

## CURRICULUM VITAE (C.V.)



Name : **Dr. MRUDULA PRASAD WADEKAR**  
Present Designation : Assistant Professor (Chemistry)  
Contact : m\_p\_wadekar@yahoo.co.in

**Educational Qualifications** : M.Sc, Ph.D. Post.Doc (CSIR RA)

Degree	Year	Subject	Grade	University
B.Sc	1992	Chemistry	First class with Distinction	Pune University
M.Sc	1994	Inorganic Chemistry	First class	Pune University
Ph.D	2000	Coordination and Analytical Chemistry		Pune University
Post Doctoral Experience as Research Associate (CSIR)	2001-2006	Chemistry and Ayurveda		National Chemical Laboratory (Pune)
Worked as project Associate in URDIP(CSIR) Pune.	Jan16 2007- April	Project:- "Preparation of Data base on Metallopharmaceuticals" sponsored by DSIR, Gov of India.		

### Teaching Experience:

**Post-Graduate Level:** 10 years (M.Sc Inorganic and Analytical Chemistry)

**Research Experience :** 15 years

**Area of Specialization:** Inorganic; Coordination & Analytical Chemistry, Traditional Drugs

**i) Major and Minor Researchs Completed: Three**

**a) Research Project for Post Doctorate:**

Type of project	Funding agency	Place of work	Duration
Worked as 'Research Associate', CSIR, Delhi for Post Doctoral Work.  Chemical characterization of metal oxide based medicines (Ayurvedic bhasmas) using modern analytical techniques.	CSIR ,Delhi	National Chemical Laboratory, Pune.	2001-2006

**b) Major Research Project:**

Type of project	Amount Sanctioned	Funding agency	Place of work	Duration
Major Research Project On Structural and Biological properties of Metal Complexes.	7,04300/-	UGC ,Delhi	Bharati Vidyapeeth Deemed University, Yashwantrao Mohite College, Pune-38	2011-2014.

**c) Minor Research Project:**

Type of project	Amount Sanctioned	Funding agency	Place of work	Duration
Synthesis, Characterization and Antimicrobial Studies of some Lanthanide Chelates.	40, 000	BVDU, Pune	Bharati Vidyapeeth Deemed University, Yashwantrao Mohite College, Pune-38	2013-2014.

**ii) Ph. Ds successfully completed under the supervision and guidance: (02)**

<b>Sr.No</b>	<b>Name of the Scholar</b>	<b>Topic</b>	<b>Date of Declaration</b>
1	Pritamkumar V. Shinde	Synthesis, Characterization and Antimicrobial Studies of Isomeric Juglonates of Yttrium (III), Samarium (III) and Gadolinium (III).	07-09-2016
2.	Mrs Sonali V. Dhamal	Chemical and Biolomedical Investigations of some Ayurvedic Drugs of Marin and Mineral origin	25-07-2015

**iii) Ph. D. Scholars registered for the supervision and guidance: (02)**

<b>Sr.No</b>	<b>Name of the Scholar</b>	<b>Topic</b>	<b>Date of Registration</b>
1	Vishwambhar P Shinde	Synthesis Characterization and Biological studies of some Isomeric Lanthanide Juglonates	31-10-2012
2	Abhaysingh S. Kadam	Structural and Biological investigations of some Isomeric Lanthanide Juglonates.	22-10-2013

**iv) Number of M.Sc Students Guided for Post Grajuation Projects: (20)**

**Awards and Honors:**

**i) Best research paper award**

<b>Title of Award</b>	<b>Name of Organization</b>	<b>Title of Research Paper</b>	<b>Name of the Conference</b>	<b>Date</b>
Best research paper award for Poster	DIAT, Pune	Paper entitled ,Synthesis, Characterization and biological studies of Selenium based Ayurvedic drug Chapal bhasma	National Conference on chemistry of chalcogens(NC <sup>3</sup> -2017) organized by DIAT, Pune	12/13-01-2017
Best research	Annasaheb	Ring Isomerism	International	9 to 10-02-2016

paper award for Poster	Magar Mahavidyalaya, Hadapasar, Pune-411028.	in Isomeric Metal Juglonates and Its Effect on their structural and biological properties.	conference on innovative trends in chemical, physical and biosciences 2016(ITCTB)	
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**ii) Worked as BOS member of Science Faculty: 5yrs**

**PUBLICATIONS :**

**NUMBER OF RESERCH PAPERS PUBLISHED IN JOURNALS – 20**

**(a) *Research papers published in National Journals : (8)***

- 1 Synthesis and characterization of Ho (III) chelates of some juglones.,Indian J. Chem.37(A) 915,1998.,V.D. Kelkar, H.R. Gholap, R.R. Gokhale and M.B.Kulkarni(Wadekar).
- 2 Pharmacological properties of isomeric juglones on the isolated frog heart Indian J. Pharmacol. 31,222,1999.,S.H. Bhosale, S.L. Bodhankar, M.B. Kulkarni, B.A. Kulkarni
- 3 Antibacterial activity of 3 nitrolawsone oximes and 3 aminolawsone oxime and their bivalent metal chelates.,Indian J. Pharmaceutical Sc. 31: 222-224,1999; R.B. Mhaske, Mrudula Kulkarni, S.B. Joshi, V.G. Kshirsagar and S.D. Pradhan
- 4 Characterization of Raupya Bhasma by using modern analytical techniques Journal of Indian Medicine and Homeopathy Vol. 3 No4, 37, 2004.Mrudula Kulkarni, G.T. Panse, B.A. Kulkarni and Yogesh Bendale.
- 5 Comparative study of some commercial samples of Naga Bhasma. Ancient Science of Life Vol 23 No 4 , 48, 2004 Mrudula Wadekar, Viswas Gogte, Prasad Khandagale and Asmita Prabhune.
- 6 Synthesis, Characterization and XRD Investigations of Cadmium (II) Phthiocol Monoximate.Bharati Vidyapeeth Deemed University Research Journal, 2010Vol.8.
- 7 No.2 PP.72-73, M.P.Wadekar, V. V. Dhapte, B. L. Khade, S. T. Takale, V.B. Jadhav and A. B. Pawar.
- 8 Public communication of Woman Scientists contribution to human welfare through Postal stamps, Environmental Observer,Vol 14, 2013, 150-151, Umesh Kulkarni, V.S. Mugade, N.B. Dahibhate, Mrudula Wadekar and Meera Deshmukh.

**(b) *Research Papers Published in International Journals ( 12)***

- 9 Synthesis spectral and XRD studies on isomeric chelates of Sr(II) and Ba(II) with phthiocol and plumbagin,.Asian Journal of Chemistry, 16, 1630-1636, 2004.,D.G. Kanse,

Mrudula wadekar, S.S. Kadam, V.D. Kelkar, R.S. Uppadhye.

- 10 Study of effect of calcination cycles on the preparation of tin based traditional drug: Studies on its formation and characterization Journal of Pharmaceutical and Biomedical Analysis. 41, (2006) 1473-1478.,M.P. Wadekar, C.V. Rode, Y.N. Bendale, K.R. Patil, A. B. Gaikwad, A.A. Prabhune.
- 11 Spectral and theoretical investigation on 2- hydroxy- 1,4-naphthoquinone (Lawson). A.B. Pawar , K.D. Jadhav, M.P. Wadekar, and R.G. Sarawadekar,Journal of Pharmacy Research, Vol 4, No. 6,1745-1747, (2011).,(Impact factor-2.33) ISSN-NO 0974-6943
- 12 Spectral,XRD and Antimicrobial studies on Isomeric chelates of Magnesium(II) and Calcium(II) with phthiocol and plubagin., Mrudula P. Wadekar, Monali Itkar, Pritam Shinde,B.L. Khade.,International Journal of Chemical and Analytical Sciences., November, 2012,3(11), 1606-1610. (Impact Factor-0.49) ISSN NO-: 0976-1209.
- 13 Chemical Investigations of some commercial samples of calcium based Ayurvedic Drug of Marine Origin:KapardiKa-Bhasma, Sonali Dhamal, M.P.Wadekar , B.A.Kulkarni, V.V.Dhapte, IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) Volume 6, Issue 4 (May. –Jun. 2013) e-ISSN: 2278-3008, p-ISSN:2319-7676.
- 14 Effect of Ring Isomerism on Spectral and Antimicrobial Studies of Sm (III) Juglonates Pritam Shinde, Smita Nilakhe, Vishwambhar Shinde, B.A. Kulkarni, V.R. Sapre, M. P. Wadekar, IOSR Journal of Applied Chemistry (IOSR-JAC) e-ISSN: 22785736.Volume 7, Issue 3 Ver. I. (Apr. 2014), PP 33-40 .
- 15 Chemical Basis for the Traditional Test used for Loha Bhasma, Mrudula P. Wadekar, Shivaji Takale, Rupali Lad, Sonali Dhamal and B.A. Kulkarni, Asian Journal of Multidisciplinary Studies.Vol.2, Issue 7(July 2014), e- ISSN:2321-8819, p-ISSN:2348-7186, (Impact Factor: 0.923)
- 16 Structural, thermal and antifungal activity studies of isomeric Sm(III)Juglonates, Pritamkumar V. Shinde and Mrudula P. Wadekar, Der Pharma Chemica, 2015, 7(11):231-239
- 17 V.P. Shinde, A.S. Kadam , P.V.Shinde and M.P. Wadekar, Spectral and antibacterial studies of isomeric Tb(III) Juglonates ,Der Pharmacia Lettre, 2016, 8 (17),7-13.
- 18 Spectral and Biological investigations of Nd(III) Juglonates ,Abhaysinh S. Kadam and Mrudula P. Wadekar., IOSR Journal Of Pharmacy (e)-ISSN: 2250-3013, (p)-ISSN: 2319-4219 Volume 7, Issue 8 Version. 1 (August 2017), PP. 16-23
- 19 Vishwambhar P. Shinde, and Mrudula P. Wadekar, Spectral and antibacterial investigations of Er(III) Juglonates, International Journal of ChemTech Research 2017, 10 (3), 740-748.

- 20 Spectral and Biological investigations of Nd(III) Juglonates ,Abhaysinh S. Kadam and Mrudula P. Wadekar., IOSR Journal Of Pharmacy (e)-ISSN: 2250-3013, (p)-ISSN: 2319-4219 Volume 7, Issue 8 Version. 1 (August 2017), PP. 16-23

***Papers published in Conference Proceedings: (Two)***

- “Solid state charge transfer nanochelates of Isomeric phthiocolates and plumbaginatates”.,M.P. Wadekar, B.L.Khade, Monali ITkar, P.S. Khandagale, V.B. Jadhav, V.V. Dhapte, P.K. Khanna., Nanobio Materials Synthesis And Chatacterization (ISBN: 978-93-82563-36-5) published in international conference MAM-2012 at Coimbatoor.India.
- Importance of Patents for the ranking of different countries according to their status in scientific research, S.T. Takale, Umesh Kulkarni, V.S. Mugade, M.P. Wadekar, N.B. Dahibhate. Proceedinds of National seminar on changing in library and information science,pp 7-11, Dec 2015 at Dr. Patangrao Kadam Mahavidyalaya, Sangli.

**The Workshops/ Conferences/ Seminars and Refresher/ Orientation courses attended/ participated:**

**Number of National and International Conference/Workshops/Seminars attended: 22**

- 1 Utility of Phthiocol as an Acid –Base Indicator. Mrudula Kulkarni ,R.B.Mhaske and B.A. Kulkarni., 33rd Annual Convention of Chemists ,Indian Chemical Society,Coimbator (1996 ).
- 2 PH Cromic Reactions of some juglones of Biological importance, Mrudula Kulkarni ,R.B.Mhaske and B.A. Kulkarni.,IUPAC International Conference on Chemical and Biological -Thermodynamics ,Amritsar ( India ) p. 18 ( 1997 )
- 3 Fifth IUPAC International Symposium on Bio-organic Chemistry. ISBOC-5 (30 Jan -4 Feb 2000 ). National Chemical Laboratory.
- 4 XXXIII National Seminar On Crystallography (8-10 January 2004) at National Chemical Laboratory ,Pune.
- 5 Material Characterization and Testing ( WMCT 2004 ) workshop organized by C-MET ,Pune on 4<sup>th</sup> February 2004 .
- 6 Standardization and chemical interpretation of the traditional curd test for TAMRA Bhasma. Mrudula Wadekar, Yogesh Bendale, Pratibha Jadhav and Asmita Prabhune. National Symposium on Designing the Molecular world through chemistry .

Varanasi B.H.U. , March 24-25,2006 (poster presentation )

- 7 Validity of Imparting Organic Component to metallic Bhasmas through the Process of Bhasmikaarana. Mrudula Wadekar , A.B.Gaikawad ,B.A.Kulkarni, ,and Asmita Prabhune. 2<sup>nd</sup> World Ayurveda Congress and Arogya 2006.
- 8 The paper entitled “Effect of isomerism and Chelation on the Antimicrobial Activity of the active constituents Phthiocol and Plumbagin” presented (as poster) in International Conference on “Current Trends in Medicinal Plant Research” held at Department of Botany, University of Pune, Pune (10-12 Jan. 2012).
9. The paper entitled “Effect of Chelation and isomerism on antimicrobial activity of copper(II) Chelates of isomeric Juglones.” Presented(as poster) in “Expanding Horizon in Chemical and Biological sciences” held at School of Chemical Sciences, Solapur University (21-24 Jan 2012).
- 10 The paper entitled “Chemical and Structural Characterization of Iron Oxide Nanoparticles synthesized via Ayurvedic Technique” Presented(as poster) in 1<sup>st</sup> International Conference on Functional materials for Defence 2012, ICFMD-2012 held at Defence Institute of Advanced Technology (DIAT), Girinagar, Pune-25 (May 18-20, 2012)
11. The paper entitled “Preparation, Characterization and analytical applications of Thiosemicarbazone derivatives of Lawsone” presented( as poster) in National Conference on Chemistry of Chalcogens (NC<sup>3</sup>-2013) page No-37, Poster No-PP 4 held at Defence Institute of Advanced Technology (DIAT), Girinagar, Pune-25 (14-15 January 2013).
12. Reinvestigation of Biosalts-Traditionally known as Ayurvedic Kshars-Isolated from Medicinal Plants from Modern Scientific Approach., International conference on “Current trends in Medicinal Plant Research” held at Dept of Botany, Pune University Pune. (10-12 Jan 2012) Page-66.
13. Application of the technique of *BHASMİKARNA* to synthesis nanometric carbon based Ayurvedic drug *HIRAKA BHASMA*, ) Expanding Horizons in Chemical and Biological Sciences Solapur held at School of Chemical Sciences, Solapur University, Solapur.(21-24 Jan 2012.) PP-121.
14. Comparative study of Calcium based Ayurvedic drug *KAPARDIKA BHASMA* and pure Calcium Carbonate., Expanding Horizons in Chemical and Biological Sciences Solapur held at School of Chemical Sciences, Solapur University, Solapur.(21-24 Jan 2012.) PP-151.

15. Role of Nano and Bio Sciences in the Reinvestigations of Metal Based Ayurvedic bhasmas as regenerative drugs. Second International Conference Nanotechnology at the biomedical interface held at Amrita Center for Nanoscience and Molecular Medicine, Kochi, Kerala.(21-23 Feb 2012) abstract no- MDN-107.
16. Role of sulphur and sulphur compounds in the synthesis of Metal based Ayurvedic Drugs., National Conference on Chemistry of Chalcogens”. Defence Institute of Advanced Technology Girinagar Pune (Jan 14-15 2013) Page no-38.
17. Synthesis, characterization and antimicrobial studies of isomeric Terbium(III) phthiocolates and plumbaginate. Abstract No:P-16, International conference on structural and inorganic NCL and IISER, Pune.c chemistry, December-4-5, 2014.
18. Ring Isomerism in Isomeric Metal Juglonates and Its Effect on their structural and biological properties. International conference on innovative trends in chemical, physical and biosciences 2016(ITCTB) dated 9 to 10-02-2016, Venue: Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-411028. (Best Poster Award)
19. Establishment of a novel series of solid state charge transfer complexes based on nontransitional metal complexes, XXXV Annual conference, Indian Council of Chemists at Haribhai V Desai College, Pune in association with College of Engineering, Pune dated 22/24-12- 2016.
20. Synthesis, Characterization and biological studies of Selenium based Ayurvedic drug Chapal bhasma, National Conference on chemistry of chalcogens(NC<sup>3</sup>-2017) at DIAT Pune dated 12/13-01- 2017.(Best Research paper award).
21. pH chromic reactions of Isomeric Phthiocol and Plumbagin and their analytical applications, National Conference on chemistry of chalcogens(NC<sup>3</sup>-2017), at DIAT Pune dated 12/13-01- 2017.(Best Research paper award).
22. Chemical characterization of Ayurvedic drug Shautika bhasma, National conference on Technical Revolution(NCTR-2017), S.P. Pune University, Pune and Anandrao Pawar College of Engineering and Research, Pune, Pune on 16/17 February 2017.