

## Academic Profile of Prof. Dr. Narsidas J Parmar

**Name:** Dr. Narsidas J. Parmar

**Designation:** Professor

**Specialization:** Organic Chemistry

**Address:** C-4, Univ. Staff Colony, Vallabh Vidyanagar

**Office:** Department of Chemistry,  
Sardar Patel University,  
Vallabh Vidyanagar

**Telephone:** 02692-235739

**Fax:** +91- 2692 236475

**Date of Birth:** 29.08.1972

**E-mail:** njpchemdeptspu@yahoo.co.in

**Website:** spuvvn.edu

**Educational Qualifications:** M.Sc., Ph.D. (Chemistry)

**Academic Experience:** 24 years

**Research Area:** 24 years

### Expertise

- Development of domino, cascade, MCR, and greener synthetic routes for complex molecules of biological interest
- Biological screening, docking and drug discovery studies

**No. of Publication:** 33

### List of Publications

#### Research Papers in Indexed and Refereed Journals of International Repute

1. Brahmbhatt, G. C., Sutariya, T. R., Atara, H. D., Parmar, N. J., Gupta, V. K., Lagunes, I., Padrón, J. M., Murumkar, P. R., & Yadav, M. R. *New pyrazolyl-dibenzo[b,e][1,4]diazepinones: room temperature one-pot synthesis and biological evaluation.* Mol Divers (IF 1.896) 24(2), 355–377 (2020).

2. B. M. Labana, G.C. Brahmbhatt, T.R. Sutariya, **N. J. Parmar**, J. M. Padrón, R. Kant, V. K. Gupta *Efficient synthesis and biological evaluation of new Benzopyran-annulated pyrano[2,3-c]pyrazole derivatives* **Mol Divers.** (I.F.: 1.896) 21, 339–354 (2017).
3. B. D. Parmar, T. R. Sutariya, G. C. Brahmbhatt, **N. J. Parmar**, R. Kant, V. K. Gupta, *A Base-Catalyzed, Domino Aldol/hetero-Diels-Alder Synthesis of Tricyclic Pyrano[3, 4-c] chromenes in Glycerol*, **J.Org.Chem** (I.F.: 4.721) 2016, 81, 4955–4964 (2016).
4. B. D. Parmar, T. R. Sutariya, G. C. Brahmbhatt, **N. J. Parmar**, R. Kant, V. K. Gupta, Prashant R Murumkar, Mayank Kumar Sharma, Mange Ram Yadav, *One-pot synthesis, biological evaluation, and docking study of new chromeno-annulated thiopyrano [2, 3-c] pyrazoles*, **Mol Divers.** (I.F.: 1.896) 1-19 (2016).
5. H. A. Barad, T. R. Sutariya, G. C. Brahmbhatt, **N. J. Parmar**, I. Lagunes, J. M. Padrón, P. Murumkar, M. Sharma, M. R. Yadav, *A catalyst-and solvent-free multicomponent synthesis and docking study of some new antiproliferative N 5-allyl-quinolylpyrido [2, 3-b][1, 4] benzodiazepinone precursors*, **New J. Chem.** (I.F.: 3.086) 40, 4931-4939 (2016).
6. **N. Parmar**, S. Teraiya, R. Patel, H. Barad, H. Jadja, and V. Thakkar, *Synthesis, antimicrobial and antioxidant activities of some 5-pyrazolone based Schiff bases*, **J. Sau. Chem. Soc.** (I.F.: 1.288) 19, 36–41 (2015).
7. T. R. Sutariya, B. M. Labana, **N. J. Parmar**, R. Kant, V. K. Gupta, G. B. Plata, J. M. Padrón, *Efficient synthesis of some new antiproliferative N-fused indoles and isoquinolines via 1,3-dipolar cycloaddition reaction in ionic liquid*, **New J. Chem.** (I.F.: 3.159) 39, 2657-2668 (2015).
8. T. R. Sutariya, B. M. Labana, B. D. Parmar, **N. J. Parmar**, R. Kant, V. K. Gupta, *A domino synthetic approach for some new, angular pyrazol- and isoxazol-heterocycles using [DBU][Ac] as an effective reaction medium*, **RSC Adv.** (I.F.: 3.208), 5, 23519-23529 (2015).
9. **N.J. Parmar**, B. D. Parmar, T. R. Sutariya, R. Kant, V.K. Gupta, *An efficient synthesis of some thiopyranopyrazole-heterocycles via domino reaction in a Brønsted acidic ionic liquid*, **Tetrahedron Lett.** (I.F.: 2.34) 55, 6060–6064 (2014).
10. **N. J. Parmar**, B. M. Labana, H.A. Barad, R. Kant, V. K. Gupta, *An efficient domino Knoevenagel/hetero-Diels–Alder route to some novel thiochromenoquinoline-fused polyheterocycles*, **Monatsh Chem.** (I.F. : 1.6) 145, 1179–1189 (2014).
11. **N.J. Parmar**, B. R. Pansuriya, B. D. Parmar and H. A. Barad, *Solvent-free, one-pot synthesis and biological evaluation of some dipyrazolo[3,4-b: 4',3'-e]pyranylquinolones, their precursors under solvent-free conditions*, **Med. Chem. Res.** (I.F.: 1.612) 23, 42–56 (2014).
12. **N.J. Parmar**, S. B. Teraiya, H. A. Barad, D. Sharma, and V.K. Gupta, *Efficient one-pot synthesis of precursors of some novel aminochromene annulated heterocycles via*

*domino/Knoevenagel-hetero-Diels-Alder reaction*, **Synth. Comm.** (I.F.: 1.026) 43, 1577–1586 (2013).

13. **N.J. Parmar**, B. R. Pansuriya, H. A. Barad, B.D. Parmar, R. Kant and V. K. Gupta, *Triethylammonium acetate-mediated domino/Knoevenagel-hetero-Diels–Alder reaction: synthesis of some angular polyheterocycles*, **Monatsh Chem.** (I.F.:1.532) 144, 865–878 (2013).
14. **N.J. Parmar**, R. A. Patel, B. D. Parmar and N P. Talpada, *An efficient domino reaction in ionic liquid: synthesis and biological evaluation of some pyrano- and thiopyrano-fused heterocycles*, **Bioorg. Med. Chem. Lett.** (I.F. 2.66) 23, 1656–1661 (2013).
15. **N. J. Parmar**, H. A. Barad, B. M. Labana, R. Kant, V, K. Gupta, *A glycerol mediated domino reaction: an efficient, green synthesis of polyheterocycles incorporating a new thiochromeno[2,3-*b*]quinoline unit*, **RSC Adv.** (I.F.:3.289) , 3, 20719–20725 (2013)
16. **N. J. Parmar**, B. R. Pansuriya, B. M. Labana, R. Kant, and V. K. Gupta, *A convenient 1,3-dipolar cycloaddition–reduction synthetic sequence from 2-allyloxy-5-nitro salicylaldehyde to aminobenzopyran-annulated heterocycles*, **RSC Adv.** (I.F.:3.289) 3, 17527–17539 (2013).
17. **N.J. Parmar**, H. A. Barad, B. R. Pansuriya and N.P. Talpada, *A highly efficient, rapid one-pot synthesis of some new heteroaryl pyrano[2,3-*c*]pyrazoles in ionic liquid under microwave-irradiations*, **RSC Adv.** (I.F.: 3.289) 3, 8064–8070 (2013).
18. **N.J. Parmar**, B. R. Pansuriya, B. M. Labana, T.R. Sutariya, R. Kant and V.K. Gupta, *Access to Some Angular Aminochromeno[2,3-*c*]pyrazole Precursors by a Domino Knoevenagel–hetero-Diels–Alder Reaction*, **Eur. J. Org. Chem.** (I.F.:3.25), 5953–5964 (2012).
19. **N.J. Parmar**, B.R. Pansuriya, H.A. Barad, R. Kant and V.K. Gupta, *An improved microwave assisted one-pot synthesis and biological investigations of some novel aryl diazenyl chromeno fused pyrrolidines*, **Bioorg. Med. Chem. Lett.** (I.F.:2.66) 22, 4075–4079 (2012).
20. **N.J. Parmar**, H. A. Barad, B. R. Pansuriya, S. B. Teraiya, V. K. Gupta, R. Kant, *An efficient one-pot synthesis, structure, antimicrobial and antioxidant investigations of some novel quinolyl dibenzo[*b,e*][1,4]diazepinones*, **Bioorg. Med. Chem. Lett.** (I.F.:2.66) 22, 3816–3821 (2012).
21. **N. Parmar**, R. Patel, S. Teraiya, D. Sharma, V. Gupta, *Catalyst-, and solvent-free one-pot synthesis of some novel polyheterocycles from aryl diazenyl salicylaldehydes derivatives*, **RSC. Adv.** (I.F.:3.289) 2, 3069–3075 (2012).
22. **N.J. Parmar**, S. B. Teraiya, R.A. Patel and N. P. Talpada, *Tetrabutylammonium hydrogen sulfate mediated domino reaction: synthesis of novel benzopyran-annulated pyrano[2,3-*c*]pyrazoles*, **Tetrahedron Lett.** (I.F.: 2.34) 52, 2853–2856 (2011).

23. **N.J. Parmar**, H.A. Barad, B.R. Pansuriya and R.A .Patel, *Chelation and extraction of copper(II) with 5-pyrazolone-based Schiff bases*, **J. Coord. Chem.** (**I.F.: 1.66**), 64(4), 688–698 (**2011**).
24. **N.J. Parmar**, S.B. Teraiya and R.A. Patel, *Studies on Oxovanadium(IV), Cr(III), Co(II), Ni(II) and Cu(II) chelates of some biketimino ligands*, **J. Coord. Chem.** (**I.F.:1.66**), 63(18):3279-3290(**2010**).
25. **N.J. Parmar** and S.B. Teraiya, *Cobalt(II) and Nickel(II) Chelates of some 5-pyrazolone based Schiff base ligands*, **J. Coord. Chem.** (**I.F.:1.66**), 62(14), 2388–2398 (**2009**).
26. P.N. Dave, S.S. Sait and **N.J. Parmar**, *Studies on Micellization and interfacial adsorption of Polyethylated (30) Laurylether (C12E30) in 0.01 M NaCl at Air water interface*, **J. Ind. Poll. Control**, 23(2), 335-342 (**2007**).
27. P.N. Dave, **N.J. Parmar** and S.S. Sait *Adsorption behaviour of Polyacrylamide on oxide surfaces*, **Ultra Sci.** 19(3), 347-354 (**2007**).
28. P.N. Dave and **N. J. Parmar**, *Ultrasonic Studies on dye Stain Removal by Surfactants*. **Ultra Sci.**, 19(2), 321-326, (**2007**).
29. P.N. dave, **N.J. Parmar** and S.S. Sait, *Preconcentration of Cu(II), Fe(II), Ni(II), Co(II) and Pb(II) Ions in Manganese Salts with Solid Phase Extraction Method*, **J. Ultra. Chem.**, 2(1), 63-70 (**2006**).
30. P.N. Dave, **N.J. Parmar** and S. S. Sait, *Thermodynamics of Micellization and Interfacial Adsorption of Polyoxyethylated octyl Phenol in 0.01 M NaCl at Air-Water interface*, **Res. J. Chem. Environ.**, 9(4), 55-58 (**2005**).
31. R. N. Jadeja, **N.J. Parmar** and J.R. Shah, *Ligand-bridge Polychelates of 4,4'-(4,4'-biphenylenebisazo)-Disalicylaldehyde Phenylhydrazone*, **Iran. Pol. J.** (**I.F.: 1.02**), 14(11), 426-431 (**2005**).
32. R.N. Jadeja and **N.J. Parmar**, *Oxovanadium (IV), Cr(III), Fe(II), Fe(III), Ni(II), Cu(II), Zn(II) and UO<sub>2</sub>(VI) Chelates from ONNO Donor Schiff base Ligand*, **Synth. React. Inorg. Met.-Org. Nano-Met. Chem.** (**I.F.: 0.66**), 35(2), 113-119 (**2005**).
33. J.R. Shah, D.S. Raj and **N.J. Parmar**, *Synthesis and Physico-chemical Studies on Nickel(II) Chelates of Some Tetridentate Biketimino Derivatives of 4-Acyl-2-pyrazolin-5-ones*, **Synth. React. Inorg. Met.-Org. Chem.** (**I.F.: 0.66**), 34(4), 697-711 (**2004**).

#### List of Minor/ Major projects carried out

| <b>Sr No</b> | <b>Title of the Project</b>   | <b>Funding Agency</b>                      | <b>Duration</b>         | <b>Present Status</b> |
|--------------|---|--|-------------------------|-----------------------|
| 1.           | Ligational Behaviour of Schiff bases Derived from 4-acyl-substituted 2-pyrazoline-5-one and various diamines. | University Grants Commission,<br>New Delhi | 1999-2000<br>(One year) | Completed             |

|    |  |   |                            |           |
|----|--|---|----------------------------|-----------|
|    | (amount approved INR 15000.00  |   |                            |           |
| 2. | Chelation and Extractive Spectrophotometric Determination of Copper(II) with Some ONNO Donor Ligands, (amount approved 75,000.00 | University Grants Commission, New Delhi | 2005-06<br>(Two years)     | Completed |
| 3. | Synthesis of Bioactive Polyheterocycles <i>via Knoevenagel-hetero-Diels-Alder Reaction</i> Amount approved INR 7,38,800.00)      | University Grants Commission, New Delhi | 2011-2014<br>(Three Years) | Completed |
| 4. | A search for biomolecules of pharmaceutical interest via domino synthetic strategies, Amount approved INR 550,000.00             | SERB, New Delhi                         | 2016-17<br>(one year)      | Completed |

## Others

### Honors

- Shiksha Rattan Puraskar, by India International Friendship Society, New Delhi, in 2008
- Life member, Indian Society for Analytical Scientists, Vadodra Chapter
- Life member, Research Journal of Chemistry and Environment

### Highlights of achievements

### Worked

- As a member, management committee, Kendriya Vidyalaya, V.V. Nagar,
- As organising secretary in the National Conference on Emerging Trends and Advances in Chemical Sciences (ETACS-2015), and National Seminar on Innovations and Emerging Dimensions in Chemical Sciences Research (IEDCSR-2016), arranged in the department.
- As a reviewer in scientific journals; JOC, Tetrahedron, RSC Advances, Medicinal Chemistry Research, Journal of Molecular Structure, Organic and biomolecular chemistry etc

### Working presently as

- a member, API committee, S.P. Univ.
- a member, SC/ST Cell, S.P. Univ.
- a member, DRAC, Department