

Resume

1.	Name -: Dr. Prashant Anil Chate
2.	Date of Birth-: 18 th July, 1977.
3.	Nationality-: Indian.
4.	Educational Qualification-: M.Sc. (Inorg. Chemistry), SET, Ph.D. D.Sc.
5.	Present Position-: Working as Asst. Prof. in J.S.M. College, Alibag-Raigad, (M.S.), India, 402 201.
6.	E-mail-: pachate04@rediffmail.com pachate09@rediffmail.com
7.	Teaching Experience-: UG and PG – 18 yrs.
8.	Research Experience-: Ph.D. (Aug. 2007). Shivaji University, Kolhapur. Title of thesis is ‘ Synthesis, Characterization and Applications of Mixed Chalcogenide Thin Films ’. 20 years research experience.
9.	Awards-: • International Einstein award, 2010, Cambridge University, England. • Top 100 Scientist award, 2010, Cambridge University, England. • Biography was selected in Who’s Who in World 2010 edition. • Man of the Year 2012, award American Biographical Institute, USA. • Nomination for ENI Award-2014. Italy. • Bharat Vidya Ratan Award-2018, International Business Council, Delhi. • International Kohinoor Award-2018, Economic Growth Foundation, Delhi • Outstanding Scientist Award-2019, VDGOD, 1st Int. Conference on Engineering, science and medicine, Chennai. • Global Teacher Award-2022, Avishkar Foundation, Solapur. • Research Excellence Award- 2023, 1st Int. Conference on Advanced Optimization Techniques and Applications (AOTA-2023), Ramgarh

	Engineering College, Jharkhand. • Research Excellence Award- 2023, Scientific International Publishing House, Tamilnadu, India. • Asia's Excellent Research Award-2023, Asia International Research Awards Congress 2023. Trichy, Tamilnadu. India.
10	Fellowship-: • Member of VDGGOOD for one year-July 2019. • Life Member (2022-23) — Academic & Research Conclave, Coimbatore, Tamilnadu India.
11.	Editorial Board Member-: • International J. Nanoscience and Nanotechnology • J. Conference Papers in Energy • International J. Advanced Nanoscience and Technology.
11.	Reviewer -: • J. of Material Science: Material in Electronics • J. of Crystal Growth • J. Alloys and Compounds • J. of Physics and Chemistry of Solids • Applied Surface Science • Material Chemistry and Physics • J. Material Processing Technology • J. Electronic Materials • J. Molecular Structure • Material Science in Semiconductor Processing • Material Letter • Ind. J. Pure and Applied Physics • Material Science and Engineering B

12.	No. of Ph.d. student guided :- 03
13.	Expert in techniques:- • X-ray diffraction and EDAX • Scanning Electron Microscopy • Optical Absorption • Two-probe Electrical Conductivity • Thermoelectric measurement • Photoelectrochemical Cells. • Transmission Electron Microscopy
14.	Research Interest:- • Thin Films • Nanomaterials • Semiconducting Materials • Mixed Oxides • Solar Cells Materials.
15.	Projects:- • University of Mumbai- Comparative studies of nanocrystalline Cd-chalcogenide CdX (X = S,Se) thin films by chemical method (2010) • UGC Minor Project – Preparation, optoelectronic characterization and photoelectrochemical studies on doped and undoped zinc selenide thin films (2010) • University of Mumbai- Synthesis, characterizations of chemically deposited CdIn₂S₄ thin films and their use in photoelectrochemical cells (2012)
16	Other:- • Working as Examiner for Inspire Award Science Exhibition- 2010-11. • Working as Examiner for Science Exhibition- 2011-12.

	• Working as national advisory board member for Int. Conference on Frontiers of Science and Technology, Dept. of Appl. Sci. KIET Group of Institution, Ghaziabad Jan-2017. • Working as Rapporteur for Int. Conference on Recent trends in science, J.S.M. College, Alibag. March-2019 • Working as national advisory board member for 3rd Int. Conference on Frontiers of Science and Technology, Dept. of Appl. Sci. KIET Group of Institution, Ghaziabad Aug-2021.
--	--

Research Publications

Title	Authors	Journal	Vol	Year	Page No.	Impact Factor	Cit. Index
A novel route to synthesize $Cd_{1-x}Pb_xSe$ thin films from solution phase	P.P.Hankare, S.D.Delekar, P.A.Chate , S.D.Sabane, K.M.Garadkar, V.M.Bhuse	<i>Semicond. Sci. Technol.</i>	20	2005	257	1.90	55
Structural and opto-electrical properties of molybdenum diselenide thin films deposited by chemical bath deposition	P.P.Hankare, P.A.Chate , S.D.Delekar, V.M.Bhuse, M.R.Asabe, B.V.Jadhav, K.M.Garadkar	<i>Crystal Growth</i>	291	2006	40	1.80	35
Characterization of $Cd_{1-x}Zn_xSe$ thin films deposited at low temperature by chemical route	P.P.Hankare, P.A.Chate , M.R.Asabe, S.D.Delekar, I.S.Mulla, K.M.Garadkar	<i>Mater. Sci.: Mater. Electron.</i>	17	2006	1055	2.80	55
Novel chemical synthetic route and characterization of zinc selenide thin films	P.P.Hankare, P.A.Chate , S.D.Delekar, M.R.Asabe, I.S. Mulla	<i>Physics and Chemistry of Solid</i>	67	2006	2310	4.00	43
Synthesis of Cadmium Selenide thin films at low-temperature by simple Chemical route and their Characterization	P.P.Hankare, S.D.Delekar, M.R.Asabe, P.A.Chate , V.M.Bhuse, A.S.Khomane, K.M.Garadkar, B.D.Sarwade	<i>Physics and Chemistry of Solids</i>	67	2006	2506	4.00	99
Synthesis, characterization of chemically deposited indium selenide thin films at room temperature	M.R. Asabe, P.A. Chate , S.D. Delekar, K.M. Garadkar, I.S. Mulla, P.P. Hankare	<i>Physics and Chemistry of Solids</i>	69	2008	249	4.00	34

Chemical deposition of ZnSe thin films: Photoelectrochemical applications	P.P. Hankare, P.A. Chate , P.A. Chavan, D.J. Sathe	<i>Alloys and Compound</i>	461	2008	623	6.20	51
Synthesis and characterization of tin sulphide thin films grown by chemical bath deposition technique	P.P. Hankare, A.V. Jadhav, P.A. Chate , K.C. Rathod, P.A. Chavan, S.A. Ingole	<i>Alloys and Compound</i>	463	2008	581	6.20	76
Comparative study of zinc selenide photoelectrode annealed at different temperature	P.P. Hankare, P.A. Chate , D.J. Sathe, M.R. Asabe B.V.Jadhav	<i>Solid State Sciences</i>	10	2008	1970	3.50	13
Structural, optical and microscopic properties of chemically deposited In ₂ Se ₃ thin films	P.P.Hankare, <u>M. R. Asabe</u> , P.A.Chate <u>K. C. Rathod</u>	<i>Mater. Sci.: Mater. Electron.</i>	19	2008	1252	2.80	20
Characterization of MoSe ₂ thin film deposited at room temperature from solution phase	P.P. Hankare, A.A. Patil, P.A. Chate, K.M. Garadkar, D.J. Sathe, A.H. Manikshete, I.S. Mulla	<i>Crystal Growth</i>	311	2008	15	1.80	38
Preparation of copper selenide thin films by simple chemical route at low temperature and their characterization	P.P. Hankare, A.S. Khomane, P.A. Chate , K.C. Rathod, K.M. Garadkar	<i>Alloys and Compound</i>	469	2009	478	6.20	66
Effect of thermal annealing on properties of zinc selenide thin films deposited by chemical bath deposition	P. P. Hankare, P. A Chate , D J Sathe, P A Chavan, V M Bhuse,	<i>Mater. Sci.: Mater. Electron.</i>	20	2009	374	2.80	114
Photoelectrochemical studies of CdSe thin films deposited by dip method	P.P. Hankare, P.A. Chate , D.J. Sathe, M.R. Asabe, B.V. Jadhav	<i>Alloys and Compound</i>	474	2009	347	6.20	10

Novel chemical synthetic route and characterization of tungsten diselenide thin films	P.P. Hankare, A.H. Manikshete, D.J. Sathe, P.A. Chate , K.C. Rathod	<i>Materials Chemistry and Physics</i>	113	2009	183	4.60	25
Photoelectrochemical characterization of annealed cadmium selenide photoelectrode using sulphide–polysulphide electrolyte	P.P. Hankare, P.A. Chate , D.J. Sathe	<i>Physics and Chemistry of Solids</i>	70	2009	655	4.00	6
WS ₂ thin films: Opto-electronic characterization	P.P. Hankare, A.H. Manikshete, D.J. Sathe, P.A. Chate , A.A. Patil, K.M. Garadkar	<i>Alloys and Compound</i>	479	2009	657	6.20	49
CdS thin film: synthesis and characterization	P.P. Hankare, P.A. Chate , D.J. Sathe	<i>Solid State Science</i>	11	2009	1226	3.50	50
Effect of air annealing on structural, optical, microscopic, electrical properties of cadmium selenide thin films	<u>P. P. Hankare</u> , P.A.Chate , <u>D. J. Sathe</u> , <u>A. A. Patil</u>	<i>Mater. Sci.: Mater. Electron</i>	20	2009	776	2.80	15
A novel route of synthesis of WS ₂ thin film and its characterization	P.P.Hankare, A.H.Manikshete D.J.Sathe, P.A.Chate , A.A.Patil, K.M. Garadkar	<i>Crystal Growth</i>	311	2009	3386	1.80	7
Effect of indium doping on photoelectrochemical properties of Cd _{0.9} Zn _{0.1} Se photosensitive films	P.P.Hankare, P.A.Chate , D.J.Sathe	<i>Physica B</i>	404	2009	2389	2.80	9
Growth and characterization of WS ₂ thin films deposited by dip	P.P.Hankare, P.A.Chate	<i>Materials Chemistry and Physics</i>	117	2009	347	4.60	10

method							
Structure, surface morphological and opto-electronic properties of zinc sulphide thin films deposited by dip method	P.P. Hankare, P.A. Chate, D.J. Sathe, A.A. Patil	<i>Applied Surface Science</i>	256	2009	81	6.70	23
Zinc sulphide semiconductor electrode synthesis and the photoelectrochemical application	P.P. Hankare, P.A. Chate, D.J. Sathe	<i>Alloys and Compound</i>	487	2009	367	6.20	16
MoS ₂ : Preparation and their characterization	K.M. Garadkar, A.A. Patil, P.P. Hankare, P.A. Chate, D.J. Sathe, S.D. Delekar	<i>Alloys and Compound</i>	487	2009	786	6.20	102
Effect of temperature on various properties of photoelectrochemical cell	P.P. Hankare, P.A. Chate, D.J. Sathe, B.V. Jadhav	<i>Alloys and Compound</i>	490	2010	350	6.20	6
Synthesis and characterization of nickel selenide thin films deposited by chemical method	P.P. Hankare, B.V. Jadhav, K.M. Garadkar, P.A. Chate, I.S. Mulla, S.D. Delekar	<i>Alloys and Compound</i>	490	2010	228	6.20	64
Structural, optical and microscopic studies of tungsten substituted molybdenum diselenide thin films	D.J. Sathe, P.P. Hankare, A.H. Manikshete, P.A. Chate, A.A. Patil	<i>Alloys and Compound</i>	499	2010	187	6.20	17
Preparation and characterization of CuInSe ₂ thin films by chemical bath deposition technique	P.P. Hankare, K.C. Rathod, P.A. Chate, A.V. Jadhav, I.S. Mulla	<i>Alloys and Compound</i>	500	2010	78	6.20	36

Structural, optical and microscopic properties of chemically deposited $\text{Mo}_{0.5}\text{W}_{0.5}\text{Se}_2$ thin films	P. P. Hankare, A.H. Manikshete, D. J. Sathe, P. A. Chate	<i>Mater. Sci.: Mater. Electron.</i>	21	2010	698	2.80	13
X-ray and optical properties of chemically deposited nanocrystalline CdSe thin films	P.P.Hankare, P.A.Chate , D.J.Sathe, B.V.Jadhav	<i>Alloys and Compound</i>	503	2010	220	6.20	29
Effect of Indium doping on (CdZn)Se composite thin films	P.P.Hankare, P.A.Chate , D.J.Sathe	<i>Alloys and Compound</i>	505	2010	259	6.20	16
Characterization of cadmium selenide films for photovoltaic applications	P.P.Hankare, P.A.Chate , D.J.Sathe	<i>Alloys and Compound</i>	505	2010	140	6.20	38
n-Type polycrystalline (CdZn)Se photoelectrode synthesis and its photoelectrochemical characterizations	P.A.Chate P.P.Hankare, D.J.Sathe	<i>Alloys and Compound</i>	506	2010	673	6.20	11
<u>Electrical and crystallographic properties of nanocrystalline $\text{CdSe}_{0.5}\text{S}_{0.5}$ composite thin films deposited by dip method</u>	P.A.Chate , D.J.Sathe, P.P.Hankare	<i>Mater. Sci.: Mater. Electron.</i>	22	2011	111	2.80	24
Synthesis and characterization of chemically deposited nickel substituted CdSe thin film	P.P. Hankare, B.V. Jadhav, P.A. Chate , D.J. Sathe, I.S. Mulla	<i>Alloys and Compound</i>	509	2011	2948	6.20	11
Growth and characteristics of Zn–Se–S thin layers by dip method	P.A.Chate , D.J.Sathe, P.P.Hankare	<i>Alloys and Compound</i>	509	2011	9425	6.20	10

Chemical deposition of CuInSe ₂ thin films by photoelectrochemical applications	P.P. Hankare, K.C. Rathod, P.A. Chate , K.M. Garadkar, D.J. Sathe, I.S. Mulla	<i>Alloys and Compound</i>	511	2012	50	6.20	6
Synthesis and characterization of cubic cadmium selenide by chemical route	P.A. Chate , D.J. Sathe, P.P. Hankare, S.D. Lakade, V.D. Bhabad	<i>Alloys and Compound</i>	552	2013	40	6.20	26
Synthesis, optoelectronic properties and photoelectrochemical performance of CdS thin films	P.A.Chate S.S.Patil, J.S.Patil, D.J.Sathe, P.P.Hankare	<i>Physica B</i>	411	2013	118	2.80	27
A novel route for synthesis, characterization of molybdenum diselenide thin films and their photovoltaic applications	D.J.Sathe, P.A. Chate , P P. Hankare, A H Manikshete, A S Aswar	<i>Mater. Sci.: Mater. Electron</i>	24	2013	438	2.80	13
Electrical, optical and morphological properties of chemically deposited nanostructured tungsten disulphide thin films	P.A.Chate , D.J.Sathe, P.P.Hankare	<i>Appl. Nanosci.</i>	3	2013	19	3.869	22
Nanocrystalline CdSe: Structural and photoelectrochemical characterization	P.A.Chate , S.S.Patil, J.S.Patil, D.J.Sathe, P.P.Hankare	<i>Electron. Mater. Lett.</i>	8	2013	553	2.40	18
Structural, compositional, thermoelectrical and photoelectrochemical properties of CdSe thin films	P.A.Chate D.J.Sathe, P.P.Hankare U.B.Sankpal	<i>Mater. Sci.: Mater. Electron</i>	24	2013	2000	2.80	10

Studies on hexagonal cadmium selenide thin film deposited by chemical route using ascorbic acid	S. L. Hake, P. A. Chate , D. J. Sathe, P. P. Hankare, V. M. Bhuse	<i>Mater. Sci.: Mater. Electron</i>	25	2014	811	2.80	13
Chemical deposition of (311) textured CdIn ₂ S ₄ thin films	P. A. Chate , D. J. Sathe, P. P. Hankare	<i>Mater. Sci.: Mater. Electron</i>	25	2014	2292	2.80	5
Electrical, optical and structural properties of rod shaped Bi ₂ S ₃ thin films deposited by dip technique.	P.A.Chate S.D.Lakde	<i>Mater. Sci.: Mater. Electron</i>	26	2015	5847	2.80	10
Hexagonal nanosized molybdenum diselenide thin film deposited at 333 K by chemical method.	D.J.Sathe, P.A.Chate	<i>Solid State Science</i>	48	2015	19	3.50	10
Characteristics of Sb ₂ S ₃ Thin Films Deposited by a Chemical Method	P. A. Chate, S. D. Lakde	<i>Int. J. Thin. Fil. Sci. Tec.</i>	4	2015	237	0.71	13
β-In ₂ S ₃ : Structural, optical, electrical and photoelectrochemical properties	P.A.Chate, D.J.Sathe, P.P.Hankare, S.D.Lakade, V.D.Bhabad	Optik	126	2015	5715	3.10	6
Structural, opto-electronic and photoelectrochemical properties of tungsten diselenide thin films	D.J.Sathe, P.A.Chate , P.P.Hankare, A.H.Manikshete U.B.Sankpal	<i>Appl. Nanosci.</i>	6	2016	191	3.869	4
<u>Properties of chemically-deposited nanocrystalline MoS₂ thin films</u>	D.J Sathe, P.A. Chate, S.B. Sargar, S.V. Kite, Z.D. Sande	<i>Mater. Sci.: Mater. Electron</i>	27	2016	3834	2.80	12

Structural, electrical and thermoelectrical analysis of nickel sulphide thin films	P.A. Chate, D.J. Sathe	<i>Appl. Phys. A</i>	122	2016	600	2.70	12
Synthesis and characterization of MoS ₂ thin films deposited by automatic CBD method	S.B Sargar, D.J. Sathe, P.A. Chate, Z.D. Sandi, S.V. Kite	<i>Int. J. Scientific Res. Edu.</i>	4	2016	5455	----	5
Properties of cadmium selenide thin films deposited by dip method	P. A. Chate, V. D. Bhabad	<i>Int. J. Thin. Fil. Sci. Tec.</i>	5	2016	163	0.710	2
Aluminum doped CdSe thin films: Structural characterization	P. A. Chate, V. D. Bhabad	<i>Int. J. Modern Trends Sci. Techno.</i>	2	2016	6	---	8
A novel method for the deposition of polycrystalline Sb ₂ S ₃ thin films.	P.A .Chate, D.J. Sathe, S.D. Lakde, V.D. Bhabad	<i>Mater. Sci.: Mater. Electron</i>	27	2016	12599	2.80	3
Effect of annealing temperature on properties of molybdenum disulfide thin films.	S.V. Kite, P.A.Chate, K.M.Garadkar, D.J.Sathe	<i>Mater. Sci.: Mater. Electron</i>	28	2017	16148	2.80	12
Optical and morphological studies of aluminum doped cadmium selenide thin films	P.A.Chate, V.D.Bhabad	<i>Mater. Sci.: Mater. Electron</i>	28	2017	16813	2.80	1
Nanostructural, magnetic and electronic transport properties of Cu-Zn mixed ferrimagnetite	U.B. Sankpal, K.V. Sukhatankar, P.A.Chate, D.J.Sathe	<i>Chemical Phys. Lett.</i>	739	2020	137032	2.80	---

Chemical deposition of bismuth sulphide thin films using malonic acid ligand	R.S.Lokhande, S.R.Thakur, P.A.Chate	<i>Mater. Sci.: Mater. Electron</i>	31	2020	11095	2.80	8
Structural, optical and thermoelectric studies on chemically synthesized annealed antimony sulphide thin films	P.A.Chate, S.D.Lakde, D.J.Sathe	<i>Optik</i>	250	2022	168296	3.10	9
Nickel selenide thin films: opto-electric and thermoelectric properties	P.A.Chate, D.J.Sathe, S.L. Hake	<i>Appl. Phys. A</i>	128	2022	904	2.70	---