## Dr. Deepenkumar Sureshbhai Gandhi

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I would like to be a part of the teaching-learning process, scientific research world especially in the fields of chemistry where my technical, communicational skills along with the academic achievements can be effectively utilized for its boost and to give my best with full capability and determination.

### Education

**Ph.D.** in Chemistry from Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar (August 2011)

Synthesis, characterization, biological studies of some drug based copper(II) and polypyridyl ruthenium(II) mixed-ligand complexes

**M.Sc.** (Organic Chemistry) with 64.28% from Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar, during (July 2005 - April 2007).

**B.Sc.** (Chemistry) with 62.28% from V.P. & R.P.T.P. Science College, Sardar Patel University, Vallabh Vidyanagar, during (July 2002 - April 2005).

#### **Professional Positions**

Assistant Professor in Chemistry: Government Science College, Idar (2<sup>nd</sup> Nov 2023 till date)

- Profound knowledge of Chemistry and ability to teach the subject for all sorts of students.
- Excellent communication and written skills as well as ability to explain the text.
- Highly skilled in using the deferent course books and material for teaching
- Ability to plan, collect material and deliver the lessons in the class.
- Proficient at arranging the competitions and assessing the performance of the students.

Assist. Prof. in Chemistry: Government Science College, Gandhinagar (18th Mar 2013 to 1st Nov 2023)

Sr. Research Associate : Jay Chemical Industries LTD, A'bad (13th Dec 2011 to 19th Mar 2013)

R & D Chemist :Jay Chemical Industries LTD, A'bad (13th May 2011 to 19th Mar 2013)

Iguar Chemical Industries LTD, A'bad (13th May 2011 to 12th Dec 2011)

- Spearheading efforts across synthesis of various novel intermediates and spectral interpretation and provide the experimental report of the synthesized compound.
- Working with international staff.
- Conducting daily Skype meeting with the General Manager (R&D) and also reporting weekly to the General Manager (R&D) with status report of the current progress.
- Preparing specifications, analytical procedure sheets, validation summary reports, analytic data review, log book entries as per the protocols & reports.
- Arranging laboratory trials to facilitate new product development and troubleshoot problematic issues. Regulating inventory levels of Laboratory chemicals.
- Collaborating with internal team members as well as external service suppliers to achieve the timely completion of the project as per agreed timelines

### **Profile**

### **Core Competencies**

• Time management, Research Management, Research Data Compilation, Documentation/Reports, Process Improvement, Cross-functional Coordination, Team Management, Strong Analytical Skill

#### **Technical Skills**

- Reactions: Buchwald-Hartwig reaction, Williamson ether synthesis (O/N-alkylation using PTC), Aqueous phase Acetylation, Chlorosulphonation, Ethylene oxide reaction, Michel reaction, Fritz Krohank synthesis, Vilsmeier-Haack reaction.
- Purification Techniques: Column chromatography, preferential crystallization, separation by salting, solvent extraction.
- Spectral Interpretation: <sup>1</sup>H NMR, <sup>13</sup>C NMR, FAB-MS, GC-MS

#### **Publications**

- Twenty-five (25) Publications in international journal of reputes:
  - For Detail Please refer Annexure 1
- Five (**05**) Book:
  - For Detail Please refer Annexure 2

### **Conferences / Seminars/Workshops**

- Coordinator for One (01) State Level Workshop.
- A member secretary of One (01) State Level Workshop.
- Attended and/or participated in two (02) International conferences
- Attended and/or participated 20+ national conference/seminar/workshop

## **Special Achievement**

### **Industrial Project:**

 Preparation and characterization of chromate salts from chrome ore" sponsored by METRI-TECH (Ahmedabad, Gujarat) (2<sup>nd</sup> July 2007 to 30<sup>th</sup> June 2008)

### **U.G.C Scholarship:**

• "Research Fellow in Science for Meritorious Student" availed by University Grant commission (New Delhi, INDIA) (1st September 2008 to 28th March 2011)

### **Proff. Talati Parivar prize:**

 Synthesis, characterization, biological study of some gene targeted drug based mixed-ligand complexes

### **Personal Details**

Date of Birth: 24th February 1985

**Marital Status:** Married:

**Languages known:** English, Hindi, Gujarati

Information provided is authentic and sufficient but will be glad to furnish any more if needed.

# Annexure 1

Sr. No.	Article Detail
1.	Synthesis, characterization, and thermal and biocidal aspects of drug-based metal complexes
	M.N. Patel, P.B. Pansuriya, P.A. Parmar, <u>D.S. Gandhi</u>
	Pharmaceutical chemistry journal, 2008, 42(12), 687
2.	DNA-interaction and in-vitro antimicrobial studies of some mixed-ligand complexes of
	cobalt(II) with fluoroquinolone antibacterial agent ciprofloxacin and some neutral
	bidentate ligands
	M.N. Patel, M.R. Chhasatia, <u>D.S. Gandhi</u>
	Bioorganic and medicinal chemistry letters, 2009, 19, 2870.
3.	Interaction of drug based binuclear mixed-ligand complexes with DNA
	M.N. Patel, M.R. Chhasatia, <u>D.S. Gandhi</u>
4.	Bioorganic and Medicinal Chemistry, 2009, 17, 5648  Square pyramidal copper(II) complexes of fourth generation fluoroquinolone and
4.	neutral bidentate ligand: Structure, antibacterial, SOD mimic and DNA-interaction
	studies
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u>
	Bioorganic and Medicinal Chemistry, 2010, 18, 1227
5.	SOD mimic activity, DNA binding and in-vitro antibacterial studies of based copper(II)
	complexes
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar
	Inorganic Chemistry Communications, 2010, 13, 618.
6.	Antimicrobial and nuclease activity of mixed polypyridyl ruthenium(II) complexes
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u> , V.R. Thakkar
	Inorganic Chemistry Communications 2010, 13, 1480.
7.	Synthesis, biological aspects and SOD mimic activity of square pyramidal copper(II)
	complexes with the 3 <sup>rd</sup> generation quinolone drug sparfloxacin and phenanthroline
	derivatives
	M.N. Patel, D.S. Gandhi, P.A. Parmar
	Inorganic Chemistry Communications 2011, 14, 128
8.	Antibacterial, SOD mimic and nuclease activities of copper(II) complexes containing
	ofloxacin and neutral bidentate ligands
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u>
9.	Applied Organometallic Chemistry 2011, 25, 27 Synthesis, characterization, antimicrobial, SOD mimic and DNA interaction behavior of
).	copper(II) complexes with pefloxacin and phenanthroline derivatives
	M.N. Patel, D.S. Gandhi, P.A. Parmar
	Applied Organometalic Chemistry, 2011, 25, 348.
10.	Third generation fluoroquinolones antibacterial drug based mixed-ligand Cu(II)
20.	complexes: Structure, antibacterial activity , superoxide dismutase activity and DNA-
	interaction approach
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u>
	Journal of Enzyme Inhibition and Medicinal Chemistry, 2011, 26(2), 188

11	Ternary copper(II) complexes of levofloxacin and phenanthroline derivatives: In-vitro antibacterial, DNA interactions and SOD like activity
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u> , V.R. Thakkar <b>Journal of Enzyme Inhibition and Medicinal Chemistry</b> , 2011, 26(3), 359
12.	Antibacterial, nuclease and SOD mimics behavior of copper(II) complexes of norfloxacin
	and phenanthrolines
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar
10	Journal of Coordination Chemistry, 2011, 64(7), 1276.
13.	Antimicrobial, DNA-binding and cleavage properties of polypyridyl chloro-
	ruthenium(II) complexes
	M.N. Patel, P.A. Parmar, <u>D.S. Gandhi</u>
14.	Journal of Enzyme Inhibition and Medicinal Chemistry, 2011, 26(5), 734  Effect of substituent of terpyridines on the DNA-interaction of polypyridyl ruthenium(II)
14.	complexes
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar
	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 2011, 84, 243
15.	DNA interacting and in–vitro antibacterial studies of fluoroquinolone based platinum(II)
10.	complexes
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar
	Inorganic chemistry communications, 2012, 15, 248
16.	Spectrophotometric determination of ciprofloxacin by ion pairing method
	M.N. Patel, B.S. Bhatt, <u>D.S. Gandhi</u> , P.A. Dosi, P.A. Parmar
	Journal of Analytical chemistry, 2012, 1
17.	Synthesis, Characterization, Covalent Binding, and Degree of Unwinding of Platinum(II)
	Bipyridine Complexes
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar B.S. Bhatt, A.P.Patidar
10	Journal of Inorganic and General Chemistry, 2012, 638(5), 838.
18.	Synthesis, characterization and evaluation of five coordinated copper(II) complexes as antibacterial, artificial nuclease and SOD mimics
	M.N. Patel, D.S. Gandhi, P.A. Parmar
	Nucleosides, Nucleotides and Nucleic Acids, 2012, 31:445
19.	DNA binding and cleavage activity of polypyridyl ruthenium(II) complexes
17.	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar, H.N. Joshi
	Journal of Coordination Chemistry, 2012, 65(11), 1926
20.	DNA Interactions and Cytotoxic studies of cis-platin analogues of substituted 2,2'-
	bipyridines
	M.N. Patel, P.A. Parmar <u>, D.S. Gandhi</u> , A.P. Patidar
	Spectrochimica Acta Part A: Mol. & Biomol. Spectroscopy, 2012, 97, 54
21.	Molecular docking, free radical scavenging, and DNA interaction studies of drug-based
	coordination compounds
	M.N. Patel, <u>D.S. Gandhi</u> , P.A. Parmar, J.V. Mehta
0.0	Monatshefte für Chemie - Chemical Monthly, (Accepted-July-2016)
22.	Dyeability and Dyeing Properties of Disperse disazo Dyes on Polyester and Nylon Fabrics
	International Journal of Scientific Research in Science, Engineering and Technology,
	2017,(3)5,809

23.	Antibacterial, SOD like and Nuclease Interaction of Fluoroquinolone Based Copper(II)
	Complexes
	International Journal of Scientific Research in Science and Technology, 2018, (4)9,448
24.	Biological Screening of Polypyridyl Chloro-Ruthenium(II) Complexes : Antimicrobial and
	DNA Interaction
	International Journal of Scientific Research in Science and Technology, 2019,(6)4,457
25.	Development of Newer Tetrahydroquinolines
	International Journal of Scientific Research in Science, Engineering and Technology,
	2021,(6)4,49.

# Annexure 2

Sr.	Book Detail
No.	
1.	Synthesis, Biological Studies of Polypyridyl Ru(II) complexes
	Lambert Academic Publishing ISBN No.: 978-3-659-66219-5
2.	Square Pyrimidal Cu(II) Complexes and their Biological Evaluation
	Lambert Academic Publishing ISBN No.: 978-3-659-63898-5
3.	Biological Studies of Oh Dimeric Co(II) & Zn(II) Complexes
	Lambert Academic Publishing ISBN No.: 978-3-659-66893-7
4.	Synthesis and Characterization of 5-(Alkoxymethyl)-8-Quinolinol
	Lambert Academic Publishing ISBN No.: 978-3-659-62691-3
5.	Synthesis of Novel Heterogeneous Catalyst and its characterization
	Lambert Academic Publishing ISBN No.: 978-3-659-62254-0