

**Dr. Jitender Madan**  
**Professor & Dean (R&D)**  
Department of Pharmaceutics  
Chandigarh College of Pharmacy  
Landran, Mohali, Panjab  
Mobile: +91-9466381363  
Fax: +91-172-3984209  
Email: [jitenderpharmacy@gmail.com](mailto:jitenderpharmacy@gmail.com)



## EDUCATION

- **Post-doctorate in Cancer Nanobiology** from Georgia State University, Atlanta, GA, USA (2011)
- **Ph.D in Pharmaceutical Sciences** (Bundelkhand University, Jhansi, U. P.; 2005-2010)
- **M.Pharmacy in Pharmaceutical Biotechnology** (Dr. H.S. Gour Vishwavidalaya, Saugor, M. P.; 2000-2002)
- **B.Pharmacy from Nagpur University (1996-2000)**

## PROFESSIONAL EXPERIENCE (Academics, Administrative, organization)

### Total Teaching and Research Experience: 13 Years and 9 Months

- Professor, Chandigarh College of Pharmacy, Landran, Mohali, Panjab, India from July 9, 2012 to till date
- Assistant Professor, School of Pharmacy, Chouksey Engineering College, Bilaspur, India (July 16, 2011 to July 6, 2012)
- Visiting Post doctorate Fellow, Department of Biology, Georgia State University Atlanta, Georgia, USA (Feb 21, 2011 to July 11, 2011)
- Assistant Professor, Hindu College of Pharmacy, Sonapat, Haryana, India (Nov 20, 2003 to July 15, 2011)
- Lecturer, Shri Gopi Chand College of Pharmacy, Baghpat, UP from Nov 1, 2002 to November 19, 2003.

## Personnel Profile

Name:	Jitender Madan
Father's Name:	Sh. D.R Madan
Date of Birth:	August 19, 1975
Marital status:	Married
Language known:	English and Hindi
Permanent Address:	16/301, Near Govt. Primary School Sikka Colony, Sonapat-131001 Haryana

## RESEARCH AREAS

Major areas of research include Self-assembled Supramolecular systems *viz.* liposomes, niosomes, cyclodextrin, nano- & micro-particles and solid-lipid nanoparticles. The focus is centered onto the exploitation of US FDA approved biomaterials in combination with other potential lipids and polymers to develop the innovative dosage forms and drug delivery systems in order to improve the bioavailability, stability, safety (tolerance) and patient-compliance. Whilst a wide range of applications are being taken up, the special emphasis is given to augment the aqueous solubility and bioavailability of anticancer drugs. Moreover, we emphasized on design, synthesis and development of ligand conjugated stealth nanoconstructs for delivery and targeting of anticancer drugs in cancer cells both *in vitro* and *in vivo*.

## RESEARCH GUIDANCE

- Guiding 4 post-graduate research fellows
- Guiding 7 Ph.D (Pharmaceutical Sciences) research fellows (Registered in Panjab Technical University, A State Govt. University established by Government of Panjab)
- Authored 33 International/6 National research publications and 2 book chapter

## Professional Membership

Life member, Indian Pharmaceutical Association, Mumbai, India (PUN/LM/0154)

## Publications

### International

H-index: 11  
Citations: 325  
i-10 index 12

### Related Publication list

1. Sharma S, Jyoti K, Sinha R, Katyal A, Jain UK, Madan J. Protamine coated proliposomes of recombinant human insulin encased in Eudragit S100 coated capsule offered improved peptide delivery and permeation across Caco-2 cells. *Mater Biol Appl.* 2016; 67:378-85 (Impact factor~3.4).
2. Tomar V, Chandra R, Prakash S, Madan J, Kukreti S. New Cancer Therapeutics: Noscapine and Analogs. *Curr Top Med Chem.* 2016 May 30 (In press, Impact factor~2.9).
3. Puri R, Kaur Bhatia R, Shankar Pandey R, Kumar Jain U, Katare OP, Madan J. Sigma-2 receptor ligand anchored telmisartan loaded nanostructured lipid particles augmented

drug delivery, cytotoxicity, apoptosis and cellular uptake in prostate cancer cells. **Drug Dev Ind Pharm.** 2016; 1:1-11 (in press, Impact factor~2.08)

4. Saini N, Sodhi RK, Bajaj L, Pandey RS, Jain UK, Katare OP, Madan J. Intravaginal administration of metformin hydrochloride loaded cationic niosomes amalgamated with thermosensitive gel for the treatment of polycystic ovary syndrome: In vitro and in vivo studies. *Colloids Surf B Biointerfaces.* 2016; 144:161-9 (Impact factor~4.2).
5. Kaur A, Jyoti K, Rai S, Sidhu R, Pandey RS, Jain UK, Katyal A, Madan J. Tetanus toxoid-loaded cationic non-aggregated nanostructured lipid particles triggered strong humoral and cellular immune responses. *J Microencapsul.* 2016; 33(3):263-73 (Impact factor~1.5).
6. Thakur V, Kush P, Pandey RS, Jain UK, Chandra R, Madan J. Vincristine sulfate loaded dextran microspheres amalgamated with thermosensitive gel offered sustained release and enhanced cytotoxicity in THP-1, human leukemia cells: In vitro and in vivo study. *Mater Sci Eng C Mater Biol Appl.* 2016; 61:113-22 (Impact factor~3.4).
7. Kaurav M, Minz S, Sahu K, Kumar M, Madan J, Pandey RS. Nanoparticulate mediated transcutaneous immunization: Myth or reality. *Nanomedicine.* 2016; 12(4):1063-81 ((Impact factor~6.8).
8. Kaur K, Sodhi RK, Katyal A, Aneja R, Jain UK, Katare OP, Madan J. Wheat germ agglutinin anchored chitosan microspheres of reduced brominated derivative of noscapine ameliorated acute inflammation in experimental colitis. *Colloids Surf B Biointerfaces.* 2015; 132:225-35 (Impact factor~4.2).
9. Kaur K, Kush P, Pandey RS, Madan J, Jain UK, Katare OP. Stealth lipid coated aquasomes bearing recombinant human interferon- $\alpha$ -2b offered prolonged release and enhanced cytotoxicity in ovarian cancer cells. *Biomed Pharmacother.* 2015; 69:267-76 (Impact factor~2.0).
10. Dixit N, Vaibhav K, Pandey RS, Jain UK, Katare OP, Katyal A, Madan J. Improved cisplatin delivery in cervical cancer cells by utilizing folate-grafted non-aggregated gelatin nanoparticles. *Biomed Pharmacother.* 2015; 69:1-10 (Impact factor~2.0).
11. Jyoti K, Kaur K, Pandey RS, Jain UK, Chandra R, Madan J. Inhalable nanostructured lipid particles of 9-bromo-noscapine, a tubulin-binding cytotoxic agent: in vitro and in vivo studies. *J Colloid Interface Sci.* 2015; 445:219-30 ((Impact factor~3.08).
12. Madan J, Gundala SR, Baruah B, Nagaraju M, Yates C, Turner T, Rangari V, Hamelberg D, Reid MD, Aneja R. Cyclodextrin complexes of reduced bromonoscapine in guar gum microspheres enhance colonic drug delivery. *Mol Pharm.* 2014; 11(12):4339-49 (Impact factor~4.8).
13. Dhama NK, Pandey RS, Jain UK, Chandra R, Madan J. Non-aggregated protamine coated poly (lactide-co-glycolide) nanoparticles of cisplatin crossed blood-brain barrier,

enhanced drug delivery and improved therapeutic index in glioblastoma cells: *in vitro* studies. *J. Microencapsul.* 2014 (in press, impact factor~1.55).

14. Saini J, Bansal V, Chandra A, Madan J, Jain UK, Chandra R, Jain SM. Bleomycin sulphate loaded nanostructured lipid particles augment oral bioavailability, cytotoxicity and apoptosis in cervical cancer cells. *Colloids Surface B: Biointerface* 2014; 118: 101-110 (Impact factor~3.550).
15. Madan J, Gundala SR, Kasetti Y, Bharatam PV, Aneja R, Katyal A, Jain UK. Enhanced noscapine delivery using estrogen-receptortargeted nanoparticles for breast cancer therapy. *Anti-Cancer Drugs*, 2014 [in press, impact factor-2.4].
16. Kaur M, Bhatia RK, Pissurlenkar RR, Coutinho EC, Jain UK, Katare OP, Chandra R, Madan J. Telmisartan complex augments solubility, dissolution and drug delivery in prostate cancer cells. *Carbohydr Polym* 2014, 101:614-22 [impact factor-3.5].
17. Gulia M, Rai S, Jain UK, Katare OP, Katyal A, Madan J. Sustained-release protamine sulphate-impregnated microspheres may reduce the frequent administration of recombinant interferon  $\alpha$ -2b in ovarian cancer: in-vitro characterization. *Anticancer Drugs*. 2014, 25(1):63-71 (impact factor-2.4).
18. Kumar M, Pandey RS, Patra KC, Jain SK, Soni ML, Dangi JS, Madan J. Evaluation of neuropeptide loaded trimethyl chitosan nanoparticles for nose to brain delivery. *Int J Biol Macromol.* 2013, 61C:189-195. [impact factor ~2.5].
19. Madan J, Pandey RS, Jain UK, Katare OP, Aneja R, Katyal A. Sterically stabilized gelatin microassemblies of noscapine enhance cytotoxicity, apoptosis and drug delivery in lung cancer cells. *Colloids and surface B: Biointerfaces.* 2013, 107:235-44 (impact factor~3.35)
20. Jain V, Jain B, Tiwari P, Saini J, Jain UK, Pandey RS, Kumar M, Katare OP, Chandra R, Madan J. Nanosolvated microtubule modulating chemotherapeutics: case to case study. *Anticancer Drugs* 2013, 24:327-36 [impact factor~2.4].
21. Madan J, Pandey RS, Jain V, Katare OP, Chandra R, Katyal A. Polyethylene glycol conjugated solid lipid nanoparticles of noscapine improve biological half life, brain delivery and efficacy in glioblastoma cells. *Nanomedicine: Nanotechnology, Biology and Medicine* 2013, 9: 492-503 (Impact factor 6.692)
22. Chandra R, Madan J, Singh P, Chandra A, Kumar P, Tomar V, Dass SK. Implications of nanoscale based drug delivery systems in delivery and targeting tubulin binding agent, noscapine in cancer cells. *Current Drug Metabolism* 2012, 13:1476-83. [ISI Impact factor: 5.113]
23. Madan J, Baruah B, Nagaraju M, Abdalla MO, Yates C, Turner T, Rangari V, Hamelberg D, Aneja R. Molecular cycloencapsulation augments solubility and improves therapeutic

index of brominated noscapine in prostate cancer cells. *Molecular Pharmaceutics* 2012; 9:1470-80 [ISI Impact factor: 4.570]

24. Garg M, Madan J, Pandey RS, Sardana S, Katyal A, Chandra R. Galactosylated gelatin nanovectors of doxorubicin inhibit cell proliferation and induce apoptosis in hepatocarcinoma cells. *Anticancer Drugs* 2012, 23:836-45 [ISI Impact factor: 2.4]
25. Alvi I A, Madan J, Kaushik D, Sardana S, Pandey RS, Ali A. Comparative study of transfersomes, liposomes and niosomes for topical delivery of 5-fluorouracil to skin cancer cells: preparation, characterization, *in vitro* release and cytotoxicity analysis. *Anticancer Drugs* 2011, 22: 774-82 [ISI Impact factor: 2.4]
26. Chauhan R, Madan J, Kaushik D, Sardana S, Sharma R. Inclusion complex of colchicine in hydroxypropyl- $\beta$ -cyclodextrin tenders better solubility and improved pharmacokinetics. *Pharm Develop Technol* 2013, 18:313-22. [ISI Impact factor: 1.107].
27. Pandey RS, Sahu S, Sudheesh MS, Madan J, Kumar M, Dixit VK. Carbohydrate modified ultrafine ceramic nanoparticles for allergen immunotherapy. *International Immunopharmacol*, 2011, 11: 925-31 [ISI Impact factor 2.376]
28. Madan J, Dhiman N, Sardana S, Aneja R, Chandra R, Katyal A. Long circulating poly (ethylene glycol)-grafted gelatin nanoparticles customized for intracellular delivery of noscapine: preparation, *in-vitro* characterization, structure elucidation, pharmacokinetic and cytotoxicity analysis. *Anticancer Drugs*, 2011, 22(6):543-55 [Impact factor 2.4]
29. Madan J, Dhiman N, Parmar VK, Sardana S, Bharatam PV, Aneja R, Chandra R, Katyal A. Inclusion complexes of noscapine in  $\beta$ -cyclodextrin offer better solubility and improved pharmacokinetics. *Cancer Chemother Pharmacol* 2010, 65: 537-548 (Impact factor 2.833)
30. Madan J, Kaushik D, Sardana S, Ali A, Mangat SS, Pandey RS. Effect of levofloxacin and pefloxacin on humoral immune response elicited by bovine serum albumin docked in gelatin nanoparticles and microparticles. *Pharmazie* 2010, 65: 284-289 (Impact factor 0.8)
31. Sardana S, Madan J, Kaushik D, Sharma R. DNA Vaccine: Mechanistic insight and delivery strategies. *Hamdard Medicus* 2009, 52: 81-86.
32. Madan J, Kaushik D, Sardana S, Mishra DN, Singh SK, Singh BK. Effect of amoxicillin and chloroquine on humoral immune response elicited by bovine serum albumin encapsulated in liposomes. *Acta Pharmaceutica* 2008, 58: 479-487.
33. Madan J, Kaushik D, Sardana S, Mishra DN. Effect of ciprofloxacin and chloramphenicol on humoral immune response elicited by bovine serum albumin encapsulated in niosomes. *Acta Pharmaceutica Sinica* 2007, 42: 905-910 (Impact factor 0.9).

## National

- 1 Rohila R, **Madan J**, Kumar G. Advancement in treatment technology for uterine Leiomyoma. Pharma Science Monitor.2011; 2 (1): 1-17.
- 2 Sardana S, **Madan J**, Sharma OP. Edible Vaccine: Approach for natural bioencapsulation of the antigen. Indian Journal of Pharmaceutical Education and Research 2005, 39 (1): 42-46.
- 3 Kumar A, **Madan J**, Katare OP. Release kinetic study of slightly water-soluble drug from different polymers. The Indian Pharmacist 2004, 3 (25): 58-60.
- 4 **Madan J**, Sardana S, Sharma R. DNA Microarray; techniques for gene profiling. J. Sci. Pharm. 2004, Jan-March, 5-8.
- 5 **Madan J**, Sharma OP. Current Status of antibiotics in Multidrug therapy. J.Sci. Pharmacy, 2003, 5: 64-66.
- 6 **Madan J**, Baldi A, Pandey RS, Sharma R. Parkinsomism: History and novel biotech approach. J. Sci and Pharm 2002. 3 (2): 62-65.

## Book Chapter

Book Chapter published entitled “Noscapines: Novel Carrier Systems to Target Tumor Cells” authored by “Ramesh Chandra, Jitender Madan, Prashant Singh, Pradeep Kumar, Vritika Tomar, Ankush Chandra and Sujata K. Dass” in book “Selected Topic in Nanomedicine” Edited by “Prof Thomas Chang (Nobel laureates) who is inventor of Artificial Cell, a legendary Scientist at McGill University, Canada

Book Chapter accepted for publication “Natural Plant Derived Anticancer Drugs Nanotherapeutics: A Review on Preclinical to Clinical Success” authored by Kumari Varsha, Ankita Sharma, Amanpreet Kaur, Jitender Madan, Ravi Shankar Pandey, Upendra Kumar Jain, Ramesh Chandra in book “NANOSTRUCTURES IN THERAPEUTIC MEDICINE” edited by Alexandru Mihai Grumezescu, Politehnica University of Bucharest, Elsevier

## PRESENTATIONS

Chandi A, Ahirwar J, Ahirwar D, **Madan J**. Eudragit S100 decorated chitosan microspheres of vincristine sulphate crosslinked with a natural non-toxic aldehyde for targeting colon cancer. UGC sponsored national seminar on Standardization of herbal formulations: a holistic goal, Guru Ghasidas University, Bilaspur Feb 25-26, 2012.

- **Madan J**, Sardana S, Katyal A, Chandra R. Noscapine in betacyclodextrin offer better solubility and improved pharmacokinetics. 61<sup>st</sup> Indian Pharmaceutical Congress, 11-13 Dec, 2009, Ahmedabad, India.
- Chauhan R, **Madan J**, Kaushik D, Sardana S. Effect of levofloxacin and pefloxacin on humoral immune response elicited by bovine serum albumin docked in gelatin microparticles and nanoparticles. 61<sup>st</sup> Indian Pharmaceutical Congress, 11-13 Dec, 2009, Ahmedabad, India.
- Alvi IA, **Madan J**, Kaushik D, Sardana S. Effect of ampicillin and chloroquine on humoral immune response elicited by bovine serum albumin encapsulated in liposomes. 61<sup>st</sup> Indian Pharmaceutical Congress, 11-13 Dec, 2009, Ahmedabad, India.
- Sharma K, **Madan J**, Kaushik D, Sardana S. Comparative study of 5-Fluorouracil loaded chitosan and guar gum microspheres targeted to colon. 61<sup>st</sup> Indian Pharmaceutical Congress, 11-13 Dec, 2009, Ahmedabad, India.
- Jain A, **Madan J**, Kaushik D, Sardana S. Topical delivery of piroxicam encapsulated in niosomal gel for the management of inflammation. 61<sup>st</sup> Indian Pharmaceutical Congress, 11-13 Dec, 2009, Ahmedabad, India.
- Arora R, Sardana S, Kaushik D, **Madan J**. Liposome constructs propagate better delivery of Mallotus philippinensis in management of dermatological disorders. Innovation in Drug Discovery and Research. March 3-5<sup>th</sup>, 2009, Panjabi University, Patiala, India
- Bhushan B, **Madan J**, Kaushik D, Sardana S, Bali A. Synthesis of 1, 4-alcoxy sulfonamideo actophenone based potential COX-2 inhibitors. Innovation in Drug Discovery and Research. March 3-5<sup>th</sup>, 2009, Panjabi University, Patiala, India.
- Sharma R, **Madan J**, Kaushik D, Bhushan B, Sardana S, Kohli K. Sustained release matrix tablets of ciprofloxacin offer prolonged antimicrobial activity. APTI Conference, Ch Devilal University, Sirsa, India.
- **Madan J**, Dhiman N, Katyal A, Sardana S, Chandra R. Release kinetic profile of noscapine, a novel anticancer agent encapsulated in bioadhesive polymeric nanoparticles for management of bladder cancer: In vitro characterization. First Summer School of Nanotechnology in Advanced Drug Delivery, 2007, NIPER, Panjab, India.
- **Madan J**, Dhiman N, Katyal A, Sardana S, Chandra R. Noscapine, a novel microtubule interfering anticancer agent encapsulated in bioadhesive polymeric nanoparticles for management of urinary bladder cancer: in vitro characterization. 58<sup>th</sup> Indian Pharmaceutical Congress. Mumbai Dec 1-3, 2006, India.

- Kaushik D, **Madan J**, Sardana S. International Workshop on Pharmacovigilance and adverse drug reactions. Jan, 21-23, 2005, M.J.P Rohailkhand Unniversity, Bareilly and abstracted in J. Pharmacovigilance and Drug Safety. (Conference Special 2005), pp. 78-79, India.
- **Madan J**, Katyal A, Sardana S, Chandra R. Microencapsulation of noscapine in biodegradable microspheres: evaluation of process variables. 57<sup>th</sup> Indian Pharmaceutical Congress. Dec 2-4, 2005, Hyderabad, India
- Kaushik D, **Madan J**, Sardana S. Evaluating immunomodulatory activity of some antimalarial drugs. Proc. Natl. Conf. Immunol Health and Dis, 2006, pp. 112-118.
- **Madan J**, Katyal A, Sardana S, Chandra R. Transdermal delivery of noscapine hydrochloride by microemulsion. International Conference on chemistry and biology interface: Synergistic new frontiers, Nov. 21-26, 2004, Vigyan Bhawan, New Delhi, India.
- **Madan J**, Katyal A, Dhiman N, Sardana S, Chandra R. Design of nanoparticles and microparticles systems for site specific delivery of noscapine, a novel anticancer agent. Evaluation of various process variables. Indo-US symposium on Nanotechnology in Advanced Drug Delivery. October 4-6, 2006, NIPER, Mohali (Panjab), India.

#### INVITED and GUEST LECTURES (09 lectures)

- AICTE sponsored staff development program held on Sep, 2011, at J.L Chaturvedi College of Pharmacy, Nagpur, India
- Guest lecture on Pharmaceutical Biotechnology in Shri Vidaywati College of Pharmacy, Jhansi, UP dated 21 April, 2012.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 16 March, 2013.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 23 March, 2013.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 26 Dec, 2013.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 16 Jan, 2014.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 22 March, 2014.
- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 23 March, 2014.



- Guest lecture on Controlled Drug Delivery in Hindu College of Pharmacy, Sonapat, Haryana, dated 29 March, 2014.

## REFERENCES

### **Prof. Upendra Kumar Jain**

Director-Principal  
Chandigarh College of Pharmacy  
Landran, Mohali-140307 (Panjab)  
Tel: +91-172-3984209  
Fax: +91-172-3984209  
Email: [director@ccpmohali.org](mailto:director@ccpmohali.org)  
Mobile: 9781925277

### **Prof. Ramesh Chandra**

Founder Director  
Dr. B.R Ambedkar Centre for Biomedical Research  
University of Delhi, Delhi-110007  
And  
Former Vice Chancellor  
Bundelkhand University (1999-2006)