

## Biodata

**Name:** Dr. Manisha Bansal

**Designation:** Assistant Professor (Stage III)

**Department:** Chemistry

**Institute:** Punjabi University Patiala

**Address:** 44, Mansahia Colony 21 No. Phatak, New Sant Nagar, Patiala

**Date of birth:** 01-01-1979

• **Particulars of Examination Passed**

S.No.	Exam	Subjects	Institute	Year of passing	Marks Obtained	Total marks	%age of marks	Merits
1.	Matric	Eng, Punjabi, Maths, Science, Social Science	CBSE	1995	358	500	71.6	-
2.	10+2	Eng, Punjabi, Chemistry, Physics, Biology	PSEB	1997	277	450	61.55	-
3.	B.Sc (Med)	Eng, Punjabi, Chemistry, Botany, Zoology	Pbi. Uni, Patiala	2000	1680	2400	70.0	3 <sup>rd</sup> in university

4.	M.Sc.	Natural Products-I, II Mod. Syn. Rx-I, II Analytical chem.-I, II	Pbi. Uni, Patiala	2002	558	800	69.7	-
5.	Ph.D.	Done	Pbi. Uni, Patiala	2007	-	-	-	-
6.	Net	Qualified	-	2003	-	-	-	-

**Ph.D : Synthetic and medicinal Chemistry**

**Topic: SYNTHESIS OF NEW SUBSTITUTED IMIDAZOLINE ISOSTERES AND THEIR ACYCLIC ANALOG BASED CENTRALLY ACTING ANTIHYPERTENSIVE AGENTS**

• **Teaching Experience**

Name of institute	Designation	from	To	Years	Month	Exp. Under graduate	Exp. Post graduate	Last pay drawn
Govt. Ranbir College of Sangrur	Guest Lecturer	01-sep 2002	31-jan 2003		5	5month		6000 -
M.M. Modi college Patiala	Adhoc Lecturer	28-jul 2003	15-march 2004		8	8 month		6000 -

Dept. Of Chemistry Pbi. Uni. Patiala	Research Fellow	05-sep 2005	06-jun 2006		9		9 month	9200 -
Dept. Of Chemistry Pbi. Uni. Patiala	Adhoc Lecturer	02-aug 2006	31-jul- 2011	5			5 years	35000 -
UCOE	Contract Lecturer	Jul 2009	March20 10		6	6 months		500 - per lecture
Department of Chemistry Punjabi University Patiala	Regular	1- August - 2011	Onwards					
Department of botany, Punjabi University Patiala	Guest Faculty	2019				6 months		500/- per lecture

**Total Teaching Experience excluding research:** 17 years approximately

**Total Research Experience:** 15 years

**Field Of Research:**

- Synthetic Organic and Medicinal Chemistry
- Synthetic Organic and Photochemistry

## List of Publications:

Sn.	Topic	Author	Year	Journal	ISSN No.	Im fac	Impact Factor in 2022
1.	Synthesis and photodegradation of 3-Hydroxy-(2-Furany-2-yl)-4H-chromen-4-one	Manisha Bansal, Dupinder Kaur		<i>Journal of Punjab Academy of sciences 5-6 (1&amp;2)</i>			
2.	Rose Bengal Sensitized Photorearrangement of 6-Chloro-3-hydroxy-2-(2'-thienyl)-4-oxo-4H-1-benzopyran	Bala R. Bansal M., Bansal W. R	September 2010	<i>Canadian journal of chemical engineering and technology</i> Vol. 1, No. 3,			
3.	Excited- State Intramolecular Proton Transfer Studies on the 6-Chloro-3-hydroxy-2-(2'-thienyl)-4-oxo-4H-1-benzopyran in Different Solvents.	<i>Bala R., Bansal M., Bansal W. R.*</i>	July 2012	J. Indian Chem. Soc., Vol. 89, , pp. 873-880		0.9	
4.	Electromeric Effect of Substitution at 6 <sup>th</sup> Position in 2-(Furan-2-yl)-3-hydroxy-4H-chromen-4-one (FHC) on the Absorption and Emission Spectra	<b>Bansal*</b> , <b>M.</b> And R Kaur,	March/2015	<i>Journal of chemical sciences, Vol. 127, No. 3, March 2015, pp. 404-412</i>	09743626,09737103	1.2	
5.	Evaluation of DPPH radical scavenging activity of 2-Furan-2-yl)-3-Hydroxy-4H-chromen-4-one and their derivatives	<b>Bansal*</b> <b>M.</b> And <b>Kaur R., Kaur K</b>	June/2016	<i>Asian Journal of Chemistry, Vol. 28, No.9 (2016), Pages 1921-1924</i>	0975-427X, 0970-7077	0.1	
6.	Comparative Studies in the Fluorescence and Excitation Spectra of 3-Hydroxyflavone (3HF) and 2-(2'-heteroaryl)-3-hydroxy-4H-chromen-4-ones	<b>Bansal*</b> <b>M.</b> And Kaur R., <b>Kaur K</b>	June/2017	<i>Journal of applied spectroscopy, Volume 84, N 2</i>	0021-937, 1573-8647	0.6	
7.	Photoreactions of 2-(furan-2-yl)-3-hydroxy-4H-chromen-4-one and 3-hydroxy-2-(thiophene-2-yl)-4H-chromen-4-one in cyclohexane and acetonitrile as solvent.	<b>Bansal*</b> <b>M.</b> And <b>Kaur K., Jyoti, Kaur R</b>	May/2017,	<i>Photochemical and photobiological sciences, 00, 1-9 accepted in may 2017</i>	1474-905X, 1474-9092	2.9	3.982
8.	Synthesis of Flavones: A mini review	<b>Bansal M.*, Kaur K., Tomar J and Kaur L.</b>	NOV/2017	<i>Biomedical journal of science and technical research</i>	<b>2574-1241</b>		

9.	A Review: On photochemistry of 3-hydroxyflavone,		2017	International Conference at RayatBahra University, Mohali,			
10.	A Review on structural and antibacterial activities of quinolones	Gurmeet Kaur and Manisha Bansal	Feb/2018	IJR International conference at Dev Samaj College for women, Ferozepur,			
11.	Role of hydrogen in ground and excited state studies of 2-aryl-3-hydroxychromen-ones in different solvents	<b>Bansal M.*</b> , <u>Kaur K.</u> , Tomar J.	April/2019	<i>Canadian Journal of Chemistry</i>	0008-4042, 1480-3291	1.0	
12.	The detection of the precursor of the Photorearranged product of 3-Hydroxy flavones in selected solvents from UV-vis spectra in situ	<b>Bansal M.*</b> , Kaur K., <u>Tomar J.</u>	Oct/2019	<i>Photochemical and photobiological sciences,</i>	1474-905X, 1474-9092	2.9	3.982
13.	Theoretical molecular predictions and antimicrobial activities of newly synthesized molecular hybrids of Norfloxacin and Ciprofloxacin	<b>Manisha Bansal*</b> , <u>Kaur G.</u> , Kaur M., Sharad L.	Dec/2019	<i>Journal of heterocyclic chemistry</i>	002-152X	1.2	2.19
14.	Detection of a Precursor of the Photorearranged Products of 3-Hydroxyflavones in Selected Solvents from the UV-visible Spectra in Situ	<b>Manisha Bansal*</b> Jyoti Tomar, Kulvir Kaur and	Oct/2019	<i>Photochemical and photobiological sciences,</i>	1474-905X, 1474-9092	2.9	3.982
15.	New insights of structural activity Relationship of curcumin and Correlating their efficacy in anticancer studies with some other similar molecules	<b>Manisha Bansal*</b> Gurmeet Kaur, Mandeep Kaur,	Aug/2021	<i>American Journal of Cancer Research</i>	2156-6976/ajcr0126947	6.1	6.1
16.	Synthesis and studies of new purines/ as multi-targeted agents involving in the immune system.	<b>Manisha Bansal*</b> , M. Hafiz Rehman Gurmeet Kaur, Mandeep Kaur,	2023	<i>Molecular Diversity springer</i>	1381-1991	3.3	3.36
17.	Switching of newly synthesized ligands of non-steroidal anti-inflammatory drugs with anti-inflammatory and anticancer activity.	<b>Manisha Bansal*</b> M. Hafiz Rehman Gurmeet Kaur, Mandeep Kaur, Amandeep Kaur	2023	<i>Bioorganic chemistry Science direct</i>	00452068, 10902120	5.3	5.307
18.	Investigating multifaceted action of	<b>Manisha Bansal*</b>	2023	<i>Journal of Biomolecular</i>	07391102, 15380254	5.2	5.2

s towards cox isozymes and interleukin-6 interacting with various target sites.	M. Hafiz Rehman Gurmeet Kaur, Mandeep Kaur, Amandeep Kaur		<i>Structure and Dynamics</i> <i>Taylor and francis</i>			
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<b>2009-2014 conferences</b>					
S.No.	Title of the Conference /Seminar attended	Year	Organizer	National /International	Topic of presentation
1.	1 <sup>st</sup> National Seminar on Chemistry	2009	Department of chemistry, Punjabi university patiala	National	Excited State Intramolecular Proton Transfer (ESIPT) Studies on 6-Chloro-3-Hydroxy Flavone <b>Bansal, M.</b> , Kaur D. 2. Reactions of Chemically Produced Singlet Oxygen with 6-Chloro-3-Hydroxy -2-(2'-Thienyl)-4-Oxo-4H-1-Benzopyran Bala R., <b>Bansal M.</b>
<b>Chaired the session and convener of the cultural events</b>					
	Annual Conference on Recent Advances in Chemical Environmental Sciences	2009	M.M.Modi college Patiala		Attended
	National Symposium on Green Chemistry: <i>Application in Science and Engineering (NSGC-2009)</i>	2009	TIET Thapar University		Attended
	2 <sup>nd</sup> National Seminar	2010	Department of	National	Synthesis and Initial Photochemical

	on Chemistry		chemistry, Punjabi university patiala		studies with 3-Hydroxy-2-(Furan-2-yl)-4H-chromene-4-one' <b>Bansal M.*,Kaur R..</b>
<b>Chaired the session and convener of the cultural events</b>					
	3rd National Seminar on Chemistry on 'Recent Advances in Chemistry and their Impact on Environment'	2011	Department of chemistry, Punjabi university patiala	National	Synthesis and Initial Photodegradative Studies with 3-Hydroxy-2-(Benzofuran-2-yl)-4H-Chromen-4-One <b>Bansal*, M., Kaur, R.</b>
<b>Chaired the session and convener of the cultural events</b>					
	International conference on 'Innovation in Chemistry for sustainable development'	2011	PanjabUniversity. chandigarh	International	Synthesis and mechanistic features of photochemical reaction of 3-HBP and 2F-3-HC' <b>Bansal*, M., Kaur, R.</b>
	National Seminar on Chemistry: An Interdisciplinary Science	2012	Department of chemistry, Punjabi university patiala	National	Comparative studies of differently substituted 3-Hydroxy flavones, <b>Bansal*, M., Kaur, R.</b>
<b>Chaired the session and convener of the cultural events</b>					
	5 <sup>th</sup> National conference on New frontiers in Chemistry	2013	Department of chemistry, Punjabi university patiala	National	Comparative study of initial photochemical reactions of Variously Substituted 3-hydroxyflavones" <b>Bansal*, M., Kaur, R., Kaur, K.</b>
<b>Chaired the session and convener of the cultural events</b>					
	National conference on Recent advances in chemical and environmental sciences	2013	M.M.Modi College	National	Photochemistry of 3-hydroxy flavones, <b>Bansal, M. and Kaur, R.</b>
	Practical aspects on the importance of patents in research (PAIPR-2013)	2013		One day workshop	
	National conference	2014	Khalsa college	National	Synthesis and Photodegradation of 2-(2'-furyl)-3-hydroxy-4H-chromen-4-one using Methylene blue as a dye' <b>Bansal*, M., Kaur, R., Kaur, K.</b>
	6 <sup>th</sup> National seminar on New Paradigm in chemical Sciences-2014	2014	Department of chemistry, Punjabi university patiala	National	Comparative study in direct and dye sensitized photolysis of 2-(2'-furyl)-3-hydroxy-4H-chromen-4-one" <b>Bansal*, M., Kaur, R., Kaur, K.</b>
<b>Chaired the session and convener of the cultural events</b>					

<b>2015-2020 Conference</b>					
S.No.	Title of the Conference /Seminar attended	Year	Organizer	National or International	Topic of presentation
1.	7 <sup>th</sup> National	2015	Dept. of	National	'Electromeric Effect

	Seminar Entitled "Synergistic Aspects of Chemical and Other Sciences 2015(SACOS-2015)		Chemistry Punjabi University, Patiala		of Substitution at 6 <sup>th</sup> Position in 2- (Furan-2-yl)-3-hydroxy-4 <i>H</i> - chromen-4-one (FHC) on the Absorption and Emission Spectra' <b>Bansal*</b> , M., Kaur, R., Kaur, K.
2.	<b>Chaired the session on 19-2-2015, Convener for organizing cultural nights</b>				
3.	8 <sup>th</sup> National paradigm in chemical sciences- NPICS-2016	2016	Dept. of Chemistry Punjabi University, Patiala	National	Evaluation of DPPH Radical Scavenging Activity of 2-(Furan- 2'-yl)-3-hydroxy-4 <i>H</i> - chromen-4- one (FHC) and their derivatives. <b>Bansal*</b> , M., Kaur, R., Kaur, K., Jyoti
4.	<b>Chaired the session, Convener for organizing cultural nights</b>				
5.	International conference on recent trends in Engineering and Material sciences	March 2016	Jaipur, National University Jaipur,	International	Comparative Studies in the Fluorescence and Excitation Spectra of 3 Hydroxyflavone(3HF) and 2(2'heteroaryl)-3-hydroxy-4 <i>H</i> - chromen-4-ones: Photodissociation vs Phototautomerizatin <b>Bansal*</b> , M., Kaur, R., Kaur, K.
6.	9 <sup>th</sup> National paradigm in chemical sciences- NPICS-2017	2017	Dept. of Chemistry Punjabi University, Patiala	National	"Synthesis, Characterization and spectral studies of 2-(2-pyrrole)- 3-hydroxy-4 <i>H</i> -chromen-4-one (PHC) <b>Manisha Bansal, Kulvir Kaur,</b> <b>Jyoti and Gurmeet Kaur</b>
7.	<b>Chaired the session, Convener for organizing cultural nights</b>				
8.	<b>10<sup>th</sup> National Conference CES:IA-2018</b>	2018	Dept. of Chemistry Punjabi University, Patiala	National	
9.	International Conference	2018	Dev Samaj College, Ferozepur in 2nd Feb, 2018	ICHR sponsored International Seminar	Paper presentation on "A Review on Structural and Antibacterial Activities of Quinolones" <b>Gurmeet Kaur,</b> <b>Manisha Bansal</b>
10.	Cancer Awareness Camp :" <b>Understanding Cancer and Knowing its Risks</b> "	2018	Dev Samaj College, Ferozepur in 3 <sup>rd</sup> Feb, 2018	International	
11.	15 <sup>th</sup> National Seminar " <b>Emerging Trends in Chemistry</b> "	2018	Department of Chemistry, Dev Samaj College, Ferozepur in 24 <sup>th</sup> Feb, 2018	National	Paper presentation on "Synthesis, Characterization and Antibacterial Activity of Amide derivatives of Ciprofloxacin" <b>Gurmeet Kaur,</b> <b>Manisha Bansal</b>
12.	International Conference "COMPFLU-2018"	2018	IIT Roorkee in 6-9th Decmber, 2018	International	Poster Presentation on " Synthesis, characterization of 1- cyclopropyl-6-fluoro-7- (piperazin-1-yl)-3-(substituted amine)quinolone-4(1 <i>H</i> )-one and their Biological Significance <i>in</i>



					<i>vitro</i> Gurmeet Kaur, <b>Manisha Bansal</b>
13.	National Conference "RTCES-2019"	2019	Department of chemistry, Punjabi University, Patiala held on 7-8 <sup>th</sup> Feb, 2019	National	Oral presentation on "Synthesis, Characterization and Biological Significance of 1-cyclopropyl-6-fluoro-4-oxo-7-(4-(cyclicamine-1-carbonyl)piperazin-1-yl)-1,4-dihydroquinoline-3-carboxylic acid" Gurmeet Kaur, <b>Manisha Bansal</b>
14.	National Seminar "CES: IA-2020"	2020	Department of Chemistry, Punjabi University, Patiala held on 19-20 <sup>th</sup> Feb, 2020	National	Oral presentation on "Studies in newly synthesized derivatives of Fluoroquinolones" Gurmeet Kaur, <b>Manisha Bansal</b>
<b>From July 2020-2023</b>					
15.	RTDDT Conference-2020	2020		National	Presentation on Structural Activity Relationship and ADMET studies of Curcumin and Rosmarinic Acid Gurmeet Kaur, <b>Manisha Bansal</b> *
16.	Bioshock India 2 <sup>nd</sup> International Conference on Recent Trends in Computational Cancer Biology and Covid-19	2021	(ICRTCCBC-2021), July 24-25, 2021	International	
17.	National conference-cum workshop themed "Post Covid-19 pandemic Era: Prospective shift towards clinical and Translational Research"	2022	16-17 March	National	Poster Presentation <i>In Silico</i> binding interactions of Curcumin with Covid-19 Bat corona virus HKU4-3CL <sup>pro</sup> Gurmeet Kaur, <b>Manisha Bansal</b> *
18	International conference	2022	Botany Department, Punjabi University, Patiala	International	
19	National Conference cum workshop themed "post Covid-19 pandemic Era: Prospective shift towards clinical and translational research"	March-2022	Department of Pharmaceutical Sciences and drug research, Punjabi university patiala	National	In silico binding interactions of curcumin with covid -1 Bat coron virus HKU4-3CL <sup>pro</sup> Gurmeet Kaur, <b>Manisha Bansal</b> *
20	International conference on	Feb 2023	Department of Chemistry Punjabi University Patiala	International	

### Worked as reviewer

Worked as reviewer				
S.No.	Journal	year	Topic	Certificate
1.	Journal of pharmaceutical research international	2022		yes
2.	<a href="#">International Journal of Environment</a>		Quality Assessment of	

	<a href="#">and Climate Change</a>		Commercial Bating Enzymes in Selected Kenyan Tanneries for Use in Different Pre-Tanning Processes	
3.	Archive der Pharmazie (Wiley)	2021		yes
4.	Heterocyclic communications	Aug 2021	Synthesis, spectroscopic characterization and DFT computational study of novel isoxazole derivative	
5.	Heterocyclic communications		Synthesis of Novel Acyclic Nucleoside Analogues Starting From 6-Aminouracil as Potent Antimicrobial Agent	
6.	Current journal of applied science and technology	2020		yes

### List of students doing and done M.Phil. And Ph.D

S.No.	Degree	Year	Name of the student	Topic
1.	M.Phil.	2008-09	Dupinder Kaur	Synthesis of some flavones and initial Photochemical Studies with 3-Hydroxy-2-(furan-2-yl)-4H-CHROMEN-4-ONE

2.	M.Phil.	2009-10	Ranbir Kaur	Synthesis of some variously substituted 3-Hydroxychromen-4-one and their photodegradative studies.I.”
3.	M.Phil.	2010-11	Satinder Kaur	Synthesis and initial photochemical degradation of 2-(Furan-2-yl)-3-hydroxy-6-methyl-4H-chromone-4-one
4.	M.Phil.	2010-11	Renu	Synthesis and initial photodegradative studies of 2-(furan-2-yl)-3,6-dihydroxy-4H-chromen-4-one
5.	Ph.D	2012	Ranbir	Thesis submitted
6.	M.Phil.	2015	Vasudha	
6.	Ph.D	2017	Kulvir Kaur	Thesis submitted Topic : Synthesis and Photochemistry of 2-(2'-heteroaryl)-3-hydroxy-4H-chromen-4-ones
7.	Ph.D	2021	Jyoti Tomar	Completed in 2021  Topic: Studies in the photooxidation and photorearrangement reactions of some selected 2-heteroaryl-4H-chromen-4-ones
8.	M.Phil.	2015-2017	Gurmeet Kaur	Synthesis characterization and evaluation of antibacterial activities of ciprofloxacin derivatives
9.	M.Phil.	2018	Lakhvir Sharad	Synthesis characterization and evaluation of antibacterial activities of Norfloxacin derivatives
10.	M.Phil.	2019	Manpreet Kaur	Theoretical molecular prediction, Synthesis and antimicrobial studies of molecular hybrids of fluoroquinolones
11.	Ph.D	08 march, 2018 enrollment, Registered 09, may 2019	Gurmeet Kaur	Studies on the Design , synthesis and biological activities of multi-targeted curcumin like compounds

12.	Ph. D	6/Dec/2019 enrollment  Registered 31/12/2020	Mandeep Kaur	Studies in linker based novel compounds using multi-targeted bioactive precursors
14.	M. Phil		Anmol Jain	
15.	Ph. D	25 June, 2021, Enrollment	Amandeep Kaur	

**Orientation and refresher course:**

<b>Sr.No.</b>	<b>Course</b>	<b>Year</b>	<b>Duration</b>	
<b>1.</b>	<b>Orientation Course</b>	<b>2011</b>	<b>27 days</b>	
<b>2.</b>	<b>Refresher course</b>	<b>2014</b>	<b>21 days</b>	
<b>3.</b>	<b>Refresher course</b>	<b>2015</b>	<b>21 days</b>	
<b>4.</b>	<b>Short term course</b>	<b>2017</b>	<b>7 days</b>	
<b>5.</b>	<b>Short term course</b>	<b>2018</b>	<b>7 days</b>	
<b>6.</b>	<b>One day Workshop</b>	<b>Feb 2018</b>	<b>One day</b>	
<b>7.</b>	<b>Course of Bioinformatics</b>	<b>January 2021</b>	<b>7 days</b>	
<b>8.</b>	<b>MD simulation with GROMACS and MMPBSA analysis</b>	<b>August 2021</b>	<b>10 days</b>	
<b>9.</b>	<b>Biodeavour Research lab</b>	<b>21 March-05 April</b>	<b>15 days</b>	
<b>10.</b>	<b>7 Days Faculty development course in chemistry in Panjab University Chandigarh</b>	<b>August 2022</b>	<b>7 days</b>	

<b>11.</b>	<b>Gian Course</b>	<b>January 2023</b>	<b>10 days</b>	
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