

CURRICULUM VITAE



Name : Dr. Alka Bali

Designation : Professor in Pharmaceutical Chemistry

Institution : University Institute of Pharmaceutical Sciences, Panjab
University, Chandigarh, India-160014.

E-Mail : alka.bali@rediffmail.com
alkaa.bali@gmail.com

Date of Birth : 27.03.1971

Fields of specialization: Pharmaceutical Chemistry

(Synthetic Medicinal Chemistry and Pharmaceutical Analysis)

Academic Qualifications:

B. Pharm. (1992) First Division

M. Pharm. (Pharmaceutical Chemistry) (1994) First Division

Ph. D. (2016)

Areas of research interest: Design and synthesis of novel chemical entities with potential atypical antipsychotic activity; anti-inflammatory activity and angiotensin-II antagonistic activity.

Development and validation of stability indicating assay methods for drugs and characterization of stress degradation impurities by LC-MS studies.

Total Experience (Postgraduate and Undergraduate Teaching and Research): 25 years

Record of Teaching and Research Experience:

Institution	Designation	Nature Of duties	Period of service	Total Period
A.S.B.A.S.J.S. Memorial College, Bela, Ropar	Lecturer in Pharmaceutical Chemistry	Teaching D.Pharm Classes	06.09.1994 To 31.07.1995	10 Months 26 days
Department of Pharmaceutical Sciences & Drug Research, Punjabi	Lecturer in Pharmaceutical Chemistry	Undergraduate and postgraduate teaching and	01.08.1995 To 17.07.2000	4 Years. 11 Months 17 days

University, Patiala		research		
University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh	Lecturer; Senior Lecturer; Associate Professor of Pharmaceutical Chemistry	Undergraduate and postgraduate teaching and research	17.07.2000 To 24-6-2016	15 Years. 11 Months
University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh	Professor of Pharmaceutical Chemistry	Undergraduate and postgraduate teaching and research	24-6-2016 Till date	

Research Guidance:

Research guidance provided for **39 M. Pharm. Theses** (2 in continuation).

1. Vandana Sharma "Phytochemical investigation of the leaves of *Azadirachta indica* (1997).
2. Gulshan Bansal "Synthesis of 5-substituted-2-n-butyl-1-[(2'-carboxybiphenyl-4-yl)methyl]benzimidazoles - potential angiotensin II receptor antagonists (1998).
3. Rakesh Goel "Synthesis of 4-alkoxy-acetophenone based potential cyclooxygenase -2 inhibitors (1998).

4. Himjyoti "Synthesis of aryloxypropyl piperazine based potential atypical antipsychotics (1998)
5. Bharat Bhushan "Synthesis of 4-alkoxy-3-methanesulphonamido acetophenone based potential cyclooxygenase - 2 inhibitors (1999).
6. Sarika "Synthesis of 4-chloro-aryloxypropyl-piperazine derived potential atypical antipsychotics (1999).
7. Varinder Mohan " Synthesis of pyrrolidone based potential nootropic agents(1999).
8. Jatinder " Synthesis of 5-substituted-2-n-propyl-1-[(2'-carboxybiphenyl-4-yl)methyl] benzimidazoles - potential angiotensin II receptor antagonists (2000).
9. Anu Goyal " Synthesis of 2-chloro-aryloxypropyl-piperazine derived potential atypical antipsychotics (2000).
10. Yogita Bansal "Synthesis of 5-substituted-2-ethoxymethyl-1-[(2'-carboxybiphenyl-4-yl)methyl] benzimidazoles - potential angiotensin II receptor antagonists (2001).
11. Priyanka Modi "Synthesis of 4-chloro-aryloxypropyl-piperazine derived potential atypical antipsychotics (2001).
12. Devinder Kumar " Synthesis of 3-alkoxy-4-methanesulphonamido acetophenone based potential cyclooxygenase - 2 inhibitors (2001).
13. Archana Kapoor "Synthesis of 5-substituted-2-ethyl-1-[(2'-carboxybiphenyl-4-yl)methyl] benzimidazoles - potential angiotensin II receptor antagonists (2003).
14. Bhawna Sharma "Synthesis of 2-substituted-1-[(2'-carboxybiphenyl-4-yl)methyl] indoles - potential angiotensin II receptor antagonists (2004).
15. Shivani Sahni "Synthesis of novel indole based potential angiotensin II receptor antagonists"(2005).

16. Komal Sharma "Synthesis of aryloxypropylpiperazine derived potential atypical antipsychotics" (2006).
17. Rakesh Kumar "Synthesis of novel indole based potential angiotensin II receptor antagonists"(2006).
18. Sandeep Gupta " Synthesis of novel angiotensin II receptor antagonists" (2007)
19. Abhishek Bhalla "Synthesis of 1,4-diaryl substituted piperazine derivatives as novel potential atypical antipsychotics" (2007).
20. Suman Kamboj "Synthesis of Substituted 1-(chlorobenzyl)-4-(aryloxypropyl) piperazine derivatives as novel potential atypical antipsychotics" (2008).
21. A.C.Dinesh Reddy "Synthesis of substituted 1-(chlorobenzyl)-4-(aryloxypropyl)piperazine derivatives as atypical antipsychotics" (2009).
22. Ruchika Ohri 'Design, synthesis and pharmacological evaluation of potential cyclooxygenase-2 inhibitors.' (2010)
23. Rajesh Kumar "Synthesis of substituted Aryloxypiperazine derivatives as potential atypical antipsychotics" (2010).
24. Tania Peshin 'Synthesis and pharmacological evaluation of chloro substituted aryloxypropyl derivatives as atypical antipsychotics' (2011).
25. Sabrinjit Kaur Dhillon 'Design, synthesis and *in vivo* evaluation of acetophenone based potential cyclooxygenase-2 inhibitors' (2011).
26. Prateek Gaur 'Development and characterization of transdermal patches of pregabalin' (2011).
27. Umesh Sen 'Synthesis and evaluation of aryl substituted heteroaromatics as potential atypical antipsychotics' (2012)

28. Akhil Bansal 'Design, synthesis and pharmacological evaluation of aminothiazole based potential cyclooxygenase-2 inhibitors.' (2012)
29. Arshjyoti Singh 'Synthesis and evaluation of aryl substituted imidazole derivatives as potential atypical antipsychotics.' (2013)
30. Amandeep Singh 'Analytical method development, formulation and evaluation of transdermal patches of duloxetine.' (2013)
31. Ratika Sharma 'Benzimidazole-based potential cyclooxygenase-2 inhibitors: design, synthesis and pharmacological evaluation.' (2014)
32. Shalu Singh 'Design, synthesis and pharmacological evaluation of indole-based atypical antipsychotics' (2015).
33. Bhim Bahadur Chaudhari 'Design, synthesis and pharmacological evaluation of aryl substituted isoxazole derivatives as potential cyclooxygenase-2 inhibitors (2016).
34. Harmanjit Kaur 'Design, synthesis and pharmacological evaluation of arylpiperazine substituted indole derivatives as atypical antipsychotics' (2016).
35. Pooja Kumari 'Design, synthesis and evaluation of indole based non- piperazine atypical antipsychotics'(2017).
36. Ajitesh Balaini 'Design, synthesis and evaluation of aminothiazole derivatives for antioxidant and anti-inflammatory activity' (2018).
37. Payal Mongia 'Design, synthesis and evaluation of 2,5-disubstituted indole compounds as atypical antipsychotics'(2018).
38. Madhurima Saha 'Development of Validated Stability Indicating Analytical Methods for Febuxostat and Characterization of Stress Degradation Products'(2019).

39. Smruti Ranjan Patra 'Development and validation of stability indicating analytical methods and characterization of stress degradation products of gefitinib'(2019).
40. Sudhanshu Shekhar 'Development and validation of stability indicating assay methods for azelastine hydrochloride and characterization of stress degradation products employing LC-MS' (2020).
41. Bidisha Mondal 'Development of validated stability indicating methods & characterization of stress degradation products of Ibrutinib by hyphenated mass spectroscopic technique' (2020).
42. Somi Priya 'Design, synthesis and evaluation of benzimidazole- based potential cyclooxygenase inhibitors with antioxidant activity' (2021).
43. Pooja Singh 'Development and validation of stability indicating methods and characterization of stress degradation products of Solifenacin' (2021).
44. Vinod Jaiswal 'Development and validation of stability indicating methods and characterization of stress degradation products of trandolapril' (2021).
45. Marella Mahesh 'Development and Validation of Stability Indicating Analytical Methods and Characterization of Stress Degradation Products of Idelalisib' (2022).
46. Tanvi Gupta "Development and validation of stability- indicating assay methods for valbenazine and characterization of its stress degradation products' (2022).
47. Tanvi Sharma 'Design, synthesis and evaluation of substituted indole derivatives as potential atypical antipsychotics' (2022).

Membership of Learned societies and other academic bodies.

Life Member of Indian Pharmaceutical Association (IPA) (Membership number:
PUN/LM/0070)

Life Member of Indian Pharmacy Graduates Association (IPGA) (Membership no.: **LM – 1624**)

Life Member of Association of Pharmacy Teachers of India (APTI) (Membership no.: **PU/LM-377**)

Life Member of Panjab University Pharmaceutical Society (PUPS).

Books:

1. Alka Bali, Gulshan Bansal, Abhishek Tiwari. Modern Pharmaceutical Analytical Techniques, Volume I. First Edition, Published by Nirali Prakashan, Pune (2018). ISBN No. 978-93-87686-58-8.

2. Alka Bali and Amandeep Singh, Formulation and evaluation of transdermal patches of duloxetine, LAP LAMBERT Academic Publishing (2015) OmniScriptum GmbH & Co. KG Deutschland, Germany. ISBN No. 978-3-659-82117-2

3. Alka Bali, Angiotensin-II receptor antagonists: New generation antihypertensives, LAP LAMBERT Academic Publishing (2016), OmniScriptum GmbH & Co. KG Deutschland, Germany. ISBN: 978-3-659-88487-0

Book chapters:

1. Sakshi Juneja, Alka Bali and Nishu Bali, Artificial Intelligence aiding medical diagnosis focusing diabetic retinopathy: AI aided computer-based detection of diabetic retinopathy, In Rajae El Ouazzani (Ed) *AI Applications for Disease Diagnosis and Treatment*. IGI Global, Hershey, PA: 66-87 (2022). ISBN13: 9781668423042; ISBN10: 1668423049; EISBN13: 9781668423066. June 2022

2. Mridula Moudgil, Alka Bali and Nishu Bali, Artificial Intelligence, Machine Learning and Deep Learning Approaches as a tool in Breast Cancer Diagnostics, In Manisha Vohra (Ed.) *Effects, Applications and Future Scope of Recent Advances in Education and Healthcare Sectors*. Central West Publishing (CWP), Australia (2022):65-100. ISBN (print):978-1-922617-30-9
3. Sumit Kumar, Alka Bali, Nishu Bali, "Bio-Inspired Algorithms: Devices for Diagnosis and Treatment of Parkinson's Disease" In Shweta Gupta (Ed.) *Bio-Inspired Algorithms and Devices for Treatment of Cognitive Diseases Using Future Technologies*, IGI Global, Hershey, PA: 1-22 (2022).
ISBN13: 9781799895343|ISBN10: 1799895343|EISBN13: 9781799895367 Feb 2022
4. Alka Bali, Nishu Bali. "Role of artificial intelligence in fast-track drug discovery and vaccine development for COVID-19. In Victor Chang, Mohamed Abdel-Basset, Muthu Ramachandran, Nicolas Green, Gary Wills (Eds.) *Novel AI and Data Science Advancements for Sustainability in the Era of COVID-19*, 1st Edition, Elsevier Inc, Academic Press, USA, 201-229 (2022), Paperback ISBN: 9780323900546; eBook ISBN: 9780323903783.
5. Bali, Alka. "Bioremediation of Pharmaceutical Wastes." In *Waste Management: Concepts, Methodologies, Tools, and Applications*. edited by Information Resources Management Association, 1237-1266. Hershey, PA: IGI Global, 2020.
<http://doi:10.4018/978-1-7998-1210-4.ch056>.
6. Alka Bali 'Pharmaceuticals in Environment: Global Concerns and Regulations' In Papadopoulou, P. (Ed.) *Environmental Exposures and Human Health*

Challenges, IGI Global, USA 270-296 (2019). ISBN13: 9781522576358 ISBN10: 1522576355

7. Alka Bali, Phytotherapeutic Agents in Epilepsy (2018) In: Kumar, V., Veeranjaneyulu, A. (Eds.). Herbs for diabetes and neurological disease management Apple Academic Press, New York. <https://doi.org/10.1201/9781315207575> ISBN No. (hard): 978-1-77188-588-1. ISBN No. (ebook): 978-1-315-20757-5.
8. Alka Bali, Bioremediation of pharmaceutical wastes (2017) In: Handbook of Research on Inventive Bioremediation Techniques, IGI Global, USA, 364-393. ISBN13: 978-1-522-52325-3; ISBN10: 1-522-52325-1; EISBN13: 978-1-522-523260.
9. Alka Bali, Drug Treatment of Peptic Ulcer Disease (2016) In: Peptic Ulcer Disease, SM Group, USA. ISBN No. 978-1-944685-69-0.

Publications: 45

International:

1. Smruti Ranjan Patra, Alka Bali, Madhurima Saha, Joga Singh, Sudhanshu Shekhar, Method validation and characterization of stress degradation products of gefitinib through UPLC-UV/PDA and LC–MS/TOF studies. International Journal of Mass Spectrometry, 2023, ***, ***-***.
2. Marella Mahesh, Alka Bali, Tanvi Gupta. Validated Spectrofluorimetric Method for estimation of idelalisib in bulk and in formulation. Zhurnal Prikladnoi Spektroskopii, 2023, 90(2) (May-Jun), ***-***.

3. Tanvi Gupta, Alka Bali, Marella Mahesh. Stability indicating derivative spectrophotometric methods for determination of valbenazine tosylate in bulk and in formulation. *Zhurnal Prikladnoi Spektroskopii*, 2023, 90(2) (Mar-Apr), ***-***.
4. Madhurima Saha, Alka Bali, Smruti Ranjan Patra, Joga Singh. Identification and characterization of stress degradation products of febuxostat employing UPLC-UV/PDA and LC-MS/TOF studies. *Rapid Communications in Mass Spectrometry*, 2023, 37(2), e9423.
5. Pooja Singh, Alka Bali. Derivative spectrophotometric methods for determination of solifenacin succinate in bulk and in tablet formulation. *Journal of Applied Spectroscopy*, *Journal of Applied Spectroscopy*, 2023, 89(6), 1085–1091.
6. Pooja Singh, Alka Bali. Spectrofluorimetric method for determination of solifenacin succinate in bulk and in tablet formulation. *Journal of Applied Spectroscopy*, *Zhurnal Prikladnoi Spektroskopii*, 2022, 89(4) (July-August), ****-**** (In press).
7. Bidisha Mondal, Alka Bali. Development and validation of a sensitive spectrofluorimetric method for determination of ibrutinib. *Journal of Applied Spectroscopy (Zhurnal Prikladnoi Spektroskopii)*, 2022, 89(2) (May), 364-370.
8. Smruti Ranjan Patra, Alka Bali, Madhurima Saha, Derivative spectroscopic methods for determination of gefitinib in bulk and in formulation. *Journal of Applied Spectroscopy*, 87 (5) November 2021, 1088-1094. *Zhurnal Prikladnoi Spektroskopii*, 2021, 88(5) (September-October).

9. Sudhanshu Shekhar, Alka Bali, Spectrofluorimetric method for determination of azelastine hydrochloride in bulk and in nasal formulation, *Journal of Applied Spectroscopy*, 88(3), July, 2021, 674-680.
10. Bhim Bahadur Chaudhari, Alka Bali, Ajitesh Balaini, Design and Synthesis of Novel Anti-inflammatory/Anti-ulcer Hybrid Molecules with Antioxidant Activity. *Medicinal Chemistry*, 17(9), 2021, 994-1006.
11. Arshjyoti Singh Alka Bali, Pooja Kumari, Aryl Substituted Imidazoles: One Pot Synthesis and Pharmacological Evaluation as Potential Atypical Antipsychotics. *Letters in Drug Design and Discovery*, 2021; 18(4): 338-354.
12. Akhil Bansal, Alka Bali, Ajitesh Balaini, Synthesis and evaluation of substituted aryl thiazoles with antioxidant potential as gastro-sparing anti-inflammatory agents. *Letters in Drug Design and Discovery*, 2020, 17(12): 1566 - 1578.
13. Madhurima Saha, Alka Bali, Smruti Ranjan Patra. Spectrofluorimetric method for determination of febuxostat in bulk and in dosage form. *International Journal of Pharmaceutical and Phytopharmacological Research*, 2020, 10(3), 53-64.
14. Shalu Singh, Alka Bali* and Tania Peshin. Synthesis and Evaluation of Aryl Substituted Propyl Piperazines for Potential Atypical Antipsychotic Activity. *Medicinal Chemistry*, 2021;17(5):429-441.
15. Ratika Sharma, Alka Bali, Bhim Bahadur Chaudhari. Synthesis of methanesulphonamido-benzimidazole derivatives as gastro-sparing antiinflammatory agents with antioxidant effect. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27(13): 3007-3013.

16. Renu Chadha, Alka Bali, Gulshan Bansal. Bioanalytical method validation for dronedarone and duloxetine in blood serum. *Journal of AOAC International*, **2017**, 100(1):45-50.
17. Renu Chadha, Alka Bali, Gulshan Bansal Identification and characterization of stress degradation products of dronedarone hydrochloride employing LC-UV/PDA, LC-MS/TOF and MSⁿ studies, *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 118: 139–148.
18. Renu Chadha, Alka Bali Development and validation of stability indicating derivative spectrophotometric methods for determination of dronedarone hydrochloride' *Journal of Applied Spectroscopy*, **2016**, 83(2): 310-314.
19. Renu Chadha, Alka Bali, Gulshan Bansal. Characterization of stress degradation products of duloxetine hydrochloride employing LC-UV/PDA and LC-MS/TOF studies. *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 121: 39-55.
20. Renu Chadha, Alka Bali, Gulshan Bansal A stability indicating method for estimation of tapentadol in bulk and in formulations, *International Journal of Pharmacy*, **2016**, 6(2): 113-120.
21. Alka Bali, Umesh Sen. Docking and physicochemical similarity studies on indole based atypical antipsychotics, *International Journal of Pharmacy*, **2016**, 6(2): 82-92.
22. Amandeep Singh, Alka Bali. Formulation and characterization of transdermal patches for controlled delivery of duloxetine hydrochloride, *Journal of Analytical Science and Technology*, **2016**, 7:25.

23. Renu Chadha, Alka Bali 'Development and Validation of Stability Indicating Derivative Spectrophotometric Methods for Determination of Duloxetine Hydrochloride' *Journal of Pharmaceutical Research International*, **2015**, 6(6): 402-414.
24. Alka Bali, Shalu Singh 'Serotonergic 5-HT₆ receptor antagonists: Heterocyclic chemistry and potential therapeutic significance.' **2015**, *Current Topics in Medicinal Chemistry*, **2015**, 15(17), 1643-62.
25. Renu Chadha, Alka Bali (2015) Stability indicating spectrofluorimetric method for determination of duloxetine hydrochloride in bulk and in dosage form. *Der Pharmacia Lettre*, **2015**, 7(7): 232-240.
26. Bharat Bhushan, Alka Bali, Satish Sardana and Gulshan Bansal Synthesis of 4-Alkoxy-3-Methanesulfonamido Acetophenone based potential cyclooxygenase-2-Inhibitors. *International Journal of Engineering Science Invention Research & Development*, **2015**, 1(7) 235-241.
27. Alka Bali, Umesh Sen, Tania Peshin 'Synthesis, Docking and Pharmacological Evaluation of Novel Indole Based Potential Atypical Antipsychotics' *European Journal of Medicinal Chemistry* **2014**, 74, 477-490.
28. Alka Bali and A. C. Dinesh Kumar Reddy 'Synthesis and evaluation of meta substituted 1-(aryloxypropyl)-4-(chloroaryl) piperazines as potential atypical antipsychotics' *Medicinal Chemistry Research*, **2013**, 22(1), 382-391.
29. Alka Bali 'Field Alignment Studies on a Series of Piperazine Based CNS Active Agents' *American Journal of Pharmacological Sciences*, **2013**, 1(1), 1-5.

30. Alka Bali, Sabrinjit Kaur and Chandrasekaran Balakumar 'Alkoxyphenyl methanesulfonamides: Synthesis, anti-inflammatory effect, and docking studies' *Medicinal Chemistry Research*, **2012**, 21(10), 3053-3062.
31. Alka Bali, Ruchika Ohri, Pran Kishore Deb 'Synthesis, evaluation and docking studies on 3-alkoxy-4-methanesulfonamidoacetophenone derivatives as non ulcerogenic anti-inflammatory agents', *European Journal of Medicinal Chemistry*, **2012**, 49, 397-405.
32. Alka Bali, Abhishek Bhalla, Suman Bala and Rajesh Kumar 'Synthesis and computational studies on aryloxypropyl piperazine derivatives as potential atypical antipsychotic agents', *Letters in Drug Design and Discovery*, **2012**, 9(2), 218-224.
33. Bali Alka 'Molecular Field Based Three Dimensional Similarity Studies on Quinoline Based CNS Active Agents', *ISRN Pharmaceuticals*, **2011**, 2011, 186943.
34. Alka Bali and Prateek Gaur 'A Novel Method for Spectrophotometric Determination of Pregabalin in Pure Form and in Capsules' *BMC Chemistry*, **2011**, 5, 59.
35. Alka Bali, Komal Sharma, Abhishek Bhalla, Suman Bala, Dinesh Reddy, Anant Singh, Anil Kumar 'Synthesis, evaluation and computational studies on a series of acetophenone based 1-(aryloxypropyl)-4-(chloroaryl) piperazines as potential atypical antipsychotics' *Eur. J. Med. Chem.* **2010**, 45, 2656-2662.
36. Bali, Alka (2010, July 13). Drug discovery in schizophrenia: Multitude of approaches. *SciTopics*. Retrieved July 19, 2010, from <http://www.scitopics.com>

37. Bali, Alka (2010, July 16). Dual Angiotensin II/Endothelin antagonists: A new therapeutic approach. *SciTopics*. Retrieved July 19, 2010, from <http://www.scitopics.com>
38. Bali, Alka (2010, October 15). Atypical antipsychotics: Serotonergic approaches *SciTopics*. Retrieved October 15, 2010, from <http://www.scitopics.com>
39. Alka Bali, Sarika Malhotra, Himjyoti Dhir, Anil Kumar, and Ajay Sharma 'Synthesis and evaluation of 1-(quinoliloxypopyl)-4-aryl piperazines for atypical antipsychotic effect' *Bioorg. Med. Chem. Lett.* **2009**, *19*, 3041–3044.
40. Alka Bali, Yogita Bansal, M. Sugumaran, Jatinder Saggu, P. Balakumar, Gurpreet Kaur, Gulshan Bansal, Ajay Sharma and Manjeet Singh, 'Design, synthesis and evaluation of novelly substituted benzimidazole compounds as angiotensin II receptor antagonists', *Bioorg. Med. Chem. Lett.* **2005**, *15*, 3962-3965.
41. Vandana Sharma, Alka Bali & Manjeet Singh, 'Two non terpenoidal benzenoid constituents from leaves of *Azadirachta indica*' , *Phytochemistry* **1998**, *49*(7), 2121-2123.

Publications (national)

1. Alka Bali and Ratika Sharma 'Quantitative Structure-Activity Relationship (QSAR) Study on Disubstituted Aminohydantoin as Potent and Selective Human β -Secretase (BACE1) Inhibitors', *Pharmacos*, *39*, 22-29 (**2014**).
2. Alka Bali and Umesh Sen 'Imidazole based angiotensin receptor antagonists: A 2D QSAR study', *Pharmacos*, **2011**, *38*, 19-25.

3. Alka Bali 'Two Dimensional Molecular Similarity: A Tool in Drug Design', *Pharmacos*, **2010**, 37, 53-58.
4. Alka Bali, Vandana Sharma, Vivek Sood & Ajay Sharma, 'Hypoglycemic activity of leaf extracts of *Azadirachta indica*'. *Indian Drugs*, **2009**, 46(1), 65-68.

Conference Papers (58)

1. Aastha Bishnoi, Tanvi Gupta, Alka Bali, Development and Validation of Stability-Indicating Assay Methods for Valbenazine. Poster presentation at National symposium-cum-Workshop on Contemporary Trends, Tools and Techniques in Pharma Quality by Design (QbD): From Conceptualization to implementation. Got **First Prize** in the Category 'Drug Regulatory Affairs and Other Pharma Trends' organized by Panjab University, Chandigarh along with Chitkara University, from 20-21 April 2023.
2. Akshay Kumar, Marella Mahesh, Alka Bali, Development and Validation of Stability Indicating Analytical Methods of Idelalisib. Poster presentation at National symposium-cum-Workshop on Contemporary Trends, Tools and Techniques in Pharma Quality by Design (QbD): From Conceptualization to implementation. Got **Second Prize** in the Category 'Drug Regulatory Affairs and Other Pharma Trends' organized by Panjab University, Chandigarh along with Chitkara University, from 20-21 April 2023.
3. **CHASCON 2022:** Aastha Bishnoi, Marella Mahesh, Alka Bali, Development and Validation of Stability Indicating Analytical Methods and Characterisation of Stress Degradation Products of Idelalisib, Poster presentation at the 15th

Chandigarh Science Congress (September 15-17, 2022) at Panjab University, Chandigarh. Awarded **Third Prize**.

4. **ICONICA 2020:** Sudhanshu Shekhar*, Madhurima Saha, Alka Bali, Method development and characterization of stress degradation products of febuxostat by LC-MS. Poster presentation at ICONICA 2020- the Global Health Summit centered on the theme, "NEXT-GEN PARADIGMS IN HEALTH CARE" held at Panjab University, Chandigarh from 12-14 February, 2020.
5. **ICONICA 2020:** Bidisha Mondal*, Smruti Ranjan Patra, Alka Bali, Characterization of stress degradation products of gefitinib by hyphenated mass spectrometric technique. Poster presentation at ICONICA 2020- the Global Health Summit centered on the theme, "NEXT-GEN PARADIGMS IN HEALTH CARE" held at Panjab University, Chandigarh from 12-14 February, 2020.
6. **CHASCON 2019:** Madhurima Saha, Ajitesh Balaini, Alka Bali, Design, Synthesis and Evaluation of Aminothiazole Derivatives as Anti-inflammatory Agents with Anti-oxidant Activity, 13th Chandigarh Science Congress (March, 13-15, 2019) Panjab University, Chandigarh.
7. **CHASCON 2018:** Mongia Payal, Bali Alka. Indole-based atypical antipsychotics: Design , synthesis and evaluation of combined anti-dopaminergic and anti-serotonergic activities (February, 12-14, 2018) Panjab University, Chandigarh.
8. **70th IPC 2018:** Madhurima Saha, Payal Mongia, Alka Bali, In-Silico Design, Synthesis and Evaluation of 2,5-Disubstituted Indoles as Atypical Antipsychotics for Anti-dopaminergic and Anti-serotonergic activity at 70th Indian Pharmaceutical Congress (December, 21-23 , 2018) New Delhi.

9. **70th IPC 2018:** Smruti Ranjan Patra, Ajitesh Balaini, Alka Bali, Synthesis, Evaluation and Docking studies of Aminothiazole Derivatives as Anti-inflammatory Agents with Anti-oxidant Activity, 70th Indian Pharmaceutical Congress, (December, 21-23 , 2018) New Delhi.
10. **CHASCON 2017:** Pooja Kumari, Alka Bali, Harmanjeet Kaur. Synthesis and biological evaluation of indole derivatives as potential atypical antipsychotics (March 9-11, 2017), 11th Chandigarh Science Congress (CHASCON), Panjab University, Chandigarh
11. Attended National Symposium on the theme, "Next-Gen Challenges in Pharmaceutical Sciences" held on March 17, 2017 at Panjab University, Chandigarh.
12. **69th IPC:** Mongia Payal, Kumari Pooja, Bali Alka. Design, synthesis and evaluation of combined anti-dopaminergic and anti-serotonergic activities of indole-based atypical antipsychotics (December, 22-24, 2017) at Chitkara University, Punjab.
13. **1st IBRO/APRC:** Alka Bali, Harmanjeet Kaur. Synthesis, pharmacological evaluation and docking studies on a series of novel piperazine based antipsychotics (February 5, 2016) **1st IBRO/APRC** Chandigarh Neuroscience Symposium, Panjab University, Chandigarh.
14. **CHASCON 2016:** Alka Bali, Harmanjeet Kaur. Novel indole based compounds in schizophrenia: Synthesis, docking and pharmacological evaluation (February 29 – March 2, 2016), **10th Chandigarh Science Congress (CHASCON)**, Panjab University, Chandigarh

15. **CHASCON 2016:** Alka Bali, Bhim Bahadur Chaudhari. Docking and similarity studies on novel phthalimide derivatives containing sulfonyl fragments as selective COX-2 inhibitors (February 29th – March 2nd, 2016), 10th Chandigarh Science Congress (**CHASCON**) 2016, Panjab University, Chandigarh.
16. **66th IPC 2015:** Alka Bali, Shalu Singh. Benzimidazole-based potential cyclooxygenase-2 inhibitors: design, synthesis and pharmacological evaluation (Jan. 23-25, 2015) 66th Indian Pharmaceutical Congress 2015, Hyderabad.
17. **Symposium 2015:** Alka Bali, Shalu Singh, Arshjyoti Singh. In silico design, one pot synthesis and pharmacological evaluation of substituted imidazoles as atypical antipsychotics (February 6, 2015) Symposium on: “**Emerging trends in Pharmaceutical sciences**” held at Panjab University, Chandigarh.
18. Bhim Bahadur Chaudhari, Alka Bali ‘Design and In silico Docking Study of Substituted 3,5-Diaryl Isoxazole Derivatives as Novel Selective Cyclooxygenase-2 Inhibitors.’ (November 20th-21st, 2015), 10th National Conference on Thermodynamics of Pharmaceutical, Chemical and Biological Systems, Chandigarh.
19. Harmanjeet Kaur, Shalu Singh and Alka Bali ‘Docking and QSAR studies on a series of indole based CNS active agents.’ (November 20th-21st, 2015), 10th National Conference on Thermodynamics of Pharmaceutical, Chemical and Biological Systems, Chandigarh.
20. **67th IPC 2015:** Bhim Bahadur Chaudhari*, Alka Bali and Shalu Singh. ‘Docking, QSAR and Similarity Studies on Indole-Based Atypical Antipsychotics (Dec. 17-19, 2015) **67th Indian Pharmaceutical Congress 2015**, Mysore.

21. **67th IPC 2015:** Alka Bali, Harmanjeet Kaur. Synthesis, pharmacological evaluation and docking studies on a series of novel piperazine based antipsychotics (December 19th-21st, 2015), **67th Indian Pharmaceutical Congress 2015**, Mysore.
22. **CHASCON 2014:** Ratika Sharma, Arshjyoti Singh, Alka Bali. Synthesis, Docking Studies And Potential Atypical Antipsychotic Activity Of Aryl Substituted Imidazole Derivatives (February 26-28, 2014) Session: Pharmaceutical Sciences and Medical Sciences. 8th Chandigarh Science Congress, Panjab University, Chandigarh.
23. **65th IPC 2013:** Alka Bali, Ratika Sharma, Akhil Bansal. Aminothiazole Based Potential COX-2 Inhibitors: Synthesis, Docking Studies and Pharmacological Evaluation. (Dec. 20-22, 2013) 65th Indian Pharmaceutical Congress 2013, Noida.
24. **65th IPC 2013:** Rachit Kumar, Alka Bali, Arshjyoti Singh. One-Pot Synthesis of Aryl Substituted Imidazole Derivatives, Docking studies and Evaluation as Potential Atypical Antipsychotics. (Dec. 20-22, 2013) 65th Indian Pharmaceutical Congress 2013, Noida.
25. **International Conference Nepal Feb 25-27, 2012:** One poster presentation at International Conference on "Recent Advances in Pharmaceutical Sciences: Transferring Knowledge from Education to Practice" held at Kathmandu University, Nepal from Feb. 25-26, 2012.
26. *Sen Umesh , Ohri Ruchika., Bali Alka 'In silico design and evaluation of novel acetophenone based potential cyclooxygenase-2 inhibitors'*

27. CHASCON 2012 : Participated and had poster presentation in the 6th Chandigarh Science Congress organized by Panjab University, Chandigarh from Feb. 26-28, 2012 in the session Pharmaceutical Sciences and Medical Sciences.

28. UGC Networking Resource Centre for Training in Pharmaceutical Sciences:

Acted as a resource person for the training course on "Current Trends in Pharmaceutical Analysis and Medicinal Chemistry" held at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh from January 24-29, 2011.

29. International Conference on Recent Advances in pharmaceutical Sciences:

Participated and had poster presentation at International conference on recent advances in Pharmaceutical Sciences held from Dec. 22-23, 2011 at BHU, Varanasi

30. *Alka Bali, Rajesh Kumar 'Synthesis and evaluation of 1-(chlorobenzyl)-4-(aryloxypropyl) piperazine based atypical antipsychotics'*

31. CHASCON 2011 : Participated and had two poster presentations in the 3rd Chandigarh Science Congress organized by Panjab University, Chandigarh from Feb. 26-28, 2009 in the session Pharmaceutical Sciences and Medical Sciences.

32. *Tania Peshin, Rajesh Kumar, Alka Bali 'Computational studies of a series of CNS active agents'*

33. Sabrinjit Kaur Dhillon, Ruchika Ohri, Alka Bali 'Synthesis and pharmacological evaluation of potential cyclooxygenase- 2 inhibitors'

- 34. 63rd Indian Pharmaceutical Congress 2011:** Coauthored two poster presentations at the 63rd Indian Pharmaceutical Congress 2011 held at Bangalore from Dec. 16-18, 2011.
35. *Bansal Akhil , Ohri Ruchika , Bali Alka, 'Synthesis, pharmacological evaluation and docking studies of acetophenone based potential cox -2 inhibitors'*
36. *Umesh Sen, Tania Peshin, Alka Bali 'Synthesis, pharmacological evaluation and physiochemical similarity studies on a series of novel antipsychotic aryloxypropyl derivatives'*
- 37. Professor K. N. Gaind Memorial Seminar:** Participated in the Professor K. N. Gaind Memorial Seminar on "Advances in the area of pharmaceutical education and research in the country" held at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh on Dec. 13, 2011.
- 38. CHASCON-2010** : Participated and had two poster presentations in the 4th Chandigarh Science Congress organized by Panjab University, Chandigarh from Mar. 19-20, 2010.
39. The poster entitled '**Synthesis And Biological Evaluation Of Substituted 1-(Chlorobenzyl)-4-(Aryloxypropyl) Piperazine Derivatives**' Ohri, Ruchika, Reddy, D.K., and Bali, Alka. was awarded the **First prize** 2009 in the session Pharmaceutical Sciences and Medical Sciences of CHASCON 2010.
- 40. EMSI Conference 2010:** Participated in the 35th Annual Conference of Environmental Mutagen Society of India (EMSI) & International Symposium on "Mutagens & Genetic Diversity for Health and Agriculture" held at Panjab University, Chandigarh from Mar. 12-14, 2010.

- 41. Biotechnica Chandigarh 2010:** Participated and had two poster presentations at Biotechnica Chandigarh held at Panjab University Chandigarh from November 16 to 18, 2010.
- 42. 62nd Indian Pharmaceutical Congress 2010:** Poster presentation Tania Peshin, Rajesh Kumar, Alka Bali 'QSAR analysis and computational studies of a series of CNS active agents' at the 62nd Indian Pharmaceutical Congress 2010 held at Manipal from Dec., 2010.
- 43. 62nd Indian Pharmaceutical Congress 2010:** Poster presentation: Sabrinjit Kaur Dhillon, Ruchika Ohri, Alka Bali 'Synthesis and pharmacological evaluation of 3-alkoxy-4-methanesulfonamido acetophenone based potential cyclooxygenase- 2 inhibitors' at the 62nd Indian Pharmaceutical Congress 2010 held at Manipal from Dec., 2010.
- 44. 62nd Indian Pharmaceutical Congress 2010:** Poster presentation Prateek Gaur, Rajesh Kumar, Alka Bali 'Synthesis and pharmacological evaluation of 1-(chlorobenzyl)-4-(aryloxypropyl) piperazine based atypical antipsychotics' at the 62nd Indian Pharmaceutical Congress 2010 held at Manipal from Dec., 2010.
- 45. CHASCON-2009 :** Participated and had poster presentation in the 3rd Chandigarh Science Congress organized by Panjab University, Chandigarh from Feb. 26-28, 2009.
- 46. International Symposium on Pharmaceutical and Biomedical Analysis PBA 2009:** Attended the symposium held at Agra from 1 to 4 march, 2009. Delivered oral presentation: Alka Bali *, Komal Sharma, Abhishek Bhalla, Suman

Bala, Anant Singh, Anil Kumar “**Novel Arylpiperazine Based Potential Atypical Antipsychotics**”

47. National Conference on Innovations in Drug Discovery and Research 2009 :

Had one poster presentation in the National Conference on Innovations in Drug Discovery and Research held at Patiala from 3-5th March, 2009.

48. 61st Indian Pharmaceutical Congress 2009 : Participated in the 61st Indian Pharmaceutical Congress 2009 held at Ahmedabad from Dec. 11-13, 2009.

49. CHASCON 2008 : Participated and had poster presentation in the 3rd Chandigarh Science Congress organized by Panjab University, Chandigarh from Feb. 26-28, 2009 in the session Pharmaceutical Sciences and Medical Sciences.

50. 78th Annual Session and Symposium on Novel Approaches for Biomedical Research NASI 2008 : Participated in the Annual Session and Symposium on Novel Approaches for Biomedical Research NASI_2008 held at Panjab University from Nov. 21-23, 2008.

51. 59th Indian Pharmaceutical Congress 2007 : Poster presentation in the 59th Indian Pharmaceutical Congress 2007 held at Varanasi from Dec. 20-23, 2007.

52. 60th Indian Pharmaceutical Congress 2008 : Participated and had poster presentation in the 60th Indian Pharmaceutical Congress 2008 held at Delhi from Dec. 12-14, 2008.

53. 58th Indian Pharmaceutical Congress 2006 : Oral presentation (co author) in the 58th Indian Pharmaceutical Congress 2006 held at Mumbai from Dec. 1-3, 2006.

54. International Symposium on India Emerging as a Global Pharmaceutical

Competitor: Member (Scientific Committee) in the symposium held at U.I.P.S., Panjab University, Chandigarh from February 25-26 2005.

55. 9th Chandigarh Symposium on New Biology: Participated in the 9th

Chandigarh Symposium on New Biology held at Department of Biotechnology, Panjab University, Chandigarh from Feb. 14-15, 2005.

56. 57th Indian Pharmaceutical Congress 2005 : Participated and had poster

presentation in the 57th Indian Pharmaceutical Congress 2005 held at Hyderabad from Dec. 2-4, 2005.

57. National Seminar on Pharmaceutics in the Light of Drug Discovery

Challenges : Participated in the "National Seminar on Pharmaceutics in the Light of Drug Discovery Challenges" held at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh from 14-15th March, 2003.

58. 20th Annual Conference of Indian Pharmacy Graduates Association-2003 :

Participated in the 20th Annual Conference of Indian Pharmacy Graduates Association held at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh on February 8th, 2003.

59. 54th Indian Pharmaceutical Congress 2002 : Participated and had poster

presentation in the 54th Indian Pharmaceutical Congress 2002 held at Bhartiya Vidyapeeth, Pune from 13.12 2002 to 15.12.2002

60. Participated in the Summer School on Computer Aided Drug Design held at

National Institute of Pharmaceutical Education and Research (NIPER) , S.A.S. Nagar from **15 - 19 June, 1998.**

61. Participated in the National Seminar titled Molecular Basis of Drug Discovery and Development held at National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar from 30-31 May, 1997. The topics covered ranged from computer aided drug design, peptidomimetics, protein chemistry etc. which are very relevant in the current computer era .

MISCELLANEOUS

- **Member, Organizing Committee (Scientific Committee)**, National symposium-cum-Workshop on Contemporary Trends, Tools and Techniques in Pharma Quality by Design (QbD): From Conceptualization to implementation organized by Panjab University, Chandigarh along with Chitkara University, from 20-21 April 2023.
- **Coordinator of M. Pharm. (Pharmaceutical Analysis) section with effect from the session 2022-2023.**
- **Editor, The Pharmacos:** Acted as Editor of 'The Pharmacos', an official publication of the Panjab University Pharmaceutical Society (PUPS) from 2020 to 2022.
- **Joint Editor, The Pharmacos:** Acted as Joint Editor of 'The Pharmacos', an official publication of the Panjab University Pharmaceutical Society (PUPS) from 2017 to 2020.
- **CHASCON-2020:** Acted as section coordinator for the Pharmaceutical Sciences sectional program of the 14th Chandigarh Science Congress (**CHASCON 2020**) (online mode) on '**Science and Technology Innovations: Ushering in the era of Make in India**' organized from December 17-19, 2020.

- **ICONICA 2020:** Member of organizing committee (**Co-convener of Public Relations Committee**) of ICONICA 2020- the Global Health Summit centered on the theme, "NEXT-GEN PARADIGMS IN HEALTH CARE" held at Panjab University, Chandigarh from 12-14 February, 2020.
- **UGC-NRC Training Program Jan 2020:** Course coordinator of UGC Networking Resource Centre Training School on 25th training school on 'Targeting new echelons in drug discovery and analysis' from Jan. 27-Feb. 1, 2020.
- Participated in generation of useful research data on clavulanic acid stability for **Startup project of Dr Best Pharmaceuticals Pvt. Ltd. (Startupindia Project No. DIPP1352) March, 2019.**
- **UGC-NRC Training Program March, 2018:** Joint Coordinator of the UGC Networking Resource Centre Training School on 'Evolving methodologies in drug discovery and analysis' conducted by UIPS from 12th -17th March, 2018.
- Acted as Convener of Annual Alumni meet held at UIPS, Panjab University, Chandigarh on **21st December, 2017.**
- Acted as **Convener of Annual Alumni meet held on 28th November, 2016** conducted by UIPS, Panjab University, Chandigarh.
- Acted as organizing secretary for the Pharmaceutical Sciences sectional program of 10th Chandigarh Science Congress (**CHASCON**) **2016.**
- Member, Organizing Committee; '10th National Conference on "Thermodynamics of Pharmaceutical, Chemical and Biological Systems'.

- Member of organizing committee; Symposium on: “Emerging trends in Pharmaceutical sciences” held at Panjab University, Chandigarh on February 6, 2015.
- Coordinated the industrial tour of M. Pharm. Sem. I students to IHBT, Palampur.
- **UGC-NRC Training Program September, 2015:** Joint coordinator for the training course on “**Contemporary Trends in the Realm of Medicinal Chemistry**” under **UGC Networking Resource Centre** held at **University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh** from **14th to 19th September 2015**.
- **UGC-NRC Training Program February 2013:** Co-coordinator for the ‘**Winter School on Computer Aided Drug Design: Hands-On Workshop**’ under the UGC Networking Resource Center training programme conducted by the University Institute of Pharmaceutical Sciences (UIPS), Panjab University, Chandigarh from **28th January to 9th February 2013**.
- **APTI (12th Annual National Convention)-2007:** Member of organizing Committee (Secretary, Entertainment Committee) held at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh.
- Member of the **Scientific Committee** during the **28th Conference of Indian Pharmacology Society from November 24-26, 1995** held at Punjabi University, Patiala.