



Dr. Pratima Tatke

Principal I/C
Professor of Pharmaceutical Chemistry
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Subjects taught/ presently teaching:

- Pharmaceutical Chemistry
- Biotechnology
- Pharmaceutical Analysis
- Biochemistry

Areas of Research Interest:

- Phytochemistry
- HPLC/HPTLC method development and Validation for phytomarkers
- Standardization of Herbal Products,
- Bioactivity guided fractionation and isolation of Phytomarkers
- Phytopharmacology

Publications:

- Chapters contributed in Books- 02
- Papers published-48 (Annexure I)
- Research Articles International: 29, National: 16
- Review Articles: International: 02, National: 01

Whether Guide at PhD/M. Phil Universities for which registered as guide:

Registered PhD Guide at

- **SNDT Women's University**
- Vinayaka Mission University

Patents filed:

- Indian patents: Granted - 02, Filed - 02
- International Patents: Filed - 01, PCT filing- 02

Annexure I

BOOKS PUBLISHED:

- ❖ Contributed a CHAPTER entitled "Extraction, isolation, characterization of phytopharmaceuticals" co-authored by Dr. Lal Hingorani in the book on **"Phytopharmaceuticals"**.

The details of the book and publisher are as given below:

Date of Book Release : November 2014

Editor : Dr. Mrs. Nilima A. Kshirsagar, National Chair Clinical Pharmacology,

ICMR Govt. of India, Dean, ESI-PGIMSIR Govt. of India, MGM Hospital, Dr.S.S. Rao Road, Parel, Mumbai-400 012, India

Co-Editor : Dr.Priyanka Jadhav, Ph.D.(Pharmaceutical Medicine), Gainesville, Florida, USA.

- ❖ Contributed a CHAPTER entitled "Characterization of betaine from Seeds" co-authored by Ms. Priti Patil in the book on **"Betaine: Chemistry, Analysis, Function and Effects"**. This book is one from the series of books titled, Food and Nutritional Components in Focus.

The names of editor and publishers are as given below:

Editor : Prof. Dr. Victor Preedy, King's College of London, London, UK.

Publishers : RSC Publishing, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge CB4 0WF, United Kingdom

PAPERS PUBLISHED:

Total: 48

Research Articles: International - 29, National - 16

Review Articles: International - 02, National - 01

Original Research

National

1. Pratima D. Pathak, A.V.Damle, H.P.Tipnis, N.G.S.Gopal, "Decontamination of Rauwolfia and Liquorice by Gamma Radiation". *Indian Drugs*, vol 25(5), pp 200-203, 1988
2. Pratima Tatke and S.Y.Gabhe, "Phytochemical Investigations of *Achyranthes aspera* Linn" in the *Indian Journal of Natural Products*, Vol 15 (2), pp 26-28, Dec. 1999.
3. S.S.Mundhada, Tatke P.A., M.K.Rehman, "Antimicrobial Activity of an Ayurvedic Formulation-Hyderbi Tablet" in *Ancient Science of Life*, XXI(4), pp 240-243, Sep 2002. (Impact factor: 0.572)
4. S.S.Mundhada, Tatke P.A., "Preliminary Phytochemical Investigation and Antimicrobial Activity of fruits of *Mimusops elengi* Linn", *Indian Drugs*, 42(7), pp 417-423, 2005.
5. A.K.Phadnis, Pratima Tatke, Kamalinder K. Singh, "Antimicrobial Activity of bark of *Acacia nilotica* Linn." *Indian Journal of Natural Products*, Vol XXII (1), pp 24-25, Mar 2006.
6. S.Y.Gabhe, Pratima Tatke, Tabassum A.Khan,, "Evaluation of immunomodulatory activity of the methanol extract of the roots of *Ficus benghalensis* in rats", *Indian Journal of Pharmacology*, Vol 38 (4), pp 271-275, Aug 2006. (Impact factor: 0.583)
7. Heeshma C.Shah, Pratima Tatke, Kamalinder K. Singh, "Antifertility Activity of Dried Flowers of *Woodfordia fruticosa* Kurz", *Indian Journal of Pharmaceutical Sciences (IJPS)*, 68(4), 528-529, 2006. (Impact factor: 0.338)
8. Murudkar A., Mundhada S.S., Tatke P.A., "Antibacterial Activity of *Mimusops Elengi* Linn Bark Against Dental Pathogens". *Indian Journal of Pharmaceutical, Education and Research (IJPER)*, 41(01), 2007
9. Tabassum A.Khan,, Pratima Tatke, S.Y.Gabhe , Immunological studies on the aerial roots of the Indian Banyan" ***Indian Journal of Pharmaceutical Sciences (IJPS)*** entitled, 18, 287, May-June 2008. (Impact factor: 0.338)
10. Heeshma C.Shah, Vinayak Naik, Pratima Tatke, Kamalinder K. Singh "Pharmacognostical Studies of Roots of *Albizia lebbek* (L.) Benth.," *Indian Journal of Natural Products* 2009, 25(2), pp. 10-15.

11. Yogini S.Jaiswal, Pratima A.Tatke, Satish Y.Gabhe, Ashok B.Vaidya, Antioxidant activity of leaves of *Anacardium occidentale* Linn. *Indian Journal of Natural Products* , 2010, XXVI (4), 17-22,
12. Yogini S.Jaiswal, I.S.R.Nidhiya, Pratima A.Tatke, Satish Y.Gabhe, Ashok B.Vaidya, "Application of Microwave assisted extraction for fast Extraction of Catechin from Leaves of *Anacardium occidentale* L. (Cashew)", *Journal Of Medicinal And Aromatic Plant Sciences* 32 (4) (2010) 187-192
13. Preeti Kulkarni, Sonal Desai, Pratima Tatke, and S.Y. Gabhe, "Simultaneous Estimation of Anions Present in Oral Rehydration Salt Ion Chromatography and Its Method Validation", *Indian Journal of Pharmaceutical Education and Research (IJPER)*, 2013; 47(2) Apr-Jun 2013: 183-187
14. Sonal Desai, Pratima Tatke, and S.Y. Gabhe, "Isolation and characterization of betaine from dried seeds of *Achyranthes aspera*." *Indian Drugs*, 2013, 50 (04), pp56-59 .
15. Megha Rajan, Pratima Tatke, Comparison of conventional and novel extraction techniques for the extraction of scopoletin from *Convolvulus pluricaulis*", *Indian Journal of Pharmaceutical Education and Research (IJPER)*, In Press
16. Dhruv Nikita, Tatke Pratima A., Marker Based Standardization Of Commercial Formulations Containing *Shankhapushpi* Using HPTLC, *Indian Journal of Pharmaceutical Education and Research (IJPER)*, In Press

International

17. A.T.Elamurthy, C.R.Shah, T.A.Khan, P.A.Tatke, S.Y.Gabhe "Standardization of Marketed Kumariasava-An Ayurvedic *Aloe vera* product" in *Journal of Pharmaceutical and Biomedical Analysis*, 37, 937-941, 2005. (Impact Factor: 2.58)
18. T.A.Khan, P.A.Tatke, S.Y.Gabhe, K.Mahajan, S.Tawde., S.Kothari, R.A.Deshmukh, "Screening of Methanol and Water Extracts of *Acacia nilotica* Pods for In-Vitro Anti-HIV Acitivity". *Journal of Research Education and Indian Medicines*, Vol.XII 5 July-Sept 2007
19. R.Vishnudevi and P.A. Tatke "Anti-microbial Activity of Dried Flowers of *Woodfordia fruticosa* Kurz ", *Asian Journal of Microbiology, Biotechnology and Environmental Sciences* 10 (1), January 2008 155- 156.

20. Pratima A. Tatke, I.S.R. Nidhiya, Deshpande S.G., "Repeated Dose Oral toxicity Study of an antidiabetic polyherbal formulation (*diapal* tablets) in rats" Pharmacology online, 1, 933-942 (2010). (Impact Factor: 0.16)
21. Vishnudevi, R. and P. Tatke "In Vitro Antimicrobial Activity of Rose Flowers" *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*, 2010, 12 (2):481-483.
22. Yogini S.Jaiswal, Pratima A.Tatke, Satish Y.Gabhe, Ashok B.Vaidya, "Antioxidant activity of various extracts of leaves of *Anacardium occidentale* linn. (cashew)" Research Journal of Pharmaceutical, Biological and Chemical Sciences, 1 (4), October- December, 2010,112-119. (Impact Factor: 0.35)
23. Yogini S.Jaiswal, Pratima A.Tatke, Satish Y.Gabhe, Ashok B.Vaidya, "Isolation and quantitative analysis of a bioactive polyphenol - Catechin in *Anacardium occidentale* Linn. (Leaves and Testa) by HPLC analysis" Research Journal of Pharmacognosy and Phytochemistry, 2 (5), September- October 2010,372-376.
(Impact Factor: 1.09)
- I.S.R. Nidhiya, Pratima A.Tatke, Satish Y.Gabhe, Ashok B.Vaidya, "Comparative antioxidant activity of three garlic varieties- an *in vitro* study", Research Journal of Pharmacognosy and Phytochemistry, 3(4), 2011,103-108. (Impact Factor: 1.09)
24. Supriya Jirge, Pratima Tatke, Satish Y. Gabhe, "Marker Based Standardisation of commercial formulations and extracts containing beta-sitosterol d- glucoside using HPTLC", International Journal of Research in Ayurveda and pharmacy. 1(2) 2010, 616-623.
25. Supriya Jirge, Pratima Tatke, Satish Y. Gabhe, Development and Validation of a novel HPTLC method for simultaneous estimation of beta-sitosterol d- glucoside and withaferin A", International Journal of Pharmacy and Pharmaceutical Sciences. 3(2) , 2011, 227-230.
(Impact Factor: 1.59)
26. S.S.Shafaq, Supriya Jirge, A.K.Latisha, Pratima Tatke, Chhaya Bhat, V.N.Naharwar "HPTLC standardization of herbal extracts of *Gmelina arborea* using umbelliferone", Medicinal Plants, 3 (2) June 2011, 1-4.
27. I.S.R. Nidhiya, Pratima A.Tatke, S.G.Deshpande "Safety profile of a polyherbal formulation (Gynocare capsules) in female rats by subchronic oral toxicity study" "Toxicology International" 2012 May ;19 (2):106-111 (Impact factor:0.50)

28. Shruti Parmar, Pratima Tatke, Kamlinder K. Singh entitled, Contraceptive efficacy and safety of herboshield vaginal gel, Contraception 2011; 85(1):122-127.
(Impact Factor: 2.83)
29. S.R. Anwikar¹, M.S. Bandekar¹, Bajpai Smrati², A.P. Pazare², P.A. Tatke¹, N.A. Kshirsagar , "HAART induced adverse drug reactions-a retrospective analysis at a tertiary referral health care center in India" in International Journal of Risk and Safety in Medicine, Volume 23(3),2011,163-169. (Impact factor: 0.20) Publisher: IOS . ISSN: 09246479, H Index: 14
30. Yogini S.Jaiswal, Pratima A. Tatke, Satish Y.Gabhe, Ashok B.Vaidya, Effect Of Various Drying Methods On Antioxidant Activity And Catechin Content Of Cashew Leaves, International Journal of Advance Pharmaceutical and Biological Sciences (IJAPBS) Vol. 2, Issue. 2, April-June 2012, 176-182 (Impact Factor: 0.12)
31. Yogini Jaiswal, Pratima Tatke, S.Y. Gabhe and Ashok Vaidya, Rapid High Performance Thin Layer Chromatographic Method For Quantitation Of Catechin From Extracts Of Cashew Leaves , Polish Journal of Food and Nutrition Sciences, Vol. 63(1), 2013, 49-54. ISSN: 1230-0322 (print version), ISSN: 2083-6007 (electronic version), Publisher: Versita (Impact factor: 0.6)
32. Nakanekar A, Waghmare P, Tatke P, Kohli K, In Vivo Evaluation Of Hypoglycemic Activity Of An Ayurvedic Polyherbal Combination (PDBT), International Ayurvedic Medical Journal, Volume 1; Issue 3; May - June 2013, ISSN:0976-5921
33. Supriya Jirge, S. Y. Gabhe, Pratima Tatke, Marker Based Standardisation Of Plant Based Formulations Containing *Brahmi* Using Bacoside A By HPTLC, International Journal of Pharmacy and Pharmaceutical Sciences, Vol 6, Issue 1, 202-207, 2013. (Impact Factor: 1.59)
34. Momin NM, Disouza JI, Tatke PA, Gonsalves Melita, M. Aparna, Marker based standardization of novel herbal dental gel, Research Journal of Topical and Cosmetic Science, Vol. 2 Issue 1, 25-29 , 2011
35. Dr Pratima A. Tatke, Dr. Supriya S. Jirge and Dr. S. Y. Gabhe, Marker Based Standardization Of Formulations Containing Ashwagandha Using Withaferin A By HPLC, World Journal of Pharmaceutical Research,

Volume 3, Issue 1, 441-451, 2014 ((SGIF Impact Factor: 5.045, Global impact factor-0.652).ISSN 2277 – 7105).

36. Sonal S. Desai, Pratima A. Tatke, Vikram Naharwar, Satish Y. Gabhe, Development and Validation of an HPLC-DAD Method for the Determination of Agnuside-A Biomarker Marker of *Vitex negundo* Linn., International Journal of Pharmacognosy and Phytochemistry, Volume 29, Issue 1, 1203-1208 (ISSN:2051-7858, (Impact Factor: 1.69)
37. Sonal Desai, Pratima Tatke, Satish Gabhe, Optimisation and Validation of HPLC-DAD Method for Analysis of Negundoside in the Extracts and Formulations Containing *Vitex negundo* Linn., International Journal of Pharmacy and Pharmaceutical Sciences, 6 (5), 2014, (Impact Factor: 1.59)
38. Supriya Jirge, Pratima Tatke, and S.Y. Gabhe, Simultaneous estimation of Kaempferol Rutin and Quercetin in various plant products of different dosage form of Bhuiamla and Amla., Journal of Planar Chromatography - Modern TLC, 4/2014 (July-August) (in press) (Impact Factor: 0.95)
39. Sonal Desai, Pratima Tatke, S. Y. Gabhe, Isolation of Catechin from Stem Bark Of *Albizia lebbeck*, International Journal of Analytical, Pharmaceutical and Biomedical Sciences, 3(2), 2014, page xx-xx (Universal Impact Factor: 0.99)
40. Lieselotte Veryser, Evelien Wynendaele, Lien Taevernier, Frederick Verbeke, Tanmayee Joshi, Pratima Tatke, and Bart De Spiegeleer, N-alkylamides: from plant to brain, Functional Foods in Health and Disease, 2014; 4(6):264-275.
41. Tatke P. A., Desai S. S., Gabhe S. Y., Marker Based Standardization Of Extracts And Formulations Of *Achyranthes aspera*, International Journal of Pharmacognosy and Phytochemical Research, 6 (2), 2014, 324-327 (Impact Factor: 1.09).
42. Pratima Tatke, Sonal Desai, S.Y. Gabhe, Isolation of quercetin-3-O- β -D-glucoside from *Azadirachta indica*, American Journal of Phytomedicine and Clinical Therapeutics, 2(7), 2014, 870-876 (Global impact Factor: 0.69).
43. Pratima Tatke, Sonal Desai, S. Y. Gabhe, Estimation of betulinic acid in extracts and formulations containing *Albizia lebbeck* by HPLC, World

Journal of Pharmaceutical Research, 3(6), 2014, 1277-1286 (SGIF Impact Factor: 5.045, Global impact factor-0.652). ISSN 2277 – 7105

44. Sonal Desai, Pratima Tatke, S. Y. Gabhe, Quantification of diosgenin in extracts and formulations containing *Solanum nigrum*, International Journal of Pharmaceutical Sciences and Research, 6 (2), 2015 (In Press).
45. Deepali Mahajan, Usha Satyapal, Pratima Tatke and Vikram Naharwar, Antimicrobial and Anthelmintic activity of *Punica granatum* fruit peels extracts, International Journal of Pharmacognosy and Phytochemical Research (Accepted for publication)

Review articles (03)

46. Poonam Nehete and Pratima Tatke, "Miceller Electrokinetic Capillary Chromatography (MECC)" in the *Indian Journal of Pharmaceutical Sciences*, Vol 61 (6), pp 335-341, 1999. (Impact Factor: 0.338)
47. Heeshma C.Shah, Pratima Tatke, Kamlinder K. Singh, '**Spermicidal Agents**' in the *Drug Discovery and Therapeutics*, 2(4):200-210, 2008. (Impact Factor: 3.82)
48. Pratima A.Tatke, Yogini S.Jaiswal, "An Overview of Microwave Assisted Extraction and its Applications in Herbal Drug Research" accepted in Research Journal of Medicinal Plant, 1-8, 2011.

Qualifications: M. Pharm, Ph.D., D.B.M.

➤ Awards

International awards: (10)

1. Received Second prize at South Asian Chapter of American College of Clinical Pharmacology for paper entitled "Wound healing activity of calcium mupirocin creams by excision and incision wound model" in August 2011.
2. Received Second prize at South Asian Chapter of American College of Clinical Pharmacology for paper entitled " Isolation of Gmelinol from *Gmelina arborea*" in August 2011.
3. Received Second prize at South Asian Chapter of American College of Clinical Pharmacology for paper entitled "Quality check for spontaneous reports of different countries" in August 2011.
4. Received first prize at Nutrition society of India-2010, Mumbai-November 2010 "Effect of garlic-capsicum combination on sodium nitrite induced oxidation of haemoglobin" in November 2010.
5. Received Second prize at South Asian Chapter of American College of Clinical Pharmacology for paper entitled "Development of a programme for Adverse drug reaction monitoring in psychiatry" in December 2010.
6. Received '**Talented Scientist Award**' at the 'International seminar on **Medicinal Plants and Herbal Products**' held in Tirupati, A.P., from March 7th-9th 2008. This award was given as recognition of her outstanding contribution in the field of Medicinal Plants and Herbal Products at International level on the recommendations made by the Scientific and Adjudication Committee.
7. An International award of Excellence in the field of Pharmaceutical Sciences was given at the "International Conference on Ayurveda and Holistic Healing" held in Penang, Malaysia from Jan 19-20, 2008.
8. The oral presentation entitled, 'Quality control of marketed formulations of Drakshasava by HPTLC using a chemical marker' received SECOND prize with Silver medal at "International Conference on Ayurveda and Holistic Healing" held in Penang, Malaysia from Jan 19-20, 2008.
9. Research work on "Marker Based Standardization of Commercial Formulations of *Shankhapushpi* Syrup Using HPTLC" received FIRST prize at International Conference on Contemporary Issues and

Future Challenges in Drug Development, held in Mumbai, from Oct 5th-7th, 2007

10. Research work on **"Neem oil-Standardization and Evaluation of Water miscible Emulgel"** received SECOND prize at International Conference on **"Neem-2002"** at Mumbai in Nov, 2002.

National Awards: (09)

1. Research work on **"A novel phytoliposomal formulation for a ployherbal mix containing curcumin"** awarded 1st prize at *Avishkar 2011-2012, VI (State level Inter-University Research Convention)* held at Kolhapur, on 13-15h, January 2012
2. Received Dr. (Mrs.) Manjusree Pal Memorial Award for BEST PHARMACEUTICAL SCIENTIST 2011 for her for outstanding contribution to the profession of pharmacy, teaching, research and industrial collaborations.
3. Received Bharat Shiksha Ratan Award for for her for contribution to the profession of teaching and research in Pharmaceutical Sciences.
4. Research paper entitled **"An anti diabetic herbal tablet formulation containing bioactive extract from waste product of Cashew"** selected for national level presentation in India Innovation Initiative – i3 2011.
5. Received certificate of appreciation **for paper entitled" Marker based standardization of commercial formulations and extracts containing beta-sitosterol-D-GLOCOSIDE using HPTLC** by P.D. Sethi Annual Award-2010.
6. **Received second prize at "ANVESHAN-2009- ZONAL Research Festival", held at Bhopal, on 27-29th , January 2009** for the project entitled, **"Isolation And Chemical Characterization Of Catechin – A Potential Biomarker With Antioxidant Activity "** and was selected as one of the best projects.
7. **Received second prize at the "ANVESHAN-2009 – 2nd National Level Research Convention", held by Association of Indian Universities – AIU, at Calcutta, on 23-25th , February 2009** entitled as, **"Isolation And Chemical Characterization Of Catechin – A Potential Biomarker With Antioxidant Activity"**.
8. Research work on **"Development and Evaluation of Female Herbal Contraceptive"** and on **"Anti HIV activity of some Indian medicinal plants"** jointly awarded 1st prize at *Avishkar (State level Inter-University research competition)* held at S.N.D.T .Women's University on 9th-12th January, 2008.

9. Merit fellowship for M. Pharm.

10. Was placed Third on Merit in S.N.D.T. **Women's University** in the B. Pharm Examination.

➤ Current engagement with research

➤ Involvement with extension and field outreach