CV of Prof. K. M. Garadkar

1.Personal Details

Name : **Dr. K. M. Garadkar**

Professor of Physical Chemistry

Department of Chemistry,

Shivaji University,

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M. S. India

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Designation	:	**Professor of Physical Chemistry**
Date of Birth	:	01-06-1970
Email Address	:	kmg_chem@unishivaji.ac.in
		garadkar@gmail.com

Permanent Address : C-11 Madhabhavi Park, Rajendra Nagar Kolhapur 416004 .

2. Academic Details:

Qualification	:	M.Sc. Ph.D.
Specialization	:	Physical Chemistry
Position:		**Professor of Physical Chemistry**

3. Research Specialization: Preparations of Nanomaterials,
Applications in Photocatalysis

4. Teaching Experience (PG) : 21 Years

5. Research Guidance: **PG Progammes Students**

M. Sc. Projects Students : 150

M. Phil Awarded Students :02

Ph. D. Awarded Students : 09

Ph. D Working : 06

A - List of Ph. D. Students: Awarded

Sr. No.	Name of the Students	Title of Ph.D. Thesis	Date of Ph. D. Award
1	**Dr. Patil A.A.**	Studies on chemically deposited mixed dichalcogenide thin films and their applications thin films and their applications	Sept.2011
2	**Dr. Shirke B.S.**	Microwave assisted synthesis ,Characterization and applications of single and mixed oxide nanoparticles	Nov.2011
3	**Dr. Ghule L.A**	Synthesis ,characterization of mixed oxide nanoparticles and its applications	Aug. 2012
4	**Dr. Pawar S.J.**	Preparation of CdTe and mixed thin films deposited by chemical deposited method and its applications	Nov.2012
5	**Dr. Korake P. V.**	Rare Earth doped nanocrystalline composite metal oxides for photocatalytic applications	June 2014
6	**Mr. Kadam A.N**	Preparation and Characterization of transition mixed metal oxide nanocomposites for their	**2015**

		photocatalytic applications	
7	**Mr. Dhabbe R.S.**	Synthesis, Characterization and photocatalytic applications of titania based nanocomposite materials doped with noble metals.	**2016**
8	**Mr. Kokate M.R.**	Synthesis and characterization of composite silica nanoparticles for catalytic applications	**2017**
9	**Mr. Gavade N. L**	Biogenic synthesis of metal loaded metal oxide nanocomposites for catalytic applications	**2017**

Details of Research

6. Publications: **National: 10**

International: 96

7. Conference Attended: **National: 10**

International: 15

Invited Talk: 10

Research Projects

Sr. No	Title of the Project	Funding Agency	Grant Sanctioned/ Amount Moblized Rs.	Status
1	Preparation & characterization of mixed metal oxide nanoparticles loaded with noble metals and its photocatalytic applications	DST New Delhi	19,90000	Completed (2012 to 2015)
2	Nanocomposite Photocatalysts for environmental Cleaning Applications	BRNS BARC	23,00000	Completed (2013 to 2016)

Sr. No	Title of the Project	Funding Agency	Amonunt in Rs	Status
3	Rare earth doped mixed metal oxide nanocomposite and its applications for the pesticide degradation	UGC **New Delhi**	10,08886/-	**Completed (2009-2012)**
4	Synthesis and characterization of some nanocrystalline mixed metal oxides of 3dtransition metals loaded with doped TiO_2 and Nb_2O_5 with reference to their photocatalytic performance.	DAE-BRNS	22,86,900/-	**Completed (2009-2011)**
4	Preparation, characterization of doped CdSe thin films and their use in optoelectronic device	UGC **New Delhi**	80000/-	**Completed (2003 to 2005)**
5	Synthesis of Platinum and Platinum bimetallic nanoparticles as novel catalyst in fuel cell and biosensor	University of Pune, Pune	300000/-	**Completed (2006-2008)**

Name of the Book : Handbook of Sol-Gel Science and Technology: Processing, Characterization and Applications

Publisher : Springer

Editors: **Klein**, Lisa, **Aparicio**, Mario, **Jitianu**, Andrei (Eds.) 2017

ISBN 978-3-319-32100-4

Name of the Chapter : **Microwave Assisted Sol-Gel Method for the Preparation of Metal Oxide Nanoparticles**

Authors : K. M. Garadkar[a*] A. N. Kadam[b], Jinsub Park[b]

9 :Membership/ Other Charges:

1) Life Member, Indian Society for Radiation and Photochemistry Mumbai.

2)Member, Editorial Board, IJACT

3) Member, American Chemical Society (USA) Member No: 31356203

Editorial Board Member of Various Journals

1) Editorial **Indian Journal of Material Science, Hindawi Publications** Hindawi Limited Adam House, Third Floor 1 Fitzroy Square London, W1T 5HF United Kingdom

2) Journal of Applied Physical Science International(**EUROPE** International Knowledge Press S107, 3 Hardman Square, Spinningfields, Manchester, M3 3EB, UK

3) **Journal of Chemistry & Applied Biochemistry**
ISSN Number : 2394-3106 Open Science Publications, 502 Padmaja Towers Srinagar Colony , Hyderabad INDIA-500073

11. List of Publications :

Total Number of Research Publications: 106 (Up to Sept.5th 2017)

h index by Google Scholar : 28

Citations : 2000

I_{10} : 66

h index by Scopus : 24

Research Gate Score : 39.85

Total Reads : 20,050

BEST FIVE PAPERS

Sr. No	Title of Paper	Name of the Journal	Authors	Page No	Vol. No	Year	Impact Factor
1	Magnetite–Silica–Gold Nanocomposite: One-Pot Single-Step Synthesis and Its Application for Solvent-Free Oxidation of Benzyl Alcohol	The Journal of Physical Chemistry (RSC)	M Kokate, S Dapurkar, **K M Garadkar**, A Gole	14214-14223	119	2015	**8.262**

2	Enhanced photocatalytic degradation of methyl red and thymol blue using titania–alumina–zinc ferrite nanocomposite	Applied Catalysis B: Environmental (Elsevier)	P P. HankareR.P. Patil A.V. Jadhav[a], **K.M. Garadkar,** R. Sasikala[,]	333-339	107	2011	**8.328**
3	Magnetite–Silica–Gold Nanocomposite: One-Pot Single-Step Synthesis and Its Application for Solvent-Free Oxidation of Benzyl Alcohol	J. of Phys. Chem (ACS)	Mangesh Kokate Sudhir Dapurkar **Kalyanrao M .Garadkar** and Anand Gole	14214–14223	119	2015	**4.509**
4	inc-oxide-silica-silver nanocomposite: Unique one-pot synthesis and enhanced catalytic and anti-bacterial performance	Journal of Colloid and Interface Science	Mangesh Kokate **Kalyanrao Garadkar[,],** Anand Gole	249–260	483	2016	**3.782**

5	Template free synthesis of ZnO/Ag_2O nanocomposites as a highly efficient visible active photocatalyst for detoxification of methyl orange	Journal of Photochemistry and Photobiology B: Biology	Abhijit Kadam, Rohant Dhabbe, Anna Gophane, Tukaram Sathe, **Kalyanrao M Garadkar**	24–33	154	2016	**3.35**

List of Publications
Total No of Publications : 110
Citations: 2000 hindex: 28 i10 :70

1)Morphological evolution of Cu doped ZnO for enhancement of photocatalytic activity AN Kadam, TG Kim, DS Shin, K.M. Garadkar, J Park Journal of Alloys and Compounds 710, 102-113	2017
2)Effect of leavening agent on structural and photocatalytic properties of ZnO nanorods SB Babar, NL Gavade, J Park, K.M. Garadkar, VM Bhuse Journal of Materials Science: Materials in Electronics 28 (12), 8372	2017
3)Enhanced photocatalytic activity of europium doped TiO2 under sunlight for the degradation of methyl orange G. V khade, N. L. Gawade K. M. Garadkar J Mater Sci: Mater Electron, 10	2017
2) A Quinazolinone Based Novel Fluorescent Nanoprobe for Selective Detection of Bovine Serum Albumin: Spectroscopic, Photophysical and Analytical Approach DP Bhopate, GM ab Prasad, AA Patil, RR Salunkhe, K M Garadkar, Imperial Journal of Interdisciplinary Research 3 (3)	2017
3) Sunlight driven high photocatalytic activity of Sn doped N-TiO 2 nanoparticles synthesized by a microwave assisted method A Kadam, R Dhabbe, D Shin, K Garadkar, J Park Ceramics International	2017

4) Green synthesis of ZnO nanoparticles by using Calotropis procera leaves for the photodegradation of methyl orange VV Gawade, NL Gavade, HM Shinde, SB Babar, K. M. Garadkar Journal of Materials Science: Materials in Electronics, 1-7	2017
5) Enhanced photocatalytic activity of europium doped TiO2 under sunlight for the degradation of methyl orange GV Khade, NL Gavade, MB Suwarnkar, MJ Dhanavade, KD Sonawane, K. M. Garadkar Journal of Materials Science: Materials in Electronics, 1-10	2017
6) Improvement of photocatalytic activity of TiO 2-WO 3 nanocomposite by the anionically substituted N and S PN Gaikwad, TM Wandre, K M Garadkar, PP Hankare, R Sasikala Colloids and Surfaces A: Physicochemical and Engineering Aspects 506, 804-811	2016
8)Decoration of biogenic AgNPs on template free ZnO nanorods for sunlight driven photocatalytic detoxification of dyes and inhibition of bacteria N. L Gawade K M Garadkar* J Mater Sci: Mater Electron, 1-12	2016
7) Sol–gel microwave assisted synthesis of Sm-doped TiO2 nanoparticles and their photocatalytic activity for the degradation of Methyl Orange under sunlight GV Khade, MB Suwarnkar, NL Gavade, K M Garadkar Journal of Materials Science: Materials in Electronics 27 (6), 6425-6432	2016
8) Photocatalytic performance of magnetically separable Fe, N co-doped TiO 2-cobalt ferrite nanocomposite PN Gaikwad, PP Hankare, TM Wandre, K M Garadkar, R Sasikala Materials Science and Engineering: B 205, 40-45	2016
9) Template free synthesis of ZnO/Ag 2 O nanocomposites as a highly efficient visible active photocatalyst for detoxification of methyl orange A Kadam, R Dhabbe, A Gophane, T Sathe, K Garadkar Journal of Photochemistry and Photobiology B: Biology 154, 24-33	2016
10) Sol–gel synthesized TiO2–CeO2 nanocomposite: an efficient photocatalyst for degradation of methyl orange under sunlight TM Wandre, PN Gaikwad, AS Tapase, K M Garadkar, SA Vanalakar, ... Journal of Materials Science: Materials in Electronics 27 (1), 825-833	2016
11) Modification of TiO2 nanoparticles by HZSM-5 for the enhancement in photodegradation of Acid Green 25 MB Suwarnkar, AN Kadam, GV Khade, NL Gavade, K M Garadkar	2016

Journal of Materials Science: Materials in Electronics 27 (1), 843-851	
12) Template free large scale synthesis of multi-shaped ZnO nanostructures for optical, photocatalytical and antibacterial properties AN Kadam, RS Dhabbe, MR Kokate, NL Gavade, K. M. Garadkar Journal of Materials Science: Materials in Electronics 26 (11), 8367-	2015
13) Polyvinyl pyrrolidone capped fluorescent anthracene nanoparticles for sensing fluorescein sodium in aqueous solution and analytical application for ophthalmic samples DP Bhopate, PG Mahajan, K M Garadkar, GB Kolekar, SR Patil Luminescence 30 (7), 1055-1063	2015
14) Microwave Assisted Synthesis and Enhanced Photocatalytic Activity of Solar-Light-Active N-Doped TiO2–ZnO Nanoparticles A Kadam, R Dhabbe, K Garadkar Journal of Nanoengineering and Nanomanufacturing 5 (3), 176-185	2015
15) Sn-Doped TiO2: Efficient Photocatalyst for Degradation of Methyl Orange Under Sunlight PP Hankare, TM Wandre, PN Gaikwad, K M Garadkar, IS Mulla, ... Journal of Nanoengineering and Nanomanufacturing 5 (3), 204-209	2015
16) Magnetite–Silica–Gold Nanocomposite: One-Pot Single-Step Synthesis and Its Application for Solvent-Free Oxidation of Benzyl Alcohol M Kokate, S Dapurkar, K Garadkar, A Gole The Journal of Physical Chemistry C 119 (25), 14214-14223	2015
17) Green synthesis of TiO2 and its photocatalytic activity GV Khade, MB Suwarnkar, NL Gavade, K M Garadkar Journal of Materials Science: Materials in Electronics 26 (5), 3309-3315	2015
18) Improving magnetic and structural properties of Zn 1–x Cu x FeCrO 4 by substituting copper synthesized by citrate gel autocombustion route PP Hankare, AS Tapase, RS Pandav, K M Garadkar, I S Mulla Materials Science in Semiconductor Processing 31, 439-445	2015
19) Biogenic synthesis of multi-applicative silver nanoparticles by using Ziziphus Jujuba leaf extract NL Gavade, AN Kadam, MB Suwarnkar, VP Ghodake, KM Garadkar Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 136, 953-960	2015
20) A highly selective and sensitive single click novel fluorescent off–on sensor for copper and sulfide ions detection directly in aqueous solution using curcumin nanoparticles DP Bhopate, PG Mahajan, K M Garadkar, GB Kolekar, SR Patil New Journal of Chemistry 39 (9), 7086-7096	2015

21) CuO-Islands on Nanostructured ZrO2 Surface Act as the ppm Level Ammonia Gas Monitor Working at Room Temperature BS Shirke, HM Shinde, M Garadkar, DR Patil Weber Advanced Physics	2015
22) Preparation of N doped TiO 2 via microwave-assisted method and its photocatalytic activity for degradation of Malathion AN Kadam, RS Dhabbe, MR Kokate, YB Gaikwad, K M Garadkar Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 133, 669-676	2014
23) In-vitro bio-fabrication of silver nanoparticle using Adhathoda vasica leaf extract and its anti-microbial activity GM Nazeruddin, NR Prasad, SR Prasad, K M Garadkar, AK Nayak Physica E: Low-Dimensional Systems and Nanostructures 61, 56-61	2014
24) Enhancement in the photocatalytic activity of Ag loaded N-doped TiO2 nanocomposite under sunlight RS Dhabbe, AN Kadam, MB Suwarnkar, MR Kokate, K M Garadkar Journal of Materials Science: Materials in Electronics 25 (7), 3179-3189	2014
25) Enhanced photocatalytic activity of Ag doped TiO 2 nanoparticles synthesized by a microwave assisted method MB Suwarnkar, RS Dhabbe, AN Kadam, K M Garadkar Ceramics International 40 (4), 5489-5496	2014
26) Photocatalytic activity of Eu 3+-doped ZnO nanorods synthesized via microwave assisted technique PV Korake, AN Kadam, K M Garadkar Journal of Rare Earths 32 (4), 306-313	2014
27) Room temperature synthesis of CdS nanoflakes for photocatalytic properties AN Kadam, RS Dhabbe, MR Kokate, K M Garadkar Journal of Materials Science: Materials in Electronics 25 (4), 1887-1892	2014
28) Extracellular biosynthesis of silver nanoparticle using Azadirachta indica leaf extract and its anti-microbial activity GM Nazeruddin, NR Prasad, SR Waghmare, K M Garadkar, IS Mulla Journal of Alloys and Compounds 583, 272-277	2014
29) Highly active lanthanum doped ZnO nanorods for photodegradation of metasystox PV Korake, RS Dhabbe, AN Kadam, YB Gaikwad, K M Garadkar Journal of Photochemistry and Photobiology B: Biology 130, 11-19	2014
30) RS Dhabbe, AN Kadam, MB Suwarnkar, MR Kokate & K M Garadkar J Mater Sci: Mater Electron 25, 3179-3189	2014

31) Morphological and optoelectronic studies on poly-crystalline leaf-like cobalt selenide thin film synthesized using a chemical bath deposition technique ML Gaur, PP Hankare, K M Garadkar, IS Mulla, VM Bhuse New Journal of Chemistry 38 (1), 255-259	2014
32) CdSe thin films: morphological, optoelectronic and photoelectrochemical studies ML Gaur, PP Hankare, KM Garadkar, SD Delekar, VM Bhuse Journal of Materials Science: Materials in Electronics 25 (1), 190-195	2014
33) Pyrene nanoparticles as a novel FRET probe for detection of rhodamine 6G: spectroscopic ruler for textile effluent DP Bhopate, PG Mahajan, K M Garadkar, GB Kolekar, SR Patil RSC Advances 4 (109), 63866-63874	2014
34) Effect of cobalt doping on structural and thermoelectrical power of zinc allu chromites synthesised by sol–gel auto-combustion method PP Hankare, KR Sanadi, AV Mali, K M Garadkar, SD Delekar, IS Mulla Materials Letters 110, 42-44	2013
35) A facile synthesis of ZnWO 4 nanoparticles by microwave assisted technique and its application in photocatalysis K M Garadkar, LA Ghule, KB Sapnar, SD Dhole Materials Research Bulletin 48 (3), 1105-1109	2013
36) Synthesis and characterization of nickel substituted cobalt ferrite nanoparticles by sol–gel auto-combustion method PP Hankare, KR Sanadi, K M Garadkar, DR Patil, IS Mulla Journal of Alloys and Compounds 553, 383-388	2013
37) One pot synthesis of magnetite–silica nanocomposites: applications as tags, entrapment matrix and in water purification M Kokate, K Garadkar, A Gole Journal of Materials Chemistry A 1 (6), 2022-2029	2013
38) Cetyltrimethylammonium bromide stabilized perylene nanoparticles for fluorimetric estimation of bicarbonate (HCO 3−) anion: spectroscopic approach DP Bhopate, GB Kolekar, K M Garadkar, SR Patil Analytical Methods 5 (19), 5324-5330	2013
39) Synthesis, structural and magnetic properties of copper substituted nickel manganite PP Hankare, RS Pandav, RP Patil, VT Vader, K M Garadkar Journal of Alloys and Compounds 544, 197-202	2012
40) Antimicrobial Activity of 6.5 MeV Electron-Irradiated ZnO Nanoparticles Synthesized by Microwave-Assisted Method KB Sapnar, LA Ghule, A Bankar, S Zinjarde, VN Bhoraskar, K M	2012

Garadkar, ... International Journal of Green Nanotechnology 4 (4), 477-483	
41) Photocatalytic degradation of phosphamidon using Ag-doped ZnO nanorods PV Korake, R Sridharkrishna, PP Hankare, K M Garadkar Toxicological & Environmental Chemistry 94 (6), 1075-1085	2012
42) Effect of sintering temperature on structural, magnetic properties of lithium chromium ferrite RP Patil, PP Hankare, K M Garadkar, R Sasikala Journal of Alloys and Compounds 523, 66-71	2012
43) Structural and surface morphological properties of chemically deposited Mo0. 5W0. 5S2 thin film AA Patil, PP Hankare, AB Gaikawad, K M Garadkar Journal of Materials Science: Materials in Electronics 23 (4), 909-912	2012
44) Photocatalytic activity of 6.5 MeV electron-irradiated ZnO nanorods KB Sapnar, LA Ghule, SV Bhoraskar, K M Garadkar, SD Dhole, ... Radiation Effects and Defects in Solids 167 (4), 238-246	2012
45) Chemical deposition of CuInSe 2 thin films by photoelectrochemical applications PP Hankare, KC Rathod, PA Chate, K M Garadkar, DJ Sathe, IS Mulla Journal of Alloys and Compounds 511 (1), 50-53	2012
46) Enhanced photocatalytic degradation of methyl red and thymol blue using titania–alumina–zinc ferrite nanocomposite PP Hankare, RP Patil, AV Jadhav, K M Garadkar, R Sasikala Applied Catalysis B: Environmental 107 (3), 333-339	2011
47) Preparation of zinc oxide nanorods by microwave assisted technique using ethylene glycol as a stabilizing agent LA Ghule, BS Shirke, KB Sapnar, SD Dhole, PP Hankare, K M Garadkar Journal of Materials Science: Materials in Electronics 22 (8), 1120-1123	2011
48) Synthesis and characterization of pure anatase TiO2 nanoparticles BS Shirke, PV Korake, PP Hankare, SR Bamane, K M Garadkar Journal of Materials Science: Materials in Electronics 22 (7), 821-824	2011
49) Photoelectrochemical applications of In2Se3 thin films by chemical deposition PP Hankare, KC Rathod, MR Asabe, AV Jadhav, VB Helavi, SS Chavan, ... Journal of Materials Science: Materials in Electronics 22 (4), 359-364	2011

50) Low cost nanostructured anatase TiO2 as a H2S gas sensor synthesized by microwave assisted technique K M Garadkar, BS Shirke, PP Hankare, DR Patil Sensor Letters 9 (2), 526-532	2011
51) Photocatalytic degradation of methyl orange using ZnO nanorods LA Ghule, AA Patil, KB Sapnar, SD Dhole, K M Garadkar Toxicological & Environmental Chemistry 93 (4), 623-634	2011
52) Synthesis, dielectric behavior and impedance measurement studies of Cr-substituted Zn–Mn ferrites PP Hankare, RP Patil, K M Garadkar, R Sasikala, BK Chougule Materials Research Bulletin 46 (3), 447-452	2011
53) Magnetic and dielectric studies of nanocrystalline zinc substituted Cu–Mn ferrites PP Hankare, UB Sankpal, RP Patil, AV Jadhav, K M Garadkar, ... Journal of Magnetism and Magnetic Materials 323 (5), 389-393	2011
54) Synthesis and characterization of nanocrystalline Ti-substituted Zn ferrite PP Hankare, RP Patil, AV Jadhav, RS Pandav, K M Garadkar, R Sasikala, ... Journal of Alloys and Compounds 509 (5), 2160-2163	2011
55) Synthesis of cerium oxide nanoparticles by microwave technique using propylene glycol as a stabilizing agent BS Shirke, AA Patil, PP Hankare, K M Garadkar Journal of Materials Science: Materials in Electronics 22 (2), 200-203	2011
56) Synthesis and morphological study of chromium substituted Zn–Mn ferrites nanostructures via sol–gel method PP Hankare, RP Patil, UB Sankpal, SD Jadhav, K M Garadkar, SN Achary Journal of Alloys and Compounds 509 (2), 276-280	2011
57) Magnetic, dielectric and complex impedance spectroscopic studies of nanocrystalline Cr substituted Li-ferrite PP Hankare, RP Patil, UB Sankpal, K M Garadkar, R Sasikala, AK Tripathi, ... Journal of Magnetism and Magnetic Materials 322 (18), 2629-2633	2010
58) Preparation and characterization of CuInSe 2 thin films by chemical bath deposition technique PP Hankare, KC Rathod, PA Chate, AV Jadhav, K. M. Garadkar Journal of Alloys and Compounds 500 (1), 78-81	2010
59) Synthesis and characterization of nanocrystalline zinc substituted nickel ferrites PP Hankare, UB Sankpal, RP Patil, IS Mulla, R Sasikala, AK Tripathi, ...	2010

Journal of Alloys and Compounds 496 (1), 256-260	
60) Effect of annealing on chemically deposited polycrystalline CdTe thin films KM Garadkar, SJ Pawar, PP Hankare, AA Patil Journal of Alloys and Compounds 491 (1), 77-80	2010
61) Synthesis and characterization of nickel selenide thin films deposited by chemical method PP Hankare, BV Jadhav, KM Garadkar, PA Chate, IS Mulla, SD Delekar Journal of Alloys and Compounds 490 (1), 228-231	2010
62) Characterization of CdS thin films synthesized by SILAR method at room temperature KM Garadkar, AA Patil, PV Korake, PP Hankare Arch. Appl. Sci. Res 2, 429-437	2010
63) Novel method for synthesis of ZnO nanorods and its applications as highly selective chlorine sensors working at low temperature DR Patil, DD Kale, SR Patil, KM Garadkar Sensor Letters 7 (6), 1057-1064	2009
64) MoS 2: preparation and their characterization KM Garadkar, AA Patil, PP Hankare, PA Chate, DJ Sathe, SD Delekar Journal of Alloys and Compounds 487 (1), 786-789	2009
65) Nanostructured ZrO^ sub 2^ Thick Film Resistors as H^ sub 2^-Gas Sensors Operable at Room Temperature KM Garadkar, BS Shirke, YB Patil, DR Patil Sensors & Transducers 110 (11), 17	2009
66) WS 2 thin films: opto-electronic characterization PP Hankare, AH Manikshete, DJ Sathe, PA Chate, AA Patil, KM Garadkar Journal of Alloys and Compounds 479 (1), 657-660	2009
67) Preparation of copper selenide thin films by simple chemical route at low temperature and their characterization PP Hankare, AS Khomane, PA Chate, KC Rathod, KM Garadkar Journal of Alloys and Compounds 469 (1), 478-482	2009
68) Novel chemical synthetic route and characterization of tungsten diselenide thin films PP Hankare, AH Manikshete, DJ Sathe, PA Chate, KC Rathod Materials Chemistry and Physics 113 (1), 183-186	2009
69) Characterization of MoSe 2 thin film deposited at room temperature from solution phase PP Hankare, AA Patil, PA Chate, KM Garadkar, DJ Sathe, AH	2008

Manikshete, ... Journal of Crystal Growth 311 (1), 15-19	
70) Structural, optical and microscopic properties of chemically deposited In2Se3 thin films PP Hankare, MR Asabe, PA Chate, KC Rathod Journal of Materials Science: Materials in Electronics 19 (12), 1252-1257	2008
71) Synthesis and characterization of tin sulphide thin films grown by chemical bath deposition technique PP Hankare, AV Jadhav, PA Chate, KC Rathod, PA Chavan, SA Ingole Journal of Alloys and Compounds 463 (1), 581-584	2008
72) Synthesis, characterization of chemically deposited indium selenide thin films at room temperature MR Asabe, PA Chate, SD Delekar, KM Garadkar, IS Mulla, PP Hankare Journal of Physics and Chemistry of Solids 69 (1), 249-254	2008
73) Preparation and characterization of cadmium telluride thin films by chemical bath deposition method PP Hankare, KC Rathod, MR Asabe, AV Jadhav, KM Garadkar	2008
74) Kinetics of hydrogen peroxide decomposition in aqueous sulphuric acid on mixed Zn-Co oxides SR Bamane, KM Garadkar OXIDATION COMMUNICATIONS 30 (1), 172-179	2007
75) Synthesis of Cadmium Selenide thin films at low-temperature by simple Chemical route and their Characterization PP Hankare, SD Delekar, MR Asabe, PA Chate, VM Bhuse, AS Khomane, ... Journal of Physics and Chemistry of Solids 67 (12), 2506-2511	2006
76) Characterization of Cd1− xZnxSe thin films deposited at low temperature by chemical route PP Hankare, PA Chate, MR Asabe, SD Delekar, IS Mulla, KM Garadkar Journal of Materials Science: Materials in Electronics 17 (12), 1055-1063	2006
77) Structural and opto-electrical properties of molybdenum diselenide thin films deposited by chemical bath method PP Hankare, PA Chate, SD Delekar, VM Bhuse, MR Asabe, BV Jadhav, ... Journal of crystal growth 291 (1), 40-44	2006
78) Kinetics of hydrogen peroxide decomposition in aqueous sulphuric acid over Zn, Co oxides and mixed oxides	2006

SR Bamane, KM Garadkar OXIDATION COMMUNICATIONS 29 (2), 258-265	
79) A novel route to synthesize Cd1− xPbxSe thin films from solution phase PP Hankare, SD Delekar, PA Chate, SD Sabane, KM Garadkar, ... Semiconductor science and technology 20 (3), 257	2005
80) Low temperature route to grow polycrystalline cadmium selenide and mercury selenide thin films PP Hankare, VM Bhuse, KM Garadkar, SD Delekar, IS Mulla Materials chemistry and physics 82 (3), 711-717	2003
81) Synthesis and characterization of chemically deposited lead selenide thin films PP Hankare, SD Delekar, VM Bhuse, KM Garadkar, SD Sabane, ... Materials chemistry and physics 82 (3), 505-508	2003
82) CdHgSe thin films: preparation, characterization and optoelectronic studies PP Hankare, VM Bhuse, KM Garadkar, SD Delekar, PR Bhagat Semiconductor science and technology 19 (2), 277	2003
83) Chemical deposition of cubic CdSe and HgSe thin films and their characterization PP Hankare, VM Bhuse, KM Garadkar, SD Delekar, IS Mulla Semiconductor science and technology 19 (1), 70	2003
84) Chemical deposition of thallium doped cadmium selenide thin films and their characterization PP Hankare, AD Jadhav, VM Bhuse, AS Khomane, KM Garadkar Materials chemistry and physics 80 (1), 102-107	2003
85) A simple, convenient, low temperature route to grow polycrystalline copper selenide thin films VM Bhuse, PP Hankare, KM Garadkar, AS Khomane Materials chemistry and physics 80 (1), 82-88	2003
86) Synthesis and X-ray diffraction studies of 4-[2'-hydroxy salicylidene-5'(2"-thiazolylazo)] methoxy benzene PP Hankare, LV Gavali, VM Bhuse, KM Garadkar, SD Delekar, PS Battase NISCAIR-CSIR, India	2003
87) A novel method to grow polycrystalline HgSe thin film PP Hankare, VM Bhuse, KM Garadkar, AD Jadhav Materials chemistry and physics 71 (1), 53-57	2001
88) Synthesis and characterization of cobalt (II), nickel (II), copper (II), zinc (II), cadmium (II) and mercury (II) complexes with 2-	2000

hydroxyimino-3-(2'-imino-4-phenylthiazolyl)-butane and 2-hydroxyimino-3-[2'-imino-4'(p-tolulylthiazolyl)]-butane PP Hankare, PH Bhoite, PS Battase, KM Garadkar, AH Jagtap NISCAIR-CSIR, India	
89) Cd1-xHgxS thin film electrodes: an electrochemical solar cell approach KM Garadkar, PP Hankare International journal of electronics 86 (11), 1311-1320	1999
90) Effect of indium doping on structural, optical and electrical properties of Cd 0.95 Hg 0.05 S thin films KM Garadkar, PP Hankare, RK Patil Materials chemistry and physics 58 (1), 64-70	1999
91) Studies on solution grown HgxCd1− xS thin films LP Deshmukh, KM Garadkar, DS Sutrave Materials chemistry and physics 55 (1), 30-35	1998
92) Structural and electrical properties of indium doped Cdo. 7. Zno. 3S thin LP Deshmukh, CB Rotti, KM Garadkar, GS Shahane Indian journal of pure & applied physics 36, 322-327	1998
93) (Cd, Hg) S pseudo-binary thin films: Growth and properties LP Deshmukh, KM Garadkar, PP Hankare, GS Shahane, DS Sutrave Indian journal of pure & applied physics 36 (2), 91-96	1998
94) Condensed Matter: Electronic Structure, Electrical, Magnetic and Optical Properties Structural and electrical properties of indium doped Cd~ 0~.~ 7 Zn~ 0~.~ 3S thin films: A correlation LP Deshmukh, CB Rotti, KM Garadkar, GS Shahane INDIAN JOURNAL OF PURE AND APPLIED PHYSICS 36, 322-327	1998
95) Structural, optical and electrical properties of indium doped CdS0. 9Se0. 1 thin films GS Shahane, KM Garadkar, LP Deshmukh Materials chemistry and physics 51 (3), 246-251	1997
96) In-doped CdSo» Sea. 1 photoelectrode for electrochemical solar cell applications LP Deshmukh, GS Shahane, KM Garadkar Indian journal of pure & applied physics 35, 560-564	1997
97) Cd 1− x Zn x S thin film electrode for photoelectrochemical (PEC) applications LP Deshmukh, CB Rotti, KM Garadkar Materials chemistry and physics 50 (1), 45-49	1997
98) Structural, optical and electrical properties of indium doped CdS	1997

0. 9 Se 0. 1 thin films LP Deshmukh, GS Shahane, KM Garadkar Materials Chemistry and Physics 3 (51), 246-251	
99) Synthesis and Optical Characteristics of Solution Grown HgxCd1-xS Thin Films LP Deshmukh, KM Garadkar, GS Shahane, PP Hankare Solid State Phenomena 55, 174-176	1997
100) Structural and optical properties of Cd1-xZnxS mixed thin films LP Deshmukh, CB Rotti, KM Garadkar, PP Hankare, BM More, ... Indian journal of pure & applied physics 35 (7), 428-431	1997
101) n-Cd0. 925Pb0. 075S: Sb Photoelectrode/Electrolyte Solar Cells LP Deshmukh, BM More, KM Garadkar, GS Shahane Solid State Phenomena 55, 120-122	1997
102) Crystalline Bi2Se3 Thin Films: Growth and Properties LP Deshmukh, DS Sutrave, KM Garadkar, GS Shahane, RN Mulik Solid State Phenomena 55, 7-9	1997
103) POLYCRYSTALLINE LEAD SELENIDE THIN FILMS: GROWTH FROM SOLUTION AND PROPERT RN Mulik, CB Rotti, BM More, DS Sutrave, GS Shahane, KM Garadkar, ... Indian journal of pure & applied physics 34 (11), 903-907	1996
104) Studies on silver sulphide thin films prepared in an aqueous alkaline medium LP Deshmukh, BM More, SG Holikatti, CB Rotti, KM Garadkar, ... Bulletin of electrochemistry 12 (3-4), 151-153	1996
105) Electrical transport properties of (Cd, Zn) S thin films LP Deshmukh, CB Rotti, KM Garadkar, PP Hankare Indian journal of pure & applied physics 34 (11), 893-897	1996
106) A Study of PbxCd1-xS Based Photoelectrochemical Cells LP Deshmukh, BM More, CB Rotti, KM Garadkar, DS Sutrave Semiconductor Devices 2733, 550	1996
107) Studies on chemically deposited Sb2S3: Ag mixed thin films LP Deshmukh, SG Holikatti, CB Rotti, KM Garadkar Bulletin of electrochemistry 12 (3-4), 157-161	1996
108) Studies of chemically deposited CdS: Bi2S3 mixed thin films LP Deshmukh, SG Holikatti, BM More, CB Rotti, KM Garadkar Bulletin of electrochemistry 12 (3-4), 154-156	1996

109) Chemical Deposition of CuBiS2 Thin Films
LP Deshmukh, DS Sutrave, BM More, CB Rotti, KM Garadkar 1996
Semiconductor devices 2733, 421

12. List o Conference/ /Workshops/ Seminars attended: Best Paper Presentation to Students

1) Mr Suwarnkar M. B First Best Poster presentation in Int. Conf at Solapur : 2013
2) Mr Korake P. V. II Best Poster presentation in Nat. Conf at Pandharpur :2012
3) Mr Korake P. V. II Best Oral presentation in Nat Conf. at Pandharpur : 2013

Other Activitities

Worked as a Referee for the Assessment of Ph. D. Thesis.

1) S. P. Pune University, Pune
2) Calcutta University, Kolkata
3) RSTM University, Nagpur
4) S. G .B University, Amravati,
5) Kuvempu University, Shimoga, Karnataka,
6) Gulbarga University, Gulbarga
7) Anna University, Madras, Chennai
8) Karnataka University, Dharwad
9) BAMU, University, Aurangabad,
10) Academy of Scientific & Innovative Research, NCL, Pune
11) Bharathidasan University, Thiruchirappalli

1) Worked As Rector, Boys Hostel, Shivaji University, and Kolhapur

2) Worked as Treasurer, in the National Conference 20-21 Jan 2011.

International Collaboration

1) **DR. JINSUB PARK**
DEPARTMENT OF ELECTRONICS
HANYANG UNIVERSITY,
SOUTH KOREA

National Collaboration

1) **Prof. V. Boraskar, Prof Dhole Sanjay Department of Physics, S. P. Pune, University, Pune**
2) **R. Sasikala Chemistry Division BARC, Mumbai**
3) **Prof. Sathe , Department of Zoology, Prof. Sonwane Department of Biochemistry, Shivaji University, Kolhapur**

Prof. K. M. Garadkar Reviewer of the International Journals

1 Journal of Magnetism and Magnetic Materials (Elsevier)
2 ACS Applied Materials & Interfaces (ACS)
3 Journal of Material Science and Engineering C (Elsevier)
4 Chinese Journal of Chemistry
5 Journal of Industrial and Engineering Chemistry
6 Journal of Solution Chemistry

7 Catalysis Communications

8) Med Pub Journals

9 Scientific Reports (Nature Publishing Group)

10 Journal of Environmental Engineering ((Elsevier)

11 Journal of Optoelectronics and Advanced Materials

12 Journal of Environmental Chemical Engineering

13 Environmental Nanotechnology and Management

14 Research on Chemical Intermediates

15 Particulate Science and Technology

16 Nanoscience and Nanotechnology Letters

17 Chinese Journal of Chemical Engineering

18 Applied Catalysis B Environmental ((Elsevier)

19 Photochemistry and Photobiology , The American Society of Photobiology

20 Photonics and Nanostructures - Fundamentals and Applications

21 Indian Journal of Pure and Applied Physics

22 Journal of Materials Science (Springer)

23 Australian Journal of Chemistry

24 Materials Science in Semiconductor Processing ((Elsevier)

25 Indian Journal of Materials Science (Hindwai)

26 Journal of Materials science and Engineering A ((Elsevier)

27 Journal of Photochemistry and Photobiology B Biology ((Elsevier)

28 Journal of Photochemistry and Photobiology A Chemistry ((Elsevier)

Worked as Reviewer for various International Journals

29 Materials Science in Semiconductor Processing ((Elsevier)

30 Inorganic Materials

31 Journal of Metallurgy(Hindawi)

32 Journal of Materials Science Materials in Electronics(Springer_

33 Toxicological and Environmental Chemistry (Taylor & Francies)

34 Journal of Thermal Analysis and Calorimetry (Springer)

35 The Bulletin of the Korean Chemical Society

36 Chemical Papers (Springer)

37 Applied Surface Science (Elsevier)

38 Journal of Hazardous Materials (Elsevier)

39 Indian Journal of Material Science (CSIR)

40 Journal of the Taiwan Institute of Chemical Engineers

41 Journal of Photochemistry and Photobiology A Chemistry (Elsevier)

42 Journal of Saudi Chemical Society (Elsevier)

43 Journal of Materials Chemistry A (RSC)

44 Material Research Bulletin (Elsevier)

45 Journal of Arabian Chemistry (Elsevier)

46 Materials Chemistry and Physics (Elsevier)

47 International Journal of Hydrogen Energy (Elsevier)

48 Green Chemistry (RSC)

49 Synthesis and Reactivity in Inorganic, Metal Organic and Nano Metal Chemistry

50 Journal of Cluster Science (Springer)

51 Journal of Applied Physics: D(IOP)

52 Journal of Materials Chemistry A (RSC)

53 Journal of Materials Chemistry C (RSC)