



Dr. P.S.Rajinikanth Associate Professor

Qualification: M.Pharm, Ph.D

Teaching Experience: 15 Years (Industrial experience: 4 years)

Research Experience: Concurrent with teaching

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Area of specialization

- Nano-carrier based targeted drug delivery specifically targeted for cancer and brain delivery.
- Self nanoemulsifying drug delivery to improve the bioavailability of poorly soluble drugs
Local targeting Drug delivery for Stomach site specific delivery for *H.Pylori* infection.
- Nanostructured lipid carrier, solid lipid nanoparticle for brain targeted delivery
- Development and evaluation of biomaterial based nano-fibrous scaffold for diabetic wound healing .

Research Projects

- 1) TRGS-Major, Taylors University, MALAYSIA (RM 40,000) Development and *in-vitro* and *in-vivo* evaluation of Supersaturated selfnanoemulsifying drug delivery systems to enhance bioavailability of poorly soluble drug Dutasteride- started June 2014 (Principal investigator)
- 2) TRGS-Emerging Grant, Taylors University, MALAYSIA, (RM27,500) Investigation of organ specific toxicity from therapeutic use of Coptis Chinesis -started July 2014 (Co-investigator)
- 3) ERGS grant, Ministry of Health, Govt of MALAYSIA (RM 221,000) Development of a novel chitosan- flavonoids (Propolis ethanolic extracts) solid lipid nanoparticle against biofilm formation by *Enterococcus faecalis* using *in vitro* and *ex vivo* human tooth models and validation of biofilm inhibition by gene expression profiling, completed by Oct,2015. (As co-investigator)
- 4) IMU internal grant, International Medical University, MALAYSIA (RM 20,000) Development & Characterization of Polymeric Nanoparticle for Controlled release of 5-fluorouracil in Cancer treatment. started by April, 2010 and completed by May 2012 (Principal investigator)
- 5) IMU PG/Ph.D grant, International Medical University, MALAYSIA (RM 60,000). Development and characterization of itraconazole encapsulated solid lipid nanoparticles as nano-carrier to delivery across the blood-brain barrier for brain targeted delivery, completed Sept 2013. (Principal investigator)

- 6) IMU UG-grant, International Medical University, MALAYSIA (RM 9000) Development and In-Vitro Characterization of Self-nanoemulsifying Drug Delivery Systems of Valsartan. (Principal investigator) –completed by Dec, 2011
- 7) IMU UG-grant, International Medical University, MALAYSIA (RM 9000) Preparation and characterization water-in-oil nanoemulsion of 5-fluorouracil for dermal application. RM 9000 Founded by IMU, (Principal investigator) completed by Dec, 2012
- 8) IMU UG-grant, International Medical University, MALAYSIA (RM 9000) Development and In-vitro evaluation of self-nanoemulsifying drug delivery systems of dutasteride (Principal investigator). completed by Dec, 2013

Patents

Nil

Publications and other than journal articles (Books, chapters in books)

1. Books chapter : 01 (International)
Title: Helicobacter Pylori infection: Current Therapy and Future therapeutics strategies: InTech Europe open sciences, April,2014,

Research Publications

(Cumulative Impact Factor- 46.56) (Average Impact Factor-2.11)

1. P.S.Rajinikanth, Fabian Davamani, Teik Hwa Ong; Ebenezer Chitra; Srinivasan Ramamurthy. "Inhibition of biofilms formed by Enterococcus faecalis by propolis nano formulation". PLOS ONE, 2017 12(3) , 1-22. (Impact factor : 4.56).
2. P.S.Rajinikanth and Subramanian.S, Development and in vivo evaluation of Selfnanoemulsifying drug delivery systems of dutasteride. Journal of Applied Pharmaceutical Science, 2017 , 7(4), 11-22.
3. P.S.Rajinikanth, Poonguzhali Subramnaiam and Chitambarm Kumarappan. Development and validation of a new RP-HPLC method for the estimation of dutasteride in bulk and pharmaceutical formulations. Journal of Applied Pharmaceutical Science. 2016, 6 (12), 47-55.
4. P.S.Rajinikanth and Jestin chellian . Investigation on potential of nanostructured lipid carrier based hydrogel as for topical delivery of 5-Fluorouracil. International journal of Nano medicine, 2016: (11). 1-11. (Impact factor : 4.35.)
5. Sonali, Rahul Pratap Singhb, Gunjan Sharmac, Lakshmi Kumaria, Biplob Kochc, Sanjay Singha, Shreekant Bharti Rajinikanth PS ,Bajarangprasad L. Pandey, Madaswamy S. Muthu. RGD-TPGS decorated theranostic liposomes for brain targeted delivery. Colloids Surf B Biointerfaces. 2016 Nov 1;147:129-41. (Impact factor : 3.96)
6. P.S.Rajinikanth and Chitambarm Kumarappan, Topical delivery of 5- Fluorouracil via Nanocarrier: Preparation, in vitro and ex in vivo Characterization of Water-in-Oil

- Nanoemulsion. Tropical Journal of Pharmaceutical Research. 2016, 15 (11), 2311-2319. (Impact factor : 0.56)
7. Kumarappan, C., Srinivasan, R., Jeevathayaparan, S. Rajinikanth, S., Naveen, H.S. Ichnocarpus frutescens: a valuable medicinal plant, Pharmacology online, 2015,2(1), 18-37
 8. Lim Wei Meng, P.S.Rajinikanth and Chitneni Mallikarjun.. Formulation and delivery of Itraconazole to the brain using nanolipid carrier system. International journal of Nano medicine, 2014,9(1), 2117–2126. (Impact factor: 4.35)
 9. Yong Tze Teen, Adinarayana Gorajana, PS Rajinikanth, Sreenivas Patro Sisinthy, Nalamolu Koteswara Rao. Development and Optimization of Gastroretentive drug delivery system for Oseltamivir. Int. J. Drug Dev. & Res, 2013, 5 (1), 197-203.
 10. P.S.Rajinikanth, Neo Woei Keat, Sanjay Garg, Self-nanoemulsifying Drug Delivery Systems of Valsartan: Preparation and In-Vitro Characterization. 2012, Intr. J. Drug Delivery,4(2),30-41. (Impact factor : 1.02)
 11. P.S.Rajinikanth, J. Balasubramaniam, M.Thilek kumar and Y.V. Rajesh, Spray Drying as an Approach for Enhancement of Dissolution and Bioavailability of Raloxifene Hydrochloride. Intr. J. Drug Delivery, 2012,4(2), 113-121. (Impact factor : 1.02)
 12. P.S.Rajinikanth and B.Mishra, Stomach-site specific drug delivery system of clarithromycin for eradication of *Helicobacter pylori*". Chem .Pharm .Bull, 2009, 57(10) 1068—1075. (Impact factor : 1.8).
 13. P.S.Rajinikanth and B.Mishra, Floating in situ gelling system for stomach site-specific delivery of clarithromycin to eradicate *H. Pylori.*, Journal of Control Release, 2008,4(1), 33-41. (Impact factor : 8.11).
 14. P.S.Rajinikanth, and B.Mishra, Development and in vitro evaluation of floating in situ gelling system of acethydroxamic acid for clearance of *H.pylori*. Drug. Dev. Ind. Pharm, 2008,34, 577-584.. (Impact factor : 2.45).
 15. P.S.Rajinikanth, and B.Mishra, Development and evaluation of floating–mucoadhesive microspheres of clarithromycin for eradication of *H.pylori*. Chem. Pharm. Bull , 2008, 52(12),45-53. (Impact factor: 1.8).
 16. P.S.Rajinikanth, J.Balasubramaniam and B.Mishra Development and evaluation of a novel floating in situ gelling system of amoxicillin for eradication of *H.pylori*. International Journal of Pharmaceutics, 2007,335 (1),114-122. (Impact factor: 3.99).
 17. J. Balasubramaniam, P. S. Rajinikanth, Jeevan Babu M. Vasudha^c, Vinay, U. Rao , Sodium Alginate Microspheres of Metformin Hcl: Formulation and *In Vitro* Evaluation. Current Drug Delivery, 2007,4, 249-256 . (Impact factor 2.56).
 18. P.S.Rajinikanth and B.Mishra, Preparation and *In Vitro* Characterization of Gellan based Floating Beads of Acethydroxamic Acid for Eradication of *H.pylori*. ,Acta Pharmaceutica , 2007,57 (1), 413–427. (Impact factor: 1.6).
 19. P. S. Rajinikanth, J. Balasubramaniam, V. U. Rao, M. Vasudha, Formulation and in vitro characterization of sodium alginate based beads of glipizide, Acta Pharm. Scientia , 2007,7,42-56..

20. P.S.Rajinikanth, J.Balasubramaniam and B.Mishra, Immediate Release Tablets of Valsartan and Efavirenz: Role of Concentration of Superdisintegrants. , ARS Pharmaceutica, 2008,49(3), 229-243.
21. P.S.Rajinikanth, P.Kumar and B.Mishra., A review on osmotic pump drug delivery system. Journal of Pharmaceutical Research, 2006,21,32-41.
22. P.S.Rajinikanth, C. Sankar and B.Mishra, Sodium alginate Microspheres of Metoprolol Tartrate for Intranasal systemic Delivery: Development and Evaluation. Drug Delivery, 2003, 10 (1) , 21-28. (Impact factor: 4.95).

Conferences, Seminars and presented lectures

Invited Lectures: 02

Conference paper Presentations: 18

International: 10

National: 08

Awards and Recognitions

1. Gold medal award by International conference on pharmacy and pharmacology, held in Bangkok, THAINLAND, 11-13 DE, 2016.
2. *Qualified Graduate Aptitude Test in Engineering (GATE) conducted by IIT- Kharagpur with 94.99.% (2000)*
3. Awarding Senior Research Fellowship (SRF) from Feb 2003 to April, 2007 by University Grants Commission, Ministry of Human Resources Development, Govt Of India

Memberships of the Professional Bodies

- Malaysian Pharmaceutical Society
- Controlled Release Society, Malaysia Chapter
- Tamilnadu Pharmacy Council
- Indian Pharmaceutical Graduates association

Other relevant information (Research citation index)

- Google scholar Citations : **681**
- H-index : **12**
- i10-index : **12**
- <https://scholar.google.com/citations?user=g6-RhUYAAAAJ&hl=en>