

## Curriculum Vitae

Nanomedicine Research Unit, Department of Pharmaceutics,  
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**Name:**

**Mohd Abul Kalam**, M. Pharm, Ph.D.

**Title:**

Assistant Professor (Pharmaceutics)

### Professional Preparation

Institution and Location	Degree (if applicable)	Years	Field of Study
Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi, India	Ph.D.	2006–2011	Pharmaceutics
Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi, India	Master of Pharmacy	2004–2006	Pharmaceutics
Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi, India	Bachelor of Pharmacy	2000–2004	Pharmaceutical Sciences

### Current Research Interest

The main focus of my research is to conduct rigorous translational nanomedicine research for promising improvements of potential therapeutics. This mainly encompasses the development and evaluation of ocular drug delivery systems. Basically, nanoformulations and their physicochemical characterizations using solid lipids as well as polymeric and self-assembled systems are of major interest. I am currently utilizing poly (D, L-lactic-co-glycolic acid) (PLGA) to prepare and optimize nanoparticles to target dendritic cells for cancer vaccination and in another line development of ophthalmic nanoformulations. Moreover, novel systems such as solid lipid nanoparticles, *in situ* sol gel system, microemulsions, nanoemulsions and the surface-modified nanoparticulate drug delivery systems.

### Appointments

- **November 2011 to date-** *Assistant Professor*, Nanomedicine Research Unit, Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

**A) PUBLICATIONS**

**2017**

- **Mohd Abul Kalam**, Aws Alshamsan. Poly (D, L-lactide-co-glycolide) nanoparticles for sustained release of tacrolimus in rabbit eyes. *Biomedicine & Pharmacotherapy*, (2017), 94, 402-411. (IF 2.759)
- Abdul Arif Khan, Zakir Khan, Abdul Malik, **Mohd Abul Kalam**, Phillip Cash, Mohd. Tashfeen Ashraf, Aws Alshamsan. Colorectal cancer-inflammatory bowel disease nexus and felony of Escherichia coli. *Life Sciences*, (2017), 180, 60-67. (IF 2.685)
- **Mohd Abul Kalam**, Sultan Alshehri, Aws Alshamsan, Anzarul Haque, Faiyaz Shakeel. Solid liquid equilibrium of an antifungal drug itraconazole in different neat solvents: Determination and correlation. *Journal of Molecular Liquids* (2017), 234, 81-87. (IF 3.648)
- **Mohd Abul Kalam**, Mohammad Raish, Ajaz Ahmed, Khalid M. Alkharfy, Kazi Mohsin, Aws Alshamsan, Fahad I. Al-Jenoobi, Abdullah M. Al-Mohizea, Faiyaz Shakeel. Oral bioavailability enhancement and hepatoprotective effects of thymoquinone by self-nanoemulsifying drug delivery system. *Materials Science and Engineering C* (2017), 76, 319-329. (IF 3.42)
- Perwez Alam, Mohammad Khalid Parvez, Ahmed Hassan Arbab, Nasir Ali Siddiqui, Mohammed Salem Al-Dosary, Adnan Jathlan Al-Rehaily, Sarfaraz Ahmed, **Mohd Abul Kalam** and Mohammad Shamim Ahmad. Inter-species comparative antioxidant assay and HPTLC analysis of sakuranetin in the chloroform and ethanol extracts of aerial parts of Rhus retinorrhoea and Rhus tripartite. *Pharmaceutical Biology*, (2017), 55 (1), 1450-1457. (IF 1.546)
- Abdulaziz Almalik, Ibrahim Alradwan, **Mohd Abul Kalam**, Aws Alshamsan. Effect of cryoprotection on particle size stability and preservation of chitosan nanoparticles with and without hyaluronate or alginate coating. *Saudi Pharmaceutical Journal* (2017) xxx, xxx–xxx: <http://dx.doi.org/10.1016/j.jsps.2016.12.008> (IF 2.233)
- **Mohd Abul Kalam**, Abdul Arif Khan, Aws Alshamsan. Non-invasive administration of biodegradable nano-carrier vaccines. *Am J Transl Res* (2017), 9(1), 15-35. (IF 3.146)

**2016**

- Abdul Arif Khan, Zakir Khan, **Mohd Abul Kalam**, and Azmat Ali Khan. Inter-kingdom prediction certainty evaluation of protein subcellular localization tools: microbial pathogenesis approach for deciphering host microbe interaction. *Briefings in Bioinformatics*, (2016), 1–11 (Available online), doi: 10.1093/bib/bbw093 (IF 8.399)

- **Mohd Abul Kalam\***. The potential application of hyaluronic acid coated chitosannanoparticles in ocular delivery of dexamethasone. *Int J Biol Macromol.* 89, (2016), 559-568. (IF 3.138)  
<http://dx.doi.org/10.1016/j.ijbiomac.2016.05.016>
- **Mohd Abul Kalam\***. Development of chitosan nanoparticles coated with hyaluronic acid for topical ocular delivery of dexamethasone. *Int J Biol Macromol.* 89, (2016), 127-136. (IF 3.138)  
<http://dx.doi.org/10.1016/j.ijbiomac.2016.04.070>
- **Mohd Abul Kalam**, Abdul Arif Khan, Shahanavaj Khan, Abdulaziz Almalik, Aws Alshamsan. Optimizing indomethacin-loaded chitosan nanoparticle size, encapsulation, and release using Box-Behnken experimental design. *Int J Biol Macromol.* 87, (2016), 329-340. <http://dx.doi.org/10.1016/j.ijbiomac.2016.02.033>. (IF 3.138)
- Abhinav Shrivastava, Abdul Arif Khan, Mohsin Khurshid, **Mohd Abul Kalam**, Sudhir K. Jain, Pradeep K. Singhal. Recent developments in the field of L-asparaginase discovery: a potential anticancer agent. *Critical Reviews in Oncology/Hematology.* 100, (2016), 1-10. <http://dx.doi.org/10.1016/j.critrevonc.2015.01.002>. (IF 5.039)
- Shahanavaj Khan, Ahmad Imran, Abdul Arif Khan, **Mohd Abul Kalam**, Aws Alshamsan. Systems Biology Approaches for the Prediction of Possible Role of Chlamydia pneumoniae Proteins in the Etiology of Lung Cancer. *PLoS One.* 11 (2), (2016): e0148530. DOI: 10.1371/journal.pone.0148530. (IF 3.360)
- **Mohd Abul Kalam\***, Aws Alshamsan, Ibrahim A. Aljuffali, Anil K. Mishra and Yasmin Sultana. Delivery of gatifloxacin using microemulsion as vehicle: formulation, evaluation, transcorneal permeation and aqueous humor drug determination. *Drug Deliv.* 23 (3) 2016, 896-907. doi: 10.3109/10717544.2014.920432. (IF 4.843)

## **2015**

- Faiyaz Shakeel, Gamal A. Shazly, Mohammad Raish, Ajaz Ahmad, **Mohd Abul Kalam**, Naushad Ali, Mushtaq A. Ansari and Gehan M. Elosaily. Biological investigation of a supersaturated self nanoemulsifying drug delivery system of *Piper cubeba* essential oil. *RSC Adv.* 5, (2015), 105206-105217. (IF 3.289)
- Ibrahim A. Aljuffali, **Mohd Abul Kalam**, Yasmin Sultana, Ahmad Imran, Aws Alshamsan. Development and validation of stability-indicating high performance liquid chromatography method to analyze gatifloxacin in bulk drug and pharmaceutical preparations. *Saudi Pharmaceutical Journal*, 23, (2015), 85-94. DOI: [10.1016/j.jsps.2014.06.005](http://dx.doi.org/10.1016/j.jsps.2014.06.005). (IF 2.233)

## **2014**

- Jayamanti Pandit, Yasmin Sultana and **Mohd Abul Kalam\***. Newer Technologies in Oral Vaccine Delivery. *Current Drug Therapy*, 9, (2014), 173-187. (IF N/A)

## **2013**

- **Mohd Abul Kalam**, Yasmin Sultana, Asgar Ali, Mohd. Aqil, Anil K. Mishra, Ibrahim A. Aljuffali, Aws Alshamsan. **Part I:** Development and optimization of solid-lipid nanoparticles using Box-Behnken

statistical design for ocular drug delivery of gatifloxacin. *Journal of Biomedical Materials Research. A*, Vol. 101A (6), **2013**, 1813-1827. (IF 3.263)

- **Mohd Abul Kalam**, Yasmin Sultana, Asgar Ali, Mohd. Aqil, Anil K. Mishra, Krishna Chuttani, Ibrahim A. Aljuffali, Aws Alshamasan. **Part II:** Enhancement of transcorneal delivery of gatifloxacin by solid lipid nanoparticles in comparison to commercial aqueous eye drops. *Journal of Biomedical Materials Research. A*, Vol. 101A (6), **2013**, 1828-1836. (IF 3.263)

## **2010**

- **Mohd Abul Kalam**, Yasmin Sultana, Asgar Ali, Mohd. Aqil, Anil K. Mishra, K. Chuttani. Preparation, characterization and evaluation of gatifloxacin loaded solid lipid nanoparticles as colloidal ocular drug delivery system. *Journal of Drug Targeting*, Vol. 18 (3), **2010**, 191-204. (IF 2.821)

## **2009**

- **Mohd Abul Kalam**, Yasmin Sultana, Asgar Ali and M. Aqil. Gatifloxacin loaded solid lipid nanoparticles (SLNs) for topical ocular delivery. *Journal of Pharmacy and Pharmacology*. Vol. 61, Supplement 1, (2009, A70-A71. (IF 2.363)

## **2008**

- Abdus Samad, Y. Sultana, R. K. Khar, M. Aqil, **Mohd Abul Kalam**, K. Chuttani, and A. K. Mishra. Radiolabeling and evaluation of alginate blend-Isoniazid microspheres by <sup>99m</sup>Tc for the treatment of tuberculosis in rabbit model. *Journal of Drug Targeting*, Vol. 16 (6) **2008**, 509-515. (IF 2.821)
- **Mohd Abul Kalam**, Yasmin Sultana, A. Samad, Asgar Ali, M. Aqil, M. Sharma and A. K. Mishra. Gelrite-Based *In Vitro* Gelation Ophthalmic Drug Delivery System of Gatifloxacin. *Journal of Dispersion Science and Technology*, Vol. 29 (1), **2008**, 89-96. (IF 1.112)

## **B) CHAPTER IN BOOKS**

- **M. Abul Kalam** and Yasmin Sultana. A full version of our chapter titled "Emerging trends in biocontrol of plant diseases" published in the book titled "*Biotechnology Emerging Trends*", edited by R. Z. Sayyed and A. S. Patil, Scientific publisher, Jodhpur, India, **2009**, pp 53-71.
- Yasmin Sultana, **Mohd. Abul Kalam** and D. P. Maurya. A full version of our chapter titled "Self emulsifying drug delivery systems" has been publication in the review book titled "*Colloids in Drug Delivery*" (Surfactant Science Series, Vol. 150), edited by Monzer Fanum, CRC Press, Taylor and Francis Group. **2010**, pp 299-310.

## **C) ABSTRACTS/ CONFERENCE**

- **Mohd. Abul Kalam**, Yasmin Sultana, Asgar Ali and M. Aqil. "Gatifloxacin loaded solid lipid nanoparticles (SLNs) for topical ocular delivery" at the British Pharmaceutical Conference, on 6-9th September, 2009 at Manchester Central, United Kingdom [**September 2009**].
- **Mohd. Abul Kalam**, Yasmin Sultana, Asgar Ali and M. Aqil. "Effect of Stearylamine on Corneal Permeation Study of Gatifloxacin Loaded Solid Lipid Nanoparticles "at The 8<sup>th</sup> International Symposium on Ocular Pharmacology and Therapeutics, on 3<sup>rd</sup> -6<sup>th</sup> Dec. 2009, Rome, Italy [**December 2009**].

## Awards

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- Awarded Senior Research Fellowship (SRF) in **PhD** by Indian Council of Medical Research (ICMR), Ministry of Human Resources and Development, Government of India (**August 2007-February 2011**).
  - Awarded Junior Research Fellowship (JRF) in **Master of Pharmacy** by University Grant Commission (UGC), Ministry of Human Resources and Development, Government of India (**July 2004-June 2006**).
  - Scholarship for Meritorious Students for a period of four years by Foundation for Social Care (FSC), New Delhi, India in **Bachelor of Pharmacy (June 2000-June 2004)**.
  - Abstract accepted for poster presentation at the British Pharmaceutical Conference, on 6<sup>th</sup>-9<sup>th</sup> September, **2009** at Manchester Central, United Kingdom and Travel Grant was sanctioned by Government of India, Department of Biotechnology, New Delhi, India.
  - Abstract accepted for poster presentation at The 8<sup>th</sup> International Symposium on Ocular Pharmacology and Therapeutics, on 3<sup>rd</sup>-6<sup>th</sup> Dec. **2009**, Rome, Italy and Travel Grant was sanctioned by Government of India, Ministry of Science and Technology, Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR), Human Resources Development Group, Government of India.
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