

Curriculum Vitae



Name : Dr. MANJUNATHA PATTABI

Educational Qualifications:

| Degree | Year | University | Subjects | Marks/Class |
|--------|------|------------|---------------------------------------|--------------|
| B.Sc. | 1981 | Mysore | Physics, Chemistry, Mathematics | 69.7%, First |
| M.Sc. | 1983 | Mangalore | Physics (Solid State) | 68.7%, First |
| Ph.D | 1988 | IIT Madras | Thin Films* | |

***Thesis Title:** Aging studies of island Cu and Ag films deposited on rigid and softenable substrates

Designation : Professor and Chairman

Address for Correspondence:

Department of Materials Science

Mangalore University

Mangalagangothri-574199

E-mail : manjupattabi@yahoo.com

pattabi@mangaloreuniversity.ac.in

Phone : +91-824-2287249 (O)

+91-824-2466463 (R)

+91-9448260563 (M)

Research Areas : Thin Films, Nanoparticles of metals and Semiconductors,
Shape Memory alloys, Fuel Cells, Solar Cells

Professional Teaching Experience:

1. Lecturer Mangalore University Since 1988
2. Reader Mangalore University Since 1995
3. Visiting Professor CIE-UNAM, Mexico June 1999-June 2000
4. Professor Mangalore University Since 2003 April

Research Guidance (M.Phil /Ph.D.):

Completed students

| Sl. No. | | Name of the Candidate |
|---------|--------|-----------------------------------|
| 1 | M.Phil | Dr.Jayasheela Uchil |
| 2 | PhD | Dr. Mohan Rao K |
| 3 | PhD | Dr.Jayasheela Uchil |
| 4 | PhD | Dr.Saraswathi Amma B |
| 5 | PhD | Dr.Sheeja Krishnan |
| 6 | PhD | Dr. Ramakrishna K |
| 7 | PhD | Dr.Gurumurthy S C |
| 8 | PhD | Dr. Asha Kiran |
| 9 | PhD | Dr.Naik Narendra Devidas |
| 10 | PhD | Dr.Murari M S |
| 11 | PhD | Dr.Krishnaprabha M |
| 12 | PhD | Dr.Tesfay Welderfael Gebreslassie |

Ongoing Registered Students

| Sl. No. | | Name of the Candidate |
|---------|-----|--------------------------|
| 1 | PhD | Mr.Praveen P |
| 2 | PhD | Mr.Arun Kumar Thilipan G |
| 3 | PhD | Dr.Reshma Karkera |
| 4 | PhD | Mr.Manjunatha M |
| 5 | PhD | Mr.Shailesh B |

Research Projects

Completed

1. Principal Investigator for the project "Preparation and Characterization of Stable Island Films" funded by the Department of Science and Technology, Govt. of India. Grant: Rs. 6,25,000/-
2. Co-Investigator for the Project "Establishment of a center for excellence in radiation and radiological sciences" funded by Board of Research in Nuclear Sciences, Department of Atomic Energy, Govt. of India. Grant: Rs. 65,00,000/-
3. Co-Investigator for the Project "R & D using Variable Energy Microtron: Establishment of a National Facility" funded by Department of Science and Technology, Govt. of India. Grant: Rs. 91,38,413/-

4. Principal Investigator for the project “Materials Analysis and Characterization using powder X-Ray Diffractometer” funded by Department of Science and Technology, Govt. of India. Grant: Rs. 68,75,000/-
5. Principal Investigator for the project “Modification of Morphology of Silver Particulate Films on Polymer Substrate by Electron beam and Photon Irradiation” funded by Board of Research in Nuclear Sciences, Dept. of Atomic Energy, Govt. of India. Grant: Rs. 7,50,000/-
6. Principal Investigator for the project “Effect of cold work and thermal cycling on the characteristics of Shape Memory Alloys” funded by Department of Science and Technology, Govt. of India. Grant: Rs.34,87,000/-
7. Principal Investigator for the project “ Evaluation of Radiation Resistance of Rare Earth Oxide Thin Films” funded by Board of Research in Nuclear Sciences, Dept. of Atomic Energy, Govt. of India. Grant: Rs. 19,546,900/-

Ongoing

1. Co-Coordinator for the ‘Centre with Potential for Excellence in Particular Area’ (CPEPA) programme of University Grants Commission, India. Grant: Rs. 5,05,80,000/-

Journal Publications

International

1. Aging and field effect studies of copper and copper/silver composite discontinuous films
V. Damodara Das, M.S. Murali Sastry and **Manjunatha Pattabi**
Physics Status Solidi A (Germany) **96** (1986) 677
2. Aging studies of discontinuous copper and silver films
V. Damodara Das, M.S. Murali Sastry and **Manjunatha Pattabi**
J. Mater. Sci (Chapman & Hall, UK) **22** (1987) 264
3. Effect of applied field and temperature on the aging of copper discontinuous films studied by repeated deposition technique
V. Damodara Das, M.S. Murali Sastry and **Manjunatha Pattabi**
J. Phys. D. (IOP, UK) **20** (1987) 215
4. Electrical conductivity and thermoelectric power of amorphous antimony telluride thin films and amorphous- crystalline transition
V. Damodara Das, N. Soundararajan and **Manjunatha Pattabi**,
J. Mater. Sci. (Chapman & Hall, UK) **22** (1987) 3522

5. Aging and field effect studies on discontinuous silver films at near liquid nitrogen temperatures
Manjunatha Pattabi, M.S. Murali Sastry, V. Damodara Das and V. Sivaramakrishnan
J. Mater. Sci (Chapman & Hall, UK) **22** (1987) 4173
6. Repeated deposition studies of the occurrence of large scale coalescence and effect of electric field on the aging of island silver films.
M.S. Murali Sastry, **Manjunatha Pattabi**, V. Damodara Das and V. Sivaramakrishnan
Vacuum (Pergamon, UK) **38** (1988) 21
7. Time variation of the tunneling length in island Cu films studied by repeated deposition technique
M.S. Murali Sastry, **Manjunatha Pattabi**
J. Phys. D. (IOP, UK) **21** (1988) 223
8. Aging and field effect studies of Cu island films at near liquid nitrogen temperatures
Manjunatha Pattabi, M.S. Murali Sastry and V. Sivaramakrishnan
J. Appl. Phys. (AIP, USA) **63** (1988) 983
9. Studies on the stability of discontinuous silver films with over layers of Al₂O₃ and SiO₂
Manjunatha Pattabi, M.S. Murali Sastry and V. Sivaramakrishnan
Physica Status Solidi A (Germany) **106** (1988) 145
10. Effect of overlayers on the instability of Cu island films
Manjunatha Pattabi, M.S. Murali Sastry and V. Sivaramakrishnan
J. Mater. Sci. (Chapman & Hall, UK) **23** (1988) 1502
11. Time variation of the interisland spacing at liquid nitrogen temperatures for Cu and Ag island films
Manjunatha Pattabi and M.S. Murali Sastry
Thin Solid Films (Elsevier) **159** (1988) L 61
12. Studies on the stability of Cu island films deposited on a softenable substrate
Manjunatha Pattabi, M.S. Murali Sastry and V. Sivaramakrishnan
J. Appl. Phys. (AIP, USA) **64** (1988) 437
13. Silver island films deposited on a substrate above its softening temperatures
Manjunatha Pattabi, M.S. Murali Sastry and V. Sivaramakrishnan
Phys. Rev. B (APS, USA) **39** (1989) 9959
14. Influence of ion bombardment cleaning on the aging rates in island copper films on fused quartz substrates
M.S. Murali Sastry and **Manjunatha Pattabi**
J. Appl. Phys. (AIP, USA) **65** (1989) 4073

15. Variation of the tunneling barrier in island Cu films
M.S.Murali Sastry and **Manjunatha Pattabi**
Physica Status Solidi A (Germany) **114** (1989) K179
16. Influence of a magnetic field on the aging rates of island silver films
Manjunatha Pattabi, P.J. Sebastian and V. Sivaramakrishnan
J. Phys. D (IOP, UK) **23** (1990) 371
17. Structural information of island metal films from aging measurements
M.S. Murali Sastry and **Manjunatha Pattabi**,
Phys. Rev. B. (APS, USA) **41** (1990) 8529
18. Solar Control Characteristics of Cu₂Se coatings
P.J. Sebastian and **Manjunatha Pattabi**
J. Phys. D (IOP, UK) **25** (1992) 981
19. Window Coating Prospects of Cu₂Se Thin Films
Manjunatha Pattabi, P.J. Sebastian and V. Sivaramakrishnan
SPIE(USA) **1523** (1992) 143.
20. The Effect of Magnetic Field on the Aging of Island Silver Films for Successive Depositions
Jayasheela Uchil, Mohan Rao K and **Manjunatha Pattabi**
J. Phys. D (IOP, UK) **29** (1996) 2992
21. The Effect of Substrate Vibration on the Mobility Coalescence in Silver Island Films
Manjunatha Pattabi, Jayasheela Uchil and Mohan Rao K
Thin Solid Films (Elsevier) **305** (1997) 196
22. Preparation and Characterization of Silver Particulate Films on Softened Polystyrene Substrates
K. Mohan Rao, **Manjunatha Pattabi**, K S Mayya, S R Sainkar and M.S. Murali Sastry
Thin Solid Films (Elsevier) **310** (1997) 97
23. Electrical Behavior of Discontinuous Silver Films Deposited on Softened Polyvinylpyridine Substrates
Manjunatha Pattabi and K Mohan Rao
J.Phys.D. (IOP, UK) **31** (1998) 19
24. Aging Studies on Discontinuous Silver Films in Ultrahigh Vacuum.
Manjunatha Pattabi, N Suresh, S M Chaudhari, A Banerjee, D M Phase, A Gupta and K. Mohan Rao,
Thin Solid Films (Elsevier) **322** (1998) 340
25. Effect of over layers on the stability of discontinuous silver films deposited on softened PVP substrates.
Manjunatha Pattabi and K Mohan Rao
J.Phys.D. (IOP, UK) **31** (1998) 2412

26. Structural studies on silver cluster films deposited on softened PVP substrates.
Manjunatha Pattabi, K. Mohan Rao, S.R. Sainkar and M.S. Murali Sastry
Thin Solid Films (Elsevier) **338** (1999) 40
27. A simple strain cell for the measurement of the gauge factor of a thin film.
Manjunatha Pattabi and K Mohan Rao,
Rev. Sci. Instr. (AIP, USA) **70** (1999) 2074
28. Modifications of power diode characteristics using Bremsstrahlung radiation from Microtron,
Ganesh, K C Prashanth, Y N Nagesha, A P Gnanaprakash, D Umakanth,
Manjunatha Pattabi, K Siddappa, Saji Salkalachen and Amitav Roy
Rad. Phy. Chem. (Pergamon-Elsevier) **55**(1999) 461
29. Preparation and characterization of silver particulate structures deposited on softened poly (4-vinylpyridine) substrates
K Mohan Rao, **Manjunatha Pattabi**, S R Sainkar, Arun Lobo, S K Kulkarni,
Jayasheela Uchil and Murali Sastry
J.Phys.D (IOP, UK) **32** (1999) 2327
30. Synthesis of Cadmium Sulphide Nanoparticles
Manjunatha Pattabi and Jayasheela Uchil;
Solar Energy Mater and Solar Cells (Elsevier) **63**(2000) 309
31. Preparation and Characterization of Copper Indium Diselenide films by Electroless deposition
Manjunatha Pattabi, P J Sebastian, X Mathew and R N Bhattacharya
Solar Energy Mater and Solar Cells (Elsevier) **63** (2000) 315
32. Charge Transport Mechanism in a Typical Au/CdTe Schottky diode
X. Mathew, J. Pantoja Enriquez, P. J. Sebastian, **Manjunatha Pattabi**, A. Sanchez Juarez , J. Campos, J.C. McClure and V.P.Singh
Solar Energy Mater and Solar Cells (Elsevier) **63** (2000) 355
33. A Novel Electrocatalyst Based on $W_x(CO)_n$ for Oxygen Reduction Reaction
Manjunatha Pattabi, R.H. Castellanos, P.J. Sebastian and X. Mathew
Electrochemical and Solid State Lett. (Electrochem. Soc. USA) **3** (2000) 431
34. Synthesis and Characterization of $W_x(CO)_n$ Electro catalyst for Application in a Fuel Cell Electrode
Manjunatha Pattabi, P J Sebastian and X Mathew
J. New Mater. For Electrochemical Systems (Canada) **4** (2001) 7
35. Photo electrochemical Characterization of SiC
P.J. Sebastian, N.R. Mathews, X. Mathew, **M Pattabi** and J. Turner
Int. J. Hyd. Energy (Elsevier) **26** (2001) 123
36. Effect of Polymer- Metal interaction on the structure of silver particulate films formed on softened polymer substrates.
K. Mohan Rao and **Manjunatha Pattabi**
J. New Mater. For Electrochemical Systems (Canada) **4** (2001) 11

37. Electrochemical Characterization of Tungsten Carbonyl Compound for Oxygen Reduction Reaction
Manjunatha Pattabi, R.H. Castellanos, R. Castillo, A. L. Ocampo, P.J. Sebastian, J.C. McClure and X. Mathew
Int. J. Hyd. Energy (Elsevier) **26** (2001) 171
38. The Effect of Precursor Concentration on the Size of the CdS Nanoparticles Synthesized in a Chicken Egg Membrane
Manjunatha Pattabi and Jayasheela Uchil
Solar Energy Mater and Solar Cells (Elsevier) **76** (2003) 323
39. Dielectric Studies on the Chicken Egg Membrane deposited with CdS Nanoparticles
Jayasheela Uchil, **Manjunatha Pattabi** and T. Shripathi
Solar Energy Mater and Solar Cells (Elsevier) **81** (2004) 313
40. Preparation and Characterization of CdS nanoparticles in an aqueous medium using chicken egg membrane.
Jayasheela Uchil and **Manjunatha Pattabi**
J. New Mater. For Electrochemical Systems (Canada) **8** (2005) 109
41. Effect of pH on the size of CdS nanoparticles synthesized by chemical diffusion across a Biological membrane
Jayasheela Uchil and **Manjunatha Pattabi**
J. New Mater. For Electrochemical Systems (Canada) **8** (2005) 155
42. Synthesis and Stability studies of Thiophenol Capped CdS Nanoparticles
Manjunatha Pattabi and Saraswathi Amma B
Solar Energy Mater and Solar Cells (Elsevier) **90**(2006) 2377
43. Effect of Temperature and Electron Irradiation on the I–V Characteristics of Au/CdTe Schottky Diodes
Manjunatha Pattabi, Sheeja Krishnan, Ganesh, X. Mathew
Solar Energy (Elsevier) **81** (2007) 111
44. Effect of thermal cycling on the shape memory transformation behavior of NiTi alloy: Powder X - ray diffraction study
Manjunatha Pattabi, Ramakrishna.K and Mahesh K.K
Materials Science & Engineering A (Elsevier) **448** (2007) 33
45. Photoluminescence study of PVP capped CdS nanoparticles embedded in PVA matrix
Manjunatha Pattabi, Saraswathi Amma B and K. Manzoor
Mater. Res. Bull. (Elsevier) **42** (2007) 828
46. Effect of Precursor Concentration on the Particle Size of Mercaptopropionic Acid capped CdS Nanoparticles
Manjunatha Pattabi and Saraswathi Amma B
J. New Mater. For Electrochemical Systems (Canada) **10**(2007) 43
47. Synthesis of Mercaptopropionic Acid Capped CdS Nanoparticles
Manjunatha Pattabi and Saraswathi Amma B
J. New Mater. For Electrochemical Systems (Canada) **10**(2007) 49

48. Comparison of Various Organic Stabilizers as Capping Agents for CdS Nanoparticles Synthesis
B. Saraswathi Amma, K. Ramakrishna and **Manjunatha Pattabi**
J. Mater. Sci. Mater. in Electronics (Springer) **18** (2007) 1109
49. Effect of 8 MeV Electron Irradiation on the Optical Properties of PVP Capped CdS Nanoparticles in PVA Matrix
Manjunatha Pattabi, Saraswathi Amma B, K. Manzoor and Ganesh Sanjeev
Solar Energy Mater and Solar Cells (Elsevier) **91** (2007) 1403
50. Studies on the Temperature Dependence of I-V and C-V Characteristics of Electron Irradiated Silicon Photo-detectors
Manjunatha Pattabi, Sheeja Krishnan and Ganesh Sanjeev
Solar Energy Mater and Solar Cells (Elsevier) **91** (2007) 1521
51. 8 MeV Electron Irradiation Effects in Silicon Photo-detectors
Sheeja Krishnan, Ganesh Sanjeev and **Manjunatha Pattabi**
Nucl. Instr. and Meth. B (NIMB) (Elsevier) **264** (2007) 79
52. Effect of 8 MeV Electron Irradiation on the Performance of CSS Grown CdTe/CdS Solar Cells
Sheeja Krishnan, Ganesh Sanjeev, **Manjunatha Pattabi**, Harin S Ullal, Xuanzhi Wu
Semicond. Sci. Tech. (IOP, UK) **22** (2007) 1307
53. Electron Irradiation Effects on the Schottky Diode Characteristics of p-Si
Sheeja Krishnan, Ganesh Sanjeev, **Manjunatha Pattabi**
Nucl. Instr. and Meth. B (NIMB) (Elsevier) **266** (2008) 261
54. Effect of Mechanical Cutting and Polishing on the Shape Memory Transformation Behavior of NiTi Alloy
Manjunatha Pattabi and K. Ramakrishna
Materials Science & Engineering A (Elsevier) **486** (2008) 14
55. Physical and Thermal Properties of 8 MeV Electron Irradiated HPMC Polymer Films
Sangappa, T Demappa, Mahadevaiah, S Ganesha, S Divakara, **Manjunatha Pattabi**, R Somashekar
Nucl. Instr. and Meth. B (NIMB) (Elsevier) **266** (2008) 3975
56. Synthesis and Optical properties of CdS/ZnS Core Shell Nanoparticles
Saraswathi Amma B, Manzoor K, Ramakrishna K and **Manjunatha Pattabi**
Materials Chemistry and Physics (Elsevier) **112** (2008) 789
57. Effect of electron irradiation on the properties of CdTe/CdS Solar cells
Sheeja Krishnan, Ganesh Sanjeev, **Manjunatha Pattabi**, X. Mathew
Solar Energy Mater. and Solar Cells (Elsevier) **93** (2009) 2
58. Synthesis and Characterization of Thiosalicylic Acid Stabilized Gold Nanoparticles
Rani M. Pattabi and **Manjunatha Pattabi**
Spectrochimica Acta Part A (Elsevier) **74** (2009) 195
59. Electrical Properties of RF Sputtered CdTe/CdS Thin Film Solar Cells
Sheeja Krishnan, Ganesh Sanjeev, **Manjunatha Pattabi** and X. Mathew
The Open Fuels & Energy Sci. J. (Bentham Open) **2** (2009) 110

60. Electrical behavior of discontinuous silver films deposited on softened Polystyrene and Poly (4-vinylpyridine) blends
Manjunatha Pattabi, Pratima Parashar and S C Gurumurthy
J. Mater. Sci. Mater. in Electronics (Springer) **20** (2009) 1182
61. Studies on the Growth and Stability of Silver Nanoparticles Synthesized by Electron Beam Irradiation
Manjunatha Pattabi, Rani M Pattabi, Ganesh Sanjeev
J. Mater. Sci. Mater. in Electronics (Springer) **20** (2009) 1233
62. Optical properties of CdS – PVA Nanocomposites
Manjunatha Pattabi and Saraswathi Amma B
Composite Interface (Brill Academic) **17** (2010) 103
63. Antibacterial Potential of Silver Nanoparticles Synthesized by Electron Beam Irradiation
Rani M Pattabi, K R Sridhar, Srinath Gopakumar, Vinayachandra Bhat,
Manjunatha Pattabi
Int. J. Nanoparticles (Inderscience, Switzerland) **3** (2010) 53
64. Conversion of microfiltration membrane into nano filtration membrane by vapour phase deposition of aluminium for desalination application
Mahesh Padaki, Arun M Isloor, K. K. Nagaraja, H. S. Nagaraja and
Manjunatha Pattabi
Desalination (Elsevier) **274** (2011) 177
65. Morphological changes in nanoparticulate silver films due to electron beam irradiation of polystyrene substrates
Manjunatha Pattabi, S C Gurumurthy, Ganesh Sanjeev and A B Gaikwad
Nucl. Instr. and Meth. B (NIMB) (Elsevier) **269** (2011) 1534
66. Electrical behavior of silver particulate films deposited on 8 MeV electron beam irradiated softened polystyrene substrates
Manjunatha Pattabi, Gurumurthy S C, Ganesh Sanjeev, Anil B Gaikwad
J. Mater. Sci. Mater. in Electronics (Springer) **22** (2011) 1095
67. Depth Distribution of Silver Particulate Films Deposited in Softened Polystyrene Substrates Studied through RBS
Richard L Thompson, S C Gurumurthy and **Manjunatha Pattabi**
J. Appl. Phys. (AIP) **110** (2011) 043533
68. Incorporation of Acetoacetanilide Crystals in Host PMMA Polymer Matrix and Characterizations of the Hybrid Composite
Sharada G. Prabhu and **Manjunatha Pattabi**
J. Min. & Mater. Charact. & Engg. (IMP, USA) **11** (2012) 519
69. Studies on Copper Coated Polysulfone/Modified Polyisobutylene-alt-maleic Anhydride Blend Membrane and its Antibiofouling Property
Arun M Isloor, Ganesh B.M., Shrikrishna Isloor, A. F. Ismail, H.G. Nagaraj and **Manjunatha Pattabi**
Desalination (Elsevier) **308** (2013) 82
70. Photoluminescence from Gold and Silver Nanoparticles (Invited Review)
Manjunatha Pattabi and Rani M Pattabi
Nano Hybrids (Trans Tech) Vol. 6 (2014) pp 1-35

71. Preparation and characterization of silver particulate films on softened polystyrene and poly(4-vinylpyridine) blends
S. C. Gurumurthy, **Manjunatha Pattabi**, Shreedhar Krishna, A. B. Gaikwad
J. Mater. Sci. Mater. in Electronics (Springer) **25** (2014) 2501
72. Optical properties of sub-surface silver Nano particulate films on 8 MeV electron beam irradiated polymer blends
S. C. Gurumurthy, **Manjunatha Pattabi**, Ganesh Sanjeev
J. Mater. Sci. Mater. in Electronics (Springer) **25** (2014) 4612
73. Effect of electron irradiation on morphological, compositional and electrical properties of nanocluster carbon thin films grown using room temperature based cathodic arc process for large area microelectronics
Shounak De, B.S. Satyanarayana, Ganesh Sanjeev, K. Ramakrishna, Mohan Rao K, **Manjunatha Pattabi**
Microelectronics Reliability (Elsevier) **54** (2014) 2740
74. Effect of Cold Rolling on Phase Transformation Temperatures of NiTi Shape Memory Alloy
Manjunatha Pattabi and Murari M S
J. Mater. Engg. Performance (Springer) **24** (2015) 556
75. Electron Irradiation Induced Modification of Bi₂Fe₄O₉ Nanoparticles
Prashanth K S Rao, Sheeja Krishnan, **Manjunatha Pattabi**, Ganesh Sanjeev
Rad. Phys. Chem. (Elsevier) **113** (2015) 36
76. The effect of electron irradiation on the structure and the optical properties of silver particulate films deposited on modified thermoplastic polymer substrates
A. R. Kakkrannaya, K. Mohan Rao, Amita Tolpadi, Ganesh Sanjeev, **Manjunatha Pattabi**
Appl. Phys. A (Springer) **122** (2016) 221 DOI: 10.1007/s00339-016-9742-2
77. Synthesis of Gold Nanoparticles Using Garcinia Indica Fruit Rind Extract
M. Krishnaprabha and **Manjunatha Pattabi**
Int. J. Nanoscience (World Scientific) **15** (2016) 1660015 (6 pages)
78. Photocatalytic activity of Ag-N co-doped ZnO nanorods under visible and solar light irradiations for MB degradation
Tefay Welderfael, **Manjunatha Pattabi**, Rani M. Pattabi, Arun Kumar Thilipan G
J. Water Process Engg. (Elsevier) **14** (2016) 117
79. Magnetic and Photoluminescence Studies of Electron Irradiated Bi₂Fe₄O₉ Nanoparticles
P K S Rao, S. Krishnan, **Manjunatha Pattabi**, G Sanjeev
J. Magnetism and Magnetic Materials (Elsevier) **401**(2016) 77
80. A study on Mimosa Pudica Flower Extract Mediated Green Synthesis of Gold Nanoparticles
M. Krishnaprabha and **Manjunatha Pattabi**
Nano World Journal, (USA) **3** (2017), 44

81. Room temperature synthesis of porous gold nanostructures by controlled transmetallation reaction via chicken egg shell membrane
Manjunatha Pattabi, Krishnaprabha M, Rajesha Nairy K and Murali Sastry
 Materials Chemistry and Physics (Elsevier) **202** (2017) 22
82. Effect of polymer-metal interaction and substrate temperature on the properties of vacuum evaporated silver Nano particulate films
 A Rakesha Kakkrannaya, Mohan Rao K, Amita Tolpadi, Ganesh Sanjeev,
Manjunatha Pattabi
 J. Mater.Sci (Springer) **53** (2018)12908

National

1. Fabrication of a bath type cryostat for thin film studies at liquid nitrogen temperatures
Manjunatha Pattabi, N. Ganesan, M.S. Murali Sastry, V. Damodara Das and V.Sivaramakrishnan
 J. Instr. Soc. (Instr. Soc. India) **17** (1987) 246
2. Stability of Ag island films deposited on softened PVP substrates.
Manjunatha Pattabi and K. Mohan Rao
 Ind. J. Phys. (IACS, India) **72A** (1998) 403
3. Dosimetry and semiconductor irradiation experiments using Microtron Facility
 Ganesh, K C Prashanth, Y N Nagesha, A P Gnanaprakash, D Umakanth,
Manjunatha Pattabi, K. Siddappa, Saji Salkalachen and Amitav Roy
 Ind. J. Phys. (IACS, India) **73S** (1999) 777
4. Insulator-Metal Transition in a Conservative System: an Evidence for Mobility Coalescence in Island Silver Films
Manjunatha Pattabi
 Pramana (Ind. Aca. Sci. India) **58** (2002) 1141 (Cond-mat/0506022 14/06/2005, arXive)

Books / Book chapters / Translations published

1. Phase Transformation in NiTi Shape Memory Alloy under Thermomechanical Conditions
Manjunatha Pattabi and K. Ramakrishna
 “Shape Memory Alloys: Manufacture, Properties and Applications” (Ed) H. R. Chen (Novascience, New York, 2010) ISBN: 978-1-60741-789-7
2. Phase transformation in NiTi shape memory alloy Under Thermomechanical conditions, pp. 317-338
Manjunatha Pattabi and K. Ramakrishna
 “Encyclopedia of Materials Science Research (2 Volume Set)” (Ed) Batukhan B. Chinbat and Sora H. Mori (Novascience, New York, 2012) ISBN: 978-1-61209-954-5

3. Antibacterial Applications of Silver Nanoparticles,
Rani M Pattabi and **Manjunatha Pattabi**
“Materials Science Forum Vol. 754- Inorganic Nanomedicine: Synthesis, Characterization and Application”, (Ed) Amir Al-Ahmed, Arun M. Isloor and M. Nasiruzzaman Shaikh, (Trans Tech, Switzerland, 2013) pp 131-142
doi:10.4028/www.scientific.net/MSF.754.131 ISBN-13: 978-3-03785-689-5
4. Electron Irradiation Effects in Cadmium Telluride and Silicon Devices- An Experimental Study
Manjunatha Pattabi and Sheeja Krishnan,
Lambert Academic Publishers, 2010, Germany, ISBN: 978-3-8383-0714-5
5. Cadmium Sulphide Nanoparticles
Saraswathi Amma B and **Manjunatha Pattabi**,
Lambert Academic Publishers, 2010, Germany, ISBN: 978-3-8383-6267-0

IN REFEREED CONFERENCE PROCEEDINGS:

1. CuIn_{1-x}Ga_xSe₂ based solar cells prepared from low-cost precursors,
M.E. Calixto, P.J. Sebastian, **Manjunatha Pattabi**, X. Mathew and J.C. McClure
Proc. ISES Millenium Solar Forum, Mexico, (2000) pp 239-242
2. Opto-electronic characterization of a CdTe based photovoltaic structure,
X. Mathew, J. Pantoja, G.P. Hernandez, P.J. Sebastian, **Manjunatha Pattabi** J.C. McClure, N.R. Mathews, A. Sanchez Juarez and J. Campos:
Proc. ISES Millenium Solar Forum, Mexico, (2000) pp 243-247
3. Synthesis and Characterization of CdS Nanoparticles in a PVA Matrix
Saraswathi Amma B and **Manjunatha Pattabi**
Proc. Int. Conf. Optoelectronic Mater. And Thin Films for advanced Technology (OMTAT 2005), Kochi, India, (2005) pp 195-201
4. CdS Nanoparticles in Egg Membrane
Saraswathi Amma B and **Manjunatha Pattabi**
Proc. DAE Solid State Physics Symposium, Mumbai, India, (2005) pp 219 220
5. Effect of UV Irradiation on MPA Capped CdS Nanoparticles in a PVA Matrix
Sarsawthi Amma B and **Manjunatha Pattabi**
Proc. Nat. Conf. On Emerging Trends in Physics, Electronics and Engg. Sciences, Mysore, (2006) pp 119-122
6. Optical Properties of Mn Doped PVP Capped CdS/ZnS Nanoparticles
Sarsawthi Amma B and **Manjunatha Pattabi**
Proc. DAE Solid State Physics Symposium, Bhopal, (2006) pp 315-316
7. Effect of electron Irradiation on the I-V Characteristics of Al/p-Si Schottky Diodes
Sheeja Krishnan, **Manjunatha Pattabi** and Ganesh Sanjeev
Proc. DAE Solid State Physics Symposium, Mysore, India, (2007) pp 953-954
8. Electrical Properties of PVP Capped CdS nanopaticles in PVA Matrix
Saraswathi Amma B, Harish Parala, **Manjunatha Pattabi** and Shripathi T;
Proc. Int. Conf. Solar Cells (ICSOLACE-2008) Cochin,(2008) pp 202-206

9. Effect of 8 MeV Electron Irradiation on Morphology of Silver Nano particulate Films on Softened Polystyrene Substrates
S C Gurumurthy, **Manjunatha Pattabi**, Ganesh Sanjeev and A B Gaikwad
Proc. Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India. (2010) pp 4-8
10. Stability Study of PVP Capped CdS Nanoparticles in PVA Matrix
Saraswathi Amma B and **Manjunatha Pattabi**
Proc. Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India. (2010) pp 9-14
11. Effect of Low Temperature Aging on the Phase Transformation Behavior of NiTi Shape Memory Alloys
K Ramakrishna and **Manjunatha Pattabi**
Proc. Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India. (2010) pp 28-32
12. Effect of Thermal Cycling at Different Rates on Phase Transformation behavior of NiTi Shape Memory Alloy
Ramakrishna K and **Manjunatha Pattabi**
AIP Conf. Proc. 1349 (2011) 145
13. Visible Luminescence from Au Nanoparticles Stabilized with Aromatic Thiols
Rani M Pattabi and **Manjunatha Pattabi**
AIP Conf. Proc. 1349 (2011) 369
14. Optical Properties of Silver Particulate Films on Modified Polymer Substrates
Gurumurthy S C, **Manjunatha Pattabi** and Ganesh Sanjeeva
AIP Conf. Proc. 1349 (2011) 605
15. Optical Properties of Subsurface Silver Particulate Films on MPTMS Doped PS Substrates
Manjunatha Pattabi, Naik N D and Gurumurthy S C
AIP Conf. Proc. 1349, (2011) 695
16. Effect of 8 MeV Electron Beam on the Electrical Properties of CdTe Solar Cells
Asha Kiran Pakkala, Ganesh Sanjeev and **Manjunatha Pattabi**
Proc. Nat. seminar on Emerging Trends in Optoelectronic and Solar energy Nanomaterials, Kannur, India (2011) pp-48-52
17. Performance of CdTe Solar Cell Irradiated with 8 MeV Electron Beam
Asha Kiran Pakkala, Ganesh Sanjeev, Alvin D Compaan, Xiangxin (Shine) Liu and **Manjunatha Pattabi**
National Seminar on Advances in Materials Science, Tirunelveli, India (2012) pp 35-37
18. Antibacterial Efficacy of Silver Nanoparticles against *Escherichia coli*
Rani M Pattabi, Arun Kumar Thilipan G, Vinayachandra Bhat, K R Sridhar and **Manjunatha Pattabi**
AIP Conf. Proc. (USA) 1512, (2013) 372
19. Preparation and Characterization of Gd₂O₃ Thin Films by RF Magnetron Sputtering
Manjunatha Pattabi and Arun Kumar Thilipan G
AIP Conf. Proc. (USA) 1512, (2013) 726

20. Effect of Chemical Etching and Mechanical Polishing on the Transformation-Temperature of Super Elastic Shape Memory Alloys
Manjunatha Pattabi and Murari M S
AIP Conf. Proc. (USA) 1536, (2013) 987
21. Electron Irradiation Effects on Structural Properties of Multiferroic YMnO_3
Prashanth K S Rao, Sheeja Krishnan, **Manjunatha Pattabi**, Ganesh Sanjeev
Int. J. Chem Tech Research **7** (2015) 1377
22. Synthesis of porous gold nanoshells by controlled transmetallation reaction
Manjunatha Pattabi and Krishnaprabha M
AIP Conf. Proc. (USA) **1665** (2015) 050033
23. Dose dependent electrical and structural properties of BiFeO_3 nanoparticles under electron irradiation
Prashanth K. S. Rao, Sheeja Krishnan, **Manjunatha Pattabi**, and Ganesh S
AIP Conf. Proc. (USA) **1665** (2015) 050070
24. Synthesis of gold nanostructures using fruit extract of *Garcinia Indica*
Krishnaprabha M and **Manjunatha Pattabi**
AIP Conf. Proc. (USA) **1731** (2016) 050122
25. Martensitic Transformations and Morphology Studies of NiTi Shape Memory Alloy
M S Murari and **Manjunatha Pattabi**
AIP Conf. Proc. (USA) **1832** (2017) 030006
26. Biogenic synthesis of Fluorescent Silver Nanoparticles using *Melastoma Malabathricum* flower extract
Krishnaprabha M and **Manjunatha Pattabi**
AIP Conf. Proc. (USA) **1832** (2017) 050016
27. Effect of Annealing on the Structural and Electrical Properties of $\text{Gd}_2\text{O}_3/\text{Si}$ Interface for MOS Capacitors
Manjunatha Pattabi and G Arun Kumar Thilipan
AIP Conf. Proc. (USA) **1832** (2017) 080020
28. Copper oxide thin films anchored on glass substrate by sol gel spin coating technique
M. Krishnaprabha, M. Parvathy Venu, and **Manjunatha Pattabi**
AIP Conf. Proc. (USA) **1953** (2018) 100075
29. *Melastoma Malabathricum* Flower Extract Mediated Rapid Synthesis of Spherical Gold Nanoparticles
Krishnaprabha M and **Manjunatha Pattabi**
Materials Today: Proc (Elsevier) **9** (2019) 133–141
30. Silver particulate films on softened polymer substrates pre-coated with selenium
K. Mohan Rao, Narendra D. Naik, and **Manjunatha Pattabi**
Materials Today: Proc (Elsevier) (In Press) doi.org/10.1016/j.matpr.2020.01.539
31. Dielectric Behavior and AC Conductivity of Low Loaded Poly(aniline Emeraldine Base-Biopolymer Nanocomposite)
P. Praveen, **Manjunatha Pattabi**, Rani M Pattabi and Vijayalakshmi Rao
AIP Conf. Proc. (USA) 2162 (2019) 020030

32. Effect of Oxygen Incorporation on the Structural and Morphological Properties of CZTS Thin Films Deposited on Mo Foils
Shradha C H, Murari M S, Veena K, **Manjunatha Pattabi**, Thirumaleshwara N Bhat
AIP Conf. Proc. (USA) **2265** (2020) 030497

Papers/ poster presentations in Conferences / Seminars / Symposia

International

1. Bias field effect studies of copper films on glass, Teflon and mica.
N. Sreekumar, **Manjunatha Pattabi**, M.S. Murali Sastry*, V.Sivaramakrishnan
7th International Conference on Thin Films, New Delhi, India, Nov. 1987
2. Aging studies on copper island films with insulating over layers.
Manjunatha Pattabi*, V. Sivaramakrishnan
7th International Conference on Thin Films, New Delhi, India, Nov. 1987
3. Time variation of tunneling length in island metal films on PMMA
Manjunatha Pattabi*, M.S. Murali Sastry, V. Sivaramakrishnan
3d Asia Pacific Physics Conference, Hong Kong, June, 1988
4. Structural information on island metal films from aging measurements.
M.S. Murali Sastry*, **Manjunatha Pattabi**,
8th General Conference of European Physical Society, Amsterdam, Netherlands, Sept., 1990.
5. New electro catalysts for oxygen reduction reaction in PEM fuel cell,
P.J. Sebastian*, T. Romero, R. Rivera, Ana Lilia Ocampo, J. Moreira,
Manjunatha Pattabi, X. Mathew and O. Solorza
International Materials Research Congress (Symposium on Solar Hydrogen Fuel Cell-3, Cancun, Mexico, Aug-Sept., 1999
6. Development of CdTe based photovoltaic structures on flexible substrates,
X. Mathew*, P.J. Sebastian, **Manjunatha Pattabi**, J. Pantoja and A. Sanchez
International Materials Research Congress (Symposium on Solar Hydrogen Fuel Cell-3, Cancun, Mexico, Aug-Sept., 1999
7. Characterization SiC based photo electrochemical system for hydrogen production,
P.J. Sebastian*, X. Mathew, A. Olea, **Manjunatha Pattabi** and J. Turner
International Materials Research Congress (Symposium on Solar Hydrogen Fuel Cell-3, Cancun, Mexico, Aug-Sept., 1999
8. Producción fotoelectroquímica de hidrógeno utilizando celdas fotovoltaicas,
P.J. Sebastian*, X. Mathew, **Manjunatha Pattabi** and J. Turner:
XXIII Semana Nacional de Energía Solar, ANES, Morelia, Mexico, Oct., 1999
9. Synthesis and Characterization of CdS Nanoparticles in a PVA Matrix
Saraswathi Amma B* and **Manjunatha Pattabi**
Int. Conf. Optoelectronic Mater. And Thin Films for advanced Technology (OMTAT 2005), Kochi, India, 2005

10. Effect of 8 MeV Electron Irradiation on the Optical Properties of PVP Capped CdS Nanoparticles in a PVA Matrix
Manjunatha Pattabi *, Saraswathi A. B, K. Manzoor and Ganesh
Int. Conf. on Nanostructured Materials (NANO 2006), Bangalore, India, Aug.2006
11. Electrical studies on silver subsurface particulate films on blends of Polystyrene and Poly (4-vinylpyridine)
Manjunatha Pattabi*, Pratima Parashar and S C Gurumurthy
International Conference on Advances in Polymer Technology (APT'08), Kochi, India, Sept. 2008
12. Effect of 8 MeV Electron Irradiation of Polystyrene Substrates on Morphology of Silver Nanoparticulate Films
Manjunatha Pattabi, S C Gurumurthy*, Ganesh Sanjeev and A B Gaikwad
Int. Conf. on Materials for the Millennium, CUSAT, Kochi, Jan. 11-13, 2010.
13. Effect of 8 MeV Electron Irradiation on Morphology of Silver Nanoparticulate Films on Softened Polystyrene Substrates
S.C. Gurumurthy*, **Manjunatha Pattabi**, Ganesh Sanjeev and A B Gaikwad
Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India, February 14-15, 2010
14. Effect of Low Temperature Aging on the Phase Transformation Behavior of NiTi Shape Memory Alloys
K Ramakrishna* and **Manjunatha Pattabi**
Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India, February 14-15, 2010
15. Stability Study of PVP Capped CdS Nanoparticles in PVA Matrix
Saraswathi Amma B* and **Manjunatha Pattabi**
Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal India, February 14-15, 2010
16. Morphological studies of particulate silver films on MPTMS doped polymer substrate
Mohan Rao K*, Rakesh Kakkrannaya A, Amita Tolpadi, Gurumurthy S. C, **Manjunatha Pattabi**, Ganesh Sanjeev
International Conference on Recent Advances in Materials Science (RAMS 2012), 6-8, Nov., 2012, Bangalore.
17. A study on the radiation resistance of CIGS/Cds thin films solar Cell against 8 MeV Electron.
Asha Kiran Pakkala*, **Manjunatha Pattabi**, Ganesh S, A.M. Fernandez, X. Mathew
International Conference on Recent Advances in Maerials Science (RAMS 2012), 6-8, Nov., 2012, Bangalore.
18. XPS study of MPA Capped CdS nanoparticles in PVA Matrix.
Saraswathi Amma B*, Shripathi T, **Manjunatha Pattabi**
International Conference on Recent Advances in Materials Science (RAMS 2012), 6-8, Nov., 2012, Bangalore.

19. Recovery in Phase with thermal cycling for 12.5% cold rolled NiTi shape memory alloy.
Manjunatha Pattabi, Murari M S*
International Conference on Recent Advances in Materials Science (RAMS 2012), 6-8, Nov., 2012, Bangalore.
20. Band Gap and morphology of magnetron sputtered Gd₂O₃ Thin films.
Manjunatha Pattabi, Arun Kumar Thilipan G*
International Conference on Recent Advances in Materials Science (RAMS 2012), 6-8, Nov., 2012, Bangalore.
21. Effect of Chemical Etching and Mechanical Polishing on the Transformation Temperature of Super Elastic Shape Memory Alloys
Manjunatha Pattabi and Murari M S*
International Conference on Recent Trends in Applied Physics & Materials Science, Feb 01-02, 2013, Bikaner.
22. One Step Synthesis of Gold Nanoaggregates and their Catalytic Activity
Krishnaprabha M* and **Manjunatha Pattabi**
18th international Workshop on Physics of Semiconductor Devices (IWPSD-2015), IISc., Bangalore, Dec., 7-9, 2015
23. *Syzygiumsamarangense* Fruit Extract Assisted Synthesis of Gold Nanoparticles
Krishnaprabha M* and **Manjunatha Pattabi**
Int. conf. on Smart Materials and Technologies for Emerging Electronics, (IC-SMTEE-2016), Sahyadri College of Engg. and Management, Mangalore, Feb. 19-20, 2016
24. *MelastomaMalabathricum* Flower Extract Mediated Rapid Synthesis of Spherical Gold Nanoparticles
Krishnaprabha Mapala*, **Manjunatha Pattabi**
1st International conference on Nanoscience and Nanotechnology (ICNAN' 16), VIT University, Vellore, Oct., 19- 21, 2016.
25. Evaluation of radiation resistance of gadolinium oxide thin films annealed in nitrogen ambient
Manjunatha Pattabi, Arun Kumar Thilipan G*,
International Conference on Functional Materials (ICFM-2016), PSNCET, Tirunelveli, 2016

National

1. Aging studies of Copper island films on Perspex and Teflon.
Manjunatha Pattabi*, M.S. MuraliSastry, V.Sivaramakrishnan
Solid State Physics Symposium, Pant Nagar, India, Dec.1986
2. Window coating prospects of Cu₂Se thin films,
Manjunatha Pattabi*, P. J. Sebastian and V. Sivaramakrishnan
Conference on the Physics and Technology of Semiconductor Devices and Integrated Circuits, Madras, India, 1992.

3. Stability of Ag island Films deposited on softened PVP substrates
Manjunatha Pattabi and K. Mohan Rao*
Condensed Matter Days - 97, Shantiniketan, India, Aug. 1997
4. Organization of silver particles in PVP matrix
K.Mohan Rao* and **Manjunatha Pattabi**
Ninth Annual Meeting of the Materials Research Society of India, Madras, India, Feb.1998
5. In-Situ AC Conductivity Measurements of Ultra-Thin Ag Films in Ultra High Vacuum
S.M.Chaudhuri*, D.M.Phase, A Banerjee, **Manjunatha Pattabi**, B A Dasannacharya
Solid State Physics Symposium, Kurukshethra, India, 1998 41 p 302
6. Effect of electron Irradiation on the I-V Characteristics of Al/p-Si Schottky Diodes
Sheeja Krishnan, **Manjunatha Pattabi*** and Ganesh Sanjeev
DAE Solid State Physics Symposium, Mysore, India, Dec. 2007
7. Stability of silver nanoparticles Synthesized by Electron Beam Irradiation
Manjunatha Pattabi*, Rani M Pattabi and Ganesh S
National Conference on Nano photonic Materials (NCNM-2008), Kochi, India, Sept.2008.
8. Electrical Studies of Silver Nanoparticles Deposited on 8 MeV Electron Beam Irradiated Softened Polystyrene Substrates
Manjunatha Pattabi, S C Gurumurthy* and Ganesh Sanjeev
54th DAE Solid State Physics Symp., M. S. Uni. Baroda, Vadodara, Dec. 14- 18, 2009
9. Optical Properties of Silver Particulate Films on Modified Polymer Substrates
Gurumurthy S C *, **Manjunatha Pattabi** and Ganesh Sanjeeva
55th DAE Solid State Physics Symp., Manipal Uni, Manipal, Dec. 26-30, 2010
10. Visible Luminescence from Au Nanoparticles Stabilized with Aromatic Thiols
Rani M Pattabi* and **Manjunatha Pattabi**
55th DAE Solid State Physics Symp., Manipal Uni, Manipal, Dec. 26-30, 2010
11. Optical Properties of Subsurface Silver Particulate Films on MPTMS Doped Polystyrene Substrates
Manjunatha Pattabi, Naik N D* and Gurumurthy S C
55th DAE Solid State Physics Symp., Manipal Uni, Manipal, Dec. 26-30, 2010
12. Effect of Thermal Cycling at Different Rates on Phase Transformation Behaviors of NiTi Shape Memory Alloy
Ramakrishna K and **Manjunatha Pattabi***
55th DAE Solid State Physics Symp., Manipal Uni, Manipal, Dec. 26-30, 2010
13. Synthesis of Porous Gold Nanoshells by controlled Transmetallation Reaction,
Manjunatha Pattabi and Krishna Prabha*
59th DAE-SSPS-2014, Dec 16-20, 2014, Vellore, India

14. Synthesis of Gold Nanoparticles using *Garcinia Indica* Fruit Rind Extract
Krishnaprabha M* and **Manjunatha Pattabi**
Recent Advances in Nano Science and Technology 2015 (RAINSAT-2015),
Sathyabhama University, Chennai, July 8-10, 2015
15. Synthesis of Gold Nanostructures using Fruit Extract of *Garcinia Indica*
Krishnaprabha M* and **Manjunatha Pattabi**
60th DAE –Solid State Physics Symposium, Amity University, Noida, Dec. 21-
25, 2015
16. Morphological and Electrical Studies of Copper Oxide Films Anchored on Glass
Substrates
Krishnaprabha Mapala* and **Manjunatha Pattabi**
Conference on Emerging Materials (CEMAT2016), Indian Institute of Science,
Bangalore, July 18-19, 2016.
17. Synthesis of Gold Nanoparticles Using Skins of *Allium Sativum* and *Allium Cepa*
as Reducing Agents
Krishnaprabha M*, Rani M Pattabi and **Manjunatha Pattabi**
One day seminar on Nanoscience and Technology, Mother Teresa Women's
University, Kodaikanal, Sept. 20, 2016.
18. Rapid Synthesis of Gold Nanostructures Using the Fruit Extract of
SpondiasMombin
Krishnaprabha M, **Manjunatha Pattabi** and Rani M Pattabi*
One day seminar on Nanoscience and Technology held at Mother Teresa
Women's University, Kodaikanal, Sept. 20, 2016.
19. Biogenic Synthesis of Fluorescent Silver Nanoparticles Using *Melastoma*
Malabathricum Flower Extract
Krishnaprabha Mapala*, **Manjunatha Pattabi**
61st DAE –Solid State Physics Symposium, KIIT University, Bhubaneswar,
Dec.26-30, 2016.
20. Effect of Annealing on the Structural and Electrical Properties of Gd₂O₃/Si
Interface for MOS Capacitors
Manjunatha Pattabi and G Arun Kumar Thilipan*
61st DAE –Solid State Physics Symposium, KIIT University, Bhubaneswar,
Dec.26-30, 2016.
21. Martensitic Transformations and Morphology Studies of NiTi Shape Memory
Alloy
Murari M S* and **Manjunatha Pattabi**
61st DAE –Solid State Physics Symposium, KIIT University, Bhubaneswar,
Dec.26-30, 2016.
22. THIN FILMS: Microelectronics to Transparent Electronics
Manjunatha Pattabi* (National Science Day Lecture)
Vivekananda College of Engineering and Technology, National Science Day, 28
Feb. 2018

Invited / plenary talks delivered

1. Preparation of CIS films by Electroless Deposition,
Manjunatha Pattabi*, P.J. Sebastian, X. Mathew and R.N. Bhattacharya
International Materials Research Congress (Symposium on Solar Hydrogen
Fuel Cell-3, Cancun, Mexico, Aug-Sept., 1999
2. Insulator –Metal Transition in a Conservative system: an evidence for
mobility coalescence in island silver films,
Manjunatha Pattabi*
3. International Symposium on Advances in Superconductivity and Magnetism:
Materials, Mechanisms and Devices,
(ASMM2D-2001), Mangalore, India, Sept., 2001
4. Synthesis of CdS Nanoparticles using a Biological Membrane,
Manjunatha Pattabi* (Invited Talk),
Seminar on Nanotechnology for Space Applications RVCE, Bangalore, June
2004
5. A glimpse into the world of Nano,
Manjunatha Pattabi* (Invited Talk)
National Seminar on Chemical Engineering and Biotechnology, RVCE,
Bangalore, May 2005
6. Synthesis and characterization of Mercaptopropionic Acid capped CdS
Nanoparticles using a Biological Membrane
Manjunatha Pattabi*(Invited Talk) and Saraswathi Amma,
Functional Metamaterials at Nanoscale, IISc, Bangalore, India, July 2005
7. Effect of deposition parameters on the structure and properties of thin films,
Manjunatha Pattabi* (Invited Talk)
National Workshop on Thin Film Materials and Devices, Suratkal, India,
Sept.2005.
8. A Simple Protocol for the Synthesis of Nanoparticles using a Biological
Membrane,
Manjunatha Pattabi* (Invited Talk)
National Seminar on Nanotechnology, Trivandrum, India, Aug.2006
9. Thin Film Preparation and Characterization – Recent Advances,
Manjunatha Pattabi*(Invited Talk)
National Workshop on Electronic and Optical Materials and Devices, Nitte,
India, Aug. 2006
10. Quantum Mechanics and Materials Science,
Manjunatha Pattabi* (Invited Talk)
UGC Seminar on Fundamentals of Quantum Mechanics, Vivekananda College,
Puttur, Aug., 2008

11. Optical Properties of Cadmium Sulphide -PVA Nanocomposites,
Manjunatha Pattabi*(Invited Talk)
Second International Conference on Polymer Blends, Composites, IPNs, Membranes, Polyelectrolytes and Gels (ICBC-2008), Kottayam, India, Sept.2008
12. Brief Introduction to Nano chemistry,
Manjunatha Pattabi* (Invited talk)
Conference on “NANOCHEMISTRY – A Science of Diminished Dimensions”
Sahyadri Science College, Shimoga, March, 2009.
13. Some Synthetic Protocols and a Few Applications of Nanoparticles
Manjunatha Pattabi* (Invited talk)
Workshop on Nanoscience and Technology (Indian Academy of Sciences, National Academy of Sciences and Indian National Science Academy), Yenepoya University, Mangalore, March 2009
14. Introduction to nanotechnology and its applications in biology,
Manjunatha Pattabi*(Invited talk),
Workshop on Nano biotechnology, St Aloysius College, Mangalore March 2009
15. Thin Film Materials and Applications,
Manjunatha Pattabi* (Invited talk)
Workshop on New directions in Materials Science, Calicut University, Calicut, March 2009
16. An Introduction to Nanoscience and Nanotechnology
Manjunatha Pattabi* (Invited talk)
Summer School on Advances in Engineering Physics, NITK, Suathkal, July 2009
17. A few applications of Nanoparticles,
Manjunatha Pattabi*(Keynote Address)
Seminar on Nanomaterials and Applications, Bhandarkar’s College, Kundapur, India, 14-15 Sept., 2009
18. Ag and Au Nanoparticles-Synthesis and Some Applications,
Manjunatha Pattabi*(Invited talk)
Seminar on Recent Developments in Nanochemistry-An overview, Govt. Science College, Hassan, India, 10th Oct., 2009.
19. Modification of the Morphology of Metal-Polymer Nanocomposite Films,
Manjunatha Pattabi* (Invited talk)
Second Int. Conf. on Polymer Processing and Characterization (ICPPC – 2010), Kottayam, India, Jan. 15-17, 2010
20. Modification of the Properties of Subsurface Silver Particulate Films,
Manjunatha Pattabi* (Invited Talk)
Int. Conf. on Recent Trends in Materials & Characterization (RETMAC 2010), NITK, Suratkal, India, February 14-15, 2010

21. Medical Applications of Nanotechnology,
Manjunatha Pattabi* (Invited Talk)
National Workshop on Applications of Nanotechnology in Medicine, Nitte University, India, February 20, 2010
22. Modification of Morphology of Silver Particulate Films on Polymer substrates by Electron Beam Irradiation,
Manjunatha Pattabi* (Invited Talk),
National Conference on Engineering Materials through Energetic Particles (NCEMEP), Shravanabelagola, April 8-10, 2010.
23. Synthesis of Silver Nanoparticles in PVA by Electron Irradiation and Study of their Antibacterial Potential,
Manjunatha Pattabi* (Invited talk)
First World Conference on Nanomedicine and Drug Delivery (WCN-2010), Kottayam, India, April 16- 18, 2010
24. Silver Nano particulate films on Softened PS/P4VP Blends,
Manjunatha Pattabi*(Invited Talk)
Int. Conf. Materials Science and Technology (ICMST 2010), Thiruvananthapuram, India, 28-30 October 2010
25. Au and Ag Nanoparticles Synthesis and Some Applications,
Manjunatha Pattabi(Invited Talk)
National Symposium on Nanoscience and Technolog, Nirmal College, Muvattupuzha, Sept. 1-2, 2011
26. Applications of thin films,
Manjunatha Pattabi (Invited Talk)
KSTA sponsored Two day workshop on Recent Trends in Condensed matter Physics, Tumkur University, Sept 16-17, 2011.
27. Role of Private Capital in Research,
Manjunatha Pattabi (Invited Talk)
Three day National seminar on Higher Education in India: Challenges and Prospects, Kannur University, Dec 13-15, 2011.
28. Challenges and opportunities in physical sciences – Key note address,
Manjunatha Pattabi (Invited Talk)
National Science conference on Challenges and Opportunities in Physical and Biological Sciences (NCOC 2011), FMKMC College, Madikeri, Dec 17, 2011.
29. Synthesis of Noble Metal Nanoparticles,
Manjunatha Pattabi (Invited Talk)
VGST-VTU Faculty Development Programme on Nanotechnology, VTU, Belgaum, April 11-15, 2012.
30. Introduction to Nanomedicine,
Manjunatha Pattabi (Invited Talk)
National Workshop on Nanomedicine, Nitte University, Mangalore, Oct.12-13, 2012

31. Antibacterial Application of Silver Nanoparticles,
Manjunatha Pattabi (Invited Talk)
National Workshop on Nanomedicine, Nitte University, Mangalore, Oct.12-13, 2012
32. Effect of Thermal Cycling in NiTi Shape Memory Alloy,
Manjunatha Pattabi (Invited Talk)
National conference on Smart Materials & Technologies for Emerging Electronics, (NC-SMTEE-2013), 8-9 March 2013, Mangalore
33. Synthesis, Characterization and Antibacterial Applications of Silver Nanoparticles,
Manjunatha Pattabi (Invited Talk),
National Seminar on Chemistry of Nanomaterials and Applications, 23 Aug 2014, Bantwal, Mangalore, India
34. Applications of Thin Films,
Manjunatha Pattabi (Invited Talk) National Level Lecture Workshop on Novel Materials, 13-14 Feb., 2015, Hubballi, India
35. Medical Applications of Metal Nanoparticles,
Manjunatha Pattabi (Invited Talk)
Symposium on Nanomaterials Biomedical Applications, Yenepoya University, 12th Dec 2015
36. Evaporated Silver Particulate Films,
Manjunatha Pattabi* (Invited Talk)
Int Conf. on Smart materials and Technologies for Emerging Electronics (IC-SMTEE-2016), Sahyadri College of Engg. and Management, Mangalore, Feb. 19-20, 2016.
37. Antimicrobial Applications of Silver Nanoparticles,
Manjunatha Pattabi* (Invited Talk)
Science Academies' Lecture Workshop on "Nano-Science and Nanotechnology" Alva's Institute of Engineering and Technology, Moodbidri, 11-12 March 2016
38. MICROSCOPY-Some Basic Ideas,
Manjunatha Pattabi* (Invited Talk)
Workshop on Materials Characterization, RVCE, Bangalore, June 14, 2016
39. SCANNING ELECTRON MICROSCOPY,
Manjunatha Pattabi* (Invited Talk)
Workshop on Polymers and Polymer Nanocomposites, RVCE, Bangalore, June 30, 2016
40. Silver Particulate Films in Polystyrene- RBS Study,
Manjunatha Pattabi* (Invited Talk)
National Conference on Study of Matter Using Intense Radiation Sources and Under Extreme Conditions, CSR, Indore, November 3-5, 2016.

41. The Role of Deposition Rate in PVD,
Manjunatha Pattabi* (Invited Talk)
Workshop on Topics in Contemporary Physics, NITK, Suratkal, 8th February 2017
42. Application of Thin Films-Astronomy to Zoology,
Manjunatha Pattabi* (Invited Talk)
Science Academies' Lecture Workshop on Condensed and Soft Matter Physics, Mangalore February 22, 2017
43. Evaporated Silver-Polystyrene Nanocomposite-Tailoring the Properties,
Manjunatha Pattabi* (Invited Talk)
Science Academies' Lecture Workshop on Condensed and Soft Matter Physics, Mangalore February 23, 2017
44. Nano Matters,
Manjunatha Pattabi* (Invited Talk)
Nat. Conf. on Emerging Trends in Science and Engg., SMVITM, Udupi, Feb. 24, 2017
45. Material Modification using Electron Accelerator,
Manjunatha Pattabi* (Invited Talk)
National Conference on Particle Accelerators in Interdisciplinary Research (PAIR) Mangalore, April 11-13, 2017
46. New Paradigms in Scientific Research for sustainability,
Manjunatha Pattabi*(Keynote Address)
International Symposium on Pure and Applied Sciences: Towards New Paradigms in Scientific Research, Kelaniya University, Srilanka, and 20th October 2017
47. Biological applications of gold and silver nanoparticles,
Manjunatha Pattabi* (Keynote Address)
National Seminar Challenges and Opportunities in Earth Science Education and Research Mysore University, 29- 30 Jan. 2018
48. Applications of Electron Microscopy,
Manjunatha Pattabi*(Invited Talk)
Seminar on Recent Advances in Materials Manufacturing and Sustainability (RAMMS-2018), Dayanand Sagar University, Bangalore, 2-3, Feb. 2018
49. Nucleation and Growth of Thin Films,
Manjunatha Pattabi* (Invited Talk)
National Seminar on Thin Film Technology and Applications, MG University, Kottayam, 15-18, Feb. 2018
50. How Important is the Deposition Rate in PVD,
Manjunatha Pattabi* (Invited Talk)
National Seminar on Thin Film Technology and Applications, MG University, Kottayam, 15-18, Feb. 2018

51. Applications of Thin Films: Microelectronics and Beyond,
Manjunatha Pattabi* (Invited Talk)
Special Lecture Series, St. Aloysius College, Mangalore, 23 Feb., 2018
52. Thin Films: Microelectronics to Transparent Electronics,
Manjunatha Pattabi* (National Science Day Lecture)
Vivekananda College of Engineering and Technology, National Science Day,
28 Feb. 2018
53. Noble Metal Nanostructures for Biological Applications,
Manjunatha Pattabi (Invited Talk)
XXXIX Annual Conf. of Indian Association of Biomedical Scientists
(IABMS), 16th Nov.2018, Chikka Aluvara, Kodagu, India.
54. How Important is the Deposition Rate in PVD,
Manjunatha Pattabi* (Invited Talk)
Mini Symposium on Modern Spintronic Materials, NITK, Suratkal, 11 Jan.,
2019.
55. Thin Flms: Microelectronics Applications,
Manjunatha Pattabi* (Invited Talk)
Manipal Research Colloquium, Manipal, April 2, 2019
56. Silver Particulate Films on Softened Polymer Substrates,
Manjunatha Pattabi* (Invited Talk)
Int. Conf. on Laser Deposition (iCOLD 2019), AIET, Moodabidri, Nov 27-29,
2019
57. Thin Films: Microelectronics and Beyond,
Manjunatha Pattabi* (Invited Talk)
Nat. Sem. on Frontiers in Theoretical and Experimental Physics, NASC,
Kanhangad, Jan 9, 2020
58. The Role of Thin Films in Today's Technology,
Manjunatha Pattabi* (Invited Talk)
VGST Workshop on "Frontiers of Physical Sciences", Davanagere University,
3 Feb 2020

Impact of publications in terms of

h-index :18

i10 -index :37

Conferences / Seminars / Workshops / Symposia organized

1. Member, Organizing Committee, International Symposium on Advances in Superconductivity and Magnetism: Materials, Mechanics and Devices, (ASMM2D 2001) Mangalore, India, 2001
2. Organized the XIV Refresher Course in Experimental Physics, Directed by Prof R Srinivasan, through the funding from Indian Academy of Sciences, National Academy of Sciences and Indian National Science Academy, June 1-16, 2009
3. Organized a Seminar on Advances in Materials Science, Nov 2013.

Member of International Conference Committee:

1. Member, International Committee, International Symposium on Solar Hydrogen Fuel Cells, (XI International Materials Research Conference), Cancun, Mexico, 2001
2. Member, International Committee, International Symposium on Solar Hydrogen Fuel Cells, (XII International Materials Research Conference), Cancun, Mexico, 2002 (and in 2008)
3. Member, International Committee, International Symposium on Progress In Ceramic Base Composite Materials, (XII International Materials Research Conference), Cancun, Mexico, 2002
4. Member, Organizing & International Committee, Materials Development in Liquid Crystal & Electroluminescent Displays (XII International Materials Research Conference), Cancun, Mexico, 2002
5. Member, International Committee, International Symposium on Solar Cells & Solar Energy Materials (International Materials Research Conference, IMRC 2003) Cancun, Mexico Aug., 17-21, 2003 (continued to be a member till 2007)
6. Member, International Advisory Committee, International Conference on Recent Trends in Materials and Characterization, RETMAC – 2010, Surathkal, India, 14-15 Feb, 2010
7. Member, Organizing Committee, International Conference on Advanced Materials and Processing, Edinburgh, Scotland, 07-08 Sept.2017.

Awards / Fellowship / Recognition

1. Invited to be the Visiting Associate of Inter University Consortium for DAE Facilities, Indore, during 1995 – 1999
2. Sir C V Raman Young Scientist Award by Karnataka State Council for Science and Technology, Govt. of Karnataka
3. MRSI Medal 2014, by Materials Research Society of India
4. Fellow of Royal Society of Chemistry (FRSC), London, 2018

Visits Abroad:

1. The Chinese University of Hong Kong (1988)
2. National University of Singapore (1988)
3. Laboratorio TASC, Trieste, Italy* and II University of Rome, Italy* (1991)
4. CNRS, Grenoble, France* (1991)
5. Max-Planck Institute, Stuttgart, Germany* (1991)
6. National Autonomous University of Mexico (UNAM)*, Mexico (1999)
7. Kelaniya University*, Srilanka (2017) (Visiting Professor)
(* Delivered lectures)

Editorial Board:

1. Editor, Advanced Materials Science Research, Allied Academies, UK
2. Member, Editorial Board, Nano Hybrids and Composites, Trans Tech Publications, Switzerland

POPULAR ARTICLES:

1. Twenty-first Century Surface Engineering - **Guest Editorial**,
P.J. Sebastian and **Manjunatha Pattabi**
Surface Engineering (UK) **16** (2000) 185