

## **Bio Data : Prof. (Dr.) Ambikanandan Misra**

**Name** : Dr. Ambikanandan Rajnarayan Misra

**Title** : Professor of Pharmacy (Pharmaceutics)

**Qualification** : M.Pharm (Pharmaceutics), Ph.D. (Pharmacy)

**Designation** : Head, Pharmacy Department,  
Coordinator, TIFAC-CORE in NDDS,  
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## **EDUCATIONAL QUALIFICATION**

<b>CODE OF EXAMINATION</b>	<b>YEAR OF PASSING</b>	<b>NAME OF UNIVERSITY</b>	<b>THE CLASS/ % OF MARKS</b>
B. PHARM	1977	UNIVERSITY OF SAUGAR , MADHYA PRADESH (M.P.), INDIA	1 <sup>st</sup> / 69.84 %
M.PHARM (PHARMACEUTICS )	1979	UNIVERSITY OF SAUGAR, MADHYA PRADESH (M.P.), INDIA (M.P.) INDIA	1 <sup>st</sup> / 67.5 %
Ph.D. (PHARMACY)	1985	M.S. UNIVERSITY OF BARODA , GUJARAT, INDIA	–

## **RESEARCH EXPERIENCE**

**Research Experience** : 28 years (11 years in Industry & 17 in Academic)

**Teaching Experience** : 17 years

## **INDUSTRIAL EXPERIENCE**

1. **Scientist**, Formulation Development Division, Sarabhai Research Center, Wadi-wadi, Baroda 390007, Gujarat, INDIA **(18<sup>th</sup> Dec. 1979 - 30<sup>th</sup> Sep. 1985)**
2. **Asst. Manager**, Quality Control, Sarabhai Chemicals, Wadi-wadi, Baroda 390007 Gujarat, INDIA **(1<sup>st</sup> Oct. 1985 – 11<sup>th</sup> Aug. 1988)**
3. **Manager**, New Drug Delivery Development, Food and Cosmetic Product Development, Cadila Laboratories Ltd., 244, Ghodashar, Maninagar, Ahmedabad -380050, Gujarat, INDIA **(12<sup>th</sup> Aug. 1988 – 17<sup>th</sup> Jan. 1990)**

## **ACADEMIC EXPERIENCE**

1. **Reader in Pharmaceutical Technology**, Pharmacy Department, Faculty of Technology and Engineering, M.S.University of Baroda, Kalabhavan, Baroda – 390001, Gujarat, INDIA. **(18<sup>th</sup> Jan. 1990 – 25<sup>th</sup> Apr. 1996)**
2. **Professor of Pharmaceutics**, Pharmacy Department, Faculty of Technology and Engineering, M.S.University of Baroda, Kalabhavan, Baroda – 390001, Gujarat, INDIA. **(26<sup>th</sup> Apr. 1996 – onwards)**
3. **Head, Pharmacy Department**, Faculty of Technology and Engineering, The M. S. university of Baroda, Vadodara, Gujarat, India **(2003 Onward)**
4. **Coordinator, TIFAC-CORE in NDDS**, Pharmacy Department, Faculty of Technology and Engineering, The M. S. university of Baroda, Vadodara, Gujarat, India **(2005-Onwards)**.
5. **Dy. Coordinator, Department Research Scheme**, Special assistance program Phase I, University Grant Commission, New Delhi **(2002 Onward)**.

## **ACADEMIC ACHIEVEMENTS**

### **HONORS & AWARDS**

1. **Gold Medal (1977)** Sagar University, Madhya Pradesh (M.P.), India,
2. **Gold Medal (1978)** Indian Drug Manufacturer's Association G.P. Nayar, India
3. **Won second prize** in National Essay competitions on "Advances in Technology of Industrial Pharmacy" **(1987)**
4. **Member**, Faculty of Technology and Engineering, M.S.University of Baroda, India **(1990 onwards)**
5. **Member**, Designing a Model Syllabus for M.Pharm. Courses (Pharmaceutics) All India Council of Technical Education, India.
6. **Member of team of inspectors** of Pharmacy Council of India, India and All India Council of Technical Education, India **(1993 onwards)**.
7. **Panel of referees - 3 International Journals** (American Association of Pharmaceutical Sciences, PharmSci Tech and Pharm. Sci., and Medical Science Monitor) **(2000 onwards)**
8. **Member**, Board of Studies, Pharmacy Dept., M.S.University of Baroda, India (1990 onwards) and Dr. H.S. Gour University, Sagar, M.P., India **(July 2002 - June 2005)**
9. **AICTE member** on Board of Trustees of S.K. Patel College of Pharmacy, Mehsana, Gujarat, India and S.N. Nahata College of Pharmacy, Mandsur, M.P. India **(2002 onwards)**.
10. **Best AICTE TAPTEC Project Award** for the research work entitled "Development of Liposomal Dry Powder Inhaler (DPI) formulations" **by Shri. Bhairon Singh Shekhawat, Vice President of India**, on the occasion of National Awards Function on Technology Day, India **(2003)**
11. **Nominated as a member of Scientific Service Committee**, Indian Pharmaceutical Congress, India for period of three years started from **2004 (2004 -2006)**.
12. **President**, Indian Pharmaceutical Association, Vadodara branch, Gujarat, India (2006 onward)
13. **2008 "Outstanding Manuscript Award"** published in AAPS PharmSciTech (2006-2008) "Preliminary Brain-targeting Studies on Intranasal Mucoadhesive Microemulsions of Sumatriptan". awarded by **American "Association of Pharmaceutical Scientists"** conferred on November 16, 2008 at Atlanta, Georgia, USA.

### **GOVERNMENT RESEARCH PROJECTS**

1. Principal Investigator, All India Council of Technical Education's TAPTEC Major Research Project (15.5 lakhs) 2000. "Development of Liposomal Dry Powder Inhalation Products"
2. Principal Investigator in All India Council of Technical Education's Major Research Project (11.5 lakhs). "Enhanced Pulmonary Bioavailability of Therapeutics by Particle Design"

3. **Co-investigator** in All India Council of Technical Education's **TAPTEC** Major Research Project (10 lakhs) 1995. **"Improvement in Therapeutic Efficacy of Anti-Malarial Drugs"**
4. **UGC Minor Research Projects** (Rs. 14000), 1990. **"Modified Indian gums as hydrophilic matrices for minor controlled oral delivery"**
5. **UGC Major Research Projects** (Rs. 4.23 lakhs), 2004. **"Transmucosal drug permeation studies using epithelial/endothelial cell lines"**
6. **Dy. Coordinator, Department Research Scheme (50 lakhs + 50 lakhs), (Phase 1 + 2) UGC (2002 onwards).**
7. **Coordinator, Technology Information Forecasting and Assessment Council's Centre of Relevance and Excellence in New Drug Delivery systems (TIFAC-CORE in NDDS)**, Mission Reach, Department of Science and Technology, New Delhi, India. **Research grant of 2.25 crores.**
8. **Coordinator, Technology Information Forecasting and Assessment Council's Centre of Relevance and Excellence in New Drug Delivery systems (TIFAC-CORE in NDDS)**, Mission Reach, Department of Science and Technology, New Delhi, India. **Research grant of 400 lakhs (2007 – 2008).**

#### **INDUSTRIAL CONSULTANCIES RESEARCH PROJECTS - 10**

1	Development of parenteral and nasal formulation of Calcitonin	Adithya Biologicals	0.6 lakhs
2	Development of lyophilized product and other innovative research	Lyka laboratories Ltd.	3.6 lakhs
3	Study of the effect of ternary mixtures & particle morphology on the fine particle fraction of salbutramol sulphate.	Sun Pharma Advanced Research Centre Vadodara.	1.95 lakhs
4	Dry powder inhaler for the combination drugs	Panacea Biotec Ltd Punjab	3.6 lakhs
5	Development of new drug delivery and innovative products	Nabros Pharma Pvt.Ltd. Ahmedabad	3.6 lakhs
6	Development of new dosage forms and innovative products	M/s Comed chemicals from May 2005, Vadodara	6.0 lakhs
7.	Development of sustained release and other innovative products.	Theraquest Biosciences Ltd., Philadelphia, USA	15.0 lakhs
8	Development of Emulsion Based Injection	Nikolas Piramal Pvt. Ltd., Mumbai	2.0 lakhs
9.	Development of liposomal products	Seven Gentech, Hyderabad	5.0 lakhs
10.	Development of liposomal dry powder inhalers	Lifecare innovations	Under Negotiations.

## **RESEARCH ACHIEVEMENTS**

**Ph.D. Guidance: Completed: 15**  
**Submitted: 4 (Synopsis)**  
**Presently working: 8**  
**M.Pharm. Projects Guidance: Completed: 41**  
**Presently working: 6**

## **DETAILS OF PUBLICATION**

- a) **No. Of Papers Published: 88**
- b) **Patents Filed: 16**
- c) **Conferences/Presentations: 40**
- d) **No. of Book Chapters Published: Total 11**

## **PATENTS FILED**

<b>Sr. No</b>	<b>Inventors</b>	<b>Title of patent</b>	<b>Date of filing</b>	<b>Patent office no.</b>
1	Nabros Pharma Pvt. Ltd. Ambikanandan Misra	Process of preparing stable phospholipids formation in injectable form essliver injection	11/11/2005 (Date of publication)	615/MUM/2004
2	M.R. Bajaj, R.S. Samant, B.B. Shah, and Ambikanandan Misra	Parental Formulations	25 oct 2004	1140/MUM/2004
3	Ambikanandan Misra, Tushar K Vyas	Drugs Loaded Nasoadhesive Microemulsions For Brain Targeted Brosk Delivery In Acute Epilepsy	7 <sup>th</sup> Oct, 2004	1061/MUM/2004
4	Ambikanandan Misra, Tushar K Vyas	Sedatives Loaded Intranasal Nasoadhesive Microemulsions For Brain Targeted Delivery In Insomnia	20 <sup>th</sup> Oct, 2004	1124/MUM/2004
5	Ambikanandan Misra, Tushar K Vyas	Drugs Loaded Intranasal Nasoadhesive Microemulsions For Brain Targeted Delivery In Migrane	20 <sup>th</sup> Oct, 2004	1125/MUM/2004
6	Ambikanandan Misra, Bijay Kumar Padhi, Mahavir Bhupal Chougule	Engineered Monodisperse Inhalation Powders for Effective Treatment of Lung Diseases.	25 <sup>th</sup> Feb, 2005	228/MUM/2005
7	Ambikanandan Misra, T. Maheshkumar	A process for synthesis of oxidized Guargum for use as disitrigrants.	26 <sup>th</sup> March, 2002	295/MUM/2002
8	Ambikanandan Misra, T. Maheshkumar	A process for modified technique of chemical synthesis of Carboxymethyl - Guargum for aqueous film coating of pharmaceuticals.	26 <sup>th</sup> March, 2005	296/MUM/2002
9	Ambikanandan Misra, Mahavir	Enhancement of Pulmonary Therapeutic Index of Drugs from Dry	27 <sup>th</sup> May 2005	729/MUM/2005

	Bhupal Chougule Bijay Kumar Padhi,	Powder Inhaler Formulations.		
10	Ambikanandan Misra, Mahavir Bhupal Chougule, S. Ganesh, Bijay Kumar Padhi,	Aerodynamically light porous dry powder inhaler formulations for targeted pulmonary deposition	30 <sup>th</sup> June, 2006	953/MUM/2006
11	Ambikanandan Misra, Gitanjali Sharma	Ageing And Weight Control By Nose To Brain Drug Delivery	29 <sup>th</sup> Sept, 2007	1649/Mum/2007
12.	Ambikanandan Misra, Deepa Patel, Gaurang Patel, Sachin Naik	Preparation of solid lipid Nanoparticles by Supercritical fluid technology	25 <sup>th</sup> Feb. 2008	390/MUM/2008
13.	Ambikanandan Misra, Sachin Naik, Yogesh Raichandani, Nazzneen Surti	Preparation of Dry liposomes by supercritical fluid technology	21 <sup>st</sup> Jan. 2008	133/MUM/2008
14	Ambikanandan Misra, Nirav Parmar, Sachin Naik, Gaurang Patel	Preparataion of Amphotericin B liposomes by supercritical fluid technology	25 <sup>th</sup> Feb. 2008	391/MUM/2008
15	Ambikanandan Misra, Chudiwal Swapnil S	Liposomal Amphotericin B formulations for nasal and sinus fungal infections.	Indian Patent applied	
16	Ambikanandan Misra.	Liposomal Citicoline Injection	Indian Patent applied	

## **NATIONAL AND INTERNATIONAL PAPERS PUBLISHED**

### **NATIONAL:**

1. A.N. Misra, K.C. Verma, N.K. Jain, Dissolution Rate Enhancement of Chlorpropamide & Tolbutamide By Crystallization, *Indian J. Pharm. Sci.*, 45, 70-71 (1983).
2. N.K. Jain, A.N. Misra, Sustained Release Tablets of Tetracycline Hydrochloride- *In-vivo* Evaluation, *Indian J. Pharm. Sci.*, 47, 148-150 (1985).
3. N.K.Jain, A.N.Misra, Controlled Release Tablets Of Hydralazine Hydrochloride, *Indian J. Pharm. Sci.*, .48, 8-12 (1986)
4. N.K. Jain, A.N.Misra, Controlled Release Beads of hydralazine hydrochloride, *Indian Drugs*, 24, 146-149 (1988).
5. V.U. Rao, A.N. Misra, A Comparitive Evaluation Of The Effect Of Penetration Enhancer on Passive Diffusion and Intophoretic Transport of Insulin, *Indian Drugs*, 32, 437-441 (1994).

6. V.U. Rao, A.N. Misra, Transdermal Administration: Effect of Various Penetration Enhancers, *Indian J. Of Exp. Biol.*, 34, 171-773 (1996)
7. J.M. Baweja, A.N. Misra, Studies on Kinetics of Drug Release from Modified Guar Gum Matrix, *Indian J. Pharm. Sci.*, 59, 316-320 (1997).
8. J.M.Baweja, A.N.Misra, Modified Guar Gum as Hydrophilic Matrix for Controlled Release Tablets, *Indian Drugs*, 34, 216-223 (1997).
9. A.B. Rao, A.N.Misra, Modification of Lactose for Direct Compression-I, *Indian J. Pharm. Sci.*, 16, 79-89 (1998).
10. M.R. Lad, A.N. Misra, V.B. Patel, Effect of Current on Dermal Permeation of Positively Charged Liposomes, *Indian J. Exp. Biol.*, 36, 578-582 (1998).
11. A.B. Rao, A.N.Misra, Modification of Lactose for Direct Compression II, *Indian J. Pharm. Sci.*, 61, 231-236 (1999).
12. M.R. Joshi, A.N.Misra, Liposomes of terbutaline sulphate: *In vitro and in vivo* studies, *Indian J. of Exp. Biol.*, 37(9), 881-887 (1999).
13. M.R. Joshi, A.N. Misra, Liposomes of terbutaline sulfate: Preparation, Optimization and Stability Studies, *Indian Drugs*, 36, 689-697 (1999).
14. M.R. Joshi, A.N. Misra, Spectrophotometric Determination of Budesonide, *Indian J. Pharm. Sci.*, 62, 92-96 (2000).
15. Avinash Sheth, Ambikanandan Misra, Enhancement of liposomal stability by adsorption of cross-linked Bovine Serum Albumin, *Indian Drugs*, 39, 474-480 (2002).
16. Joshi M.R., S.P. Shah and A.N. Misra. Preparation and Evaluation of Directly Compressible Forms of Rifampicin and Ibuprofen. *Indian J. Pharm. Sci.*, 65(3): 232-238, (2003).
17. S. P. Shah, S. Ganesh and A. N. Misra. Factors Affecting Development of Dry Powder Inhalers. *Indian J. Pharm. Sci.*, 65(4): 336-345, (2003).
18. Ambikanandan Misra, Transdermal Drug Delivery: Present and Future. *The Pharma Review*, Vol. II, No.11, (2004).
19. Mayur Kalariya, Bijay Kumar Padhi, Mahavir Chougule, Ambikanandan Misra Incorporation of Clobetasol Propionate in Solid Lipid Nanoparticles for Treatment of Eczema: Formulation and Clinical Implications, *Indian Journal of Experimental Biology*, 43, 233-240, March (2005).
20. A. K. Seth and A. N. Misra, Preparation and optimization of Idoxuridine liposomes, *Indian Journal of pharmaceutical Sciences*, 67(1): 89-95, (2005).
21. Ambikanandan Misra, Possible Impact of TRIPS on Indian Health Care System. *The Pharma Review*, 4(19), 25- , Dec (2005).
22. Misra, Ambikanandan, "Intranasal drug delivery for CNS Disorders" *Cronicle Pharmabiz*, 93-102, November 30, (2006).

23. Misra, Ambikanandan, "NDD Research: Need Or Compulsion?" *Cronicle Pharmabiz*, 103-105, November 30, (2006).
24. Misra, Ambikanandan, "Intranasal Drug Delivery for Central Nervous System Disorders" *The Pharma Review*, 101-106, December (2006).
25. Misra, Ambikanandan, Dry powder inhalers: Novel Approaches, *Pharmabiz*, March (2007).
26. Misra, Ambikanandan Drug delivery to brain: Emerging potential, *Pharmabiz*, Sept (2007)
27. Mahesh Balaria, Sachin Naik, Ambikanandan Misra, Ethosomes: A Novel Drug Delivery Systems of Antifungal Drugs in Treatment of Topical Fungal Diseases, *Indian Journal of Experimental Biology*, Accepted.

### **INTERNATIONAL:**

28. N.K. Jain, A.N. Misra, Controlled Release Capsule Of Tetracycline HCl, *Drug Dev. Ind. Pharm.*, 15, 825-844 (1989).
29. V.U. Rao, A.N. Misra, Effect of Penetration Enhances on Transdermal Absorption of Insulin across Human Cadaver Skin, *Drug Dev. Ind. Pharm.*, 20, 258-259 (1994).
30. V.U. Rao, A.N. Misra, Enhancement of Iontophoretic Permeation of Insulin across Human Cadaver Skin, *Pharmazie*, 49, 538-539 (1997).
31. J.M. Baweja, A.N.Misra, Modified Guar Gum As a Tablet Disintegrant, *Pharmazie*, 52, 856-859 (1997).
32. V.B. Patel, A.N. Misra and Y.S. Marfatia, Topical Dosage Form of Liposomes Clofazimine Research and Clinical Implications, *Pharmazie*, 54, 448-451 (1999).
33. J.M. Baweja, A.N.Misra, Modified Guar Gum as a Film Former, *Pharmazie*, 54, 678-681 (1999).
34. V.B. Patel, A.N.Misra, Encapsulation and Stability of Clofazimine Liposomes, *J. Microencap.*, 16, 357-367 (1999).
35. V.B. Patel, A.N. Misra and Y.S. Marfatia, Topical Liposomal Gel of Tretinoin for the treatment of Acne: Research and Clinical Implications, *Pharm. Dev. Tech.*, 5, 455-464 (2000).
36. V.B. Patel, A.N.Misra and Y.S. Marfatia, Preparation and Comparative Clinical Evaluation of Liposomal gel of Benzoyl Peroxide for Acne, *Drug. Dev. Ind. Pharm.*, 27 (8), 863 – 869, (2001).
37. M. R. Joshi and A.N. Misra, DPI of Liposomal Ketotifen Fumarate: Formulation and Characterization, *Int. J. Pharmaceutics*, 223(1-2): 15-27 (2001).

38. V.B. Patel, A.N. Misra and Y.S. Marfatia, Clinical assessment of the combination therapy with liposomal gels of tretinoin and benzoyl peroxide in acne, *AAPS PharmSciTech*, 2(3) Technical Note 3, (2001).
39. M. R. Joshi and A.N. Misra, Liposomal Budesonide for Dry Powder Inhaler: Preparation and Stabilization *AAPS PharmSciTech*, 2(4), article 25, (2001).
40. M. R. Joshi and A.N. Misra, Pulmonary disposition of budesonide from liposomal dry powder inhaler, *Methods Find Exp Clin Pharmacol*, 23(10): 531-536, (2001).
41. A. Shahiwala and A.N. Misra. Studies in topical application of niosomally entrapped Nimesulide. *J. Pharm. Pharmaceut. Sci.*, 5(3): 220-225, (2002).
42. A.K. Seth and A.N. Misra. Mathematical Modeling of preparation of acyclovir liposomes: reverse phase evaporation method. *J. Pharm. Pharmaceut. Sci.*, 5(3): 285-291, (2002).
43. M.R. Joshi and A.N.Misra. Disposition kinetics of ketotifen from liposomal dry powder for inhalation in rat lung. *Clin. Exp. Pharmacol. Physiol.*, 30(3): 153-156, (2003)
44. A.K. Seth, A.N. Misra and D. Umrigar. Role of novel acyclovir gel in herpes simplex: A clinical implication. *Medical Sci. Monitor.*, 9(7): 193-198, (2003)
45. A.N. Misra and T. Mahesh, Influence of Absorption Promoters on Pulmonary Insulin Bioactivity, *AAPS PharmSciTech.*, 4(2): article 15, (2003).
46. Ambikanandan Misra, Ganesh S., Aliasgar Shaiwala, Shrenik P. Shah, Drug Delivery to the Central Nervous System: A review. *J. Pharm. Pharmaceut. Sci.*, 6(2): 252-273, (2003)
47. Avinash Kumar Seth; Ambikanandan Misra; Dipak Umrigar, Topical Liposomal Gel of Idoxuridine for the Treatment of Herpes Simplex: Pharmaceutical and Clinical Implications, *Pharm. Dev. Technol.*, 9(3) 277 – 289, (2004).
48. Shah S.P. and Misra Ambikanandan, Development of Liposomal Amphotericin B Dry Powder Inhaler Formulation, *Drug delivery*, 11(4), 247-253, (2004).
49. Mayur Kalariya, Bijay Kumar Padhi, Mahavir Chougule, Methotrexate Loaded Solid Lipid Nanoparticles for Topical Treatment of Psoriasis: Formulation and Clinical Implications, *Drug delivery Technology*, 4(8), Oct. (2004).
50. Shahiwala A. and Misra Ambikanandan, Pulmonary absorption of liposomal Levonorgesterel, *AAPS PharmSciTech*, 5(1), article 13, (2004).
51. Shrenik P. Shah and Ambikanandan Misra, Liposomal Amikacin Dry Powder Inhaler: Effect of Fines on In Vitro Performance, *AAPS PharmSciTech*, 5(4), article 65, (2004).
52. T. Mahesh Kumar and Misra Ambikanandan, Pulmonary Absorption Enhancement of Salmon Calcitonin, *Journal of Drug Targeting*, 12(3), 135 – 144, (2004).

53. Shah, S. P.; Misra, Ambikanandan, Liposomal Amphotericin B dry powder inhaler: Effect of fines on *in vitro* performance, *Pharmazie*, 59(10), 812-813, (2004).
54. Shahiwala A. and Misra Ambikanandan, Nasal delivery of Levonorgesterel for contraception – an experimental study in rats, *Fertility and Sterility*, 81, 893-898, (2004).
55. Aliasgar Shahiwala and Ambikanandan Misra, Nasal Delivery of liposomal leuprolide acetate for contraception. *Drug Delivery Technology*, (Feb 2005).
56. Aliasgar Shahiwala and Ambikanandan Misra, A preliminary pharmacokinetic study of liposomal leuprolide dry powder inhaler: a technical note. *AAPS PharmSciTech*, 6(3): E482 – 486, (2005).
57. Tushar k.Vyas, Aliasgar sahiwala, Sudhanva Marathe and Ambikanandan Misra, Intranasal Drug Delivery for Brain Targeting. *Current drug Delivery*, 2, 165 – 175, (2005).
58. Sachin Naik, Mahavir Chougule, Bijay Kumar padhi, Ambikanandan Misra, Development of novel lyophilized mixed micelle Amphotericin B formulation for treatment of systemic fungal infection, *Current drug Delivery*, 2, 177 – 184, (2005).
59. Tushar K. Vyas, A.K. Babbar, R.K. Sharma, and Ambikanandan Misra, Intranasal mucoadhesive microemulsion of zolmitriptan: Preliminary studies on brain-targeting. *Journal of Drug Targeting*, 13(5):317 – 324, (2005).
60. Tushar K. Vyas, A.K. Babbar, R.K. Sharma, Shashi Singh and Ambikanandan Misra, Preliminary Brain Targeting Studies of Intranasal Mucoadhesive Microemulsions of Sumatriptan. *AAPS PharmSciTech*, 7(1), Article 8, (2006).
61. Tushar K. Vyas, A.K. Babbar, R.K. Sharma, Shashi Singh and Ambikanandan Misra, Intranasal Mucoadhesive Microemulsions of Clonazepam: Preliminary Studies on Brain Targeting. *J Pharm Sci.*, 95(3):570 – 580, (2006).
62. Aliasgar Shahiwala and Ambikanandan Misra, Preliminary investigation of the nasal delivery of liposomal leuprolide acetate for contraception in rats, *J Pharm Pharmacol.*, 58(1): 19 – 26, (2006).
63. Shah P, Jogani V, Bagchi T, Misra A., Role of Caco-2 Cell Monolayers in Prediction of Intestinal Drug Absorption, *Biotechnol Prog.*, 22(1): 186 – 198, (2006).
64. Mahavir B. Chougule, Bijay kumar Padhi, Ambikanandan Misra, Nano-liposomal Dry Powder Inhaler of Amiloride Hydrochloride. *Journal of Nanoscience and Nanotechnology*, Vol. 6 (9-10), 3001–3009, (2006).
65. T. Mahesh Kumar and Ambikanandan Misra, Formulation and Evaluation of Insulin Dry Powder for Inhalation, *Drug Development and Industrial pharmacy*, 32 (6), 677-686, (2006).
66. Bijay K Padhi, Mahavir B. Chougule, Ambikanandan Misra, "Optimization of formulation components and characterization of large respirable powders

- containing high therapeutic payload", *Pharmaceutical Development Technology*, 11(4), 465-475, (2006).
67. Mahavir B. Chougule, Bijay K. Padhi, Kaustubh A. Jinturkar and Ambikanandan Misra, "Development of Dry Powder Inhalers" *Recent Patents on Drug Delivery & Formulation*, 1, 11-21, (2007).
  68. Mahavir B. Chougule, Bijay K. Padhi, and Ambikanandan Misra, Nano- liposomal dry powder inhaler of tacrolimus: preparation, characterization and pulmonary pharmacokinetics, *International Journal of Nanomedicine*, 2(4):675-88 (2007)
  69. Pritam Kanagale, Braj Bhushan Lohray, Prakash Davadra, Rajesh Kini and Ambikanandan Misra, Formulation and Optimization of Porous Osmotic Pump Based Controlled Release System of Oxybutynin, *AAPS PharmSciTech.*, 13;8(3):E53, (2007)
  70. Avinash Kumar Seth and Ambikanandan Misra, Preparation and Evaluation of Acyclovir Liposomes by Two Techniques: A Comparative Study, *Iranian Journal of Pharmaceutical Research*, 6 (2): 75-81(2007).
  71. Naazneen Surti, Sachin Naik, and Ambikanandan Misra, Assessment of in-vitro antiproliferative activity of WGA-conjugated budesonide nanoparticles in A-549 cells, *Journal of Biomedical Nanotechnology*, Vol 3, (2007).
  72. Ambikanandan Misra, Pranav Shah, Viral Jogani, P. Mishra, A.K. Mishra, and T. Bagchi Role of <sup>99m</sup>Tc-Mannitol and <sup>99m</sup>Tc-PEG in Assessment of Paracellular Integrity of Cell Monolayers, *Nuclear Medicine Communications*, 28(8):653-9, (2007)
  73. Jogani Viral, Shah PJ, Mishra P, Mishra AK, Misra AN, Nose to Brain Delivery of Tacrine , *Journal of Pharmacy and Pharmacology*, 59(9):1199-205, (2007)
  74. Ambikanandan Misra, Pranav Shah, Viral Jogani, P. Mishra, A.K. Mishra, and T. Bagchi Modulation of Ganciclovir Intestinal Absorption in Presence of Absorption Enhancers *Journal of Pharmaceutical Sciences*, 96(10):2710-22. (2007)
  75. Jogani Viral, Shah PJ, Mishra P, Mishra AK, Misra AN, Intranasal Mucoadhesive Microemulsion of Tacrine to Improve Brain Targeting, *Alzheimer Disease and Associated Disorders*, 22 (2), 116-124 , (2008).
  76. Kumar M, Misra A, Babbar AK, Mishra AK, Mishra P, Pathak K., Intranasal nanoemulsion based brain targeting drug delivery system of risperidone., *Int J Pharm.* 24;358(1-2):285-91. (2008)
  77. Mukesh Kumar, Kamla Pathak, Ambikanandan Misra Formulation and characterization of Nanoemulsion-Based Drug Delivery System of Risperidone. *Drug Dev Ind Pharm.* 2008 Nov 17, 1-9
  78. Nazneen Surti, Ambikanandan Misra, Intracellular Delivery of Nanoparticles of an Antiasthmatic Drug, *AAPS PharmSciTech* 9(1):217-23. (2008)
  79. Bijay Padhi, Mahavir Chougule, Ambikanandan Misra, Development of Spray Dried Liposomal Dry Powder Inhaler of Dapsone, *AAPS PharmSciTech*, 9(1):47-53. (2008)

80. Ambikanandan Misra, Pranav Shah, Viral Jogani, P. Mishra, A.K. Mishra, and T. Bagchi In Vitro Assessment of Transepithelial Permeation of Acyclovir in presence of Absorption Enhancers, *Drug Development and Industrial Pharmacy*, 34(3):279-88. (2008).
81. Nazneen Surti, Ambikanandan Misra Wheat Germ Agglutinin Conjugated nanoparticles For Sustained Cellular And Lung Delivery of Budesonide, *Drug Deliv.*, 15(2):81-6. (2008)
82. Viral Jogani, Kaustubh Jinturkar, Tushar Vyas and Ambikanandan Misra Recent Patents Review on Intranasal Administration for CNS Drug Delivery, *Recent Patents on Drug Delivery & Formulation*, 2 (1), 25-40, (2008)
83. Pritam Kanagale, Vineetkumar Patel, Natarajan Venkatesan, Mukul Jain, Pankaj Patel, Ambikanandan Misra. Pharmaceutical development of solid dispersion based osmotic drug delivery system for nifedipine. *Curr Drug Deliv.* 2008 Oct ;5 (4):306-11
84. Padhi Bijay, Chougule Mahavir, Misra Ambikanandan. "Aerosol Performance of Large Respirable Particles of Amikacin Sulfate Produced by Spray and Freeze Drying Techniques", *Current Drug Delivery*, In press. Vol. 6, Issue 1, January 2009
85. Naazneen Surti, Sachin Naik, Ambikanandan Misra. Pharmacokinetic Evaluation of Wheat Germ Agglutinin-Grafted Nanoparticles of Mometasone Furoate *Sci Pharm.*; in press. doi:10.3797/scipharm.0803-13
86. Ambikanandan Misra, Kaustubh Jinturkar, Deepa Patel, Jigar Lalani & Mahavir Chougule. Recent advances in liposomal dry powder formulations: preparation and evaluation. *Expert Opin. Drug Deliv.* (2009) 6 (1):1-19
87. Mukesh Kumar; Ambikanandan Misra; A. K. Mishra; Pushpa Mishra; Kamla Pathak. Mucoadhesive nanoemulsion-based intranasal drug delivery system of olanzapine for brain targeting. *Journal of Drug Targeting*, December 2008; 16(10): 806-814
88. Mukesh Kumar; Ambikanandan Misra. Nanoemulsion Based Drug Delivery System Of Olanzapine For Brain Targeting Formulation Considerations. *PDA Journal of Pharmaceutical sciences and Technology*.

#### **Papers Accepted for Publication:**

89. Ambikanandan Misra, Sheetal Porecha, Tapan Shah, Viral Jogani, Sachin Naik, Microemulsion Based Transnasal drug delivery for treatment of insomnia, *Drug Delivery* , Accepted on 17-10-2008.

#### **Papers in Communication:**

90. Gitanjali Sharma, Ambikanandan Misra. "Role Of Intranasal Cabergoline In Obesity Management,". *AAPS Pharm Sci Tech* .2009.(communicated)

#### **BOOKS PUBLISHED:**

1. A.N.Misra, Transdermal Drug Delivery' In "Controlled and Novel Drug Delivery (Ed. N. K. Jain)", CBS Publications, New Delhi - 1997
2. A.N.Misra, "Advances in Pulmonary Drug Delivery" In "Advances in Controlled and Novel Drug Delivery (Ed. N. K. Jain)", CBS Publications, New Delhi - 2000
3. A.N.Misra, "Liposomal Transdermal Delivery" In "Liposomal (Ed. S.P. Vyas)", CBS Publications, New Delhi - 2000.
4. Ambikanandan Misra (Author), Drug Delivery to the Central Nervous System, CBS Publications, New Delhi, 2003.
5. Ambikanandan Misra, "Tablets." In "Pharmaceutical Product Development" (Ed. N. K. Jain) CBS Publishers and Distributors, New Delhi, 2005, pp. 61-112.
6. Ambikanandan Misra Viral Jogani,& Pranav Shah, "Role of Herbal Absorption Promoters in Oral Delivery of Therapeutics" In book series "Recent Progress in Medicinal Plants" Volume 14 (Biopharmaceuticals) Chapter 27, page 503-536, 2006.
7. Ambikanandan Misra, "Tablets." In "Pharmaceutical Product Development" (Ed. N. K. Jain) CBS Publishers and Distributors, New Delhi, 2006, pp. 61-112.
8. Ambikanandan Misra, "Drug delivery through the blood brain barrier" In "Exploring Nanotechnology" encyclopedia, <http://www.nanopolis.net>
9. Ambikanandan Misra, Manisha Lalan, 'Surfactants and Block Co-Polymers in Drug Delivery' In "Colloids in Pharmaceutical and Biotechnological Applications".In Press
- 10.Ambikanandan Misra, Tapan Shah, Kiruba Florence, ' 'Microemulsions in Pharmaceuticals and Biotechnology'" In "Colloids in Pharmaceutical and Biotechnological Applications". In Press
- 11.Ambikanandan Misra and Manisha S. Lalan , "Role of Natural Polysaccharides in Treatment and Control of Diabetes" Vol. 25 , Recent Progress in Medicinal Plants. In Press.

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