Name	Dr. E.MANIKANDAN
Designation &Department	ASSISTANT PROFESSOR PHYSICS
Qualification	M.Sc.,Ph.D.
Area of Specialization	NANOSCIENCE AND ITS APPLICATIONS
Date of Joining (KSR IET)	21-11-2021
Experience	**Teaching: 1Year 8 Month**
Number of Papers Published	**International Journals :3**
Number of Papers Presented	**National Conferences :14 International Conferences : 12**
Contact Details	**E Mail ID: e.mani16041992@gmail.com Mobile: +91-9894065485**

Publications (International Journal)

1. S. Sivakumar and E. Manikandan, Enhanced structural, optical, electrochemical and magnetic behaviour on manganese doped tin oxide nanoparticles via chemical precipitation method. Journal of Materials Science: Materials in Electronics 30, no. 8 (2019) 7606-7617.
   DOI: 10.1007/s10854-019-01076-8
   Publisher: Springer IF: 2.47
2. S. Sivakumar and E. Manikandan, Novel Synthesis of Optical, Photoluminescence Properties and Supercapacitor Application on Zn2+ doping Sn1-xZnxO2 nanoparticles. International Journal of Scientific Research in Physics and Applied Sciences 6.6 (2018) 1-13.
   DOI: 10.26438/ijsrpas/v6i6.113
   Publisher: ISROSET IF: 1.021s
3. S. Sivakumar, E. Manikandan, B. Mahalakshmi, Nazir Ahmad mala, L. Nelson prabu, Synthesis and Characterization of Optical, Electrochemical and Magnetic Behavior on Manganese-Zinc co-doped Tin Oxide nanoparticles. Vacuum.

DOI: https://doi.org/10.1016/j.vacuum.2019.109116

Publisher: Elsevier IF: 3.637

Publications (International Conferences)

1. presented my paper entitled "optical and electrochemical properties of SnO_2 nanoparticles via chemical precipitation method" in International Conference on Recent Advances in Materials (ICRAM-2018) organized by Pg & research department of physics national college (autonomous) Tiruchirappalli on 22nd & 23rd Mar 2018.

2. presented my paper entitled "Optical and magnetic properties of Zn-doped NiO nanoparticles" in the Souvenir International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018) organized by Department of Chemistry Annamalai University, Annamalai Nagar on 2nd & 3rd February 2018.

3. presented a research paper entitled "correlated Room Temperature Ferromagnetism and Photoluminescence in SnO_2 nanoparticles via chemical precipitation method" in the International Conference on sustainable scientific advancements (ICSSA-19) held on 22 & 23 Feb 2019 and organized by PG & Research Dept. of Biotechnology, Physics and Chemistry of Sri Vinayaga college of arts and science, Ulundurpet - 606 107, Villupuram, Tamilnadu.

CONFERENCES AND SEMINARS

- A paper was presented entitled "Structural, Morphological and Optical Properties of Pure SnO2 nanoparticles via chemical co-precipitation method" National Conference on FRONTIER AREAS IN APPLIED PHYSICS (NCFAAP-2016) 27th April 2016. Engineering Physics Section Faculty Of Engineering & Technology Annamalai University, Annamalainagar - 608 002.

- I have presented a research paper entitled "Structural, optical and photocatalytic activities of pure and Mn: SnO2 nanoparticles via chemical precipitation method". National Seminar On New Trends In Chemistry (NTC-2016),21st-22nd,October 2016.Department of Chemistry,Annamalai University,Annamalai Nagar.

- I have attended the DST-NRDMS Summer/Winter School Training On "GEOSPATIAL TECHNOLOGY-Significance Applications And Beyond" Organized by the Department Of Earth

Sciences, AnnamalaiUniversity,Tamilnadu, During November 23rd To 13th December 2016.

- A paper was presented entitled "Synthesis and characterization of undoped and Mn: SnO2 nanoparticles Via Chemical Precipitation Method''.National Conference On Recent Developments In Nano Materials And Thin Films Research (RDNMTR-2017) 4th-5th March 2017. PG & Research Department Of Physics AVVM Sri Pushpam College (Autonomous) Poondi, Thanjavur-613 503.

- Participated in the Two-Days Lecture Workshop on Recent Developments in Applied Physics 18-03-2017 & 19-03-2017. Research Department Of Physics Khadir Mohideen College Adirampattinam – 614701 Thanjavur District.

- I have participated in my paper entitled "Influence of Mn doping on structural, optical and magnetic properties of SnO2 nanoparticles by Chemical Precipitation Method" in International Conference On Recent Advances In Applied Physics (ICRAAP-2017) organized by Faculty of Engineering and Technology Engineering Physics. Annamalai University, Annamalai Nagar on 21st & 22nd Sep 2017.

- I have presented my paper entitled "Influence of Mn doping on structural, optical and electrochemical properties of SnO2 nanoparticles by Chemical Precipitation Method" National conference On Recent trends in nanomaterials and Thin films research (RTNMTR-2018) organized by Pg & Research Department Of Physics AVVM Sri Pushpam College (autonomous) poondi on 9-11 February 2018.

- I have presented my paper entitled "optical and electrochemical properties of Mn-doped SnO2 nanoparticles via chemical precipitation method" in International Conference on Recent Advances in Materials (ICRAM-2018) organized by Pg & research department of physics national college (autonomous) Tiruchirappalli on 22nd & 23rd Mar 2018.

- I have participated in my paper entitled "Optical and magnetic properties of Zn-doped NiO nanoparticles" in the Souvenir International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018) organized by Department of Chemistry Annamalai University, Annamalai Nagar on 2nd & 3rd February 2018.

- I have participated in the university sponsored prof. K. S. SONACHALAM memorial XXVI

interdisciplinary research methodology workshop organized by Department of Economics, Annamalai University for 7 days from 23.03.2018 to 29.03.2018.

- I have presented my paper entitled "Effect Of Structural, Optical And Electrochemical Properties Of Zn /Sno2 Nanoparticles Via Chemical Precipitation Route" in National Conference on Frontiers in Nanoscience [NCFNS] 2018 to be held at the Department of Physics, Annamalai University, Annamalainagar, Chidambaram, Tamil Nadu, during 4th and 5th October, 2018.

- I have presented a research paper entitled "Enhanced Structural, Optical and electrochemical behavior on manganese doped tin oxide nanoparticles via chemical precipitation method" in the National Conference on Recent Trends in Material science (RTMS-2018) organized by Dept. of Physics, Annamalai University, Annamalainagar, held during Dec 19th & 20th, 2018.

- I have presented a research paper entitled "Structural, Optical, Photoluminescence and Electrochemical Supercapacitor Application of SnO2 nanoparticles" in the International Conference on Recent advances in materials science (ICRAMS-2019) organized by PG & Research dept. of physics, National College (Autonomous), Tiruchirappalli, from 04 – 06 Feb 2019.

- I have presented research paper entitled "correlated Room Temperature Ferromagnetism and Photoluminescence in SnO2 nanoparticles via chemical precipitation method" in the International Conference on sustainable scientific advancements (ICSSA-19) held on 22 & 23 Feb 2019 and organized by PG & Research Dept. of Biotechnology, Physics and Chemistry of Sri Vinayaga college of arts and science, Ulundurpet - 606 107, Villupuram, Tamilnadu.

WEBINARS: **National: 42** **International: 30**

CAREER PROFILE
CURRICULUM PROJECT

M.Sc. Project

Synthesis and Characterization of Cobalt Ferrite (CoFe2O4) nanoparticles by Co-Precipitation Method (April 2015)

Ph.D. Thesis

Title: STUDIES ON OPTICAL, ELECTROCHEMICAL AND MAGNETIC PROPERTIES OF PURE AND Mn, Zn DOPED SnO2 NANOPARTICLES BY CHEMICAL PRECIPITATION METHOD (Nov 2019)

Thesis details: Spectral Analysis of cerium oxide using TG-DTA, XRD, FT-IR, UV-Vis DRS, PL, SEM-EDX, HR-TEM, VSM and CV.

M.SC., UNDER THE GUIDANCE:

- 1. A. GNANASEELAN (Reg. No: 40518P21004) "Structural and magnetic properties of Ni^{2+} substituted Fe_3O_4 nanoparticles". A project report was submitted to Joseph Arts and Science College in partial fulfillment for the award of the degree of Master of Science in Physics.

- 2. A. JAYAGURU (Reg. No: 40518P21006) "Synthesis of structural, functional, and morphological properties of Sn-doped CdO nanoparticles". A project report was submitted to Joseph Arts and Science College in partial fulfillment for the award of the degree of Master of Science in Physics.

- 3. S. VINOTHINI (Reg. No: 40518P21013) "Biological approach for the synthesis of ZnO nanoparticles; using amaranthus gangeticus extract". A project report was submitted to Joseph Arts and Science College in partial fulfillment for the award of the degree of Master of Science in Physics.

Invited Speaker (Chief Resource Person)

1. Given Invite speaker entitled **"Nanomaterials and Its Characterization Techniques"** in "**National webinar on Nanomaterials and Its Characterization Techniques"** organized by ST.JOSEPH UNIVERSITY, Dimapur, Nagaland-797 115 on 07 Feb 2022.