

CENTRE FOR NANO SCIENCE & TECHNOLOGY

College of Engineering & Technology

SRINIVAS UNIVERSITY

Srinivas Nagar, Mukka, Mangalore – 574146

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Vision:

To become a pioneer and a world class centre of excellence in academics and research in Nano Science and Technology for the advancement of mankind and the nation.

Mission:

To strive in attaining excellence consistently by adopting contemporary methods of teaching and learning to develop skills and to inculcate a research culture in the budding engineers, who can cater to the comfort and well-being of society at large.

Objectives:

- (1) To promote higher education and cutting edge research in most anticipated breakthrough technology of 21st century – nanoscience & technology.
- (2) To spread the importance of nanotechnology to the human generations to school students by conducting education & training programmes at different high-schools & pre-university colleges in the State.
- (3) To explore the possibilities of solving basic & social problems in the society through nanotechnology supported solutions.
- (4) Commercialization of nanotechnology inventions.
- (5) Promote industrial research through Industry collaborations.
- (6) To promote scholarly publishing by bringing out online, open access journals, conducting conferences and workshops.

Programmes:

B. Tech. – Nanotechnology (4 years) at Srinivas Institute of Technology (VTU), Mangalore.

M.Tech. - Industrial Nano-Biotechnology at Srinivas University, Mukka, Mangalore.

M. Phil. & Ph.D. - in Nano Science and Technology at Srinivas University, Mukka, Mangalore.

Present Research:

- (1) Preparation & Characterization of Nanomaterials & Nanocomposites.
- (2) Nanofilters for water purification.
- (3) Characterization of Nano-mechanical & Nanoelectronic components.
- (4) Commercialization of nanotechnology Inventions.

Research Fields: Nanomaterials, Polymer-Nano Composites, Biocompatible Polymers, Polymer Blends, Biocompatible Polymer- Metal Nano Composites, Dye Sensitised Solar Cells, Gas Sensors, Drug Release Devices, Pharmacology, Pharmaceuticals

People:

Sl. No.	Name of Scientist	Qualification	Area of Research
1	Dr. Praveen B. M.	M.Sc. Ph.D., Post Doc @ IISc, Post Doc @ AU, South Korea	Nano-Materials, Nano-Composites, Corrosion Studies
2	Dr. Prasad P. (Coordinator; M: 9482331531)	M.Sc., Ph.D.	Nanomaterials, Polymer-Nano Composites, Biocompatible Polymers, Polymer Blends,

			Biocompatible Polymer- Metal Nano Composites, Dye Sensitised Solar Cells, Gas Sensors, Drug Release Devices
3	Dr. Ramakrishna Shabaraya	M.Pharm., MBA, MD, Ph.D.	Nano-Pharmacology, Nano-Pharmaceutics, Nanosystems for Drug Delivery
4	Dr. P. S. Aithal	M.Sc., MIT, M.Tech., M.Sc. (E-Bus), Ph.D. (Phys), Ph.D. (Mangt.), Post Doc @, PRL, Post Doc @ CREOL, USA	Nano-computing Materials & Systems
5	Dr. Shubhrajyotsna Aithal	M.Sc. (Mat. Sc.), M.Sc. (Chem.), MA (Eng.), M.Phil. (Chem), & Ph.D.	Nano-Photonics
6	Mr. Shareefraju J. Ukkund	M.Tech (Ph.D.)	Biosynthesis of Nano-Materials, Nano-Crystalline cellulose
7	Mr. Naveen Kumar J. R.	M.Tech (Ph.D.)	Metal oxide Nanohybrid/Nanocomposite, gas sensing
8	Mrs. Bhavya M. S.	M.Sc (Ph.D.)	Biocompatible Polymer – Magnetic Nano Composites
9	Dr. Sandhya Shenoy U.	M.Sc., Ph.D., Post doctoral@JNCASR	Nanomaterial synthesis, nanofluids, 2D materials, thermoelectric materials and simulations of materials for energy.

List of Projects implemented / undergoing:

Sl. No.	Title of the Project	Sanction No.	Total Cost (₹)	Agency	Present Status
1	Modernization of Chemistry laboratory <u>Dr. Praveen B. M.</u>	Ref. No 8024/RIFD/M OD 292 /2010-11 dated 31-03-2011	₹ 9,00,000	AICTE under MODROBS scheme	Completed
2	Development of Nickel Si ₃ N ₄ nano particles composite coating by Pulse Electrodeposition method and their corrosion behavior for Technological applications <u>Dr. Praveen B. M.</u>	Ref No SR/FT/CS/147/2011 dated 13-07-2012	₹ 24,16,000	DST under Fast Track Scheme for young scientist	Completed
3	Development of Nickel – Nano Particles composites by	Ref No: GRD 313/ dated 01/01/2015	₹ 30,00,000	Centres Of Innovative Science And	On Going

	Electrodeposition Method for Industrial Applications <u>Dr. Praveen B. M.</u>			Engineering Education (CISEE) BY VGST, Govt. of Karnataka	
4	Development of Nanostructured Multilayer Coating by Electrodeposition for Aerospace Application at elevated temperature and its corrosion studies <u>Dr. Praveen B. M.</u>	ISRO/RES/3/72 3/1 6-17 dated 02/02/2017	₹ 19,50,000	ISRO-Respond	On Going
5	Study on Dye sensitized Metal nanoparticles doped polymer films for Optical Limiting & Optical Phase Conjugation. <u>Dr. Shubhrajyotsna Aithal</u>	SR/WOS-A/CS-95/2017 dated 04/10/2017	₹ 36,00,000	DST, New Delhi	On Going
6	Biosynthesis of Nanoparticles and the Investigation on the Properties of Polymer/Blend Nano Composites for Biomedical Applications. <u>Dr. Prasad P.</u>	CISEE/2016-17/GRD-538 dated 21/12/2017	₹ 30,00,000	Centres Of Innovative Science And Engineering Education (CISEE) BY VGST, Govt. of Karnataka	On Going
7	Design, Fabrication and Characterization of Some Novel Dye-doped Metal-Polymer Nanocomposites films for Third Harmonic Nonlinear Optical and Photonics Switching Applications. <u>Dr. P. S. Aithal</u>	DST/NM/NS/2 018/132 02/04/2018	₹ 1.88 Crores	Technology – Missions Division, DST, New Delhi	Sanctioned
8	DST INSPIRE Faculty award. <u>Dr. Sandhya Shenoy U.</u>	DST/INSPIRE/04/2017/000550 24/07/2017	₹ 85,00,000	DST, New Delhi	On Going

Dr. Praveen B. M.

Books Written:

1. "Electrodeposition and Nanocomposites" Lambert Academic Publishing, Germany ISBN No 978-3-8484-0119-2.
2. "Corrosion Inhibitors" Lambert Academic Publishing, Germany ISBN No 978-3-8484-2710-9.
3. Non Toxic Corrosion Inhibitors for Steel B.M Prasanna, B.M. Praveen, NarayanaHebbar, ISBN NO: 978-3-659-50238-5
4. Eco-Friendly Corrosion Inhiitors for Steel and Zinc NarayanaHebbar, B.M. Praveen, B M Prasanna ISBN NO : 978-659-31547-3

Research Publications:

1. Corrosion inhibition studies of zinc and steel in hydrochloric acid medium. Kuvempu, Univ. Sci. J. 3(1) (2006) 88-95.
2. Corrosion studies of carbon nanotubes – Zn Composite coating. Surface and Coatings Technology, 201(2007) 5836 – 5842.
3. Corrosion Behavior of Zn -TiO₂ Composite Coating. Synthesis & Reactivity Inorganic, Metal-Organic, & Nano-Metal Chemistry. 37 (2007) 461–465.
4. Electrodeposition and properties of Zn-nanosized TiO₂ composite coatings. Applied Surface Science, 254 (2008) 2418-2424.
5. Quinol-2-thione compounds as corrosion inhibitors for mild steel in acid solution. Materials chemistry and Physics, 108 (2008) 283–289.
6. Chemical treatment of zinc surface and its corrosion inhibition studies. Bulletin of Materials Science 31(1) (2008) 37-41.
7. Generation and corrosion behavior of zn-nano sized carbon black composite, coating. International journal of electrochemistry, 4(2)(2009) 258-266.
8. Metol as corrosion inhibitor for steel. International journal of electrochemistry 4(2)(2009) 267-275.
9. Surface modification of steel by a condensation product and its corrosion studies. Bulletin of electrochemistry 23 (2007) 123-127.
10. Electrodeposition and properties of Zn-Ni-CNT composite coatings. Journal of alloys and compounds 482 (2009) 53-57.
11. Electrochemical Generation of Zn-Chitosan Composite Coating on Mild Steel and its Corrosion Studies, Engineering, 2 (2010) 580-584.
12. Veratradehyde as Corrosion Inhibitor for Mild Steel in Different Acid Medium. Journal of chemistry and chemical engineering 4 (8) 2010 35 – 41.
13. New schiff.s bases as corrosion inhibitor for mild steel in HCl medium. Materials Science : An Indian Journal 7(1), 2011 [1-6].
14. Synergistic effect of additives on bright nanocrystalline zinc electrodeposition. Journal of Applied Electrochemistry, 41 (1) (2011) 39-49
15. Preparation and characterization LiMn₂O₄ nano materials for Li ion Batteries, Materials Science, An Indian Journal, 8(2012) 207-212.
16. Veratraldehyde as Corrosion Inhibitor for Zinc in Different Acid Medium. Der PharmaChemica, 2010, 2(6): 295-301.
17. Ziprasidone as a corrosion inhibitor for zinc in different acid medium. Journal of Chemical and Pharmaceutical Research 2011, 3(1):501-507
18. Corrosion inhibition of steel in acid media by S-Benzylthiuronium chloride. Der PharmaChemica, 2011, 3(1): 388-398.

19. New Electroactive compounds as corrosion inhibitors for zinc in acidic medium. *Advances in Applied Science Research*, 2011, 2 (2): 333-341.
20. Inhibition effects of acetyl coumarines and thiazole derivatives on corrosion of zinc in acidic medium. *Bulletin of Materials Science* 2011, 34(3) 571–576.
21. Electrodeposition and Corrosion Resistance Properties of Zn-Ni/TiO₂ Nano Composite Coatings, *International journal of electrochemistry*, Volume 2011 doi:10.4061/2011/261407.
22. New brightener for Zn-Fe alloy plating from sulphate bath. *International journal of electrochemistry*, Volume 2011, doi:10.4061/2011/132138.
23. Corrosion Inhibition Effect of Substituted Quinoline and Its Condensation Products on Mild Steel in Acidic Media, *Analytical & Bioanalytical Electrochemistry*. 3 (3) (2011) 249-260.
24. Corrosion Inhibition studies of mild steel by new inhibitor in different corrosive medium. *Research Journal of chemical sciences* 1(7), 46-50, (2011).
25. Kinetic and mechanistic studies on the oxidation of tinidazole by bromamine-t (bat) in hcl medium. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 2(4) 2011, 947-957.
26. Surface modification of zinc by new organic compounds and its corrosion study *Der PharmaChemica*, 2011, 3 (6):565-575.
27. New brightener for Zn-Ni alloy plating from sulphate bath *Chemical Engineering Communications*, 199 (6)(2012) 812-822.
28. Metol as corrosion inhibitor for zinc. *Transactions of Indian Institute of Metals*, 65 (3) 2012, 297-302.
29. Benzimidazole derivatives as corrosion inhibitors for zinc in acid solution. *Protection of Metals and Physical Chemistry of Surfaces*, 2013, 49,(5),2013. 587–590.
30. Electrochemical study of the corrosion behavior of zinc surface treated with a new organic chelating inhibitor. *International Scholarly Research Network, ISRN Metallurgy* Volume 2012, Article ID 940107, 7 pages doi:10.5402/2012/940107.
31. Acid corrosion inhibition of steel by lamotrigine. *International Scholarly Research Network, ISRN Corrosion* Volume 2012, Article ID 932403, doi:10.5402/2012/932403.
32. Corrosion Inhibition of Zinc by a New Inhibitor in Hydrochloric Acid Medium. *Research Journal of Chemical Sciences*, Vol. 3(11) 82-89 (2013).
33. Microstructural and Mechanical Studies of PVA Doped with ZnO and WO₃ composites Films. Volume 2014, Article ID 846140, 7 pages <http://dx.doi.org/10.1155/2014/846140>.
34. Inhibition Effect of Azadirachtaindica, a Natural Product, on the Corrosion of Zinc in Hydrochloric Acid Solution. *Transactions of the Indian Institute of Metals*, (2014) 67(5):675–679.
35. The Inhibition Effects of Chloroquinolines on the Corrosion of Mild Steel in Hydrochloric Acid Solution. *Journal of Iron and Steel Research, International*, 2014, 21 (8) 804- 808.
36. Ketosulfone Drug as a Green Corrosion Inhibitor for Mild Steel in Acidic Medium. *Industrial Engineering and Chemistry Research (ACS publication)* 2014, 53 (20), pp 8436–8444.
37. Micro structural studies of PVA doped with metal oxide nanocomposites films AIP Conference Proceedings 1591, 493 (2014); (<http://dx.doi.org/10.1063/1.4872650>) (AIP Publications).

38. Anthralic acid as corrosion inhibitor for mild steel in hydrochloric media. *Procedia Materials Science* 5 (2014) 712 – 718.
39. Advancement in Microstructural, Optical and Mechanical Properties of PVA (Mowiol 10- 98) Doped by ZnO Nanoparticles, *Physics Research International*, Volume 2014, Article ID 742378, 9 pages <http://dx.doi.org/10.1155/2014/742378>.
40. Polyethylene glycol as a corrosion inhibitor for lead and lead free solders in acidic medium. *International Journal of Mechanical Engineering and Robotics Research* Vol. 4, No. 1, January 2015 128-135.
41. Inhibition effect of an anti-HIV drug on the corrosion of zinc in acidic medium. *Transactions of the Indian Institute of Metals*, 68 (4) 543-551, 2015.
42. Enhancement of Optical, Mechanical and Micro Structural Properties in Nanocomposite Films of PVA doped with WO₃ Nanoparticles. *International Journal of Structural Integrity*. 6(2015)338 – 354.
43. Chemical and electrochemical studies of ranitidine as a corrosion inhibitor for mild steel in hydrochloric acid medium. *International Research Journal of Chemistry*, Vol. 1(2), pp. 010-017, 2014.
44. Corrosion inhibition behavior of ketosulphide for mild steel in acidic medium. *International Research Journal of Chemistry* 2(1)(2015) 018-020.
45. Pulse Electrodeposition, characterization and corrosion behavior of Ni–Si₃N₄ composites *Journal of Materials Engineering and Performance* 24(5) (2015) 1987-1994.
46. Development of Ni-Si₃N₄ Nanocomposites by Electrodeposition. *International Journal of Engineering Sciences & Research Technology*, 4(2): February, 2015, 505-508.
47. Anticorrosion Potential of Hydralazine for corrosion of mild steel in 1 M hydrochloric acid solution. *Journal of Fundamental and Applied science*, 2015, 7(2) 222-243.
48. Corrosion Inhibition behavior of Ketosulfone for zinc in acidic medium. *Journal of Fundamental and Applied science*, 2015, 7(2) 271-279.
49. Generation of Nanostructured MgO Particles by Solution Phase Method. *Research Journal of Chemical Sciences* Vol. 5(5), 13-18, May (2015).
50. Development and characterisation of Ni-Si₃N₄ nanocomposites. *AIP Conference Proceedings* 1665, 080031 (2015); doi: 10.1063/1.4917935.
51. Enhancement of micro structural properties of PVA doped with MWCNT's and metal oxide nanocomposites films. *Conference Proceedings* 1665, 140002 (2015); doi: 10.1063/1.4918211.
52. The Corrosion inhibition effect of Hydralazine.HCl on the zinc in Acidic media. *Moroccan Journal of Chemistry*, 3 (3) (2015) 496-506.
53. The inhibition effect of hydralazine hydrochloride on corrosion of mild steel in hydrochloric acid solution. *International Research Journal of Chemistry and Chemical Sciences* Vol. 2(2), pp. 021-025.
54. Anticorrosion potential of a pharmaceutical intermediate Floctafenine for zinc in 0.1 M HCl solution. *International Journal of Industrial chemistry* (2015) 6:221–231, DOI 10.1007/s40090-015-0049-5.
55. Studies on Structural, Optical and Mechanical Properties of MWCNTs and ZnO nanoparticles doped PVA nanocomposites. *Nanotechnology Reviews*, 4(5), 2015, 457-468.

56. Adsorption, thermodynamic, and electrochemical studies of ketosulfide for mild steel in acidic medium. *Journal of Adhesion Science and Technology*, Vol. 29, No 24, 2692–2708, 2015, <http://dx.doi.org/10.1080/01694243.2015.1081781>.
57. Corrosion inhibitory action of mild steel in 1M HCl by Chlorophenicol. *Moroccan Journal of Chemistry*, 3(4) 2015 824-837.
58. Synthesis and antimicrobial evaluation of novel 4-amino-6-(1, 3, 4-oxadiazolo/1, 3, 4-thiadiazolo)-pyrimidine derivatives.", *Molecular Diversity*. (2016) 20:391–398. DOI 10.1007/s11030-015-9640-0.
59. Electrochemical Study on inhibitory effect of Aspirin on Mild Steel in 1M hydrochloric acid. *Journal of the Association of Arab Universities for Basic and Applied Sciences* (2017) 22, 62–69.
60. Inhibition Study of Mild Steel Corrosion in 1 M Hydrochloric Acid solution by 2-Chloro 3- formylquinoline. *Internnational Journal of Inustrial chemistry* (2016) 7:9–19 DOI 10.1007/s40090-015-0064-6.
61. Experimental and theoretical studies of hydralazine hydrochloride as corrosion inhibitor for mild steel in HCl acid medium. *Anti-Corrosion Methods and Materials*, Volume: 63 Issue: 1, 2016, PP 47-55.
62. Generation of Ni–Si₃N₄ nanocomposites by DC, PC and PRC electrodeposition methods. *Surface Engineering*, 32(7) 501-507, 2016.
63. Ni-Nb₂O₅ Composites Prepared by Pulse Electrodeposition Method. *Surface Engineering and Applied Electrochemistry*, 2017, Volume 53, Issue 2, pp 179–185.
64. Ni - Si₃N₄ Electrodeposition, Properties and corrosion behaviour. *Surface Engineering and Applied Electrochemistry*, 2017, Vol. 53, No. 3, pp. 258–264.
65. Dielectric and electric conductivity studies of PVA (Mowiol 10-98) doped with MWCNTs and WO₃ nanocomposites films. *Materials Research Express*, 3(5) (2016) 055012.
66. Synthesis and Antimicrobial Evaluation of 6-(4-(4-Chlorophenylamino)piperidine-1-yl) pyrimidin-4-amino Analogues. *Iranian Journal of Organic Chemistry* Vol. 8, No. 2 (2016) 1755-1764.
67. Microwave-Assisted, Palladium Catalyzed Synthesis of Novel 4,6-Diamino Pyrimidine Derivatives. *Intenrtational journal of Innovative research and Development* 5(11) 2016, 118- 123.
68. ElectroactiveSulfonatedPolysulfone Polymer as Corrosion 4 Inhibitor for Mild Steel in Acidic Medium. *Journal of Bio and Tribo Corrosion*, accepted, DOI 10.1007/s40735-017- 0106-z.
69. Synthesis and antimicrobial evaluation of some novel 6-(4-benzylpiperidin-1- yl) l)-4-amino/benzylamino/phenylamino/phenoxy-pyrimidine derivatives. *Iranian Journal of Organic Chemistry* Vol. 9, No. 3(2017) 2123-2133.
70. Experimental approach of Sulfamethoxazole as a corrosion Inhibitor for Carbon Steel in 1M hcl, *JNNCE Journal of Engineering & Management* (Accepted).

Dr. Prasad P.

Publications:

1. Miscibility, Thermal, and Mechanical Studies of Hydroxypropyl Methylcellulose/Pullulan Blends, *Journal of applied polymer science* 110 (1), 444-452, 2008

2. Investigation of miscibility of biocompatible guar gum/pullulan polymer blend, *Malaysian Polymer Journal*, 8 (1), 33-37, 2013
3. In-vitro release study of metoprolol succinate from the bioadhesive films of pullulan-polyacrylamide blends, *International Journal of Polymeric Materials* 61 (4), 300-307, 2012
4. Investigation on Miscibility of Sodium Alginate/Pullulan Blends, *Journal of Polymers and the Environment* 20 (3), 887-893, 2012
5. Miscibility, thermal, and mechanical studies of methylcellulose/poly(vinyl alcohol) blends, *Int. J. Res. Pharm. Chem.*, 2 (4), 957-968, 2012
6. Miscibility and Thermal Behavior of Pullulan/Polyacrylamide Blends, *Journal of Macromolecular Science, Part A* 48 (11), 920-926, 2011
7. Miscibility and thermal studies of PVP/Pullulan blends, *International Journal of Plastics Technology* 14 (2), 234-245, 2010
8. Miscibility Studies of Polysaccharide Xanthan Gum/PVP Blend, *Journal of Polymers and the Environment* 18 (2), 135-140, 2010
9. Studies on the Compatibility of Pullulan – Carboxymethyl Cellulose Blend Using Simple Techniques, *Malaysian Polymer Journal* 3 (2), 13-23, 2008
10. Miscibility studies of GG/CMC blends in aqueous solution, *International Journal of Advance Research in Science and Engineering*, Vol. 6, issue 1, 514-523, 2017
11. Physico-chemical and thermal property studies of GG/CMC blend thin films, *International Journal of Advance Research in Science and Engineering*, Vol. 6, issue 6, 572-578, 2017
12. Azobenzene dye-sensitised solar cells using TiO₂ nanoparticles and carbon nanotubes, *International Journal of Advance Research in Science and Engineering*, Vol. 6, issue 7, 743-749, 2017
13. A comparative study of efficiency of CdS-SWCNT, and NiO-SWCNT nanocomposites for methyl violet, *International Journal of Advance Research in Science and Engineering*, Vol. 6, issue 8, 1-9, 2017
14. Miscibility studies of GG/PVA blends in aqueous solution, *International Journal of Advance Research in Science and Engineering*, Vol. 6, issue 9, 1-8, 2017
15. Physico-chemical and thermal property studies of GG/PVA blend thin films, *International Journal of Advance Research in Science and Engineering*, Vol. 7, issue 1, 2018

Awards:

1. Active Young Researcher Award, for significant contribution in the field of research by AR Research Publications, International Research Publication

Editorial Member:

1. Editorial member of *International Journal of Advance Research in Science and Engineering*. ISSN(O): 2319-8354, ISSN(P): 23119-8346
2. Editorial member of *Journal of Nano Science and Quantum Physics*, <http://jnsqp.com/editorial.php>
3. Editorial member of *International Journal of Applied Engineering and Management Letters (IJAEML)*
4. Editorial member of *International Journal of Case Studies in Business, IT and Education (IJCSBE)*

Lecture Delivered as Resource Person:

1. A keynote address on 'Speciality Polymers' on 28th February 2012 at FMKMC, Madikeri, in connection with National Science Day Celebration 2013

2. Guest lecture on “Chemistry of Nanomaterials and Applications” at Sri Venkatramana Swami College, Bantwal on 23rd August, 2014
3. Invited talk on “Applications of Nanotechnology” at Mahaveera First Grade College, Moodbidri on 18th September, 2014
4. Special talk on “Industrial applications of Nanomaterials” at Vijaya College, Mulki on 5th January, 2015
5. Invited Talk on “Importance of Nanoscience and Technology” at CIT, Ponnampete on February 19, 2016.
6. Special talk on “Nanomaterials and their applications” for two days workshop on Advanced Materials at SIT, Mangaluru, on 29th – 30th July 2016.

Dr. P. S. Aithal

Publications:

1. Aithal, P. S. (2016). Nanotechnology Innovations & Business Opportunities : A Review, International Journal of Management, IT and Engineering (IJMIE), Volume 6, Issue 1, pp. 182-204, (January 2016), ISSN: 2249-0558, DOI : <http://doi.org/10.5281/zenodo.161153> <http://ssrn.com/abstract=2779151>
2. Aithal, P. S., (2016). Study on ABCD Analysis Technique for Business Models, business strategies, Operating Concepts & Business Systems, International Journal in Management and Social Science, Volume 4, Issue 1, pp. 98-115, 2016, ISSN 2321-1784, www.ijmr.net.in, DOI : <http://doi.org/10.5281/zenodo.161137>. <http://ssrn.com/abstract=2779232>
3. Aithal P. S. & Shubhrajyotsna Aithal, (2016). Business Strategy for Nanotechnology based Products & Services. International Journal of Management Sciences and Business Research (IJMSBR) Vol. 5, Issue 4, April 2016, pp.139-149, ISSN 2226-8235. DOI : <http://doi.org/10.5281/zenodo.161127> <http://ssrn.com/abstract=2779450>
4. Aithal, P. S. & Shubhrajyotsna Aithal, (2016). Nanotechnological Innovations & Business Environment for Indian Automobile Sector: A Futuristic Approach, International Journal of Scientific Research and Modern Education (IJSRME), Volume I, Issue I, 2016, pp. 296-307. ISSN: 2455 – 5630, DOI : <http://doi.org/10.5281/zenodo.161090> <http://ssrn.com/abstract=2779505>
5. Aithal, P. S. and Shubhrajyotsna Aithal, (November 2016). Nanotechnology Innovations and Commercialization – Opportunities, Challenges & Reasons for Delay. International Journal of Engineering and Manufacturing (IJEM), 6(6), pp. 15-25, ISSN: 2305-3631. DOI: <http://doi.org/10.5281/zenodo.161161>, DOI: 10.5815/ijem.2016.06.02. www.academia.edu/s/f7a9836ef1. <http://ssrn.com/abstract=2866363>
6. Aithal, P. S. & Shubhrajyotsna Aithal, (2016). Nanotechnology Innovations & Business Opportunities in Renewable Energy Sector, International Journal of Engineering Research and Modern Education (IJERME) ISSN (Online): 2455 - 4200 (www.rdmodernresearch.com) Volume I, Issue I, 2016, pp. 674- 692. DOI : <http://doi.org/10.5281/zenodo.160905> <http://ssrn.com/abstract=2822971>
7. Aithal, P. S., and Shubhrajyotsna Aithal, (2016). Opportunities & Challenges for Green Technology in 21st Century. International Journal of Current Research and Modern Education (IJCRME), ISSN (Online): 2455 - 5428 (www.rdmodernresearch.com)

- Volume I, Issue I, pp. 818-828, 2016. DOI : <http://doi.org/10.5281/zenodo.62020>
<http://ssrn.com/abstract=2837272>
8. Aithal, P. S., (2016). Review on Various Ideal System Models Used to Improve the Characteristics of Practical Systems. *International Journal of Applied and Advanced Scientific Research*, ISSN (Online): 2456 – 3080, Vol. 1, Issue 1, pp. 47-56, 2016. DOI : <http://doi.org/10.5281/zenodo.159749> <http://ssrn.com/abstract=2850040>
 9. Aithal, P. S. & Shubhrajyotsna Aithal, (2016). A New Model for Commercialization of Nanotechnology Products and Services. *International Journal of Computational Research and Development*, Vol. 1, Issue 1, pp. 84-93. ISSN (Online): 2456 - 3137 (www.dvpublication.com) DOI: <http://doi.org/10.5281/zenodo.163536>. <http://ssrn.com/abstract=2860623>
 10. Aithal, P. S., & Shubhrajyotsna Aithal, (2015). Ideal Technology Concept & its Realization Opportunity using Nanotechnology, *International Journal of Application or Innovation in Engineering & Management (IJAIEEM)*, Volume 4, Issue 2, pp. 153 - 164, 2015, ISSN 2319-4847. DOI: <http://doi.org/10.5281/zenodo.61591> <http://ssrn.com/abstract=2778225>
 11. Aithal, P. S., Shubhrajyotsna Aithal, (2015). A review on Anticipated Breakthrough Technologies of 21st Century, *International Journal of Research & Development in Technology and Management Sciences*, Vol. 21, Issue 6, 2015, pp. 112 - 133, ISBN - 1-63102-450-7, DOI: <http://doi.org/10.5281/zenodo.61617>. <http://ssrn.com/abstract=2778613>
 12. Aithal, P. S., (2015). Concept of Ideal Business & Its Realization Using E-Business Model, *International Journal of Science and Research (IJSR)*, Volume 4, Issue 3, pp. 1267-1274, March, 2015, ISSN 2319-7064, DOI : <http://doi.org/10.5281/zenodo.61648>. <http://ssrn.com/abstract=2778674>
 13. Aithal, P. S., V.T. Shailashree, P. M. Suresh Kumar, (2015). A New ABCD Technique to Analyze Business Models & Concepts, *International Journal of Management, IT and Engineering (IJMIE)*, Vol. 5, Issue 4, pp. 409 - 423, April 2015, ISSN: 2249-0558, DOI : <http://doi.org/10.5281/zenodo.61652>, IF = 5.299. <http://ssrn.com/abstract=2778659>
 14. Aithal, P. S. and T. Vaikuth Pai, (2016). Concept of Ideal Software and its Realization Scenarios, *International Journal of Scientific Research and Modern Education (IJSRME)*, ISSN (Online): 2455 – 5630, (www.rdmodernresearch.com) Volume I, Issue I, 2016. pp. 826-837. DOI: <http://doi.org/10.5281/zenodo.160908>. <http://ssrn.com/abstract=2821763>
 15. Aithal, P. S. (2016). Ideal Banking Concept and Characteristics. *International Research Journal of Management, IT and Social Sciences (IRJMIS)*, Vol. 3, No. 11, pp. 46-55. DOI : <http://dx.doi.org/10.21744/irjmis.v3i11.311>. ISSN: 2395-7492. Published by International Journal of College and University.
 16. Aithal, P. S. (2016). A Comparison of Ideal Banking Model with Mobile Banking System. *International Journal of Current Research and Modern Education (IJCRME)*, ISSN (Online): 2455 - 5428 (www.rdmodernresearch.com), 1(2), 206-224. DOI: <http://dx.doi.org/10.5281/ZENODO.198708>. <http://ssrn.com/abstract=2883773>
 17. Shubrajyotsna Aithal, & Aithal, P. S., Bhat, G. K. (2016). Characteristics of Ideal Optical Limiter and Realization Scenarios using Nonlinear Organic Materials – A Review. *International Journal of Advanced Trends in Engineering and Technology (IJATET)*, Impact Factor: 5.665, ISSN (Online): 2456 - 4664 (www.dvpublication.com), 1(1), 73-84. DOI: <http://doi.org/10.5281/zenodo.240254>. <https://www.academia.edu/30895021>.

18. Aithal, P. S., & Shubhrajyotsna Aithal, (2015). An Innovative Education Model to realize Ideal Education System, International Journal of Scientific Research and Management (IJSRM), Vol. 3, Issue 3, pp. 2464 - 2469, March, 2015, ISSN 2321-3418, DOI: <http://doi.org/10.5281/zenodo.61654>. <http://ssrn.com/abstract=2778871>

Dr. Shubhrajyotsna Aithal

Publications:

1. Shubhrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, (2011). Optical Nonlinearity of Dye-doped Polymer Film using Z-scan Technique, Second International Conference on Photonics 2011, 17-19 October 2011, Le Meridian, Kota Kinabalu, Malaysia, IEEEXplore ISBN 978-1-61284-265-3, pp 62-66 (2011), DOI: <http://doi.org/10.1109/ICP.2011.6106884>, SCOPUS ID 84855894294. <https://www.academia.edu/28474767>.
2. Shubhrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, (2011). Study of nonlinear absorption in a dye doped polymer film due to frequency up-converted fluorescence, Proceedings of the International Conference on Laser, Material Science and Communication, Dept. of Physics, University of Burdwan, West Bengal, Ed. U. Chatterjee and P.K. Chakrabarti, ISBN : 978-93-80813-14-1, pp. 107-109, (2011), DOI : <http://doi.org/10.5281/zenodo.62033>. <https://www.academia.edu/28475256>.
3. Shubhrajyotsna Aithal, Sreeramana Aithal, and Gopalkrishna Bhat, (2011). Nonlinear Absorption Studies of Disperse Orange Doped Polymer Film, Trends in Optics and Photonics II, Proceedings of International Conference on Trends in Optics and Photonics, December 7- 9, 2011, Kolkata, India. Editors : Ajay Ghosh and Debesh Choudhury, ISBN 978-81-908188- 1-0, P. 132-137, (2011), DOI : <http://doi.org/10.5281/zenodo.62034>. <https://www.academia.edu/28475416>
4. Shubhrajyotsna Aithal, Sreeramana Aithal and Gopalkrishna Bhat, (2012). Phase Conjugation in Two Photon Absorbing Dye films by Degenerate Four-wave Mixing, 3rd International Conference on Photonics 2012, 1-3 October 2012, Penang, Malaysia. Published in IEEEXplore ISBN: 978-1-4673-1463-3, pp - 235-239 (2012). DOI <http://doi.org/10.1109/ICP.2012.6379868>, SCOPUS ID 84872090844. <https://www.academia.edu/28475459>.
5. Shubhrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, (2012). Study of Degenerate Four-Wave Mixing in Disperse Orange Dye-doped Polymer Film, Advanced Materials Research Journal, ISSN: 1662-8985, Trans Tech Publications (TTP), Switzerland, Vol. 584 (2012) pp 526-530, DOI: <http://doi.org/10.4028/www.scientific.net/AMR.584.526>., SCOPUS ID 84869385712. <https://www.academia.edu/28475745>.
6. Shubhrajyotsna Aithal, Sreeramana Aithal, (2012). Study of Phase Conjugated wave in DASPB dye-doped polymer films, Photonics Global Conference 2012, 13-16, December 2012, Nanyang Technical University, Singapore. In Photonics Global Conference (PGC), Singapore, 2012 (pp. 1-5). IEEE. ISBN : 978-1-4673-2513-4, DOI: <http://doi.org/10.1109/PGC.2012.6458057>. SCOPUS ID 84874412809. <https://www.academia.edu/28475902>
7. Shubhrajyotsna Aithal, P.S. Aithal and Gopalkrishna Bhat, (2013). Degenerate four-wave mixing in DASPB dye-doped polymer film, published in Part IV Quantum Optics, Chapter 12, Advances in Laser Physics and Technology, Edited by Man Mohan, Anil

- Kumar Maini, Aranya A. Bhattacharjee and Anil K. Razdan under the imprint of Foundation Books, Cambridge University Press India Pvt Ltd. 2013, pp. 179 - 195, ISBN: 978-93-844634-1-0., DOI : <http://doi.org/10.5281/zenodo.62048>.
<https://www.academia.edu/28475987>
8. Shubhrajyotsna Aithal, Sreeramana Aithal and Gopala Krishna Bhat. (2013). Study of Optical Limiting and Optical Phase Conjugation in DASPB dye-doped polymer films, GSTF Journal of Physics and Applications (JPA) Vol. 1 No. 1, pp. 15-24, (September 2013). ISSN: 2335-6901, DOI: http://doi.org/10.5176/2335-6901_1.1.3.
<https://www.academia.edu/28476490>
 9. P. S. Aithal and Shubhrajyotsna Aithal, (2014). Ideal Education System and its Realization through Online Education Model using Mobile Devices, Proceedings of IISRO Multi Conference 2014, Bangkok, 7/01/2014, pp. 140 - 146, ISBN No. 978-81-927104-33-13., DOI : <http://doi.org/10.5281/zenodo.62059>.
<https://www.academia.edu/28476518>
 10. Shubhrajyotsna Aithal, P. S. Aithal and G. K. Bhat, (April 2015). Comparative Study on Azo dye-doped Polymer Films for Optical Phase Conjugation, International Journal of Science and Research (IJSR), Volume 4 Issue 4, pp. 436 - 441. ISSN 2319-7064., DOI: <http://doi.org/10.5281/zenodo.61724>. <https://www.academia.edu/25155821>
 11. Shubhrajyotsna Aithal, Dr. P. S. Aithal and Gopalkrishna Bhat, (July 2015) A Review On Sustainable Organic Materials for Optical Limiting Technology. International Journal of Management, IT and Engineering (IJMIE), Volume 5, Issue 7, pp. 527-544, ISSN: 2249-0558. DOI: <http://doi.org/10.5281/zenodo.62032>. <https://www.academia.edu/25162953>
 12. P. S. Aithal & Shubhrajyotsna Aithal, (2015). "Ideal Technology Concept & its Realization Opportunity using Nanotechnology", International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume 4, Issue 2, pp. 153 - 164, 2015, ISSN 2319-4847. DOI: <http://doi.org/10.5281/zenodo.61591>. SCOPUS indexed. <http://ssrn.com/abstract=2778225>
 13. P. S. Aithal, & Shubhrajyotsna Aithal, (2015) A review on Anticipated Breakthrough Technologies of 21st Century, International Journal of Research & Development in Technology and Management Sciences, Vol. 21, Issue 6, pp. 112 - 133, ISBN - 1-63102-450-7. DOI: <http://doi.org/10.5281/zenodo.61617>. <http://ssrn.com/abstract=2778613>
 14. P. S. Aithal & Shubhrajyotsna Aithal, (2015). "An Innovative Education Model to realize Ideal Education System", International Journal of Scientific Research and Management (IJSRM), Vol. 3, Issue 3, pp. 2464 - 2469, March, 2015, ISSN 2321-3418,. DOI : <http://doi.org/10.5281/zenodo.61654>. <https://www.academia.edu/28476701>
 15. Shubhrajyotsna Aithal, P. S. Aithal, & G.K. Bhat, (2016). A Review on Organic Materials for Optical Phase Conjugation & All-optical Switches, International Journal of Management, IT and Engineering (IJMIE), Volume 6, Issue 1, pp. 222-238, ISSN: 2249-0558., DOI: <http://doi.org/10.5281/zenodo.62027>.
<https://www.academia.edu/25164804>
 16. P. S. Aithal & Shubhrajyotsna Aithal, (2016). Business Strategy for Nanotechnology based Products & Services, Journal of Management Sciences and Business Research (IJMSBR) Vol. 5, Issue 4, April 2016, pp.139-149, I.F. 3.274, ISSN 2226-8235, DOI : <http://doi.org/10.5281/zenodo.62028>. <http://ssrn.com/abstract=2779450>
 17. P. S. Aithal & Shubhrajyotsna Aithal, (2016). Impact of On-line Education on Higher Education System, International Journal of Engineering Research and Modern

- Education (IJERME) Volume I, Issue I, 2016, pp. 225-235, ISSN : 2455 – 4200, I.F. 3.035. DOI: <http://doi.org/10.5281/zenodo.62029>. <http://ssrn.com/abstract=2779436>
18. P. S. Aithal, and Shubrajyotsna Aithal, (2016). Nanotechnological Innovations & Business Environment for Indian Automobile Sector : A Review, International Journal of Scientific Research and Modern Education (IJSRME) (www.rdmodernresearch.com) Volume I, Issue I, 2016, pp. 296-307. ISSN (Online): 2455 – 5630, DOI : <http://doi.org/10.5281/zenodo.62030>. <http://ssrn.com/abstract=2779505>
 19. P. S. Aithal and Shubrajyotsna Aithal, (November 2016). Nanotechnology Innovations and Commercialization – Opportunities, Challenges & Reasons for Delay. International Journal of Engineering and Manufacturing (IJEM), 6(6), pp. 15-25, ISSN: 2305-3631. DOI : <http://doi.org/10.5281/zenodo.161161>, DOI: 10.5815/ijem.2016.06.02. www.academia.edu/s/f7a9836ef1. <http://ssrn.com/abstract=2866363>
 20. P. S. Aithal & Shubrajyotsna Aithal, (2016). Nanotechnology Innovations & Business Opportunities in Renewable Energy Sector, International Journal of Engineering Research and Modern Education (IJERME) ISSN (Online): 2455 - 4200 (www.rdmodernresearch.com) Volume I, Issue I, 2016, pp. 674- 692. DOI : <http://doi.org/10.5281/zenodo.62031>. <http://ssrn.com/abstract=2822971>
 21. Shubrajyotsna Aithal & Aithal, P. S., (2016). Student Centric Learning Through Planned Hardwork - An Innovative Model. International Journal of Scientific Research and Modern Education (IJSRME) ISSN (Online): 2455 – 5630 (www.rdmodernresearch.com) Volume I, Issue I, 2016. pp. 886-898. DOI: <http://doi.org/10.5281/zenodo.61830>. <http://ssrn.com/abstract=2836527>
 22. Shubrajyotsna Aithal and Aithal P. S., (2016), ABCD analysis of Dye doped Polymers for Photonic Applications, IRA-International Journal of Applied Sciences, (ISSN 2455-4499). Vol. 4, No.3, pp. 358-378. DOI : <http://doi.org/10.5281/zenodo.155103>. DOI : <http://dx.doi.org/10.21013/jas.v4.n3.p1>. <http://ssrn.com/abstract=2845680>
 23. P.S. Aithal and Shubrajyotsna Aithal, (2016). Opportunities & Challenges for Green Technology in 21st Century, International Journal of Current Research and Modern Education (IJCRME) ISSN (Online): 2455 - 5428 (www.rdmodernresearch.com) Volume I, Issue I, pp. 818-828, 2016, DOI : <http://doi.org/10.5281/zenodo.62020>. <http://ssrn.com/abstract=2837272>
 24. Aithal, P. S. & Shubrajyotsna Aithal, (2016). A New Model for Commercialization of Nanotechnology Products and Services. International Journal of Computational Research and Development, Vol. 1, Issue 1, pp. 84-93. ISSN : 2456 – 3137. DOI : <http://doi.org/10.5281/zenodo.163536>. <http://ssrn.com/abstract=2860623>
 25. Aithal, P. S. and Shubrajyotsna Aithal, (2016). Scholarly Publishing : Why Smart Researcher Hesitate to Publish in/with Top Ranking Journals/Publishers. International Journal of Current Research and Modern Education (IJCRME), ISSN (Online): 2455 - 5428 (www.rdmodernresearch.com), Vol. I, Issue I, pp. 829-845, 2016. DOI: <http://doi.org/10.5281/zenodo.62019>. <http://ssrn.com/abstract=2837264>
 26. Shubrajyotsna Aithal, & Aithal, P. S., Bhat, G. K. (2016). Characteristics of Ideal Optical Limiter and Realization Scenarios using Nonlinear Organic Materials – A Review. International Journal of Advanced Trends in Engineering and Technology

- (IJATET), Impact Factor: 5.665, ISSN (Online): 2456 – 4664, 1(1), 73-84. DOI : <http://doi.org/10.5281/zenodo.240254>. <https://www.academia.edu/30895021>.
27. Shubrajyotsna Aithal, Aithal, P. S. & Bhat, G. K. (2016). Literature Review on Organic Materials for Third Harmonic Optical and Photonic Applications. International Journal of Advanced Trends in Engineering and Technology (IJATET) Impact Factor: 5.665, ISSN (Online): 2456 - 4664, 1(1), 151-162. DOI : <http://doi.org/10.5281/zenodo.240647>. <https://www.academia.edu/30894808/>.
 28. Shubrajyotsna Aithal, Aithal, P. S. & Bhat, G. K. (2016). Type 1 & Type 2 Optical Limiting Studies in Disperse Orange-25 Dye-doped PMMA-MA Polymer Films using CW Laser. International Journal of Applied and Advanced Scientific Research (IJAASR), ISSN (Online): 2456 - 3080 (www.dvpublication.com), 1(1), 196-208. DOI : <http://doi.org/10.5281/zenodo.208184>. <https://www.academia.edu/30676607/>
 29. Shubrajyotsna Aithal, Aithal, P. S. and Bhat, G. K. (2016). CW Optical Limiting Study in Disperse Yellow Dye-doped PMMA-MA Polymer Films. IRA-International Journal of Applied Sciences, 5(3), 129-146. (ISSN 2455-4499). DOI: <http://dx.doi.org/10.21013/jas.v5.n3.p4>. <https://www.academia.edu/30676560/>
 30. Shubrajyotsna Aithal, Aithal, P. S. and Bhat, G. K. (2016). Study of Low Power Degenerate Four-Wave Mixing in Disperse Yellow Dye-doped Polymer Film. International Journal of Engineering Research and Modern Education (IJERME), ISSN (Online): 2455 - 4200 (www.rdmodernresearch.com), 1(2), 200-209. DOI: <http://dx.doi.org/10.5281/ZENODO.198716>.
 31. Aithal, P. S. & Shubrajyotsna Aithal (2016). Ekalavya Model of Higher Education – an Innovation of IBM’s Big Data University. International Journal of Current Research and Modern Education (IJCRME), ISSN (Online): 2455 - 5428 (www.rdmodernresearch.com) 1(2), 190-205. DOI: <http://dx.doi.org/10.5281/ZENODO.198704>. <http://ssrn.com/abstract=2883770>
 32. Shubrajyotsna Aithal, Aithal, P. S. & Bhat, G. K. (2017). Study of Third Order Optical Nonlinearity in DASPB Dye-doped Polymer Films using CW Laser. Saudi Journal of Engineering and Technology (SJEAT), 2(1), 32-48. (ISSN: 2415-6272). Publishers : Scholars Middle East Publishers. DOI : <http://doi.org/10.21276/sjeat.2017.2.1.4>.
 33. Shubrajyotsna Aithal, & Aithal P. S. (2017). Research Opportunities for Use of Organic Dyes & Dye-doped Polymers in Optoelectronics and Photonics. International Journal of Engineering Research and Modern Education (IJERME). Impact Factor: 6.525, ISSN (Online): 2455 - 4200 (www.rdmodernresearch.com) 2(1), 90-97. DOI : <http://doi.org/10.5281/zenodo.546772>.
 34. Shubrajyotsna Aithal, P. S. Aithal, and G. K. Bhat, (June, 2017). Study of Third Order Optical Nonlinearity in Disperse Orange-25 Dye-doped Polymer Films using CW Laser. International Journal of Applied Engineering & Management Letters, 1(1), 18-35. DOI: <http://dx.doi.org/10.5281/zenodo.818692>.
 35. Shubrajyotsna Aithal, P. S. Aithal, and G. K. Bhat, (June, 2017). Study of Nonlinear Optical Properties of Disperse Yellow-7 Dye-doped Polymer Films using CW Laser. International Journal of Applied Engineering and Management Letters (IJAEML), 1(1), 45- 62. DOI: <http://dx.doi.org/10.5281/zenodo.821082>.

Conference Papers:

1. Strategic Rethinking on Sustainable Materials for Future Photonics Technology, Shubrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, MANEGMA 2011- Proceedings of National Conference on From Best Practices to Next Practices - Strategic Re-Thinking for Sustainable Competitive Advantage, held at Srinivas Institute of Management Studies, Mangalore on 08/04/2011, pp 100 -116.
2. Degenerate four-wave mixing in DASPb dye-doped polymer films, Shubrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, Proceedings of Third International Conference on Current developments in Atomic, Molecular, Optical and Nano Physics, 14-16, December 2011 at University of Delhi, Delhi,
3. Study of Degenerate Four-Wave Mixing in Disperse Orange Dye-doped Polymer Film, Shubrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, International Conference on Recent Trends in Advanced Materials, ICRAM -2012, Feb 20 – 22, 2012, at VIT University, Vellore, Tamilnadu.
4. Generation of Phase Conjugated wave in DASPb dye-doped polymer films, Shubrajyotsna Aithal, P. S. Aithal, and Gopalkrishna Bhat, Presentation at International Conference on Materials Science and Technology, 10-14th of June 2012 at Kottayam, Kerala.
5. Azo dye-doped Polymer Films for Optical Limiting Applications, Shubrajyotsna Aithal, Sreeramana Aithal, Gopalkrishna Bhat, Proceedings of International Conference on Global Trends in Pure and Applied Chemical Sciences, held during March 3-4, 2012 in Udaipur, India
6. A review on Sustainable Materials Research for optical switching of Future Optical Computer Technology, Shubrajyotsna Aithal, P.S. Aithal and Gopalkrishna Bhat, MANEGMA 2012- Proceedings of National Conference on Sustainable Growth in Developing Economies, Manegma 2012 held at Srinivas Institute of Management Studies, Mangalore on 12/04/2012.
7. Shubrajyotsna Aithal, Sreeramana Aithal, Gopalkrishna Bhat, Azo dye-doped Polymer Films for Optical Limiting & Optical Phase Conjugation, Presented in Photonics 2012 – International Conference on Fiber Optics & Photonics, 9 December - 12 December 2012, Indian Institute of Technology, Madras, Chennai, Tamilnadu, India and archived in OSA's Optics InfoBase.
8. Phase Conjugation and Optical Limiting studies in DASPb dye-doped polymer films, Shubrajyotsna Aithal, Sreeramana Aithal, Gopalkrishna Bhat, Presented in national Conference on Condensed matter Physics and Applications. Dept. of Physics, Manipal Institute of Technology, Manipal University, 27-28, December 2012.
9. Shubrajyotsna Aithal, Aithal P. S., Bhat G.K., (2013 April) Managing Innovations in Nonlinear Optical Materials for Photonics Technology, MANEGMA 2013- Proceedings of National Conference on Sustainable Growth in Developing Economies, SIMS Mangalore, 12/04/2013 pp. 37-46, ISBN : 978-81-929306-9-5.
10. P.S. Aithal and Shubrajyotsna Aithal, A review on Organic Materials for Optical Phase Conjugation & All-optical Switches, National conference on Changing Trends in Management, IT & Social Sciences 9th April, 2014, MANEGMA 2014, Srinivas Institute of Management Studies, Mangalore, 2014.
11. P. S. Aithal and Shubrajyotsna Aithal, Ideal Technology Concept & its Realization opportunity using Nanotechnology, Proceedings of National Conference on Recent Advances in Computer Science & Information Technology, 09, July 2014, Mangalore, pp. 1-18, ISBN No. 978-81-929306-3-3.

12. P. S. Aithal and Shubhrajyotsna Aithal, Competency based Education System & its Social Relevance, presented in National Conference on Change & its Contemporary Social Relevance, Srinivas Institute of Management Studies, Mangalore, held on 23rd August 2014. ISBN No. 978-81-929306-1-9.
13. Aithal, P. S., & Shubhrajyotsna Aithal, (2014). Ideal education system and its realization through online education model using mobile devices. In Proceedings of IISRO Multi Conference, Thailand (pp. 140-146). Bangkok, 7/01/2014, ISBN No. 978-81-927104-33-13.
14. P. S. Aithal and Shubhrajyotsna Aithal, Competency based Education System & its Social Relevance, (August 2014) Proceedings of National Conference on Change & its Contemporary Social Relevance, Srinivas Institute of Management Studies, Mangalore, held on 23rd August 2014. pp. 67 – 74, ISBN No. 978-81-929306-1-9.
15. Shubhrajyotsna Aithal, P.S. Aithal & G.K. Bhat, (April 2014) A Review on Organic Materials for Optical Phase Conjugation & All-optical Switches. National Conference on Changing Trends in Management, IT, & Social Sciences, 9th April 2014, SIMS, Mangalore, pp. 44-51, ISBN 978-81-929306-0-2.
16. P. S. Aithal & Shubhrajyotsna Aithal, (April 2014) An innovative Education Model to realize Ideal Education System, National Conference on Changing Trends in Management, IT & Social Sciences, 9th April 2014, SIMS, Mangalore, pp.17-21, ISBN 978-81-929306-0-2.
17. Shubhrajyotsna Aithal, P.S. Aithal and G. K. Bhat, Comparative Study on Azodyedoped Polymer Films for Degenerate Four Wave Mixing Applications, Presented in International Conference on Opto-Electronic and Photonic Materials, Shastra University, Tanjavur, Feb 27-28 2015.
18. P. Sreeramana Aithal, and Shubhrajyotsna Aithal, (January 2015) Education for everybody based on ubiquitous e-business model, Proceedings of National Conference in EBusiness, E-Education and E-Governance, Srinivas Institute of Management Studies, Mangalore, 24, January, 2015. ISBN No. 978-81-929306-4-0.
19. Shubhrajyotsna Aithal, Aithal P. S. & G.K. Bhat, A Review on Organic Materials for Optical Phase Conjugation & All-optical Switches. National Conference on Changing Trends in Management, IT, & Social Sciences, 9th April 2014, SIMS, Mangalore, pp. 44-51, ISBN 978-81-929306-0-2.
20. P. S. Aithal & Shubhrajyotsna Aithal, Impact of On-line Education on Higher Education System, National Conference on Recent Trends in Management, IT & Social Sciences, 12th December 2015, SIMS, Mangalore.
21. Education for everybody based on ubiquitous e-business model, P. Sreeramana Aithal, and Shubhrajyotsna Aithal, Proceedings of National Conference in E-Business, E-Education and E-Governance, Srinivas Institute of Management Studies, Mangalore, 24, January, 2015. pp. 112-119, ISBN No. 978-81-929306-4-0.
22. Shubhrajyotsna Aithal, P.S. Aithal & G.K. Bhat, (2015 October) A Review on Organic Materials for Degenerate Four Wave Mixing, Proceedings of National Conference on Innovative Practices, SIMS, Mangalore, pp. 277-290. ISBN : 978-81-929306-8-8.
23. Shubhrajyotsna Aithal, P.S. Aithal & G.K. Bhat, (April 2015) A Review on Sustainable Organic Materials for Optical Limiting Technology, Proceedings of National Conference on Recent Advances in IT, Management and Social Sciences, SIMS, Mangalore, 23rd April, 2015, pp. 682-704, ISBN : 978-81-929306-6-4.
24. Shubhrajyotsna Aithal, Aithal, P. S., Bhat, G., Azo dye-doped polymer films for optical limiting & Optical phase conjugation, 2012, Proceedings of International Conference

on Fiber Optics and Photonics, PHOTONICS 2012, Article number 6545827, 2012 International Conference on Fiber Optics and Photonics, PHOTONICS 2012; Chennai, Tamil Nadu; India; 9 December 2012 through 12 December 2012; Scopus ID 84881150654. ISBN: 978- 146734718

Mr. Shareefraju J. Ukkund

Publications:

1. Azobenzene dye-sensitised solar cells using TiO₂ nanoparticles and carbon nanotubes, International Journal of Advance Research in Science and Engineering, Vol. 6, issue 7, 743-749, 2017
2. Synthesis and characterization of silver nanoparticles from Penicillium sps., Materials Today: Proceedings (Elsevier), Volume 4, Issue 11, Part 3, 2017, Pages 11923-11932, doi.org/10.1016/j.matpr.2017.09.113

Mrs. Bhavya M. S.

Publications:

1. Miscibility studies of GG/CMC blends in aqueous solution, International Journal of Advance Research in Science and Engineering, Vol. 6, issue 1, 514-523, 2017
2. Physico-chemical and thermal property studies of GG/CMC blend thin films, International Journal of Advance Research in Science and Engineering, Vol. 6, issue 6, 572-578, 2017
3. Miscibility studies of GG/PVA blends in aqueous solution, International Journal of Advance Research in Science and Engineering, Vol. 6, issue 9, 1-8, 2017
4. Physico-chemical and thermal property studies of GG/PVA blend thin films, International Journal of Advance Research in Science and Engineering, Vol. 7, issue 1, 2018

Dr. Sandhya Shenoy U.

1. Bhat, D.K. and **Shenoy S.U.** (2018). *Mat. Today Phys.*, 4, 12 – 18.
2. Sadiq, M.M.J., **Shenoy, S.U.** and Bhat, D.K. (2018). *Mat. Chem. Phys.*, 208, 112 - 122.
3. **Shenoy, S.U.** and Shetty, N.A. (2017). *Front. Mater. Sci.*, 12, 74 – 82.
4. Perumal, S., Bellare, P., **Shenoy, S.U.**, Waghmare, U.V. and Biswas, K. (2017). *Chem. Mater.*, 29, 10426 –10435.
5. **Shenoy S.U.**, Bhat, D.K. (2017). *J. Phys. Chem. C*, 121, 20696 – 20703.
6. Sadiq, M.M.J., **Shenoy, S.U.** and Bhat, D.K. (2017). *J. Phys. Chem. Solids*, 109, 124 – 133
7. Sadiq, M.M.J., **Shenoy, S.U.** and Bhat, D.K. (2017). *Mat. Today. Chem.*, 4, 133 – 141.
8. Bhat, D.K. and **Shenoy S.U.** (2017). *J. Phys. Chem. C*, 121, 7123 – 7130.
9. Sadiq, M.M.J., **Shenoy, S.U.** and Bhat, D.K. (2017). *Adv. Sci. Eng. Med.*, 9, 115 – 121.
10. Roychowdhury, S., **Shenoy, S.U.**, Waghmare, U.V. and Biswas, K. (2017). *J. Mater. Chem. C*, 5, 5737 – 5748.
11. **Shenoy, S.U.** and Shetty, N.A. (2017). *J. Nanofluids*, 6, 11 – 17.

12. **Shenoy, S.U.**, Waghmare, U.V., Lingampalli, S.R., Roy, A. and Rao, C.N.R. (2017). *Isr. J. Chem.*, 57, 477– 489.
13. Banik, A., **Shenoy, S.U.**, Saha, S., Waghmare, U.V. and Biswas, K. (2016). *J. Am. Chem. Soc.*, 138, 13068– 13075.
14. Roy, A., **Shenoy, S.U.**, Manjunath, K, Vishnoi, P., Waghmare, U.V. and Rao, C.N.R. (2016). *J. Phys. Chem. C*, 120, 15063 – 15069.
15. Sadiq, M.M.J., **Shenoy, S.U.** and Bhat, D.K. (2016). *RSC Adv.*, 6, 61821 – 61829.
16. Lingampalli, S.R., Manjunath, K, **Shenoy, S.U.**, Waghmare, U.V. and Rao, C.N.R. (2016). *J. Am. Chem. Soc.*, 138, 8228 – 8234.
17. Roychowdhury, S., **Shenoy, S.U.**, Waghmare, U.V. and Biswas, K. (2016). *Appl. Phys. Lett.*, 108, 193901.
18. **Shenoy, S.U.**, Gupta, U., Narang, D.S., Late, D.J., Waghmare, U.V. and Rao, C.N.R. (2016). *Chem. Phys. Lett.*, 651, 148 –154.
19. Roychowdhury, S., **Shenoy, S.U.**, Waghmare, U.V. and Biswas, K. (2015). *Angew. Chem. Int. Ed.*, 54, 15241 – 15245.
20. Subramanya, B., Bhat, D.K., **Shenoy, S.U.**, Ullal, Y. and Hegde, A.C. (2015). *Int. J. Hydrogen Energy*, 40, 10453 – 10462.
21. Subramanya, B., Ullal, Y., **Shenoy, S.U.**, Bhat, D.K. and Hegde, A.C. (2015). *RSC Adv.*, 5, 47398 – 47407.
22. Banik, A., **Shenoy, S.U.**, Anand, S., Waghmare, U.V. and Biswas, K. (2015). *Chem. Mater.*, 27, 581 – 587.
23. **Shenoy, S.U.** and Shetty, N.A. (2015). *J. Nanofluids*, 4, 428 – 434.
24. **Shenoy, S.U.** and Shetty, N.A. (2014). *Appl. Nanosci.*, 4, 47 – 54.
25. **Shenoy, S.U.** and Shetty, N.A. (2013). *Nanomater. Nanotechol.*, 3, 5:2013.
26. **Shenoy, S.U.** and Shetty, N.A. (2013). *J. Nanoeng. Nanomanuf.*, 3, 64 – 69.
27. **Shenoy, S.U.** and Shetty, N.A. (2013). *Nano Trends: J. Nanotechnol. App.*, 14, 09734181.
28. **Shenoy, S.U.** and Shetty, N.A. (2013). *Synth. React. Inorg. Met. Org. Nanomet. Chem.*, 43(3), 343 – 348.
29. **Shenoy, S.U.** and Shetty, N.A. (2012). *J.ASTM Int.*, 9(5), JAI104416.