

RUCHIKA

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**EDUCATIONAL QUALIFICATION**

Course	School/College/ University/Institute	Board/University	Completion year	%age/ CPGA
PhD	CSIR-Institute of Himalayan Bioresource Technology	Academy of Scientific and Innovative Research (AcSIR)	Pursuing (joined in Aug,2020)	-
Masters in science	Lovely Professional University, Jalandhar(H.P)-INDIA	Lovely Professional University	2020	9.45
Bachelors in science	Post Graduate Gov. College Dharamshala (H.P)-INDIA	Himachal Pradesh University	2018	8.90
Higher Secondary Education	C.R.C.G.S.S.S, Rehan, Nurpur (H.P)-INDIA	Himachal Pradesh University	2015	89.4 %
Matriculation	D.A.V Public school, Rehan, Nurpur (H.P)- INDIA	CBSE	2013	9.6

SCIENTIFIC SKILLS

- ✓ **Formulation and drug delivery:** Physico-chemical characterization of nutraceuticals including solubility, partition coefficient etc. Ameliorating bioavailability and therapeutic efficacy of nutraceuticals by employing novel formulation approaches such as polymeric conjugation approach, Self-emulsifying drug delivery system, solid dispersion, oral thin films, nanofiber technology, inclusion complexation etc.
- ✓ **Characterization of formulations:** Characterization of developed formulations via DLS, microscopy techniques (SEM and TEM), XRD and spectroscopy techniques (UV-Visible, NMR, MALDI-TOF MS, FT-IR). Enumeration of drug content, *in vitro* release and dissolution using UV-Visible and HPLC.
- ✓ **In-vivo studies:** Preliminary knowledge of animal handling, oral dosing and parameters of kinetics and protocol in rodent models. Familiar with *in vivo* studies using zebrafish model.
- ✓ **Molecular techniques:** SDS-PAGE, Western Blot, PCR, qRT-PCR.

AWARDS

- Awarded **IGSTC-PhD Industrial Exposure Fellowship (PIEF) 2022**, from IGSTC.
- Receiving fellowship as **Junior Research Fellow** from Council of Scientific and Industrial Research (CSIR), New Delhi.
- Qualified All India **CSIR-NET-JRF** (Life Science) December, 2019 (Rank: 138).
- Selected among 23 for Participation in Workshop sponsored by **DST-SERB** under 'KARYASHALA' of Mission ABHYAAS "**Hands-on Workshop on Advanced Techniques in Natural Products & Medicinal Chemistry**" on 15th-22nd March, 2022, organized by Natural Products & Medicinal Chemistry Division, **CSIR-Indian Institute of Integrative Medicine, Jammu**.

EXTRACURRICULAR ACTIVITIES

- Selected for Participation in Online Workshop On Basic Bio Methodology Of Laboratory Mice And Rats: Handling, Restraining, Identification methods, Injections, Blood Sampling, Anaesthesia/Analgesia and Euthanasia, on 6th-10th December, 2021 organised by **National Centre for Biological Science - Tata Institute of Fundamental Research, Bengaluru, INDIA**.
- Selected for poster presentation in **8th International Symposium on Current Trends in Drug Discovery Research "CTDDR-2022"** on 12th-14th March, 2022 held at **CSIR-Central Drug Research Institute, Lucknow, INDIA**.

PUBLICATIONS

- **Ruchika**, Kumari S., Dhiman P., Singh D., Saneja A.* (2022). *R- α -Lipoic Acid Conjugated to D- α -Tocopherol Polyethylene Glycol 1000 Succinate: Synthesis, Characterization, and Effect on Antiseizure Activity*. **Journal of Agricultural and Food Chemistry**, 70, 25, 7674–7682 <https://doi.org/10.1021/acs.jafc.2c01685> (IF:5.895)
- **Ruchika**, Sharma A., Saneja A.* (2022). Zebrafish as A Powerful Alternative Model Organism for Preclinical Investigation of Nanomedicines, **Drug Discovery Today**, 27, 5, 1513 - 1522 <https://doi.org/10.1016/j.drudis.2022.02.011> (IF: 8.369)
- Dhritlahre R. K., **Ruchika**, Padwad Y., Saneja A.* (2021). Self-emulsifying formulations to augment therapeutic efficacy of nutraceuticals: From concepts to clinic. **Trends in Food Science & Technology**, 115, 347-365. <https://doi.org/10.1016/j.tifs.2021.06.046> (IF: 16.002)
- Khan N., **Ruchika**, Dhritlahre R. K., Saneja A.* (2022). Recent advances in dual ligand targeted cancer therapy. **Drug Discovery Today**, 27, 2288-2299 <https://doi.org/10.1016/j.drudis.2022.04.011> (IF: 8.369)
- Khan N., Bhardwaj V.K., **Ruchika**, Purohit R.*, and Saneja A.* (2023). Deciphering the interactions of genistein with β -cyclodextrin derivatives through experimental and microsecond timescale umbrella sampling simulations. **Journal of Molecular Liquids**, 374, 121295 <https://doi.org/10.1016/j.molliq.2023.121295>. (IF: 6.633)

- Sharma, P., **Ruchika**, Dhiman, P., Kumar, R., Saneja, A., & Singh, D. (2023). A solid dispersion of Citrus reticulata peel biowaste as an effective antiepileptic: Sustainable approach toward value addition and agro-industrial waste valorisation. **Journal of Drug Delivery Science and Technology**, 81, [104238](https://doi.org/10.1016/j.jddst.2023.104238) <https://doi.org/10.1016/j.jddst.2023.104238> (IF: 5.0).
- **Ruchika**, Bhardwaj, N., Saneja, A*. Orally fast dissolving α -lipoic acid electrospun nanofibers mitigates lipopolysaccharide induced inflammation in RAW 264.7 macrophages. **Biomaterial Advances (Communicated)**
- **Ruchika**, Saneja A.* The dawning era of oral thin films for nutraceutical delivery: from laboratory to clinic. **Biotechnology Advances. (Communicated)**

Book chapters

- **Ruchika**, Saneja A*. (2021). Valorization of Sitosterol from Agricultural Waste as Therapeutic Agent. In: Rana A., Saneja A., Kumar S., Lichtfouse E (eds) Sustainable Agriculture Reviews 56. **Sustainable Agriculture Reviews**, vol 56. Springer, Cham. https://doi.org/10.1007/978-3-030-84405-9_5
- **Ruchika**, Dhritlahre R. K., Saneja A*. (2021) Nano-delivery of Bioactive Constituents from Apple Pomace. In: Rana A., Saneja A., Kumar S., Lichtfouse E (eds) Sustainable Agriculture Reviews 56. **Sustainable Agriculture Reviews**, vol 56. Springer, Cham. https://doi.org/10.1007/978-3-030-84405-9_3

Declaration

I do hereby declare that the particulars of information and facts stated here in above are correct and complete to the best of my knowledge.

(Ruchika)