

## Bio Data

**Name:** Dr Vikas Rana  
**Designation:** Assistant Professor (Pharmaceutics)  
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**Email id** [Vikas\\_pbi@rediffmail.com](mailto:Vikas_pbi@rediffmail.com)  
**Academic** M Pharm; PhD (Pharmaceutics)

**Qualification:**

**Industrial Experience:** 2.5 Years

**Teaching Experience:** 16 Years

**Subject Taught:**

### B Pharm Level

Dispensing Pharmacy, Biological Pharmacy, Unit Operation, Pharmacokinetics and Biopharmaceutics, Physical Pharmacy, Pharmaceutical Technology, Dosage form Design.

### M Pharm Level

Advanced Pharmacokinetics and Biopharmaceutics, Quality Assurance and Packaging Technology, Pharmaceutical Process validation

### Ph D Level

Advances in Pharmaceutics

**Area of Specialization:** Pharmaceutics

**Area of Research:** Nanoparticulate drug delivery system, orally disintegrating systems, Micro emulsion based drug delivery systems, Carbohydrate polymers.

**Projects handled:** AICTE, New Delhi (10lacs +23lacs=33lacs approx); ICMR, New Delhi (25 lacs approx), UGC, New Delhi (3.55 lacs); CSIR, New Delhi (5 lacs+16lacs=21lacs approx).

**Patents filed:** Four (Published: 03)

**Total Impact Factor:** ~ 142

**M. Pharmacy Research guidance:** 17

**PhD Research guidance:** Awarded: 06 Registered: 03

## List of Publications

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	Impact Factor
1.	Akashdeep Singh, Bhumika Mangla, Sheshank Sethi, Sunil Kamboj, Radhika Sharma, <b>Vikas Rana</b>	QbD based synthesis and characterization of polyacrylamide grafted corn fibre gum	Carbohydrate polymers	156	45-55	2017	4.811
2.	Sameer Bhandari, <b>Vikas Rana</b> , Ashok K Tiwary	Antimalarial solid self-emulsifying system for oral use: in vitro investigation	Therapeutic Delivery	8	201-213	2017	-
3.	Ram Sarup Singh, Hemant Preet Kaur, <b>Vikas Rana</b> , John F Kennedy	Immunomodulatory and therapeutic potential of a mucin-specific mycelial lectin from <i>Aspergillus panamensis</i>	International journal of biological macromolecules	96	241-248	2017	3.671
4.	Manish Jindal, <b>Vikas Rana</b> , Vineet Kumar, Bharti Sapra, Ashok K Tiwary	Synthesis, physico-chemical and biomedical applications of sulfated <i>Aegle marmelos</i> gum: Green chemistry approach	Arabian Journal of Chemistry	10	S2151-S2159	2017	4.553
5.	Ram Sarup Singh, Navpreet Kaur, <b>Vikas Rana</b> , John F Kennedy	Pullulan: A novel molecule for biomedical applications	Carbohydrate polymers	171	102-121	2017	4.811
6.	Sheshank Sethi, Rajneet Kaur Khurana, Sunil Kamboj, Radhika Sharma, Akashdeep Singh, <b>Vikas Rana</b>	Investigating the potential of <i>Tamarindus indica</i> pectin–chitosan conjugate for reducing recovery period in TNBS induced colitis	International Journal of Biological Macromolecules	98	739-747	2017	3.671
7.	Sameer Bhandari, Vikram Bhandari, Jatin Sood, Sunil Jaswal, <b>Vikas Rana</b> , Neena Bedi, Rakesh Sehgal, Ashok K Tiwary	Improved pharmacokinetic and pharmacodynamic attributes of artemether–lumefantrine-loaded solid SMEDDS for oral administration	Journal of Pharmacy and Pharmacology	69	1437-1446	2017	2.405
8.	Radhika Sharma, <b>Vikas Rana</b>	Effect of carboxymethylation on rheological and drug release characteristics of <i>Terminalia catappa</i> gum	Carbohydrate Polymers	175	728-738	2017	4.811

9.	Sunil Kamboj, <b>Vikas Rana</b>	Quality-by-design based development of a self-microemulsifying drug delivery system to reduce the effect of food	International Journal of Pharmaceutics	501 (1)	311-325	2016	3.649
10.	Radhika Sharma, Sunil Kamboj, Gursharan Singh, <b>Vikas Rana</b>	Development of aprepitant loaded orally disintegrating films for enhanced pharmacokinetic performance	European Journal of Pharmaceutical Sciences	84	55-69	2016	3.756
11.	Sunil Kamboj, <b>Vikas Rana</b>	Formulation optimization of aprepitant microemulsion-loaded silicated corn fiber gum particles for enhanced bioavailability	Drug development and industrial pharmacy	--	1-16	2015	2.1
12.	Radhika Sharma, Sunil Kamboj, Rajneet Khurana, Gursharan Singh, <b>Vikas Rana</b>	Physicochemical and functional performance of pectin extracted by QbD approach from Tamarindus indica L. pulp	Carbohydrate Polymers	134	364-374	2015	4.07
13.	Sunil Kamboj, Radhika Sharma, Kuldeep Singh, <b>Vikas Rana</b>	Aprepitant loaded solid pre-concentrated microemulsion for enhanced bioavailability: A comparison with micronized	European Journal of Pharmaceutical Sciences	78	90-102	2015	3.756
14.	Sunil Kamboj, Kuldeep Singh, A.K. Tiwary, <b>Vikas Rana</b>	Optimization of microwave assisted Maillard reaction to fabricate and evaluate corn fiber gum-chitosan IPN films	Food Hydrocolloids	44	260-276	2015	4.747
15.	Sunil Kamboj, <b>Vikas Rana</b>	Physicochemical, rheological and antioxidant potential of corn fiber gum	Food Hydrocolloids	39	1-9	2014	4.474
16.	Inderbir Singh, <b>Vikas Rana</b>	Exploiting the interaction of polymethacrylates with iron oxide for the enhancement of mucoadhesive strength.	Pakistan journal of pharmaceutical sciences	27(2)	343-350	2014	0.682
17.	Rajneet Khurana, Kuldeep Singh, Bharti Sapra, A.K. Tiwary, <b>Vikas Rana</b>	Tamarindus indica pectin blend film composition for coating tablets with enhanced adhesive force strength	Carbohydrate Polymers	102	55-65	2014	4.811
18.	Kuldeep Singh, A K Tiwary, <b>Vikas Rana</b>	Ethylenediaminediacetic acid bis(carbido amide chitosan): Synthesis and evaluation as solid carrier to fabricate nanoemulsion.	Carbohydrate Polymers	95	303-314	2013	4.811
19.	Kuldeep Singh, A K Tiwary, <b>Vikas Rana</b>	Spray dried chitosan-EDTA superior microparticles as solid substrate for the oral delivery of	International journal of biological macromolecules	58	310-319	2013	3.671

20.	Inderbir Singh, <b>Vikas Rana</b>	Iron oxide induced enhancement of mucoadhesive potential of Eudragit RLPO: formulation, evaluation and optimization of mucoadhesive drug delivery system.	Expert Opinion on Drug Delivery	10(9)	1179-91	2013	5.657
21.	Inderbir Singh, <b>Vikas Rana</b>	Enhancement of Mucoadhesive Property of Polymers for Drug Delivery Applications: A Critical Review	Reviews of Adhesion and Adhesives	1	271	2013	-
22.	Manish Jindal, Vineet Kumar, <b>Vikas Rana</b> , A K Tiwary	Aegle marmelos fruit pectin for food and pharmaceuticals: Physico-chemical, rheological and functional performance.	Carbohydrate polymers	93(2)	386-94	2013	4.811
23.	Manish Jindal, <b>Vikas Rana</b> , Vineet Kumar, Ram S Singh, John F Kennedy, AK Tiwary	Sulfation of Aegle marmelos gum: Synthesis, physico-chemical and functional characterization.	Carbohydrate polymers	92(2)	1660-8.	2013	4.811
24.	Manish Jindal, Vineet Kumar, <b>Vikas Rana</b> , A.K. Tiwary	Exploring potential new gum source Aegle marmelos for food and pharmaceuticals: Physical, chemical and functional performance	Industrial Crops and Products	45	312-318	2013	3.181
25.	Manish Jindal, Vineet Kumar, <b>Vikas Rana</b> , A.K. Tiwary	Physico-chemical, mechanical and electrical performance of bael fruit gumechitosan IPN films.	Food Hydrocolloids	30	192-199	2013	4.747
26.	Kuldeep Singh, Rajat Suri, A K Tiwary, <b>Vikas Rana</b>	Exploiting the synergistic effect of chitosan-EDTA conjugate with MSA for the early recovery from colitis	International journal of biological macromolecules	54	186-196	2013	3.671
27.	Manish Jindal, Vineet Kumar, <b>Vikas Rana</b> , A K Tiwary	An insight into the properties of Aegle marmelos pectin-chitosan cross-linked films.	International journal of biological macromolecules	52	77-84	2013	3.671
28.	AK Tiwary, B Sapra, <b>Vikas Rana</b> , G Kaur	Oral Insulin Delivery: Unveiling Patented Approaches	Reviews in Advanced Sciences and Engineering	1 (4)	280-291	2012	-
29.	Inderbir Singh, <b>Vikas Rana</b>	Techniques for the Assessment of Mucoadhesion in Drug Delivery Systems: An Overview	Journal of Adhesion Science and Technology	26	2251	2012	1.073

30.	Parshu Ram Rai, Ashok Kumar Tiwary, <b>Vikas Rana</b>	Optimization of an aqueous tablet-coating process containing carboxymethylated Cassia fistula gum.	AAPS PharmSciTech	13	431-40	2012	2.451
31.	Kuldeep Singh, Rajat Suri, A K Tiwary, <b>Vikas Rana</b>	Chitosan films: crosslinking with EDTA modifies physicochemical and mechanical properties.	Journal of Materials Science Materials in Medicine	23	687-95	2012	2.325
32.	Parshu Ram Rai, A. K. Tiwary, <b>Vikas Rana</b>	Superior disintegrating properties of calcium cross-linked Cassia fistula gum derivatives for fast dissolving tablets	Carbohydrate Polymers	87(2)	1098-104	2012	4.811
33.	K Malik, <b>Vikas Rana</b> , I Singh	Gum Ghatti--a pharmaceutical excipient: development, evaluation and optimization of sustained release mucoadhesive matrix tablets	Acta poloniae pharmaceutica	69 (4)	725-737	2012	0.877
34.	Gurpreet Arora, Karan Malik, Inderbir Singh, Sandeep Arora, <b>Vikas Rana</b>	Formulation and evaluation of controlled release matrix mucoadhesive tablets of domperidone using Salvia plebeian gum.	Journal of Advanced Pharmaceutical Technology & Research	2(3)	163-9	2011	-
35.	Ram Sarup Singh, Ranjeeta Bhari, <b>Vikas Rana</b> , Ashok Kumar	Immunomodulatory and therapeutic potential of a mycelial lectin from Aspergillus nidulans	Applied biochemistry and biotechnology	165(2)	624-38	2011	1.751
36.	<b>Vikas Rana</b> , Parshuram Rai, Ashok K. Tiwary, Ram S. Singh, John F. Kennedy, Charles J. Knill	Modified gums: Approaches and applications in drug delivery	Carbohydrate Polymers	83(3)	1031-47	2011	4.811
37.	Honey Goel, Ashok K Tiwary, <b>Vikas Rana</b>	Fabrication and optimization of fast disintegrating tablets employing interpolymeric chitosan-alginate complex and chitin as novel superdisintegrants.	Acta poloniae pharmaceutica	68	571-83	2011	0.877
38.	H Goel, A Arora, A K Tiwary, <b>Vikas Rana</b>	Development and evaluation of mathematical model to predict disintegration time of fast disintegrating tablets using powder characteristics.	Pharmaceutical Development and Technology	16	57-64	2011	1.860

39.	I Singh, P Kumar, H Singh, M Goyal, <b>Vikas Rana</b>	Formulation and evaluation of domperidone loaded mineral oil entrapped emulsion gel (MOEG) buoyant beads	Acta Pol. Pharm. Drug Res	68	121-126	2011	0.877
40.	<b>Vikas Rana</b> , AK Tiwary, S Jain, D Singh	Chitosan-Chondroitin composite films: comparison with in vitro skin permeation data of hydrophilic and lipophilic drugs	Iranian Journal of Pharmaceutical Research		231-242	2010	1.352
41.	Ashok Kumar Tiwary, <b>Vikas Rana</b>	Cross-linked chitosan films: effect of cross-linking density on swelling parameters.	Pakistan journal of pharmaceutical sciences	23	443-8	2010	0.682
42.	Inderbir Singh, Pradeep Kumar, Sanjeev Kumar, <b>Vikas Rana</b>	Formulation and development of matrix tablets of tramadol using katira gum as release modifier.	Yakugaku zasshi	130	1225-31	2010	0.161
43.	Honey Goel, Gurpreet Kaur, Ashok K Tiwary, <b>Vikas Rana</b>	Formulation development of stronger and quick disintegrating tablets: a crucial effect of chitin.	Yakugaku zasshi	130	729-35	2010	0.161
44.	Gurpreet Kaur, <b>Vikas Rana</b> , Subheet Jain, Ashok K Tiwary	Colon delivery of budesonide: evaluation of chitosan-chondroitin sulfate interpolymer complex.	AAPS PharmSciTech	11	36-45	2010	2.451
45.	Honey Goel, Nishant Vora, Ashok K Tiwary, <b>Vikas Rana</b>	Formulation of orodispersible tablets of ondansetron HCl: investigations using glycine-chitosan mixture as	Yakugaku zasshi	129	513-21	2009	0.161
46.	I Singh, P Kumar, N Rani, <b>Vikas Rana</b>	Investigation of different lipid based materials as matrices designed to control the release of a hydrophobic drug	Int. J. Pharm. Sci. Drug Res	1 (3)	158-163	2009	-
47.	Honey Goel, Nishant Vora, Ashok K Tiwary, <b>Vikas Rana</b>	Understanding the mechanism for paradoxical effect of ionized and unionized chitosan: Orodispersible tablets of Ondansetron Hydrochloride.	Pharmaceutical Development and Technology	14	476-84	2009	1.860
48.	Honey Goel, Nishant Vora, <b>Vikas Rana</b>	A novel approach to optimize and formulate fast disintegrating tablets for nausea and vomiting.	AAPS PharmSciTech	9(3)	774-81	2008	2.451

49.	Honey Goel, Parshuram Rai, <b>Vikas Rana</b> , Ashok K Tiwary	Orally disintegrating systems: innovations in formulation and technology.	Recent patents on drug delivery & formulation	2(3)	258-74	2008	-
50.	Nishant Vora, <b>Vikas Rana</b>	Preparation and optimization of mouth/orally dissolving tablets using a combination of glycine, carboxymethyl cellulose and sodium alginate: a comparison with superdisintegrants.	Pharmaceutical Development and Technology	13(3)	233-43	2008	1.860
51.	Kumar Babita, Vinod Kumar, <b>Vikas Rana</b> , Subheet Jain, Ashok Kumar	Thermotropic and spectroscopic behavior of skin: relationship with percutaneous permeation enhancement.	Current Drug Delivery	3(1)	95-113	2006	2.516
52.	<b>Vikas Rana</b> , Kumar Babita, Dinesh Goyal, Ashok Tiwary	Sodium citrate cross-linked chitosan films: optimization as substitute for human/rat/rabbit epidermal sheets.	Journal of Pharmacy and Pharmaceutical Sciences	8(1)	10-17	2005	-
53.	Kumar Babita, <b>Vikas Rana</b> , Ashok K Tiwary	Lipid synthesis inhibitors: effect on epidermal lipid conformational changes and percutaneous permeation of levodopa.	AAPS PharmSciTech	6(3)	E473- 81	2005	2.451
54.	<b>Vikas Rana</b> , Kumar Babita, Dinesh Goyal, Rakesh Gorea, Ashok Tiwary	Optimization of chitosan films as substitute of animal and human epidermal sheets for in vitro permeation of polar and non polar drugs	Acta pharmaceutica	54 (4)	287- 299	2004	1.288
55.	K. Babita, <b>Vikas Rana</b> , A. K. Tiwary	Epidermal lipids: thermotropic behavior and role in transcutaneous permeation of levodopa	Drug Development Research	63(4)	190- 199	2004	1.909
56.	Inderbir Singh, Pradeep Kumar, Harinderjit Singh, Malvika Goyal,	Formulation and evaluation of domperidone loaded mineral oil entrapped emulsion gel (MOEG) buoyant beads.	Acta poloniae pharmaceutica	68(1)	121-6	2001	0.877
57.	<b>Vikas Rana</b> , P Rai, AK Tiwary, S Gupta	Enhanced in vitro percutaneous permeation of diclofenac sodium with primary amine and pyrrolidone ion-pairs	INDIAN DRUGS	36	21-28	1999	-
58.	<b>Vikas Rana</b> , P Rai, AK Tiwary	Logics of Percutaneous Permeation Enhancement by Amides and Amines	INDIAN DRUGS	35 (11)	673- 681	1998	-
<b>Total Impact Factor</b>							141.975

## Citation indices

Citations	999
h-index	19
i10-index	31

## **Books/Reports/Chapters/General articles etc.**

S.No	Title	Author's Name	Publisher	Year of Publication
<b>Books</b>				
1.	The Mesalamine Profile: Analytical and Spectral Attributes.	<b>Vikas Rana,</b> Kuldeep Singh	Lap Lambert Academic Publishing, Deutschland, Germany	2014
2.	Chitosan-Modifications and applications in drug delivery	Ashok Kumar Tiwary, Bharti Sapra, Gurpreet Kaur and <b>Vikas Rana</b>	Nova Science Publishers Inc. New York	2012
3.	Optimization Technique: Polymeric films with comparable permeation to animals skin.	<b>Vikas Rana</b> and Ashok Kumar Tiwary	Lap Lambert Academic Publishing, Deutschland, Germany	2011
<b>Book Chapters</b>				
1.	Handbook of Polymers for Pharmaceutical Technologies: "Modification of Gums: Synthesis Techniques and Pharmaceutical Benefits"	<b>Vikas Rana,</b> Sunil Kamboj, Radhika Sharma, Kuldeep Singh,	Wiley-SCRIVENER	2015
2.	Recent development in the Microemulsion Based Targeted Delivery of neurotherapeutics: "Recent Possibilities in the Microemulsion Based Targeted Delivery of Neurotherapeutics"	<b>Vikas Rana,</b> Kuldeep Singh, Sunil Kamboj	OMICS	2015
3.	Unfolding the Biopolymer Landscape: "Derivatized polysaccharides: A potential in nano/microparticulate based drug delivery"	<b>Vikas Rana,</b> Kuldeep Singh, Sunil Kamboj	Bentham Science Publishers	2015
4.	Emerging paradigms in nanotechnology: "Chitosan-EDTA microparticles as solid substrate For the oral delivery of primaquine nanoemulsion"	<b>Vikas Rana</b> and Kuldeep Singh	978-81-317-8991-9	2014
5.	Emerging paradigms in nanotechnology: "Felodipine nanoemulsion system: formulation Optimization and evaluation"	Kuldeep Singh and <b>Vikas Rana</b>	978-81-317-8991-9	2014



6.	Emerging paradigms in nanotechnology: “Formulation Optimization of Solid Self Nano Emulsifying Systems of Felodipine for Enhanced Oral Bioavailability”	Sunil Kamboj, Meenu Nagpal and <b>Vikas Rana</b>	978-81-317-8991-9	2014
7.	Orally Disintegrating Tablets: Innovations and Recent development in Drug Delivery. Chapter -18, In ‘Drug Delivery Recent development in Biotechnology’	<b>Vikas Rana</b> , Kuldeep Singh, Sunil Kamboj, Inderbir Singh	Studium Press, USA.	2013
8.	Chitosan: Formulation of drug delivery systems, In Chitin and Chitosan: Opportunities and challenges. Dutta P K. (ed.),	<b>Vikas Rana.</b> , Babita K. Jain S. and Tiwary A K.,	SSM International Publication, Contai, Midnapore, India, pp. 283-313.	2005

### **Guest Lectures Delivered**

1. Invited Talk: Role of Process Validation in Pharmaceutical Industry, NIAPR, Patiala 16<sup>th</sup> Feb, 2010
2. Expert Lecture: Understanding Biopharmaceutics, GPCG, Patiala. Dt 9/April/2010
3. Invited Talk: Advancements in Bio Pharmaceutics and Pharmacokinetics, GPCG, Patiala. 16/April/2010
4. Expert Lecture: Understanding Compartment modeling and performance evaluation methods, GPCG, Patiala. 6/April/2011
5. Expert Lecture: Drug Stability testing, GPCG, Patiala, 15 March, 2012
6. Expert Lecture: Basics of Pharmacokinetics-Compartment models, Eduset, Mohali. 14/March/ 2013
7. Invited Talk in FTP programme: Emerging Paradigms in Pharmaceutical Excipients, SVIET, Rajpura, 25<sup>th</sup> July, 2013.
8. Expert Lecture: Pharmaceutical aerosols, Eduset, Mohali., 3<sup>rd</sup> Oct, 2013
9. Expert Lecture: Basics of Pharmacokinetics, Rayat Bahra university, Mohali, 27/Jan/ 2014.
10. Expert Lecture: Compartment models Vs Non compartment modeling, GPCG, Patiala. 5<sup>th</sup> /Nov/ 2014
11. Invited Talk: Preformulation studies of drugs: An update, NIPER, Mohali, 9<sup>th</sup> oct 2015.
12. Invited Talk: Permeability studies: methods and Benefits, NIPER, Mohali, 23<sup>rd</sup> oct, 2015
13. Invited Talk: Design and Strategies for modification of drug properties, NIPER, Mohali, 9<sup>th</sup> Nov, 2015
14. Invited Talk: Advancements in Polymer developments, NIPER, Mohali, 20<sup>th</sup> Nov, 2015
15. Invited Talk: Polymer Applications NIPER, Mohali, 4<sup>th</sup> Dec, 2015

### **Research Guidance**

#### **List of M. Pharmacy Students guided**

S. No.	Name of the Student	Title of Thesis	Year of Completion
1.	Nishant Vohra	PREPARATION AND OPTIMIZATION OF ORO DISPERSIBLE TABLETS OF ONDANSETRON HYDROCHLORIDE	Dec., 2007
2.	Harmanpreet singh	SOLID DISPERSION OF AN ANTIFUNGAL DRUG BY FLUIDIZED BED COATING TECHNIQUE: PREPARATION AND EVALUATION	Feb., 2008
3.	Honey Goel	FORMULATION DEVELOPMENT AND OPTIMIZATION OF FAST DISINTEGRATING	July, 2008

		TABLETS OF ONDANSETRON HYDROCHLORIDE	
4.	Anshu	INVESTIGATIONS ON MOUTH DISSOLVING TABLETS OF ANTIEMETIC AGENTS: FORMULATION DEVELOPMENT AND EVALUATION	September, 2008
5.	Rajat Suri	MESALAMINE TABLETS FOR COLON RELEASE: PREPARATION AND EVALUATION	August, 2009
7.	Rajneet Khurana	INVESTIGATING THE POTENTIAL OF TAMARINDUS INDICA PECTIN-CHITOSAN CONJUGATE FOR COLORECTAL DELIVERY	August,2011
8.	Menu Nagpal	FORMULATION DEVELOPMENT AND EVALUATION OF EXTENDED RELEASED TABLETS CONTAINING SOLID PRECONCENTRATED MICROEMULSION OF FELODIPINE	August,2011
9.	Sunil Kamboj	INVESTIGATIONS ON FORMULATION DEVELOPMENT OF ORODISPERSIBLE TABLETS CONTAINING SOLID PRECONCENTRATED MICROEMULSION	August,2012
10.	Bhumika Mangala	INVESTIGATIONS ON THE DEVELOPMENT OF FLOATING TABLETS USING DERIVATIZED POLYSACCHARIDE	August,2013
11.	Damanjeet Kaur	EXPLORING THE ANTIBACTERIAL POTENTIAL OF GEL FORMULATIONS OF DERIVATIZED POLYSACCHARIDE:OPTIMIZATION AND EVALUATION	August,2013
12.	Radhika Sharma	EXPLORING THE POTENTIAL OF DERIVATIZED POLYSACCHARIDE BASED EYE DROPS FOR THE TREATMENT OF BACTERIAL KERITITIS AND DRY EYE DISEASE	August,2014
13.	Gursharan Singh	INVESTIGATIONS TO DEVELOP APREPITANT ODFS FOR ENHANCED BIOAVAILABILITY	August,2014
14.	Vandana	FORMULATION DEVELOPMENT AND EVALUATION OF FLUCONAZOLE LOADED MICROEMULSION BASED MUCOADHESIVE HYDROGEL	August, 2015
15.	Shubham Dhand	INVESTIGATIONS TO ENHANCE ORAL BIOAVAILABILITY OF ANTIRETROVIRAL DRUG: FORMULATION DEVELOPMENT AND EVALUATION	August, 2016
16.	Manish	FLUCONAZOLE-ANTIFUNGAL OIL BLEND: FORMULATION OPTIMIZATION AND EVALUATION OF MICROEMULSION BASED BIOADHESIVE HYDROGEL	August, 2016
16.	Sonia	FLUCONAZOLE-ANTIFUNGAL OIL MICROEMULSION-II: HYDROGEL FORMULATION OPTIMIZATION AND EVALUATION	August, 2017
17.	Saurav Chaudhary	CLOPIDOGREL BISULPHATE INJECTION AND SOFT GELATINE CAPSULE FOR IMMEDIATE ANTICOAGULANT EFFECT: FORMULATION DEVELOPMENT AND EVALUATION	August, 2017

### List of Ph.D. Students guided/under guidance

S. No.	Name of the Student	Title of Thesis	Degree awarded
1.	Parshuram Rai	INVESTIGATIONS ON BIODEGRADABLE POLYMERS FOR COLORECTAL DRUG DELIVERY: FORMULATION AND EVALUATION	Oct, 2012
2.	Munish	FORMULATION AND EVALUATION OF COLON DELIVERY SYSTEM USING A MODIFIED POLYSACCARIDE	Oct, 2014
3.	Inderbir Singh	FORMULATION AND OPTIMIZATION OF POLYMETHACRYLATE BASED GASTRO RETENTIVE DELIVERY SYSTEMS	April, 2014
4.	Kuldeep Singh	FORMULATION DEVELOPMENT AND OPTIMIZATION OF PRECONCENTRATED MICROEMULSIONS CONTAINING POORLY WATER SOLUBLE DRUGS	July, 2015
5.	Sameer Bhandari	SOLID MICROEMULSION PRECONCENTRATES CONTAINING ARTIMETHER AND LUMEFENTRINE: FORMULATION OPTIMIZATION AND EVALUATION	Sept, 2017
6.	Sunil Kamboj	FORMULATION DEVELOPMENT AND OPTIMIZATION OF PRECONCENTRATED MICROEMULSIONS CONTAINING ANTIRETROVIRAL DRUGS	Oct, 2017
7.	Radhika Sharma	DEVELOPMENT AND OPTIMIZATION OF BIOADHESIVE NANOSTRUCTURE BASED DELIVERY SYSTEM FOR ANTIFUNGAL DRUGS	Registered, August, 2015
8.	Sheshank Sethi	FABRICATION AND EVALUATION OF ATIRETROVIRAL DRUG LOADED SOLID SELF-MICROEMULSIFYING DRUG DELIVERY SYSTEM FOR ENHANCED BIOAVAILABILITY	Registered, August, 2016
9.	Akashdeep singh	FORMULATION OPTIMIZATION AND EVALUATION OF IHALABLE NANOSTRUCTURES FOR POORLY WATER SOLUBLE DRUG	Registered, October, 2016