

Curriculum Vitae

Arun Kumar Gupta Ph.D.

EK-444 Scheme No 54
Vijay Nagar, Indore 452010
(M.P.) India
Mobile: 09753950080
E-mail: arunkg_73@rediffmail.com
arunkg73@gmail.com



PRESENT STATUS

Principal in Chameli Devi Institute of Pharmacy, Indore since June 2018

POST DOCTORATE RESEARCH

Post-Doctoral Fellow (PDF) in Computational R&D, AstraZeneca India Pvt. Ltd., Bangalore (Collaborative Project of Prof. Peter Johnson, Dept. of Chemistry, University of Leeds, U.K and AstraZeneca Research Foundation).

ACADEMIC CREDENTIALS

- **Ph.D. (Pharmacy)** from Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, M.P. (duration 2002-2005 and awarded in 2007)
“Rational Designing, Synthesis and Biological Evaluation of some novel Selective Cyclooxygenase-2 Inhibitors”
- **M. Pharm. (Medicinal & Pharmaceutical Chemistry)** from Shri G.S. Institute of Technology & Science, Indore with first division (Year 1996-1998)
“Simultaneous Estimation of Amoxicillin and Bromhexine Hydrochloride in Solid Dosage Forms”
- **B. Pharm.** from College of Pharmacy, SGSITS Campus, Indore with first division. (Year 1990-1994)

EXPERIENCE IN YEARS

Total Experience: 20 years

- ◆ Industrial Research Experience: 03
- ◆ Research Experience: 03
- ◆ Academic Experience: 14

AREA OF RESEARCH

- Computational Chemistry includes QSAR, VHTS, Docking, Homology Modeling of some Antidiabetics, Antimycobacterials and Cyclooxygenase Inhibitors.
- Synthesis of Small Molecules.

- Nano-technology/Conjugation Chemistry specially Dendrimers and Chitosan Analogs.
- Analytical Method Development of Drugs and Formulations

RESEARCH EXPERTISE

- Multistep micro-synthesis, purification of synthesized compounds using recrystallization and modern chromatographic techniques
- Characterization of molecules through spectroscopic methods
- Biochemical and biological evaluation of synthesized compounds
- Structure base *de novo* design and molecular modeling

POST DOCTORAL EXPOSURE

- *De novo* design
- Synthesis of design compounds
- SAR analysis
- Near neighbor search, Sub-structure search & Pharmacophoric Search
- High Throughput Virtual Screening

PROFESSIONAL EXPERTISE

- LC-MS, NMR, HPLC, GC, UV, IR, Microplate Reader, Plethysmometer
- Synthetic route development
- Designing of drug like structure and their synthesis
- HTS data analysis
- Spectral interpretation

PROFESSIONAL EXPERIENCE (TEACHING/RESEARCH /

INDUSTRIAL)

- Dean Academic Dr. A.P.J. Abdul Kalam University, Indore from July 2017 to May 2018.
- Dean Faculty of Pharmacy, Dr. A.P.J. Abdul Kalam University, Indore from July 2016 to May 2018.
- Principal in School of Pharmacy (formally Known as RKDF Institute of Pharmaceutical Sciences) from Dec 2012 to May 2018.
- Professor and Head (Dept. of Pharmaceutical Chemistry) at Smriti College of Pharmaceutical Education, Indore from Oct 2008 to Nov 2012.

- Post-Doctoral Fellow (PDF) in AstraZeneca India Pvt. Ltd., Bangalore (Collaborative Project of Prof. Peter Johnson, Dept. of Chemistry, University of Leeds and AstraZeneca Research Foundation) from Jan. 2006 to Sep. 2008.
- As a Reader in Smriti College of Pharmaceutical Education, Indore M.P. from July 2005 to Dec 2005.
- As a lecturer in B. R. Nahata College of Pharmacy, Mandsaur, M.P. from Apr. 1998 to Mar. 2002.
- As a process development chemist in R&D Division of Beta Naphthol Ltd., Indore from 1995 to Jul. 1996.

PROFESSIONAL ACTIVITIES

- Academics
 - Taught the subject in Ph.D. Course work: Research Methodology.
 - Taught the subjects in M. Pharm.: Modern Analytical Chemistry, Drug Design, Advance Medicinal Chemistry and Advance Organic Chemistry.
 - Taught the subjects in B. Pharm.: Organic Chemistry, Physical Chemistry, Analytical Chemistry, Medicinal Chemistry, Inorganic Chemistry and Biochemistry.
- Administration activities
 - Working as Head of the Institute.
 - Working as Academic Dean, Dr. A.P.J. Abdul Kalam University, Indore.
 - Working as Dean, Faculty of Pharmacy, Dr. A.P.J. Abdul Kalam University, Indore.
 - Senior Superintendent Exam. and Superintendent Exam. of RGPV Examination.
 - Worked as Head of the Department at SCOPE, Indore
 - Coordinator in institutional NBA accreditation team. Institute (SCOPE) was accredited by NBA for 3 Yrs.
 - UG Program Head for NBA accreditation at SCOPE, Indore. Program (UG) was accredited by NBA for 3 Yrs.
 - Institutional academic administrative Head at SCOPE, Indore
- Research
 - Guiding Ph.D. scholars

- Guiding M. Pharm. dissertation specially drug design, polymer chemistry and synthetic chemistry.
- Others
 - Reviewer of many international journals like Eur. J. Med. Chem., J. Enz. Inh. Med Chem., Med. Chem., Med. Chem. Res. etc.
 - Participated as resource person in AICTE/ICMR/MPCST/TEQIP sponsored National Seminars/SDP/FDP
 - As a coordinator of AICTE sponsored National Seminars
 - LOC member of M.P. State Pharma Meet, Committee Chairman APTICON 2015, Committee member IPA convention 2011, Committee member in various M.P. State Pharma Meet.
 - Member of Examination panels of Rajiv Gandhi Proudyogi Viswavidhyalaya, Bhopal, DAVV Indore, BU Bhopal, Vikaram University Ujjain; Involved in routine student evaluation procedures such as conducting examinations and evaluation.

RESEARCH/ SEMINAR GRANTS

- Seminar Grant received from Atomic Energy Regulatory Board, Mumbai Sanctioned letter no: AERB/EC-SC-7-26/2018/ dated 22/11/2018.
- Research Project grant from M P Council of Science and Technology, Bhopal (M.P), Sanctioned letter no: 4975/CST/R&D (BioSci.)/2014 dated 19/12/2014. (Amount 4,28,000)
- Seminar Grant received from M P Council of Science and Technology, Bhopal (M.P), Sanctioned letter no: 3425/CST/R&D (SSW)/2014 dated 30/7/2014.
- Seminar Grant received from M P Council of Science and Technology, Bhopal (M.P), Sanctioned letter no: 359/CST/R&D(SSW)/2016 dated 03/05/2016

SEMINAR / FDP / WORKSHOP ORGANIZED

- ✓ MPCST sponsored one day National seminar on “**Recent Frontiers in Drug Delivery and Drug Discovery Research**” on 27th September 2014 as Convener and an Organizer.
- ✓ MPCST sponsored one day National Seminar on “**Recent trends and advancement in alternatives to animal experiments**” on 01st October 2016 as Convener and an Organizer.

- ✓ Atomic Energy Regulatory Board Sponsored one day National Seminar on **“Regulatory Aspects & Clinical Application of Radiopharmaceuticals”** on 6th May 2017 as Organizing Chairman.
- ✓ One week (9th to 15th Sep 2017) Faculty Development Program on **“Ideal Teaching Practice”** as Organizing Chairman.
- ✓ One Day Workshop **“Techniques and Advances in Herbal Drug Extraction, Isolation and Standardization”** on 27th Oct 2017 as Organizing Chairman.

SESSIONS CHAIRED

1. As **Co-Chairman** of scientific session in International Conference on “Innovations in Pharmaceutical Science” held on 27-28th Feb 2016, Sri Aurobindo Institute of Pharmacy, Indore (M.P.)
2. As **Chairman** of scientific session in National Seminar on “Innovation in Pharmaceutical Science ” held on 25th Nov 2016, Indore Institute of Pharmacy, Indore (M.P.)

RESOURCE PERSON: (INVITED /PLENARY/SPECIAL LECTURES)

1. **Resource Person** in MPCOST Sponsored one days National Seminar on **“Application of Green Chemistry in Pharmaceutical Industry”** held on 23rd Feb 2018, Lakshmi Narain College of Pharmacy, Indore (MP).
2. **Resource Person** in North Maharashtra University Sponsored one days National Seminar on **“Recent Advancements in Chromatography and Hyphenated Techniques”** held on 10th Feb 2018, A.R.A. College of Pharmacy, Dhule (MH).
3. **Resource Person** in two days National Seminar on “Recent Trends on Spectroscopic Techniques” held on 17th-18th Nov 2017, Department of Basic Science, Dr. A.P.J. Abdul Kalam University, Indore (M.P.).
4. **Resource Person** in one week Faculty Development Programme on “Ideal Teaching Practice” held on 9th-15th Sep 2017, Dr. A.P.J. Abdul Kalam University, Indore (M.P.).
5. **Resource Person** in SERB Sponsored two days National Seminar on “Application of Cheminformatics in Pharmaceutical Research” held on 5th and 6th May 2017, Sagar Institute of Research, Technology and Science-Pharmacy, Bhopal (M.P.).

6. **Resource Person** in MPCST Sponsored National Conference on “New Concern about Quality and Safety of Herbal Supplements” held on 20th Sep 2014, Central India Institute of Pharmacy, Indore (M.P.).
7. **Resource Person** in International Conference on “Interdisciplinary Research in Engineering Management Pharmacy and Science (ICIREMPS 2K14)” under TEQIP-II held on 20th Feb to 23rd Feb 2014, Sagar Institute of Research and Technology, Bhopal (M.P.).
8. **Resource Person** in AICTE Sponsored Faculty Development Programme, “An Exploration of Recent Innovations in Drug Delivery and Drug Discovery” held on 4th to 17th Dec 2013 at Lakshmi Narain College of Pharmacy, Bhopal (M.P.).
9. **Resource Person** in 17th Refresher Course in “Recent Trend in Chemistry” held on 29th Aug to 18th Sep 2013 Academic Staff College DAVV, Indore (M.P.).
10. **Resource Person** in AICTE Sponsored Faculty Development Programme, “Application of Novel Drug Delivery System for the Molecules of Herbal Origin” held on 3rd to 15th June, 2013, TRUBA Institute of Pharmacy, Bhopal (M.P.).
11. **Resource Person** in AICTE Sponsored Faculty Development Programme, “Impact of Bioinformatics, Biotechnology & Molecular Biology on Drug Discovery”, held on 27th May to 8th June, 2013, R. C. Patel Institute of Pharmaceutical Education & Research, Shirpur.
12. **Plenary Lecture** in APP Second Annual National convention on “Pharmacist as a Vital Part of Healthcare System” held on 17th March 2013, at SSDJ College of Pharmacy, Chandwad, Nashik.
13. **Resource Person** in CSIR Sponsored National Seminar on “Hands on training on software related to computer added drug design”, held on 21st to 22nd Jan 2013, Nirma University, Ahmedabad.
14. **Resource Person** in ICMR Sponsored National Seminar on “Recent Trends in Drug Discovery and Research” held on 30th Sep 2012, Rajiv Gandhi Institute of Pharmacy, AKS Univerity, Satna (M.P)
15. **Resource Person** in AICTE Sponsored Staff Development Programme, “Emerging Trends and Technologies in Pharmaceutical Sciences and Computer Aided Drug Design” held on 7-19th May 2012, Sagar Institute of Research and Technology-Pharmacy, Bhopal (M.P.).

16. **Resource Person** in National Seminar on “Analytical Method Development and Biomedical Analysis” held on 28-29 Oct 2010, B. R. Nahata College of Pharmacy, Mandsaur, (M.P.).
17. **Resource Person** in National Seminar on “Recent Advances in Drug Discovery”, held on 9th Sep, 2010, Nirma University, Ahmedabad.
18. **Resource Person** in AICTE Sponsored Staff Development Programme, “Recent Advancement in Pharmaceutical Chemistry”, held on 2nd Feb to 14th Feb, 2009, R. C. Patel Institute of Pharmaceutical Research, Shirpur.
19. **Special Lecture** in National Seminar on “Computational Chemistry and Molecular Modelling”, held on 20th April 2009, Smriti College of Pharmaceutical Education, Indore (M.P.).
20. **Resource Person** in “National workshop on Health Education”, held on 28th, 29th March 2009, B. R. Nahata College of Pharmacy, Mandsaur, (M.P.).

COMPUTER PROFICIENCY

- Operating System : Linux, Windows98/2000/XP/Vista, MS DOS
- Packages : SciFinder / SpotFire / MS Office
- Languages : Fortran, C and C++
- Drug Design Tool

 1. De novo Designing Tool SPROUT
 2. Docking Tools GOLD, GLIDE, FRED, AutoDock
 3. Pharmacophoric Tools CATALYST, MedChem Explorer
 4. Molecular Modeling MOE, Schrödinger, ICM-Molsoft, HyperChem, Packages Openeye tools, SYBYL, ChemOffice
 5. Statistical Packages SYSTAT, SIGMASTAT, VALSTAT

RESEARCH FELLOW

- **Junior Research Fellow AICTE** in Dept. of Pharmacy, S.G.S.I.T.S., Indore (1996-1998).
- **Senior Research Fellow CSIR** in Dept. of Pharmacy, S.G.S.I.T.S., Indore (2002-2005).

AWARDS/ ACHIEVEMENTS

- APP Young Achiever Award 2013
- AstraZeneca recognition award 2008
- Developed a regression analysis program (**VALSTAT**) in C++

- IDMA Research Award 2003 / SRF (CSIR) Award 2002 / GATE 1996 / National Scholarship Award

RESEARCH BEQUEST (APPENDIX-2)

Research Articles	:	91
Review	:	9
Conferences	:	International(6); National (36)
Monograph	:	2
Patent	:	2

THESIS/DISSERTATIONS SUPERVISED (Appendix-3)

- Doctoral Research Thesis: 8 (6 Awarded, 1 Submitted & 1 Pursuing)
- Post Graduate Research Thesis: 47 (47 Awarded)

PROFESSIONAL MEMBERSHIP

- Life Member (MP/ MAN / LM /0003), Indian Pharmaceutical Association (IPA)
- Registered Pharmacist (10285), State Pharmacy Council, M.P.

PERSONAL PROFILE

➤ Date of Birth	:	27 th June 1973
➤ Nationality	:	Indian
➤ Passport No.	:	F6132337
➤ Marital Status	:	Married
➤ Father's Name	:	Shri S.M. Gupta
➤ Mother's Name	:	Smt. Indira Gupta
➤ Languages Known	:	English, Hindi
➤ Interests	:	Reading and Comp. Programming
➤ Permanent Address	:	EK-444, Scheme # 54, Vijay Nagar, Indore-452010 (M.P.), India Phone: +91 731-2576197

REFERENCES

Dr. S. G. Kaskhedikar

Ex-Professor
Dept of Pharmacy,
Shri G.S. Institute of Technology and
Sciences, Indore,
(MP), 452003, India
Phone: +91 9767825370
E-mail: sgkaskhedikar@rediffmail.com

Dr. (Mrs) Anurekha Jain

Ex-Principal
B R Nahata College of Pharmacy,
Mandsaur- 458001 (M.P.), India.
Phone: +91 9425108574

Dr. Sharad Wakode

Associate Professor,
Delhi Institute of Pharmaceutical
Sciences and Research (DIPSAR),
Pushp Vihar, Sector 3, M. B. Road
New Delhi- 110017, India.
Phone: +91 9891008594
E-mail: sharadwakode@gmail.com

E-mail: anurekha_jain@yahoo.com,
anurekha_jain71@rediffmail.com

Sincerely,
(ARUN KUMAR GUPTA)

Summary of Ph.D. Thesis

Conventional non steroidal anti-inflammatory drugs (NSAIDs) are non-homogeneous family of pharmacologically active compounds which act through non-specific inhibition of cyclooxygenase (COX). COX enzyme present in two forms: the constitutive form (COX-I) and the inducible form (COX-II). COX-I is responsible for normal hemostasis, gastric and renal functions, where as COX-II is essentially present in inflammatory cells. Non-specific inhibitions have serious side effects viz. gastric irritation, bleeding, ulceration, renal damage, vascular homeostasis etc. Therefore we plan to develop novel selective cyclooxygenase-II inhibitors, which would be devoid of toxic effects of conventional NSAIDs.

In present work 1, 2-disubstituted heteroaryl analogs were designed on the basis of pharmacophoric features. Designed compounds were subjected to docking study against COX-I and COX-II enzymes respectively. Compounds which showed high degree of selectivity and affinity for COX-II enzyme were proposed for synthesis. These compounds were synthesized considering four synthetic schemes. Proposed hypothesis was confirmed through COX-I and II enzyme assay followed by animal study like anti-inflammatory activity and Ulcerogenic index.

QSAR studies were performed to optimize the lead structure which possessed optimum *in-vitro* and *in-vivo* activity with low degree of ulcerogenic index. Based on the QSAR analysis, physicochemical properties, which is responsible for selectivity and affinity was identified. One compound was proposed on the basis of predicted activity. The proposed compound was synthesized and their pharmacological properties namely

COX-1 & COX-2 inhibitory activity, anti-inflammatory activity, and ulcerogenic index were determined.

The present work helped in identification of 1, 2-disubstituted indoles and 1, 2-disubstituted benzimidazoles as lead nuclei for anti-inflammatory activity with enhanced safety profile due to reduced ulcerogenic activity and selectivity for COX-2 enzyme over COX-1.

RESEARCH CONTRIBUTION

2(Patent) + 2(Book) +91 (Research Article) +9 (Review Article)

[Citation: 680; *h-Index*: 13; i10-index: 19; Impact Factor (IF) 2014]

PATENT:

1. Gupta Revathi Arun, **Gupta Arun Kumar**, 5-Nitrofuranyl-4-Oxo-2-Thioxothiazolidin-3-yl Derivatives for the Treatment of Tuberculosis Indian Patent (2436/MUM/2014 dated 28/07/2014 Published on 12/02/2016)
2. Agrawal Yogesh Purushottam, Agrawal Mona Yogesh, **Gupta Arun Kumar** and Shamkuwar Prashant Babarao, 2, 4- Thiazolidinedione Derivatives for the Treatment and Management of Diabetes Mellitus, Indian Patent (Published, 2615/MUM/2013 dated 08/08/2013 Published on 15/08/2014).

BOOK:

1. Gautam Surya Prakash, **Gupta Arun K.**, “Characterization of PAMAM Dendrimers” LAP LAMBERT Academic Publishing, Saarbrucken, Germany, 2013. **ISBN-978-3-659-46675-5**
2. **Gupta Arun K.**, Joshi Megha, Synthesis approaches for novel prodrug of simvastatin, LAP LAMBERT Academic Publishing, Saarbrucken, Germany, 2012. **ISBN 978-3-8465-8214-5**

INTERNATIONAL JOURNALS:

1. Saxena Ashish, **Gupta Arun Kumar**, V. Praveen Kumar, Nainar M. Sundaramoorthi, Bob Manoj, Kasibhatta Ravisekhar, Quantification of 17-Dsacetyl Norgestimate in Human Plasma by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) and its Application to Bioequivalence Study, **J. Pharm. Ana.**, 2015; 5(2): 93-100: doi 10.1016/j.jpha.2014.09.004.
2. Gautam Surya Prakash, Keservani Raj K., Gautam Tapsya, **Gupta Arun K.** and Sharma Anil Kumar, An Alternative Approach for Acetylation of Amine Terminated Polyamidoamine (PAMAM) Dendrimer, **Ars Pharm.**, 2015; 56(3): 155-159.

3. Agrawal Yogesh P., Agrawal Mona Y. and **Gupta Arun K.**, Design synthesis rhodanine derivatives and in-vitro evaluation as aldose reductase inhibitors **Chem. Biol. Drug Des.**, 2015, 85, 172–180; doi 10.1111/cbdd12369 **IF : 2.485**
4. Saxena Ashish, **Gupta Arun**, Kasibhatta Ravisekhar, Bob Manoj, Praveen Kumar V and Purwar Bipin, Rapid and sensitive method for quantification of gestodene in human plasma as the oxime derivative by liquid chromatography-tandem mass spectrometry (LC-MS/MS) and its application to bioequivalence study **J. Chrom. B**, 2014, 945-946, 240-246. **IF : 2.729 (Citation 2)**
5. Gautam Surya Prakash, **Gupta Arun Kumar**, Sharma Anupama Gautam Tapsya, and Madhu, Synthesis and Analytical Characterization of Ester and Amine Terminated PAMAM Dendrimers **Global Journal of Medical Research (B)**, 2013, 13, 7-15. **(Citation 4)**
6. **Gupta Arun K.**, Sabarwal Neetu, Patidar Amit, Patel Arpit, Agrawal Yogesh P., Rationalization of Physicochemical Characters and Docking of 3-Alkoxy-5-phenoxy-N-thiazolyl benzamide Analogs toward Glucokinase Activator Activity, **Med. Chem. Res.**, 2012, 21, 2196-2207. **IF : 1.402 (Citation 1)**
7. Sharma Anupama, Gautam Surya Prakash and **Gupta Arun Kumar**, Surface Modified Dendrimers: Synthesis and Characterization for Cancer Targeted Drug Delivery, **Bioorg. Med. Chem.**, 2011, 19, 3341–3346. **IF : 2.793 (Citation 37)**
8. Gupta Revathi A., **Gupta Arun K.**, Soni Love K. and Kaskhedikar Satish Gopalrao, 2-(pyrazin-2-yloxy)acetohydrazide Analogs QSAR Study: An Insight into the Structural Basis of Antimycobacterial Activity, **Chem. Biol. Drug Des.**, 2010, 76, 441–450. **IF : 2.485 (Citation 12)**
9. **Gupta Arun Kumar**, Sabarwal Neetu, Agrawal Yogesh P., Prachand Sumeet and Jain Sanjay, Insights through AM1 calculations into the structural requirement of 3, 4, 6-substituted-2-quinolone analogs towards FMS kinase inhibitory activity, **Eur. J. Med. Chem.**, 2010, 45, 3472-3479. **IF : 3.447 (Citation 15)**
10. Podobnik Marjetka, Tyagi Richa, Matange Nishad, Dermol Urska, **Gupta Arun K.**, Mattoo Rohini , Seshadri Kothandaraman and Visweswariah Sandhya S. A Mycobacterial Cyclic AMP

Phosphodiesterase That Moonlights as a Modifier of Cell Wall Permeability, *J. Bio. Chem.*, 2009, 284, 32846–32857. **IF : 4.573 (Citation 47)**

11. Gupta Anvita, **Gupta Arun Kumar** and Seshadri Kothandaraman, Structural models in the assessment of protein druggability based on HTS data, *J. Comput. Aided Mol. Des.* 2009, 23, 583-592. **IF : 2.990 (Citation 23)**
12. Gupta Revathi A., **Gupta Arun Kumar** and Kaskhedikar Satish G. Prediction of Anti-mycobacterial Activity of 2-(4-(4,5-dihydro-1H-pyrazol-3-yl)phenoxy)acetic acid Analogs: A QSAR Approach, *Acta. Chim. Slov.* 2009, 56, 977–984. **IF : 0.686 (Citation 3)**
13. Gupta Revathi A., **Gupta Arun Kumar**, Soni Love Kumar and Kaskhedikar S. G., Study of physicochemical properties–antitubercular activity relationship of naphthalene-1,4-dione analogs: A QSAR approach, *Chemical Papers*, 2009, 63, 723–730. **IF : 1.468 (Citation 8)**
14. Soni Love Kumar, **Gupta Arun Kumar** and Kaskhedikar S. G., Exploration of QSAR modelling techniques and their combination to rationalize the physicochemical characters of nitrophenyl derivatives towards aldose reductase inhibition, *J. Enz. Inhibition Med. Chem.*, 2009, 24, 1002–1007. **IF : 2.332 (Citation 1)**
15. Gupta Revathi A., **Gupta Arun Kumar**, Soni Love Kumar and Kaskhedikar S. G., Insights through AM1 calculations into the structural requirement of N-hydroxythiosemicarbazone analogs as anti-tubercular agents, *J. Enz. Inhibition Med. Chem.*, 2009, 24, 850-858. **IF : 2.332 (Citation 1)**
16. **Gupta Arun Kumar**, Gupta Revathi A., Soni Love Kumar and Kaskhedikar S.G., Exploration of Physicochemical Properties and Molecular Modelling Studies of 2-Sulfonyl-phenyl-3-phenyl-indole Analogs as Cyclooxygenase-2 Inhibitors, *Eur. J. Med. Chem.*, 2008, 43, 1297-1303. **IF : 3.447 (Citation 21)**
17. Soni Love Kumar, **Gupta Arun Kumar** and Kaskhedikar S. G., QSAR study of 5-arylidene-2,4-thiazolidinediones as aldose reductase inhibitors, *Med. Chem. Res.*, 2008, 17, 258–266. **IF : 1.402 (Citation 7)**

18. Sambasivarao Somishetti V., Soni, Love K., **Gupta Arun K.** and Satish G. Kaskhedikar, QSAR Modelling of [1,2,4]triazino[4,3-a]benzimidazole Acetic Acid Derivatives as Aldose Reductase Inhibitors, **Acta Chim. Slov.** 2008, 55, 338–342. **IF : 0.686 (Citation 2)**
19. Gupta Revathi A., **Gupta Arun Kumar**, Soni Love Kumar and Kaskhedikar S.G., Exploration of Physicochemical Properties and Molecular Modelling studies of Furanylamide Analogs as Antituberculosis Agents, **QSAR Comb. Sci.**, 2007, 26, 897-907. **IF : 1.647 (Citation 10)**
20. Gupta Revathi A., **Gupta Arun Kumar**, Soni Love Kumar and Kaskhedikar S.G., Rationalization of physicochemical characters of oxazolyl thiosemicarbazones analogs towards multi-drug resistant tuberculosis: A QSAR approach, **Eur. J. Med. Chem.**, 2007, 42, 1109-16. **IF : 3.447 (Citation 21)**
21. **Gupta A. K.**, Jain A., Jain A., Agrawal K., Saraswat V., Revathi S., Soni L. K. and Kaskhedikar S.G., QSAR Analysis of Indazole Estrogens as Selective β -Estrogen Receptor Ligands: Rationalization of physicochemical Properties, **Medicinal Chemistry**, 2007, 3, 347-53. **IF : 1.363 (Citation 4)**
22. Jain Anurekha, Jain Avijeet, Vyas Vivek, Subedar Niharika and **Gupta Arun**, Simultaneous Estimation of Aceclofenac and Paracetamol in Tablet Dosage Form by UV Spectroscopy, **Asian J. Chem.** 2007, 19, 4920-4922. **IF : 0.355 (Citation 4)**
23. Jain Avijeet, Paliwal Vivek, Jain Anurekha, Deb Lokesh and **Gupta Arun**, Evaluation of Wound Healing Activity of Herbal Formulation **Asian J Chem.** 2007,19, 1273-1276. **IF : 0.355**
24. Revathi S., **Gupta A. K.**, Soni L.K., Kavitha S., Wagh R. and Kaskhedikar S.G., Rationalization of physicochemical characters of 1,5-diarylpyrazole analogs as dual (COX-2/LOX-5) inhibitors: A QSAR approach, **J. Pharm. Biomed. Ana.**, 2006, 42, 283-89. **IF : 2.979 (Citation 10)**
25. Jain A., Gupta V.B., Jain A., **Gupta, A. K.** and Chaturvedi S.C., 2D-QSAR Analysis of some Imidazole with Acylsulphonamides and Acylsulfamides as Selective AT₁ Angiotensin-II Receptor antagonist as a Hypertensive Agent, **Asian J. Chem.**, 2006, 18, 1290-96. **IF : 0.355**

26. Vasanthanathan P., Lakshmi M., Arockia Babu M., **Gupta A.K.**, and Kaskhedikar S.G., QSAR Study of 3-Phenyl-5-acyloxymethyl-2*H*,5*H*-furan-2-ones as Antifungal Agents: The Dominant Role of Electronic Parameter, **Chem. Pharm. Bull.**, 2006, 54, 583-87. **IF : 1.164 (Citation 24)**
27. Sambasivarao S.V., Soni Love K., **Gupta Arun K.** and Kaskhedikar S.G., Quantitative Structure Activity Analysis of 5-Aarylidene-2,4-thiazolidinediones as Aldose Reductase Inhibitors, **Bioorg. Med. Chem. Letts.**, 2006, 16, 512-20. **IF : 2.42 (Citation 23)**
28. Hanumantharao P., Sambasivarao S. V., Soni L. K., **Gupta A. K.** and Kaskhedikar S. G., 3D-QSAR Analysis of Thiazole benzenesulfonamide substituted 3-pyridylethanolamines as β_3 -Adrenergic Receptor Agonist, **Bioorg. Med. Chem. Letts.**, 2005, 15, 3167-73. **IF : 2.42 (Citation 17)**
29. **Gupta, A. K.**, Soni, L. K., Hanumantharao, P., Sambasivarao, S. V., Arockia Babu, M., and Kaskhedikar S. G., 3D-QSAR Analysis of some Cinnamic Acid Derivatives as Antimalarial Agents, **Asian J. Chem.**, 2004, 16, 67-73. **IF : 0.355 (Citation 6)**
30. Despande, S. V., Arockia babu, M., **Gupta, A. K.**, Kaskhedikar, S. G. and Saxena, A. K., 3D QSAR Analysis of some Heterocyclic compounds as Cyclooxygenase- 2 Inhibitors, **Med. Chem. Res.**, 2004, 13, 337-347. **IF : 1.402 (Citation 2)**
31. **Gupta, A. K.**, and Kaskhedikar S. G., Derivative Spectrophotometric Estimation of Amoxycillin and Bromhexine Hydrochloride in Tablets, **Asian J. Chem.**, 2003, 15, 977-80. **IF : 0.355 (Citation 6)**

INDIAN JOURNALS:

1. Dubey Kushagra, Dubey Raghvendra, Gupta Revathi A and **Gupta Arun**, Evaluation of lens aldose reductase inhibitory potential of fruit extracts of *Terminalia bellerica Roxb.*, **Journal of Drug Delivery & Therapeutics**, 2018; 8(6-A):16-18.
2. Pathan Javed Khan, Gautam Girendra and **Gupta Arun Kumar**, *Hemidesmus indicus l.*: evaluation of sedative & hypnotic effect in the elevated plus-maze apparatus, **European Journal of Pharmaceutical and Medical Research**; 2018: 5(12), 231-234.

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 32. Revathi S., **Gupta Arun Kumar**, Soni Love Kumar, Kavitha S., Waugh R. and Kaskhedikar S.G., "QSAR Studies of 2,3-Diaryl-pyrazolo[1,5-b]pyridazine Analogs as Cyclooxygenase-2 Inhibitors" (Poster Presentation) **57th Indian Pharmaceutical Congress**, December 2005, Hyderabad, 178.
 33. Avasthi Rakesh, Jatav Rakesh Kumar, Mishra Gyan Prakash, **Gupta Arun Kumar**, Kawthekar N. and Kaskhedikar S. G., "Quantitative Structure Activity Relationship of 3,4 – Dihydroquinazoline Derivatives as Novel Selective T-type Ca⁺⁺ Channel Blockers" (Poster Presentation) **56th Indian Pharmaceutical Congress**, December 2004, Kolkata, 180.
 34. Dua Monika, Mishra Gyan Prakash, Soni Love Kumar, **Gupta Arun Kumar** and Kaskhedikar S. G., "QSAR Studies of Thalidomide analogs as Anti-angiogenic and Anticancer Agents" (Poster Presentation) **56th Indian Pharmaceutical Congress**, December 2004, Kolkata, 181.
 35. **Gupta, A. K**, Arockia Babu, M. and Kaskhedikar, S. G., "VALSTAT: A Validation Program for Quantitative Structure Activity Relationship Study" (Poster Presentation) **55th Indian Pharmaceutical Congress**, December 2003, Chennai, 192.
 36. Sambasivarao, S. V., Arockia Babu, M., Hanumantharao, P., **Gupta, A. K.**, Soni, L. K. and Kaskhedikar, S. G., "2D-QSAR Analysis of 5-Aryllidyene 2, 4 thiazolidinediones for their Aldose Reductase Activity"

(Poster Presentation) **54th Indian Pharmaceutical Congress,**
December 2002, Pune, 196.

DOCTORAL THESIS AWARDED

S.No.	Student Name	Title	Year
1.	Yogesh Agarwal	Design, Synthesis and Evaluation of some novel 2,4-thiazolidinedione Derivatives for Management of Diabetes Mellitus	2013 (Awarded)
2.	Surya Prakash Gautham	Surface Modified Dendrimers: A Polymeric Nano Architecture for Targeted Cancer Drug Delivery	2014 (Awarded)
3.	Amit Modi	Design, Synthesis and Biological Evaluation of Some Benzimidazole Derivatives as Antimicrobials	2016 (Awarded)
4.	Ajay Verma	Development and Characterization of Biopolymer Based Nanoparticulate Carrier System as Vaccine Adjuvant for Effective Immunization	2016 (Awarded)
5.	Ashish Saxena	Quantification of Drugs in Biological Fluids by Novel Analytical Techniques	2018 (Awarded)
6	Anu Kaushal	Development and Characterization of Drug Delivery System for the Treatment of <i>H. pylori</i> Infection	2018 (Awarded)

DOCTORAL THESIS SUBMITTED

S.No.	Student Name	Title	Year
1.	Sumeet Prachand	Design, Synthesis and Biological Evaluation of Some Heterocyclic Compounds as Anti-diabetic	2018 (Submitted)

DOCTORAL THESIS PURSUING

S.No.	Student Name	Title	Year
1.	Jyoti Pande	Design, Synthesis, and Biological Evaluation of some Aldose Reductase Inhibitors	2012 (Pursuing)

POST GRADUATE RESEARCH THESIS

S.No.	Student Name	Title	Status	Year
1	Monti Dayma	Validation of HVAC system - "A FMEA approach"	Completed	2016-17
2	Neetu Chaudhary	Formulation, Optimization & Comparison of Ondansetron Dispersible Tablet	Completed	2015-16
3	Amit Kumar Gupta	Formulation and Evaluation of Floating Bilayer Tablet of Domperidone & Granisetron	Completed	2015-16
4	Ankit Jain	Formulation and Evaluation of Periodontal Strips of Ornidazole	Completed	2015-16
5	Hitesh Talreja	Formulation and Development of Sustained Release Matrix Tablet of Lornoxicam	Completed	2015-16
6	Namrta Yadav	Optimization and Evaluation of Mucoadhesive Microspheres of Domperidone using Chitosan	Completed	2014-15
7	Brijesh Kumar	Formulation Development & Release Profile Study of Metformin HCl Bilayer Tablet using Guar gum Dummy Layer	Completed	2014-15
8	Sapna Titwania	Formulation and Evaluation of Floating Microspheres Loaded with Gliclazide	Completed	2014-15
9	Priyanka Yadav	Formulation Development of an Aqueous Injection of a Poorly Water Soluble Drug Using Mixed Solvency Concept and Its Evaluation	Completed	2014-15
10	Abhilasha Solanki	Formulation and Evaluation of Microcapsule of Lornoxicam by using non- solvent addition method	Completed	2014-15
11	Pooja Pancholi	Formulation and Evaluation of Control Release Matrix Tablets of Ketorolac tromethamine	Completed	2014-15
12	Vaibhav Parmar	Formulation, Optimization and Evaluation of Spherical Agglomerates of Cefuroxime axetil	Completed	2014-15
13	Nikhil Bhaskar Kulkarni	Qualification of Autosampler Dissolution Test Apparatus	Completed	2014-15
14	Bhavana Doble	Validation and Optimization of Simultaneous Estimation for Various Formulations of Diclofenac Sodium and Paracetamol	Completed	2013-14
15	Devanand Joshi	High Performance Liquid Chromatography: Qualification and System Validation	Completed	2013-14
16	Kunjbihari Sahu	Simultaneous Estimation and	Completed	2013-14

		Validation of Paracetamol, Aceclofanac and Serratiopeptidase in Combined Dosage Form		
17	Sahyadri Brahaspati	Process Validation of Wet Granulation	Completed	2013-14
18	Tushar Ramesh Patil	Validation of Aseptic Processing of Blow Fills and Seal Technology, used for Manufacturing of Sterile Ampoules for Parenteral Products	Completed	2013-14
19	Apoorva Gupta	Synthesis and Biological Evaluation of Nitrofurantoin Derivatives as Antileishmanial Agents	Completed	2011-12
20	Arshad Ali	Design, Synthesis and Biological Evaluation of Thiazolidinedione Derivatives as Anti-diabetic Agents	Completed	2011-12
21	Ashvin Jaiswal	Design, Synthesis and Evaluation of Isocitrate Lyase Inhibitors Against M. Tuberculosis	Completed	2011-12
22	Faimida Jahan	Simultaneous Estimation of Telmisartan And Cilnidipine In Solid Dosage Form	Completed	2011-12
23	Keerti Jain	Design, Synthesis and Biological Evaluation of Glycogen Synthase Kinase-3 β Inhibitors as Antidiabetic Agents.	Completed	2011-12
24	Sachin Ingle	Synthesis and Evaluation of Surface Modified Nanocarrier for Prostate Cancer Therapy	Completed	2011-12
25	Shikha Jain	Design, Synthesis, Characterization and Biological Evaluation of Coumarin Derivatives as Antimalarials	Completed	2011-12
26	Swatantra Kumar Mishra	Design, Synthesis, Characterization and Biological Evaluation of some Benzimidazole Derivatives as Anti-cancer Agents	Completed	2011-12
27	Vikas Patidar	Design, Synthesis, and Biological Evaluation of some N-Acetic Acid Rhodanine Derivatives for Management of Diabetes	Completed	2011-12
28	Vishvas Malviya	Synthesis, and Biological Evaluation of some Thiazolidinedione- N-Acetic Acid Derivatives for Management of Diabetes	Completed	2011-12
29	Anjali Khandelwal	Synthesis and Characterization of Antimicrobial and Antifungal activity of some 1,3,4-Thiadiazole Derivatives	Completed	2010-11
30	Ashok Chourasia	Synthesis, Characterization and Biological Evaluation of Thiadiazole	Completed	2010-11

		Derivatives as an AntiTubercular Agent		
31	Dinesh Sahu	Simultaneous Estimation of Aceclofenac and Rabeprazole Sodium in Solid Dosage Form	Completed	2010-11
32	Dragnpal Singh Bundela	Synthesis, Characterization and Biological Evaluation of Coumarin Derivatives as an Antimalarial Agent	Completed	2010-11
33	Nivedita Jain	Synthesis and Biological Evaluation of some Fluoroquinolone Derivatives as Antitubercular Agent	Completed	2010-11
34	Priyanka Singh	Design, Synthesis and Biological Evaluation of Some New Azaaurones Derivatives as Antimalarial Agents	Completed	2010-11
35	Swati Devra	Design, Synthesis and Biological Evaluation of Some Substituted Imidazole Derivatives	Completed	2010-11
36	Welkin John	Synthesis and Evaluation of Modified Dendrimers for Cancer Therapy	Completed	2010-11
37	Anubha Jain	Molecular Modeling, Design, Synthesis and Biological Evaluation of some Substituted Imidazoles Derivatives as Antifungal Agents (major project)	Completed	2009-10
38	Anubha Jain	In Vitro-In Vivo Relationship Modeling of Rosiglitazone Maleate (minor project)	Completed	2009-10
39	Amit Patidar	Design, Synthesis and Biological Evaluation of Glycogen Synthase Kinase-3 β Inhibitors as Antidiabetic Agent	Completed	2009-10
40	Anupama Sharma	Synthesis and Characterization of Surface Modified Dendrimers for Cancer Targeted Drug Delivery	Completed	2009-10
41	Arpit Patel	Synthesis and Biological Evaluation of some 1,2,4-Triazole Derivatives as Antifungal Agents	Completed	2009-10
42	Deepika Rathore	Synthesis and Characterization of Chitosan Derivative as Efficient Mucoadhesive Agent	Completed	2009-10
43	Jyoti Pandey	Design, Synthesis, and Biological Evaluation of some Aldose Reductase Inhibitors	Completed	2009-10
44	Megha Joshi	Prodrug of Simvastatin as Cascade Latentiated Inhibitor of HMG-CoA Reductase	Completed	2009-10
45	Mihir Patel	Synthesis, Characterization and	Completed	2009-10

		Biological Evaluation of Coumarin Derivatives as an Antimalarial Agent		
46	Rohan Gaikwad	Design, Synthesis and Biological Evaluation of some Rhodanine Derivatives as Aldose Reductase Inhibitors	Completed	2009-10
47	Ghazala Khan	Simultaneous Estimation of Metformin Hydrochloride and Sitagliptine in Tablet Dosage Form	Completed	2009-10