

## Curriculum Vitae



**NAME:** Dr. GOURANGA NANDI

**Designation** Assistant Professor

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

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**Subject Specialization:** Pharmaceutics

### Academic qualification:

2002: B.Pharm, Jadavpur University, India

2003: GATE Qualified (**Score: 96.15 percentile**)

2005: M.Pharm, Jadavpur University, India

2010: Ph.D in Pharmacy, Jadavpur University, India

### Professional experiences:

#### Teaching Experience: 16 years

August 14, 2006 to October 10, 2018 : BCDA College of Pharmacy & Technology, Hridaypur, Kolkata-700127

October 11, 2018 to till date Assistant Professor, Department of Pharmaceutical Technology, University of North Bengal, Darjeeling, W.B., India

**Areas of Research Interest:** Polysaccharide based drug delivery, fabrication of chemically modified polysaccharide in drug delivery, novel sustained release drug delivery

**No. of Ph.D. students:** (a) Supervised (awarded): 03 (b) Ongoing: 04

**No. of M.Pharm. students:** (a) Awarded: 03 (b) Ongoing: 03.

**No. of Publications:** (a) Journal(s): 28 (b) Book(s): 01 (c) Book chapter(s): 03

### **List of Publications in journals:**

28. Current challenges in different approaches to control COVID-19: a comprehensive review. Simran Giri, Sanjukta Sen, Rohan Singh, Paramita Paul, Ranabir Sahu, **Gouranga Nandi**, Tarun Kumar Dua. Bulletin of the National Research Centre (2022) 46:47. (ISSN 2522-8307) (<https://doi.org/10.1186/s42269-022-00730-2>).
27. An updated review on Eupatorium adenophorum Spreng. [Ageratina adenophora (Spreng.)]: traditional uses, phytochemistry, pharmacological activities and toxicity. Simran Giri, Ranabir Sahu, Paramita Paul, **Gouranga Nandi**, Tarun Kumar Dua. Pharmacological Research - Modern Chinese Medicine 2 (2022) 100068. (ISSN: 2667-1425) (<https://doi.org/10.1016/j.prmcm.2022.100068>)
26. Pharmacological studies of rhizomes of extract of *Cyperus tegetum*, emphasized on anticancer, anti-inflammatory and analgesic activity. Atanu Chatterjee, Ritu Khanra, Moitreyee Chattopadhyay, Santanu Ghosh, Ranabir Sahu, **Gouranga Nandi**, Himanshu Sekhar Maji, Pranabesh Chakraborty. Journal of Ethnopharmacology, 289 (2022) 115035. (ISSN: 0378-8741) (**Impact factor: 4.360**) (<https://doi.org/10.1016/j.jep.2022.115035>).
25. 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. Gouhar Jahan Ashraf, Priya Das, Tarun Kumar Dua, Paramita Paul, **Gouranga Nandi**, Ranabir Sahu. Biomedical Chromatography 2021 e5230. (ISSN: 1099-0801) (**Impact factor: 1.902**) (<https://doi.org/10.1002/bmc.5230>).
24. Development of quality control parameters for standardization of a novel mucilage obtained from okra (*abelmoschus esculentus (L.) Moench*) fruit. Soma Das, Ananya Ghosh, Rusham Das, **Gouranga Nandi**, L. K. Ghosh. International Journal of Current Pharmaceutical Research 13(3) (2021) 28 – 41. (ISSN: 0975-7066) (DOI: <https://dx.doi.org/10.22159/ijcpr.2021v13i3.42091>).
23. Synthesis, characterization and fabrication of sodium carboxymethyl-okra-gum-grafted-polymethacrylamide into sustained release tablet matrix. Smita Patra, Nripendra Nath Bala, **Gouranga Nandi\***. *International Journal of Biological Macromolecules*, 164 (2020) 3885 – 3900. (ISSN: 0141-8130) (**Impact factor 6.953**). (<https://doi.org/10.1016/j.ijbiomac.2020.09.025>).
22. Quality-by-Design approach for development of sustained-release multiple-unit beads of lamotrigine based on ion-cross-linked composite of pectin and okra mucilage: an in vitro appraisal. Soma Das, Ananya Ghosh, Abhijit Changder, **Gouranga Nandi\***, L. K. Ghosh.

*International Journal of Biological Macromolecules*, (2020), 163, 842 - 853. (ISSN: 0141-8130)  
(**Impact factor 6.953**). (<https://doi.org/10.1016/j.ijbiomac.2020.07.033>)

21. Formulation of extended-release beads of lamotrigine based on alginate and *Cassia fistula* seed gum by QbD approach. Dixita Jain, Akshay Sodani, Swapnil Ray, Pranab Ghosh, **Gouranga Nandi\***. *Current Drug Delivery*, (2020) 17 (5) 422 – 437. (ISSN: 1875-5704 online) (**Impact factor: 2.565**). DOI: [10.2174/1567201817666200317124022](https://doi.org/10.2174/1567201817666200317124022).

20. Okra and its various applications in drug delivery, food technology, healthcare and pharmacological aspects- a review, Soma Das, **Gouranga Nandi**, L. K. Ghosh, *Journal of Pharmaceutical Sciences and Research* 11 (6) (2019) 2139 – 2147 (ISSN: 0975-1459).

19. Poly (methacrylic acid)-grafted-okra gum: synthesis, characterization and evaluation as mucoadhesive, **Gouranga Nandi**, *Int. J. of Pharm.Sc. and Drug. Res.* (2019) 11(5); 250 -254. (ISSN: 0975-248X).

18. Effects of Viscoelastic Properties and Hydration Kinetic on Drug Release from the Tablet of Diclofenac Sodium Based on Poly (Sodium Acrylate)-Grafted-Gellan Matrix, **Nandi Gouranga**, *Journal of Drug Delivery & Therapeutics*, (2019) 9(5), 1 – 8. (ISSN: 2250-1177).

17. Graft-copolymer of Polyacrylamide-tamarind seed gum: Synthesis, characterization and evaluation of flocculating potential in peroral paracetamol suspension, **Gouranga Nandi\***, Abhijit Changder, Lakshmi Kanta Ghosh, *Carbohydrate Polymers*, (2019), 215, 213 – 225. (ISSN: 0144-8617) (**Impact factor 9.381**).

16. Evaluation of stability of Ropinirole hydrochloride and Pramipexole dihydrochloride microspheres at accelerated condition, Koyel Kar, R. N. Pal, N. N. Bala, **Gouranga Nandi**, *International Journal of Applied Pharmaceutics*, (2018) 10 (4), 82 - 86. (ISSN: 0975-7058).

15. Tamarind seed gum-hydrolyzed polymethacrylamide-grafted –gellan beads for extended release of diclofenac sodium using 3<sup>2</sup> full factorial design, **Gouranga Nandi\***, Amit Kumar Nandi, Najim Sarif Khan, Souvik Pal, Sibashish Dey, *International Journal of Biological Macromolecules*, (2018), 114, 214 - 225. (ISSN: 0141-8130) (**Impact factor 6.953**).

14. Sustained release gastroretentive tablet of metformin hydrochloride based on poly (acrylic acid)-grafted-gellan, Debjani Sarkar, **Gouranga Nandi\***, Abhijit Changder, Prasenjit Hudati, Sayani Sarkar & L. K. Ghosh, *International Journal of Biological Macromolecules*, (2017), 96, 137-148. (ISSN: 0141-8130) (**Impact factor 6.953**).

13. Viscoelastic, swelling kinetic and drug release characterization of poly(acrylic acid)-grafted-gellan, **Gouranga Nandi\***, Subhankar Mukhopadhyay, N. Mondal, *Indo American Journal of Pharmaceutical Research* 7(01) (2017) 7503 – 7515. (ISSN: 2231-6876).

12. Role of tamarind seed polysaccharide as a carrier in novel drug delivery system. Subhankar Mukhopadhyay, Biplab Mallick, Atanu Debnath, Abhimanyu Thakur, Parikshit Banerjee, Arpan Mahanty, Gouranga Nandi\*. *World Research Journal of Pharma Technology*, (2017), 3(1): 1 – 7. (ISSN No.: 2454-5546).
11. Gastroretentive extended release of metformin from methacrylamide-g-gellan and tamarind seed gum composite matrix, Rosy Priyadarshini, **Gouranga Nandi\***, Abhijit Changder, Sailee Chowdhury, Sudipta Chakrabarty, L. K. Ghosh, *Carbohydrate Polymers*, (2016), 137, 100-110. (ISSN: 0144-8617) (**Impact factor 9.381**).
10. An overview of natural polysaccharides and their chemical modifications: application in drug delivery; **Gouranga Nandi**, Sailee Chowdhury, Sudipta Chakroborty, *Asio Journal of Drug Delivery* 1(1) (2015) 37 – 43. (ISSN: 2455-2828) (dids Link: <http://dids.info/didslink/12.2015-37726478/>).
9. Synthesis, characterization and evaluation of methacrylamide grafted gellan as sustained release tablet matrix, **Gouranga Nandi\***, Poushali Patra, Rosy Priyadarshini, Santanu Kaity, L. K. Ghosh, *International Journal of Biological Macromolecules*, (2015), 72, 965-974. (ISSN: 0141-8130) (**Impact factor 6.953**).
8. Review on Yarsagumba (*Cordyceps sinensis*) - An Exotic Medicinal Mushroom, Sudipta Chakroborty, Sailee Chowdhury, **Gouranga Nandi**, *International Journal of Pharmacognosy and Phytochemical Research*, 6(2) (2014) 339 – 346. (ISSN: 0975-4873). (**Impact factor 1.334**).
7. Formulation optimization of a floating once-daily matrix tablet of ofloxacin; N. Mondal, **Gouranga Nandi**, Sudeshna Acharya, B. K. Gupta, *American Journal of PharmTech Research* 4(2) (**2014**) article no. 70. (ISSN: 2249-3387).
6. Phytosomes- emerging thrust are of drug development technology, Sailee Chowdhury, Sudipta Chakroborty, **Gouranga Nandi**, N. N. Bala, *International Journal of Drug Formulation and Research* 5(1) (**2014**) 1 – 14. (ISSN: 2229-5054).
5. Stomach specific sustained delivery of metformin hydrochloride from a novel composite matrix, N. Mondal, **Gouranga Nandi**, L. K. Ghosh, B. K. Gupta, *International Journal of Drug Formulation and Research* 5(2) (**2014**) 140 – 152. (ISSN: 2229-5054).
4. Pharmaceutical Excipients from Natural Sources, S. Chowdhury, S. Chakroborty, **G. Nandi**, S. Pal. *NSHM Journal of Pharmacy and Healthcare Management*, 2014, 5, 63-75. (ISSN: 2230-7249).

3. Formulation optimization of a floating extended release matrix tablet of metformin hydrochloride, B. K. Gupta, S. S. Sethy, **Gouranga Nandi**, Debjani Sarkar, L. K. Ghosh, American Journal of PharmTech Research 2(4) (2012) article 55. (ISSN: 2249-3387).
2. Development and formulation optimization of a low density floating extended release tablet of clarithromycin. **Gouranga Nandi\***, L. K. Ghosh, B. K. Gupta. International Journal of Drug Formulation and Research, 2(3) (2011) 262 – 279. (ISSN 2229-5054).
1. Formulation and *In Vitro* Evaluation of Sunflower Oil Entrapped Within Buoyant Beads of Furosemide, Rammohan Bera, Bivash Mandal, Manas Bhowmik, Hriday Bera, Sanjoy K. Dey, **Gouranga Nandi**, Lakshmi K. Ghosh, *Scientia Pharmaceutica*, (2009), 77, 669- 678. (ISSN: 2218-0532).

#### **Books:**

**Fundamentals of Pharmacotherapeutics.** Paramita Paul, Anindita Gantait, Ranabir sahu, **Gouranga Nandi**. Everest publishing House (ISBN for Paperback: 978-81-949281-2-6; eBook: 978-81-949281-3-3): In Press.

#### **Book Chapters:**

1. *In situ* polymeric gels for topical drug delivery; p83-114 (2020).  
DOI: [https://doi.org/10.1007/978-3-030-46923-8\\_4](https://doi.org/10.1007/978-3-030-46923-8_4)  
Advanced Biopolymeric Systems for Drug Delivery (Advances in Material Research and Technology book series). Nayak A., Hasnain M. (eds) Springer, Cham ISBN978-3-030-46922-1 (Print); ISBN:978-3-030-46923-8 (online)
2. Alginate-based systems for protein and peptide delivery; p85 – 106 (2021)  
DOI: <https://doi.org/10.1016/B978-0-12-821437-4.00011-6> In Tailor-Made and Functionalized Biopolymer Systems. Hriday Bera, Buddhadev Layek, Jagdish Singh (Eds) Elsevier.  
ISBN: 978-0-12-821437-4 (print)  
ISBN: 978-0-12-821457-2 (online)
3. Biomedical applications of cashew gum-based micro- and nanostructures; chapter11 (page:285-302) (2022) DOI: <https://doi.org/10.1016/B978-0-323-90986-0.00001-7> In Micro- and nanoengineered gum-based biomaterials for drug delivery and biomedical applications. Sougata Jana, Subrata Jana (Eds) Elsevier. ISBN: 978-0-323-90986-0.

#### **Patent: Nil**

## Research Projects:

Title of the Project	Funding Agency	Year of Sanction and duration	Cost (INR)	PI or Co-PI	Status
Fabrication and in-vitro characterization of okra mucilage ( <i>Hibiscus esculentus</i> ) nanoparticles loaded with an antidiabetic phytoconstituent apigenin	University of North Bengal	2019-20	1.5 lakh	PI	Completed
Green-fabrication, characterization and evaluation of chemically modified natural polysaccharide based extended release fisetin loaded peroral nanoparticles for enhanced bioavailability, antioxidant and hypoglycemic efficacy	University Grant Commission	2019-2021	10 lakh	PI	Ongoing
Screening of some herbal hydrocolloids from North-Eastern Himalayas to fabricate them as mucoadhesive nasal gels	University of North Bengal	2020-21	1.5 lakh	PI	Completed
Taro ( <i>Colocasia esculenta</i> ) stolon polysaccharide-polyacrylamide graft copolymer: Synthesis, characterizations and application in sustained-release drug delivery	University of North Bengal	2021-22	1.5 lakh	PI	ongoing

**Membership of Learned Societies:** Live member of APTI

**Editorial Board Membership:** Lifetime member of Advisory Editorial Board of following journals:

1. ASIO Journal of Medical & Health Science Research
2. ASIO Journal of Pharmaceutical & Herbal Medicines Research
3. ASIO Journal of Drug Delivery
4. ASIO Journal Analytical Chemistry