Dr. Jitender Bhalla

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Personal Profile

Name	Jitender Bhalla
Father's Name	Amarjeet Bhalla
Date of Birth	10-04-1988
Gender	Male
Marital Status	Married
Category	General
Nationality	Indian
Contact	+91-8168624778

Academic Profile

- PhD. in Organic Chemistry from Panjab University Campus, Chandigarh (2016).
- M.Sc. in Chemistry from DAV College, Sector 10, Chandigarh (2010).
- B.Sc. in Medical from Kurukshetra University, Kurukshetra (2008).

Competitive Examination

- Qualified UGC-JRF-NET in Chemical Sciences (2010)

Job Profile

- Physical/Inorganic/Organic Chemistry (Lectures and Practicals) – B.Sc. I, II and B.Sc. III at DAV College, Chandigarh (**w.e.f., 20th April, 2021 to till date**)
- Physical/Inorganic/Organic Chemistry (Lectures and Practicals) – B.Sc. I, II and B.Sc. III at Dev Samaj College for Women, Chandigarh (**10-01-2018 to 20-04-2021**)
- Physical/Organic Chemistry (Lectures and Practicals) – B.Sc. I, II and B.Sc. III at DAV College, Chandigarh (**27-07-2017 to 09-01-2018**)
- Physical/Organic Chemistry (Lectures and Practicals) – B.Sc. I, II and B.Sc. III at DAV College, Chandigarh (**18-07-2016 to 12-04-2017**)

Ph.D. Profile

Title of Thesis	Synthesis, Characterization and Biological Evaluation of Hybrid β-Lactams: Search for Potential

	Biologically Active Agents
Name of Supervisors	Prof. S. S. Bari and Dr. Aman Bhalla
Area of Specialization	Synthetic Organic Chemistry and Heterocyclic Synthesis
Institution	Department of Chemistry and Centre for Advanced Studies in Chemistry, P. U. Chandigarh
Published Articles	13
Published Book Chapters	4

Research Publications

1. Synthesis of Novel Pyrazolylmethylene-Pyrimidine Heterocycles: Potential Synthons for Hybrid β-Lactams. *Can. Chem. Trans*. **2015**, *3*, 72-84.
2. Facile synthesis of novel monocyclic *trans*- and *cis*-3-oxy/thio/seleno-4-pyrazolyl-β-lactams. *Arkivoc* **2015**, (vii), 10-27
3. Facile synthesis of novel halogenated 4-pyrazolyl spirocyclic-β-lactams: versatile heterocyclic synthons. *Tetrahedron Lett*. **2016**, 57, 2822-2828
4. One pot, simple, and efficient synthesis of (*E*)- and (*Z*)-3-allylidene-β-lactams from 3-allyl-3-phenylseleno-β-lactams: analogues of β-lactamase inhibitors. *Tetrahedron Lett*. **2016**, 57, 4763-4766.
5. Pyrimidine and Pyrazole Linked Azetidin-2-ones: Entry to Novel Class of β-Lactam Heterocycles *J. Heterocycl. Chem*. **2017**, 54, 2297-2306.
6. Diastereoselective synthesis of novel 3-aryloxy/alkoxy-4-benzothiazolylpyrazolyl-β-lactams: Potential synthons for novel aminoacids/nanocopolymers. *Synth. Commun.* **2017**, *47*, 1955-1962.
7. An efficient synthesis of novel benzothiazolylpyrazole substituted imines: Versatile synthons for heterocycles. *Heterocycl. Lett*. **2017**, *7*, 629-634.
8. Facile synthesis of novel benzothiazolylpyrazolyl anchored 3-thio/seleno/chloro-β-lactams: Synthetic intermediates for novel 3-sulfenyl/sulfonyl, C-3 functionalized monocyclic and spirocyclic β-lactams. *Synth. Commun.* **2018**, 48, 2675-2682.
9. Facile and efficient synthesis of chiral sulfoxide esters: Versatile tool in asymmetric synthesis. *Synth. Commun.* **2019**, 49(2), 279-285.
10. A Comprehensive Review on C-3 Functionalization of β-Lactams. *Curr. Org. Syn.* **2019**, *16(1)*, 3-16.

11. A Rapid and Efficient Protocol for Chiral Sulfoxide Amides: Versatile Asymmetric Synthon. *J. Appl. Chem.* **2019**, *8(3)*, 1223-1230.
12. Stereoselective synthesis and in-silico evaluation of C4-benzimidazolyloxyphenyl substituted trans-β-lactam derivatives as promising novel PPARγ activators. *Synth. Commun.* **2021**, *51(24)*, 3758-3767.
13. A decade update on synthesis of bicyclic β-lactams and their transformation into synthetically/biologically relevant carbocyclic and heterocyclic moieties. *Tetrahedron* **2024**, *167*, 134230.

Book Chapters

1. Synthesis of diverse β-lactams: Role of appended hetero moiety on its activity in *Beta-Lactams: Novel Synthetic Pathways and Applications*; Banik, B. Ed.; Springer, Germany, **2017**; pp 1-40. Doi: 10.1007/978-3-319-55621-5
2. Role of transition metal reagents in β-lactam synthesis: New paradigms in *Beta-Lactams: Novel Synthetic Pathways and Applications*; Banik, B. Ed.; Springer, Germany, **2017**; pp 41-72. Doi: 10.1007/978-3-319-55621-5
3. Recent trends in nitrone-olefin [3+2] cycloaddition reaction: Synthetic and biological potentials in *Organic and Medicinal Chemistry;* Banik, B. Ed.; Nova Science Publisher, USA, **2019**; Vol. 1; pp 1-52.
4. Recent advances in copper-catalyzed heterocyclic synthesis. In *Advances in Organic Synthesis*; Atta-ur-Rahman, Ed.; Bentham Science Publishers Pte. Ltd, Singapore, 2022, 16, pp 1-62. (ISBN 978-981-5039-26-9 online) (doi: 10.2174/9789815039269122160 1)

Orientation/Refresher Course/FDP

1. Attended Gurudakshata-126th Faculty Induction Program from 22-12-2020 to 18-01-2021 at UGC-MMTTC, Panjab University, Chandigarh.
2. Attended Interdisciplinary Refresher Course in Indian Studies from 15-10-2024 to 28-10-24 at UGC-MMTTC, Panjab University, Chandigarh.