



1. Name of the Faculty : **Dr. J. JOSEPH PRINCE**
2. Department and Designation : Physics / Assistant Professor
3. Date of Joining : 05-03-2003
4. Faculty ID : TF0011
5. E-mail Address : josephprinceaut@gmail.com
6. Date of Birth : **28/02/1962**
7. Qualification : M.Sc.; M.Ed.; Ph.D.; M.Tech.; P.G.D.C.A; P.G.D.M;
8. Specialization : THIN FILM PHYSICS

9. Professional Experience:

- **Assistant Professor (2007 - Present):** Bharathidasan Institute of Technology, Anna University, Tiruchirappalli
- **Lecturer & Head (2003- 2007):** Bharathidasan Institute of Technology, Anna University, Tiruchirappalli
- **PG Teacher (1997 - 2003):** Govt. Higher Secondary School, Muruganpatti, Dindugul.
- **Research Fellow (1989 - 1994):** CECRI Karaikudi
- **Lecturer (1986 – 1989):** Christian Polytechnic, Ottanchatram, Dindugal.

10. Research Guidance:

Ph.D; Degree - Completed	On going
11	5

M.phil; Degree - Completed	On going
15	NIL

11. Awards and Honours : -

12. Sponsored Projects: -

13. Patents:-

## 14. Publications

### (i) International Journals:

1. Joseph Prince J.; Ramamurthy S.; Subramanian B.; Sanjeeviraja C. ; Jayachandran M. Spray pyrolysis growth and material properties of In<sub>2</sub>O<sub>3</sub> films, Journal of Crystal Growth, Volume 240, Number 1, April 2002, pp. 142-151(10).
2. Murali K.R, Kumaresan S, Joseph Prince J, Characteristics of CdS films brush electrodeposited on low-temperature substrates, "Materials Science in Semiconductor Processing", Volume 10, Issue 1, January 2007, Pages 56-60
3. K. R Murali, S. Kumaresan, Joseph Prince J, Brush electrodeposited CdS films on low temperature substrates "Materials Letters", Volume 6(2007) 2613-2615.
4. Murali K.R, Kumarasen S, Joseph Prince J, Properties of brush plated CdS films, "Journal of Materials Science; Materials in Electronics", volume 18 (2007) Pages 487-493.
5. V. Malathy, S. Sivaranjani, V.S. Vidhya, J. Joseph Prince, C. Sanjeeviraja, M. Jayachandran, Amorphous to crystalline transition and optoelectronic properties of nanocrystalline Indium Tin Oxide (ITO) films sputtered with high rf power at room temperature \*Journal of Non-Crystalline Solids 355 (2009) 1508-1516.
6. V. Malathy, S. Sivaranjani, V.S. Vidhya, J. Joseph Prince, T. Balasubramanian, C. Sanjeeviraja, M. Jayachandran., "Role of substrate temperature on the structural, optoelectronic and morphological properties of (400) oriented indium tin oxide thin films deposited using rf sputtering technique" - Journal of Materials Science: Materials in Electronics, 2<sup>nd</sup> February 2010.
7. S. Sivaranjani, V. Malathy, V. Swaminathan, J. Joseph Prince, T. Balasubramanian, C. Sanjeeviraja, M. Jayachandran "Thickness dependence of structural, electrical and optical properties of sputter deposited indium tin oxide films" - Advanced Science Letters, Accepted on 21<sup>st</sup> March 2010.
8. V. Senthil kumar, P. Vickraman, J. Joseph Prince, M. Jayachandran, C. Sanjeeviraja, Effects of Annealing temperature in structural and optical properties of antimony doped tin oxide (ATO) thin films. "Philosophical magazine letters" Volume 90, Issue 5 may 2010, pages 337-347
9. V. Senthil kumar, P. Vickraman, J. Joseph Prince, M. Jayachandran, C. Sanjeeviraja, Studies on calcining effect of SnO<sub>2</sub> nanoparticles in Optical, Structural, and Luminescence studies. "Materials science Poland" (Communicated) Feb 2010.
10. V. Senthil kumar, P. Vickraman, J. Joseph Prince, M. Jayachandran, C. Sanjeeviraja, Optical and structural studies of nanostructured In<sub>2</sub>O<sub>3</sub> thin films deposited on different substrates by electron beam evaporation technique. "Journal of optoelectronics and advanced materials" (Communicated) Feb 2010.

11. Sakthivelu, S. Valanarasu, J. Joseph Prince, Effect of pH on SILAR deposited ZnO thin films -" International Journal Chemical science: 7(4) ,Accepted 04.09.2009,pages 2463-2469
12. Sakthivelu, V Saravanan, M Anusuya, J. Joseph Prince, " Structural, morphological and optical studies of molarity based ZnO thin films", Journal of Ovonic Research, Vol. 7, No. 1, January - February 2011, p. 1 - 7.
13. Manikandan, K, Mani, P, Fermi Hilbert Inbaraj, P, Valli, S & Joseph prince, J 2012, 'Influence on Optical Properties of Cadmium Sulfide by Manual Deposition of SILAR Method', International Journal of Engineering Science and Technology, vol.4,no.05, pp.2421, ISSN: 0975-5462.
14. Manikandan, K, Mani, P, Surendra Dilip, C, Valli, S, Fermi Hilbert Inbaraj, P & Joseph prince, J 2014, 'Effect of complexing agent: The structural, morphological, topographical and optical properties of Fe(x)S(x) nano thin films deposited by SILAR method', Applied Surface Science, vol. 288, no.01, pp.76.
15. Surendra Dilip, C, Senguttuvan, G, Sivakumar, V, Manikandan, K, Joseph Prince, j and Thiruneelakandan, R, 2013, 'Synthesis, Spectral Investigation, Reinforced Bio-potential Enhancement and structure Property Correlation of Mixed Ligand Pyridine-4-carbaldehyde Metal Complexes', Asian Journal of Chemistry; Vol. 25, pp. S73-S75
16. N.karthikeyan, J.joseph Prince, S.Ramalingam, S.Periandy, "Vibrational spectroscopic [FT-IR, FT-Raman] investigation on (2,4,5- Trichlorophenoxy) Acetic acid using computational [HF and DFT] analysis", Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 124 (2014) 165-177.
17. P. Fermi Hilbert Inbaraj, J. Joseph Prince "Optical and structural properties of Mg doped ZnO thin films by chemical bath deposition method" J Mater Sci: Mater Electron DOI 10.1007/s10854-017-7991-2 (5 October 2017)

(ii)National Journals:

1. G Ilango, M Arivazhagan, J.Joseph Prince, V Balachandran , "FTIR and FT-Raman spectral investigation of 2-chloro-1, 3-dibromo-5-fluorobenzene", Indian Journal of Pure and Applied Physics 2008, vol. 46, pp. 698-7
2. Manikandan, K, Mani, P, Fermi Hilbert Inbaraj, P, Dominic Joseph, T, Thangaraj, V, Surendra Dilip, C & Joseph Prince, J 2014, 'Influence of molar concentration on structural, morphological and optical properties of CdS thin films obtained by SILAR method', Indian journal of pure and applied physics,vol.52, pp.354-359.

(iii)International Conference:

1. J. Joseph Prince, E. Savarimuthu, V. Vasu, S. Ramamurthy, M. Jayachandran  
Modeling of (n) ITO-(n) Si solar cells prepared by Spray Pyrolysis technique, SPIE International Conference on Optical Materials Technology for Energy Efficiency and Solar Energy conversion XV, Sandiego, CA, USA July 2-Aug 1[1997]
2. N. Balamurugan, J. Joseph Prince, S. Ramamurthy, M. Sivaraman "Review on Properties of porous Silicon (pSi) Nano structure and photovoltaic device", International conference on electrochemical power systems (ICEPS-2) during 20-21, December 2004, Hyderabad, India.
3. G. Umamaheswari, V.S. Vidhya, S. Sivaranjini, B. Subramanian, J. Joseph Prince "Nanostructural characterization of SnO<sub>2</sub> thin films deposited by DC magnetron sputtering of tin oxide target for gas sensors", International conference on Nanomaterial and its Applications (ICNA) during 4 -6, Feb-2007, Department of Chemistry , National Institute of Technology ,Trichy15.
4. K.C. Lalithambika, L.C. Nehru, J. Joseph Prince, B. Subramanian, G. Raja Gopal, K. Thayamanavan, C. Sanjeeviraja, M. Jayachandran , "Optoelectronic properties of Nanocrystalline Indium Tin Oxide Films prepared by chemical spray technique", International conference on Nanomaterials & its application (ICNA - 2007) Department of Chemistry, National Institute of Technology, and Tiruchirappalli, India. During 4-6, February 2007.
5. S. Sivaranjani, V. Malathy, J. Joseph Prince, T. Balasubramanian, V. Swaminathan, M. Jayachandran, C. Sanjeeviraja. "Indium Tin Oxide Nanocrystalline Functional Electrode for Gas Sensors Prepared by RF Magnetron Sputtering"- The 2008 Asian Conference on Nanoscience and Nanotechnology during 3-7, Nov-2008, Biopolis, Singapore.
6. Mani P, Manikandan K, Joseph Prince J, 2014, ' Structural and Optical Characterisation of Triethanolamine (TEA) doped Tin Sulphide (SnS) thin films by SILAR method', International conference on recent Trends in Engineering and management (ICRTEM 2014) to be held April 11, 12<sup>th</sup> , 2014 at Indra Ganesan College of Engineering, Trichy, Tamil Nadu.
7. Manikandan, K, Mani, P, Surendra Dilip, C, Mahalingam V, Joseph Prince, J, 2014 'Structural and Morphological Studies on Iron Sulfide thin films by SILAR method, International conference on Swift Heavy Ions in Materials Engineering and Characterisation( SHIMEC 2014) October 14-17,2014, Inter- University Accelerator Centre, New Delhi 110067.(Acceptance)
8. Mani P, Manikandan K , Janaki Ramya A, Iruthaya seelan A and Joseph Prince J ,2014,

Copper doped Tin Sulfide ( $Cu_xSn_{1-x}S_y$ ) Nano semiconductor Thin Films with Complexing Agent Triethanolamine (TEA) For Photovoltaic cell Applications on an International conference on "Green Technologies for Environmental Pollution Control and Prevention during 27 to 29<sup>th</sup> September 2014. NIT, Tiruchirappalli. TamilNadu.(Acceptance)

9. Mani P, Mani kandan K , Janaki Ramya A, Syed Zahirullah, S and Joseph Prince J Optical, Structural And Morphological Properties Of Tin Sulfide Nano Thin Films With Complexing Agent EDTA For Solar Cell Applications" on an International conference on "Green Technologies for Environmental Pollution Control and Prevention" during 27 to 29<sup>th</sup> September 2014 at NIT, Tiruchirappalli. Tamil Nadu.(Acceptance)
10. K. Manikandan, P. Mani, A. Iruthaya seelan , A. Janaki ramya, S. Syed Zahirullah and .J. Joseph prince 2014, Effect of complexing agent triethanolamine (TEA) on CdS nano thin films on an International conference on "Green Technologies for Environmental Pollution Control and Prevention" during 27 to 29<sup>th</sup> September 2014 at NIT, Tiruchirappalli. Tamil Nadu.(Acceptance)

(iv) National conference

1. Manikandan, K, Mani, P & Joseph Prince, J 2013, 'Structural and Morphological Properties of  $FexS_x$  Thin Films Deposited by SILAR Technique', Proceedings of the National Conference on Frontier Topics in Advanced Materials (NCFTAM) to be held on 04.03.2014, Bishop Heber College, Trichy -17
2. Manikandan, K, Mani, P, Fermi Hilbert Inbaraj, P, Iruthayaseelan, A, Syed Zahirullah, S, Dominic Joseph, T & Joseph Prince. J 2013, 'Effect of increasing molar composition on the structural, morphological and optical properties of  $FexCd_{1-x}S_y$  nano thin films deposited by SILAR method', Proceedings of the CSIR sponsored national seminar on novel materials (NSNM 2013) 08th MARCH - 2013, Department of Physics, Shivani Engineering College.
3. Manikandan .K, Mani .P & Joseph Prince .J 2013, 'Influence of increasing molar concentration of the structural, morphological and optical properties of  $FexS_x$  nano thin films deposited by SILAR method', Proceedings of the National Seminar on Recent Trends in Crystal Growth and Nano Materials, NSCGNM-2013 sponsored by UGC to be held during 13-15, March 2013 at PG and Research Department of Physics, National College (Autonomous), Tiruchirappalli.
4. Manikandan, K, Mani, P, Valli, S, Iruthayaseelan, A & Joseph Prince, J 2013, 'Structural, topography and optical properties of CdS thin films by manual SILAR technique', Proceedings of the National conference on NCMPCE 13, 15th march 2013 at Kongunadu College of engineering and technology, ISBN: 978-81-909244-1-2.
5. Manikandan, K, Mani, P, Valli, S, Iruthayaseelan, A & Joseph Prince, J 2013, 'Influence

on optical properties of CdS thin films by manual SILAR method', Proceedings of the National conference on NCMPCE 13,15th march 2013 at Kongunadu College of engineering and technology. ISBN: 978-81-909244-1-2.

6. Manikandan, K, Mani, P, Fermi Hilbert Inbaraj, P, Dominic Joseph, T & Joseph Prince, J 2013, 'Structural and optical properties of CdS thin films obtained By SILAR Method', Proceedings of the National Conference on Advanced Materials and Applications-NCAMA2013 to be held during 4, 5<sup>th</sup> April, 2013 at NIT Tiruchirappalli.

(V) Books Published with ISBN number/ISSN number:-

14. Conferences/Workshops/Seminar/ Short Term Refresher Course Attended

- i. Orientation Course -Ugc Academic Staff College Bharathidasan University Tiruchirappalli
- ii. Practice Of Xray Diffraction Techniques In School Of Physics Alagappa University
- iii. The 2008 Asian Conference On Nanoscience And Nanotechnology
- iv. Conference Organised By Materials Research Society (Singapore)
- v. International Conference On Nanomaterial And Its Applications (Icna)
- vi. International Conference On Electrochemical Power Systems (Icpeps-2)
- vii. The Society For Advancement Of Electrochemical Science And Technology (Saest) Cecri Campus Karaikudi
- viii. National Workshop On Theory And Practice Of X-Ray Diffraction Techniques Alagappa University Karaikudi
- ix. Nano Materials For Energy Conversion And Conservation Bishop Heber College Tiruchirappalli
- x. Workshop On Optical Communication Gandhigram Rural University Dindigul
- xi. Workshop On Thin Film Technology National Institute Of Technology Tiruchirappalli

15. Conferences/Workshops/Seminar Organised

16. Other Contribution (If Any )

**Signature**

**HOD**

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