

## Curriculum Vitae

**Name** DR. RANABIR SAHU

**Designation** Assistant Professor & Head

**Mailing Address** Department of Pharmaceutical Technology, University of North Bengal, P.O.- NBU, Dist- Darjeeling, West Bengal, Pin -734013, India.

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### Academic qualification:

2007: B.Pharm, Jadavpur University, India

2009: M.Pharm, Jadavpur University, India

2014: Ph.D in Pharmacy, Jadavpur University, India

### Professional experiences:

#### Teaching Experience: 03 years 07 months

October 9, 2018 to till date : Assistant Professor, Department of Pharmaceutical Technology, University of North Bengal, Darjeeling, W.B., India

#### Research Experience: 5 years 6 months

Project Trainee, 2009-2010	Bose Institute, India
Post Doctoral Fellow, 2014- 2016	IISER-Kolkata, India
Post Doctoral Fellow, 2016- 2018	Jadavpur University, India

**No. of Publications:** (a) Journals: 38 (b) Book(s): 01 (c) Book chapter(s): 02

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**Google Scholar:** <https://scholar.google.com/citations?user=E6U1AIMAAAAJ&hl=en>

## **List of Publications:**

### **Research papers:**

1. Giri, S., Sahu, R., Paul, P., Nandi, G., & Dua, T. K. (2022). An updated review on Eupatorium adenophorum Spreng.[Ageratina adenophora (Spreng.)]: traditional uses, phytochemistry, pharmacological activities and toxicity. **Pharmacological Research-Modern Chinese Medicine**, 100068. (Springer Nature)
2. Giri, S., Sen, S., Singh, R., Paul, P., Sahu, R., Nandi, G., & Dua, T. K. (2022). Current challenges in different approaches to control COVID-19: a comprehensive review. **Bulletin of the National Research Centre**, 46(1), 1-13. (Springer Nature)
3. Chatterjee, A., Khanra, R., Chattopadhyay, M., Ghosh, S., Sahu, R., Nandi, G, Maji, HS., Chakraborty, P (2022). Pharmacological studies of rhizomes of extract of Cyperus tegetum, emphasized on anticancer, anti-inflammatory and analgesic activity. **Journal of Ethnopharmacology. Elsevier (Impact Factor: 4.36)**
4. Gangopadhyay, M., Das, A. K., Sahu, R., Saha, A., Dey, S., Bandyopadhyay, S., Mitra, A. (2021). Evaluation of growth response for mass production and accumulation of 2-hydroxy-4-methoxybenzaldehyde in endangered Hemidesmus indicus by an aeroponic system. **Industrial Crops and Products 172:114072. Elsevier (Impact Factor: 5.645)**
5. Ashraf, G. J., Das, P., Dua, T. K., Paul, P., Nandi, G., Sahu, R. (2021). High-performance thin-layer chromatography based approach for bioassay and ATR–FTIR spectroscopy for the evaluation of antioxidant compounds from Asparagus racemosus Willd. aerial parts. **Biomedical Chromatography 35:e5230. Wiley (Impact Factor: 1.902)**
6. Sethi, A., Sharaff, M., Sahu, R. (2021) Deciphering common temporal transcriptional response during powdery mildew disease in plants using meta-analysis. **Plant Gene:100307. Elsevier (Cite Score: 4.3)**
7. Dewanjee, S., Vallamkondu, J., Chakraborty, P. C., Kalra, R., Gangopadhyay, M., Sahu, R., Medala, V., John, A., Reddy, P. H., Kandimalla, R. (2021) The Emerging role of HDACs: Pathology and Therapeutic targets in Diabetes Mellitus. **Cells 10:1340. MDPI (Impact Factor: 6.600)**
8. Sahu, R., Kundu, P., Sethi, A. (2021) In vitro antioxidant activity and enzyme inhibition properties of wheat whole grain, bran and flour defatted with hexane and supercritical fluid extraction. **LWT-Food Science and Technology 146:111376. Elsevier (Impact Factor: 4.952)**
9. Sahu, R., Narayanaswamy, P., Kundu, P., Kumar, A. (2021) Differential Response of Phytohormone Signalling Network Determines Nonhost Resistance in Rice during Wheat Stem Rust (Puccinia graminis f. sp. tritici) Colonization. **Plant Pathology 70:1409-1420. Wiley (Impact Factor: 2.590)**

10. Kundu P, **Sahu R** (2021) GIGANTEA confers susceptibility to plants during spot blotch attack by regulating salicylic acid signalling pathway. **Plant Physiology and Biochemistry** **167:349-357. Elsevier (Impact Factor: 4.270)**
11. **Sahu R**, Dua TK., Das S, Feo VD, Dewanjee S (2019) Wheat phenolics suppress doxorubicin-induced cardiotoxicity via inhibition of oxidative stress, MAP kinase activation, NF- $\kappa$ B pathway, PI3K/Akt/mTOR impairment, and cardiac apoptosis. **Food and Chemical Toxicology** **125: 503-519. Elsevier (Impact Factor: 6.023)**
12. Barbhuiya, F. Z., **Sahu, R.**, Das, B. K., Pal, H. (2019) HPLC Fingerprinting Profile of some Phenolic Acid and Flavonoids in Rare Medicinal Plant *Leucas biflora* for Biomedical Implication. **NDP JOURNAL OF HORTICULTURE AND PLANT SCIENCE**. 2, 1-4.
13. Pal H, Kundu A, **Sahu R**, Sethi A, Hazra P, Chatterjee S (2018) Unraveling the metabolic behavior in tomato high pigment mutants (hp-1, hp-2dg, ogc) and non ripening mutant (rin) during fruit ripening. **Scientia Horticulturae** 246: 652-663. **Elsevier (Impact Factor: 3.643)**
14. Sharma S\*, **Sahu R\***, Navathe S, Mishra VK, Chand R, Singh PK, Joshi AK, Pandey SP (2018) Natural variation in elicitation of defense-signaling associates to field resistance against the spot blotch disease in bread wheat (*Triticum aestivum* L.). **Frontiers in Plant Science**, 9:636. [\*Equal First Author] **Frontiers (Impact Factor: 5.753)**
15. **Sahu R**, Kundu P, Sharaff M, Pradhan M, Sethi A, Mishra V. K. etc (2016) Understanding the defense-related mechanism during the wheat's interaction with fungal pathogens. **Indian Phytopathology**. 69: 203-205.
16. **Sahu R**, Sharaff M, Pradhan M, Sethi A, Bandopadhyay T, et al. (2016) Elucidation of defense-related signaling responses to spot blotch infection in bread wheat (*Triticum aestivum* L.). **The Plant Journal** 86: 35-49. **Wiley (Impact Factor: 6.417)**
17. Khanra R, Dewanjee S, Dua TK, **Sahu R**, Gangopadhyay M, et al. (2015) *Abroma augusta* L.(Malvaceae) leaf extract attenuates diabetes induced nephropathy and cardiomyopathy via inhibition of oxidative stress and inflammatory response. **Journal of Translational Medicine** 13: 1-14. **BMC (Springer Nature) (Impact Factor: 5.532)**
18. Dewanjee S, Gangopadhyay M, Das U, **Sahu R**, Samanta A, et al. (2014) Signal transducer and oxidative stress mediated modulation of phenylpropanoid pathway to enhance rosmarinic acid biosynthesis in fungi elicited whole plant culture of *Solenostemon scutellarioides*. **Enzyme and Microbial Technology** 66: 1-9. **Elsevire (Impact Factor:3.493 )**
19. **Sahu R**, Gangopadhyay M, Dewanjee S (2013) Elicitor-induced rosmarinic acid accumulation and secondary metabolism enzyme activities in *Solenostemon scutellarioides*.

20. **Sahu R**, Dewanjee S, Gangopadhyay M (2013) Bioproduction and optimization of rosmarinic acid production in *Solenostemon scutellarioides* through media manipulation and conservation of high yielding clone via encapsulation. **Natural Product Communications** 8: 1275-1278. (Impact Factor:0.986)
21. Dewanjee S, **Sahu R**, Karmakar S, Gangopadhyay M (2013) Toxic effects of lead exposure in Wistar rats: Involvement of oxidative stress and the beneficial role of edible jute (*Corchorus olitorius*) leaves. **Food and Chemical Toxicology** 55: 78-91. Elsevier (Impact Factor: 6.023)
22. Dewanjee S, Gangopadhyay M, **Sahu R**, Karmakar S (2013) Cadmium induced pathophysiology: prophylactic role of edible jute (*Corchorus olitorius*) leaves with special emphasis on oxidative stress and mitochondrial involvement. **Food and Chemical Toxicology** 60: 188-198. Elsevier (Impact Factor: 6.023)
23. **Sahu R**, Dewanjee S, Dua TK, Gangopadhyay M, Das AK, et al. (2012) Derespliation coupled with in vitro antioxidant assay of two flavonoid glycosides from *Diospyros peregrina* fruit. **Natural Product Research** 26: 454-459. Taylor & Francis (Impact Factor: 2.862)
24. **Sahu R**, Dewanjee S (2012) Differential physiological and biochemical responses under variable culture conditions in micro-propagated *Solenostemon scutellarioides*: an important ornamental plant. **Natural Products and Bioprospecting** 2: 160-165. Springer
25. Dewanjee S, Mandal V, **Sahu R**, Dua TK, Manna A, et al. (2011) Anti-inflammatory activity of a polyphenolic enriched extract of *Schima wallichii* bark. **Natural Product Research** 25: 696-703. Taylor & Francis (Impact Factor: 2.862)
26. Dewanjee S, Maiti A, **Sahu R**, Dua TK, Mandal V (2011) Effective control of type 2 diabetes through antioxidant defense by edible fruits of *Diospyros peregrina*. **Evidence-Based Complementary and Alternative Medicine** 2011. Hindwai (Impact Factor: 1.813)
27. Bose SK, Dewanjee S, **Sahu R**, Dey SP (2011) Effect of bergapten from *Heracleum nepalense* root on production of proinflammatory cytokines. **Natural Product Research** 25: 1444-1449. Taylor & Francis (Impact Factor: 2.862)
28. Das AK, **Sahu R**, Dua TK, Bag S, Gangopadhyay M, et al. (2010) Arsenic-induced myocardial injury: protective role of *Corchorus olitorius* leaves. **Food and Chemical Toxicology** 48: 1210-1217. Elsevier (Impact Factor: 6.023)
29. Das AK, Dewanjee S, **Sahu R**, Dua TK, Gangopadhyay M, et al. (2010) Protective effect of *Corchorus olitorius* leaves against arsenic-induced oxidative stress in rat brain. **Environmental Toxicology and Pharmacology** 29: 64-69. Elsevier (Impact Factor: 4.860)
30. Das AK, Bag S, **Sahu R**, Dua TK, Sinha MK, et al. (2010) Protective effect of *Corchorus olitorius* leaves on sodium arsenite-induced toxicity in experimental rats. **Food and**

**Chemical Toxicology 48: 326-335. Elsevier (Impact Factor: 6.023)**

31. Mandal V, Dewanjee S, **Sahu R**, Mandal SC (2009) Design and optimization of ultrasound assisted extraction of curcumin as an effective alternative for conventional solid liquid extraction of natural products. **Natural Product Communications** 4: 95-100. (Impact Factor:0.986)
32. Maiti A, Dewanjee S, **Sahu R** (2009) Isolation of hypoglycemic phytoconstituent from Swietenia macrophylla seeds. **Phytotherapy Research** 23: 1731-1733. **Wiley (Impact Factor:5.878)**
33. Dewanjee S, **Sahu R**, Mandal V, Maiti A, Mandal SC (2009) Antidiabetic and antioxidant activity of the methanol extract of Diospyros peregrina fruit on Type I diabetic rats. **Pharmaceutical Biology** 47: 1149-1153. **Taylor & Francis (Impact Factor:6.023)**
34. Dewanjee S, Maiti A, **Sahu R**, Dua TK, Mandal SC (2009) Study of anti-inflammatory and antinociceptive activity of hydroalcoholic extract of Schima wallichii bark. **Pharmaceutical Biology** 47: 402-407. **Taylor & Francis (Impact Factor:3.503)**
35. Dewanjee S, Das AK, **Sahu R**, Gangopadhyay M (2009) Antidiabetic activity of Diospyros peregrina fruit: effect on hyperglycemia, hyperlipidemia and augmented oxidative stress in experimental type 2 diabetes. **Food and Chemical Toxicology** 47: 2679-2685. **Elsevier (Impact Factor: 6.023)**
36. Mandal SC, Jana GK, Das S, **Sahu R**, Venkidesh R, et al. (2008) Hepatoprotective and antioxidant activities of Smilax chinensis L. root. **Pharmacologyonline** 2: 529-535. (Impact Factor: 0.31)
37. Dewanjee S, Maiti A, Das S, **Sahu R**, Mandal S (2008) Evaluation of in vitro antioxidant activity of Diospyros peregrina fruits. **International Journal of Pharmacology and Biological Sciences** 2: 135-144.
38. Dewanjee S, Bose SK, **Sahu R**, Mandal SC (2008) Antidiabetic effect of matured fruits of Diospyros peregrina in alloxan-induced diabetic rats. **International Journal of green pharmacy** 2: 95.

**Book or Book Chapters:**

1. Paul, Paramita , Anindita Mondal Gantait, **Ranabir Sahu** and Gouranga Nandi. Fundamentals of Pharmacotherapeutics for D.Pharm Students: Everest Publishing House, 2022.
2. **Sahu, R.**, Dewanjee, S. (2021). Carotenoids as Antidiabetic Agents. In: Carotenoids: Structure and Function in the Human Body. Md. Zia-Ul-Haq, S Dewanjee, Md. Riaz, Springer, pp. 513-532.
3. **Sahu, R.**, Dewanjee, S. (2010). Biodiversity. In: All you need to know more about herbal drug. S.C. Mandal (Ed). New Central book Agencies, Kolkata, India, 2, pp.16-21.

## Research Projects:

Title of the Project	Funding Agency	Year of Sanction and duration	Cost (INR)	PI or Co-PI	Status
Antidiabetic activity of Sikkim and Darjeeling Himalaya region medicinal plants	University of North Bengal, India	2019 & 1 years	150000/-	Dr. Ranabir Sahu	Completed
Evaluation of Pharmacognostic parameters, Phytochemical characterization and Pharmacological activities of Medicinal Plants found in North East India	University of North Bengal, India	2020 & 1 years	150000/-	Dr. Ranabir Sahu	Completed
In search of novel antidiabetic lead from <i>Asparagus racemosus</i> Willd. : A Sikkim and Darjeeling Himalayan regional Medicinal Plant	DST-SERB, India	2020 & 2 years	3000000/-	Dr. Ranabir Sahu	Ongoing
Development, characterization and antidiabetic potentials of protocatechuic acid and taraxerol derived nanoparticles	UGC, India	2020 & 2 years	1000000/-	Dr. Ranabir Sahu	Ongoing

## Conference Attended:

### International

1. Presented paper at three days **International Conference on Herbal Drug**, Bangalore, Karnataka, India; February, (2009).
2. Presented paper in five days “**5<sup>th</sup> World Congress of Cellular and Molecular Biology**”, Indore, India; November 02-06, (2009).
3. Presented paper in three days International Conference on “**6<sup>th</sup> Intl. Plant Tissue Culture & Biotechnology Conference**”, University of Dhaka, Dhaka, **Bangladesh**; 3-5<sup>th</sup> December (2010).
4. Presented poster in five days International Conference on “**9<sup>th</sup> International Wheat Conference**”, **Sydney, Australia**; 20-25<sup>th</sup> September (2015).
5. Presented poster in five days International Conference on “**6<sup>th</sup> International Conference Plant, Pathogen and People**”, New Delhi, **India**; 23-27<sup>th</sup> February (2016).

6. Presented poster in one day International Seminar on “Future of Education, Research and Prospects in Pharmacy” Jakir Hossain Institute of Pharmacy, Miyapur, Murshidabad, West Bengal; held on 19.01.2020.

#### **National**

1. Presented paper in two days National Conference on Environmental Biotechnology, Tiruchirapalli, Tamil Nadu, India; November, 2008.
2. Presented paper in one day scientific seminar on “Emerging Novel Approaches of Pharmaceutical Science in Recent era” organized by GRY Institute of Pharmacy, Indore, February, 2013.
3. Presented paper in two days scientific seminar on “Research and development in drugs and pharmaceuticals: An industrial perspective” organized by Jadavpur University, Kolkata, February 23-24, 2013.
4. Presented poster in one day seminar on “DBS Department Day Biologia 2015” organized by DBS, IISER-Kolkata, March 21, 2015.
5. Presented poster in two days seminar on “Quality control and standardization of Ethnopharmaceuticals in the present era” organized by Centurian University of Technology, and Management, Bhubaneswar, India, March 4-5, 2018.
6. Presented poster in one day seminar on “Pharmacy & Healthcare: Traditional Knowledge to Modern Techniques” organized by Jadavpur University, India, September 14, 2018.
7. Presented poster in one day seminar on “*In vitro* antioxidant assay of two flavonoid glycosides from *Diospyros peregrina* fruit” organized by Department of Chemistry, University of North Bengal, Darjeeling, West Bengal, India-734013, 2020.
8. Presented poster in one day seminar on “Cardioprotective potential of wheat phenolics in ameliorating doxorubicin-induced myocardial injury by attenuation of oxidative stress” organized by Department of Chemistry, University of North Bengal, Darjeeling, West Bengal, India-734013, 2020.

#### **Participated In Workshop:**

1. Attained two days National Workshop on: “Instrumental Chromatography and Drug Discovery” organized by School of Natural Product Studies, December 8-9, 2008.
2. Completed training of 9 months (from 01.07.2009 to 31.03.2010) on Plant Biotechnology and Analytical Techniques from Department of Botany, BOSE Institute, 93/1, Acharya Prafulla Chandra Road, Kolkata - 700 009.

3. Attained six days **National Workshop on: “Botanical Identification & Evaluation of Indian Medicinal Plant”** organized by **School of Natural Product Studies, Jadavpur University, Kolkata, November 20-26, 2013.**

**4. Achievement & Awards:**

Sl. No.	Name of Award	Awarding agency	Year
1.	GATE Scholarship	IIT Kanpur, India	2007
2.	Junior Research Fellowship	UGC, India	2010
3.	Senior Research Fellowship	UGC, India	2012
4.	Post Doctoral Fellowship	UGC, India	2014
5.	Travel Grant	DBT, India	2015
6.	3 <sup>rd</sup> Position in Poster Presentation	ADTU, India	2019

**Membership of Learned Societies:**

**1. West Bengal Pharmacy Council, India**

**2. Society of Ethnopharmacology**