

CURRICULUM VITAE OF T. D. NEELIMA

Academic profile

- **Ph.D**, IIT, Madras, **2003-08**
- **M.Sc**, Osmania University, Hyderabad, **1991-93**
- **B.Sc**, Osmania University, Hyderabad, **1988-91**



Total Teaching and Research experience: 23 years

- **Professor and Head**, Department of Chemistry, Sardar Patel College, Secunderabad, **July 2023-present**.
- **Professor**, Swarnandhra Institute of Engineering and Technology, Narsapur, West Godavari District, Andhra Pradesh **Jan2020 -Jul2023** (3.5 yrs)
- **Assistant Professor**, NIPER Hyderabad, **Apr 2017- 31 Jan 2020** (2.9 yrs)
- **Associate Professor**, Padmasri B. V. Raju Institute of Technology, Narsapur, Medak, **Jan2015- Apr 2017** (2.4 yrs).
- **Junior Research Scientist** in Medicinal Chemistry, Dr. Reddy's Institute of Life sciences, University of Hyderabad, Hyderabad, **Jan 2013- Apr2014** (1.4 yrs)
- **Postdoctoral Research fellow** in Medicinal Chemistry, Dr. Reddy's Institute of Life sciences, University of Hyderabad, Hyderabad, **May 2008- Dec 2012** (4.9 yrs)
- **Lecturer**, Bharat Degree and Post Graduate College for Women, Hyderabad, **June 1994-97** and **Sep 1998-Dec 2002** (8 yrs)

Additional Responsibilities: Academic coordinator, Convener for research and website committees at Sardar Patel College, Organizer, host and anchor person for all official/cultural programs at NIPER, Hyderabad

Publications: 22 in SCOPUS/ International journals

Book Chapters: 1

Selected conferences/presentations: 11

Research Guidance: 2

- *Guided 2 Doctoral students for PhD as Guide*
- *Guided 15 MS dissertation students as Research guide*

Sponsored Research: Principal Investigator for 4 funded projects from DST and CSIR
Total funding worth: 73 lakhs

1. Funding Agency: DST-SERB
April 2010- April 2013
F. No: 0078/2010
Amount: INR 19 Lakhs

2. Funding Agency: CSIR
May 2012-2015
F.No: 02(0057)/12/EMR-II
Amount : INR 18 Lakhs

Funding Agency: DST
Jan 2016-2019
F.No: SR/S1/OC-55/2013
Amount: INR 35.93 Lakhs

Book Chapters:

Rajasekhara Reddy, Sabbasani, Sathi, Bhulakshmi, P., Sridhar, Tangellamudi, Neelima D. and Doddi, Adinarayana. "Chapter 11: Synthesis of bioactive heterocycles via click reaction". *Non-Conventional Synthesis: Bioactive Heterocycles*, edited by György Keglevich and Bubun Banerjee, Berlin, Boston: De Gruyter, pp. 307-336, **2024**.

<https://doi.org/10.1515/9783110980189-011>

Publications

1. Design, synthesis of DNA-interactive 4-thiazolidinone-based indolo-/pyrroloazepinone conjugates as potential cytotoxic and topoisomerase I inhibitors. Manasa Kadagathur, Sandip Patra, Geetanjali Devabattula, Joel George, Regur Phanindranath, Arbaz Sujat Shaikh, Dilep Kumar Sigalapalli, Chandraiah Godugu, Narayana Nagesh, Neelima D. Tangellamudi, Nagula Shankaraiah. *European Journal of Medicinal Chemistry* 2022, **238**, 114465-84.

ISSN: 0009-4374

2. Arbaz Sujat Shaikh, Gaddam Kiranmai, G. Parimala Devi, Priyanka N. Makhal, Dilep Kumar Sigalapalli, Ramya Tokala, Venkata Rao Kaki, Nagula Shankaraiah, Narayana Nagesh, Bathini Nagendra Babu, Neelima D. Tangellamudi. Exploration of Mercaptoacetamide-inked Pyrimidine-1,3,4-Oxadiazole Derivatives as DNA Intercalative Topo II inhibitors: Cytotoxicity and Apoptosis Induction. *Bioorganic and Medicinal Chemistry Letters*. **2022**, *Letters*.2022, **65**, **128697-703**. ISSN: 0960-894X

3. Manasa Kadagathur, Arbaz Sujat Shaikh, Biswajit Panda Joel George, Regur Phanindranath, Dilep Kumar Sigalapalli, Nagesh A. Bhale, Chandraiah Godugu, Narayana Nagesh, Nagula Shankaraiah, Neelima D. Tangellamudi. Synthesis of indolo/pyrroloazepinone-oxindoles as potential cytotoxic, DNA-intercalating and Topo I inhibitors. *Bioorg.*,**2022**, *122*, 105706-19.

ISSN: 0045-2068

4. Dilep Kumar Sigalapalli, Gaddam Kiranmai, Ramya Tokala, Chaturvedula Tripura, Ramesh Ambatwar, Saiprasad N. Nunewar, Manasa Kadagathur, Nagula Shankaraiah, Narayana Nagesh, Bathini Nagendra Babu, Neelima D. Tangellamudi. Targeting Tubulin Polymerization and DNA Binding of 4-Thiazolidinone-umbelliferone Hybrids: Synthesis and Cytotoxicity Evaluation. *New J.Chem.*, **2021**, *45*, 18908-18923. DOI: [10.1039/d1nj03135j](https://doi.org/10.1039/d1nj03135j)

URL <http://dx.doi.org/10.1039/d1nj03135j> ISSN: 1369-9261

5. Dilep Kumar Sigalapalli, Gaddam Kiranmai, G. Parimala Devi, Ramya Tokala, Sravani Sana, Chaturvedula Tripura, Govinda S. Jadhav, Manasa Kadagathur, Nagula Shankaraiah, Narayana Nagesh*, Bathini Nagendra Babu, Neelima D. Tangellamudi. Synthesis and biological evaluation of novel imidazo[1,2-a]pyridine-oxadiazole hybrids as anti-proliferative agents: Study of microtubule polymerization inhibition and DNA binding. *Bioorganic and Medicinal Chemistry*, **2021**, *43*, 116277-89. DOI: [10.1016/j.bmc.2021.116277](https://doi.org/10.1016/j.bmc.2021.116277)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85108630613&partnerID=MN8TOARS> ISSN: 0968-0896
6. Manasa Kadagathur, Dilep Kumar Sigalapalli, Sandip Patra & Neelima D. Tangellamudi Microwave-assisted hydrogen peroxide-mediated synthesis of benzoxazoles and related heterocycles via cyclodesulfurization, *Synthetic Communications*, **2021**, *51(14)*, 2213-2224.
DOI: [10.1002/slct.202003516](https://doi.org/10.1002/slct.202003516)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85106284328&partnerID=MN8TOARS> ISSN: 1532-2432
7. Manasa Kadagathur, Sandip Patra, Dilep Kumar Sigalapalli, Nagula Shankaraiah* and Neelima D. Tangellamudi. Cyclodesulfurization: An Enabling Protocol for Synthesis of Various Heterocycles. *ChemistrySelect*, **2021**, *6(10)*, 2621-2640. DOI: [10.1002/slct.202100201](https://doi.org/10.1002/slct.202100201)
<http://www.scopus.com/inward/record.url?eid=2-s2.0-85102523983&partnerID=MN8TOARS> ISSN: 23656549
8. Manasa Kadagathur, Sandip Patra, Dilep Kumar Sigalapalli, Nagula Shankaraiah and Neelima D. Tangellamudi. Syntheses and Medicinal Chemistry of Azepinoindolones: A Look Back to Leap Forward. *Org. Biomol. Chem.*, **2021**, *19*, 738-764. DOI: [10.1039/D0OB02181D](https://doi.org/10.1039/D0OB02181D)
URL <https://doi.org/10.1039/D0OB02181D> ISSN: 1477-0539
9. Dilep Kumar Sigalapalli, Vidyasrilekha Yele, Srikanth Jupudi, Arbaz Sujat Shaikh, Manasa Kadagathur, Neelima D. Tangellamudi, Nagendra Babu Bathini*. Insights into the pharmacophore-based 3D-QSAR modeling, molecular dynamics simulation studies of certain dihydroxy pyrrolidine/piperidine and aza-flavanone derivatives as α -glucosidase inhibitors *J. Mol. Struct.*, **2021**, *1223*, 129243-54. DOI: [10.1016/j.molstruc.2020.129243](https://doi.org/10.1016/j.molstruc.2020.129243)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85090824485&partnerID=MN8TOARS> Print ISSN: 00222860

10. Dilep Kumar Sigalapalli, Manasa Kadagathur, Arbaz Sujat Shaikh, Govinda S. Jadhav, Bulti Bakchi, Nagendra Babu Bathini, **Neelima D. Tangellamudi**.* Microwave-Assisted TBHP-Mediated Synthesis of 2-Amino-1,3,4-Oxadiazoles in Water. *ChemistrySelect*, **2020**, *5*, 13248-13258. DOI: [10.1002/slct.202003516](https://doi.org/10.1002/slct.202003516)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85096071943&partnerID=MN8TOARS> ISSN: 23656549
11. Saiprasad N. Nunewar, Komal G. Sangu, Naveen K. Kotla and **Neelima D. Tangellamudi**.* Oxidative Dearomatization as a Strategy for a Facile, Metal-free Synthesis of Vanillyl Benzodiazepines. *ChemistrySelect*, **2020**, *5*, 10015-21. DOI: [10.1002/slct.202002523](https://doi.org/10.1002/slct.202002523)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85089994426&partnerID=MN8TOARS> ISSN: 23656549
12. Dilep Kumar Sigalapalli, Venkatesh Pooladanda, Manasa Kadagathur, Sravanthi Devi Guggilapu, Jaya Lakshmi Uppu, Chandraiah Godugu, Nagendra Babu Bathini, and **Neelima D. Tangellamudi**.* Novel Chromenyl-Based 2-Iminothiazolidin-4-one Derivatives as Tubulin Polymerization Inhibitors: Design, Synthesis, Biological Evaluation and Molecular Modelling Studies. *J. Mol.Struct.*, **2020**, *1225*, 128847-61. DOI: [10.1016/j.molstruc.2020.128847](https://doi.org/10.1016/j.molstruc.2020.128847)
<http://www.scopus.com/inward/record.url?eid=2-s2.0-85089886503&partnerID=MN8TOARS> Print ISSN: 00222860
13. Dilep Kumar Sigalapalli, Raghu Rangaswamy and **Neelima D. Tangellamudi**.* Novel Huperzine A based NMDA antagonists: Insights from Molecular Docking, ADME/T and Molecular Dynamics Simulation Studies. *RSC Adv.*, **2020**, *10*, 25446-25455. DOI: [10.1039/D0RA00722F](https://doi.org/10.1039/D0RA00722F)
URL <https://doi.org/10.1039/D0RA00722F> ISSN: 2046-2069
14. Manasa Kadagathur, G. Parimala Devi, Preeti Grewal, Dilep Kumar Sigalapalli, Priyanka N. Makhal, Uttam Chand Banerjee, Nagendra Babu Bathini, **Neelima D. Tangellamudi**.* Novel diindoloazepinone Derivatives as DNA Minor Groove Binding Agents with Selective Topoisomerase I Inhibition: Design, Synthesis, Biological Evaluation and Docking Studies *Bioorg.*, **2019**, *99*, 103629-46. DOI: [10.1016/j.bioorg.2020.103629](https://doi.org/10.1016/j.bioorg.2020.103629)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85082670909&partnerID=MN8TOARS>
ISSN: (ONLINE) 10902120 (PRINT) 00452068

15. Saiprasad N. Nunewar, Naveen Kotla, Apoorva Dixit and **Neelima D. Tangellamudi**.* Synthesis of 1-(Indol-2-yl)-Phenoxazine Hybrids from Quinacetophenone Precursor as DNA intercalating agents. *J. Mol. Struct.*, **2020**, 1217, 128311-128322. DOI: [10.1016/j.molstruc.2020.128311](https://doi.org/10.1016/j.molstruc.2020.128311)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85084340963&partnerID=MN8TOARS> Print ISSN: 00222860
16. Saiprasad N. Nunewar, Bhavana B. Muthyala, Sowmya Dastari, and **Neelima D. Tangellamudi**.* Quinacetophenone: A Simple Precursor for Synthesis of Phenoxazines. *New J. Chem.*, **2019**, 43, 14952-14960. DOI: [10.1039/c9nj03525g](https://doi.org/10.1039/c9nj03525g)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85072611226&partnerID=MN8TOARS> ISSN: 1369-9261
17. Sigalapalli Dilep Kumar, Venkatesh Pooladanda, Priti Singh, Manasa Kadagathur, Sravanthi Devi Guggilapu, Jaya Lakshmi Uppu, **Neelima D. Tangellamudi**,* Pavan Kumar Gangireddy, Chandraiah Godugu. Discovery of certain benzyl/phenethyl thiazolidinone-indole hybrids as potential anti-proliferative agents: Synthesis, molecular modeling and tubulin polymerization inhibition study. *Bioorg.*, **2019**. 92, 103188-103196. DOI: [10.1016/j.bioorg.2019.103188](https://doi.org/10.1016/j.bioorg.2019.103188)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85071041111&partnerID=MN8TOARS> ISSN: 0045-2068
18. **N. D. Tangellamudi**,* S. B. Shinde, V. Pooladanda, C. Godugu, S. Balasubramanian, Facile synthesis of 2-aryl 5-hydroxy benzo[d]oxazoles and their in vitro antiproliferative effects on various cancer cell lines. *Bioorg Med Chem Lett.*, **2018**, 28, 3639-47. DOI: [10.1016/j.bmcl.2018.10.038](https://doi.org/10.1016/j.bmcl.2018.10.038)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-85055651436&partnerID=MN8TOARS> ISSN: 0960-894X
19. Balakrishna Dulla, **Neelima D. Tangellamudi**,* Sridhar Balasubramanian, Pushkar Kulkarni, Javed Iqbal, Oliver Reiser, and Manojit Pal. Isovanillin derived N-(un)substituted hydroxylamines possessing ortho-allylic group: valuable precursors to novel bioactive N-heterocycles. *Org. Biomol. Chem.*, **2014**, 12, 2552-58. DOI: [10.1039/c3ob42460j](https://doi.org/10.1039/c3ob42460j)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-84897078943&partnerID=MN8TOARS> ISSN: 1477-0539

20. Javed Iqbal, **Neelima. D. Tangellamudi**,* Balakrishna Dulla and Sridhar Balasubramanian. Sequential C-N and C-O bond Formation in Single pot: Synthesis of 2H-benzo[b][1,4]oxazines from 2,5-dihydroxybenzaldehyde and Aminoacid precursors. *Org. Lett.*, **2012**, *14*, 552-555. DOI: [10.1021/ol2031747](https://doi.org/10.1021/ol2031747)
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-84856096316&partnerID=MN8TOARS> ISSN: 1523-7052
21. **Neelima. D. Tangellamudi***and Sundararajan G. Unexpected chemoselectivity of cyclic enones on introducing additional chirality in diethanolamine ligand in catalytic asymmetric Michael addition reactions using heterobimetallics. *J. Mol.Cat. A: Chemical.*, **2009**, *314*, 71-80. DOI: [10.1016/j.molcata.2009.08.019](https://doi.org/10.1016/j.molcata.2009.08.019)
<http://www.scopus.com/inward/record.url?eid=2-s2.0-71749092444&partnerID=MN8TOARS>
EID: 2-s2.0-71749092444
Print ISSN: 1381-1169
22. **Neelima. D. Tangellamudi**, Babu Varghese and Sundararajan G. Highly efficient resolution of racemic diethanolamine using (-) camphor-10-sulphonic acid. *Arkivoc*, **2005**, *xi*, 137-145.
EID: 2-s2.0-15744395428
URL <http://www.scopus.com/inward/record.url?eid=2-s2.0-15744395428&partnerID=MN8TOARS>ISSN: 1551-7012

Reviewer for

1. Journal of Heterocyclic Chemistry
2. New Journal of Chemistry
3. Current Organic Chemistry
4. Organic Letters

Selected presentations

1. Design, Molecular Docking, ADME/T and Molecular Dynamics Simulation Studies of Huperzine A Analogues: Virtual Identification of NMDA Receptor Antagonists. Dilep Kumar Sigalapalli, Raghu Rangaswamy and Neelima D. Tangellamudi* 29 Feb-2March, **2020** at the International Conference on Drug Discovery. BITS Pilani, Hyderabad campus.
2. Novel Chromenyl Based 2-Iminothiazolidin-4-one Derivatives as Tubulin Polymerization Inhibitors: Design, Synthesis, Biological Evaluation and Docking Studies. Dilep Kumar

- Sigalapalli, Venkatesh Pooladanda, Chandraiah Godugu, Bathini Nagendra Babu, Neelima D. Tangellamudi.* *PhD Poster Symposium organized by Royal Society of Chemistry*, December 21, **2019**, at *NIPER Hyderabad*.
3. Synthesis Of 1-(Indol-2-yl)-Phenoxazine Hybrids From Quinacetophenone Precursors And Their Biological Evaluation As DNA Intercalating Agents. Saiprasad N. Nunewar, Naveen kotla, Jaya Lakshmi Uppu, Apoorva Dixit, Venkatesh Pooladanda, Chandraiah Godugu,b Neelima D. Tangellamudi.* *PhD Poster Symposium organized by Royal Society of Chemistry*, December 21, **2019**, at *NIPER Hyderabad* (won the Best Poster award).
 4. Design, Synthesis and Biological Evaluation of Novel Seleno Thiophene-3-carboxamides. Priyanka N. Makhal, Prasanna Kumar, T. Venu, Neelima D. Tangellamudi.**PhD Poster Symposium organized by Royal Society of Chemistry*, December 21, **2019**, at *NIPER Hyderabad*.
 5. Design, synthesis and biological evaluation of novel azepinodiindolone derivatives as potential DNA-intercalating antitumor agents". Manasa Kadagathur, G. Parimala Devi, Dilep Kumar Sigalapalli, Priyanka N. Makhal, Nagendra Babu Bathini, Neelima D. Tangellamudi.* At the International Conference On Pure And Applied Chemistry – **IconPAC 2019**", organized by K L University, Vijayawada, on March8-9, **2019** at K L University, Vijayawada, Andhra Pradesh, India (won the Best Poster award).
 6. Design and Synthesis of Novel 5- Substituted Thiazole Carboxamides as Possible Bcl-2 Inhibitors. D. Sowmya, N. Saiprasad and Neelima D. Tangellamudi. *PhD Poster Symposium organized by Royal Society of Chemistry*, January 9, **2019**, at *NIPER Hyderabad*.
 7. Oxidative dearomatization strategy for facile metal- free synthesis of vanillyl based benzodiazepines. Komal Sangu and Neelima D. Tangellamudi. *PhD Poster Symposium organized by Royal Society of Chemistry*, January 9, **2019**, at *NIPER Hyderabad*
 8. Introducing additional chirality in the chiral ligands. Is more the merrier?". Neelima, T.D and Sundararajan, G. Oral presentation at the Second **J-NOST symposium**, *October 11-14, 2006* at CCG, Jaipur, Rajasthan.
 9. Unexpected chemo selectivity in catalytic Michael addition reaction using heterobimetallics. Effect of chiral auxiliary on the ligand". Neelima, T.D and Sundararajan, G. **CRSI**, *July 12-14, 2006* at IIT Madras, Chennai.
 10. Catalytic asymmetric Michael addition of malonates: Effect of the chiral auxiliary on the amine

group of the chiral ligand”. Neelima, T.D and Sundararajan, G. International conference, **OCCB-2006, January 6-9, 2006** at NCL Pune, Pune.

11. Synthesis and structure related studies of novel chiral ligands to be used in asymmetric synthesis”. Neelima, T.D and Sundararajan, G. **Chemists meet, March 26-27, 2004** at Indian Institute of Technology Madras.

Selected Workshops

1. National Workshop on “Regulatory Compliance For Accelerating Innovations” Jointly organized by BIRAC (DBT) and Clinical Development Services Agency, at NIPER Hyderabad, 29 May, **2019**.
2. Workshop on Drug Discovery & Development - Concept, Clinic & Commercialization (D3C3) organized by NIPER Hyderabad in collaboration with Novartis Academic Connect , at NIPER Hyderabad, in three modules on 16-17 Feb, **2018**; 9-10 March, **2018**; 13-14 April, **2019**.
3. Workshop on “Scientific educational practices”, organized by BVRIT, at VEDIC on 23-25 May, **2016**.
4. Workshop on “How To Develop And Troubleshoot GC And HPLC Methods” jointly organized by American Chemical Society and Agilent Technologies, at IIT Madras, Feb **2004**.
5. Workshop on “Drugs”, Organized by Department of Chemistry, Osmania University, 16-18 December **1999**.

Research Guidance

- *Guided 2 Doctoral students for PhD*
 - i. Mr. Dileep Kumar Sigalapalli: PhD awarded, **July 2021**.
Thesis title: “Synthesis and Biological Evaluation of Novel Iminothiazolidinone/ Coumarin/ Oxadiazole Derivatives as Potential Anticancer Agents and Designing of Novel Biologically Active Compounds by Using Computational Approach”
 - ii. Ms. Manasa Kadagathur:, PhD awarded, April **July 2021**
Thesis title: Design, Synthesis and Biological Evaluation of Indoloazepine-Containing Heterocyclic Compounds as Potential Anti-Cancer Agents
- *Guided 15 MS dissertation students as Research guide*

Awards/ Achievements

- Member of Jury, A National Symposium, Technical Presentation, SCHEMCON, BVRIT, Medak, **Sep10-11, 2016**
- Qualified in National Eligibility Test (NET), organized by CSIR, **2001**.
- Qualified in GATE with 93.12 percentile and 123rd All India rank, 1996.
- Eighth Rank in M.Sc at Osmania University, **1993**.
- Merit scholarship for securing 8th rank in M.Sc at the University level, **1993**
- First Rank in S.S.C (Tenth standard) at the School level and National Merit Scholarship.

Invited lectures

1. Talk on Drug Discovery, titled: Facile synthesis of benzoxazoles and their anti-proliferative effect of various cancer cell lines, at World Drug Discovery Congress 2018, Bengaluru, **September 25-26, 2018**.

2. Talk on Synthesis, Biological evaluation and Molecular Docking studies of Novel indolo/pyrroloazepinone- oxindole conjugates as potential anti-proliferative agents with Topo I inhibitory capability at 2nd Global Virtual Congress on Cancer Research, **October 17-18, 2022**

3. Talk on Synthesis, Biological Evaluation and Molecular Docking Studies of Novel Indolo/pyrroloazepinone-4-thiazolidinone Conjugates as Potent Antiproliferative Agents with Topo I Inhibitory Capability at 3rd Global Virtual Congress on Cancer Research & Drug Development, **May 15, 2023**