

## DR. ARCHANA S. GURJAR

Designation	Assistant Professor, Senior grade
Date of Joining	03/01/1974
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### EDUCATIONAL QUALIFICATION

Degree	Specializations	Awarding University	Awarded Year
Ph.D. (Tech)	Pharmaceutical Chemistry	University of Mumbai	2014
M. Pharm	Med. & Pharm. Chemistry	Devi Ahilya Vishwa Vidyalaya (D.A.V.V.), Indore	1998
B. Pharm	Pharmacy	Devi Ahilya Vishwa Vidyalaya (D.A.V.V.), Indore	1996

### COURSES TAUGHT

Class	Semester	Subject code	Name of the subjects
First Year B. Pharm	II	BP203T	Biochemistry (Theory)
Second Year B. Pharm	III	BP301T	Pharmaceutical Organic Chemistry II (Theory)
	IV	BP401T	Pharmaceutical Organic Chemistry III (Theory)
Third Year B. Pharm	V	BP501T	Medicinal Chemistry II (Theory)
Final Year B. Pharm	VII	BP701T	Instrumental Methods of Analysis (Theory)
	VIII	BP811ET	Advanced Instrumentation Techniques (Theory)
M. Pharm. (Pharm. Chemistry)	I	MPC101T	Modern Pharmaceutical Analytical Techniques (Theory)
	I	MPC102T	Advanced Organic Chemistry I (Theory)
	II	MPC202T	Advanced Organic Chemistry II (Theory)
M. Pharm. (Pharm. Analysis)	I	MPA102T	Advanced Pharmaceutical Analysis (Theory)
	II	MPA201T	Advanced Instrumental Analysis (Theory)

### RESEARCH STUDENT GUIDED/ONGOING

Degree	Specialization	Ongoing	Completed
Ph. D. (Tech)	Pharmaceutical Chemistry	1	-
M. Pharm	Pharmaceutical Chemistry	3	7
M. Pharm	Pharmaceutical Analysis	5	1

### AREA OF RESEARCH

- Computer aided drug design
- Heterocyclic synthesis
- Neurodegenerative disease
- Anti-cancer agents

### INDUSTRY PROJECTS

Title of the projects	Amount (Lakhs)	Funding	Status
HPLC Analysis of E2 extract	Rs. 0.24	Private Company	Completed
Method development, analysis and stability of two polyherbal formulation	Rs. 2.91	Private Company	Completed
HPLC Analysis of five extracts	Rs. 2.45	Private Company	Completed
HPLC Analysis and stability studies of a polyherbal	Rs. 1.45	Private Company	Completed

HPLC Analysis of four extracts	Rs. 2.04	Private Company	Completed
Search of potential heterocyclic inhibitors of AChE and BACE1 for Alzheimer's disease	Rs. 0.60	University of Mumbai	Completed
Synthesis and pharmacological evaluation of Imidazole and its analogues as anti-Alzheimer agents	Rs. 0.32	University of Mumbai	Completed
Design of Aryl urea analogs as potential candidates for the treatment of Alzheimer's disease	Rs. 0.14	University of Mumbai	Completed
Design, synthesis and pharmacological evaluation of substituted Aryl sulfonamides as potential cognitive enhancer and anti-obesity agents	Rs. 15.85	DBT sponsored	Completed
Design and Synthesis of Bioactive Heterocyclic Non- peptide inhibitors of $\beta$ -Secretase by Molecular Modelling	Rs. 6.80	UGC Major Research Project scheme	Completed
Synthesis and evaluation of therapeutic potential of 1, 2, 4-thiadiazole heterocycle derivatives as antibacterials	Rs. 0.30	University of Mumbai	Completed

#### LIST OF PUBLICATIONS

1. Pathak, S.; Gurjar, A.; Law, C. S. W.; Yeong, K. Y.; Vishwakarma, S. #37 Design, Synthesis and Evaluation of the Cholinesterase Inhibitory Potential of 5-Chlorobenzimidazole Derivatives for Alzheimer's. ***Journal of Pharmaceutical Chemistry*, 2022**, 8 (Supplement) on 20.7.2022.
2. S Parmar, K Memane, A Gurjar, # 42 Ligand-based drug design for search of imidazole analogues as anti-Alzheimer agents. ***Journal of Pharmaceutical Chemistry*, 2022**, 8 (Supplement) on 20.7.2022.
3. Evaluating the Role of Diverse Substitutions on Nitrogen-Containing Heterocyclic Scaffold Based on CADD and Biological Studies for Alzheimer's Disease, S Vishwakarma, V Solanki, A Gurjar - Proceedings of International Conference on Drug Discovery (ICDD), 2020, 19.2.2020, SSRN 3540830
4. Archana S. Gurjar\*, Vivek S. Solanki, Ankita R. Meshram, Suchita S. Vishwakarma, Exploring beta amyloid cleavage enzyme-1 inhibition and neuroprotective role of benzimidazole analogues as anti-alzheimer agents, ***Journal of the Chinese Chemical Society*, 2020**, 67 (5), 864-873.
5. Archana S. Gurjar\*, Vinay Velingkar, Vincenza Andrisano and Angela D. Simone, open access, Molecular Docking, Synthesis, *in silico* and *in vitro* screening of Substituted Aryl Ureido Analogues as BACE1 Inhibitors to target Alzheimer's Disease, ***Biomedical Journal of Scientific and Technical Research*, 2018**, 11 (4), 1-6.
6. Nishita P. Shah, Vivek S. Solanki, Archana S. Gurjar\*, Advancements in BACE1 and Non-peptide BACE1 Inhibitors for Alzheimer's disease, ***Indian Journal of Chemistry (Section B)*, June 2018**, 57B (06), 830-842.
7. Archana S. Gurjar\*, Mrunali N. Darekar, Keng Yoon Yeong, Luyi Ooi, In silico studies, synthesis and pharmacological evaluation to explore multi-targeted approach for imidazole analogues as potential cholinesterase inhibitors with neuroprotective role for Alzheimer's disease, ***Bioorganic and Medicinal Chemistry*, 2018**, 26, 1511-1522.
8. Archana S. Gurjar, Vincenza Andrisano, Angela D. Simone, Vinay S. Velingkar\*, Design, synthesis, in silico and in vitro screening of 1,2,4-thiadiazole analogues as non-peptide inhibitors of beta-secretase, ***Bioorganic Chemistry*, 2014**, 57, 90-98.
9. Archana Nirantar, A. B. Mandhare, Meena Tiwari & S. C. Chaturvedi\*, QSAR Analysis of a series of Anti-inflammatory 5-phenyl-3H-Imidazo(4,5-c) (1,8) naphthyridin-4-(5H)-ones, ***Indian Journal of Pharmaceutical Sciences*, 2000**, 62 (5) 388-392.

## CONFERENCE, SEMINAR, WORKSHOP, SYMPOSIUM AND WEBINARS

1. Webinar on Problem-solution fit versus Product-market fit: An innovator's perspective and expectations of the ecosystem by IIC of Prin. K. M. Kundnani College of Pharmacy, Mumbai on 19<sup>th</sup> February'2022.
2. Webinar on DELNET: Resources & Services by Prin. K. M. Kundnani College of Pharmacy, Mumbai in collaboration with DELNET- Developing Library Network on 25<sup>th</sup> September'2021.
3. Webinar on Multiple Techniques for Effective Assessment of Student Capabilities by Prin. K. M. Kundnani College of Pharmacy, Mumbai in collaboration with APTI on 27<sup>th</sup> August'2021.
4. Webinar on Authoring and Proctoring Tools for Academics organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai in collaboration with Learning Mate and APTI on 21<sup>st</sup> November'2020.
5. Webinar on Let's break the silence organized under the aegis of IQAC, Prin. K. M. Kundnani College of Pharmacy and Department of Lifelong Learning and Extension, University of Mumbai, on 13<sup>th</sup> August 2020.
6. Two Day International Webinar on "Technologies for Co-crystallization and Innovation, knowledge transfer and Commercialization in the academic set-ups" held on 31st July 2020 and 1st August 2020, organized by Department of Pharmaceutics, under the aegis of IQAC, Prin. K. M. Kundnani College of Pharmacy, Mumbai 400 005, Maharashtra, India.
7. Webinar on Orientation Workshop on Chemistry Subjects Under Revised Syllabus 2019 in S. Y. B. Pharm organized by VES College of Pharmacy on 31st July, 2020. (Resource person for POC-2 and Attended other subjects)
8. Webinar on Recent Trends in Research and Development for Commercial Industrial applications by IQAC and dept. of Pharm. Chem. of Prin. K. M. Kundnani College of Pharmacy, Mumbai on 18<sup>th</sup> July'2020.
9. Webinar-4 on Recent Advances in analysis of elements in pharmaceuticals organized by IQAC of Prin. K. M. Kundnani College of Pharmacy, Mumbai in collaboration Labindia Analytical on 16<sup>th</sup> July'2020 (As Coordinator -**Organized** and Attended).
10. Webinar-2 on Practical approaches for solubility enhancement of poorly water-soluble drugs organized under aegis of IQAC of Prin. K.M Kundnani College of Pharmacy, Mumbai on 11<sup>th</sup> July 2020.
11. Webinar on "Virtual Laboratory and Practical Work: An Extension of the ICT tools", organized by Kamala Nehru College of Pharmacy, Butibori, Nagpur on 3<sup>rd</sup> July'2020
12. National level Webinar on "Art of writing Research proposals and Research paper", organized on 26<sup>th</sup> June'2020 by Sinhgad College of Pharmacy, Vadgaon (Bk) Pune.
13. Webcast on Demonstration of Virtual Experiments of B. Pharm. Program through use of Virtual Labs platform developed by MHRD, Govt. of India organized by VES College of Pharmacy, Chembur on 12<sup>th</sup> June '2020. (No certificate has been given)
14. Webinar on Ongoing Strategies for Drug Designing for Covid-19 organized by R.D. & S.H. National College & S.W.A. Science College, Bandra, Mumbai on 5<sup>th</sup> June'2020.
15. Workshops on Moodle LMS organized by CDAC for faculty of Prin. K M Kundnani College of Pharmacy, Mumbai on 21st, 23rd, 25th May and 3rd June'2020. (No certificate recvd till 16.8.2020)
16. CPE Webinar on "Understanding Practice School and its Concept in UG Pharmacy Education", organized by PCI, New Delhi in association with Rajiv Gandhi Univ. of Health Sciences, Bengaluru and JSS Academy of Higher Education & Research, Mysuru on 23<sup>rd</sup> May'2020. (CPE webinar is awarded 01 credit point by PCI India)
17. Webinar on "Teaching Practical with Virtual lab: Lt Platform", on 20th May 2020, organized by: Prin. K.M Kundnani College of Pharmacy in association with University of Mumbai.
18. National Level Online Webinar on "How to create Educational Videos", held on 10/05/2020, conducted at [www.youtube.com/DrAnawarr](http://www.youtube.com/DrAnawarr) by Dr. Anwar R. Shaikh.
19. Webinar on "Research: Planning and Execution- An Interactive Session with a renowned Pharmaceutical Scientist: Prof. Vandana Patravale", organized by Dr. D Y Patil Institute of Pharmaceutical Sciences and Research, Pune on 1<sup>st</sup> May 2020
20. National Level Online Webinar on Google Classroom held on 18/04/2020, conducted at [www.youtube.com/DrAnawarr](http://www.youtube.com/DrAnawarr) by Dr. Anwar R. Shaikh
21. AICTE Sponsored two-day National Conference on "Challenges in the Development of Generic and Biosimilars" at Prin. K. M. Kundnani College of Pharmacy, Mumbai on 4<sup>th</sup> & 5<sup>th</sup> October'2019.
22. One day workshop on "Microfluidics Technology for Pharma & Biotech Application", organized by Trident Equipments Pvt Ltd & Microfluidics International Corporation at Prin. K. M. Kundnani College of Pharmacy, Mumbai on 11<sup>th</sup> October'2018.



23. One day workshop on “Avishkar Research Convention”, organized by University of Mumbai, Department of Students’ Development at Prin. K. M. Kundnani College of Pharmacy, Cuffe Parade, Mumbai on September 7, 2018.
24. Two-day workshop on “Extraction and isolation of Phytoconstituents”, organized by Prof. K. S. Laddha at Institute of Chemical Technology, Matunga, Mumbai on 23<sup>rd</sup> and 24<sup>th</sup> June’ 2018.
25. 42<sup>nd</sup> Annual Meeting of the Indian Biophysical Society (IBS-2018) on “Emerging trends in biophysics”, IISER Pune, 9<sup>th</sup> -11<sup>th</sup> March’2018.
26. One day Sympatec seminar on “Particle Size Analysis”, at Prin. K. M. Kundnani College of Pharmacy, Mumbai on 25<sup>th</sup> January’2018.
27. Three days National conference on “Neurodegenerative Disease: Strategies of Drug Discovery and Delivery to the Brain”, at SVKM’s Dr. Bhanuben Nanavati College of Pharmacy, Mumbai from 27<sup>th</sup> – 29<sup>th</sup> July’2017.
28. One day National seminar on “Diabetes: Bench to Bedside”, organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai on 27<sup>th</sup> January’2017 (**Organized** and Attended).
29. ICMR sponsored Two-day National Symposium on “Current Scenario of Pharmacological Experimentation & Interpretations”, organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai on 2<sup>nd</sup> & 3<sup>rd</sup> September’2016.
30. One day Workshop for Pharmacy Teachers on “Quality Pharmacy Education: Role of Accreditation”, organized by Shri Vile Parle Kelvani Mandal’s Dr. Bhanuben Nanavati College of Pharmacy, Mumbai on 28<sup>th</sup> March’2016.
31. One day Chemistry Teachers Workshop on “Real-World Curriculum for Green Chemistry”, organized by R. D. & S. H. National College & Seth Wassiamull Assomull Science College, Mumbai on 6<sup>th</sup> December’ 2015.
32. One day ‘Elsevier Connect Seminar, Empowering Knowledge’ held on 28<sup>th</sup> October’2015, Mumbai.
33. One day National seminar on “Pharmaceutical Excipients-An Insight”, organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai on 21<sup>st</sup> August’2015.
34. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS) held at New Delhi, India, from 30<sup>th</sup> January to 2<sup>nd</sup> February, 2011.
35. 15th Annual National Convention of APTI, APTICON-2010, Hyderabad, from 2<sup>nd</sup> & 3<sup>rd</sup> Nov’2010.
36. One day workshop on “QSAR and Statistical Analysis”, organized by Bombay College of Pharmacy, Kalina on 28<sup>th</sup> March’2008.
37. One day workshop on “Molecular Modeling & Structure Based Drug Design.” organized by Bombay College of Pharmacy, Kalina on 23<sup>rd</sup> March’2007.
38. A one-day seminar on “Regulatory Guidelines: New Drug Development, Registration and Approval”, organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai on 13<sup>th</sup> January, 2007.
39. One day workshop on “Computer Assisted Drug Design”, organized by Prin. K. M. Kundnani College of Pharmacy, Mumbai on 15<sup>th</sup> October, 2005.
40. “Modules of Drug Discovery-Concept to Development”, organized by Industry Institute Partnership Cell, C. U. Shah College of Pharmacy on 15<sup>th</sup> January, 2004.
41. “Pharmacovigilance – From Identification to Reporting”, An International Workshop on 4<sup>th</sup> December, 2003 organized by Seth G. S. Medical College & K. E. M. Hospital Mumbai.
42. “Trends In Pharmaceutical Sciences & Pharmacy Practice”, organized by S.V.B’s College of Pharmacy, Dombivli (E) from September 23<sup>rd</sup> –27<sup>th</sup>, 2003.
43. Seminar on “Elements of Drug Design and Discovery” organised by Industry-Institute Partnership Cell & department of Pharmaceutical Chemistry Bombay College of Pharmacy on 4<sup>th</sup> January, 2003.
44. 54<sup>th</sup> Indian Pharmaceutical Congress, “Biotechnology-A Challenge to Pharmacy Profession”, at Bharati Vidyapeeth, Pune from 13<sup>th</sup> to 15<sup>th</sup> December, 2002.

#### AWARDS AND ACHIEVEMENTS

1. Molecular modelling, in-silico ADME, synthesis and characterization of indole analogues to target epidermal growth factor receptor for non-small cell lung cancer, Archanadevi Patel\*, Sonal Pathak, Archana Gurjar, International conference in innovation and advances in pharmaceutical sciences (ICIAPS 2023), Karnataka, 10<sup>th</sup> & 11<sup>th</sup> February 2023 (**2nd Prize for Oral Presentation**).
2. Novel synthetic pathway for Chloroquine side chain- Novoldiamine, **third position** in UG section of Medicine and Pharmacy category at Final round of Avishkar Research convention 2021-22 of University of Mumbai by Mr. Yash Ganatra, TY B. Pharm student on 15.5.2022 guided by Dr Archana S. Gurjar.
3. Molecular modelling study and synthesis of indole analogues to target gamma-secretase for Alzheimer’s disease, Sonal Parmar\* and Archana Gurjar, **Best oral presentation** at International Conference on Current Advances in Pharmaceutical Industry and Development organized by Centre for Pharmaceutical sciences, IST, Jawaharlal

Nehru Technological University Hyderabad (JUNTH) and Association of Pharmaceutical Research (APR) at JNUTH- Hyderabad from 10<sup>th</sup> – 11<sup>th</sup> Mar 2022.

4. Design, synthesis and evaluation of the cholinesterase inhibitory potential of 5-chloro benzimidazole derivatives for Alzheimer's, Sonal Pathak\*, Suchita Vishwakarma and Archana Gurjar, **Second position in oral presentation** at International Conference on Emerging Trends in Drug Discovery and Development (ICETD3-2022) at BITS- Mesra from 20<sup>th</sup> – 21<sup>st</sup> January 2022.
5. Evaluating the role of diverse substitutions on nitrogen-containing heterocyclic scaffold based on CADD and biological studies for Alzheimer's disease, Suchita Vishwakarma, Vivek Solanki, Archana Gurjar\*, **Third cash prize of Rs 3000/-** at International Conference on Drug Discovery 2020 at BITS- Hyderabad from 29<sup>th</sup> Feb- 2<sup>nd</sup> Mar 2020.
6. Gurjar A. S., Vishwakarma S\*, Meshram A, "Evaluating Versatility of Benzimidazole Analogues as Anti-Alzheimer Agents", **second prize in oral presentation** under pharmaceutical chemistry, pharmaceutical analysis and QA category; at APTICON 2018 (5th - 6th October 2018), organized at Swami Keshwanand Institute of pharmacy, Jaipur.

#### TRAINING PROGRAMME

Computer Aided Drug Design and Molecular Modelling training in Torrent Research Centre, Torrent Pharmaceuticals Ltd., Ahmedabad.

#### FACULTY DEVELOPMENT PROGRAMME

Topic	Duration	Venue
RRR Revitalize, Rejuvenate & Rebalance	26 <sup>th</sup> to 28 <sup>th</sup> April 2023	3 day Online Yoga workshop by APTI MS, BVCP, Navi Mumbai & Niramay Yogasadhana, Dombivli
NITTTR Module 2: Professional Ethics and Sustainability	Oct-Nov 2022, 8 weeks certificate month Feb 2023	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 4: Instructional Planning and Delivery	Oct-Nov 2022, 8 weeks certificate month Feb 2023	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 8: Institutional Management & Administrative procedures	Oct-Nov 2022, 8 weeks certificate month Feb 2023	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 1: Orientation Towards Technical Education and Curriculum Aspects	April- May 2022, 8 weeks certificate month July 2022	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 3: Communication Skills, Modes & Knowledge Dissemination	April- May 2022, 8 weeks certificate month July 2022	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 6: Student Assessment and Evaluation	April- May 2022, 8 weeks certificate month July 2022	Online mode, AICTE approved FDP course by NITTTR
NITTTR Module 7: Creative Problem Solving, Innovation and Meaningful R & D	April- May 2022, 8 weeks certificate month July 2022	Online mode, AICTE approved FDP course by NITTTR
Incorporating Universal Human Values in Education (An AICTE Initiative)	27 <sup>th</sup> Sept to 1 <sup>st</sup> Oct 2021	Online mode by AICTE
Emerging Trends in Drug Engineering	30 <sup>th</sup> Aug to 3 <sup>rd</sup> Sept' 2021	Online ATAL FDP by Prin. K. M. Kundnani College of Pharmacy, Mumbai.
Revisiting Different Facets of Medicinal Chemistry	5 <sup>th</sup> to 9 <sup>th</sup> July'2021	Online ATAL FDP Pharm Chem Dept. Bombay College of Pharmacy, Kalina.

NITTTTR Module 5 Technology Enabled Learning and Life Long Self Learning	April- May 2020, 8 weeks certificate date Feb 2021	Online mode, AICTE approved FDP course by NITTTTR
Developing Soft Skills and Personality	Sept to Nov 2020	Online course of 8 weeks by NPTEL-AICTE, FDP
Drug Engineering	21 <sup>st</sup> to 25 <sup>th</sup> Sept'2020	Online ATAL FDP organized by Bombay College of Pharmacy, Kalina.
Orientation and Pedagogy for Curriculum: Good Teaching Practices	3 <sup>rd</sup> to 8 <sup>th</sup> Aug'2020	Online one week AICTE sponsored, organized by Smt. Kishoritai Bhoyar College of Pharmacy, Kamptee, Nagpur
Getting started with Moodle	21 <sup>st</sup> to 25 <sup>th</sup> May 2020	5-day Online training Workshop by CDAC, Mumbai for Prin. K. M. Kundnani College of Pharmacy, Mumbai.
Online Teaching & E-content	16th and 17th of May 2020	2-Day Online FDP jointly organized by HSNC university and IIDE
Online FDP on MOODLE	13 <sup>th</sup> to 15 <sup>th</sup> May 2020	3-day online FDP organised by SCOPE, VIT Chennai in association with Teaching Learning Center of IIT Bombay.
Soft Skill Development	Jan- Mar 2020	Online course of 8 weeks by NPTEL-AICTE, FDP
Mechanisms in Organic Chemistry	Jul- Sept 2019	online course of 8 weeks by NPTEL-AICTE, FDP
NITTTTR, Induction Programme Phase I	26 <sup>th</sup> Nov to 7 <sup>th</sup> Dec' 2018	Government Polytechnic Mumbai.
AICTE sponsored Clinical Pharmacy: Skill Development and Training	1 <sup>st</sup> to 13 <sup>th</sup> February'2017	Bharati Vidyapeeth Deemed University Poona College of Pharmacy, Pune.
AICTE sponsored Issues Related to Drug Discovery & Development	18 <sup>th</sup> to 30 <sup>th</sup> Nov'2013	Bharati Vidyapeeth Deemed University Poona College of Pharmacy, Pune.
AICTE sponsored Novel Drug Delivery Systems: Past-Present-Future	19 <sup>th</sup> Sept to 1 <sup>st</sup> Oct'2011	Sinhgad College of Pharmacy, Vadgaon (Bk.), Pune.
AICTE sponsored Emerging Global Research Trends in Pharmacy	18 <sup>th</sup> to 30 <sup>th</sup> June'2007	Prin. K. M. Kundnani College of Pharmacy, Cuffe Parade.
AICTE sponsored Innovations in Pharmaceutical Biotechnology	20 <sup>th</sup> Feb to 4 <sup>th</sup> Mar'2006	Bharati Vidyapeeth Deemed University Poona College of Pharmacy, Pune.

#### PROFESSIONAL MEMBERSHIP

1. Life Member of APTI No. MA/ LM-1441.
2. Registered Pharmacist Maharashtra State, Reg. No. 178080 dated 8.9.2015.

#### ACADEMIC RESPONSIBILITIES

1. Placement Incharge
2. NIRF nodal officer
3. Assistant RTI officer
4. Admission committee
5. IQAC member
6. NBA and NAAC accreditation team member

7. Unfair means committee
8. College development committee

OUTREACH ACTIVITY

1. DLLE extension work teacher

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