CURRICULUM VITAE

Dr. SATYANARAYANA BATTULA

M.Sc., CSIR-NET, Ph.D. (IIIM)

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Makavarapalem (Post & Mandal)
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Research interests

- 2-Oxo group driven fundamental reaction chemistry
- Metal free/ catalyzed activation of C=N based cyclization's to procure various medicinally importantheterocyclic scaffolds.
- Post-Ugi reactions to medicinally valuable compounds.
- Design and synthesis of small molecule libraries as target inhibitors for various important biological functions.
- Total synthesis and biological exploration of natural product molecules.
- Development of synthetic approaches for vitamin K.
- Metal free cross-coupling reactions through innate activation C-H bonds.
- C-H activation of electron deficient systems and unactivated positions.

Research Experience

06/2012- 05/2016 : **Senior Research Fellow,** Medicinal Chemistry Division, IIIM-CSIR, Jammu-180001, INDIA.

06/2010- 05/2012 : **Junior Research Fellow,** Medicinal Chemistry Division, IIIM-CSIR, Jammu-180001, INDIA.

09/2016 – 12/2021 : **Started independent career (Asst. Prof.) and established few protocols (see in publications) & in addition, having an industrial research experience.**

Education

2010 - 2016 : **Ph.D.** in **IIIM** (CSIR Institute-Jammu) & **AcSIR**
Dissertation: ***Studies on reactions of selective nucleophiles at key aldehyde electrophilic centers and development of β-carbolines as antimalarial agents***
***Ph.D. Supervisor*: Dr. Qazi Naveed Ahmed**

2003 - 2005 : **M.Sc. (Chemistry)**, Department of Chemistry, Andhra University, Visakhapatnam, Andhra Pradesh, INDIA.

1999 - 2002 : **B.Sc. (Chemistry)**, S. G. A. G. Degree College, Andhra University, Visakhapatnam, Andhra Pradesh, INDIA.

Work Experience

2005 – 2010	:	Worked as **Chemistry Lecturer** for Graduate and Post graduate students in PSV Degree & PG College affiliated to **Andhra University**.
2016 (Feb) – 2016 Aug)	:	Worked as **Research Scientist** in **Enanti Labs** (p) Ltd., Thanam (Vil), Parawada, Visakhapatnam, and Andhra Pradesh.
2016 (Sept) – 2021 (Dec)	:	As an **Asst. Professor** in Chemistry department at **Uka Tarsadia University**, Bardoli, Surat, and Gujarat.
2022 (Mar) – 2023 (Feb)	:	**Research Scientist** in Devsynthesis India Pvt. Ltd., Hyderabad.
2023 (Mar) – 2024 (June)	:	As an **Asst. Professor** in Chemistry (H & S); **CVR College of Engineering, Hyderabad.**
2024 (July) – 2025 (March)	:	**Sr. Asst. Professor** in Chemistry (H & S); **CVR College of Engineering, Hyderabad.**
2025 (April) Onwards	:	**Associate Professor,** Dept. of Chemistry & Chemical Science, Central University of Jammu, Bagla (Rahya-Suchani), Jammu, J&K.

Collaborations

- Dr. Venu Gopal mendu; Texas Tech University, Lubbock, USA; for the project of synthesis of Menaquinone [K2] Analogue MK-6 & MK-9 (***Tetrahedron***, **2020**, 76, 131696; DOI: https://doi.org/10.1016/j.tet.2020.131696; ***Abstract published on journal cover page***)
- Dr. Keyur M. Pandya, Senior Scientist, Exelixis Inc., California, USA; the project on synthesis of novel biologically intriguing heterocycles to antimicrobial agents and novel methodologies. (3 articles were published till now; few in process)
- Aether Industries, Dr. Aman Desai (Director); Worked on a Grignard reagent-based reaction mechanism in a fundamental reaction & published in ***ACS Omega***, **2022**, *7*, 5069–5078. DOI: 10.1021/acsomega.1c06031.
- Dr. Jigar Y. Soni, Mewar University, India; for the objective of the heterocycle's synthesis and their anticancer properties determination (4 articles were published till now; few in process)
- Dr. Sumit Kumar, Magadh University, Bodh Gaya, India; (***recently been started, working on docking studies of heterocycles with kinase enzymes and DFT energy calculations of reaction intermediates to find the key points of the mechanism***)

Publications

1. Chouhan, A.; Kumar, S.; Pandya, K. M.; Ajit Joshi,* **Battula, S.;*** Synthesis of Novel Imidazo[2,1-b][1,3,4]-thiadiazole Molecules; Discover their in vitro Antimicrobial, Anti-malarial properties & DFT and ADMET Prediction Studies. (***Under review***)
2. Chouhan, A.; Kumar, S.; Ajit Joshi,* **Battula, S.;*** Synthesis of Novel N-alkyl-3-mesityl-5-methyl-4,5-dihydroisoxazole-5-carboxamide Molecules; Determine their in-vitro Antimicrobial, Anti-malarial properties & In Silco Prediction Studies. ***Russian Journal of Bioorganic Chemistry***, **2025**, *51*, 1262–1278**.**
3. Mahesh, K. Z.; **Battula, S.;*** Soni, J. Y.; Hypervalent iodine salt as an aryne synthon: An application to the facile & tandem synthesis to 9-Aryldihydrophenanthrenes with styrenes. ***J. Orgmetlic. Chem.*** **2025**, *1031*, 123576.
4. Meena, L. R.; Soni, J. Y.; * **Battula, S.*** A Concise Review on Microwave-Assisted Synthesis of

Sulfonamides. ***ChemistrySelect***, **2024**, *9*, e202304327. https://doi.org/10.1002/slct.202304327

5. **Battula, S.**;* Battini, N.; Soni, J. Y.; Iodine Catalyzed Oxidative C(CO)−C(methyl) Bond Cleavage in Methyl ketones: Application to the Synthesis of β-Carboline-3-esters. ***Tetrahedron Lett.,*** **2024**, 134, 154872. https://doi.org/10.1016/j.tetlet.2023.154872.
6. Pandya, K. M.;* **Battula, S.**;* Anjaneya, A. K. K.; Patel, N. B.; Patel, R. J. Design & Synthesis of Novel Azitidinone Hybrid Pharmacophore with 1,8-Naphthyridine and Secondary amines & Discover their Antimicrobial, and Anticancer Properties. ***Med. Chem. Res.***, **2023**, 32, 1098-1108. https://doi.org/10.1016/j.bioorg.2021.105206.
7. Rayani, R. H.; Soni, J. Y.; Parmar, D. R.; Kusurkar, R. V.; Vala, A.; Zunjar, V.; **Battula, S.**; Design, synthesis, in silico and biological evaluation of biotin-pyrazole derivatives as cytotoxic agent. ***Org. Commun***. 15:2, **2022**, 117-128. http://doi.org/10.25135/acg.oc.132.2203.2370.
8. Rayani, R. H.; Soni, J. Y.; Parmar, D. R.; Kusurkar, R. V.; Eissae, I. H.; Metwaly, A. M.; Khalil, A.; Zunjar, V.; **Battula, S.**; Niazi, S. Identification of new pyrazolyl piperidine molecules as factor Xa inhibitors: Design, synthesis, in silico, and biological evaluation. ***Results in Chemistry***, **2022,** *4*, 100355. https://doi.org/10.1016/j.rechem.2022.100355.
9. **Battula, S.**;* Desai, A. A.; Soni, J. Y.; Dhruv, P. M. Accessing Unexplored Grignard Reluctant Aldehyde in 2-Oxoaldehyde by Organocuprates to [1,2] Addition & Oxidative Coupling Reactions. ***ACS Omega***, **2022**, *7*, 5069–5078. https://doi.org/10.1021/acsomega.1c06031.
10. Pandya, K. M.; **Battula, S.**;* Patel, N. B. Design & Synthesis of InCl3 Catalyzed Novel Pyrazole Conjugates with 2o-Amines; Discover their In Vitro Antimicrobial & DFT Studies. ***Polycyclic Aromatic Compounds***, **2023**, 43, 1232-1246. DOI: 10.1080/10406638.2022.2026986.
11. **Battula, S.**;* Bavyesh, D. 2-Aminopyridine ***e*-EROS**, **2022**.
12. **Battula, S.**;* Tandel, S. N. 2-Hydroxy-1,4-naphthoquinone ***e*-EROS**, **2022**.
13. Pandya, K. M.; **Battula, S.;*** Naik, P. J. Pd-Catalyzed Post-Ugi Intramolecular Cyclization to the Synthesis of Isoquinolone Pyrazole Hybrid Pharmacophores & Discover their Antimicrobial and DFT Studies. ***Tetrahedron Letters***, **2021**, *81*, 153353. (***Abstract selected for issue Cove Page***)
14. Deepa R. Parmar, Dr. Jigar Y. Soni,* Dr. Ramakrishna Guduru, Rahul H. Rayani, Rakesh V. Kusurkar, Anand G. Vala, Sahista N. Talukdar, Ibrahim. H. Eissa, Ahmed M. Metwaly, Ahmed Khalil, Dr. Vishwanath Zunjar, and Dr. Satyanarayana Battula. Discovery of new anticancer thiourea-azetidine hybrids: design, synthesis, in vitro antiproliferative, SAR, in silico molecular docking against VEGFR-2, ADMET, toxicity, and DFT studies. ***Bioorganic Chemistry***, **2021**, 115, 105206.
15. Parmar, D.; Rayani, R.; Vala, A.; Kusurkar, R.; Manvar, R.; Talukda, S.; **Battula, S.**; Zunzar, V.; Preeti, Soni, J.* Design, synthesis, in silico studies and in vitro anticancer activity of 3-(4-methoxyphenyl)azetidine derivatives. ***ChemistrySelect***, **2020**, *5*, 14296-14302.
16. Yerramsetti, N.;* Dampanaboina, L.; Mendu, V.; **Battula, S.*** Synergistic Factors Ensue High Expediency in the Synthesis of Menaquinone [K_2] Analogue MK-6: Application to Access an Efficient One-Pot Protocol to MK-9. ***Tetrahedron***, **2020**, *76*, 131696.
17. **Battula, S.**;* Tandel, S. N. "2-Aminobenzonitrile" ***e*-EROS 2020**.
18. Narsaiah, B.; Srujana, B.; **Battula, S.*** Oxone Mediated Effective Aromatization of Tetrahydro-β-carbolines: A Facile Synthesis to β-carboline-3-esters/amides & Marinacarboline A & C. ***J. Indian chem. Soc.*** **2019**, *96*, 1413-1418.
19. Khan, S.; **Battula, S.**; Ahmed, Q. N. Aroyl group driven [1,2] phosphonate-phosphate/ phosphine oxide-phosphinate rearrangement. ***Tetrahedron*** **2016**, *72*, 4273-4279. [Highlighted in ChemInform 2016, Vol. 47, Issue 44. DOI: 10.1002/chin.201644172]
    Impact factor: 2.645
20. Battini, N.; **Battula, S.**; Ahmed, Q. N. Copper Assisted Synthesis of 2-Hydroxyphenyl-1,2-diones from

Phenols and 2-Oxoaldehydes. ***Eur. J. Org. Chem.*** **2016**, *2016*, 658-662. (*Selected as* ***Wiley Hot Topic***). [Highlighted in ChemInform 2016, Vol. 47, Issue 25. DOI: 10.1002/chin.201625074]
Impact factor: 3.068

21. **Battula, S.;** Kumar, A.; Gupta, A. P.; Ahmed, Q. N. 2- Oxo Driven N_2 Elimination Induced Decarbonylative Cyclization reaction in Benzotriazoles to 6-Aminophenanthridines. ***Org. Lett.*** **2015**, *17*, 5562-5565. [Highlighted in ChemInform 2016, Vol. 47, Issue 15. DOI: 10.1002/chin.201615154]
Impact factor: 6.732
22. **Battula, S**.; Kumar, A.; Ahmed, Q. N. Metal-Free Oxidative Cleavage of C-C bond in α-Hydroxy-β-oxophosphonates. ***Org. Biomol. Chem.***, **2015**, *13*, 9953–9956.
Impact factor: 3.559
23. **Battula, S**.; Battini, N.; Singh, D.; Ahmed, Q. N. 2-Oxo Group promoted Hydrophosphonylation & Intramolecular Oxidative Nucleophilic Displacement. ***Org. Biomol. Chem.***, **2015**, *13*, 8637–8641.
Impact factor: 3.559
24. Battini, N.; **Battula, S.;** Kumar, R. R.; Ahmed, Q. N. 2- Oxo Driven Unconventional reactions: Microwave Assisted Approaches to Tetrahydrofuro[3,2- d]oxazoles and Furanones. ***Org. Lett.*** **2015**, *17*, 2992-2995. [Highlighted in ChemInform 2015, Vol. 46, Issue 44. DOI: 10.1002/chin.201544124]
Impact factor: 6.732
25. Mupparapu, N.;§ Battini, N.;§ **Battula, S**.;§ Khan, S.;§ Vishwakarma, R.A.; Ahmed, Q. N. Aminocatalytic Cross-Coupling Approach via Iminium Ions to different C-C Bonds. ***Chem. Eur. J.*** **2015**, *21*, 2954-2960 (§***equal contributors***). [Highlighted in ChemInform 2015, Vol. 46, Issue 27. DOI: 10.1002/chin.201527121]
Impact factor: 5.771
26. **Battula, S**.; Vishwakarma, R.A.; Ahmed, Q. N. Cu-benzotriazole-catalyzed electrophilic cyclization of N-arylimines: a methodical tandem approach to O-protected-4hydroxyquinazolines. ***RSC Adv.***, **2014**, *4*, 38375-38378. [Highlighted in ChemInform 2015, Vol. 46, Issue 11. DOI: 10.1002/chin.201511234]
Impact factor: 3.289
27. Mupparapu, N.; Khan, S.; **Battula, S**.; Kushwaha, M.; Gupta, A. P.; Vishwakarma, R.A.; Ahmed, Q. N. Metal-Free Oxidative Amidation of 2- Oxoaldehydes: A Facile Access to α- Ketoamides. ***Org. Lett.*** **2014**, *16*, 1152-1155. [Highlighted in ChemInform 2014, Vol. 45, Issue 32. DOI: 10.1002/chin.201432093]
Impact factor: 6.732
28. Bharate, S.B.; Mudududdla, R.; Bharate, J.B.; Battini, N.; **Battula, S.**; Yadav, R.R.; Singh, B.; Vishwakarma, R.A. Tandem one-pot synthesis of flavans by recyclable silica-$HClO_4$ catalyzed Knoevenagel condensation and [4+2]-Diels-Alder cycloaddition. ***Org. Biomol. Chem.*** **2012**, *10*, 5143-5150. [This article is featured in the top 10% of the most highly cited articles of *Org. Biomol. Chem.* during 2012].
Impact factor: 3.559 (OBC).
29. Bharate, S.B.; Mudududdla, R.; Bharate, J.B.; Battini, N.; **Battula, S.**; Yadav, R.R.; Singh, B.; Vishwakarma, R.A. Silica-$HClO_4$ catalyst for one-pot preparation of flavans. ***SYNFACTS*** **2012**, *8* (9), 1042.
Impact factor: 2.718 (*Synfacts*),
30. Bharate, S.B.; Yadav, R.R.; **Battula, S.**; Vishwakarma, R.A. Meridianins: Marine-Derived Potent Kinase Inhibitors. ***Mini. Rev. Med. Chem.***, **2012**, *12*, 618-631. *Impact factor*: 2.903

***Chem Spider Synthetic Pages*:**

1. Synthesis of Benzyl 2-oxo-2-(p-tolyl)acetate through 2-Oxo Promoted Hydrophosphonylation followed by Aerobic Intramolecular Nucleophilic Displacement Reaction
2. Synthesis of 1-(4-bromophenyl)-2-(thiophen-3-yl)ethane-1,2-dione through 2-oxoiminium mediated oxidative cross coupling reaction
3. One-Pot Synthesis of MK-9

4. Synthesis of 4-Methoxy-2-(thiophen-2-yl)quinazoline by Cu-Benzotriazole Catalyzed Electrophilic Intramolecular Cyclization of N-Arylimine in Methanol
5. Tandem synthesis of 4-(6-Phenanthridinyl)morpholine through the Elimination of N2 and CO from Substituted Benzotriazole

Manuscripts under preparation:

1. **Battula, S.;*** Multiple Functioning of Iodine in the Synthesis of 6-Aminophenanthridines through sp3 C-H Functionalization of Acetophenones.
2. Desai, A.; Ukani, S; **Battula, S.;*** Under Pressure Continuous Cascade/Parallel Amination with Recovery and Reuse/Recycling of Excess Ammonia.
3. Chouhan, A.; Kumar, S.; Pandya, K. M.; Ajit Joshi,* **Battula, S.;*** Synthesis and Biological Evaluation of novel 4, 5-dihydro-3-mesityl-5-methylisoxazole-5-carboxamide derivatives
4. Aravind A. Kumar, **Battula, S.;*** Synthetic modification of Liphagal and their derivatives synthesis, describing in vitro Anticancer proprties.

Book/ Book Chapter

1. A Book was published and entitled, "Uniqueness of 2-Oxo-Electrophiles Reactions with Typical Nucleophiles", Lambert Academic Publishing; ISBN: 978-613-9-92159-1; **2018**.
2. **A Perspective of Diverse Synthetic Approaches and Biological Applications of Vitamin K**, A book chapter in IntechOpen (ISBN: 978-1-83969-392-2), **2021**.
3. Identification techniques of natural and synthetic quinones using various methods (Accepted); Bentham Science, **2025**.

More Information: (Scholar Pages)

More information & auxiliary documents can be found at (Dr. Satyanarayana Battula/ Dr. Satyam Battula):

Google Scholar:	https://scholar.google.co.in/citations?hl=en&authuser=1&user=wcm9298AAAAJ
Scopus ID:	https://www.scopus.com/authid/detail.uri?authorId=55257268100
Research gate:	https://www.researchgate.net/profile/Satyanarayana_Battula2
ORCID ID:	https://orcid.org/0000-0002-0540-8844
Web of Science:	https://www.webofscience.com/wos/author/record/N-4381-2016
Total citations:	617, **h-index**: 12, **i10-index**: 12

Projects/ Grants

Year	*Title*	*Organization*	*Amount*	*Status*
2017-18	Discover the conceptual aspects of distinctive 2-Oxo based Electrophilic Reactions: Synthesis of biologically active molecules	**UTU-RPS** (Seed grant)	80,000 INR	***Completed***
2018	Determine the abstract aspects of typical 2-oxo based electrophilic reactions: Applications to synthesis of heterocycles and 2-oxo based bio-orthogonal cross coupling reactions	DST-ECR	***Shortlisted in first round***; not sanctioned later due to lack of facilities.	
2021-22	Ascertain the Protocols for One-pot Synthesis of Vitamin K and its Variants & Find the Application to their Commercial Level Synthesis	**UTU-RPS** (Seed grant)	1,00,000 INR	***Completed***

Fellowships and Awards

- Best ***Oral presentation award*** in National Conference on "New Imperatives in Drug Design and Discovery" organized by Dept. of Chemistry, UTU in association with ISCB & NAS India.
- ***Best research paper award*** at IIIM-CSIR, Canal Road, Jammu-180001, INDIA in 2014.
- Award of ***Ph.D. research fellowship from CSIR (JRF & SRF)***, during (2010-2015).
- Qualified ***CSIR (NET) - JRF-2008*** (Dec.) exam conducted by Council of Scientific and Industrial Research, India in 2008 (in Chemical Sciences).

Professional Memberships/Editor/Reviewer

- Reviewer of ***ChemistrySelect*** (Wiley Publishers).
- Reviewer of ***Particle and Particle Systems Characterization*** (Wiley Publishers).
- Reviewer of ***Journal of Molecular Structure*** (Wiley Publishers).
- Reviewer of ***Synthetic Communications*** (Taylor & Francis Publishers).
- Reviewer of ***Medicinal Chemistry Research*** (Springer Publishers).
- Reviewer of ***Journal of Indian Chemical Society*** (ICS).
- Editorial Board member of the ***American Journal of Heterocyclic Chemistry***
- Editorial Board member/ Reviewer of the ***STM Journals***.

Conferences attended / Poster/ Oral presentations/ FDP Program

1. Conference attended at "Chemical Research Society North Zone Meeting" University of Jammu, Jammu, India (Nov-**2011**).
2. Attended and Poster presented at DBT Sponsored National Symposium on Bioinformatics: Challenges in the post-genomic era. (**2012**)
3. Paper presented as poster in Indian Chemical Society conference at Uka Tarsadia University in Bardoli (**2017**) entitled, "*Amino Catalytic Cross-Coupling Approach by 2-Oxoiminium ions to Exigent C-X Bonds*".
4. Poster presented in Indian Chemical Society conference at PAHER University in Udaipur (**2018**), Rajasthan, entitled, "***α*-Oxo Driven Catalyst Free Hydrophosphonylation & Aerobic Intramolecular Nucleophilic Displacement Reactions**".
5. **Oral presentation**, entitled, "***The role of α-Oxo Group of 2-Oxoaldehyde in the Synthesis of Diverse Heterocycles***" in Indian Chemical Society Conference Chemical Sciences in New Era at PAHER University in Udaipur (**2018**), Rajasthan.
6. As a delegate and presented an oral presentation, entitled, "***2-oxo group driven chemistry in α-hudroxy-β-oxophosphonates***" in Research Scholars Meet-2019 organized by RSC-Indian West Chapter at Dept. of Chemistry, UTU.
7. As a delegate delivered an oral presentation, entitled, "***The structural unit ($COCHN_1N_2$) assisted synthesis to valuable functionalized heterocycles***" in National Conference on "New Imperatives in Drug Design and Discovery" at Dept. of Chemistry, UTU held on 22nd & 23rd of November 2019. Indian Society of Chemists and Biologists (ISCB) Lucknow, India and The National Academy of Sciences, India (Mumbai Chapter)
8. Delivered a virtual talk on, "***Impact of natural bioactive compounds for the treatment of COVID-19 diagnostic challenges and future perspectives***" organized by **HeriCure HelthCare Group**, Pune (INDIA) & collaboration with University of Kwazulu-Natan, Durban (South Africa) on 31st May-2020.
9. Participated in "Faculty Development Program" (virtual) on Spectroscopic and Chromatographic Techniques, from 24th to 28th April-2023; conducted by Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.
10. Participated in Seminar on "Electron Paramagnetic Resonance Spectroscopy: A Defense Against Environmental Aggressors" conducted by Bruker on 11th July-2023.
11. Participated in one day workshop, "Strategies for IPR & Plagiarism risks" in CVR College of Engineering on 27-01-2024.

12. Attended a program on, "Journal Citation Reports Certification Program'' organized by Clarivate on 29th & 30th of 2023.
13. Attended a one-week faculty development program on, "Advances in Material Characterization and Data Processing (AMCDP-2024)" organized by Anurag University, Hyderabad from 15th -20th July.
14. Attended a two-week FDP, "A Two-Week Faculty Development Programme titled as "Transforming Education: Integrating OBE and NEP 2020" organized by CVR College of Engineering Hyderabad from 22 July to 2 August 2024.
15. Attended a one-week FDP on, "Emerging innovations in chemistry & chemical technology" organized by Vardhaman College of Engg. from 22nd April to 27th April 2024.

Guest Lectures/ Invited lectures

1. A Guest lecture was held on Central University of Gujarat, on "***Conceptual Aspects of Distinctive 2-Oxo based Electrophilic Reactions: Synthesis of Biologically Interested Heterocycles***" on 29th Jan-2020.
2. HeriCure -V-UkZen, 1st International Webinar Conference; ***In-Silico* Studies Informs Nature is a Choice of Source for Drug Discovery to Covid-19**; held on 30th May-2020.
3. GSBTM Sponsored Crash Course; CGBIBT, UTU; Intensive Crash Work-shop for Cracking IIT-JAM & JNU-CEEB; ***SPECTROSCOPY: Fundamentals UV-VIS and NMR***; 10th Dec-2018.
4. DST & GSBTM Sponsored Crash Course; CGBIBT, UTU; The Intensive Crash Work-shop for Cracking IIT-JAM & JNU-CEEB; ***Electronic factors and their consequences in fundamental organic chemistry***; 5th Jan-2020.
5. DST & GSBTM Sponsored Crash Course; CGBIBT, UTU; The Intensive Crash Work-shop for Cracking IIT-JAM & JNU-CEEB; ***Chemical bonding concepts for simple inorganic & organic molecules***; 18th Feb-2020.
6. GSBTM sponsored BT-CBC Crash work-shop-2020; Pramukh Swami Science & H. D. Patel Arts college, Kadi; ***SPECTROSCOPY: Fundamentals UV-VIS and NMR***; 10th Feb-2020.
7. Exceptional Reactivity of 2-Oxoiminium in the Formation of Various Cross-Coupling reactions, Delivered an Expert talk in online-mode at C. M. Science College, Darbhanga in an International Conference on Intellectual Property and Advances in Chemical Sciences (IPACS-2025).

Research expertise/ Skills

- Expertise in handling of air sensitive reactions and multi-step synthesis
- Purification of compounds through column, Preparative HPLC / TLC.
- Characterization of compounds through ^{1}H, ^{13}C, 2D-NMR spectroscopy and Mass spectrometry
- Hand on experience with HPLC, NMR, IR instruments
- Computer skills such as Ms Office, ChemDraw, SciFinder and Endnote reference manager
- Little experience with molecular modeling

Teaching Topics

- Structure, periodicity and bonding
- Organic reaction mechanism
- Organic spectroscopy
- Organic synthesis & Asymmetric synthesis
- Stereo chemistry
- Quantum chemistry & Symmetry and Group theory
- NET syllabus (Organic and Inorganic)
- Engineering Chemistry aspects

Research Guidance

- Guided to 50 M.Sc. final year students to their Dissertation

Declaration

I declare that the information given above is true and correct to the best of my knowledge and belief.

Place: Hyderabad
Date: 08-09-2025

Dr. Satyanarayana, B.