

## RESUME FORMAT

1. **Dr. Elahipasha Usmansahib Masumdar.**
2. **Qualification:** M. Sc (Physics), Ph. D.
3. **Designation:** Associate Professor in Physics  
IQAC Co-ordinator and Officer on Special Duty
4. **Specialization:** Electronics.
5. **Research Project Completed (During last five Years):**

| Sr. No. | Title  | Sanctioned amount (Rs lacs) | Duration                |
|---------|--|-----------------------------|-------------------------|
| 1       | UGC, New Delhi funded Major research project titled "Synthesis of pure and doped ZnO thin films by spray pyrolysis and its applications as gas sensor" completed | 10.54 Lakhs                 | March 2010 to Feb. 2013 |
| 2       | UGC, WRO, Pune funded Minor Project Titled "Processing Characterization and applications of Antimony doped Cadmium sulphide Thin Films" completed                | 0.40 Lakhs                  | Dec. 2002 to Nov. 2004  |

### 6. **Publications (Last Five Years)**

#### **List of International Journal Publications**

1. **E. U. Masumdar** , V. B. Gaikwad ,V.B. Patil , V. B. Pujari and L.P. Deshmukh ,  
Some studies on chemically synthesized antimony doped CdSe thin films Mat.  
Chem. Phys. 7 (2003) 669.
2. **E. U. Masumdar**, S.H.Mane, V.S.Karande, V. B. Pujari, P.N.Bhosale and L.P.

- Deshmukh, CdSe : Sb electrode for photoelectrochemical applications J. Mater. Sci.: Mater.in Elect. 14 (2003) 43
3. **E. U. Masumdar**, S.H.Mane, V. B. Pujari, and L.P. Deshmukh, Effect of antimony dopant on the structural and optical properties of CdSe thin films, Ind.J.Pure &Appl. Phys,40 (2002) 624.
  4. **E.U.Masumdar**, and L.P.Deshmukh Photoelectrochemical properties of CdSe: Sb thin film based solar cells : Influence of electrode Thickness, Turk J.Phy,27(2003)1.
  5. V.B.Pujari,V.B.Gaikwad, **E. U. Masumdar**, P. D. More and L. P. Deshmukh, Chemically synthesized (Cd,Hg)Se pseudobinaries: Some characteristic properties Turk J. Phys,26(2002)407.
  6. **E.U.Masumdar** Surface Review and Letters Vol 12 Nos & 6 (2005)1-5 ( E-Journal)
  - 8 A.A. Yadav, M.A. Barote, T.V. Chavan, **E.U. Masumdar**, “Influence of indium doping on the properties of spray deposited CdS<sub>0.2</sub>Se<sub>0.8</sub> thin films” Journal of Alloys and Compounds 509 (2011) 916–921
  9. A.A. Yadav, **E.U. Masumdar**, “Preparation and characterization of indium doped CdS<sub>0.2</sub>Se<sub>0.8</sub> thin films by spray pyrolysis” Materials Research Bulletin 45 (2010) 1455-1459.
  - 10 A.A. Yadav, **E.U. Masumdar**, “Optical and electrical transport properties of spray deposited CdS<sub>1-x</sub>Se<sub>x</sub> thin films” Journal of Alloys and Compounds 505 (2010) 787-792.
  - 11 A.A. Yadav, **E.U. Masumdar**, “Photoelectrochemical performances of n-CdS<sub>1-x</sub>Se<sub>x</sub> thin films prepared by spray pyrolysis technique” Solar Energy, 84 (2010) 1445-1453.
  - 12 A.A. Yadav, M.A. Barote, **E.U. Masumdar**, “Studies on nanocrystalline sulphide (CdS) thin films deposited by spray pyrolysis” Solid State Sciences, 12 (2010) 1173-1177.
  - 13 A.A. Yadav, M.A. Barote, **E.U. Masumdar**, “Studies on cadmium selenide CdSe) thin films deposited by spray pyrolysis” Materials Chemistry and , 121 (2010) 53-57.

- 14 A.A. Yadav, M.A. Barote, **E.U. Masumdar**, "Photoelectrochemical properties of spray deposited n-CdSe thin films" *Solar Energy*, 84 (2010) 763-770.
- 15 A.A. Yadav, M.A. Barote, P.M. Dongre, **E.U. Masumdar**, "Studies on growth and characterization of CdS<sub>1-x</sub>Se<sub>x</sub> (0.0 ≤ x ≤ 1.0) alloy thin films by spray pyrolysis" *Journal of Alloys and Compounds*, 493 (2010) 179-185.
- 16 A.A. Yadav, **E.U. Masumdar**, A.V. Moholkar, M. Neumann-Spallart, K.Y. Rajpure, C.H. Bhosale, "Electrical, structural and optical properties of SnO<sub>2</sub>: F thin films: Effect of the substrate temperature" *Journal of Alloys and Compounds*, 488 (2009) 350-355.
- 17 A.A. Yadav, **E.U. Masumdar**, A.V. Moholkar, K.Y. Rajpure, C.H. Bhosale, "Effect of quantity of spraying solution on the properties of spray deposited fluorine doped tin oxide thin films" *Physica B* 404 (2009) 1874–1877.
- 18 A.A. Yadav, M. A. Barote, **E.U. Masumdar**, "A photoelectrochemical performance studies of CdSe: Sb electrolyte cell" *Chalcogenide Letters* Vol. 6, No. 4, April 2009, P. 149 – 153.
- 19 A.A. Yadav, M.A. Barote, **E.U. Masumdar**, "Compositional analysis studies of chemically synthesized antimony doped CdSe thin films" *Chalcogenide Letters*, Vol 5, No 12, Dec 2008, p 405-414.
- 20 A.A. Yadav, **E.U. Masumdar**, A.V. Moholkar, K.Y. Rajpure, C.H. Bhosale, "Gas Sensing of Fluorine Doped Tin Oxide Thin Films Prepared by Spray Pyrolysis" *Sensors & Transducers Journal*, 92(2008) 55-60.
- 21 M.A. Barote, S.S. Kamble, L.P. Deshmukh, **E.U. Masumdar**, "Photoelectrochemical performance of Cd<sub>1-x</sub>Pb<sub>x</sub>S (0 ≤ x ≤ 1) thin films", ***Ceramics International*, 39 (2013) 1463–1467.**
- 22 M. A. Barote, A. A. Yadav, **E. U. Masumdar**, "Effect of Thickness on Structural, Optical and Electrical Properties of Chemically Grown Cd<sub>0.825</sub>Pb<sub>0.175</sub>S Thin Films", ***Journal of Chemical, Biological and Physical Sciences*, Vol. 3, No. 1, (2013) 510-521.**
- 23 **E. U. Masumdar**, M. A. Barote, "Effect of solution molarity on the structural and opto-electric properties of ZnO thin films deposited by spray pyrolysis", ***Journal of Chemical, Biological and Physical Sciences*, Vol. 3, No.**

**1(2013) 525-533.**

24. Maqbul A. BAROTE, **Elahipasha U. MASUMDAR**, “Structural, Morphological and Optical Properties of Spray Deposited Nano-crystalline CdO Thin Films, **Sensors & Transducers Journal**, Vol. 146, 11, November 2012, pp. 90-95.
25. **Elahipasha U. MASUMDAR**, Maqbul A. BAROTE, “Structural, Morphological and Optical Properties of Spray Deposited Nanocrystalline ZnO Thin Films: Effect of Nozzle to Substrate Distance, **Sensors & Transducers Journal**, Vol. 146, Issue 11, November 2012, pp. 164-169.
26. M.A. Barote, S.S. Kamble, A.A. Yadav, **E.U. Masumdar**, “Optical and electrical characterization of chemical bath deposited Cd–Pb–S thin films”, **Thin Solid Films**, 526 (2012) 97–102.
27. M. A. Barote, S.S. Kamble, A.A. Yadav, R.V. Suryavanshi, L.P. Deshmukh, **E.U. Masumdar**, “Thickness dependence of Cd<sub>0.825</sub>Pb<sub>0.175</sub>S thin film properties” **Materials Letters**, 78 (2012) 113–115.
28. M. A. Barote, A. A. Yadav, R. V. Suryawanshi, L. P. Deshmukh, **E. U. Masumdar**, “Chemical bath deposited PbSe thin films: Optical and electrical transport properties”. **Res. J. Chem. Sci.**, Vol. 2(1), 15-19, Jan. (2012).
29. M. A. Barote, A. A. Yadav, **E. U. Masumdar**, “Synthesis, characterization and Photoelectrochemical properties of n-CdS thin films”. **Physica B**, 406 (2011) 1865-1875.
30. M. A. Barote, A. A. Yadav, R. V. Suryawanshi, **E. U. Masumdar**, “Effect of Pb incorporation on energy band gap of CdS thin films”. **J. Ovonic Research**, Vol. 7, No. 3, (2011) 45-50.
31. M. A. Barote, A. A. Yadav, **E. U. Masumdar**, “Effect of deposition parameters on growth and characterization of chemically deposited Cd<sub>1-x</sub>Pb<sub>x</sub>S thin films.” **Chalcogenide Letters**, Vol. 8, No. 2, (2011) 129 – 138.
32. M. A. Barote, A. A. Yadav, T. V. Chavan, **E. U. Masumdar**, “Characterization and photoelectrochemical properties of chemical bath deposited n-PbS thin films”. **Digest J. Nanomater. Biostructures**, Vol. 6, No. 3 (2011) 979-990.
33. M. A. Barote, A. A. Yadav, L. P. Deshmukh, **E. U. Masumdar**, “Synthesis and characterization of chemically deposited Cd<sub>1-x</sub>Pb<sub>x</sub>S thin films” **Journal of Non-Oxide Glasses** Vol. 2, No. 3, (2010) 151-165.

34. M. A. Barote, B. D. Ingale, R. V. Suryawanshi, T. V. Chavan, **E. U. Masumdar**, “Growth and characterization of chemical bath deposited polycrystalline n-PbSe thin films”. **Res. J. Chem. Sci.** **1 (5) (2011) 48-51.**
35. M. A. Barote, B. D. Ingale, G. D. Tingre, A. A. Yadav, R. V. Suryawanshi, **E. U. Masumdar**, “Some studies on chemically deposited n-PbSe thin films”, **Res. J. Chem. Sci.** **1 (9) (2011) 37-41.**
36. M. A. Barote, A. A. Yadav, **E. U. Masumdar**, “Growth and electrical properties of  $Cd_{1-x}Pb_xS$  thin films by CBD technique” **International Journal of Systems Biology Volume 2 Supplement 1 2010.**
37. M. A. Barote, A. A. Yadav, R. V. Suryawanshi, **E. U. Masumdar**, “Preparation and characterization of chemically deposited lead sulphide thin films” **Interlink Research Analysis 2 (2010) 64-69.**
38. **E.U. Masumdar** “Photoelectrochemical performances of indium-doped  $CdS_{0.2}Se_{0.8}$  thin film electrodes prepared by spray pyrolysis” **Journal of Electrochemica acta** 2011, vol. 56, , pp. 6406-6410[ Impact Factor 3.642]
39. **E.U. Masumdar** “ $Cu_{1-x}In_xSe_2$  thin films:Deposition by spraypyrolysis and characteristics” **Journal of Solar Energy** ,24 February 2012 [Impact Factor -2.135]
40. **E.U. Masumdar** “Thickness dependence of  $Cd_{0.825}Pb_{0.175}S$  thin film properties” **Journal of Material Letters Volume 78**, 1 July 2012, Pages 113–115[Impact Factor -2.117]
41. **E.U. Masumdar** “Growth and Characterization of Chemical bath Deposited Polycrystalline n-PbSe thin films” **Research Journal of Chemical Sciences** Vol. 1(5), 48-51, Aug(2011)[ Impact factor 1.075]
42. **E.U. Masumdar** “Some Studies on Chemically Deposited n-PbSe Thin Films” **Research Journal of Chemical Sciences** Vol. 1(9), 37-41, Dec. (2011) [Impact factor 1.075]
43. **E.U. Masumdar** “Effect of Pb incorporation on Energy band gap of CdS thin Films”**Journal of Ovonic Research** Vol. 7, No. 3, May - June 2011, p. 45 – 50[Impact factor 0.635]
44. **E.U. Masumdar** “Synthesis, characterization and photoelectrochemical properties of n-CdS thin films” **Journal Physica B: Condensed Matter** Volume 406, Issue 10, 1 May 2011, Pages 1865–1871[ Impact factor 0.856,]

45. **E.U.Masumdar** “Effect of solution Molarity on Structural and optoelectronic Properties of ZnO Thin films deposited by Spray Pyrolysis” **Journal of chemical and biological Sciences**
46. **E.U.Masumdar** “Structural , Morphological and Optical properties of spray deposited Nanocrystalline ZnO Thin Films : Effect of Nozzle To substrate distance” **Journal of Sensors and transducers**
47. **E.U.Masumdar** “Structural , Morphological and Optical properties of spray deposited Nanocrystalline CdO Thin Films” **Journal of Materials Letters**
48. **E.U.Masumdar** “Optical and Electrical characterization Of chemical bath Deposited CdPbS thin films” **Journal of Thin Solid Films**
49. **E.U.Masumdar** “Spray pyrolysed CuInSe<sub>2</sub>Thin Films:Prospectus in Solar cell Applications” **Journal of Nanoscience and aNano technology Letters**
50. **E.U.Masumdar** “ Photoelectrochemical Performance of CdPbS Thin Films” **Journal of Ceramics International**
51. **E.U.Masumdar** “Effect of Thickness on structural , optical, and Electrical properties of Chemically grown CdPbS thin films” **Journal of chemical and biological Sciences**
52. **E.U.Masumdar** “Thermo electronic Properties of Ga doped ZnO films prepared by Sparay Pyrolysis Technique” **International journal of Advanced Research in Basic And Applied Sciences (ISSN -2394-4072)**
53. **E.U.Masumdar** “Some Studies on Spray deposited CdO thin Films” **International journal of Advanced Research in Basic And Applied Sciences (ISSN -2394-4072)**
54. **E.U.Masumdar** “Structural and compositional Analysis of Spray deposited CdO thin Films”**Science Park Research Journal (ISSN2321-8045)**
55. **E.U.Masumdar** “Structural and morphological Properties of Ga doped ZnO films prepared by Sparay Pyrolysis” **Journal of advances in Applied Sciences and Technology (ISSN2393-8188, (print),**
56. **E.U.Masumdar** “Opto-electronic properties of Ga-doped ZnO films prepared by spray pyrolysis technique” **Vision Research Review (ISSN2250-169X. Vol III Issue-VIII)**
57. **E.U.Masumdar** “Influence of Indium doping on structural properties of spray deposited ZnO thin films” **Indo western Research Journal (ISSN-2454-3292)**

58. **E.U.Masumdar** “Electrical properties of Spray deposited CdO thin Films: Effect of Substrate Temperature” **Journal of advances in Applied Sciences and Technology** (ISSN2393-8188, (print),

## **B) Conferences/Symposia /Workshops / Seminars**

1. Microstructural studies on CdSe : Sb thin films ,**E. U. Masumdar** , V. B. Gaikwad , V. B. Pujari G. S. Shahane , L.P. Deshmukh and P.N. Bhosale , National Symposium On Science And Technology of Vacuum And Thin Films ( IVSNS-2001), Sept. 5-7, 2001,Indian Institute of Science, **Bangalore, India.** .
2. Transport mechanism in chemically synthesized antimony-cadmium selenide thin films,**E. U. Masumdar**, V. B. Gaikwad, V. B. Pujari, P. D. More and L. P. Deshmukh , Presented in National Symposium on Science And Technology of Vacuum and Thin Films, (IVSNS-2001), Sept. 5-7, 2001,Indian Institute of Science, **Bangalore, India.**
3. Optical and structural studies on CdSe : Sb thin films,**E. U. Masumdar** , V. B. Pujari , J.S. Dargad , V.S. Karande , S.H. Mane and L.P Deshmukh ,National Symposium on Instrumentation, 31Oct- 2 Nov., 2001,**Dehradun, India..**
4. Study of CdSe : Sb / electrolyte interface cells , **E. U. Masumdar** , V. B. Pujari , V.S. Karande, S.H. Mane and L.P. Deshmukh , India Japan Workshop on New Advanced Materials In Molecular Electronics, Dec.10-11,2001, SSPL,**New Delhi, India.**
5. CdSe; Sb thin film photoelectrodes L.P.Deshmukh,Campaign on University,Research and Training (COURT-2001),Shivaji University, **Kolhapur**,March,11,2001
6. CdSe:Sb (0.1mol%)Thin Film Photoelectrodes:Effect of Thickness, The Technical parameter,**E.U.Masumdar**and L.P.Deshmukh, ISCGTIEM,University of **Mysore**, Nov.2002.
7. Structural, optical and photoelectrochemical properties of chemically deposited CdSe:Sb thin films,**E. U. Masumdar**, S.H. Mane, V.S. Karande, V.B. Pujari and L.P. Deshmukh , National Conference on Thin Film Techniques and Applications, Feb. 1-2, 2002, **Coimbtore, T.N., India.**
8. CdSe:Sb thin films : Growth and characterisation , **E .U. Masumdar**, V.B. Pujari, S.H. Mane, V.S. Karande and L.P. Deshmukh , 5<sup>th</sup> National Conference on Solid State Ionics, Feb.15- 17, 2002, Nagpur Univ. **Nagpur**, M.S, India.
9. Some studies on chemically synthesized antimony – cadmium selenide thin films, **E.U. Masumdar**, J.S. Dargad, P.N. Bhosale and L.P. Deshmukh, National Seminar on Physics of Materials For Electronic and optoelectronic Devices, Feb. 25-27, 2002, Jai Narain Vyas University, **Jodhpur**, Rajsthan, India.

10. Chemically synthesized Cd (S, Te) thin films: Growth and structural studies, V. B. Patil, **E. U. Masumdar** D. S. Sutrave, G. S. Shahane and L. P. Deshmukh, Symposium on Fundamentals of Crystal Growth, Nov. 7-9, 2000, Crystal Growth Center, Anna University, **Chennai**, India.
11. Tin sulphide thin films: Growth from the solution and characteristics, B. T. Raut, V. B. Patil, **E. U. Masumdar** and L. P. Deshmukh, Symposium on Fundamentals of Crystal Growth, Nov. 7-9, 2000, Crystal Growth Center, Anna University, **Chennai**, India.
12. Photoelectrochemical studies of chemically deposited SnS thin films, B. T. Raut, V. B. Patil, **E. U. Masumdar** and L. P. Deshmukh, Dept. of Elec and Communication Engineering, College Of Technology, MASTER –2000, Nov. 9-10, 2000, **Pant Nagar**, India.
13. Photoelectrochemical (PEC) studies of chemically deposited  $Cd_{1-x}Pb_xSe$  thin films, R. N. Mulik, V. B. Patil, P. D. More, **E. U. Masumdar**, G. S. Shahane and L. P. Deshmukh, Proc. Xth International Workshop On Preparation and Characterization Technology of some Important Single Crystals, Feb. 26-28, 2001, NPL, **New Delhi**, India.
14. (Cd, Hg) Se thin films: Growth from the solution and characteristics, V. B. Pujari, V. B. Patil, **E. U. Masumdar** P. D. More and L. P. Deshmukh, National Symposium On Science And Technology Of Vacuum And Thin Films, (IVNSS-2001), Sept. 5-7, 2001, Indian Institute of Science, **Bangalore, India**.
15. Microcrystallographic investigations on (Cd, Hg) Se thin film structures, V. B. Pujari, S. H. Mane, V. S. Karande, **E. U. Masumdar** and L. P. Deshmukh, National symposium on Instrumentation, 31 Oct- 2 Nov. 2001, **Dehradun**, India.
16.  $Hg_xCd_{1-x}Se$  thin film electrode for photoelectrochemical applications, V. B. Pujari, S. H. Mane V. S. Karande, **E. U. Masumdar** and L. P. Deshmukh, India Japan Workshop On New Advanced Materials In Molecular Electronics, Dec. 10-11, 2001, SSPL, **New Delhi**, India.
17. Chemically synthesized Antimony doped CdSe thin films: Growth and characterization, **E. U. Masumdar**, National Seminar and Technology on Science and Technology of Thin films, Oct, 16-17, 2004, R. S. College, **Latur**.
17. Microcrystallographic investigations on (Cd, Hg) Se thin film structures, V. B. Pujari, S. H. Mane, V. S. Karande, **E. U. Masumdar** and L. P. Deshmukh, National Symposium on Instrumentation, 31 Oct- 2001, **Dehradun, India**.
18.  $Hg_xCd_{1-x}Se$  thin film electrode for photoelectrochemical applications, V. B. Pujari, S. H. Mane, S. Karande, **E. U. Masumdar** and L. P. Deshmukh, India Japan Workshop On New Advanced Materials In Molecular Electronics, Dec. 10-11, 2001, SSPL, **New Delhi, India**.
19. Electrical Transport Properties Of (Hg, Cd) Se thin films, V. B. Pujari, **E. U. Masumdar**, V. B. Gaikwad, V. B. Patil and L. P. Deshmukh, Eleventh International Workshop On



- Physics Of Semiconductor Devices Dec.11-15, 2001, Indian Institute of Technology,**New Delhi,India.**
20. Mercury-Cadmium- Selenide thin films: Preparation and Properties, V.B.Pujari,V.B. Gaikwad,**E.U.Masumdar**,P.D. More and P.L. Deshmukh, Eleventh International Workshop On Physics Of Semiconductor Devices,Dec.11-15,2001,Indian Institute Of Technology,**New Delhi,India.**
  21. CuBiSe<sub>2</sub> thin films: Growth and characteristics,V.B. Gaikwad,V.B.Pujari,**E.U.Masumdar**,V.B.Patil and L.P.Deshmukh, Eleventh International Workshop On Physics Of Semiconductor Devices,Dec.11-15,2001,Indian Institute of Technology,**New Delhi,India.**
  22. CdSe: Sb thin film photoelectrodes **E.U.Masumdar** and L.P.Deshmukh,Campaign on University Research and Training(COURT-2001),Shivaji University,**Kolhapur**,March,11,2001.
  23. Growth and characterization on Chemical bath deposited CdSe: Sb thin Films, **E.U. Masumdar** andL.P.Deshmukh,10th European Conference on applications of surface and interface Analysis,Oct 5- 10,2003 **Berlin, Germany.**
  24. Chemically Synthesized CdSe:Sb thin films structures: Growth and characterization, **E. U. Masumdar**,conference on Organic Photovoltaics,Aug,2- 6,2004,**Bellingham, WA,USA**
  25. Optical and electrical characterisation studies of chemically synthesized Antimony-Cadmium Selenide thin films, **E.U.Masumdar**,2nd International Conference on Technological Advances of thin Filmsand coatings ,July 13-17,2004 National University,**Singapore.**
  26. Some studies on chemically synthesized CdSe: Sb thin film structures, **E.U. Masumdar**,3rd International Conference on Materials for Advanced Technologies and 9th International Conference On Advanced Materials 3-8 July,2005 National University-**Singapore.**
  27. Some Studies On Chemically Grown CdSe: Sb Electrolyte Cell 3rd International Conference on Materials for Advanced Technologies and-9th International Conference on Advanced Materials 3-8 July,2005 at National University at **Singapore.**
  28. Optical and electrical transport properties of chemically synthesized antimony- cadmium selenide thin films structures,**E.U.Masumdar** and L.P. Deshmukh,International Symposium on Adhesion Aspects of Thin Films,Dec,15-17,2003 **Orlando,Florida,USA.**
  29. Chemically synthesized CdSe:Sb thin film structures: Growth and characterization **E.U. Masumdar**, and L.P.Deshmukh, International Symposium on Polyimides and High Temperature Polymers Dec,17- 19,2003,**Orlando,Florida,USA.**

30. Electrical Characterization Studies on Solution Grown Antimony Cadmium Selenide Thin Films **E.U.Masumdar** ,C.S.Mali,M.R.Patil and L.P.Deshmukh, National Seminar On Science and Technology of Thin Films,Oct,16-17,R.S.College, **Latur**.
31. Photoelectrochemical studies of Sb doped CdSe photoelectrodes, **E.U.Masumdar**, V.B.Gaikwad, V.B.Pujari,P.D.More,V.B.Patil and L.P.Deshmukh ,Eleventh International Workshop On Physics Of Semiconductor Devices, Dec,10-11,2001, Indian Institute Of Technology, **New Delhi,India**.
32. Photoelectrochemical ( PEC) studies of chemically deposited Cd<sub>1-x</sub>Pb<sub>x</sub> Se thin films, R.N.Mulik, V.B.Patil, P.D.More,**E.U.Masumdar**,G..S.Shahane and L.P.Deshmukh, Proc.Xth International Workshop on Preparation and Characterization of Technologycally Important single Crystals, Feb.26-28,2001,NPL,**New Delhi,India**.
33. Cd(S,Te) pseudo-binary thin films: growth and characteristics, V.B.Patil,R.N.Mulik, **E. U. Masumdar**,E.S.Sutrave,V.B.Gaikwad,V.B.Pujari and L.P. Deshmukh,Proc.Xth International Work shop On Preparation And Characterization Of Technology Important Single Crystals, Feb.26- 28,2001,NPL,**New Delhi,India**
34. Hg<sub>x</sub> Cd<sub>1-x</sub> Se thin film electrode for photoelectrochemical applications, V.B. Pujari , S.H. Mane V.S. Karande, and L.P. Deshmukh, India Japan Workshop On New Advanced Materials In Molecular Electronics, Dec.10-11,2001, SSPL,**New Delhi, India**.
35. Photoelectrochemical (PEC) cells: Use of CdS<sub>1-x</sub> Tex thin film electrodes, V.B.Patil G..S. Shahane, **E.U.Masumdar** and L.P.Deshmukh, Eleventh International Workshop On Physics Of Semiconductor Devices, Dec.11-15,2001,Indian Institute Of Technology, **New Delhi,India**.
36. Chemically Synthesized Antimony doped CdS thin Films: Growth and characterization**E.U.Masumdar**, National Seminar on Science and Technology of Thin Films,Oct,16-17 , 2004,R.S.College,**Latur**.
37. Structural and Electrical Properties of CdMnSe thin films: A Correlation,V.S. Karande, S.H.Mane, V.B.Pujari,**E.U.Masumdar** and L.P.Deshmukh, National Seminar On Science and Technology of Thin Films,Oct 16-17,2004 R.S.College, **Latur**.
38. Studies on Nanocrystalline (Cd Hg) Te detector thin films,S.H.Mane,V.S.Karande, J.S.Dargad, **E.U.Masumdar** and L.P.Deshmukh, National Seminar on Science and Technology of Thin films,Oct,16-17, 2004 R.S.College,**Latur**.
39. Studies of Chemical Grown CdSb Thin Films Structure, M.A Barote,A.A.Yadav and **E.U Masumdar** International Conference on Advanced Materials and Application Sponsered by UGC,New Delhi,at Shivaji University, **Kolhapur** Nov.15-17,2007.

40. Electrical transport properties of (Hg,Cd) Se thin films, V.B.Pujari, **E.U.Masumdar**, V.B.Gaikwad .B.Patil and L.P.Deshmukh ,Eleventh International Workshop On Physics of Semiconductor Devices ,Dec.11-15,2001, Indian Institute Of Technology,**New Delhi,India**.
41. Mercury-Cadmium-Selenide thin films: Preparation and Properties, .B.Gaikwad,**E.U.Masumdar**, P.D. More and L.P.Deshmukh, Eleventh International Workshop On Physics Of Semiconductor Devices, Dec.11-15,2001, Indian Institute of Technology,**New Delhi,India**.
42. Electrochemical radiation detector with Hg<sub>x</sub> Cd<sub>1-x</sub>Se photoelectrodes: Effect of technical Parameter V.B.Pujari,B.A.Patil,D.J.Dhage,J.S.Daragad,**E.U.Masumdar** and P.Deshmukh,National Seminar on Science and Technology of Thin Films,Oct,16-17, 2004 R.S.College, **Latur** .
43. Optical properties on spray deposited CdSSe photonic Materials A.A.Yadav, M.A.Barote,**E.U.Masumdar** ,National Seminar on Photonic materials and nanotechnology at R.S.College, Latur on 23-24 Jan 2009 .
44. Some studies on nanostructured CdPbS thin films **E.U.Masumdar** ,National Seminar on Photonic materials and nanotechnology at R.S.College, Latur
- 46 **A. A. Yadav**, C. S. Mali, E. U. Masumdar, “Optical properties of spray deposited CdS<sub>1-x</sub>Se<sub>x</sub> thin films”, **International Conference on Contemporary Trends in Optics and Optoelectronics, Indian Institute of Space Science and Technology, Thiruvananthapuram, 17-19 January 2011.**
45. **A. A. Yadav**, C. S. Mali, E. U. Masumdar, “Properties of fluorine doped tin oxide thin films for optoelectronic applications”, **International Conference on Contemporary Trends in Optics and Optoelectronics, Indian Institute of Space Science and Technology, Thiruvananthapuram, 17-19 January 2011.**
46. M.A. Barote, **A.A. Yadav**, E.U. Masumdar, “Growth mechanism and characterization of chemically synthesized Cd<sub>1-x</sub>Pb<sub>x</sub>S thin films” **National Seminar on Advanced Materials (NSAM-2010), Shivaji University, Kolhapur, 19-20 March 2010.**
47. **A.A. Yadav**, M.A. Barote, R.V. Suryawanshi, R.N. Kendre, C.S. Mali, E.U. Masumdar, “A study on low cost-high conducting fluorine doped tin oxide thin films” **National**

- conference on emerging trends in material science and communications (ETMSC-2010), M.G. College, Ahmedpur, 13-14 March 2010.
48. M.A. Barote, *A.A. Yadav*, E.U. Masumdar, "Chemically synthesized  $Cd_{1-x}Pb_xS$  thin films: Growth and characterization" **National conference on emerging trends in material science and communications (ETMSC-2010), M.G. College, Ahmedpur, 13-14 March 2010.**
  49. *A.A. Yadav*, M.A. Barote, E.U. Masumdar, "Structural, optical and electrical properties of spray deposited cadmium selenide (CdSe) thin films" **National conference on recent trends in thin film technology (RTTFT-2010), Jijamata College of Science and Arts, Bhende, Ahmednagar, 23-24 February 2010.**
  50. M.A. Barote, *A.A. Yadav*, E.U. Masumdar, "Synthesis and characterization of chemical bath deposited n-CdS thin films" **National conference on recent trends in thin film technology (RTTFT-2010), Jijamata College of Science and Arts, Bhende, Ahmednagar, 23-24 February 2010.**
  51. M.A. Barote, *A.A. Yadav*, E.U. Masumdar, "Structural Characterization of Chemically Deposited Cadmium Lead Sulphide Thin Films" **International conference on nanotechnology and biosensors (ICNB 2010), Raghu Engineering College, Dakamarri, Visakhapatnam, 20-21 January 2010.**
  52. M.A. Barote, *A.A. Yadav*, E.U. Masumdar, "Growth mechanism and characterization of chemically bath deposited  $Cd_{1-x}Pb_xS$  thin films" **State level seminar on nanoscience and nanotechnology-present scenario, K. M. J. Mahavidyalaya, Washi, Osmanabad, 21 November 2009.**
  53. *A.A. Yadav*, M.A. Barote, U. V. Biradar, C. S. Mali, E.U. Masumdar, "Optoelectronic properties of fluorine doped tin oxide thin films prepared by spray pyrolysis" **National conference on recent trends in physics and laser technology, Gramin Mahavidyalaya, Vasantnagar, Mukhed, 29-30 August 2009.**
  54. M.A. Barote, *A.A. Yadav*, U.V. Biradar, E.U. Masumdar, "Studies on growth mechanism of chemically synthesized  $Cd_{1-x}Pb_xS$  thin films" **National conference on recent trends in physics and laser technology, Gramin Mahavidyalaya, Vasantnagar, Mukhed, 29-30 August 2009.**
  55. *A.A. Yadav*, M.A. Barote, E.U. Masumdar, "Optical studies on spray deposited  $CdS_{1-x}Se_x$  photonic materials" **National seminar on Photonic materials and nanotechnology (NSPMN-2009), Rajarshi Shahu Mahavidyalaya, Latur, 23-24 January 2009.**
  56. E.U. Masumdar, *A.A. Yadav*, M.A. Barote, L.P. Deshmukh, "Solution grown CdSe: Sb thin film structures: growth and characterization" **National conference on recent trends in thin film technology (WCS-RTTFT-08), Walchand College of Science, Solapur, 14-15 November 2008.**
  57. E.U. Masumdar, *A.A. Yadav*, M.A. Barote, L.P. Deshmukh, "Chemically synthesized CdSe: Sb electrode for photoelectrochemical applications" **National conference on recent trends in thin film technology (WCS-RTTFT-08), Walchand College of Science, Solapur, 14-15 November 2008.**
  58. M.A. Barote, *A.A. Yadav*, E.U. Masumdar, "Studies on chemically grown `CdSe: Sb thin film structures" **International conference on advanced materials and applications (ICAMA-2007), Shivaji University, Kolhapur, 15-17 November 2007.**

59. **“LPG Sensing properties of Spray Deposited Zn O Thin films”** UGC Sponsored National Conference on physics of Photonics Materials and Devices organized by Rajarshi Shahu Mahavidyalaya, ( 16-17 March 2012).
60. **“Structural , Optical and Electrical Properties of spray pyrolysed ZnO thin films”** UGC Sponsored National Conference on physics of Photonics Materials and Devices organized by Rajarshi Shahu Mahavidyalaya, ( 16-17 March 2012).
61. **“Effect of Thickness on structural and optical properties of chemical grown Cd<sub>0.825</sub>Pb<sub>0.175</sub> S thin Films”** UGC Sponsored National Conference on physics of Photonics Materials and Devices organized by Rajarshi Shahu Mahavidyalaya, ( 16-17 March 2012).
62. **“Thickness dependent PEC properties Cd<sub>0.825</sub>Pb<sub>0.175</sub> S thin Films”** UGC Sponsored National Conference on physics of Photonics Materials and Devices organized by Rajarshi Shahu Mahavidyalaya, ( 16-17 March 2012).
63. **“Information Technology and quality higher education”** NAAC sponsored National Conference on Quality enhancement on Higher Education (12-13 April 2012)
64. **“Teachers Role in Qualitative Education”** NAAC sponsored National Conference on Role of Faculty and students in Quality Assurance organized by COCSIT, LATUR (21-22 Sept 2011)
65. **“Physical Properties of ZnO thin films deposited by spray pyrolysis : Effect of solution molarity”** UGC Sponsored Two day National Conference on Microwave Techniques and Applications at Maulana azad College of arts, science and Commerce, Aurangabad(29-30 November ,2013).
66. **“Influence of spray rate on Structural , morphological Properties of films deposited by spray pyrolysis”** UGC Sponsored Two day National Conference on Microwave Techniques and Applications at Maulana azad College of arts, science and Commerce, Aurangabad(29-30 November ,2013).
67. **“Synthesis and Physical Properties of spray deposited Nano crystalline CdO Thin Films”**
68. UGC Sponsored Two day National Conference on Microwave Techniques and Applications at Maulana azad College of arts, science and Commerce, Aurangabad(29-30 November ,2013)
69. **“Structural properties of chemically grown Cd .825 Pb.175 S thin films”** UGC Sponsored Two day National Conference on Microwave Techniques and Applications at Maulana azad College of arts, science and Commerce, Aurangabad(29-30 November , 2013).
70. **“Structural and optoelectronic Properties of ZnO thin Films”** One Day National Seminar on Explore Physics organized by Changu Kana Thakur College, New Panvel.

a. **Books (Last Five Years)**

| S. N o. | Title with page nos.  | Type of Book & Authorship | Publisher & ISSN/ ISBN No.         | Month, Year |
|---------|---|---------------------------|------------------------------------|-------------|
| 1       | Present Scenario and Future Challenges of autonomous Colleges | Reference Book            | Aruna Prakashan Latur ISBN No 978- | March 2017  |

|    |  |             |                                    |            |
|----|--|-------------|------------------------------------|------------|
|    |  |             | 93-84810-29-0                      |            |
| 2  | Proceedings of UGC Sponsored National seminar on Physics of Photonics Materials and Devices  | Proceedings | ISBN No:<br>978-81-920783          | March 2012 |
| 3  | Proceedings of NAAC sponsored National Conference on Quality enhancement on Higher Education   | Proceedings | ISBNNo.<br>978-81-920783-1-1       | April 2012 |
| 4  | Proceedings of UGC Sponsored( Under CPE) National seminar on Photonics Materials and Nanotechnology  | Proceedings | -                                  | Jan 2009   |
| 5  | Souvenir of National seminar on physics of nonconventional Energy and II annual convention of IAPT RC-5( Mah and Goa) and Science Exhibition | Souvenir    | -                                  | Nov 2005   |
| 6  | Proceedings of UGC Sponsored National seminar on science and technology of thin Films  | Proceedings | -                                  | Jan 2009   |
| 7  | Perfect Steps In PhysicsI ( Based on Latur Pattern)  | XI Physics  | Amrut Prakashan , Aurangabad       | 2006       |
| 8  | Perfect Steps In PhysicsI ( Based on Latur Pattern)  | XII Physics | Amrut Prakashan , Aurangabad       | 2005       |
| 9  | Perfect Steps In PhysicsI (Revised for 100% sucesses)Latur Pattern   | XII Physics | Amrut Prakashan , aurangabad       | 2006       |
| 10 | Latur Pattern, Physics Std XI  | XI Physics  | Chaya Publishing house, Aurangabad | 2008       |
| 11 | Physics – A Text Book Cum Tutor , Std XII, Paper-I   | Xii Physics | Himalaya Publishing House          | 2007       |

## 7. Conferences Attended (Last Five Years)

| Sr. No. | Title of the Paper Presented   | Title of Conference/ Seminar   | Organised by   |
|---------|--|--|--|
| 1       | Oral presentation on Some studies on Chemically grown CdSe: Sb Electrolyte Cell (L-4_Poster presentation -4)                     | 3 <sup>rd</sup> international conference on Materials for Advanced technologies and 9 <sup>th</sup> international conference on Advanced Materials at <b>Singapore</b> (3-8 July 2005) | MRS, Nanyang Technology University and National University Singapore at National University <b>Singapore</b> |
| 2       | Poster Presentation on Some studies on Chemically grown CdSe: Sb Thin film structures (OB-12-OR-55, Oral presentation)           | 3 <sup>rd</sup> international conference on Materials for Advanced technologies and 9 <sup>th</sup> international conference on Advanced Materials at <b>Singapore</b> (3-8 July 2005) | MRS, Nanyang Technology University and National University Singapore at National University <b>Singapore</b> |
| 3       | Oral Presentation on Comositional Analysis Studies Of Chemically Synthesized Antimony doped CdSe thin Films                      | UGC sponsored National Seminar on science and technology of Thin films ( 16-17 October 2004)   | Rajrashi Shahu Mahavidyalaya, Latur  |
| 4       | Oral Presentation on Electrical characterization studies of solution grown Antimony doped CdSe thin Films                        | UGC sponsored National Seminar on science and technology of Thin films ( 16-17 October 2004)   | Rajrashi Shahu Mahavidyalaya, Latur  |
| 5       | Oral presentation on CdSe: Sb (0.1 mol%) thin film electrode : Effect of Electrode Thickness and Window layer on PEC performance | UGC sponsored National sem,inar on Electro and magneto Ceramics Devices and Systems (21-22 October 2002)   | Shankararo Mohite Patil College , Akluj  |
| 6       | Oral presentation on Optical and transport properties of antimony doped CdSe thin Films  | XI International Workshop on The physics of the Semiconductor devices, new Delhi ( 11-15 December 2001)  |  |
| 7       | Poster presentation on Photoelectrochemical studies on Sb doped Cdse thin Films  | XI International Workshop on The physics of the Semiconductor devices, New Delhi ( 11-15 December 2001)  |  |

## 8. Research Guidance

- a. Recognised Research Guide in Physics by Swami Ramanand Teerth Marathwada University, Nanded.

b. Recognised Research Guide in Computer Science by Yeshwantrao Chavan Maharashtra Open University, Nashik.

c. Details of Ph.D awarded/working and M.Phil awarded students

| Sr. No. | Ph.D/M.Phil                 | Name of Scholar      | Awarded in | Working |
|---------|-----------------------------|----------------------|------------|---------|
| 1       | Ph.D in physics             | <b>A.A.Yadav</b>     | Sept. 2011 |         |
|         |                             | <b>M.A,Barote</b>    | Sept. 2011 |         |
|         |                             | <b>A. D. Kanwate</b> | --         | Working |
|         |                             | <b>S. S. Shaikh</b>  | --         | Working |
| 2       | M. Phil In Computer Science | <b>S. V. Patil</b>   | 2011       |         |
|         |                             | <b>V. M. Kone</b>    | 2008       |         |