

CURRICULUM VITAE

H. JOY PRABU Ph.D

Assistant Professor
Department of Physics
St. Joseph's College (Autonomous),
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Areas of Research Interest:

Nanoscience and Nanotechnology, Nano crystallization, Material Science, Green Synthesis method, Electrochemical Synthesis, Computational Technology, Materials Characterization and applications.

Personal:

- Name: H. Joy Prabu
- Date of Birth: June 06, 1989
- Nationality: Indian
- Sex: Male
- Marital Status: Married

Education:

- PhD from Bharathidasan University, Tiruchirappalli, Aug 2017.
- M.Phil. Physics from St. Joseph's College-Tiruchirappalli.
- B.Ed. Physical Education from St. Xavier's College of Education, Palayamakottai- Tamil Nadu.
- M.Sc. Physics from St. Joseph's College-Tiruchirappalli.

Employment Record:

- Assistant Professor: St. Joseph's College from June 2016 onwards :: Department of Physics.

Administrative Experience:

- Member for the Campus Ministry, from June 2016 to till date

Publications:

Journal Publications:

- Facile sonication-assisted synthesis and characterisations of silica decorated graphene nanocomposites, Micro & Nano Letters (IET), DOI: 10.1049/mnl.2017.0656, ISSN 1750-0443, Impact Factor: 0.723, **2018**.
- Comparative Studies on Bio and Chemically Synthesized CuO Nanoparticles and their Antibacterial Activity, International Research Journal of Pharmacy (IRJP), Volume No.:8(10), ISSN:2230: 8407, Impact Factor:0.751, **2017**.
- Synthesis and characterization of ZnO/CNT nanocomposites, International Research Journal of Engineering and Technology, Volume No.:4 (9), PP.:86-88, ISSN:2395-0056, Impact Factor:6.17, **2017**.
- Green Synthesis and Characterizations of Flower Shaped CuO Nanoparticles for Biodiesel Application, Sensors & Transducers, Volume No.:210 (3), PP.:38-41, ISSN:1726-5479, **2017**.
- Synthesis and Characterizations of Needle- Shaped CuO Nanoparticles for Biodiesel Application, International Journal of Advanced Research(IJAR), Volume No.:5 (1),PP.:1642-1648, ISSN:2320-5407, Impact Factor:6.11, **2017**.
- Facile Preparation and Characterizations of Silica decorated Graphene nanocomposites, International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Volume No.:3, PP.:941-945, ISSN:2394-4099, Impact Factor:4.91, H Index No.:16, **2017**.
- Ultrasonication-assisted Transesterification for Biodiesel Production by Using Heterogeneous ZnO Nanocatalyst, Environmental Progress & Sustainable Energy, Volume No.:37 (1), ISSN: 1944-7450, Impact Factor:1.672, **2017**.
- Ultrasonication Assisted Production of Biodiesel from Sunflower Oil by Using CuO: Mg Heterogeneous Nanocatalyst, IOP Conference Series: Materials

Science and Engineering, doi:10.1088/1757-899X/225/1/012213, Open Access, **2017**.

- Plant-mediated biosynthesis and characterization of silver nanoparticles by leaf extracts of *Tragia involucrata*, *Cymbopogon citronella*, *Solanum verbascifolium* and *Tylophora ovata*, *Karbala International Journal of Modern Science* (Elsevier), Volume No.:1 (4), PP.:237-246, ISSN.: 2405-609X, C Index No.:5, **2015**.
- Green synthesis and characterization of silver nanoparticles by leaf extracts of *Cycas circinalis*, *Ficus amplissima*, *Commelina benghalensis* and *Lippia nodiflora*, *International Nano Letters* (Springer), Volume No.:5 (1), PP.:43-51, ISSN.:2008-9295, C Index No.:12, **2015**.
- Greener chemical synthesis and characterization of Mg doped ZnS nanoparticles and their engineering band gap performance, *Journal of Engineering Research and Applications*, Volume No. :5(8),PP.:99-105, ISSN.:2248-9622, Impact Factor:5.17, **2015**.
- Flower-Shaped CuO Nanostructure Synthesized by Sonochemical Method and the effect of NaOH concentrations, *International Journal of Advanced Research*, Volume No.:3 (8), PP.:1091-1096, ISSN.:2320-5407, Impact Factor:6.11, **2015**.
- Antibacterial activity of silver nanoparticles synthesized from plant leaf extract of *Cycas circinalis*, *Ficus amplissima*, *Commelina benghalensis* and *Lippia nodiflora* leaves, *Journal of Chemical and Pharmaceutical Research*, Volume No.:7 (9), PP.:443-449, ISSN.:0975-7384, Impact Factor:0.14, H Index No.:22, **2015**.
- Hydrothermal Synthesis of ZnO Nano-Honeycomb Structures and their Activity against Pathogenic Bacteria, *International Journal of PharmTech Research*, Volume No.:8 (6), PP.:65-71, ISSN.:2455-9563, Impact Factor:0.66, H Index No.:28, **2015**.
- Eco-Friendly Electrochemical Synthesis of Rod Shaped Ag Nanostructures for Battery Application, *International Journal of ChemTech Research*, Volume

No.:8, PP.:271-277, ISSNO.: 2455-9555, Impact Factor:0.598, H Index
No.:23, **2015**.

- Ultrasound tailoring of industrially important nano particles, International Journal of Scientific Research Engineering & Technology (IJSRET), Volume No.:2 (2), PP.:056-059, ISSNO.:2278-0882, Impact Factor:3.21, **2013**.
- Tailoring of CdSe Nanoparticles by Different Techniques, International Journal of Scientific Research, Volume No.:2 (6), PP.:524-525, ISSNO.:2278-0882, Impact Factor:3.24, **2013**

Conference Publications:

- Novel Laser induced plant leaf extract mediated synthesis of CuO nanoparticles and its catalytic activity, International Conference on Emerging Trends in Nanoworld (ICETN 2017), VELS University, 27th & 28th February 2017, Chennai-600 117.
- Synthesis and characterization of some Binary Quantum Dots-National Conference on Functional Materials-19th Sep 2013 at Sacred Heart College, Tirupatture-635 601.
- Synthesis of Silver Nanoparticles- National Symposium on Nanosciences and Nanotechnology, 30th September – 1st October 2013, Department of Nanosciences and Technology, Karunya University, Coimbatore-641 114.
- Plant Leaf extract mediated green synthesis and characterization of Laser induced Bio-nanoparticles and their Catalytic applications, International Conference on Nanostructured Polymeric Materials and Polymer Nanocomposites, Mahatma Gandhi University, Kerala 686560.
- Green Synthesis of Silver nanoparticles using Aloe vera (*Aloe barbadensis*) Extracts, International Conference on Smart Materials 2015, Sacred Heart College, Tirupattur. P. 24.
- Innovations and Future Research Dimensions on Nanobio Pharmaceutical Technology, Green Sonochemical Synthesis of Silver Nanoparticles and their

applications, Anna University, Bharathidasan Institute of Technology Campus, Tiruchirappalli, page. 54.

- Electrochemical Synthesis of Silver Nanoparticles, 3rd International Science Congress, Karunya University, Coimbatore (ISBN: 978-93-83520-24-4), page 230.

Chapters in books:

- Materials, Energy and Environment Engineering, (Book Chapter-pp 159-165), Springer Nature Singapore, 978-981-10-2674, 2017.

Courses Taught:

- Applied Physics-I & II
- Numerical and Statistical methods
- Electrodynamics
- Fibre optic communication
- Foundation Courses
- Digital Electronics
- Method of Spectroscopy

Invited Talks:

- Smart Materials, Holy Cross College (Auto), 28 Jan 16, Trichy, Tamilnadu, India.
- Advances in Nanotechnology Research, Holy Cross College (Auto), 05 Dec 17, Trichy, Tamilnadu, India.
- Nanomaterials, Ananda College, Devakkottai, 26 July 18, Tamilnadu, India.

Workshops:

Workshops Attended:

- International Conference – **Nano Technology (INDO-US)**, St. Joseph's college, Trichy-620 002.

- Workshop on Powder, Nano & Thin Film Characterization using X-Ray Diffraction Techniques (X'Raydiate-2012), (26-27 Sep 2012), Avinashilingam University, Coimbatore, Tamil Nadu-641 043.
- National Conference on Materials for Future Technology (NCFMT'12), (28th Sep 2012), Department of Physics, Sacred Heart College, Tirupatture-635 601.
- Structure and Thermodynamics of Emerging Materials (STEM-2012), 5-6 November, 2012, IGCAR **Kalpakkam, Chennai**, Tamil Nadu-603 102.
- National Conference on Nano Materials (3-4 December, 2012), Department of Physics, Karunya University, Coimbatore-641 114.
- Convergence-2012, Resent Trends in Materials Research, 21-22 December, 2012, Department of Physics, National Institute of Technology, Tiruchirappalli-620 015.
- Short term course on Ultrasound and Its Applications, Department of Chemical Engineering & Department of Chemistry, National Institute of Technology, Tiruchirappalli-620 015.
- School On Advanced NMR Spectroscopy, August 12-24,2013, UGC-Networking Resource Center, School of Chemistry, **HYDERABAD- 500 046**.
- International Seminar on “Nanostructure- Based Solar Photovoltaic’s”, (22nd October 2013), School of Mechanical and Building Sciences (SMBS), **VIT Chennai-600 127**.
- National Seminar on Emerging Trends in Solar Energy-2013, October 23, 2013, Department of Chemistry, B.S. Abdur Rahman University, **Vandalur, Chennai – 600 048**.
- National Conference on Functional Materials (NCFM'13), 19 September 2013, Department of Physics, Sacred Heart College, **Tirupattur- 635 601**.
- TEQIP Sponsored four-day workshop on “Applications of Nanotechnology in Mechanical Engineering”, 18-21 Dec 2013, NIT, Tiruchirappalli- 15.

- National Conference on Advanced Materials (NCAM-2014), 24th February 2014, Department of Physics, St. Joseph's College, Tiruchirappalli- 620 002.
- NRC-M Workshop on Magnesium Alloys, UGC Networking Resource Centre for Materials, Dept. of Materials Engineering, **IISc, Bangalore- 560 012.**
- NRC-M Workshop on Biomaterials, May 2014, UGC Networking Resource Centre for Materials, Dept. of Materials Engineering, **IISc, Bangalore- 560 012.**
- NRC-M symposium on Mg alloys, 5-7 May 2014, UGC Networking Resource Centre for Materials, Dept. of Materials Engineering, **IISc, Bangalore- 560 012.**
- NRC-M workshop on Advances in Corrosion Engineering, 22-24 Dec, UGC Networking Resource Centre for Materials, Dept. of Materials Engineering, **IISc, Bangalore- 560 012.**