnagar presented at the International conference on Recent Advances in Material Science, in Bangalore during 6-8 November 2012.

18. GIXRD and VSM studies in magnetic sandwich films, **Ramanna**, T.Sankarappa, T.Sujatha, **P.J.Sadashivaiah**, S.Abdul Khadar, A.W.Manjunath and P.Saravanan, presented at the National conference on Magnetic Materials and Applications (MagMa-2012) held in IIT Madras, Chennai during 12, 13, March 2012.

19. Studies on Dielectric Properties and Conductivity in Borotellurite Glasses, T.Sankarappa, J.S. Ashwajeet and **R.Ramanna**, presented at the 103rd Indian Science Congress held at University of Mysore, Mysuru Karnataka during 3-7 January 2016.

20. Conductivity in some CuO Dopede Borate Glasses, N. Nagaraja, J.S. Ashwajeet, T. Sankarappa, T. Sujatha, G. B. Devidas, B. Vijaya Kumar, M. Prashantkumar, **R. Ramanna**, A. Manjunath, presented at the 100th Indian Science Congress held in Calcutta University, Kolkata during 3-7 January 2013.

21. Glass Transition Temperature and conductivity in Li_2O and Na_2O Doped Borophosphate Glasses, J.S. Ashwajeet, T.Sankarappa, **R.Ramanna**, T.Sujatha and A.M. Awasthi. Presented at the 4th National conference on Advanced Materials and Radiation Physics (AMRP-2015) held in Sant Longowal of Engineering and Technology, Punjab during 13-14 March 2015.

22. DC Conduction Studies in V_2O_5- CoO Doped Borophosphate Glasses, J.S. Ashwajeet, T.Sankarappa, **R.Ramanna**, N. Nagaraj, B. Vijaykumar and T.Sujatha, presented at the KSTA Regional Conference on Science & Society held in Veerashaiva College, Ballari during 16-17 january 2015.

23. Electrical Conduction in Borophosphate Glasses Doped with Transition and Alkali Ions, J.S. Ashwajeet, T.Sankarappa, **R.Ramanna**, T.Sujatha, G.B. Devidas, M. Prashantkumar, N. Nagaraj and B. Vijaykumar, presented at the 102nd Indian Science Congress held in Mumbai University, Maharastra during 3-7 January 2015.

24. Electrical Conduction in Borophosphate Glasses Doped with CoO and Li_2O, J.S. Ashwajeet, T.Sankarappa, **R.Ramanna**, N. Nagaraj and B. Vijaykumar presented at the International Seminar on Glasses and other Functional Materials held in Nagarjun University, Guntur during 11-13 December 2014.

25. Study of Electrical Transport Mechanisms in Mixed Transition Metal ions Borophosphate Glasses, J.S. Ashwajeet, T.Sankarappa, T. Sujatha and **R.Ramanna**, presented at the Kathmandu Symposium on Advanced Materials- held in Kathmandu, Nepal during 7-10, September 2014.

26. Study of Electrical Conduction Mechanisms in Borophosphate Glasses Doped with Transition Metal Ions, Ashwajeet J.S, T.Sankarappa, T.Sujatha and **Ramanna R**, presented at the Second National Conference on Physics and Chemistry of Solids held in SR & BGNR Govt. Arts & Science College, Khammam, Andra Pradesh during 29-30 March 2014.

27. DC Conductivity of V_2O_5 Doped Borophosphate Glasses, J.S. Ashwajeet, T.Sankarappa, T.Sujatha, **R.Ramanna**, A.W.Manjunath, G.B. Devidas, B. Vijaykumar, S.S. Veena, N. Nagaraj and M. Prashantkumar, presented at the 101st Indian Science Congress held in Jammu University, Jammu Kashmir during 3-7 February 2014.

28. Electronic Transport of Ppy-Ag Nanoparticles, K. Praveenkumar, T.Sankarappa, Jyoti Kattimani, Chandraprabha G, J S Ashwajeeth and **R. Ramanna** presented at the 2nd International Conference on Nanotechnology (ICNT) & Indo-USA Joint Symposium, held in Haldia Institute of Technology West Bengal, India during 19-22 February 2015.

29. Structural and Dielectric Studies on Magneto Electric Nano-Composites, S. Abdul Khader, T. Sankarappa, T Sujatha, J.S. Ashwajeet and **R.Ramanna** presented at the International Conference on Nano Science & Engineering Applications held in JNTU Hyderabad during -2014.

Conferences/symposium/seminars/workshop attended

1. One One Workshop on Frontier areas in Physical Sciences in Rani Channamma University, Belagavi during 17th January 2020.

2. International Conference on Physics of Materials & Nanotechnology in Mangalore University, during 19-21 September 2019.

3. National Conference on Recent Advances in Engineering Technology and Science in Shridevi Institute of Engineering & Technology, Tumkur.

4. KSTA Conference on **"Energy, climate change and environment"**, organized by school of Earth Science, Central University of Karnataka, Kadaganchi, Gulbarga during 29-30 January 2016.

5. **103rd Indian Science Congress Association** held in University of Mysore, Mysuru Karnataka during 3-7 January 2016.

6. National Seminar on **"International Year of Crystallography"** held in Department of Physics, Gulbarga University, Gulbarga during 27-28 March 2015.

7. KSTA Conference on **"Science and Technology for Disaster Management"**, organized by school of Earth Science, Central University of Karnataka, Kadaganchi, Gulbarga during 22-23 January 2015.

8. **27th Kerala Science Congress** held in Allapuzha, Kerala during 27-29 January 2015.

9. **KSTA Regional Conference on Science & Society** held in Veerashaiva College, Ballari during 16, 17 January 2015.

10. **102nd Indian Science Congress Association** held in Mumbai University, Maharashtra during 3-7 January 2015.

11. Second National Conference on **Physics and Chemistry of Solids** held in SR & BGNR Govt. Arts & Science College, Khammam, Andra Pradesh during 29-30 March 2014.

12. National Seminar on **Radiation Physics**, held in Department of Physics, Gulbarga University, Gulbarga during 17, 18 March 2014.

13. **101st Indian Science Congress Association** held in Jammu University, Jammu Kashmir during 3-7 February 2014.

14. International Conference on **Thin Films and its Applications** held in SASTRA University, Thanjavur, Tamil Nadu during 11-13 September 2013.

15. National Conference on **Solar Energy and Its Applications** held in Maharani's Science College for Women, Bangalore during 19th April 2013.
16. National Seminar on **Condensed Matter and Materials Physics**, held in Department of Physics, Gulbarga University, Gulbarga during 19, 20 March 2013.

17. International conference on **Recent Advances in Material Science**, held in Bangalore during 6-8 November 2012.

18. One day seminar on **Food Security & Natural Resources Management** organized by faculty of science and technology, Gulbarga University, Gulbarga, during 8th October 2012.
19. **Special lecture series in Physics** held in Department of Physics, Gulbarga University, Gulbarga during 27-29 March 2012.

20. National seminar on **advanced functional materials** held in Department of Physics, Gulbarga University, Gulbarga during 19, 20 March 2012.

21. Three days training Program on "**Thin Film Magnetism**", organized by UGC-DAE CSR, Indore, Madhya Pradesh, during 14-16 March 2012.

22. National conference on **Magnetic Materials and Applications (MagMa-2012**) held in IIT Madras, Chennai during 12, 13 March 2012.

23. **100th Indian Science Congress Association** to be held in Kolkata during 3-7 January 2013.

24. National Seminar on **Radiation Physics**, held in Department of Physics, Gulbarga University, Gulbarga during 17, 18 March 2011.

25. National seminar on **X-Ray diffraction techniques** held in Department of Physics, Gulbarga University, Gulbarga during 2, 3 March 2010.