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Smart materials: Hydrogels/ therochromic/ photochromic materials and medicinal potent heterocyclic compounds.

No. of Publication: 122 + 2

List of publication:

Review Article/ Chapter Published in Book

1. "Flame retardant polyester resins", Chapter – 8, Vol. 1, pp.333-364, 2002 "Handbook of Polymer Composites and Blends", Published by RAPRA Technology, Limited, UK. (V.S. Patel, R.G. Patel and M.P. Patel).

2. Removal of Cr (VI) from aqueous solution by super absorbent poly(N,N-DAPB/N,N-DMAAM/PNAAC] Hydrogels",Yatin N. Patel and Manish P. Patel **Chapter – 12**, In "Micro- And Nanostructured Polymer Systems From Synthesis to Applications", CRC Pressand Apple Academic Press products, USA. **1**, pp.165-184, **2015.**

LIST OF PUBLICATIONS:

1. Simultaneous ultrasound- and microwave-assisted one-pot 'click' synthesis of 3-formyl-indole clubbed 1,2,3-triazole derivatives and their biological evaluation, Jaydeep A. Mokariya, Anirudhdha G. Kalola, Pratibha Prasad, Manish P. Patel, *Molecular Diversity*,**[I.F.: 2.013]**https://doi.org/10.1007/s11030-021-10212-8 (In Press).

2. Green and facile preparation of ultrasonic wave-assisted chitosan-g-poly-(AA/DAMPB)/-Fe_3O_4 composite hydrogel for sequestration of reactive black 5 dye, Shital R. Patel , Rasmika H. Patel &Manish P. Patel,*Polymer Bulletin*,**[I.F.: 2.014]**https://doi.org/10.1007/s00289-021-03662-5 (In Press).

3. Eco-friendly bioadsorbent-based polymer composites as a pH-responsive material for selective removal of anionic and azo dyes from aqueous solutions, Shital R. Patel , Rasmika H. Patel &Manish P. Patel, *Journal of Macromolecular Science, Part A Pure and Applied Chemistry*, **58** (2) 97-110 (2021).**[I.F.: 1.349]**https://doi.org/10.1080/-10601325.2020.1827957.

4. Design and synthesis of imidazole based quinolone derivatives as antimicrobial and antitubercular agents, Pratik G. Shobhashana and Manish P. Patel,*Asian Journal of Research in Chemistry and Pharmaceutical Sciences*,**7**(2), 726-733, 2019.**[I.F.: 3.0]**

5. Synthesis of imidazole derivatives bearing quinolone nucleus catalysed by CAN and their antimicrobial, antitubercular and molecular docking studies,Pratik G. Shobhashana, Pratibha Prasad, Anirudhdha G. Kalola and Manish. P. Patel, *Research Jounal of Life Sciences, Bioinformatics, Pharmaceuticals and Chemical Sciences*, **4**(3) 175-186, 2018. **[I.F.: 0.35]**

6. Microwave assisted one-pot synthetic route to imidazo[1,2-a]pyrimidine derivatives of imidazo/triazole clubbed pyrazole and their pharmacological screening,Pratibha Prasad, Anirudhdha G. Kalola and Manish P. Patel, *New J. Chem*,**42**, 12666-12676, 2018. **[I.F.: 3.069]**

7. Microwave assisted synthesis of halo-aryl-substituted-1H-pyrazol-pyridine moiety and study on "Effect of halogen substitution on antimicrobial activity", Nileshkumar D. Vala and Manish P. Patel, *Heterocyclic Letter*,**8,** (2),385-393, 2018.**[SJIF. : 6.691]**

8. An efficient synthesisof 4H-pyranoquinolinone derivatives catalysedbya versatileorganocatalyst tetra-n-butylammonium fluoride and their pharmacological screening,Pratibha Prasad, Pratik G. Shobhashana and Manish P. Patel, *R. Soc. Open Sci.***4**, (Dec), 70764, 2017. **[I.F.: 2.515]**

9. Synthesis, characterization of new 1,2,4-triazole derivatives bearing quinoline nucleus and their antimicrobial and antituburcular evaluation, Pratik. G. Shobhashana, Pratibha Prasad and Manish P. Patel, *Heterocyclic Letter*,**7**, (3), 819-828, 2017. **[SJIF. : 6.659]**

10. Synthesis and characterization of microwave induced pyrano[3,2-c] chromene, pyrano[4,3-b]pyran and 4H-chromene derivatives of aubstituted 2-(4-substituted phynyl-N-allylinole and their biological screening, Pratibha Prasad, Pratik. G. Shobhashana, and Manish P. Patel, *Heterocyclic Letter*,**7**, (3), 775-789, 2017. **[SJIF. : 6.659]**

11. Antimicrobial and antioxidant evaluation of new quinolone based aurone analogs, Hardik H. Jardosh and Manish P. Patel, *Arabian Journal of Chemistry*, **10**, S3781-S3791 2017.**[I. F.: 3.613]**

12. Microwave-assisted, solvent-free, one-pot, three-component synthesis of fused pyran derivatives containing benzothiazole nucleus catalyzed by pyrrolidine-acetic acid and their biological evaluation, Haresh B. Patel, Jayvirsinh D. Gohil, Manish P. Patel, *MonatshChem*, **148** (6) 1057-1067, 2017. **[I. F.:1.131]**

13. Library design, synthesis and biological exploration of novel 3,4′-bicarbostyril derivatives as potent antimicrobial,antitubercular and antimalarial agents,Hardik H. Jardosh,Nileshkumar D. Vala, Manish P. Patel,*Med Chem Res*,**26(5),** 881-899, 2017. **[I. F.:1.436]**

14. Ultrasound promoted efficient synthsis of new tetrazolo[1,5-a]quinoline derivatives and their comparative antimicrobial and anti tubercular study, Ankit J. Patel, Manish P. Patel; *Heterocyclic Letter*,**6,** (2) 185-194, 2016. **[SJIF. : 6.634**]

15. Synthesis and microbial studies of new pyrazoline/isoxazolinederivatives bearing quinolinemoiety using ultrasound irradiation, Ankit J. Patel, *Manish P. Patel,Indian Journal of Advances in Chemical Science,***4**(4) 409-420, 2016.

16. A novel approach for the synthesis of hydrogel nanoparticles and a removal study of reactive dyes from industrial effluent, Viran P. Mahida, Manish P. Patel,*RSC Advances*, **6**, 21577-21589, 2016. **[I. F. : 3.84]**

17. Removal of some most hazardous cationic dyes using novel poly (NIPAAm /AA/Nallylisatin)nanohydrogel, Viran P. Mahida and Manish P. Patel,*Arabian Journal of Chemistry*, **9,**430-442,2016, **[I. F.:3.725]**

18. PS-TBD triggered general protocol for the synthesis of 4H-chromene, pyrano[4,3-b]pyran and pyrano[3,2-c]chromene derivatives of 1H-pyrazole and their biological activities, Nileshkumar D. Vala, Hardik H. Jardosh, Manish P. Patel, *Chinese Chemical Letters*, **27**, 168–172, 2016. **(I. F. : 1.587]**

19. Green approach for the facile construction of pyrazolylpyrazoline bearing benzothiazole derivatives and its biological evaluation; Haresh B. Patel, Jayvirsinh D. Gohil, Manish P. Patel; *Heterocyclic Letters*, **6**, 31-42, 2016. **[SJIF. : 6.634]**

20. Superabsorbent amphoteric nanohydrogels: Synthesis, characterization and dyes adsorption studies, Viran P. Mahida, Manish P. Patel, *Chinese Chemical Letters*, **27**, 471-474, 2016. **[I. F. : 1.587)**

21. Comparative study on the use of conventional, microwave and ultrasound irradiation for the synthesis of pyrano[3,2-c]chromene and benzopyrano[4,3-b]chromene derivatives in water;Jayvirsinh D. Gohil, Haresh Patel, Manish P. Patel; *Heterocyclic Letter*,**6**, 123-132, 2016. **[SJIF. : 6.634]**

22. Ultrasound Assisted Synthesis of Triazole/Tetrazole Hybrids Based New Biquinoline Derivatives as a New Class of Antimicrobial and Antitubercular Agents;Jayvirsinh D. Gohil, Haresh Patel, Manish Patel,*Indian Journal of Advances in Chemical Science*, **4**, 102-113, 2016. **[SJIF. : 2.63]**

23. New approach for the synthesis of spiroindolinone incorporated 1,2,4-triazolo[1,5-a]quinoline derivatives and their pharmacological screening, Gaurav G. Ladani, Manish P. Patel, *Heterocyclic Letters*, **6**, 393-405, 2016. **[SJIF. : 6.634]**

24. Synthesis of imidazole[4,5-C] quinoline derivatives via hofmann rearrangement in the presence of iodobenzene diacetate and its biological evaluation, Gaurav G. Ladani, Manish P. Patel, *Heterocyclic letters*,**3**, 459-469. 2016.**[SJIF. : 6.634]**

25. Removal of heavy metal ions from aqueous solution by superabsorbent poly (NIPAAm/DAPB/AA) amphoteric nanohydrogel, Viran P. Mahida, Manish P. Patel,*Desalination and Water Treatment*, **57 (29)**,13733-13746, 2016. **(I. F. : 1.173)**

26. Regioselective one-pot three-component synthesis of quinoline based 1,2,4-triazolo[1,5-a]quinoline derivatives, Gaurav G. Ladani, Manish P. Patel,*RSC Advances*, **5**, 76943-76948, 2015. **[I. F. : 3.84]**

27. Novel 1,3,4-oxadiazole motifs bearing quinoline nucleus: synthesis, characterization and their biological evaluation for antimicrobial, antitubercular, antimalarial and cytotoxic activity Gaurav G. Ladani, Manish P. Patel,*New Journal of Chemistry*, **39**, 9848-9857, 2015. **[I. F. : 3.086]**

28. Zinc triflate promoted general synthetic protocol for the facile construction of chromenes and pyrimidines bearing *N*-allyl quinolone nucleus, Nileshkumar D. Vala, Hardik H. Jardosh, Manish P. Patel, *International Letters of Chemistry, Physics and Astronomy*; **8,** 199-207, 2015.

29. Pyrazole-quinolone-isoniazid hybrids: synthesis, characterization and *in vitro* evaluation as a new class of antimicrobial and antitubercular agents, Nileshkumar D. Vala and Manish P. Patel,*Heterocyclic Letters;***5**, 609-620, 2015. **[SJIF. : 6.152]**

30. Design and synthesis of new (bis)trifluoromethyl-promoted *N*-aryl biquinoline derivatives as antitubercular and antimicrobial agents, Mehul B. Kanani and Manish P. Patel,*Medicinal Chemistry Research,*24,563-575 (2015)**[I. F.- 1.612]**

31. Synthesis of N-arylquinolone derivatives bearing 2-thiophenoxyquinolines and their antimicrobial evaluation, Mehul B. Kanani and Manish P. Patel, *Chinese Chemical Letters*, **25**, 1073-1076, 2014. **[I. F.- 1.587]**

32. Facile construction of densely functionalized thiopyrano[2,3-b]quinolinesvia three-componentreactions catalyzed by L-proline,Mehul B. Kanani and Manish P. Patel,*RSC Adv.*,**4**, 28798–28801 (2014).**[I. F.- 2.562]**

33. Synthesis of new superabsorbent poly (NIPAAm/AA/N-allylisatin) nanohydrogel for effective removal of As(V) and Cd(II) toxic metal ions, Viran P. Mahida and Manish P. Patel,*Chinese Chemical Letters*, **25**,602-604, (2014). **[I. F.- 1.587]**

34. Design and synthesis of biquinolone-isoniazid hybrids as a new class of antitubercular and antimicrobial agents,Hardik H. Jardosh and Manish P. Patel,*European Journal of Medicinal Chemistry*, **65**, 348-359 (2013). **[I. F.- 3.499]**

35. Adsorption of azo dyes from water by new poly (3-acrylamidopropyl)-trimethylammoniumchloride-co-N,N-dimethylacrylamide super- absorbent hydrogel—Equilibrium and kinetic studies,Yatin N. Patel and Manish P. Patel, *J. Environ. Chem. Eng.*,**1**(4), 1368-1374 (2013).

36. A new fast swelling poly[DAPB-co-DMAAm-co-AASS] superabsorbent hydrogel for removal of anionic dyes from water, Yatin N. Patel and Manish P. Patel, *Chinese Chemical Letters,* **24**, 1005-1007, (2013). **[I. F.- 1.210]**

37. Synthesis of 2-amino-4H-chromene derivatives under microwave irradiation and their antimicrobial activity, Nirav K Shah, Nimesh M Shah, Manish P Patel andRanjan G Patel, *Journal of Chemical Science.*, **125**, 3, 525-530, (2013). **[I. F.- 1.298]**

38. An efficient-synthesis of 3'-indolyl substitutedpyrido[1,2-*a*]benzimidazoles as potential antimicrobial and antioxidant agents, Harshad G. Kathrotiya and Manish P. Patel, *Journal of Chemical Sciences* 125,993-1001(2013). **[I.F.-1.298]**

39. Synthesis and identification of *β*-aryloxyquinoline based diversely fluorine substituted *N*-aryl quinolone derivatives as a new class of antimicrobial, antituberculosis and antioxidant agents, Harshad G. Kathrotiya and Manish P. Patel, *European Journal of Medicinal Chemistry,* **63**,675-684 (2013).**[I. F.- 3.499]**

40. One step synthesis of pyrido[1,2-*a*]benzimidazole derivatives of aryloxypyrazole and their antimicrobial evaluation, Hardik H. Jardosh, Chetan B. Sangani, Manish P. Patel, Ranjan G. Patel, *Chinese Chemical Letters*, **24**,123-126 (2013).**[I. F.- 1.210]**

41. Microwave-induced CAN promoted atom-economic synthesis of 1H-benzo[*b*]xanthene and 4*H*-benzo[g]chromene derivatives of N-allyl quinolone and their antimicrobial activity, Hardik H. Jardosh and Manish P. Patel, *Medicinal Chemistry Research,* 22, 2954-2963 (2013). **[I. F.- 1.271]**

42. Microwave-assisted CAN-catalyzed solvent-free synthesis of *N*-allyl quinolone-based pyrano[4,3-*b*]chromene and benzopyrano[3,2-*c*]chromene derivatives and their antimicrobial activity, Hardik H. Jardosh and Manish P. Patel, *Medicinal Chemistry Research,* **22**, 905-915 (2013). **[I. F.- 1.271]**

43. Microwave-assisted synthesis of pyrido[1,2-*a*]benzimidazole derivatives of β-aryloxyquinoline and their antimicrobial and antituberculosis activities, Chetan B. Sangani, Hardik H. Jardosh, Manish P. Patel, Ranjan G. Patel, *Medicinal Chemistry Research,* **22**,3035-3047 (2013). **[I. F.- 1.271]**

44. Synthesis and *in vitro* antimicrobial evaluation of novel 2-amino-6-(phenylthio)-4-(2-(phenylthio)quinolin-3-yl)pyridine-3,5-dicarbonitriles, Mehul B. Kanani and Manish P. Patel, *Medicinal Chemistry Research*, **22**,2912-2920(2013).**[I. F.- 1.271]**

45. Microwave-assisted synthesis of novel *4H*-chromene derivatives bearing 2-aryloxyquinoline and their antimicrobial activity assessment, Chetan B. Sangani,Nimesh M. Shah, Manish P. Patel, Ranjan G. Patel,*Medicinal Chemistry Research*, **22**, 3831-3842, (2013). **[I. F.- 1.271]**

46. New *N*-arylaminobiquinoline derivatives: microwave-assisted synthesis and their antimicrobial activities,Nimesh M. Shah, Manish P. Patel, Ranjan G. Patel,*Medicinal Chemistry Research*, **22**, 312-322 (2013).**[I. F.- 1.271]**

47. Synthesis, characterization and *in vitro* microbial evaluation of some new 4*H*-chromene and quinoline derivatives of 1*H*-pyrazole, Nilesh J. Thumar, Manish P. Patel, *Journal of Heterocyclic Chemistry*, **49** (5), 1169-1178 (2012). **[I. F.- 1.224]**

48. Synthesis, characterization and antimicrobial activity of some new biquinoline derivatives containing a thiazole moiety,Nirav K. Shah, Nimesh. M. Shah, Manish. P. Patel, Ranjan. G. Patel,*Chinese Chemical Letters*,**23**,454-457(2012). **[I. F.- 1.210]**

49. An Efficient and Facile Synthesis of 1*H*-Pyrazolo[1,2-*b*]phthalazine-5,10-dione Derivatives of Biological Interest, Nimesh. M. Shah, Manish. P. Patel, Ranjan. G. Patel,*Journal of Heterocyclic Chemistry*, **49**, 1310-1316 (2012). **[I. F.- 1.210]**

50. Synthesis and *in vitro* antimicrobial evaluation of penta-substituted pyridine derivatives bearing the quinoline nucleus. Jigar. A. Makawana, Manish. P. Patel, Ranjan. G. Patel, *Medicinal Chemistry Research*, **21**, 616-623 (2012).**[I. F.- 1.271]**

51. Novel Cationic Poly[AAm/NVP/DAPB] Hydrogels for Removal of Some Textile Anionic Dyes from Aqueous Solution,Yatin N. Patel andManish P. Patel, *Journal of Macromolecular Science Part A: Pure and Applied Chemistry*, **49**, 1-12 (2012).**[I.F.- 0.807]**

52. Synthesis and *in vitro* antimicrobial screening of new pyrano[4-3-*b*]pyrane derivatives of *1H*-pyrazole,Chetan. B. Sangani, Divyesh. C. Mungra, Manish. P. Patel, Ranjan. G. Patel, *Chinese Chemical Letters,***23**, 57-60 (2012).**[I. F.- 1.210]**

53. Synthesis and *in vitro* antimicrobial activity of *N*-arylquinoline derivatives bearing 2-morpholinoquinoline moiety,Jigar. A. Makawana, Manish. P. Patel, Ranjan. G. Patel,*Chinese Chemical Letters*,**23**, 427-430 (2012).**[I. F.- 1.210]**

54. New *N*-arylaminobiquinoline derivatives: Synthesis, antimicrobial, antituberculosis, and antimalarial evaluation, Nimesh. M. Shah, Manish. P. Patel, Ranjan. G. Patel, *European Journal of Medicinal Chemistry*, **54**, 239-247(2012).**[I. F.- 3.499]**

55. Synthesis of a novel class of some biquinoline pyridine hybrids via one-pot, three-component reaction and their antimicrobial activity, Nimesh. M. Shah, Manish. P. Patel, Ranjan. G. Patel, *Journal of Chemical Sciences*, **124 (3)**,669-677 (2012).**[I. F.- 1.298]**

56. Lanthanum triflate-triggered synthesis of tetrahydroquinazolinone derivatives of*N*-allylquinolone and their biological assessment, Hardik. H. Jardosh andManish. P. Patel, *J. Serb. Chem. Soc.***77 (11)**, 1561-1570 (2012). **[I. F.- 0.934]**

57. $Zn(OTf)_2$-catalyzed three component, one-pot cyclocondensation reaction of some new octahydroquinazolinone derivatives and access their bio-potential, Pushpak. M. Shah, Manish. P. Patel, *Medicinal Chemistry Research*, **21**, 1188-1198(2012). **[I. F.- 1.271]**

58. A three component one-pot synthesis and biological studies of some new octahydroacridine-1,8-dione derivatives containing tetrazolo[1,5-*a*]quinoline moiety, Sandip V Bhuva and Manish P Patel, *Indian Journal of Chemistry*, **51B**, 1388-1395 (2012). **[I. F.- 0.648]**

59. A one-pot synthesis of pyrano[6,5-*b*]quinoline derivative and their biological studies,Chetan. B.Sangani, Divyesh. C.Mungra, Manish. P. Patel, Ranjan. G.Patel,*Journal of Serbian Chemical Society*, **77 (9)**, 1165-1174 (2012). **[I. F.- 0.934]**

60. The design, synthesis and antimicrobial activity of new biquinoline derivatives, Nirav K. Shah, Nimish M. Shah, Manish P. Patel,Ranjan G. Patel, J. Serb. Chem. Soc., **77 (3)**, 279-286 (2012). **[I. F.- 0.934]**

61. An efficient synthesis of 3'quinolinyl substituted imidazole-5-one derivatives catalyzed by zeolite and their antimicrobial activity, Harsad G. Kathrotiya, Nilav A. Patel, Ranjan G. Patel, Manish P. Patel, *Chinese Chemical Letters*, **23**, 273–276(2012). **[I. F.- 1.210]**

62. Molecular iodine catalyzed synthesis of tetrazolo[1,5-*a*]-quinoline based imidazoles as a new class of antimicrobial and antituberculosis agents. Divyesh C. Mungra, Harshad G. Kathrotiya , Niraj K. Ladani, Manish P. Patel, Ranjan G. Patel,*Chinese Chemical Letters***23**, 1367-1370 (2012). **[I. F.- 1.210]**

63. Microwave-assisted multicompotent synthesis of 3'-indolyl substituted pyrano[2,3-c]pyrazoles and their antimicrobial activity, Harsad G. Kathrotiya, Ranjan G. Patel, *Manish P. Patel, J. Serb. Chem. Soc.* **77 (8)**, 983-991 (2012). **[I. F.- 0.934]**

64. Microwave-assisted synthesis of 3'-indolyl substituted *4H*-chromenes catalysed by DMAP and their antimicrobial activity,HarshadG. Kathrotiya and Manish. P. Patel,*Medicinal Chemistry Research,*Harshad**21**,3406-3416(2012). **[I. F.- 1.271]**

65. Diversity-Synthesis and antimicrobial evaluation of new pyrano[4,5-*b*]pyran and pyrano[3,2-*c*] chromene derivatives bearing 2-thiophenoxy quinoline nucleus, Jigar A. Makawana, Manish P. Patel, Ranjan P. Patel,*Arch. Pharm. Chem. Life Sci.,***345**, 314-322 (2012). **[I. F.- 1.54]**

66. Synthesis, characterization and biological activity of some new carbostyril bearing 1*H*-pyrazole moiety, Nilesh J. Thumar and Manish P. Patel, *Medicinal Chemistry Research* , **21**, 1751-1761 (2012). **[I. F.- 1.271]**

67. Synthesis and *in vitro* antimicrobial activity of new 3-(2-morpholinoquinolin-3-yl) substituted acrylonitrile and propanenitrile derivatives, Jigar A. Makawana, Manish P. Patel, Ranjan P. Patel,*Chemical Papers***65 (5)**, 700-706(2011).

68. Microwave assisted synthesis of novel Hantzsch 1,4-dihydropyridines, acridines, acridine-1,8-dions and poly hydroquinolines bearing the tetrazolo [1,5-*a*]quino line moiety and their antimicrobial activity assess, Niraj K. Ladani, Divyesh C. Mungra, Manish P. Patel, Ranjan P. Patel,*Chinese Chemical Letters*, **22**, 1407-1410 (2011). **[I. F.: 1.210]**

69. Microwave assisted synthesis and antimicrobial evaluation of new fused pyran derivatives bearing 2-morpholino quinoline nucleus, JigarMakawana, Divyesh C. Mungra, Manish P. Patel, Ranjan P. Patel *Bioorganic& Medicinal Chemistry Letters,* **21**, 6166-6169 (2011). **[I. F.- 2.903]**

70. Synthesis and identification of *β*-aryloxyquinolines and their pyrano[3,2-*c*]chromene derivatives as a new class of antimicrobial and antituberculosis agents,Divyesh C. Mungra, Manish P. Patel, Dhanji P. Ranjani and Ranjan P. Patel *European Journal of Medicinal Chemistry,***46**, 4192-4200 (2011).**[I. F.- 3.499]**

71. Zn(II) chloride catalyzed one pot synthesis of some new 4-thiazo lidinone derivatives as biologically potent agents, Pushpak M. Shah and Manish P. Patel,*Indian Journal of Chemistry, section-B,***50B**, 310-314 (2011). **[I. F.- 0.648]**

72. Super absorbent hydrogel based on poly[acryl amide/maleic acid/2-methacry loxy ethyl tri methylammonium chloride]: synthesis, characterization and their applica-tion in the removal of chromium (VI) from aqueous solution,Ankit M. Patel, Manish P. Patel, Ranjan G. Patel, *Journal of Macromolecular Science Part-A, Pure and Applied Chemistry***48** (5), 339-347 (2011). **[I.F.- 0.807]**

73. Synthesis and antimicrobial screening of pyrano[3,2-*c*]chromene derivatives of 1*H*-pyrazoles, Chetan B. Sangani, Divyesh C. Mungra, Manish P. Patel, Ranjan P. Patel, *Cent. Eur. J. Chem.,***9(4**), 635-647 (2011).

74. Synthesis and Antimicrobial Activity of Some New N-Substituted Quinoline Derivatives of 1*H*-Pyrazole, Nilesh J. Thumar,Manish P. Patel, *Archiv der Pharmazie,***2**, 91-101 (2011). **[I. F.- 1.54]**

75. Synthesis, characterization, and antimicrobial evaluation of carbostyril derivatives of 1*H*-pyrazole, Nilesh J. Thumar, Manish P. Patel, *Saudi Pharmaceutical Journal,***19**, 75-83 (2011).**[I. F.- 0.954]**

76. Nickel and copper removal study from aqueous solution using new cationic poly[Acrylamide/ N,N-DAMB/ N,N-DAPB] super absorbent hydrogel, Ankit M. Patel, Manish P. Patel, Ranjan G. Patel, *Journal of Applied Polymer Science*, **119** (4), 2485-2493 (2011).**[I. F.- 1.401]**

77. Microwave-assisted synthesis of some new tetrazolo[1,5-*a*]quinolinebased benzimidazoles catalyzed by *p*-TsOH and investigation of their antimicrobial activity, Divyesh C. Mungra, Manish P. Patel, Ranjan P. Patel, *Medicinal Chemistry Research,***20**(6), 782-789 (2011). **[I. F.- 1.271]**

78. A facile four component one-pot synthesis of polyhydroquinoline derivatives catalyzed by ionic liquid *via* modified Hantzsch reaction, Jay P.Nirmal, Pratish V.Dadhaniya, Manish P Patel&Ranjan G Patel,*Indian Journal of Chemistry section-B,* **48B**,May, 587-592 [2010].**[I. F.- 0.648]**

79. A convenient one-pot synthesis of some new 3-(2-phenyl-6-(2-thienyl)-4-pyridyl)hydroquinolin-2-ones under microwave irradiation and their antimicrobial activities. Niraj K. Ladani, Manish P. Patel, Ranjan P. Patel *Phosphorus, Sulfur, and Silicon and the Related Elements,***185**, (3), 658-662, (2010). **[I. F.- 0.601]**

80. An efficient three component one-pot synthesis of some new octahydroqui-nazolinone derivatives and investigation of their antimicrobial activities. Niraj K. Ladani, Manish P. Patel, Ranjan P. Patel. *ARKIVOC,***vii**, 292-302, (2009). **[I. F.- 1.057]**

81. An efficient one-pot synthesis and *in vitro* antimicrobial activity of new pyridine derivatives bearing the tetrazoloquinoline nucleus. Divyesh C. Mungra, Manish P. Patel, Ranjan P. Patel. *ARKIVOC,***xiv**, 64-74, (2009).**[I. F.- 1.057]**

82. Synthesis and *in vitro* antimicrobial evaluation of4*H*-pyrazolopyran, -benzopyran and naphthopyran derivatives of1*H*-pyrazole, Nilesh J. Thumar,Manish P. Patel, *ARKIVOC*,**xiii**, Page: 363-380, (2009). **[I. F.- 1.057]**

83. One-pot multicomponent condensation reaction in neutral condition: Synthesis, characterization and biological studies of fused thiazole [2,3-*b*] quinazolinone derivatives. Nirav K. Shah, Manish P. Patel, Ranjan G. Patel, *Phosphorus, Sulfur and Silicon, and the Related Elements,* **184** (10), 2704-2719 [2009].**[I. F.- 0.601]**

84. Synthesis, characterization and biological activity of substituted thiazole-5-carboxaldehyde and its ylidenenitriles derivatives. Nilesh J. Thumar, Manish P. Patel, *Phosphorus, Sulfur and Silicon, and the Related Elements.***184** (10), 2720-2732 [2009].**[I. F.- 0.601]**

85. Reaction of 3-aminocyclohexa-2-en-1-ones with arylidenemalononitriles; synthesis, characterization & antimicrobial activity of some new quinoline bearing pyrazole nucleus. Nirav K. Shah, Manish P. Patel, Ranjan G. Patel, *Indian Journal of Chemistry; Section-B*, **48B,**August, 1170-1173 [2009].**[I. F.- 0.648]**

86. A new cationic poly[1-vinyl-3-ethyl imadazolium iodide], P(VEII) hydrogel for the effective removal of chromium (VI) from aqueous solutionPratish V. Dadhaniya, Ankit M. Patel, Manish P. Patel, Ranjan G. Patel, *Journal of Macromolecular Science Part-A, Pure and Applied Chemistry,***46** (4), 447-454 [2009]. **[I.F.- 0.807]**

87. Microwave-assisted synthesis of some new biquinoline compounds catalyzed by DMAP and their biological activities.Jay P. Nirmal, Manish P. Patel, Ranjan G. Patel, *Indian Journal of Chemistry section-B,* **48B,**May, 712-717 [2009].**[I. F.- 0.648]**

88. A convenient one-pot synthesis of series of 3(2,6-diphenyl-4-pyridyl)hydroquiinolin-2-one under microwave irradiation and their antimicrobial activites.Niraj K. Ladani, Manish P. Patel, Ranjan G. Patel, *Indian Journal of Chemistry section-B.* **48B,**February, 261-266 [2009].**[I. F.- 0.648]**

89. Microwave-assisted reaction: One-pot synthesis of various quinolyl-quinoline-4-one derivatives, Nilav A. Patel, Ranjan G. Patel, Manish P. Patel, *Journal of Environmental research and Development,***3** (3), 851-858 [2009].

90. Synthesis, characterization and biological activity of some new benzoic acid and thiazoloacridinederivatives,Nilav A. Patel, Sandip C. Surti, R. G. Patel and M. P. Patel,*Phosphorus, Sulfur, and Silicon and the Related Elements,***183** (9), 2191-2203 [2008].**[I. F.- 0.601]**

91. Synthesis and antimicrobial activity of some new substituted 9-(*1H*-pyrazolo[3,4-b]quinolin-1-yl]acridines, Sanjay F. Thakor, Pankaj V. Parmar, Manish P. Patel and Ranjan G. Patel, *Saudi Pharmaceutical Journal,***16,** No. 1, 64-68 [2008].**[I. F.- 0.954]**

92. Synthesis and characterization of heterocyclic substituted fluoran compounds, Sachin V. Patel, Manish P. Patel, Ranjan G. Patel, *J. Serb. Chem. Soc.,***72(11)**, 1039-1044 (2007).**[I. F.- 0.934]**

93. Synthesis and antibacterial activity of novel pyrazolo[3,4-*b*]quinoline based heterocyclic azo compounds and their dyeing performance. Sanjay F. Thakor, Dinesh M. Patel, Manish P. Patel and Ranjan G. Patel, Saudi Pharmaceutical Journal, **15(1)**, 48-54 (2007). **[I. F.- 0.954]**

94. Copper and Nickel removal from aqueous solutions using new chelating poly[Acrylamide/N-vinyl pyrrolidone/3-(2-hydroxyethyl carbamoyl)acrylic acid] hydrogels, Pratish V. Dadhaniya, Manish P. Patel, Ranjan G. Patel, *Journal of Macromolecular Science, Part-*A**, 44:7**, 769-777 [2007].**[I.F.- 0.807]**

95. Removal of anionic dyes from aqueous solution using poly [N-vinyl pyrrolidone/2-methacryloyloxyethyl)trimethyl ammonium chloride] superswelling hydrogels. Pratish V. Dadhaniya, Manish P. Patel, Ranjan G. Patel *Polymer Bulletin* **58**, 359-369 (2007).**[I. F.- 1.332]**

96. Synthesis and studies of the biological activity of novel pyrimidino fused acridine derivatives, B. B. Patel, R. G. Patel and M. P. Patel, *J. Serb. Chem. Soc.,***71(10)**, 1015-1023 (2006].**[I. F.- 0.934]**

97. Swelling and dye adsorbtion study of novel superswelling [Acryamide/N-vinylpyrrolidone/3(2-hydroxyethyl carbamoyl)acrylic acid]hydrogels, Pratish V. Dadhaniya, Manish P. Patel, Ranjan G. Patel, *Polymer Bulletin* **57**, 21-31 (2006).**[I. F.- 1.332]**

98. Monoazo disperse dyes based on Fused 1H-Pyrazolo[3,4-b]quinoline-3-amine, Ranjan G. Patel, Manish P. Patel and Sajid A. Saiyad, *Colourage*, p-39-43, December [2005].

99. Synthesis, characterization and anti-bacterial activity of some new 2,3,6-trisubstituted quinazolin-4(3H)-ones, Rohit D. Patel, Manish P. Patel&Ranjan G. Patel, *Indian Journal of Chemistry,**44B,*** Sept. 1944-1946 [2005].**[I. F.- 0.648]**

100. Synthesis and characterization of novel substituted spiro[isobenzofuran-1(3H),9'-xanthene]-3-ones, Sachin V. PatelManish P. Patel and Ranjan G. Patel, *J. Serb. Chem. Soc.,***70(7)**, 931-936 (2005].**[I. F.- 0.934]**

101. Synthesis and characterization of bromoquinazolinonesubstituted spiro [isobenzofuran-1,9'-xanthene]-3-ones, S. V. Patel, M. P. Patel, and R. G. Patel,*Journal of the Iranian Chemical Society,* **2(3)**, 220-225 [2005).

102. 3,6-Disubtituted fluoranscontaining 4(3*H*)-quinazolinon-3-yl, diethyl amino groups and their application in reversible thermochromicmaterials, Ritesh G. Patel, Manish P. Patel and Ranjan G. Patel, *Dyes and Pigments,* **66(1)**, 7-13 (2005).**[I. F.- 3.532]**

103. Synthesis and characterization of chromogenic fluorancompounds containing 4-keto-quinazolinone moieties, Ritesh G. Patel, Manish P. Patel and Rajan G. Patel, *J. Serb. Chem. Soc.*,**69** (5) 327-333 (2004).**[I. F.- 0.934]**

104. Synthesis and characterization of ether linkage containing bis-fluorancompounds", Ritesh G. Patel, Jignesh V. Patel, Manish P. Patel and Rajan G. Patel, *J. Serb. Chem. Soc.*,**68** (8-9), 607-613 (2003).**[I. F.- 0.934]**

105. Synthesis and curing kinetics of coloured epoxy resin containing azo moiety, Milan R. Patel, Manish P. Patel, Ranjan G. Patel and Rashmika H. Patel, *The International Journal of Polymeric Materials*, Vol. **52** (3), 211-218 (2003).**[I. F.- 1.83]**

106. Synthesis and application of novel heterocyclic dyes based on 11-amino-13H-acenaphtho[1,2-e]pyridazino[3,2-b]quinazolin-13-one, Vijay H. Patel, Manish P. Patel, (Miss) Ranjan G. Patel, *J. Serb. Chem. Soc.*,**67** (11), 727-734 (2002).**[I. F.- 0.934]**

107. Disperse dyes based on 2-methyl-3-[3'-aminophthalimido]-4(3H)-quinazolinone, Vijay H. Patel, Manish P. Patel, (Miss) Ranjan G. Patel, *J. Serb. Chem. Soc.*,**67** (11), 719-726(2002).**[I. F.- 0.934]**

108. Monoazo disperse dyes derived from 11H-7-amino-2-chloro-isoindolo[2,1-a]benzimidazole-11-one, Kalpesh M. Patel, Vijay H. Patel, Manish P. Patel and Ranjan G. Patel, *Dyes and Pigments,* **55** (1), 53-58 (2002).**[I. F.- 3.532]**

109. Glass fiber reinforced composites of colouredepoxy resin cured with different amines, Milan R. Patel, Manish P. Patel, Rashmika H. Patel, Ranjan G. Patel, *Polymer and Polymer Composites*, **10** (6), 441-446 (2002).**[I. F.- 0.31]**

110. Fused heterocycle 11-amino-13H-acenaphtho[1,2-e]pyridazino[3,2-b]quinazo-line-13-one based monoazo disperse dyes, Vijay H. Patel, Manish P. Patel and Ranjan G. Patel, *Dyes and Pigments,* **52** (3), 191-198 (2002).**[I. F.- 3.532]**

111. Synthesis and application of heterocyclic dyes based on 11-Amino-3-bromo-13H-acenaphtho[1,2-e]pyridazino[3,2-b]quinazoline-13-one, Vijay H. Patel, Manish P. Patel, (Miss) Ranjan G. Patel, *Heterocyclic Communications*, 7, 599-606 (2001).**[I. F.- 0.522]**

112. Synthesis and studies of colouredpolyesters derived from bis-azo diols, K.J. Patel, M.P. Patel and R.G. Patel, *Indian Journal of Chemical Technology*, **7**, 307-311 (2000).**[I. F.- 0.628]**

113. Synthesis and characterization of novel polyester/copolyester, Manish P. Patel and Ranjan G. Patel, *J. of Polymeric Materials*, **16**, 237-242 (1999).

114. Studies on the kinetics of curing and thermal stability of novel tetrafunctional epoxy resin and their glass fiber-reinforced composites, Kamlesh G. Amin, Manish P. Patel and Ranjan G. Patel, POLYMER '99 'Polymers Beyond AD 2000', Ed: A. K. Ghosh, The Society of Polymer Science, India, 538-531 (1999).

115. Studies on the curing kinetics and thermal stability of the novel tetrafunctional epoxy resin, 4-N,N,N'N'-tetrakis(2,3-epoxypropyl)-4,4'-(1,4-phenylenedioxy)-dianiline, Kamlesh G. Amin, Manish P. Patel&Ranjan G. Patel *Die AngewandteMakromolekulareChemie*,**266,** 46-49 (1999).

116. Novel bis-azodiols: utilization in coloured polyesters, B.J. Modi**,** M.P. Patel, (Miss) R.G. Patel and V.S. Patel. *Colourage*, Vol**. XLV (2),** 23-28 (1998).

117. Synthesis and characterization of thermotropic liquid crystalline copolyesters, M.P. Patel, (Miss) R.G. Patel and V.S. Patel, *International Journal of Polymeric Materials*,**42**, 209-217 (1998). **[I. F.- 1.83]**

118. Studies of the novel water soluble coloured polyesters containing an azo moiety, M. P. Patel, B.J. Modi, (Miss) R.G. Patel and V.S. Patel *J. Appl. Polym. Sci.*, **68**, 2041-2048 (1998). **[I. F.- 1.401]**

119. Synthesis and characterization of novel poly(aryl-ether-ketone)s, Miss R. G. Patel, M.P. Patel, V.S. Patel and B.B. Mistry. 'Polymers Synthesis and characterizations' Ed: Paramjit Singh, Allied Publishers Limited, New Delhi, 74-82 (1997).

120. Synthesis and characterization of polymeric dyes, K.H. Shah, M. P. Patal, K.G. Amin, (Miss) R.G. Patel and V.S. Patel, *ActaCinenciaIndica*, Vol **XXIII C(4),** 177 (1997).

121. Heterocyclic monoazo disperse dyes derived from 2,2'-methylene bis-(3H)-quinazoline for dyeing nylon, polyester and cellulose triacetate fibres, B.B. Mistry, M. P. Patel, N.B. Patel, (Miss) R.G. Patel and V.S. Patel, *ActaCienciaIndica*, Vol**. XXIII C(2)**, 79 (1997).

122. Synthesis and characterization of bisazo diols and their utilization in coloured polyesters, M. P. Patel, B.J. Modi, (Miss) R.G. Patel and V.S. Patel, *Indian J. Fibre and Text. Res.*,**22**, 202-209 (1997). **[I. F.- 0.486]**

No. of Ph.D student produced: 22

Ph.D. STUDENT GUIDED

Sr No	Name Of Students	Title of the Thesis	Ph.D. Award Year
1	Ritesh G. Patel	Synthesis and evaluation of new chromogenicfluoran compounds.	Aug. 2004
2	Jignesh V. Patel	Studies of hydrogels and some heterocycles for drug release and chromogenic materials.	June 2005
3	Sachin V. Patel	Synthesis of heterocyclic compounds based on spiro[isobenzofuran-1,9'- xanthen]-3-one and utilization for reversible thermochromic materials	Dec 2005
4	Sanjay F. Thakor*	Synthesis, characterization, application and antibacterial activity of heterocyclic dyes.	July. 2005
5	Rohit D. Patel	Some novel quinoline and quinazolinone compounds: Their synthesis, characterization and biological studies.	May 2006
6	Nilav A. Patel*	Some new quinolineacridine and thiazolo quinazolinone compounds: Their synthesis characterization and biological studies.	May 2007
7	SandipV. Bhuva	Synthesis and characterization of new heterocyclic compounds and their *in vitro* pharmacological studies.	March 2010
8	Nilesh J. Thumar	Some new derivatives of chromene, pyran, quinoline and thiazole: Their synthesis, characterization and evaluation as antimicrobials.	Dec 2010
9	Ankit M. Patel*	New ionic super absorb enthydrogels: Synthesis, characterization and evaluation for their potent applications.	Dec 2010
10	Pushpak M. Shah	Synthesis and medical application of new heterocyclic compounds.	Oct 2011
11	Harshad G. Kathrotiya	Synthesis and biological evaluation of new 2-phenyl indole and 2-aryloxyquinoline based heterocycles	Dec 2013
12	Yatin N. Patel	Studies of new ionic superabsorbent hydrogels for removal of dyes and heavy metals from aqueous solution	Jan 2014
13	Hardik H. Jardosh	Synthesis, characterization and biological exploration of diverse heterocycles library of *N*-allyl quinolone.	Feb 2014

14	Mehul B. Kanani	Synthesis and biological evaluation of new quinoline based diverse heterocycles.	Dec 2014
15	Viransinh P. Mahida	Super absorb entnanohydrogels: Their synthesis, characterization and Evaluation for removal of toxic metals and dyes from wastewater.	Sep 2015
16	Nileash D. Vala	Synthesis, characterization and biological Exploration of some new derivatives based on*1H*-Pyrazole and *N*-Allyl Quinolone	Sep 2016
17	Gaurav G. Ladani	Novel heterocyclic derivatives bearing quinoline nucleus: Synthesis, Characterization and pharmacological evaluation	Oct 2016
18	Jayvirsinh D. Gohil	Studies in synthesis and characterization of some novel pharmacologically active compounds bearing quinoline nucleus.	Sep 2017
19	Haresh B. Patel	Design, synthesis and biological exploration of pyrazole and benzothiazole bearing heterocyclic compounds.	Oct 2017
20	Ankit J. Patel	Synthesis and characterization of new biologically Active compounds bearing quinoline scaffold.	Sep 2018
21	Pratibha Prasad	Synthesis of new N-substituted indole and 5-substituted pyrazole derivatives and their biological exploration.	Jan 2020
22	Pratik G. Shobhasana	Design of new heterocyclic compounds and their evaluation for potential pharmacological activity.	June 2020

Ph.D Students working at present:

Sr. No.	**Name Of Students**	**Title of the Thesis**	***Year of Regd***
1	Roshni D Hingrajiya	Synthesis and characterization of derived heterocyclic compounds and their potent pharmaceutical applications.	From 2017
2	Anirudhdha G. Kalola	Design and synthesis of new medicinally active heterocyclic compounds and their biological evaluation.	From 2017
3	Jaydeep A. Mokariya	Synthesis, characterization and pharmaceutical applications of derived heterocyclic compounds.	From 2017
4	Shital R. Patel	Design and Development of Smart Nanomaterials for Evaluation of Their Potent Applications	From 2018
5	Reenaben C. Patel	Design, Synthesis, Characterization and Pharmaceutical Evaluation of heterocycle based compounds.	From 2020

* Jointly with Prof. Dr. (Miss) R. G. Patel.

List of of Minor/ Major projects carried out: 7 (Appendix)

1. UGC, New Delhi: " Studies of New Superabsorbent Nano Materials for Removal of Toxic metals and Dyes from Industrial Wastewater" from 01-02-2011 to 31-01-2014 [Rs. 7,01,600/-].
2. UGC, New Delhi: **"**Structure based Design of Novel Heterocyclic compounds: Synthesis, SAR and Pharmacological Studies" from 01-05-2006to30-04-2009 [Rs. 5,12,600/-].
3. DST, New Delhi: "Novel Side Armed Polymers as Dispersing/ Wetting Agents for Resin Minimal Pigment Concentrates-Tailoring and Evaluation",[Co-Investigator) from 01-04-2003to31-08-2006 [Rs. 11,90,460/-].
4. "Study on Colour stability of Pyperazine (Anhy) and Diethylene amines", funding by Diamine and Chemicals Ltd., Vadodara, India(Co-Investigator) from 01-01-2004to31-12-2004 [Rs. 99,000/-].
5. UGC, New Delhi : "Synthesis and Characterization of Leuco dyes and their Evaluation for Thermo and Pressure Sensitive Materials" from 01-01-2002 to 31-12-2004 [Rs. 2,61,360/-].
6. UGC, New Delhi: "Synthesis, Characterization & Application of Novel Coloured Epoxy Resins" (Co-Investigator) from 1-10-1998 to 31-09-2001 [Rs. 3,09,815/-].
7. UGC, New Delhi: "Synthesis, characterization and kinetics studies of some novel O-diglycidyl epoxy resins" from 1-10-1999 to 31-03-2000[Rs. 10,000/-].

Others:

Membership:

- The Society for Polymer Science (SPS), New Delhi, India (Life Member)
- Indian Council of Chemist (ICC), Agra, India (Life Member)
- The Indian Society of Analytical Scientist, India (ISAS) (Life Member)
- Society for Materials Chemistry, India (Life Member)
- American Chemical Society (Membership No. 2405719), 2006-2007
- Board of Study (Chemistry)
- DRC member of Department of Material Science, Sardar Patel Univesrity, V.V. Nagar.
- Adhoc PG Board of Study (Chemistry), 2005-2010
- Member of the committee to reframe the syllabus for M. Sc. Chemistry
- Member of the committee to reframe the syllabus for M. Sc. Chemistry as per CBCS
- Secretary, Sardar Patel University Teacher Association (SPUTA), V.V.Nagar.
- President-2013, JCI Milkcity, Anand (Executive committee member)
- 17 Gam Patidar Samaj, Anand (Executive committee member/Life Member)
- Member of Departmental IQAC committee, Chemistry Department, S.P. University.

Honors:

AWARDS:

- Hari Ohm Ashram Award for Best Research Paper:

    1. Studies of the Novel Water Soluble Coloured Polyesters Containing an Azo Moiety M.P. Patel, B.J. Modi, (Miss) R.G. Patel and V.S. Patel, J. Appl. Polym. Sci., 68, 2041-2048 (1998).
    2. Synthesis and Characterization of Thermotropic Liquid Crystalline Copolyesters, M.P. Patel, (Miss) R.G. Patel and V.S. Patel, Int. J. Polym. Mater.,**42**, 209-217 (1998).
    3. Synthesis and Characterization of Bisazo diols and their Utilization in Coloured Polyesters, M.P. Patel, B.J. Modi, (Miss) R.G. Patel and V.S. Patel, *Indian J. Fibre& Text. Res.*, **22**, 202-209 (1997).
    4. Synthesis and Studies of Coloured Polyesters derived from bis-azo diols", K.J. Patel, M.P. Patel and R.G. Patel, Indian Journal of Chemical Technology, **7**, 307-311 (2000).

- 2nd Prize has been awarded for the research paper entitled "Synthesis, characterization and application of novel antifungal heterocyclic monoazo acid dyes" presented at "National Symposium on "New Trends in Synthetic Organic Chemistry" held at Hotel Taj Residency by K.T.H.M.College, Nashik (Maharastra) during July 7-8, 2002.

- 3rd Prize has been awarded for the research paper entitled "Swelling and dye adsorption study of new cationic poly [AAm/DAMB/ DADMAC] hydrogels" presented at "National Seminar on Novel trends in Polymer Science and Technology" held at Department of Chemistry Sardar Patel Univeniversity, Vallabh Vidyanagar during 8th& 9th March 2007.

- 1st prize has been awarded for the research pater entitled "Synthesis, characterization and application of colorimetric sensor hydrogels for the detection of ferric ion in aqueous media", presented at National Seminar on Applied Polymer Science and Technology (NSAPST-2020) held at Department of Chemistry, Sardar Patel Univesity, Vallabh Vidyanagar during 28-29 January 2020.

- Honored **"SHIKSHA RATTAN PURASKAR"** by India International Friendship Society, New Delhi on 21-01-2011.