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Appendix

10 Appendix

List of Publications

Research articles from Ph.D. work

1. **Rani, V.** and Chawla, R. Design, fabrication, optimization and characterization of memantine-loaded biodegradable PLGA nanoscaffolds for treatment of Alzheimer's disease. Biomed. Mater., 2022, 17(6), 065024. https://doi.org/10.1088/1748-605X/ac9811.
2. **Rani, V.**, Verma, R., Kumar, K. and Chawla, R. Role of pro-inflammatory cytokines in Alzheimer's disease and neuroprotective effects of pegylated self-assembled nanoscaffolds. Curr. Res. Pharmacol. Drug Discovery, 2023, 4, p.100149. https://doi.org/10.1016/j.crphar.2022.100149.
3. **Rani, V.**, Verma, R., Kumar, K. and Chawla, R. pH influenced Self-assembled Stealth Nanoscaffolds encapsulating Memantine for the treatment of Alzheimer's disease. J. Biosci., 2023, 48(3), 31. https://doi.org/10.1007/s12038-023-00343-5.
4. **Rani, V.**, Verma, R and Chawla, R. Biodistribution, Pharmacokinetic and pharmacodynamic effect of self-assembled nanoscaffolds in neurodegenerative condition of Alzheimer's disease (Manuscript has been communicated).

Research articles from allied work

1. Deb, A., Mandurnekar, A.A., **Rani, V.**, Chauhan, T., Mishra, B. and Chawla, R. Formulation and evaluation of curcumin loaded nanofilms for the treatment of wounds. SPER J. Pharm. Biol. Res., 2018, 1(1), 5-9.
2. Neelam, **Rani, V.**, and Chawla, R. Formulation and evaluation of negatively charged liposomes of sertraline hydrochloride for antidepressant activity. Asian J. Pharm., 2020, 14(2), 211-219. https://doi.org/10.22377/ajp.v14i2.3616.
3. Chauhan, T., **Rani, V.**, Sahu, B., Sharma, A., Kheruka, S.C., Gambhir, S., Dube, V., Aggarwal, L.M. and Chawla, R. Negatively charged liposomes of sertraline hydrochloride: Formulation, characterization and pharmacokinetic studies. J. Drug Delivery Sci. Technol., 2020, 58, 101780. https://doi.org/10.1016/j.jddst.2020.101780.
4. Chawla, R., Sahu, B., Mishra, M., **Rani, V.** and Singh, R. Intranasal micellar curcumin for the treatment of chronic asthma. J. Drug Delivery Sci. Technol., 2022, 67,102922. https://doi.org/10.1016/j.jddst.2021.102922.
5. Chawla, R., Karri, V., **Rani, V.**, Mishra, M. and Kumar, K. Factorial design-based nanocarrier mediated formulation of efavirenz and its characterization. Nano LIFE, 2022, 12(02), 2250002. https://doi.org/10.1142/S1793984422500027.

Review articles

1. Kumar, K., **Rani, V.**, Mishra, M. and Chawla, R. New paradigm in combination therapy of siRNA with chemotherapeutic drugs for effective cancer therapy. Curr. Res. Pharmacol. Drug Discovery, 2022, 3, 100103. https://doi.org/10.1016/j.crphar.2022.100103.
2. Kumar, S., Gupta, S., **Rani, V.** and Sharma, P. Pyrazole containing anti-HIV agents: An update. Med. Chem., 2022, 18(8), 831-846. https://doi.org/10.2174/1573406418666220106163846.
3. Chawla, R., **Rani, V.** and Mishra, M. Changing paradigms in the treatment of tuberculosis. Indian J. Tuberc., 2022, 69(4), 389-403. https://doi.org/10.1016/j.ijtb.2021.08.034.

Book chapters

1. Chawla, R., **Rani, V.** and Mishra, M. Nanoparticulate carriers—Versatile delivery systems. Nanopharmaceutical Advanced Delivery Systems, 2021, 31-54**.** https://doi.org/10.1002/9781119711698.ch2.
2. Chawla, R., **Rani, V.**, Mishra, M. and Kumar, K., Integrated role of nanotechnology and pharmacogenetics in diagnosis and treatment of diseases. Pharmacogenetics, 2021, 11-45**.** https://doi.org/10.5772/intechopen.97643.
3. Chawla, R., **Rani, V.**, Mishra, M. and Kumar, K. Computer simulation and modeling in pharmacokinetics and pharmacodynamics. In computer aided pharmaceutics and drug delivery: An application guide for students and researchers of pharmaceutical sciences, 2022, 217-254, Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-16-5180-9_8.
4. Kumar, S., **Rani, V.**, Singh, S., Kapoor, D., Dhanjal, D.S., Thakur, A., Pujari, M., Ramamurthy, P.C. and Singh, J. Arsenic-induced responses in plants: Impacts on biochemical processes. Arsenic in plants: Uptake, consequences and remediation techniques, 2022, 112-128. https://doi.org/10.1002/9781119791461.ch6.

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Department of Pharmaceutical Engineering & Technology, Indian Institute of Technology (BHU), Varanasi

Requisition Form for Allotment of Animal Housing Space

Nature of Work: UG/PG/IDD/Ph.D. /PDF/Project:.....Ph.D.....

User Information

Name of Student: ....Varsha Rani.....

Name of Supervisor/PI: .....Dr. Ruchi Chawla.....

Name & Address of Department/School: Pharmaceutical Engineering and Technology

Phone Number: 8765365963 Email:varsharani.rs.phe17@itbhu.ac.in

Signature of the Student

1. Title of the study: Evaluation of Behavioral, pharmacokinetic and biodistribution properties of Memantine HCL nanoformulation in Alzheimer's disease model.
2. Number of Animals to be housed (**Maximum 40** at one time): 40
3. Species: Swiss Albino
4. Body Weight: 22-30 g
5. Sex: Male and female
6. Any disease conditions: Alzheimer's disease
7. Time duration: From 17.11.2021 To: 10.1.2022
8. IAEC Approval No. (*Valid certificate needs to be enclosed*): Dean/2019/IAEC/1634

Special request (if any): No

Signature of the Supervisor/PI /HoD/Coordinator

Date:16.11.2021

For office use only----------

SPACE ALLOCATION (Approved/Not Approved):				
Room	**Rack**	**Spaces**	**Duration**	
				Animal House In-charge (Signature with seal)

BANA RAS HINDU UNIVERS ITY
FACULTY OF MED ICINE
INSTITUTE OF MEDIC AL SCIENCE S
VA RANASI 221 005
(542/GO/ReBi//S/02/CPCSEA dated 26.5.2017)

NO. Dean/2o19/ iAEC/ ; 2 3$

Dated: 17.11.2019

The Head
Departm e flt Of Pharm aceu tic al Engineeri ng & Technology
Indian Institu te of Technology
Banaras Hindu Uni vers ity

Dear Sir,

A meeting of the Central Animal Ethical Committee of the University was held on 16.11.2019 & I 7.1 1.20 1 9at 10.00AM in the Chamber of the Dean, Faculty of Medicine, IMS for animal ethical clearance of the proposal Submitted by the following.

Name of the Student	Varsha Rant
Title	Evaluation of pharmacokinetic and biodistribution properties of Memantine HCL iianoforirulation in Alzheimer's disease model
No. of Animals Approved	Swiss Albino Mice-75
Suggestion	The CPCSEA Guidelines should be followed strictly while handling the animals
Remarks	**The Synopsis is approved by the Central Animal Ethical Committee of the University**

This i5 for your informatio n and necessary action at your end.

Yours sincerely,

(R K JAIN)
DEAN

CHAIRMAN
CENTRAL AN IMAL ET HICAL COMMITTEE OF THE UNIVERSITY