

Dr Salma Khanam. M Pharm, Ph.D.

Professor and Head

Department of Pharmacognosy

Al Ameen College of Pharmacy

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**Educational Qualifications:**

1. Ph.D. Awarded from Rajiv Gandhi University of Health Sciences, India in the year 2004 for the research work entitled “Antimutagenic effect of Ashwagandha-genetic and non genetic biomarkers’ evaluation”
2. M.Pharm. – First Class - Bangalore University, India in the year 1988.
3. B. Pharm. – First Class - Bangalore University, India in the year 1986.
4. Qualified Graduate Aptitude Test Entrance -1986
5. Completed a proficiency course “Introduction to biotechnology” with ‘A’ grade from IISc, Bangalore.-1991
6. Completed a QIP short- term course on “Frontiers in biotechnology” from IISc, Bangalore-1999

Experience

28 years of Teaching and Research

Teaching Experience

Designation	Name of the Institute	Classes	Period	Subjects Taught
Professor and Head	Al Ameen College of Pharmacy	M.Pharm B.Pharm Pharm D	1998 till date	1. Medicinal Plant Biotechnology 2. Industrial Pharmacognosy 3. Advanced Pharmacognosy 1. Industrial Pharmacognosy 2. Pharmaceutical Microbiology and Biotechnology 1. Pharmaceutical Microbiology
Asst Professor	Al Ameen College of Pharmacy	M.Pharm B.Pharm	1992-1998	1. Chemistry of Natural Products 1. Pharmacognosy and Phytochemistry 2. Pharmaceutical Biotechnology 3. Pharmaceutical Microbiology
Lecturer	Al Ameen College of Pharmacy	B.Pharm D. Pharm	1988-1992	1. Pharmacognosy and phytochemistry 2. Pharmaceutical Microbiology 1. Pharmaceutical Juripudence 2. Pharmacognosy

Research Experience

1. Post graduate research- M. Pharm projects : 48
2. Doctoral research-: 4 PhD
3. Co Guided 1 Ph D project
4. Co Guided 6 MD Ayurveda projects
5. Paper publications: 44
6. Paper presentations: >30

Research Interests:

1. Isolation and structure elucidation of phytoconstituents from herbal sources.
2. Evaluation of herbal drugs for various activities including antimutagenic, antidiabetic, immunomodulatory and others
3. Development and evaluation of different herbal and cosmetic formulations
4. Standardization of herbal drugs.
5. Chromatographic evaluation of herbal drugs

Industrial/Institutional collaborative research projects with:

1. Sami Chemicals and Extracts Ltd, Bangalore
2. Natural Remedies, Bangalore
3. CFTRI, Mysore
4. IIHR, Bangalore
5. Biocon, Ltd, Bangalore
6. FRLHT Bangalore
7. NIUM- PG Dept of Unani College
8. PG Dept –Govt Ayurveda College

Research Grants:

1. Received a grant of Rs 13 lakhs from AICTE under MODROBS Scheme 2003 for developing Pharmacognosy laboratory for standardization of herbal drugs.
2. Received a grant of Rs 10000/- from RGUHS, Bangalore for oral presentation of research work at Global Summit on Medicinal Plants at Mauritius 25th to 30th Sept 2003
3. Received a grant of Rs 10000/- from RGUHS, for research activities

Professional Credits:

1. Recognised by the Rajiv Gandhi University of Health Sciences as Guide for M Pharm and Ph.D., research projects in pharmacy under the university.
2. Contributed as technical expert for curriculum development of Graduate, Post graduate pharmacy courses in Rajiv Gandhi University of Health Sciences.
3. Member, Academic Council Rajiv Gandhi University of Health Sciences.
4. Member, Academic Council MS Ramaiah University of Applied Sciences

5. BOS member at NMKRV deemed University.
6. Member, Ph.D. Registration Committee for Pharmacy faculty, Rajiv Gandhi University of Health Sciences.
7. Guest faculty at Strides Arco Labs, Bangalore for MS programme under BITS Pilani
8. Chairperson at workshop conducted for syllabus revision for M Pharm , RGUHS at Soniya College of Pharmacy-Dharwad 2013
9. Chairperson at workshop conducted for syllabus revision for B Pharm , RGUHS at Sarada Vilas College of Pharmacy-Mysore 2014
10. Received best paper award for paper entitled 'Development and validation of HPTLC method for estimation of withaferin A in ashwagandha obtained from different geographical sources, at Indian Graduates' Association 23rd Annual conference-2006
11. Authored a Chapter on 'Biosynthetic pathways' in NISCAIR publications

Workshops/Seminars organized:

1. Convener for International Herbal conference 2009
2. Coordinator for National Workshop sponsored by NMPB and APTI on 'Developing quality Monographs of Herbal drugs'-2009
3. Co-chairman for scientific session 11th Annual Convention of Association of Pharmaceutical Teachers of India held in Bangalore, 2006
4. Coordinator for AICTE sponsored Workshop on thesis writing -2006
5. Coordinator for Workshop on –Biotechnology for Teachers of Bangalore University for 1997

Guest lectures delivered:

1. Invited regularly by PG Dept Government Ayurvedic College to deliver talk on - Standardization of Herbal drugs.2010 onwards
2. Invited regularly by PG Dept Unani College Bangalore as resource person in QIP program to deliver talks on –
 - i. Standardization of Unani Herbal drugs-2010
 - ii. Transgenic plants-2011
 - iii. Contamination in Unani Drugs-2012
 - iv. Recent trends in standardization of herbal drugs-2014
3. Invited by Manipal College of Pharmaceutical Sciences as Resource Person to present a talk on-Transgenic plants-2008
4. Invited by Dept of Pharmaceutical sciences Kakatiya University, Warangal to deliver talk on - Standardization of Herbal drugs-2008
5. Scientific lecture during AICTE sponsored program on Environmental pollutants- Mutagenic pollutants
6. Speaker Pre Conference IPC Chennai 2012- Scientific writing
7. Guest lecture at Dayanand College of Pharmacy -Standardization of herbals-2013
8. Guest lecture at Pharmacy college in Gwalior-Standardization of herbals-2013

Other related experience-research, professional, industrial, etc.

- Recognized guide and examiner for PhD in Pharmacy RGUHS, Bangalore. MAHE Manipal, Hamdard New Delhi and JSS University
- Recognized guide and examiner for M.Pharm from RGUHS, Bangalore, MGR University, Tamilnadu, MAHE Manipal, Hamdard University New Delhi, JSS University Ooty
- Academic Council Member of RGUHS, Bangalore -2003
- PCI Inspector
- KSPC Pharmacy Inspector from 1999-2001
- LIC Inspector for UG and PG courses under RGUHS, Bangalore
- Member of Editorial Board of APTI Bulletin , IJPER
- Served as Chairperson Scientific committee at IPC 2007, 2012
- Guest faculty at BITS Pilani MS programme Strides Bangalore
- Member of Editorial Board RGUHS journal of Pharmaceutical Sciences
- Reviewer or IJPER, RGUHS journal, J of Ethanopharmacology and others
- Member of Technical and Research Committee of National Institute of Unani Medicine (NIUM)
- Advisor of Staff Selection Commission Interview Board for selection of pharmacists 2015.

Professional Memberships:

- Life Member of Indian Society for Technical Education.
- Life Member of Indian Society of Pharmacognosy.
- Life Member of Association of Pharmacy teachers of India.
- Karnataka State Pharmacy Council - Registered Pharmacist No: 24706

Publications - Research articles

1. Shyamala Bhaskaran and Salma Khanam, 2001, 'Effect of Alcoholic extract of Ananas, Bamboosa and Phoenix on Oestrous cycle of female Albino Rats', Ind J Nat Pdts, Vol 17, 43-46
2. Syed Imam Rabbani, Kshama Devi and Salma Khanam, 2003, 'In vivo clastogenic activity of citral' Ind J.Nat Pdts Vol 19,13-17
3. T.N. Shivananda, G.U. Harish, Vibha Rao and Salma Khanam, 2003, 'A new method for estimation of L-Dopa using HPLC' National Academy Science letters, Vol-26,-36-43
4. Salma Khanam, Kshama Devi and H.N. Shivprasad, 2004, 'Natural Antimutagens' Ind J Nat Pdts Vol 20, 3-8
5. G.S Kumar and Salma Khanam 2004, Anti-Acne activity of Natural Products Ind J Nat Pdts 20, 7-9
6. Salma Khanam, Shivaprasad H.N and Kshama Devi, 2004, '*In Vitro*Antioxidant Screening Models : A Review' Ind J Pharm Edu, Vol 38, 180-183

7. Salma Khanam, and Kshama Devi, 2005, 'Antimutagenic activity of Ashwagandha' J of Natural Remedies Vol 5/2, 126-131
8. Salma Khanam, and Kshama Devi, 2005, 'Effect of *Withania somnifera* root extract on Lead induced DNA damage' Journal of Food, Agriculture & Environment-JFAE, Vol 3,31-33
9. M.N Poornachandra, Salma Khanam, B.G. Shivananda, T.N Shivanananda and R Dris,2005, '*Mucuna pruriens* (L) DC- A novel drug learning and memory retrieval' Journal of Food, Agriculture & Environment-JFAE, Vol 3,13-15
10. Salma Khanam, and Kshama Devi, 2005 'Antimutagenic activity of *Withania somnifera* against cyclophosphamide induced DNA damage in mice, Drug lines Vol 8 (1), 1-4
11. Salma Khanam and Kshama Devi, 2005, 'Antimutagenic activity of Ashwagandha against lead nitrate: A genetic and non-genetic biomarkers' evaluation'Pharmacogmag vol 1(3)
12. Shivprasad H.N and Salma Khanam 2006, 'HPLC analysis of polyphenols in green tea extract' Asian J of Chemistry, Vol 18,877-881
13. Shivprasad H.N and Salma Khanam 2006, 'Quantification of oligomeric proanthocyanadines (OPCs) in grape seed extracts by spectrometric method. Asian Journal of Chemistry Vol 18
14. B. Vinutha , D. Prashanth , K. Salma , S.L. Sreeja , D. Pratiti , R. Padmaja , S. Radhika , A. Amita, K. Venkateshwarlu , M. Deepak c 2006, 'Screening of selected Indian medicinal plants for acetylcholinesterase inhibitory activity' J Ethanopharmacol
15. Sajjad Khan, Salma Khanam and Deepak M, 2006 'Antioxidant activity of a new diarylheptano from *Zingiber officinale*' Pharmacog Mag
16. Mohamed Fayaz, K. K. Namitha, K. N. Chidambara Murthy, M. Mahadeva Swamy,R. Sarad Salma Khanam, P.V. Subbarao and G.A. Ravishankar 2005 Chemical Composition, Iron Bioavailability, and Antioxidant Activity of *Kappaphycus alvarezzi* (Doty) J. Agric. Food Chem. (3), 792 -797
17. Syed Imam Rabbani, Kshama Devi, Salma Khanam, Noor Zahra. 2006 Citral, a component lemongrass oil inhibits the clastogenic effect of nickel chloride in mouse micronucleus test system Pak J Pharm Sci 19 (2):108-13.
18. Sai Kishore Singh, Salma Khanam, Shivananda BG, Amit Agarwal and Shivananda TN 2008 Genetic variations in gymnemic acid content of *Gymnema sylvestre* leaves BIOMED, Issue 1, Volume 1
19. Roopashree TS, Salma Khanam and Raman Dang 2008 Production of volatile constituent linalool from the static culture of *Ocimum basilicum* BIOMED, Issue 1, Volume 1
20. Syed Imam, Rabbani and Kshama Devi, and Salma, Khanam 2008 Effect of Thiazolidinediones on the Erythropoietic and Germinal Cells in the Male Wistar Rats. Clinical Medicine : Oncology , 2 .

21. Syed Imam Rabbani, Kshama Devi and Salma Khanam 2009 Effect of thiazolidinediones on the serum biomarker levels in the nicotinamide-streptozotocin induced type-2 diabetes *Pharmacologyonline* 1: 800-808
22. Prasanna S.M., Salma Khanam and Hullatti K.K. 2008 Effect of *Agaricus bisporus* and *Pleurotus ostreatus* on allaxon induced hyperglycemic animals *Pharmacognosy Magazine* Volume :4 (13): 57-59
23. V. S. P. Saradhi, Salma Khanam, B. G. Shivananda, T. Vasantha Kumar, T. N. Shivananda 2007 Effect of NPK fertilizers on chemical constituents of *Aloe vera* leaves JR online, Vol 4,
24. Nilesh Kumar, Salma Khanam, Mueen Ahmed K K and Raman Dang, 2007 Evaluation of Indian Medicinal Plants for Antibacterial Activity, *Biomed* 2 (2), 206-211.
25. Ambujakshi HR, Shivananda BG and Salma Khanam 2008, Isolation of colosolic acid from the leaves of *Lagerstroemia speciosa* (L) *Pers Biomed* 4 (2), 206-211. 355
26. Syed Imam Rabbani, Kshama Devi and Salma Khanam 2009 Anti mutagenic activity of metformin against the nicotinamide-streptozotocin induced DNA damage in wistar rats *Int J Pharmacol. Bio Sci* Vol 3 141-148
27. Syed Imam Rabbani, Kshama Devi & Salma Khanam 2009 Inhibitory effect of Glimpiride on nicotinamide-streptozotocin induced nuclear damages and sperm abnormality in diabetic Wistar rats. *Ind J of Exptal Bio* Vol. 47 : 804
28. Navneet Kumar Singh, Arghya Biswas, Syed Imam Rabbani, Kshama Devi, Salma Khanam 2009 Hydroalcoholic Root Bark Extract of *Salacia oblonga* Prevented Mitomycin-C Induced Sperm Abnormality in Wistar Rats. *Pharm Cog Mag* Vol 5 254
29. Bincy Raj, Salma Khanam and Josephine Leno 2009 HPTLC method of estimation of ursolic acid in *Ocimum sanctum* *Asian J of chem.*, 6990
30. Syed Imam Rabbani, Kshama Devi and Salma Khanam 2010 Protective role of glibenclamide against nicotinamide-streptozotocin induced nuclear damage in diabetic Wistar rats *J Pharmacol Pharmacother*, Vol. 1, No. 1. pp. 18-23.
31. Salma Khanam Divya jyothi, Rokeya sultana 2010, Optimization of Microwave Assisted Solvent Extraction Of Withanolides From Leaves of *Ashwagandha* *IJPC* 4(1)1-4
32. Bincy Raj, Salma Khanam, Soosamma John and Madhavi T Ayesha Siddique 2010 Quantitative Estimation of Rosmarinic Acid in *Ocimum sanctum* Extracts and Polyherbal Formulation by HPTLC *Res J Pharmacog and Phytochem (RJPP)* Vol 02 (01)
33. Syed Imam Rabbani, Kshama Devi, Salma Khanam. 2010 Pioglitazone, a ppar-r ligand inhibited the nicotinamide-streptozotocin induced sperm abnormalities in type-2 diabetic Wistar rats *Pak J Pharm Sci*;23(3):326-31.

34. Divya jyothi, Salma Khanam, Rokeya sultana 2010 Optimization of microwave assisted extraction of withanolides from roots of Ashwagandha and its comparison with conventional extraction method Int J Pharm Pharm Sci, , Vol 2, Issue 4, 46-50
35. S.Priya , Zeeshan Afsar, Salma Khanam, Bhuvaneshwari, 2010 Studies on Antifungal Activity of Different Extracts of *Cassia fistula* and Bioactivity guided isolation and identification of Antifungal Agent Int J pharma world res Vol 1
36. Rokeya Sultana, Salma Khanam, Kshma Devi, 2011.Immunomodulatory effects of aqueous extract of fruits of *Solanum xanthocarpum* Der Pharmacia Letter Feb issue
37. Rokeya Sultana, Salma Khanam, Kshma Devi, 2011 Immunomodulatory effects of methanolic extract of fruits of *Solanum xanthocarpum* Int J of Pharmaceut Sci Vol 2
38. Salma Khanam, Nitha. P. Mohan, Kshama Devi, Rokeya sultana, 2011 Protective role of *Tinospora cordifolia* against cisplatin- induced nephrotoxicity. Int J of Pharm and Pharmaceu Sci. Vol 3 (4)
39. Salma Khanam and Rokeya Sultana, 2012 Isolation of β -sitosterol & stigmasterol as active immunomodulatory constituents from fruits of *Solanum xanthocarpum* (solanaceae) IJPSR, Vol. 3, Issue 04
40. Manvitha Mohan, Salma Khanam and , B.G. Shivananda, 2013, Optimization of Microwave Assisted Extraction of Andrographolide from *Andrographis paniculata* and its Comparison with Refluxation Extraction Method J of Pharmacog and phytochem Vol 2 (1), 342-348
- 41 Salma Khanam and Zeeshan Afsar . 2013. Herbal disinfectants: a review. World Journal of Pharmaceutical research Vol 3(1), 258-273.
42. Salma Khanam, Bhuvaneshwari and Kshma Devi, 2014 In-vitro Enzyme Inhibition Studies for Antidiabetic Activity of Mature and Tender Leaves of *Mangifera indica* var. Totapuri. Research and reviews: J of microbiol and biotechVol 3 36-42.
43. Salma Khanam and Zeeshan Afsar 2014 Antimicrobial activity of the extracts of *Cassia fistula* and *Milletia pinnata* against ampicillin resistant strains of clinical origin Asian Journal of Phytomedicine and Clinical Research. 2(1), 22 – 29
44. Aparna S, Beena Antony, Salma K and Rama NK. 2015Antibacterial activity of essential oil of *cymbopogon flexuosus* (lemon grass) against clinical isolates of multidrug-resistant *Acinetobacter baumannii*: A preliminary *in-vitro* study. Int J of app bio and pharma tech (2). 211-16

List of M. Pharm Thesis supervised (1996-2014)

Sl.No	Year	Title
1.	2014	Preparation, Characterization and Evaluation of Herbal Nanoparticles for

		Antioxidant and Hepatoprotective activity
2.	2014	In- Vitro Antioxidant and Antidiabetic Evaluation of Fractionated Hydroalcoholic extract of leaves of <i>Tagetes erecta</i> Linn
3.	2012	Isolation and Purification of Chemical Constituents of leaves of <i>Lagerstromia speceiosa</i> L. pers. Towards its Chemical standardization
4.	2011	Standardization of <i>Tinospora cordifolia</i> and its evaluation against nephrotoxicity of cisplatin in rats
5.	2011	Isolation of chemical constituents from the Bark of <i>Cinamomum cassia</i> for achieving standardization
6.	2011	Comparative evaluation of Garcinia fruits and isolation of citric acid
7.	2011	Phytochemical and Pharmacological Investigations on <i>Uraria picta</i> and its substitutes
8.	2009	Optimization of microwave assisted extraction of <i>Andrographis paniculata</i> for isolation of Andrographolides and development of methods of estimation of andrographolide in extract and serum
9.	2009	Comparison of conventional and microwave assisted extraction of Withanolides from roots and aerial parts <i>Withania somnifera</i> and antimicrobial activity of the extracts
10.	2009	Microwave assisted extraction of roots and rhizomes of <i>Picrorrhiza kurroa</i> and development of sensitive method for the estimation of kutkoside and picroside in extracts and serum
11.	2007	Development and validation of HPTIC for standardization of preparations containing Turmeric, ginger and Boswelia
12.	2007	Comparative phytochemical profiling of <i>Aconitum heterophyllum</i> wall. Ex Royale & <i>Cyperus rotundus</i> Linn and their evaluation for anti-diarrhoeal activity
13.	2007	Development and validation of HPTLC for standardization of <i>Ocimum sanctum</i> extracts and formulations
14.	2007	Isolation and characterization of chemical constituents of <i>Asparagus raecemosus</i> as "Markers"
15.	2006	Isolation and characterization of chemical constituents of <i>Zingiber officinale</i> as "Markers "

16.	2006	Isolation and characterization of chemical constituents of <i>Momordica charantia</i> as “Markers”
17.	2006	Activity guided isolation of cholinesterase inhibitors from plants through bioautography
18.	2006	Bioactivity guided isolation of the Antifungal principles from the plant <i>Cassia fistula</i>
19.	2005	Validation and Application of HPTLC methods for evaluation of Ashwagandha and Kalmegh
20.	2004	Antiasthmatic activity of <i>Piccorhiza kurruoa</i> , <i>Solanum xanthocarpum</i> , <i>Camellia sinensis</i>
21.	2004	Isolation and Characterization of fungal hydrolytic enzyme
22.	2004	Antimutagenic agents from Marine Algae
23.	2004	Formulation and Evaluation of Herbal drugs for antiacne activity
24.	2004	Development of Nutraceuticals from edible seaweeds
25.	2003	Isolation and Characterization of Active principles from <i>Lagestroemia speciosa</i>
26.	2003	Antioxidant and Antimutagenic activity of Proanthocyanidins
27.	2002	Phytochemical and Anti-inflammatory investigations on <i>Alpinina galanga</i> Wild
28.	2002	Effect of different cultural techniques on the chemical constituents of <i>Aloe barbedensis</i> mill
29.	2002	Tissue culture studies of <i>Ocimum basilicum</i>
30.	2002	Isolation and Characterization of Proanthocyanidins from Cocoa beans
31.	2002	Isolation and Estimation of Gymnemic acid from <i>Gymnema sylvestrae</i> grown under different cultural conditions
32.	2001	Phytochemical and Pharmacological evaluation of Wheat grass
33.	2001	Hepatoprotective activity of <i>Vitex negundo</i> and <i>Ichnocarpus frutescens</i>
34.	2001	Investigations on E and Z Guggulosterones of <i>Commiphora mukul</i> extracts
35.	2000	Studies on Natural Colorants for Hair dyeing properties
36.	2000	Comparative studies on <i>Andrographis paniculata</i> from different geographical

		sources
37.	2000	Quantification of Resveratrol and its derivative from various natural sources
38.	2000	Screening of Indigenous drugs for Anti-acne activity
39.	1999	Comparative studies on Ayurvedic drugs used as Daruharidra
40.	1999	Activity guided isolation of Natural antimicrobial compounds through bioautographic technique.
41.	1999	A comparative pharmacognostic evaluation of selected species of <i>Mucuna</i> seeds and evaluation of Heuristic process in seeds of <i>Mucuna pruriens</i>
42.	1998	Studies of some Indian Medicinal Plants for Disinfectant property
43.	1998	Studies on selected Indian Medicinal Plants for Larvicidal activity
44.	1998	Screening of Some Indian Medicinal Plants in search of natural disinfectants
45.	1997	Study on marine bacteria as source of antimicrobial agents
46.	1996	Comparative studies on Antistress adaptogenic activities of four different ayurvedic formulations
47.	1996	Hypoglycemic and hypocholesterolemic screening of edible mushrooms <i>Agaricus</i> , <i>Bisporus</i> and <i>Pleurotus ostreatus</i>
48.	1995	Role of soil microorganisms in degradation of the pesticide carbofuran