Dr. Sourav Ghosh

Associate Professor of Dept. of Pharmaceutical Technology, Adamas University,

Kolkata, West Bengal, India

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Vidwan portal URL: https://vidwan.inflibnet.ac.in//profile/328212



To impart intrinsic knowledge of the subject in theoretical, practical and research aspects. To indulge high quality of discipline and sincerity in the students to make them successful in their academic career and produce them as responsible and duty-minded citizens of our country

RESEARCH INTEREST

Neuropharmacological study; Mechanism based drug Developments; Isolation of Natural Products; Toxicity studies; *In-Vitro and In-Vivo* study; Molecular docking and Network Pharmacology (*In-silico*) study

PROFESSIONAL EXPERIENCE

- ➤ Presently worked as an associate prof, in Adamas University, Kolkata, W.B from 01/12/2022 to till date.
- ➤ Served as an professor and H.O.D (Pharmacology Dept.) in S. D. College of pharmacy & vocational studies, Muzaffarnagar, U.P. from 09/03/2022 to 30/11/2023
- ➤ Served as an associate prof. in S. D. College of pharmacy & vocational studies, Bhopa Road, Muzaffarnagar, U.P. from 01/05/2015 to 08/03/2022
- ➤ Served as an assistant prof. in S. D. College of pharmacy & vocational studies, Bhopa Road, Muzaffarnagar, U.P. from 01/05/2012 to 30/04/2015
- ➤ Served as a lecturer in S. D. College of pharmacy & vocational studies, Bhopa Road, Muzaffarnagar, U.P. from 10/09/2009 to 30/04/2012
- ➤ Total Teaching experience- Approx. 16 years



KEY SKILLS

- > In-vitro and in-vivo pharmacological studies
- > Toxicity study
- ➤ *In-silico* study to understand possible mechanism of action
- > Spectral analysis
- Familiar with computer software like MS office tools
- ➤ Good Technical and Analytical skills
- ➤ Demonstrated ability to work as a team player as well as an individual with good communication skill

ACADEMIC DETAILS

- **Ph.D.** (Pharmaceutical Science): From IFTM University, Moradabad (U.P.)
- ➤ M. Pharma (Pharmacology): From Calcutta Institute of Pharmaceutical Sciences and Allied Health Sciences, Uleberia, under Maulana Abul Kalam Azad University of Technology, W.B. with 83.8%
- ➤ B. Pharma: From Calcutta Institute of Pharmaceutical Sciences and Allied Health Sciences, Uleberia, under Maulana Abul Kalam Azad University of Technology, W.B. with 77.4%
- ➤ XII: From Bali High School, W.B.C.H.S.E. Board in 2003 with 61%
- **X:** From Arambagh High School, W.B.S.E.Board in 2001 with 68.5%

PROFESSIONAL AFFILIATION

Registered pharmacist, West Bengal Pharmacy Council, salt lake (W.B.), India (Registration No. A8632)

Ph.D. TOPIC

Title: "Neuropharmacological studies on some traditional medicinal plants"

TRAINING PROGRAMME

Bioequivalence study course from Bioequivalence study centre, Jadavpur University, Jadavpur, West Begal

INDUSTRIAL EXPOSURE

- Completed industrial training at Blue Cross Laboratories Pvt Ltd, Verna, Goa in 2006
- ➤ Join as a trainee in Dabur Pharma Pvt.Ltd, Kalyani, West Bengal in 2007.

ARTICLES PUBLISHED

- ➤ Chowdhury SR, Ghosh S, Basu B, Sen A, Digar A, Halder A, Prajapati B. Deciphering the Antidepressant Potential of Piper betle L. Essential Oil and Its Inclusion Complex: Network Pharmacology and Experimental Insights. Molecular Neurobiology. 2025 Jun 16:1-23.
- ➤ Dutta S, Chatterjee S, Ghosh S, Basu B, Prajapati B, Ali N. Exploring the Anxiolytic and Antidepressant-Like Effects of Citrus Maxima Oil and its Inclusion Complex: A Focus on GABAergic and Serotonergic Pathways. Journal of Pharmaceutical Innovation. 2025 Apr;20(2):34.
- ➤ Chowdhury SR, Ghosh S, Chatterjee S, Murtuja S, Rakshit G, Basu B, Prajapati B, Ali N. Antidepressant-Like Effects of Hydroxychavicol-Enriched Piper betle L. Leaf Extract in Chronic Mild Stress–Induced Rodent Models and Possible Mechanism (s) of Action Involved. Chemistry & Biodiversity. 2025 Apr 14:e202402842.
- ➤ Basu B, Dutta S, Rahaman M, Dutta S, Ansari MN, Prajapati BG, Dutta A, Ghosh S. Exploring the Impact of Polysaccharide-Based Nanoemulsions in Drug Delivery. Journal of Biomedical Materials Research Part B: Applied Biomaterials. 2025 May;113(5):e35582.
- ➤ Chatterjee A, Chatterjee P, Irani R, Ghosh S, Basu B, Prajapati B. Impact of Polyphenol-Rich Chocolate on Microbial Diversity and Human Health: A Comprehensive Review. Current Nutrition & Food Science. 2025 Feb 6.
- ➤ Basu B, Rahaman M, Ghosh S, Dutta S, Kumar A, Mukherjee S, Singh S. Emerging silk sericin-based formulation fortified with therapeutics in the management of diabetic wound and skin tissue regeneration. Zeitschrift für Naturforschung C. 2025 Feb 21.
- ➤ Chowdhury SR, Ghosh S, Rahaman M, Dutta S. Role of Polyphenols to Attenuate Depressive Disorders and Cognitive Impairments Associated with Diabetes Mellitus—A Comprehensive Review. The Natural Products Journal. 2025 Apr;15(3):E060624230792.
- ➤ Chowdhury SR, Ghosh S. *Piper betle*: Ancient Remedies and Modern Neuropharmacological Insights. The natural product Research, Volume 21, Issue, Dec, 2024 e15734072342263.
- ➤ Ghosh S, Dutta S, Basu B, Prajapati BG. Bio-based Polymers and Microcarriers Improve Stability and Efficacy of Essential Oils. Current Bioactive Compounds, Volume 21, Issue , Dec, 2024, e15734072332644.
- > Ghosh S, Chowdhury SR, Rahaman M, Basu B, Prajapati B. Revolutionizing influenza

- treatment: a deep dive into targeted drug delivery systems. Current Pharmaceutical Biotechnology. 2024 Oct 21.
- ➤ Rahaman M and Ghosh S, Natural Product Interventions in Peripheral Diabetic Neuropathy: A Multi-Target Approach, The Natural Products Journal; Volume 15, Issue, Sep,2024, e22103155334599.
- ➤ Ghosh S, Chowdhury SR, Ghosh S, Rahaman M, Dutta S. Mechanistic Insights into the Neuroprotective Effects of Natural Products in Diabetic Neuropathy, Current Bioactive Compounds; Volume 21, Issue, sep,2024, e15734072321268.
- ➤ Dutta S, Ghosh S, Rahaman M, Chowdhury SR. Plant-derived Exosomes: Pioneering Breakthroughs in Therapeutics, Targeted Drug Delivery, and Regenerative Medicine. Pharmaceutical Nanotechnology. 2024 Jun 4.
- ➤ Chowdhury SR, Ghosh S, Rahaman M, Dutta S. Advancing Precision Medicine with Nanosensor: Emerging Technologies for Early Diagnosis of Heart Disease, Current Nanomedicine; Volume 14, Issue, June 2024, e210624231201.
- ➤ Ghosh S, Kumar A, Sachan N, Chandra P. Evaluation of the Antidepressant-like Effect of Total Sterols Fraction and Stigmasterol Isolated from Leaves of Aegle marmelos and Possible Mechanism (s) of Action Involved. Current Drug Discovery Technologies. 2022; 19(2): e290721195144
- ➤ Ghosh S, Kumar A, Sachan N, Chandra P. Anxiolytic and antidepressant-like effects of essential oil from the fruits of Piper nigrum Linn.(Black pepper) in mice: involvement of serotonergic but not GABAergic transmission system. Heliyon. 2021 Apr 1; 7(4):e06884.
- ➤ Garg A, Kumar A, Singh V, Agarwal K, Ghosh S. Design, Synthesis and Biological Evaluation of Some New Piperazine Associated Hydrazone Derivatives. Journal of Cardiovascular Disease Research. 2021; 12(5); 686-695
- ➤ Ghosh S, Kumar A, Sachan N, Chandra P. Re-exploring an Epicentre Spice with Immense Therapeutic Potentials: Black Pepper (Piper nigrum). Current Nutrition & Food Science. 2020 Dec 1; 16(9):1326-37.
- ➤ Ghosh S, Kumar A, Sachan N, Aggarwal I, Chandra P. GABAergic and Serotonergic System Mediated Psychoneuropharmacological Activities of Essential Oil from the Leaves of Aegle marmelos: An in vivo and in silico Approach. Journal of Essential Oil Bearing Plants. 2020 Nov 1; 23(6):1265-82.
- ➤ Ghosh S, Kumar A, Sachan N, Chandra P. Bioactive Compounds and Distinctive Pharmacological Activity Guided Review of Aegle marmelos: A Miraculous Plant of Indigenous Medicine System. Current Bioactive Compounds. 2020 Oct 1; 16(7):965-77.
- ➤ Kumar A, Ghosh S. An experimental evaluation of Ageratum conyzoides on membrane

- stabilization and protein denaturation during acute inflammation and arthritis. Biomedical and Pharmacology Journal. 2011 Mar 29; 4(2):313-7.
- ➤ Kumar A, Singh V, Ghosh S. Anticonvulsant activity of 1,3,4-oxadiazole, Journal of Pharmacy Research, 2012, 5(6), 3092-3095
- ➤ Kumar A, Singh V, Ghosh S. An experimental evaluation of in vitro immunomodulatory activity of isolated compound of Ricinus communis on human neutrophils. International Journal of Green Pharmacy (IJGP). 2011; 5(3).
- ➤ Ghosh S, Upadhay A, Singh A, Kumar A. Investigation of antimicrobial activity of silver nano particle loaded cotton fabrics which may promote wound healing. International Journal of Pharma and Bio Sciences. 2010; 1(3):1-0.
- ➤ Debasish D, Ghosh S, Roy AK, Haque R, Samanta S. Study of antioxidant activity of Hygrophila difformis. Int. J. Drug Dev. & Res. 2010; 2:113-20.
- ➤ Ghosh S, Debasish D, Samir S, Gupta A, Chaudhary R, Evaluation of synergistic effect of methanolic leaves extract of Hygrophila difformis on prolongation of sleeping time along with thiopentone sod. A comparative study with diazepam, International Journal of Pharma Professional's Research. 2010;1(1)
- ➤ Ghosh S, Rajvanshi A, Kishun S. Assessment the influence of patient counseling on quality of life in type-II diabetes mellitus patients. Int J Pharm Bio Sci. 2010; 1:1-6.
- ➤ Ghosh S, Malik S, Gupta A, Chaudhary R. A prospective, observational cohort study to elicit adverse effects of anti-tuberculosis drugs among patient treated for active tuberculosis. J Pharm Res. 2010; 3:10-6.
- ➤ Ghosh S, Vikas V, Gupta A, Chaudhary R. Evaluation of the practice of self-medication among college students in west Uttar Pradesh. International Journal of Pharma Professional's Research. 2010; 1(1):14-8.
- ➤ Ghosh S, Ali S, Chhabra L, Prasad C, Gupta A. Investigation of attitudes and perception of medical practitioners on adverse drug reaction reporting-a pilot study. T Ph Res. 2010; 3(6):1-9.
- ➤ Debasish D, Ghosh S, Subhasish M, Rabiul H, Samir S. Study of hepatoprotective effect of Hygrophila difformis Lf Blume (Acanthaceae) roots against paracetamol induced hepatotoxicity in rats. Int J ph Sci. 2009; 1:323-9.

PATENT

➤ Niyati Shah, Sourav Ghosh, Himanshu Sharma, Ravinder Kumar Mehra and Sneha Adhikary, Laminar flow cabinet, Patent No. 447486-001. 10th Feb, 2025.

- Niyati Shah, Sourav Ghosh, Manish Kumar Pathak, Ravinder Kumar Mehra, Himanshu Sharma, Sneha Adhikary and Ms. Pratibha, Advance UV-Visible spectrophotometer. Advance Sterilization Device for Medical and Pharmaceutical device. Patent No. 411499-001. 25th March, 2024.
- Gongutri Borah, Himanshu Sharma, Rameshwar Kumar, Nahida Tabassum, Sourav Ghosh, Ravinder Kumar Mehra, Ishan Aggarwal and Sneha Adhikary, Advance Sterilization Device for Medical and Pharmaceutical device. Patent No. 410456-001. 14th March, 2024
- Sachin Tyagi, Sourav Ghosh, Charu Bharti, Saral Kumar, Suryakant Verma, Sabiya Praveen , Himanshu Sharma and Tarannum Fatima, Dissolution apparatus, Patent No. 405327-001. 21st Jan, 2024.
- Sandipan Dasgupta, Sanjay Dey, Pinky Acharjee, Dr. Somsubhra Ghosh, Mukesh Kumar Das and Sourav Ghosh, Smoke chamber to induce emphysema in mice, Patent No. 392427-001. 10 th Oct, 2023
- ➤ Ruchi Tiwari, Sailesh Kumar, Adhay Kumar, Sourav Ghosh, Ramendra Singh, Rajesh Kumar, A composition and method for synthesizing corticosteroid loaded hybrid nanoparticles. Patent: Application No.2022/07709 (Granted) 28 Sept, 2022
- Abhishek Tiwari, Varsha Tiwari, Manish Kumar, Arvind Kumar, Vaishali Singh, Sourav Ghosh, Suresh Kumar, Renu Saharan, Sunil Singh, Vipin Saini and Anand Poddar. Norflaxacin reverse Gelatinization gel: Development, Characterization and evaluation. Patent: Application No. 202211015546. 1st April, 2022

BOOKS PUBLISHED

- ➤ Ghosh S, Kumar A, Singh V. "Pharmacological studies on *Hygrophilla difformis*". ISBN: 978-3-659-15596-3. Lambert Academic Publishing (Germany).
- ➤ Kumar A, Singh V, **Ghosh S**. "Butenolide: A Novel Synthesis and Biological Activities" ISBN: 978-3-659-13266-7. Lambert Academic Publishing (Germany)

BOOK CHAPTERS PUBLISHED

- ➤ Das R, Ghosh S, Chatterjee A. Probiotics for the Mitigation of Inflammation-Based Lung Cancer. In the Role of Probiotics in Cancer Management 2025 Jul 16 (pp. 157-187). Apple Academic Press.
- ➤ Das R, Ghosh S, Chatterjee A. Internet of things application to study the spontaneous quantitative drugs detoxification through biosensor. In Mining Biomedical Text, Images and Visual Features for Information Retrieval 2025 Jan 1 (pp. 119-149). Academic Press.
- > Ghosh S, Chaudhary SR, Rahaman M, Chatterjee RP, Chatterjee S. Precision Medicine in

- Neurodegenerative Disorders. In Integrating Neuroimaging, Computational Neuroscience, and Artificial Intelligence (pp. 44-58). CRC Press.
- ➤ Pal B, Goswami R, Kotal M, Basu B, Ghosh S, Santra S. DNA Barcoding of Plants Used for Herbal Drug Preparation. InGenetic Improvement and Conservation Practices of Medicinal Plants (pp. 174-193). CRC Press.
- ➤ Dey A, Sharma PK, Pathak A, Yadav SK, Singh J, Ghosh S. Revolutionizing Infection Control: Harnessing the Power of Stem Cells for Precision Antimicrobial Therapy. In Emerging Paradigms for Antibiotic-Resistant Infections: Beyond the Pill 2024 Nov 19 (pp. 197-209). Singapore: Springer Nature Singapore.

FDP ATTEND

- ➤ NEP 2020 orientation and sensitization programme under Malviya Mission Teacher Training (MM-TTP) of UGC organized by Indian Institute of Technology from 18/12/2023 to 30/12/2023.
- ➤ NEP 2020 orientation and sensitization programme under Malviya Mission Teacher Training (MM-TTP) of UGC organized by IGNOU from 06/01/2025 to 15/01/2025.

SUPERVISION

- ➤ Ph.D 4 Scholar (Thesis not submitted yet)
- ➤ M.Pharm- 25 Students
- ➤ B.Pharm- 40 students

PRESENTED (ORAL/POSTER) IN INTERNATIONAL OR NATIONAL CONFERENCE

- ➤ Ghosh, S., Kumar, A., and Chandra, P., 2020, February. Neuropharmacological activities of leaves of *Aegle marmelos* (L) Corr.: Oral presentation in 7th International congress of the Society for Ethnopharmacology. Jamia Hamdard, New Delhi, India.
- ➤ Ghosh, S., Kumar, A., and Chandra, P., 2019, February. Traditional herbs in neurological disorders: Poster presentation in national conference on recent advances in pharmacovigilence measure affecting drug development and industry output. Shobit University, Gangoh, U.P., India.
- ➤ Ghosh, S., Kumar, A., Singh, B., and Iggarwal I, 2022, April, Neuropharmacological action of total sterol fraction isolated from leaves of *Aegle marmelos* in 1st Paramedicon on Innovation in modern/traditional health sciences and medical technology, Banaras Hindu University, Mirzapur, U.P., India. (Invited Speaker)
- ➤ Ghosh, S., Kumar, A. and Singh, B, 2022, May, Overview of traditional medicinal system in India in National conference on Intellectual property rights of pharmaceuticals 2.0,

- Pranveer Singh Institute of Pharmacy, U.P., India
- ➤ Ghosh, S., Digar A, 2024, April BioStart: Bridging Innovative Research & Startups in Pharmaceutical s on Recent Advances in Therapeutic Strategies for Triple Cancer, S.D. College of Pharmacy and Vocational Studies, U.P., India

CONFERENCES / WORKSHOPS/ SEMINARS ATTENDED

- ➤ National conference on Role of Indian pharma for global wellbeing, Indian Pharmaceutical congress, April, 2024.
- ➤ International conference on BioStart: Bridging Innovative Research & Startups in Pharmaceutical s, S.D. College of Pharmacy and Vocational Studies, U.P., India, April, 2024.
- ➤ International Symposium on Safety Assessment under materirovigilance and pharmacovigilance programs, DPSRU, New Delhi, India (May, 2022)
- ➤ AICTE approved on national conference on Intellectual property rights of pharmaceuticals 2.0, Pranveer Singh Institute of Pharmacy, U.P., India (May, 2022)
- ➤ FDP on Research Methodology, Graphic Era Hill University, College of Pharmacy, Bhimtal Campus, U.K., India (April, 2022)
- ➤ UGC approved training course on "Emerging Trends and Alternatives in Pharmacological Research" Organized by UGC networking Resourse centre, University Institute of Pharmaceutical Sciences (UIPS), Punjab University, Chandigarh. (Feb, 2022)
- ➤ Webner on "HPTLC applications in polyherbal formulation standardization using merkers". KIET School of Pharmacy, Ghaziabad, U.P. (2022)
- ➤ Webner on "Innovative trends in phytopharmacology". IFTM University, Moradabad, U.P. (May, 2020)
- > 7th International congress of the Society for Ethnopharmacology. Jamia Hamdard, New Delhi, India. (February, 2020)
- National conference on recent advances in pharmacovigilence measure affecting drug development and industry output. Shobit University, Gangoh, U.P., India. (February, 2019)
- National level workshop on "Role of intellectual property rights in biotechnology and pharmaceutical industries" jointly organized by S. D. College of Pharmacy & Vocational Studies, Muzaffarnagar and IIPTA, Delhi. (January, 2012)

AWARDS & ACHIVEMENTS

- ➤ Best Teacher Awards in 2020 (SDCOP&VS)
- ➤ College Topper throughout the M.Pharmacy Course

CONSULTANCY PROJECT

- ➤ Worked as an Invigilator in consultancy project entitled "Development of polyherbal tooth gel having antiviral property" in 2021
- ➤ Work as an Invigilator in consultancy project entitled "Development of polyherbal formulation having immunomodulatory activity" in 2022

REVIEWERSHIP IN JOURNAL

- Natural Product Research of Taylor & francis publication (Impact factor 2.861)
- Naunyn-Schmiedeberg's Archives of Pharmacology, Springer Nature Publication (Impact Factor 3.1)

PERSONAL DETAILS

Date of Birth: March 2, 1986

Father's Name: Mr. Debiprasad Ghosh

Mother's Name: Mrs. Jharna Ghosh

Languages Known: English, Hindi & Bengali.

Marital Status: Married

Address: Vill- Bagajal, P.O- Arambagh, Dist- Hooghly

Pin-712601 (W.B.)

DECLARATION

I hereby declare that all the details furnished above are true to the best of my knowledge and if found false, I am responsible.

Place (Sourav Ghosh)

(Kolkata)