CENTRAL UNIVERSITY OF JAMMU

First Name	Dr. Satyanarayana	Middle Name		Last Name	Battula	Photograph
Title & Designation		Associate Professor				
Address		Department of Chemistry and Chemical Sciences, Central University of Jammu, Bagla, Rahya-Suchani, District Samba-181143, Jammu and Kashmir, INDIA				
Phone Number		-				
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Mobile		(+91)7567515652				
Email		satyanarayana.che@cujammu.ac.in and satyamssd@gmail.com				
Web-Page		https://satyamssd.wixsite.com/drsatyam				

Educational Qualifications:

Degree	Institution	Year
Ph.D.	Indian Institute of Integrative Medicine (**IIIM**-CSIR Institute-Jammu) & **AcSIR**	2016
CSIR-NET (JRF)	CSIR-UGC	2008
M.Sc.	Andhra University	2005
B.Sc.	Andhra University	2002

Career Profile:

2025 (April) onwards: Associate Professor, Dept. of Chemistry & Chemical Science, Central University of Jammu, Bagla (Rahya-Suchani), Jammu, J&K.

2023-2025: Sr. Asst. Professor in Chemistry (H & S); CVR College of Engineering, Hyderabad, Telangana.

2022-2023: Research Scientist in Devsynthesis India Pvt. Ltd., Hyderabad, Telangana.

2016-2021: Asst. Professor in Chemistry department at Uka Tarsadia University, Bardoli, Surat, and Gujarat.

Administrative Assignments:

- Member of Board of Studies of the Department of Chemistry and Chemical Sciences.
- Industry/ Academia Meet Department Coordinator
- Timetable Coordinator
- Training & Placement Department Coordinator
- Examination Co-Coordinator.
- Chemistry lab Coordinator

Areas of Interest / Specialization:

- ✧ 2-Oxo group driven fundamental reaction chemistry to valuable C-X bonds and heterocycles.
- ✧ Metal free/ catalyzed activation of C=N based cyclization's to procure various medicinally important heterocyclic scaffolds.
- ✧ Post-Ugi reactions to medicinally valuable compounds.
- ✧ Design and synthesis of small molecule libraries as target inhibitors for various important biological activities.
- ✧ Total synthesis and biological exploration of natural product molecules.
- ✧ Metal free cross-coupling reactions through innate activation C-H bonds.

Subjects Taught:

- ✧ **PhD Course Work –** Research Methodology (PHUNI1C002T) Theory
- ✧ **Integrated B.Sc. (Hons) M. Sc. Chemistry**:

UCHE0O030T/MCHE1E02: Fundamentals of Organic Spectroscopy

ICHE1C01: Organic Chemistry-I
UCHE0O033T/ MCHE2E02: Quantum chemistry and group theory
UCHE0O013T: General Chemistry
UCHE0O021T/ MCHE2E03: Smart Materials and Applications
ICHE3C001T: Physical Chemistry-II

Theory Papers: Organic Chemistry, Spectroscopy, Quantum chemistry, General Chemistry, Physical Chemistry.
Practicals: Organic Chemistry Lab (Preparation of complexes and characterization, chromatographic separation techniques).

Research Guidance:

Ph.D. ongoing: 01

M.Sc., Project Students: Guided 30 masters students for their dissertation

Publications Profile:

SCIENTIFIC RESEARCH PROFILE

Total Publications	**:** 29
Book & Book chapters	**:** 3
h-index and i10-index	**:** 12 and 14
Total citations	**:** 653
Scopus Author ID	: 55257268100
Vidwan ID	: 120834

MORE INFORMATION: (SCHOLAR PAGES)

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

a. Research Paper

1. 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**.** https://doi.org/10.1134/S106816202460627X

2. 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. https://doi.org/10.1016/j.jorganchem.2025.123576

3. 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

4. **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.

5. 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.

6. 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.

7. 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.

8. **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.

9. 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. ***Pol ycyclic Aromatic Compounds***, **2023**, 43, 1232-1246. https://doi.org/10.1080/10406638.2022.2026986

10. **Battula, S.;*** Bavyesh, D. 2-Aminopyridine ***e*-EROS**, **2022**. https://doi.org/10.1002/047084289X.rn02485

11. **Battula, S.**;* Tandel, S. N. 2-Hydroxy-1,4-naphthoquinone ***e*-EROS**, **2022**. https://doi.org/10.1002/047084289X.rn02487

12. 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***). https://doi.org/10.1016/j.tetlet.2021.153353

13. 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. https://doi.org/10.1016/j.bioorg.2021.105206

14. 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. https://doi.org/10.1002/slct.202003654

15. Yerramsetti, N.;* Dampanaboina, L.; Mendu, V.; **Battula, S.*** Synergistic Factors Ensue High Expediency in the Synthesis of Menaquinone [K2] Analogue MK-6: Application to Access an Efficient One-Pot Protocol to MK-9. ***Tetrahedron***, **2020**, *76*, 131696. https://doi.org/10.1016/j.tet.2020.131696

16. **Battula, S.**;* Tandel, S. N. "2-Aminobenzonitrile" ***e*-EROS 2020**. https://doi.org/10.1002/047084289X.rn02332

17. Battini, N.; Battini, S.; **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. https://indianchemicalsociety.com/portal/uploads/journal/7%20-%20Nov%2019.pdf

18. 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]. https://doi.org/10.1016/j.tet.2016.05.067

19. 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]. https://doi.org/10.1002/ejoc.201501423

20. **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]. https://doi.org/10.1021/acs.orglett.5b02699

21. **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. https://doi.org/10.1039/C5OB01615K

22. **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. https://doi.org/10.1039/C5OB01310K

23. 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]. https://doi.org/10.1021/acs.orglett.5b01271

24. 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]. https://doi.org/10.1002/chem.201405477

25. **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] . https://doi.org/10.1039/C4RA07377K

26. 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]. https://doi.org/10.1021/ol5000204

27. 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]. https://doi.org/10.1039/C2OB25376C

28. 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. https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0032-1317054

29. 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. http://dx.doi.org/10.2174/138955712800626728

b. Books - Featured Research Cover Art in Journals

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.

c. Chapter in books

1. **A Perspective of Diverse Synthetic Approaches and Biological Applications of Vitamin K**, A bookchapter in IntechOpen (ISBN: 978-1-83969-392-2), **2021**. DOI: 10.5772/intechopen.99565, https://www.intechopen.com/chapters/78590
2. **Identification techniques of natural and synthetic quinones using various methods**; Bentham Science, (ISBN: 9798898810276) **2025**. https://www.benthamdirect.com/content/books/9798898810276.chapter-3

d. Conferences attended / Poster/ Oral presentations/ FDP Program

1. 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”.
2. 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”.
3. 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.

4. 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.
5. As a delegate delivered an oral presentation, entitled, "The structural unit (COCHN1N2) 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)
6. 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.
7. Participated in "Faculty Development Program" (virtual) on Spectroscopic and Chromatographic Techniques, from 24th to 28th April-2023; conducted by Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.
8. Participated in Seminar on "Electron Paramagnetic Resonance Spectroscopy: A Defense Against Environmental Aggressors" conducted by Bruker on 11th July-2023.
9. Participated in one day workshop, "Strategies for IPR & Plagiarism risks" in CVR College of Engineering on 27-01-2024.
10. Attended a program on, "Journal Citation Reports Certification Program'' organized by Clarivate on 29th & 30th of 2023.
11. 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.
12. 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.
13. 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/ Resource person

- ✧ A Keynote Speaker in a FDP program "New Generation Chemical Innovations: Bridiging Academia and Industry NGCIBAI-2025" held at Vardhaman College of Engg., Hyderabad, on 15th December-2025 (Virtual mode).
- ✧ A Keynote Speaker at the "International Conference on Intellectual Property and Advances in Chemical Sciences (IPACS-2025)" held on 25th July-2025 in C. M. Science College, Darbhanga (Virtual mode).
- ✧ An Expert talk was given at SR University on, "***α-Ketoaldehyde: A Substrate asset to Diverse Functional Bonds & Heterocycles***" on 10th Jan-2026 (Virtual mode).
- ✧ 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.
- ✧ 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.
- ✧ 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.
- ✧ 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.
- ✧ 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.
- ✧ 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.
- ✧ 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 Projects

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***
2019	Study of the 2-oxo based electrophilic reactions with selective organometallics and perceive their insights	Aether sponsored project	2,50,000 INR	***Completed***
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***

AWARDS / FELLOWSHIPS:

- 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* conducted by Council of Scientific and Industrial Research, India in 2008 (in Chemical Sciences).

Reviewer in International Journals:

- Reviewer of ***ACS Omega*** (ACS Publishers).
- Reviewer of ***ChemistrySelect*** (Wiley Publishers).
- Reviewer of ***Particle and Particle Systems Characterization*** (WileyPublishers).
- 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***