

CVs of Prof. Hitendra M. Patel

- Name and full correspondence address: Prof. (Dr.) Hitendra M. Patel, FRSC,FICS
 Professor, Lab: 318, 2nd floor, Department of Chemistry,
 Sardar Patel University, Near University Campus,
 Vallabh Vidyanagar 388 120.
- 2. Email(s) and contact number(s): hm_patel@spuvvn.edu, (O) +91-2692-226856 to Ext-,210;
- Institution: Department of Chemistry, Sardar Patel University, Near University Campus,
 Vallabh Vidyanagar 388 120, Gujarat, India.
- 4. Orchid id: https://orcid.org/0000-0003-4740-7329
- 5. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution
1.	B.Sc.	1994	Chemistry/Physics	Veer Narmad South Gujarat University, Surat
2.	M.Sc.	1996	Organic Chemistry	Veer Narmad South Gujarat University, Surat
3.	Ph.D.	2008	Chemistry	Sardar Patel University,V.V.Nagar

6. Ph. D. thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Title: "Synthesis, Characterization and Material Applications of azo dyes based on derivatives of hydroxybenzophenones"

Guide's Name: Dr. B. C. Dixit,

Institute: V. P. & R. P. T. P. Science College, Vallabh Vidyanagar

Name of University: Sardar Patel University, Vallabh Vidyanagar, Gujarat.

Year of Award: 2008

6. Work experience (in chronological order).

Sr.	Positions	Name of the	From	То	Pay Scale
No.	Held	Institute			,
1	Junior Scientific	Gujarat Pollution	13 th May 1996	14 th March 1997	4500-125-7000
	Assistant	Control Board, Surat			
2	Lecturer in Chemistry,	St. Xavier's College, Ahmadabad	15 th March 1997	25 th September 1998.	2200-75-2800- 100-4000
3	Lecturer to Associate Professor (Sr. Grade to selection grade to Associate Professor) in Chemistry,	Science College,	26 th September 1998	4 th February 2015.	37,400-67000
4	Associate Professor in Organic Chemistry,	Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar,	5 th February 2015	to 28 th October 2016	37,400-67000
5	Professor in Chemistry	Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar,	29 th October 2016	to continue	44820 pay band (37,400-67000)

7. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

Sr.No.	Name of Award	Awarding Agency	Year
1	Elected Member, Organi	Royal Society of Chemistry	2020-2023
	Community Council,		
	RSC, London		
2	Fellow	Royal Society of Chemistry	2020 onwards
3	Member	American Chemical Society, U.S.A.	2016 onwards
4	Associate Member-	Royal Chemical Society, U.K.	2015-2020
	Member		
5	Life Member	Indian Chemical Society and Biologists,	2018 onwards
		India	
6	Life Member-Fellow	Indian Chemical Society	(2011-2023) -2023
	Member		onwards
7	Life Member	The Association of Chemical Technologist of	2010 to continue
		India	
8	Member	Advisory Committee for SC/ST Cell, Sardar	2012 to continue
		Patel University, V.V. Nagar, Gujarat	

9	Member of IQAC	Sardar Patel University, V.V. Nagar, Gujarat	March 2015-2017
	(Worked as Convener for		
	Criterion-I)		
10	Member	Board of studies & Faculty Member of	2008 to 2011
		Science. S. P. University, V. V. Nagar	

7. Publications (List of papers published in SCI Journals, in year wise descending order).

Sr.	TITLE	Year
No.		
1	Catalyst-free synthesis of imidazo [5, 1-b] quinazolines and their antimicrobial	2023
	activity	
	PJ Patel, RM Vala, SG Patel, DB Upadhyay, DP Rajani, F Damiri,	
	Journal of Molecular Structure 1285, 135467	0000
2	Recent developments in the Hantzsch synthesis of dihydropyridines	2023
	RM Vala, HM Patel Advances in Heterocyclic Chemistry 141, 179-208	
3	Polysaccharide-based nanogels for biomedical applications: A comprehensive	2023
	review	
	F Damiri, S Rojekar, Y Bachra, RS Varma, S Andra, S Balu, CV Pardeshi,	
	Journal of Drug Delivery Science and Technology, 104447	2222
4	Water mediated TBAB catalyzed synthesis of spiro-indoline-pyrano [3, 2-c]	2023
	quinolines as α-amylase inhibitor and in silico studies	
	DB Upadhyay, RM Vala, SG Patel, PJ Patel, C Chi, HM Patel Journal of Molecular Structure 1273, 134305	
5	Importance of Hybrid Catalysts toward the Synthesis of 5 H-Pyrano [2, 3-d]	2023
	pyrimidine-2-ones/2, 4-diones (Thiones)	
	MP Parmar, RM Vala, HM Patel	
	ACS Omega 8 (2), 1759–1816	0000
6	An efficient, catalyst-free and aqueous ethanol-mediated synthesis of 5-((2-	2023
	aminothiazol-5-yl)(phenyl) methyl)-6-hydroxypyrimidine-2, 4 (1 H, 3 H)-dione derivatives and their	
	PJ Patel, SG Patel, DB Upadhyay, L Ravi, A Dhanasekaran, HM Patel	
	RSC advances 13 (35), 24466-24473	
7	Synthesis of N-(4-chlorophenyl) substituted pyrano[2,3-c]pyrazoles enabling	2022
	PKBβ/AKT2 inhibitory and <i>in vitro</i> anti-glioma activity	
	RM Vala, V Tandon, LG Nicely, L Guo, Y Gu, S Banerjee, HM Patel	
8	Annals of Medicine 54 (1), 2548-2560 Catalyst-Free, Room-Temperature Accessible Regioselective Synthesis of	2022
	Spiroquinolines and Their Antioxidant Study	2022
	PJ Patel, DM Patel, RM Vala, SG Patel, DB Upadhyay, Y Pannerselvam,	
	ACS omega 8 (1), 444-456	
9	Catalytic Stereoselective Multicomponent Reactions for the Synthesis of Spiro	2022
	Derivatives: Recent Progress	
	DM Patel, PJ Patel, HM Patel	
10	European Journal of Organic Chemistry 2022 (46), e202201119 Microwave-assisted multicomponent synthesis of antiproliferative 2, 4-	2022
	dimethoxy-tetrahydropyrimido [4, 5-b] quinolin-6 (7 H)-ones	
	SG Patel, A González-Bakker, RM Vala, PJ Patel, A Puerta, A Malik,	
	RSC advances 12 (47), 30404-30415	
11	Versatile Synthetic Platform for 1,2,3-Triazole Chemistry	2022
	DP Vala, RM Vala, HM Patel	
	ACS Omega 7 (42), 36945–36987	I

12	Crystal structure, antibacterial and antifungal evaluation of 5-bromothiophene	2022
	based 3, 4-dihydropyrimidin-2-(1 H)-(thi) ones	
	MG Sharma, RM Vala, DP Rajani, V Ramkumar, RL Gardas, S Banerjee,	
13	Phosphorus, Sulfur, and Silicon and the Related Elements 198 (2), 145-153	2022
13	Synthesis, crystal structure and in silico studies of novel 2,4-dimethoxy-	2022
	tetrahydropyrimido[4,5-b]quinolin-6(7H)-ones	
	SG Patel, RM Vala, PJ Patel, DB Upadhyay, V Ramkumar, RL Gardas, RSC Advances 12 (29), 18806-18820	
14	Syrbactin-class dual constitutive-and immuno-proteasome inhibitor TIR-199	2022
''	impedes myeloma-mediated bone degeneration in vivo	2022
	V Tandon, RM Vala, A Chen, RL Sah, HM Patel, MC Pirrung, S Banerjee	
	Biosci. Report 44 (2), BSR20212721.	
15	One-pot two-step catalytic synthesis of 6-amino-2-pyridone-3, 5-dicarbonitriles	2022
	enabling anti-cancer bioactivity	
	LG Nicely, RM Vala, DB Upadhyay, J Nogales, C Chi, S Banerjee,	
	RSC advances 12 (37), 23889-23897	
16	Synthesis and in vitro study of antiproliferative benzyloxy dihydropyrimidinones	2021
	RM Vala, MG Sharma, DM Patel, A Puerta, JM Padrón, V Ramkumar,	
17	Archiv der Pharmazie 354 (6), 2000466	2020
17	Pyridine-2-carboxylic acid as an effectual catalyst for rapid multi-component	2020
	synthesis of pyrazolo[3,4-b]quinolinones MG Sharma, RM Vala, HM Patel*	
	RSC Advances 10 (58), 35499-35504	
18	A novel substrate directed multicomponent reaction for the syntheses of	2020
	tetrahydro-spiro[pyrazolo[4,3-f]quinoline]-8,5'-pyrimidines and tetrahydro-	
	pyrazolo[4,3-f]pyrimido[4,5	
	DM Patel, HJ Patel, JM Padrón, HM Patel*	
	RSC Advances 10 (33), 19600-19609	
19	One-Pot Assembly for Synthesis of 1,4-Dihydropyridine Scaffold and Their	2019
	Biological Applications	
	MG Sharma, J Pandya, DM Patel, RM Vala, V Ramkumar, R Subramanian,	
00	Polycyclic Aromatic Compounds 39 (5), 395-485	0040
20	Trimethyl glycine betaine based catalyst promoted novel and eco-compatible	2019
	pseudo four-component reaction for regioselective synthesis of functionalized 6,	
	8-dihydro-1'H, 5H	
	DM Patel, HM Patel* ACS Sustainable Chemistry & Engineering 7 (22), 18667–18676	
21	ACS Sustainable Chemistry & Engineering 7 (22), 18667–18676 Impact of an aryl bulky group on a one-pot reaction of aldehyde with	2019
<u>-</u> 1	malononitrile and N-substituted 2-cyanoacetamide	2010
	RM Vala, DM Patel, MG Sharma, HM Patel	
	RSC Advances 9 (49), 28886-28893	
22	A Practical Green Visit to the Functionalized	2019
	[1,2,4]Triazolo[5,1-b]quinazolin-8(4H)one Scaffolds Using the Group-Assisted	
	Purification (GAP) Chemistry and Their	
	DM Patel, RM Vala, MG Sharma, DP Rajani, HM Patel	
	ChemistrySelect 4 (3), 1031-1041	
23	Hydroxyl Alkyl Ammonium Ionic liquid assisted Green and One-pot	2019
	regioselective access to Functionalized Pyrazolodihydropyridine core and their	
	pharmacological evaluation	
	DM Patel, MG Sharma, RM Vala, I Lagunes, A Puerta, JM Padrón,	
0.1	Bioorganic chemistry 86, 137-150	00.10
24	Synthesis, Molecular Docking and Biological Evaluation of Mannich Products	2019
	Based on Thiophene Nucleus using Ionic Liquid	
	HM Patel*, DP Rajani, MG Sharma, HG Bhatt Letters in Drug Design Discovery 16 (2), 10.2174/1570180815666180502123743	
i	Letters in Drug Design Discovery to (2). TU.21/4/15/UT80815666180502123/43	

25	Anti-Proliferative 1,4-Dihydropyridine and Pyridine Derivatives Synthesized	2018
	through a Catalyst-Free, One-Pot Multi-Component Reaction	
	MG Sharma, RM Vala, DM Patel, I Lagunes, MX Fernandes, JM Padrón,	
	ChemistrySelect 3 (43), 12163–12168	
26	Synthesis, characterizations and microbial studies of novel mannich products	2018
	using multicomponent reactions	
	HM Patel	
	Current Bioactive Compounds 14 (3), 278-288	
27	Green approach for synthesis of bioactive Hantzsch 1, 4-dihydropyridine	2017
	derivatives based on thiophene moiety via multicomponent reaction	
	MG Sharma, DP Rajani, HM Patel*	
	Royal Society open science 4 (6), 170006	
28	Facile synthesis and biological evaluation of New Mannich products as potential	2017
	antibacterial, antifungal and antituberculosis agents: molecular docking study	
	HM Patel*, KD Patel, HD Patel	
	Current Bioactive Compounds 13 (1), 47-58	
29	Synthesis of new mannich products bearing quinoline nucleous using reusable	2015
	ionic liquid and antitubercular evaluation	
	HM Patel	
	Green and Sustainable Chemistry 5 (04), 137	
30	Synthesis, characterization and dyeing assessment of novel acid azo dyes and	2014
	mordent acid azo dyes based on 2-hydroxy-4-methoxybenzophenone-5-sulfonic	
	acid on wool and silk fabrics	
	HM Patel, BC Dixit	
	Journal of Saudi Chemical Society 18 (5), 507-512	
31	Design, synthesis and biological evaluation of new Mannich products using	2014
	ethyl ammonium nitrate as reusable ionic liquid.	
	HM Patel	
	IOSR Journal of Applied Chemistry, 7 (8), 40-47,	
32	Synthesis, structure investigation and dyeing assessment of novel bisazo	2014
	disperse dyes derived from UV absorbing material	
	HM Patel	
	IOSR Journal of Applied Chemistry 6, 51-55	
33	Solvent-free synthesis of mannich products catalyzed by ethyl ammonium	2014
	Nitrate as reusable ionic liquid and there in vitro microbial studies.	
	HM Patel	
0.4	International Journal of Recent Scientific Research, 5 (10), 1799-1805	0011
34	Synthesis, characterization and dyeing assessment of novel bisazo-acid dyes	2014
	derived from 2-hydroxy-4-methoxybenzophenone-5-sulphonic acid	
	HM Patel	
25	Int. J. Sci. Engi. Res 5 (1), 2213	0040
35	Synthesis, characterization and dyeing behaviour of heterocyclic acid and	2013
	mordent dyes on wool and silk fabrics	
	HM Patel	
20	Procedia Engineering 51, 363-370	2040
36	Synthesis, characterization and applications of some novel mordent and	2012
	heterocyclic disperse dyes on polyester and wool fibers	
	HM Patel	
27	Orbital: The Electronic Journal of Chemistry 4 (3), 159-170	2042
37	Synthesis, antimicrobial activity and absorption studies of some novel	2012
	heterocyclic dyes based on 4-hexylbenzene-1, 3-diol	
	HM Patel	
	European Journal of Chemistry 3 (1), 44-50	

38	Synthesis, characterization and dyeing behavior of heterocyclic acid dyes and	2012
	mordent acid dyes on wool and silk fabrics HM Patel	
	Journal of the Serbian Chemical Society 77 (11), 1551-1560	
39	Material applications of novel heterocyclic disperse and mordent dyes based on	2012
	2-butyl-3-(4-hydroxybenzoyl) benzofuran	
	HM Patel	
	Advances in Applied Science Research 3, 235-241	
40	Dyeing assessment of some novel mordent and heterocyclic disperse dyes	2012
	based on dihydrobenzofuran derivatives on to polyester and wool fibers	
	HM Patel	
41	Der Chemica Sinica 3 (1), 175	2011
41	Synthesis, characterization and printing application of solvent dyes based on 2-	2011
	hydroxy-4-n-octyloxybenzophenone BC Dixit, HM Patel	
	E-Journal of Chemistry 8 (2), 615-620	
42	Synthesis, characterization and application of some novel mordent and	2011
	heterocyclic disperse dyes based on 2-Butyl-3-(4-hydroxybenzoyl)benzofuran	
	HM Patel	
	Der Chemica Sinica 2 (6), 89-96	
43	Material Applications of Novel Disperse and Mordent Azo Dyes Based on 2-	2010
	Hydroxy-4-methoxybenzophenone	
	BC Dixit, HM Patel	
4.4	Asian Journal of Chemistry 22 (2), 921	0040
44	Synthesis, characterization and dyeing assessment of novel acid azo dyes and	2010
	mordent acid azo dyes based on 2-hydroxy-4-methoxybenzophenone on wool	
	and silk fabrics	
	BC Dixit, HM Patel, RB Dixit, DJ Desai Journal of the Serbian Chemical Society 75 (5), 605-614	
45	Studies on dyeing performance of novel acid azo dyes and mordent acid azo	2009
	dyes based on 2, 4-dihydroxybenzophenone	
	BC Dixit, HM Patel, DJ Desai, RB Dixit	
	E-Journal of Chemistry 6 (2), 315-322	
46	Synthesis and application of new mordent and disperse azo dyes based on 2,4-	2007
	dihydroxybenzophenone	
	BC Dixit, HM Patel, DJ Desai	
	Journal of the Serbian Chemical Society 72 (2), 119-127	

8. Detail of patents.

Sr.No	Patent Title	Name of Applicant(s)	Patent	Award Date	Agency/Country	Status
			No.			
	YRIMIDINECA	Dipti B. Upadhyay, Ruturajsinh M. Vala, Joaquina Nogales, Sourav Banerjee and Hitendra M. Patel		Under Review	India	Published

10. Books/Reports/Chapters/General articles etc.

Sr.No	Title	Author's Name	Publisher	Year of Publica
5	Chapter: Deep eutectic mixture (DEM)-assisted multicomponent synthesis of heterocycles Book: Multicomponent Synthesis (Green	Hitendra M. Patel	De Gruyter , Volume 5 (In print)	2023
	Bioactive Heterocycles)			
5	Chapter: Microneedle of Drug Delivery Systems Book: Nanoscience and Nanotechnology for Smart Prevention, Diagnostics and Therapeutics: Fundamentals and Applications	Fouad Damiri, Sagar Salave, Hitendra M Patel, Mohamed Berrada	Wiley-Scrivener (In print)	2023
4	Recent developments in the Hantzsch synthesis of dihydropyridines	R. M. Vala, H. M. Patel	Advances in Heterocyclic Chemistry, Elsevier, 141, 179-208	2023
3	Synthetic Dyes and Their Applications (Part - 1)	Hitendra M. Patel	LAP LAMBERT Academic Publishing GmbH & Co.,Germany ISBN:978-3-8473-4584-8	
2	Synthetic Dyes and Their Applications (Part - 2)		LAP LAMBERT Academic Publishing GmbH & Co.,Germany ISBN:978-3-8484-3761-0	
1	Study Guide To Chemistry		LAP LAMBERT Academic Publishing GmbH & Co.,Germany ISBN: 978-3-659-26367-5	

11. Any other Information (maximum 500 words) Project Completed:

- (1) "An Efficient Synthesis of Biologically Active Compounds via One-Step Synthesis from Diverse Heterocyclic Scaffolds" from DST-SERB, New Delhi, During 2017-2021 (48,62000/-)
- (2) "Synthesis, Characterization and Biological Activity of Some New Heterocyclic Compounds Based on U. V. Absorbing Materials using Mannich Reaction" from UGC, New Delhi, During 2012-2015 (3,19000/-)

Expertise: Organic Chemistry, Ionic Liquids and Deep Eutectic Mixtures, Multi-component Reactions, Anti-proliferative Activity, Synthesis of Heterocyclic Compounds, Medicinal Chemistry, Regioselective and Diastereoselective Synthesis, Green Synthesis, C-C and C-N bond formation, Heterogeneous Catalysis, Metal-free Catalyst, Microwave Assisted Synthesis, DFT calculations, Hirshfeld analysis, Docking studies, Single crystals, Group-Assisted Purification (GAP) Chemistry

12. Doctoral Theses Guided

2022

Synthesis of biologically active heterocyclic compouns bearing pyridine, pyrimidine and pyrazole scaffolds using one-pot reactions

Sardar Patel University, Ruturajsinh M. Vala

202

Development of novel heterocyclic Scaffolds via multi component reactions and their Anti- proliferative Activity

Sardar Patel University, Divyang M. Patel

2020

Synthesis of Novel Heterocyclic compounds using multi-component reaction and their biological evaluations. Sardar PatelUniversity,Mayank G. Sharma

13. Honours and Awards

2021

Top Cited Article 2019-2020 ChemistrySelect, Wiley

2020

CAS Registry Innovator

American Chemical Society

2020

Online course ACS Reviewer Lab

American Chemical Society

2019

Travel Support -2019

DST-SERB

2019

Top 2 % Peer Reviewer award

Publons

2019

Web of Science Certificate

Web of Science and Clarivate Analysis

2019

Associate Editor, Organic Section

Frontiers in Chemistry, Switzerland

2018

Outstanding Contribution Award for reviewing Journal

Journal of Molecular Structure, Elsevier

2018

Brand ambassador 2018-19

Bentham Science Publishers

2017

Distinguished Faculty in Science Award

Venus international Foundation, Chennai, India

14. Expert reviewer in following International Journals

ACS sustainable chemistry & engineering. (3), Arkivoc (12), Archiv der Pharmazie (1), Asian Journal of Organic Chemistry (1), Catalysis communications. (2), Chemistry- an Asian journal (2), ChemCatChem (3),

ChemistrySelect (45), Chemical data collections. (2), Green Chemistry (40), Frontiers in Chemistry (11), Chemistry & biodiversity (2), Chemical data collections (1), Journal of Heterocyclic Chemistry (4), Journal of Chemical Research (2) Journal of Molecular Modelling (1), Journal of Molecular Structure (61), Research on Chemical Intermediates (2), Journal of Medicinal chemistry (3) Medicinal Chemistry Research (7), Molecules (5), Natural Product Research (3), Polycyclic Aromatic Compounds (5), RSC advances (4), SN Applied Sciences (2), Textile Research (22), Fibers and Polymers (3), Molecules. (14)

15. Invited Talks in Conferences and Universities:

More than 85 (State, National, International Conference/Seminar/workshop/symposium) in India and abroad

16. Scientific Visits: U.S.A., France, Spain and U.K.