Prof. R. JAYAVEL
Professor, Crystal Growth Centre

Cellphone : 9444309701

e-Mail ID : rjvel@annauniv.edu

Address : No. 925-H.IG., I-MAIN ROAD TNHB COLONY
VELACHERY CHENNAI - 600 042

Present Position

Professor, Crystal Growth Centre, Alagappa College of Technology, Anna University, Chennai from January-2009.

Present Additional Responsibility

- Director, Centre for Research, Anna University, Chennai from October-2015.

Previous Positions

- Associate professor, Crystal Growth Centre, Alagappa College of Technology, Anna University, Chennai during January-2006 and December-2008.
- Assistant Professor, Crystal Growth Centre, Alagappa College of Technology, Anna University, Chennai during April-2002 and December-2005.
- Lecturer, Crystal Growth Centre, Alagappa College of Technology, Anna University, Chennai during December-1995 and April-2002.

Previous Additional Responsibility

- Director, Centre for Nano Science and Technology, Anna University, Chennai during October-2005 and June-2015.
- Director, Centre for International Affairs, Anna University, Chennai during August-2005 and August-2008.

Other Employment

- Visiting Professor, University of South Australia for 15-30th June 2016.
- Visiting Professor, University of Queensland, Australia. for 15th October-26th October 2012.
- Visiting Professor, University of Goettingen, Germany. for 23rd August- 22nd October 2010.
- Visiting Professor, Research Inst. of Electronics Shizuoka University, Japan for 15th October-26th October 2012.

- Special Researcher, National Institute for Materials Science, Japan. for 15th August 2001-31st March 20.
- STA Fellow, National Research Institute for Metals, Tsukuba, Japan. Research for 15th August 1999 to 14th Augus.

Degree

- M.Phill. in PHYSICS , ANNA UNIVERSITY, ANNA UNIVERSITY (1989 - 1990).
- M.Sc. in PHYSICS , GOVT. ARTS COLLEGE, THIRUVANNAMALAI, UNIVERSITY OF MADRAS (1986 - 1988).
- B.Sc. in PHYSICS , GOVT. ARTS COLLEGE, SALEM, UNIVERSITY OF MADRAS (1982 - 1985).

Research Degree

- Ph.D. in MATERIALS SCIENCE, CRYSTAL GROWTH, NANOMATERIALS from Faculty of SCIENCE AND HUMANITIES, ANNA UNIVERSITY, ANNA UNIVERSITY (1990 - 1994). Title: INVESTIGATIONS ON THE GROWTH AND CHARACTERIZATION OF HIGH TEMPERATURE SUPERCONDUCTING SINGLE CRYSTALS.

Area of Specialisation

- NANOMATERIALS
- NANOCRYSTALINE THIN FILMS

Membership in Professional Organization

- Indian Association for Crystal Growth
- Electron Microscope Society of India
- Materials Research Society of India
- Indian Physics Association
- Indian Physical Society

Research Guidance

Number of Ph.D Scholars Guided	: 34
Number of Ph.D Scholars Guiding	: 12
Number of M.S (By Research) Students Guiding	: 2

Number of M.E./ M.Tech. Projects Guided	: 14
Number of M.E./ M.Tech. Projects Guiding	: 3
Number of Ph.D Scholars Guided as Joint-Supervisor	: 2

Papers Published in Journals

Research Papers Published in International Journals	: 351
Research Papers Published in National Journals	: 0

1. Jayavel, R., Murugakoothan, P., Venkateswara Rao, C.R., Subramanian, C., Ramasamy, P., Chakravarti, A., Ranganathan, R. and Raychaudhuri, A.K., "Preparation and characterisation of BiSrCaCuO through glassy route", Solid State Communications, published by ELSEVIER. Vol. 79, Issue 5, pp. 421 (1991).

2. Jayavel, R., Murugakoothan, P., Rao, C.R.V., Sureshkumar, P., Subramanian, C. and Ramasamy, P., " Growth and morphology studies of La2-xSrxCuO4 single crystals", MATERIALS RESEARCH BULLETIN, published by ELSEVIER. Vol. 26, Issue 9, pp. 945 (1991).

3. Jayavel, R., Murugakoothan, P., Venkateswara Rao, C.R., Subramanian, C., Ramasamy, P., Kumarasamy, B.V. and Narlikar, A.V., " Superconductivity and morphological studies on Bi2Sr2CaCu2O8 single crystals grown from stoichiometric and nonstoichiometric melts", Bulletin of Materials Science, published by Springer. Vol. 14, Issue 6, pp. 1343 (1991).

4. Murugakoothan, P., Jayavel, R., Rao, C.R.V., Subramanian, C. and Ramasamy, P., "Growth and characterisation of Bi2Sr2Ca1Cu2Oy by the floating zone method", Materials Chemistry and Physics, published by ELSEVIER. Vol. 31, Issue 3, pp. 281 (1992).

5. Venkateswara Rao, C.R., Murugakoothan, P., Jayavel, R., Subramanian, C. and Ramasamy, P., "Growth, characterization and superconductivity studies on CaLaBaCu3O7-δ single crystals", Journal of Materials Science Letters, published by Kluwer Academic. Vol. 11, Issue 3, pp. 145 (1992).

6. Jayavel, R., Murugakoothan, P., Rao, C.R.V., Sureshkumar, P., Subramanian, C. and Ramasamy, P., "Textured growth and orientation dependence of hardness measurement on superconducting Bi2Sr2CaCu2Oy", Journal of Materials Science Letters, published by Kluwer Academic . Vol. 11, Issue 24, pp. 1650 (1992).

7. Jayavel, R., Murugakoothan, P., Rao, C.R.Venkateswara, Subramanian, C. and Ramasamy, P., " Growth of superconducting Bi2Sr2CaCu2O8 single crystals using K2CO3 flux", Superconductor Science and Technology, published by IOPScience. Vol. 6, Issue 5, pp. 349 (1993).

8. Jayavel, R., Murugakoothan, P., Venkateswara Rao, C.R., Subramanian, C., Ramasamy, P., Kumarasamy, B.V. and Narlikar, A.V., " Growth of CaLnBaCu 3O7-δ (Ln = La, Pr and Nd) single crystals by the flux technique", Superconductor Science and Technology, published by Institute of Physics Publishing. Vol. 6, Issue 6, pp. 443 (1993).

9. Jayavel, R., Sekar, C., Murugakoothan, P., Venkateswara Rao, C.R., Subramanian, C. and Ramasamy, P., " Growth of large size single crystals and whiskers of Bi2Sr2CaCu2O8 by step-cooling method", Journal of Crystal Growth, published by ELSEVIER. Vol. 131, Issue 1, pp. 105 (1993).

10. Jayavel, R., Thamizhavel, A., Murugakoothan, P., Subramanian, C. and Ramasamy, P., " Growth, twin and domain structure studies of superconducting Bi2Sr2Ca1-xYxCu2O8+δ single crystals", Physica C: Superconductivity and its applications, published by ELSEVIER. Vol. 215, Issue 3, pp. 429 (1993).

11. Murugakoothan, P., Jayavel, R., Rao, C.R.Venkateswara, " Growth and characterization of bulk-textured Bi2Sr2Ca-xYxCu2Oδ by the float zone technique", Superconductor Science and Technology, published by Institute of Physics Publishing. Vol. 7, Issue 6, pp. 367 (1994).

12. Jayavel, R., Thamizhavel, A., Murugakoothan, P., Venkateswara Rao, C.R., Subramanian, C. and Ramasamy, P., " Growth of large size twin free YBa2Cu3O7-δ single crystals by a temperature gradient technique", Journal of Crystal Growth, published by ELSEVIER. Vol. 137, Issue 1, pp. 273 (1994).

13. Murugakoothan, P., Jayavel, R. and Subramanian, C., " Synthesis and characterisation of bulk textured phases in the Bi(Pb)-Sr-Ca-Cu-O system", Crystal Research and Technology, published by ELSEVIER. Vol. 30, Issue 5, pp. 587 (1995).

14. Aravazhi, S., Jayavel, R. and Subramanian, C., " Growth and characterization of benzophenone and urea doped triglycine sulphate crystals", Ferroelectrics, published by Taylor & Francis. Vol. 200, Issue 1, pp. 279 (1997).

15. Aravazhi, S., Jayavel, R. and Subramanian, C., " Growth and characterization of L-alanine and L-valine doped triglycine sulphate crystals", Materials Research Bulletin, published by Elsevier Limited. Vol. 32, Issue 11, pp. 1503 (1997).

16. Arunmozhi, G. , Mohan Kumar, R.b, Jayavel, R. and Subramanian, C., " Growth and surface studies on triglycine sulpho-phosphate (TGSP) single crystals", Materials Science and Engineering B, published by Elsevier BV. Vol. 49, Issue 3, pp. 216 (1997).

17. Aravazhi, S., Jayavel, R. and Subramanian, C., " Growth and stability of pure and amino doped TGS crystals", Materials Chemistry and Physics, published by ELSEVIER. Vol. 15, Issue 3, pp. 233 (1997).

18. Thamizhavel, A., Paul, D.P., Prabhakaran, D., Jayavel, R. and Subramanian, C., " Studies on simultaneous substitution of Pb and Y in Bi2Sr2CaCu2O8+δ single crystals", Physica C: Superconductivity and its applications, published by IOPScience. Vol. 288, Issue 3, pp. 163 (1997).

19. Arunmozhi, G., Jayavel, R. and Subramanian, C., " Growth and characterization of amino acids mixed triglycine sulpho-phosphate single crystals", Materials Chemistry and Physics, published by Taylor & Francis. Vol. 50, Issue 1, pp. 57 (1997).

20. Arunmozhi, G., Jayavel, R. and Subramanian, C., " Experimental determination of metastable zone width, induction period and interfacial energy of LAP family crystals", Journal of Crystal Growth, published by ELSEVIER. Vol. 178, Issue 3, pp. 387 (1997).

21. Thamizhavel, A., Prabhakaran, D., Jayavel, R. and Subramanian, C., " Growth and characterization of superconducting Bi2Sr2Ca(1 - x)CexCu2O8 + δ single crystals", Physica C: Superconductivity and its applications, published by ELSEVIER. Vol. 275, Issue 3, pp. 279 (1997).

22. Ushasree, P.M., Jayavel, R., Subramanian, C. and Ramasamy, P., " Growth and micromorphology of as-grown ZTS single crystals and the etching studies", Bulletin of Electrochemistry, published by Scientific Publishers of India. Vol. 14, Issue 11, pp. 407 (1998).

23. Balakumar, S., Xu, J.B., Arunmozhi, G., Jayavel, R., Nakatani, N. and Yamazaki, T., " Atomic force microscope studies on domain dynamics in phosphate substituted triglycine sulfate single crystals: Evidence for the domain boundary motion towards negative region and holes formation at ", Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers, published by Japan Society of Applied PhysicS. Vol. 37, Issue 11, pp. 6177 (1998).

24. Kamaludeen, M., Selvaraj, I., Visuvasam, A. and Jayavel, R., " LaB6 crystals from fused salt electrolysis", Journal of Materials Chemistry, published by Royal Society of Chemistry. Vol. 8, Issue 10, pp. 2205 (1998).

25. Thamizhavel, A., Prabhakaran, D., Jayavel, R. and Subramanian, C., " Growth and texturing studies of Bi2.1Y0.1Sr1.9CaCu2-xLi xO8 crystals grown by floating-zone technique", Journal of Crystal Growth, published by ELSEVIER. Vol. 183, Issue 4, pp. 573 (1998).

26. Arunmozhi, G., Jayavel, R. and Subramanian, C., " Ferroelectric studies on amino acids mixed TGSP single crystals", Materials Letters, published by ELSEVIER. Vol. 33, Issue 5, pp. 251 (1998).

27. Murugakoothan, P., Mohan Kumar, R., Ushasree, P.M., Jayavel, R., Dhanasekaran, R. and Ramasamy, P., " Habit modification of potassium acid phthalate (KAP) single crystals by impurities", Journal of Crystal Growth, published by ELESVIER. Vol. 207, Issue 4, pp. 325 (1999).

28. Ushasree, P.M., Jayavel, R., Subramanian, C. and Ramasamy, P., "Growth of zinc thiourea sulfate (ZTS) single crystals: A potential semiorganic NLO material", Journal of Crystal Growth, published by ELESVIER. Vol. 197, Issue 1, pp. 216 (1999).

29. Mohan Kumar, R., Gopalakrishnan, N., Jayavel, R. and Ramasamy, P., " Investigations on the nucleation kinetics of L-arginine phosphate single crystals", Crystal Research and Technology, published by John Wiley and Sons Inc.. Vol. 34, Issue 10, pp. 1265 (1999).

30. Ushasree, P.M., Jayavel, R. and Ramasamy, P., " Growth and characterization of phosphate mixed ZTS single crystals", Materials Science and Engineering B: Solid-State Materials for Advanced Technology, published by Elsevier Sequoia SA,Lausanne, Switzerland. Vol. 65, Issue 3, pp. 153 (1999).

31. Ushasree, P.M., Jayavel, R. and Ramasamy, P., " Influence of pH on the characteristics of zinc tris (thiourea) sulfate (ZTS) single crystals", Materials Chemistry and Physics, published by Elsevier Sequoia SA,Lausanne, Switzerland. Vol. 61, Issue 3, pp. 270 (1999).

32. Paul, D.P., Jayavel, R., Subramanian, C. and Ramasamy, P., " Investigations on nucleation thermodynamical parameters of NdBa2-Cu3O7-δ (Nd123) crystallizing from high temperature solution", Materials Chemistry and Physics, published by Elsevier Sequoia SA,Lausanne, Switzerland. Vol. 59, Issue 2, pp. 175 (1999).

33. Uthayakumar, S., Srinivasan, E., Paul, D.P., Prabhakaran, D., Jayavel, R., Subramanian, C. and Ramasamy, P., "Texturing studies on Sm substituted Bi-2212 high Tc superconductor grown by floating zone technique", Physica C: Superconductivity and its Applications, published by ELSEVIER. Vol. 341, Issue 1, pp. 659 (2000).

34. Srinivasan, E., Uthayakumar, S., Murugakoothan, P., Jayavel, R., Subramanian, C. and Ramasamy, P., " Studies on the growth aspects of Eu1.4Ce0.6NbSr2Cu2O 10-δ single crystals", Physica C: Superconductivity and its Applications, published by ELSEVIER. Vol. 341, Issue 1, pp. 547 (2000).

35. Ushasree, P.M., Muralidharan, R., Jayavel, R. and Ramasamy, P., " Growth of bis(thiourea) cadmium chloride single crystals - a potential NLO material of organometallic complex", Journal of Crystal Growth, published by ELSEVIER. Vol. 218, Issue 2, pp. 365 (2000).

36. Varatharajan, R., Santhanaraghavan, P., Jayavel, R., Bocelli, G., Right, L. and Ramasamy, P., " BaSrTiCeO3: Growth and crystal structure", Crystal Engineering, published by ELSEVIER. Vol. 3, Issue 3, pp. 195 (2000).

37. Varatharajan, R., Jayavel, P., Kumar, J., Jayavel, R. and Asokan, K., " Effects of energetic ions on barium strontium titanate crystals", Nuclear Instruments and Methods in Physics Research, Section B, published by ELSEVIER. Vol. 170, Issue 1, pp. 145 (2000).

38. Giridharan, N.V., Varatharajan, R., Jayavel, R. and Ramasamy, P., " Fabrication and characterization of (Ba,Sr)TiO3 thin films by sol-gel technique through organic precursor route", MATERIALS CHEMISTRY AND PHYSICS, published by ELSEVIER. Vol. 65, Issue 3, pp. 261 (2000).

39. Varatharajan, R., Samanta, S.B., Jayavel, R., Subramanian, C., Narlikar, A.V. and Ramasamy, P., " Ferroelectric characterization studies on barium calcium titanate single crystals", Materials Characterization, published by ELSEVIER. Vol. 45, Issue 2, pp. 89 (2000).

40. Paul, D.P., Jayavel, R., Subramanian, C. and Ramasamy, P., " Investigations on nucleation thermodynamical parameters of NdBa2Cu3O7-δ (Nd123) crystallization by high temperature solution growth", Bulletin of Materials Science, published by SPRINGER. Vol. 23, Issue 2, pp. 79 (2000).

41. Varatharajan, R., Jayavel, R., Subramanian, C. and Ramasamy, P., " Growth and characterization of Ce and Nb doped barium strontium titanate single crystals", Materials Research Bulletin, published by Elsevier Limited. Vol. 35, Issue 4, pp. 603 (2000).

42. Ushasree, P.M., Muralidharan, R., Jayavel, R. and Ramasamy, P., " Metastable zonewidth, induction period and interfacial energy of zinc tris(thiourea) sulfate", Journal of Crystal Growth, published by ELSEVIER. Vol. 210, Issue 4, pp. 741 (2000).

43. Manikandan, S., Jayavel, R. and Dhanuskodi, S., "EPR study on γ-irradiated single crystals of a non-linear optical material: 3-methoxy-4-hydroxy benzaldehyde", MATERIALS CHEMISTRY AND PHYSICS, published by ELSEVIER. Vol. 72, Issue 1, pp. 1 (2001).

44. Sumathi, R.R., Giridharan, N.V., Jayavel, R. and Kumar, J., "BaTiO3 as an insulating layer for InP-based metal-insulator-semiconductor structures", Materials Letters, published by ELSEVIER. Vol. 51, Issue 1, pp. 56 (2001).

45. Ariponnammal, S., Jayavel, R. and Natarajan, S., "X-ray photo-emission spectroscopic study on Sm0.85Nd0.15Se", International Journal of Modern Physics B, published by WORLD SCIENTIFIC. Vol. 15, Issue 26, pp. 3465 (2001).

46. Venkataraj, S., Geurts, J., Weis, H., Kappertz, O., Njoroge, W.K., Jayavel, R. and Wuttig, M., "Structural and optical properties of thin lead oxide films produced by reactive direct current magnetron sputtering", Journal of Vacuum Science and Technology, Part A, published by American Institute of Physics. Vol. 19, Issue 6, pp. 2870 (2001).

47. Venkataraj, S., Drese, R., Kappertz, O., Jayavel, R. and Wuttig, M., "Characterization of niobium oxide films prepared by reactive DC magnetron sputtering", Physica Status Solidi (A) Applied Research, published by WILEY. Vol. 188, Issue 3, pp. 1047 (2001).

48. Jayavel, R., Mochiku, T., Ooi, S. and Hirata, K., "Studies on the growth aspects of Bi2Sr2CaCu2O8+δ whiskers by vapour-liquid-solid mechanism", Physica C: Superconductivity and its Applications, published by ELSEVIER. Vol. 357, Issue 2, pp. 345 (2001).

49. Mohan Kumar, R., Muralidharan, R., Rajan Babu, D., Rajendran, K.V., Jayavel, R., Jayaraman, D. and Ramasamy, P., "Growth and characterization of L-lysine doped TGS and TGSP single crystals", Journal of Crystal Growth, published by ELSEVIER. Vol. 229, Issue 1, pp. 568 (2001).

50. Srinivasan, E., Uthayakumar, S., Jayavel, R., Subramanian, C. and Ramasamy, P., "Growth and characterization of superconducting (GdCe)2NbSr2Cu2O10-δ single crystals", Journal of Crystal Growth, published by ELSEVIER. Vol. 229, Issue 1, pp. 391 (2001).

51. Rajendran, K.V., Jayaraman, D., Jayavel, R., Mohan Kumar, R. and Ramasamy, P., " Growth and characterization of non-linear optical L-hystidine tetrafluoroborate (L-HFB) single crystals", Journal of Crystal Growth, published by ELSEVIER. Vol. 224, Issue 1, pp. 122 (2001).

52. Giridharan, N.V., Jayavel, R. and Ramasamy, P., " Structural, morphological and electrical studies on barium strontium titanate thin films prepared by sol-gel technique", CRYSTAL RESEARCH AND TECHNOLOGY, published by WILEY. Vol. 36, Issue 1, pp. 65 (2001).

53. Varatharajan, R., Madeswaran, S. and Jayavel, R., "Nb:BST: Crystal growth and ferroelectric properties", Journal of Crystal Growth, published by ELSEVIER. Vol. 225, Issue 2, pp. 484 (2001).

54. Rajasekaran, R., Ushasree, P.M., Jayavel, R. and Ramasamy, P., "Growth and characterization of Zinc Thiourea Chloride (ZTC): A semiorganic nonlinear optical crystal", Journal of Crystal Growth, published by ELSEVIER. Vol. 229, Issue 1, pp. 563 (2001).

55. Jayavel, R., Mochiku, T., Ooi, S. and Hirata, K., "Vapour-liquid-solid (VLS) growth mechanism of superconducting Bi-Sr-Ca-Cu-O whiskers", Journal of Crystal Growth, published by ELSEVIER. Vol. 229, Issue 1, pp. 339 (2001).

56. Choudhury, R.-R., Chitra, R., Ramanadham, M. and Jayavel, R., " Prevention of depoling in TGS by alanine substitution: An interpretation based on a neutron-diffraction study", Applied Physics A: Materials Science and Processing, published by SPRINGER. Vol. 74, Issue 1, pp. S1667 (2002).

57. Uthayakumar, S., Srinivasan, E., Jayavel, R. and Subramanian, C., "Substitutional effect of Mn on floating zone growth Bi-2212 bulk textured crystals", Physica C: Superconductivity and its Applications, published by ELSEVIER. Vol. 383, Issue 1, pp. 122 (2002).

58. Madeswaran, S., Giridharan, N.V., Jayavel, R. and Subramanian, C., "Growth of Co-doped (Ba,Sr)TiO3 single crystals and their characterization", Journal of Crystal Growth, published by ELSEVIER. Vol. 237, Issue 1, pp. 858 (2002).

59. Xue, D., Wu, S., Jayavel, R., Terabe, K., Kurimura, S. and Kitamura, K., " Temperature dependant domain structures of lithium niobate single crystals", IEEE International Symposium on Applications of Ferroelectrics, published by Proceedings of the 13th IEEE International Sympos. pp. 37 (2002).

60. Jayavel, R., Mochiku, T., Ooi, S. and Hirata, K., "Growth of superconducting Bi2Sr2CaCu2O8+δ whiskers by a modified annealing process", Physica C: Superconductivity and its Applications, published by ELSEVIER. Vol. 378, Issue 1, pp. 118 (2002).

61. Kitamura, K., Liu, Y., Jayavel, R., Nakamura, M., Kurimura, S. and Hatano, H., " UV light irradiation for optical damage control in near-stoichiometric LiNbO3 crystal", Pacific Rim Conference on Lasers and Electro-Optics, CLEO - Technical Digest, published by Elsevier BV. pp. 203 (2002).

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63. Giridharan, N.V., Madeswaran, S. and Jayavel, R., "Structural, morphology and electrical studies on ferroelectric bismuth titanate thin films prepared by sol-gel technique", Journal of Crystal Growth, published by ELSEVIER. Vol. 237, Issue 1, pp. 468 (2002).

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65. Venkataraj, S., Kappertz, O., Drese, R., Liesch, Ch., Jayavel, R. and Wuttig, M., "Thermal stability of lead oxide films prepared by reactive DC magnetron sputtering", Physica Status Solidi (A) Applied Research, published by WILEY. Vol. 194, Issue 1, pp. 192 (2002).

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67. Venkataraj, S., Kappertz, O., Jayavel, R. and Wuttig, M., "Growth and characterization of zirconium oxynitride films prepared by reactive direct current magnetron sputtering", Journal of Applied Physics, published by AMERICAN INSTITUTE OF PHYSICS. Vol. 92, Issue 5, pp. 2461 (2002).

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Papers Presented in Programmes

Research Papers Presented in International Programmes	: 47
Research Papers Presented in National Programmes	: 20

1. Vasudevan, R. Alagesan, T. and Jayavel, R., "Synthesis and characterization of sol-gel derived nanocrystalline Tin oxide (SnO2) thin film for gas sensor applications" presented in a International level conference on International symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2008), organised by IIT Madras, India from 10-Dec-2008 to 12-Dec-2008.

2. Vasudevan, R., Karthik, T., and Jayavel, R., "Comparative study of sol-gel derived Zirconia toughened Alumina (ZTA) nanocomposites by microwave and conventional sintering techniques" presented in a International level conference on International conference on Nanoscience and Technology (ICONSAT 2010), organised by IIT Bombay, India from 18-Feb-2010 to 20-Feb-2010.

3. Krishna Chandar, N., Elahi, A. and Jayavel, R., "Effect of Sintering on the Structural Properties of Pure and RE doped Dysprosium Oxide Nanoparticles" presented in a International level workshop on International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 21-Feb-2011 to 24-Feb-2011.

4. Saravanan, L., Jayavel, R., Mori, T. and Vinu, A., "Synthesis of mesoporous with tunable pore diameters and its absorption properties" presented in a International level workshop on International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 21-Feb-2011 to 24-Feb-2011.

5. Thangappan, R., Kalaiselvam, S., Elayaperumal, A. and Jayavel, R., "Fabrication of Gd2O3 nanofibers using Electrospinning technique and properties" presented in a International level workshop on International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 21-Feb-2011 to 24-Feb-2011.

6. Arivarasan, A., Sasikala, G. and Jayavel, R., "Aqueous Synthesis of Thiol Capped Cadmium Telluride colloidal quantum dots" presented in a International level workshop on International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 21-Feb-2011 to 24-Feb-2011.

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9. Vasudevan, R., karthik, T., Ganesan, S. and Jayavel, R, "Microwave sintering behavior on the structural and morphological properties of High Temperature Ceramic Nanomaterials" presented in a International level workshop on International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 21-Feb-2011 to 24-Feb-2011.

10. Vasudevan, R. and Jayavel, R., "Studies on structural and electrochemical behavior of Yttria substituted BaCeO3 nanocomposites for SOFC Electrolytes" presented in a National level workshop on National workshop on preparation and characterization of Nanomaterials (NWPCN-2011), organised by University of Madras, India from 14-Mar-2011 to 16-Mar-2011.

11. Vasudevan, R. and Jayavel, R., "Studies on structural and electro-chemical behavior of BaCeYO3 nanocomposites for Solid Oxide Fuel Cell applications" presented in a National level conference on Nanoscience and Engineering for Better Ceramics (NanoSEC2011), organised by IISc Bangalore, India from 23-Jun-2011 to 24-Jun-2011.

12. Vasudevan, R., Sruthi, K. and Jayavel, R, "Effect of microwave sintering on the structural and electrochemical behavior of yittria substituted BaCeO3 nanocomposite for SOFC applications" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

13. Saravanan, R., Rajesh, D., Rajasekaran, S.V., Chitra, M. and Jayavel, R., "Crystal growth and dielectric property of Na0.5K0.5NbO3 single crystal growth by flux method using B2O3 flux" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

14. Saravanan, R., Rajesh, D., Rajasekaran, S.V., Chitra, M. and Jayavel, R., "Crystal growth and dielectric property of Na0.5K0.5NbO3 and Mn-doped Na0.5K0.5NbO3 single crystal growth by flux method" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

15. Arivarasan, A., Sasikala, G. and Jayavel, R., "Fabrication of highly fluorescent cadmium based aqueous phase colloidal quantum dots for Solar cell applications" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

16. Dhinesh Kumar, R. and Jayavel, R., "Hydrothermal Synthesis and magnetic property studies of Multiferroic YMnO3 nanorods" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

17. Sruthi, K., Vasudevan, R. and Jayavel, R., "The improved behavior of Gd substituted BaCeYO3 nanocomposites for IT-SOFC electrolyte" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

18. Krishna Rao Eswar, N., Vasudevan, R. and Jayavel, R., "Studies on structural and multiferroic behavior of BaTiO3 - CoFe2O4 nano composite" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

19. Shanmugam, M., Santhosh Kumar, B. and Jayavel, R., "Synthesis and Characterization of graphene based electrode material for energy applications" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

20. Venkatesan, A., Krishna Chandar, N., Arjunan, S., Mohan Kumar, R. and Jayavel, R., "Surfactant-free non-aqueous synthesis of Al doped V2O5 nanoparticles and its characterization" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

21. Thangappan, R., Kalaiselvam, S., Elayaperumal, A. and Jayavel, R., "Comparative study of non-aqueous sol-gel synthesized Gd2O3 nanostructure by conventional and microwave technique" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

22. Krishna Chandar, N. and Jayavel, R., "Room temperature synthesis and properties of pure and Gadolinium doped Dy2O3 naanoparticles" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

23. Raja, R. and Jayavel, R., "Effect of Zirconium on phase transformation of Ce1-xZrxO2 nanoparticles and its characterization" presented in a International level conference on International Conference on Recent Trends in Advanced Materials, organised by VIT University, India from 20-Feb-2012 to 22-Feb-2012.

24. Murugan, M., Pazhani, K.C. and Jayavel, R., "Study on the Durability of Concrete with Nanoparticles" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

25. Sruthi, K., Vasudevan, R. and Jayavel, R., "Influence of Nd on the Structural and Electrochemicaal Behavior of BaCe0.8Y0.1O3-x Nanocomposites for IT-SOFC Electrolytes" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

26. Arivarasan, A., Thiyagarajan, V., Sasikala, G. and Jayavel, R., "Size Dependent Optical Properties of CdTe Colloidal Quantum Dots" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

27. Krishna Rao Eswar, N., Rajdip Bandyopadhyaya, Vasudevan, R. and Jayavel, R., "Photocatalytic Degradation of Chemical Dye using Tin Oxide in Mesoporous Silica" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

28. Krishna Chandar, N. and Jayavel, R., "Self-assembly Mechanism of Cube-like CeO2 mesocrystals" presented in a International level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

29. Thangappan, R., Kalaiselvam, S., Elayaperumal, A. and Jayavel, R., "General Non-Aqueous Sol-Gel Synthesis of Nanostructured and Morphology Difference of Gd2O3 by Conventional and Microwave Technique" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

30. Raja, R. and Jayavel, R., "Effect of Zirconium on phase transformation of Ce1-xZrxO2 nanoparticles and its characterizations" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

31. Selvakumar, D. and Jayavel, R., "Preparation of Conducting Nanofibers using Electrospinning Method" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

32. Vasudevan, R., Ganesan, S. and Jayavel, R, "Structural and Optical Characteristics of Hydrothermal Synthesized HMTA Capped ZrO2 Nanostructures" presented in a National level seminar on National Seminar on Indigenous Nanomataterials Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

33. Geetha, M., Jayavel, R. and Kamaraj, V., "Microstructural and Tribologycal Properties of Nanostructured Zr and ZrN Thin Films Prepared by Pulsed DC Magnetron Sputtering" presented in a National level seminar on National Seminar on Indigenous Nanomatateriales Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

34. Shanmugam, M. and Jayavel, R., "Synthesis and Thermal Recuction of Graphene for Lithium Ion Battery applications" presented in a National level seminar on National Seminar on Indigenous Nanomatateriales Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

35. Saranya, V. and Jayavel, R., "Synthesis of Mesoporus Silica Nanospheres to Measure Reactiveoxygen Species in Cancer cell" presented in a National level seminar on National Seminar on Indigenous Nanomatateriales Development for Industrial Applications, organised by Anna University, India from 27-Feb-2012 to 28-Feb-2012.

36. Selvakumar, D. and Jayavel, R., "Fabrication of PbSe - ZnO based thin films for Solar cell applications" presented in a International level conference on 6th International Symposium on Macro- and Supramolecular Architecture and Materials, organised by K. S. Rangasamy College of Technology, India from 21-Nov-2012 to 25-Nov-2012.

37. Thangappan, R., Satheesh, K., Shanmugam, M., Raja, R. and Jayavel, R., "Synthesis and Characterization of Graphene - Metal Oxide Composites for Energy Related Applications" presented in a International level conference on 5th Bangalore Nano, organised by Govt. of Karnataka, India from 05-Dec-2012 to 07-Dec-2012.

38. Arivarasan, A., Selvakumar, D., Sasikala, G. and Jayavel, R., "CdTe Colloidal Quantum Dots Based Nano-Structured Materials for Potential Applications" presented in a International level conference on 5th Bangalore Nano, organised by Govt. of Karnataka, India from 05-Dec-2012 to 07-Dec-2012.

39. Vasudevan, R., Sruthi, K., Ganesan, S. and Jayavel, R., "Improved electro-chemical performance of BaCe0.8Y0.1(RE)0.1O3-δ (RE= Yb, Nd, Sm) ceramic nanocomposites for solid oxide fuel cell (SOFC) Electrolytes applications" presented in a International level conference on International Symposium for Research Scholars (ISRS 2012), organised by IIT Madras, India from 13-Dec-2012 to 15-Dec-2012.

40. Raja, R. and Jayavel, R., "Hydrothermal Preparation of TiO2-GNS/CNT and their Super Capacitor Behaviour" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

41. Murugan, M., Mohan Kumar, R. and Jayavel, R., "Graphene-Metal Oxide Semiconductor Composite for Field effect Traansistor applications" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

42. Arul Prakash, F., Shhaya MurphinKumar, P., Jayavel, R. and Devasena, T., "Comparative study of beneficial effect of titanium oxide nanoparticles" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

43. Geetha, M., Jayavel, R. and Kamaraj, V., "Tribological and Electrical Properties of Nanocrystalline Cu Films deposited by DC Magnetron Sputtering" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

44. Balu, K., Arivarasan, A., Jayavel, R. and Kalpana, R., "CeTe/ZnS Core/Shell Quantum dts for X-Ray Detection" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

45. Poongodi, G., Vnkatesan, A., Mohan Kumar, R. and Jayavel, R., "Effect of Solvent on Morphological and Wetability of TiO2 Thin Film on FTO by Hydrothermal method" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

46. Karl Chinnu, M., Vijai Anand, K., Mohan Kumar, R. and Jayavel, R., "Synthesis of Electrochemical Studies on the Ceria based Bilayer films by Hydrothermal Route" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

47. Reghuram, S., Arivarasan, A., Jayavel, R. and Kalpana, R., "CdSe/ZnS Quantum dots for In Vitro Imaging of Hepatocellular Carcinoma" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

48. Venkatesan, A., Poongodi, G., Krishna Chandar, N., Mohan Kumar, R. and Jayavel, R., "Structural, Morphological and Optical properties of Rare Earths (Ce, Sm) doped V2O5 nanostructures by Non-Aqueous Route" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

49. Murugadoss, G. and Jayavel, R., "Structural and Study of Optical and Thermal properties of CdS/Bi2S3 Nanocomposites" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

50. Dinesh Kumar, D., Kalaiselvam, S. and Jayavel, R., "Effect of Nitrogen flow rate on Microstructure and Mechanical properties of Reactive DC Magnetron Sputtered nanocrystalline TiN Thin Films" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

51. Shanmugam, M. and Jayavel, R., "Graphene Metal Oxide Polymer nanocomposites for Energy aplications" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

52. Thangappan, R., Kalaiselvam, S. and Jayavel, R., "Influence of Graphene in Metal oxide Nanocomposites for Energy Related Application" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

53. Elakkeya, E. and Jayavel, R., "Synthesis and Characterization of Nanosilica Produced from Fly Ash (common waste materials) by Precipitation method" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

54. Selvakumar, D. and Jayavel, R., "Preparation of Vanadium based Thin films for sensor application" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

55. Vasudevan, R., Ganesan, S. and Jayavel, R, "Improved Electro-Chemical Performace of NiO - BaCe0.8Y0.2O3-x Composites for IT-SOFC electrolytes" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

56. Arivarasan, A., Sasikala, G. and Jayavel, R., "Polymer Encapsulated Thiol Capped CdTe Quantum Dots for Solar cell application" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

57. Parameshwaran, R., Kalaiselvam, S. and Jayavel, R., "Nanomaterials Embedded Phase Change Thermal Storage System for Energy Efficient and High performance Buildings" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

58. Selvarajan, R. and Jayavel, R., "Facile Synthesis of Graphene Oxide and Graphene for energy related applications" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

59. Nagaraju, P., Senthil, B., Arivarasan, A. and Jayavel, R., "Effect of Calcinations Temperature on Structural and Morphological behavior of TiO2 Nanoparticles for Solar cell application" presented in a International level workshop on Second International Workshop on Advanced Functional Nanomaterials, organised by Anna University, India from 28-Jan-2013 to 30-Jan-2013.

60. Shanmugam, M. and Jayavel, R., "Graphene-Metal Oxide Polymer nanocomposites for Energy Storage applications" presented in a National level conference on 24th Annual General Meeting of Materials Research Society of India, organised by Materials Research Society of India and Indira Gandhi Centre for Atomic Research, India from 11-Feb-2013 to 13-Feb-2013.

61. Arivarasan, A., Sasikala, G. and Jayavel, R., "Enhanced fluorescence behavior of CdTe colloidal quantum dots through polymer encapsulation" presented in a National level conference on 24th Annual General Meeting of Materials Research Society of India, organised by Materials Research Society of India and Indira Gandhi Centre for Atomic Research, India from 11-Feb-2013 to 13-Feb-2013.

62. Thangappan, R., Kalaiselvam, S. and Jayavel, R., "Synthesis and Characterization of Graphene/Vanadium Pentoxide Nanofibers by Electrospinning Technique" presented in a National level conference on 24th Annual General Meeting of Materials Research Society of India, organised by Materials Research Society of India and Indira Gandhi Centre for Atomic Research, India from 11-Feb-2013 to 13-Feb-2013.

63. Geetha, M., Kumar, N., Dash, S., Tyagi, A.K., Jayavel, R. and Kamaraj, V., "Tribological and Electrical Properties of Nanocrystalline Cu Films deposited by DC Magnetron Sputtering" presented in a National level conference on 24th Annual General Meeting of Materials Research Society of India, organised by Materials Research Society of India and Indira Gandhi Centre for Atomic Research, India from 11-Feb-2013 to 13-Feb-2013.

64. Dinesh Kumar, D., Kalaiselvam, S. and Jayavel, R., "Structural charateristics and mechanical properties of Reactive DC magnetron sputtered nanocrystalline TiN thin films at target power of 50 W" presented in a National level conference on 24th Annual General Meeting of Materials Research Society of India, organised by Materials Research Society of India and Indira Gandhi Centre for Atomic Research, India from 11-Feb-2013 to 13-Feb-2013.

65. Venkatesan, A., Krishna Chandar, N., Mohan Kumar, R. and Jayavel, R., "Effect of Rare Earth Elements (Ce, Sm) on Structural, Morphological and Optical properties of V2O5 Nanostructures Synthesized by Non-Hydrolytic route" presented in a National level seminar on National Seminar on Recent Trends in Crystal Growth & Nano Materials, organised by National College, Tiruchirappalli from 13-Mar-2013 to 15-Mar-2013.

66. Saravanan, R., Asokan, K., Chitra, M. and Jayavel, R., "Morphological and Electrical Studies of Lithium Ion Irradiated sodium Potassium Niobate Single Crystal Grown by Flux method" presented in a National level seminar on National Seminar on Recent Trends in Crystal Growth & Nano Materials, organised by National College, Tiruchirappalli from 13-Mar-2013 to 15-Mar-2013.

67. Saravanan, R., Rajesh, D., Rajasekaran, S.V., Perumal, R., Chitra, M. and Jayavel, R., "Nano Hillock and complex crater formation by low-energy Ar+ ion implantation into sodium potassium niobate single crystal" presented in a International level conference on International Conference on Nanoscience and Nanotechnology, organised by SRM University, India from 18-Mar-2013 to 20-Mar-2013.

Books Published

1. "Proceedings of Indo-Japan Workshop on Crystal Growth and Applications of Advanced Materials for Optoelectronics" authored by R. Jayavel and K. Kitamura and published by Vijay Nichole In prints P.Ltd. , Chennai.(2005)

Current Sponsored Projects

1. "M.Tech. Programme on Nanoscience and Technology", funded by DST (August-2008 - March-2021). Project Cost: 96900000.00.

2. "XI-Plan Development Grant to Centre for Nanoscience and Technology", funded by UGC (December-1969 - December-1969). Project Cost: 11000000.00.

3. "Single crystal growth of Sodium Potassium Niobate for Transducer Applications", funded by UGC (December-1969 - December-1969). Project Cost: 1400000.00.

Sponsored Projects Completed

1. "Growth of large size Ba1-x¬ Ax(A=Ca, Sr) TiO3 single crystals and their characterization", funded by DAE-BRNS (April-1995 - March-1999). Project Cost: 98600000.00.

2. "Modernisation of flame fusion crystal growth system for the production of emerald and star Ruby", funded by AICTE (December-1969 - December-1969). Project Cost: 1000000.00.

3. "Growth of Germanium Single Crystals for Window Applications", funded by ISRO (December-1969 - December-1969). Project Cost: 1020000.00.

4. "Upgradation of Existing facilities for the Growth of Semiorganic Crystals for NLO applications", funded by AICTE (December-1969 - December-1969). Project Cost: 1000000.00.

5. "Growth of bulk single crystals of high temperature semiconductors and their characterization", funded by DST (December-1969 - December-1969). Project Cost: 1240000.00.

6. "State Initiated National Facility for Semiconductor based Nanomaterials", funded by TN Govt. (December-1969 - December-1969). Project Cost: 5000000.00.

7. "Heavy ion Irradiation Effects on Colossal Magneto Resistance (CMR) Single Crystals", funded by IUAC (December-1969 - December-1969). Project Cost: 404000.00.

8. "Growth and Characterization of Bimetallic Thiocyanate Crystals for Frequency Conversion Devices", funded by CSIR (December-1969 - December-1969). Project Cost: 1016000.00.

9. "Semiconductor Nanostructures", funded by DST (December-1969 - December-1969). Project Cost: 61624000.00.

10. "Synthesis and Characterization of Carbon Nanotubes using Mesoporous MCM-41 molecular sieves-its Application as Memory Devices ", funded by DST (December-1969 - December-1969). Project Cost: 3066000.00.

11. "Development of piezoelectric single crystals of PZN-PT for Acoustic Transducer and Sensor Applications", funded by DRDO (December-1969 - December-1969). Project Cost: 1000000.00.

Programme Chaired

1. Chairman, International level workshop titled "Indo-Italian Advanced level Workshop on Semiconductor Nanostructures, Ultra Thin Films and Applications" conducted by Anna University from 09-Sep-2010 to 09-Sep-2010.

2. Chairman, National level seminar titled "6th Nanotechnology Conclave" conducted by Department of Science and Technology and Confederation of Indian Industries from 03-Nov-2011 to 03-Nov-2011.

3. Chairman, International level conference titled "6th International Symposium on Macro- and Architectures and Materials" conducted by K. S. Rangasamy College of Technology from 21-Nov-2012 to 25-Nov-2012.

4. Chairman, International level workshop titled "Second International Workshop on Advanced Functional Nanomaterials" conducted by Anna University from 28-Jan-2013 to 28-Jan-2013.

5. Chairman, National level conference titled "NANO MEET-2013" conducted by ANNA UNIVERSITY from 19-Sep-2013 to 20-Sep-2013.

6. International level conference titled "NANO MEET-2014" conducted by ANNA UNIVERSITY from 16-Mar-2014 to 17-Mar-2014.

Programme Organized

1. Co-Director, International level workshop on "International Workshop on Crystal Growth of Technologically Important Materials" from 24-Feb-2004 to 28-Feb-2004.

2. Co-coordinator, National level Short Course on "UGC-Refresher Course on Crystal Growth" from 17-Nov-2004 to 07-Dec-2004.

3. Convener, International level workshop on "Indo-Japan Workshop on Crystal Growth of Advanced Materials" from 07-Dec-2004 to 10-Dec-2004.

4. Coordinator, International level workshop on "International Workshop on Crystal Growth & Applications of Advanced Materials" from 09-Jan-2006 to 13-Jan-2006.

5. Coordinator, International level workshop on "International Workshop on Nano Science and Technology" from 23-Jan-2006 to 28-Jan-2006.

6. Chairman, International level workshop on "Japan-India Workshop on Optronic Materials and Devices Based on Micro to Nano Technology " from 22-Mar-2007 to 23-Mar-2007.

7. Coordinator, National level workshop on "Awareness Programme on Nanoscience and Technology " from 19-Sep-2007 to 20-Sep-2007.

8. Coordinator, National level seminar on "Seminar on Energy Materials & Systems" from 10-Jan-2008 to 11-Jan-2008.

9. Convener, National level conference on "Industry Meet on Nanoscience and Technology" from 28-Nov-2008.

10. Coordinator, International level workshop on "Indo-US Workshop on Visible and Ultraviolet Sources for Solid State Lighting and Water Purification" from 05-Jan-2009 to 07-Mar-2009.

11. Coordinator, International level workshop on "International Workshop on Advances in Nanoscience and Technology" from 28-Oct-2009 to 30-Oct-2009.

12. Convener, National level conference on "Nanomeet-2010-Emerging Trends in Nanoscience and Technology" from 26-Mar-2010 to 27-Mar-2010.

13. Convener, International level workshop on "International Workshop on Advanced Functional Nanomaterials" from 21-Feb-2011 to 24-Feb-2011.

14. Coordinator, National level conference on "Nanomeet-2011, Materials for Applied Nanoscience and Nanotechnology Research" from 07-Mar-2011 to 08-Mar-2011.

15. Coordinator, National level seminar on "Recent Advancements in Nanotechnology" from 05-Aug-2011 to 06-Aug-2011.

16. Organizing Secretary, International level conference on "International Conference on Advanced Materials" from 05-Jan-2012 to 07-Jan-2012.

17. Coordinator, National level conference on "Nanomeet-2012 Indigenous Development of Nanomaterials for Industrial Applications" from 27-Feb-2012 to 28-Feb-2012.

18. Convener, International level workshop on "Second International Workshop on Advanced Functional Nanomaterials" from 28-Jan-2013 to 30-Jan-2013.

19. Convener, International level workshop on "Third International Workshop on Advanced Functional Materials" from 16-Dec-2015 to 18-Dec-2015.

20. Convener, National level conference on "NANO MEET-2016" from 06-Oct-2016 to 07-Oct-2016.

21. Convener, National level workshop on "National Workshop and Hands on Training on Thin film solar cells" from 11-Nov-2016 to 12-Nov-2016.

22. Convener, International level workshop on "Fourth International Workshop on Advanced Funtional Nanomaterials" from 22-Mar-2017 to 24-Mar-2017.

23. Coordinator, International level workshop on "INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND DEVICE TECHNOLOGY" from 22-Nov-2017 to 24-Nov-2017.

24. Convener, National level workshop on "NANO MEET-2017" from 29-Nov-2017 to 30-Nov-2017.

Special Reprasentations

1. Member - Board of Studies in Nanoscience in Bharathiar University, Coimabatore

2. Member-Board of Studies in Nanoscience and Technol in Alagappa University

3. Member- Board of Studies in Biosensors and Bioelet in Alagappa University

4. Member - Board of Studies in Physics in Periyar University, Salem

5. Member - Board of Research Studies in Periyar University, Salem

6. Member-Board of Studies in Nanoscience in M.S. University, Tirunelveli

7. Member-Board of Studies in Science and Humanities in Anna University of Tech., Trichy

8. Board of Studies - Dept. of Nanotechnology in Shri Ramakrishna Engineering College, Coimbatore

Honours

1. "CSIR-Visiting Research Associate for research at NPL" given by CSIR from India (1993).
2. "Young Physicists Colloquium" given by Indian Physical Society from India (1993).
3. "Certificate of Achievement for SEM Training" given by Leica Cambridge Ltd from UK (1995).
4. "Best paper Award" given by Seminar on Materials and Characterization, CECRI from India (1998).
5. "DAAD Sandwich Model Fellowship to visit Germany" given by RWTH-Technical University of Aachen from Germany (2000).
6. "Science & Technology Agency (STA) Fellowship" given by National Research Institute for Metals from Japan (2001).
7. "Japanese Government Award for Foreign Expert" given by NIMS, Japan from Japan (2004).
8. "Best paper Award" given by International Conference on Spectrophysics", Chennai from India (2005).
9. "Honorary Guest Professor" given by Shizuoka University from Japan (2012).
10. "Active Researcher Award" given by Anna University from India (2012).
11. "MRSI Prize for Best Paper Presentation" given by Materials Research Society of India from India (2013).
12. "Fellow of Tamil Nadu Academy of Sciences" given by Tamil Nadu Academy of Sciences from India (2015).

Patents Filed

1. Filed patent rights for A Process for the Production of water based nanocoin India. File number: 2831 Filed Date: 18-Nov-2008.

Experience Abroad

1. Visited National Research Institute for Metals, Tsukuba, Japan from 15-Aug-1999 to 14-Aug-2001. Purpose of visit :STA Fellow.
2. Visited National Institute for Materials Science , Japan from 15-Aug-2001 to 31-Mar-2003. Purpose of visit :Special Researcher.
3. Visited Research Inst. of Electronics Shizuoka University, Japan from 01-Dec-2006 to 31-Mar-2007. Purpose of visit :Visiting Professor.

4. Visited University of Goettingen, Germany from 23-Aug-2010 to 22-Oct-2012. Purpose of visit :Visiting Professor.

5. Visited University of Queensland, Australia from 15-Oct-2012 to 26-Oct-2012. Purpose of visit :Visiting Professor.

6. Visited National Institute of Materials Science, Tsukuba. from 25-Nov-2013 to 06-Dec-2013. Purpose of visit :Guest Researcher .

7. Visited King Saud University, SAUDI ARABIA from 15-Nov-2014 to 19-Nov-2014. Purpose of visit :Visiting Professor .

Invited Lectures

1. Delivered a Lecture on "Nanocrystalline Thin Film of Transparent Conductin" in International Workshop on Advances in Nano Science and Technology organized by Anna University, Chennai (28-Oct-2009).

2. Delivered a Lecture on "Crystal Growth and Anisotropic magnetic Properties" in National Symposium on Growth of Detector-grade Single Crystals organized by Bhabha Atomic Research Centre, Mumbai (21-Nov-2009).

3. Delivered a Lecture on "Synthesis and Characterization of Nanomaterials fo" in Seminar on Nanoscience - Current Innovations and Future Perspectives organized by Justice Basheer Asmed Sayeed College for Woman, Chennai (16-Dec-2010).

4. Delivered a Lecture on "Synthesis and Characterization of Nanomaterials fo" in Seminar on Nano Agricultural 2011 - Nanotechnology for Enhancing Food Security organized by Tamil Nadu Agricultural University, Coimbatore (08-Apr-2011).

5. Delivered a Lecture on "Advanced Functional Nanomaterials for Energy Stora" in Seminar on Recent Advancements in NanoscieTechnology organized by Goverment Arts College, Tiruvannamalai (05-Aug-2011).

6. Delivered a Lecture on "Nanomaterials for Biomedical applications" in ICMR sponsored National Seminar on Biomedical Applications of Nanotechnology organized by Rajalakshmi Engineering College, Chennai (11-Aug-2011).

7. Delivered a Lecture on "Synthesis and Characterization of Nanomaterials fo" in National Level Workshop on Nanomeasurements organized by NGM College, Pollachi (16-Sep-2011).

8. Delivered a Lecture on "Advanced Nanomaterials for Energy Creation" in National Seminar on Solar Energy Conversion with Nanoparticles organized by Velammal College of Engineering and Technology, Madurai (14-Oct-2011).

9. Delivered a Lecture on "Advanced Functional Nanomaterials for Energy Appli" in Eco-friendly Materials and Process for Low-Carbon & Sustainable Society organized by National Environmental Engineering Research Instit, Nagpur (15-Dec-2011).

10. Delivered a Lecture on "Recent trents in Nanoscience and Technology" in National Conference - Quest for Innovation in Nanotechnology organized by Bharath University, Chennai (08-Feb-2012).

11. Delivered a Lecture on "Nanomaterials for Biomedical applications" in 4th Indo-Korean Conference on Integrative Bioscience Research-Opportunities and Challenges organized by Avinashilingam University, Coimbatore (11-Feb-2012).

12. Delivered a Lecture on "Development of Organic / Inorganic Nano Hybrid Sys" in International Conference on Recent Trends in Advanced Materials organized by VIT University, Vellore (20-Feb-2012).

13. Delivered a Lecture on "Preparation methods and deposition techniques of N" in National Seminar on Indigenous Nanomatateriels Development for Industrial Applications organized by Anna University, Chennai (28-Feb-2012).

14. Delivered a Lecture on "Nanomaterials for Biomedical applications" in National Science Day organized by Apollo Engineering College, Sriperumpudur (29-Feb-2012).

15. Delivered a Lecture on "Recent trents in Nanoscience and Technology" in National Conference on Emerging Trends in Science and Humanities organized by Saveetha Engineering College, Chennai (09-Mar-2012).

16. Delivered a Lecture on "Advanced Nanomaterials for Energy Storage Applicat" in Advances in Nano Materials for Non-Conventional Power Sources organized by Sri Venkateshwara College of Engineering and Techn, Thiruvallur (16-Apr-2012).

17. Delivered a Lecture on "Recent trents in Nanoscience and Technology" in ISTE students chapter organized by PGP College of Enggineering and Technology, Namakkal (28-Apr-2012).

18. Delivered a Lecture on "Advanced Nanomaterials for Energy Application" in National Conference on Recent Advanced in Physics organized by Sri Vidya Mandir Arts and Science College, Uthangarai (21-Jul-2012).

19. Delivered a Lecture on "Nanomaterials for Biomedical Application to Treat " in Natioal Seminar on Electron Microscopy in Nanotechnology and Biomedical Research organized by Madras Veterinary College, Chennai (24-Jul-2012).

20. Delivered a Lecture on "Effective - Research Article writing " in National Workshop on Advaanced Technical Writing organized by Adhiparasakthi Engineering College, Melmaruvathur (26-Jul-2012).

21. Delivered a Lecture on "Nanomaterials for clean Environment" in Emerging Trends in Green Technology organized by Sriram Engineering College, Chennai (13-Sep-2012).

22. Delivered a Lecture on "Recent trents in Nanoscience and Technology" in Special Lecture organized by University College of Anna University, Villupuram (24-Sep-2012).

23. Delivered a Lecture on "Mesocrystals: A new class of nanomaterials" in International Conference on Emerging Advanced Nanomaterials organized by Australian Institute for Bioengineering and Nanote, Australia (23-Oct-2012).

24. Delivered a Lecture on "Electronic Structure of Magnetic Ions doped ZnO Th" in Structure and Thermodynamics of Emerging Materials organized by Indira Gandhi Centre for Atomic Research & Indian , Kalpakkam (05-Nov-2012).

25. Delivered a Lecture on "Effect of Rare Earth Elements (Ce, Sm) on structur" in 3rd International Symposium on Rare Earth Resource Utilization (ISRERU-3) organized by Changchun Institute of Applied Chemistry, China (10-Dec-2012).

26. Delivered a Lecture on "Graphene-metal oxide nanocomposites for Electronic" in 3rd Special Symposium on Advances in Functional Materials (AFM-3) organized by Chinese Academy of Sciences, China (12-Dec-2012).

27. Delivered a Lecture on "Physical Properties studies of transition metal do" in Second International Workshop on Advanced Functional Nanomaterials organized by Anna University, Chennai (29-Jan-2013).

28. Delivered a Lecture on "Graphene-metal oxide nanocomposites with improved " in Second International Workshop on Advanced Functional Nanomaterials organized by Anna University, Chennai (30-Jan-2013).

29. Delivered a Lecture on "Development of Organic / Inorganic Nano Hybrid Sys" in National Seminar on Recent Trends in Crystal Growth & Nano Materials organized by National College, Tiruchirappalli (13-Mar-2013).

30. Delivered a Lecture on "Effect of Rare Earth Elements (Ce, Sm) on structur" in National Seminar on Recent Trends in Crystal Growth & Nano Materials organized by National College, Tiruchirappalli (14-Mar-2013).

31. Delivered a Lecture on "Graphene-metal oxide nanocomposites with improved " in International Conference on Nanoscience and Nanotechnology organized by SRM University, Kattankulathur (18-Mar-2013).

Extension & Outreach Programme

1. Co-ordinator for Nanotechnology Research Demonstration, CHENNAI SCIENCE FESTIVAL - 2012, and funded by Government of Tamilnadu at Anna Gem Science Park School, Chennai during 27-Jan-2012 and 30-Jan-2012. No. of participants: 4800.

2. Co-ordinator for Research Exhibition - Nanotechnology , Kurukshetra 2012 - Techno Management Fest, at Anna University, Chennai during 01-Feb-2012 and 04-Feb-2012. No. of participants: 200.

3. Co-ordinator for Technology Exhibition, Technology Day Celebration - 2012, and funded by Centre for Technology Development and Transfer at Anna University, Chennai during 11-May-2012 and 12-May-2012. No. of participants: 500.

4. Co-ordinator for Nanotechnology Research Demonstration, CHENNAI SCIENCE FESTIVAL - 2013, and funded by Government of Tamilnadu at Anna Gem Science Park School, Chennai during 30-Jan-2013 and 03-Feb-2013. No. of participants: 5000.

5. Co-ordinator, One day training programme on comprehension of basic subjects, at Anna University, Chennai during 16-Mar-2013 and . No. of participants: 50.

6. Co-ordinator for Technology Exhibition, Technology Day Celebration - 2013, and funded by Centre for Technology Development and Transfer at Anna University, Chennai during 13-May-2013 and 14-May-2013. No. of participants: 200.