

## **Dr. Mehulsinh R. Chhasatia**

Cell +91 9429439908, & E-mail: [chhasatiamrc@gmail.com](mailto:chhasatiamrc@gmail.com)

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### **Academic Credentials**

	<b>Qualification</b>	<b>Month &amp; Year of Passing</b>	<b>University</b>	<b>% Obtained</b>
<b>Ph.D.</b>	Chemistry	June-2009	Sardar Patel University	-
<b>P.G.</b>	Inorganic chemistry	April-2005	Sardar Patel University	56.92
<b>U.G.</b>	Industrial Polymer Chemistry	April-2003	Sardar Patel University	63.12
<b>H.S.C.</b>	Science	March-2000	GSHEB	45.85
<b>S.S.C.</b>	General	March-1998	GSEB	61.57

### **Professional Experience**

Worked as an Assistant Professor in Department of Chemistry at Anand People's Medicare Society, Anand.	12.6 years Till date
Worked as a Research scientist at Sigma Energy, Baroda.	2 yrs
Worked as a Lecturer in Department of Chemistry at M.B. Patel Science Collage, Anand.	6 months

### **Core Competencies**

- Chromatographic Techniques viz., Paper Chromatography, TLC, Column Chromatography.
- Spectroscopic Techniques viz., UV-VISIBLE Spectroscopy, IR Spectroscopy.
- Windows 98, XP based Programmed and other computer applications, Web-Browsing etc.
- Familiar with Chem office, Chems sketch, ISIS-Draw etc.

### **Achievements**

- ❖ Registered as a for M.Phil. and Ph.D. Research Guide at Sardar Patel University, V.V.Nagar.
- ❖ Presentation on Coordination Chain Polymeric Assemblies of Trivalent Lanthanides with Multidentate Schiff base: Synthetic, Spectral Investigation, Magnetic and Thermal Approach at "National seminar on novel trends in Polymer Science & Technology" conducted by The Department of Chemistry, Sardar Patel University on 8<sup>th</sup> & 9<sup>th</sup> March 2007.  
**The Presentation was declared as 3<sup>rd</sup> Prize Winner in Poster Presentation Competition.**
- ❖ Awarded by The Prof. Talati Parivar for the research work on "The Chemistry and Biochemistry of transition metal ions and Biological activity exerted by coordination compounds" on November 23<sup>rd</sup>, 2007.
- ❖ Awarded by The Hari Ohm Ashram Prerit Shri Bhaikaka Inter-University Smarak Trust for "Five-coordinated oxovanadium (IV) complexes derived from amino acids and ciprofloxacin: Synthesis, spectral, antimicrobial, and DNA interaction approach." For the year 2008-09 in co-ordination chemistry.

## Research Work

- ❖ Recognized Guide for M.Phil. and Ph.D. (Chemistry & Applied Chemistry) at Sardar Patel University, V.V.Nagar.

- 1. Ph.D. : One student completed
- 2. M.Phil. : Two students completed

## Specializations

Bio-Inorganic Chemistry, Coordination compounds, metal chelate/polychelates, DNA and Biological studies of complexes.

## Publications

- One Patent
- 22 Papers have been Accepted & 3 under communication.
- Book Published: 4
- Total: **27** publications.

## Administrative Assignment

### ❖ University Level:

- 1. Member, Revised of syllabi committee (Chemistry) Sardar Patel University, Gujarat

### ❖ Institute Level:

- 1. Member of organizing committee of seminars at Dept of Chemistry. APMS, Anand
- 2. Working as Head of M.Sc./B.Sc. Chemistry at APMS, Anand
- 3. Member of admission committee of M.Sc. Organic Chemistry, APMS, Anand

## University Examination Assignments

- Convener, Paper setter and Examiner for Inorganic /Physical Chemistry at UG, PG and M.Phil. level Sardar Patel University, Gujarat
- External and Internal examiner for UG, PG & M.Phil. Practical and Viva Vove Examinations, Sardar Patel University, Gujarat
- External examiner for UG & PG Practical and Viva Voce Examinations, CU Shah University, Surendranagar, Gujarat
- External examiner and paper setter for UG & PG Examinations, Ganpat University, Mahesana, Gujarat
- External examiner for PG Practical and Viva Vove Examinations, Uka Tarsadia University, Bardoli, Gujarat

## Professional Affiliations

- ❖ Life time membership of “ **VIGYAN GURJARI**” Vijnana Bharti-Gujarat Unit, Membership No: 214 on 13/04/2017.

## References

**Dr. M. N. Patel**

Professor, Department of Chemistry,  
Sardar Patel University,  
Vallabh Vidyanagar - 388 120  
Gujarat - INDIA.

**Dr. D. S. Raj**

Principal,  
M. B. Patel Science College,  
Sardar Patel University,  
Anand.

**Dr. D. K. Raval**

Professor, Department of Chemistry,  
Sardar Patel University,  
Vallabh Vidyanagar - 388 120  
Gujarat - INDIA.

## Personal Dossier



**Name** : Dr. Mehulsinh Ranjitsinh Chhasatia  
**Date of Birth** : May 19<sup>th</sup>, 1983  
**Nationality** : Indian  
**Sex** : Male  
**Language Known** : English, Hindi, Gujarati.  
**Marital Status** : Married

**Address:** 27-28, Jetal Kunj, Opp. Patel M.S. High School, Station Road, Vadod, Anand-388370.

Place: Anand

# ANNEXURE-I

## Patent Publication:

1. **A process for the preparation of transparent conductive oxides.**  
**WO 2014/033753 A2, 6 March 2014, WIPO/PCT**  
Patel Jashmin Pravinbhai, Patel Sanjaykumar Hasmushbhai, Nirmal Jay Purottambhai,  
Dosi Promise Abhaykumar, Chhasatia Mehulsinh Ranjitsinh

## Book Publication:

1.	<b>Biological studies of oh Dimeric Co(II) &amp; Zn(II) complexes : DNA binding and cleavage</b> Mehul R. Chhasatia, Deepen S. Gandhi, Lambert Academic Publishing
2.	<b>A Textbook of Physical Chemistry</b> Physical Chemistry, Atul Prakashan, Ahmadabad
3.	<b>Biological Aspects: Complexes of VO(IV) Amino Acid &amp; Ciprofloxacin</b> Mehul R. Chhasatia, Lambert Academic Publishing
4.	<b>Synthesis And Characterization of VO(IV) Complexes</b> Mehul R. Chhasatia, Lambert Academic Publishing
5.	<b>Experiments in Inorganic Chemistry</b> Mehul R. Chhasatia, Anand People's Medicare Society , Anand

## Paper Publications:

1. **Five coordinated oxovanadium(IV) complexes derived from amino acid and ciprofloxacin: Synthesis, spectral antimicrobial and DNA interaction approach**  
Mehul R. Chhasatia, S.H.Patel, P.A.Parmar and M.N.Patel  
Bioorganic & Medicinal Chemistry Letters, 18, 2008, 6494-6500.
2. **DNA cleavage, binding and intercalation studies of drug-based oxovanadium(IV) complexes**  
Mehul R. Chhasatia, S.H.Patel, H.S.Bariya, V.R.Thakkar and M.N.Patel  
Journal of enzyme Inhibition and Medicinal Chemistry, 24(3), 2009,1715-721.
3. **DNA intrection and in-vitro antimicrobial studies of mixed ligand complexes of Cobalt(II) with floroquinolone antibacterial agent ciprofloxacin and some neutral bidentate ligands**  
Mehul R. Chhasatia, D.S.Gandhi and M.N.Patel  
Bioorganic & Medicinal Chemistry Letters, 19,2009, 2870-2873.
4. **Coordination polymeric assemblies of some d-block elements with Schiff bases and its characterization.**  
M.N.Patel, P.K.Panchal, P.B.Punsuriya, H.M.Parekh and Mehul R. Chhasatia  
Journal of macromolecular Science, Part A: Pure and Applied Chemistry, 44, 2007, 373-378
5. **Coordination chain polymeric assemblies of trivalent lanthanides with multidentate Schiff base**  
Synthetic spectral investigation and thermal aspects.  
M.N.Patel, S.H.Patel, P.B.Punsuriya, H.M.Parekh and Mehul R. Chhasatia  
Journal of Thermal Analysis and colorimetry 91(2), 2008, 413-418
6. **Synthesis, characterization invitro biocidal and nuclease activity of some coordinated compounds.**  
M.N.Patel, P.B.Punsuriya, Mehul R. Chhasatia, Pinakin Dhandhukia and Vasudev Thakkar.  
Journal of Coordination Chemistry, 61(20), 2008, 3336-3349
7. **Synthesis, characterization invitro biocidal and nuclease activity of Cu(II), Fe(II) and Fe(III) complexes.**  
M.N.Patel, P.B.Punsuriya, Mehul R. Chhasatia and S.H.Patel  
Polish J. Chemistry, 82, 2008, 1527-1539

8. **Synthesis, spectroscopic, thermal and biological aspects of novel six coordinated dimeric iron(III) mixed ligand complexes**  
M.N.Patel, P.B.Punsuriya and Mehul R. Chhasatia  
Applied Organometallic Chemistry, 22, 2008, 415-426
9. **Interaction of drug based binuclear mixed ligand complexes with DNA**  
Mehul R. Chhasatia, D.S.Gandhi and M.N.Patel  
Bioorganic & Medicinal Chemistry, 17, 2009, 5648-5655
10. **Antibacterial and DNA interaction studies of zink(II) complexes with quinolone family member, ciprofloxacin**  
Mehul R. Chhasatia, P.A.Parmar and M.N.Patel  
European Journal of Medicinal chemistry, 45, 2010, 439-446
11. **In vitro bacteriostatic and DNA interaction studies of drug-based antimicrobial mixed ligand complexes of Cobalt(II)**  
Mehul R. Chhasatia, Bhupesh Bhatt, Mohan Patel  
Medicinal Chemistry Research, 20, 2011, 220-230
12. **Synthesis, characterization and biological studies of some homodinuclear complexes of zinc with second generation quinolone drug and neutral bidentate ligands**  
Mehul R. Chhasatia, P.A.Dosi, H.S.Bariya, V.R.Thakkar and M.N.Patel  
Polyheron, 29, 2010, 1918-1924
13. **DNA intrection and promotion in antibacterial activites of ciprofloxacin drug due to formation of mixed ligand complexes of oxovanadium(IV)**  
Mehul R. Chhasatia, S. H. Patel, C. R. Desai and M. N. Patel  
Nucleosides, Nucleotides and Nucleic acid. 29, 2010, 200-225
14. **Effect of medium constituents on the growth and lipase production in Pseudomonas aeruginosa 2036.**  
Madhu S. Arora, Jagdish S. Patel, Dr. Induben Baser, Mehul R. Chhasatia  
Int. J. Adv. Res. Biol. Sci. 2(7), 2015, 171-176
15. **Water Analysis Based on Physico Chemical Parameters in Anand District, Gujarat**  
Patel KS, Patel RN, Chhasatia MR, Baser I, Patel DS  
Int. J. for Pharm. Res. Scholar. V-4, I-2, 2015, 239-243
16. **Study on synthesis of novel Chalcone their antimicrobial activity.**  
Rajarshi N Patel, Ketan S.Patel, Mehul R.Chhasatiya, Indu Baser  
J.Club for Pharm. Science. V-2, I-1, 2015, 20-27
17. **A novel route for the synthesis of chemiluminescence, as a crime scene investigation compound**  
Patel D.S, Patel K.S., Patel R.B., Chhasatia M.R., Patel J.R., Shah A.J., Patel R.N.  
Research journal of forensic science. Vol. 5(3), 2017, 1-6
18. **Synthesis and characterization of cobalt,nickel,Copper, complexes containing 4-benzoylthiosemicabazole-2-(4-nitrophenyl)-5-methyl-2,4-dihydropyrazole-3-one**  
Dipak K. Bhoi, Tapan H. Parekh, Mehulsinh R. Chhasatia, Nileshkumar D. Vala  
Journal of Emerging Technologies and Innovative Research, vol.-6, Iss.-3, March-2019.
19. **An efficient facile synthesis of the hybrid scaffold of of Pyrazole-Triazole-Chromenes Nucleus using PS-TBD as a green catalyst**  
Nileshkumar D. Vala, Tapan H. Parekh and Mehulsinh R. Chhasatia  
Journal of Drug Delivery and Therapeutics, 9(4): 2019, 222-226
20. **Synthesis of furano[2,3-c]/pyrrolo[2,3-c]coumarins and synthesis of 1(H)[1] benzopyrano [3,4-b][1]benzpyrano[3',4'-d] furan-7(H)-ones/1(H)-[1] benzpyrano [3,4]benzpyrano[3',4'-d]pyrrole-7(H)-ones**  
Mahesh K. Pandya, Mehulsinh R. Chhasatia, Nileshkumar D. Vala, Tapan H. Parekh  
Journal of Drug Delivery and Therapeutics, 9(4-s) 2019, 32-42.

**21. Synthesis And Characterization Of 3-(4-Aryl-5h-6,7,-Dihydrocyclopenta[B]Pyridin2-Yl), 3-(4-Aryl-5,6,7,8-Tetrahydroquinolin-2-Yl) And 3-(5-Hydroxy-Biphenyl-3-Yl) Coumarins Using Piperidine As A Catalyst**

Mahesh K. Pandya, Mehulsinh R. Chhasatia, Nileshkumar D. Vala, Tapan H. Parekh  
Heterocyclic Letters, Vol. 10(2), 2020, 333-340.

**22. Synthesis, Characterization of 1H-Pyrazol-Pyrano [3, 2-C] Chromene Derivatives and Their in Vitro Antimicrobial Activities**

Mehulsinh R. Chhasatia, Nileshkumar D. Vala, Tapan H. Parekh  
International Journal of All Research Education and Scientific Methods, 8(10), 2020, 660-665.

ANNEXURE-II

**Symposium and Conference:**

- 1. In-vitro antifungal study of genuine oxovanadium(IV) heteromoiities of different Schiff bases.**  
H.M.Parekh, P.B.Punsuriya, S.H.Patel, M.R.Chhasatia and M.N.Patel  
"National Seminar on Recent Development in Chemistry" Department of Chemistry, Hemchandracharya North Gujarat University, Patan On 31<sup>st</sup> Jan. 2006
- 2. Synthesis, thermal and spectroscopic investigation of some 3<sup>rd</sup> metal co-ordination polymeric assemblies.**  
H.M.Parekh, P.B.Punsuriya, S.H.Patel, M.R.Chhasatia and M.N.Patel  
"National Seminar on Recent Development in Chemistry" Department of Chemistry, Hemchandracharya North Gujarat University, Patan On 31<sup>st</sup> Jan. 2006
- 3. State level seminar on "Recent Advances in Chemistry" organized by V.P & R.P.T.P. Science College on 18<sup>th</sup> & 19<sup>th</sup> June, 2006.**
- 4. Structural, spectral investigation and antimicrobial activity of genuine iron(II) containing hetero cyclic moieties and its DNA binding.**  
M.N.Patel, P.B.Punsuriya and M.R.Chhasatia  
"National symposium on recent trends in chemistry" held at M.P. Govt. P.G. college Chittorgarh on 10<sup>th</sup> Jan. 2007
- 5. Synthetic, Characterization, Thermal and Biological Aspect of Novel Dimeric Cu(II) hetero system.**  
M.N.Patel, P.B.Punsuriya and M.R.Chhasatia and S.H.Patel  
"9<sup>th</sup> CRSI National symposium in chemistry" held at department of chemistry, University of Delhi on 1<sup>st</sup> -4<sup>th</sup> Feb.2007
- 6. Dimeric Cu (II) Complexes: Synthesis, Thermal, Spectroscopic and Biological Approach.**  
M.N.Patel, P.B.Punsuriya and M.R.Chhasatia  
"International conference on materials for millennium (March-2007)" held at Department of Applied Chemistry, Cochin University of science and technology Kochi on 1<sup>st</sup>-3<sup>rd</sup> March 2007
- 7. Synthesis, Structural, Characterization, In-vitro Antimicrobial Activities and DNA Binding Studies of some genuine Bis-Coumarin-Fe(III) Complexes**  
M.N.Patel, M.R.Chhasatia and P.B.Punsuriya  
"International conference on materials for millennium (March-2007)" held at Department of Applied chemistry, Cochin University of science and technology Kochi on 1<sup>st</sup>-3<sup>rd</sup> March 2007
- 8. Coordination chain polymeric assemblies of trivalent lanthanides with multidentate Schiff base: Synthetic, Spectral investigation, Magnetic and Thermal Approach**  
S.H.Patel, P.B.Punsuriya, M.R.Chhasatia and M.N.Patel  
"National seminar on novel trends in polymer science and technology" held at Department of Chemistry, Sardar Patel University on 8<sup>th</sup> & 9<sup>th</sup> March 2007  
**The paper was declared as 3<sup>rd</sup> prize winner in poster presentation competition**

9. **Calf-thymus DNA-binding and cleavage study of VO(IV) complexes**  
 "National conference on green chemistry and its perspective" held at Sant Gadge Baba Amaravati University on 11<sup>th</sup> & 12<sup>th</sup> Feb. 2008
10. **Five coordinated oxovanadium(IV) complexes derived from AMINO ACID and ciprofloxacin: Synthesis, spectral antimicrobial and DNA interaction approach.**  
M.R.Chhasatia, D.S.Gandhi, P.A.Parmar and M.N.Patel  
 "Indian Council of Chemist, 27<sup>th</sup> Annual Conference" held at Departement of Chemistry, Gurukul Kangri Vishwavidyalaya, Haridwar on 26<sup>th</sup>-28<sup>th</sup> Dec. 2008
11. **DNA intrection and In vitro antimicrobial studies of mixed ligand complexes of Cobalt(II) with floroquinolone antibacterial agent ciprofloxacin and some neutral bidentate ligands.**  
M. R. Chhasatia, D. S. Gandhi, P. A. Parmar and M. N. Patel  
 "National Seminar on Emerging Trends in Chemical Science Research" held at Department of Chemistry, Sardar Patel University on 20<sup>th</sup> & 21<sup>st</sup> Jan. 2009
12. **Microwave assisted synthesis of halo-aryl-substituted 1H-pyrazol-pyridine moiety and study on "effect of halogen substitution on antimicrobial activity."**  
Mehulsinh R. Chhasatia, Nileshkumar D.Vala, Manish P. Patel and Tapan H. Parekh.  
 "National Seminar on Emerging Trends in Chemical Science" held at The Poona Collage of Arts, Science and Commerce, Pune on 9<sup>th</sup> & 10<sup>th</sup> Feb. 2018.
13. **PS-TBD Catalysed General Synthesis For The Hybrid Scaffold Of Pyrazole-Triazole-Chromens Nucleus.**  
Mehulsinh R. Chhasatia, Nileshkumar D.Vala, and Tapan H. Parekh  
 National Conference " Medicinal Chemistry at the Interface of 21<sup>st</sup> Century :An Indian Prespective" organized by chemistry department of V.P. & R.P.T.P. Science College Vallabh Vidyanagar held 28<sup>th</sup> January, 2019.
14. **Chrometography technics in Chemistry**  
Mehulsinh R. Chhasatia, Shivam Saroj, Vaibhav Patel  
 SCIENCE MEET 2019: jointly organizes by GUJARAT SCIENCE ACADAMY (VVN Chapter), Shri A.N.Patel PG Institute of Science & Research, Anand and C.C. Patel Community Science Center, Sardar Patel University, Vallabh Vidyanagar, 6<sup>th</sup> January, 2019
15. **Synthesis and characterization of Ps-Tbd Catalysed reaction of Pyrazole-Triazole-Chromens**  
Mehulsinh R. Chhasatia, Nileshkumar D.Vala, and Tapan H. Parekh  
 One day Seminar on "Recent Trends in Chemical and Forensic Sciences" jointly organized by Shree P.M.Patel Ins. of P.G. Studies and Research in Science, and Shree P.M.Patel Ins. of P.G. Studies and Research in Applied Science, Anand People's Medicare Society, Anand, 12<sup>th</sup> Feb., 2019.

#### Workshop

1. One-day workshop on "NAAC Preparation: The Road Ahead" on 31<sup>st</sup> August 2018.  
 Internal Quality Assurance Cell (IQAC) Sardar Patel University
2. Framing of syllabus of III to VI semester B.Sc. (Chemistry) under CBCS system, on 6<sup>th</sup> Aug, 2018 organised by Chemistry Department, M.B.Patel Science college, Anand, and Board of Studies in Chemistry, Sardar Patel University.
3. One-day workshop on "Preparation of NAAC Assessment and Accreditation for non-accredited colleges/Institutes" organised on 20<sup>th</sup> February 2019.  
 Internal Quality Assurance Cell (IQAC) Sardar Patel University