

Faculty Profile

Name: **PARTHA PALIT**

Designation: **ASSISTANT PROFESSOR [Level-12]**

Department/ Centre: Department of Pharmaceutical Sciences

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Educational Qualifications: [M.Pharm. (First Class **First**; Gold **Medalist**) in Pharmaceutical Technology, Jadavpur University (2003); Qualified GATE-2001; Ph.D. in Pharmacy from IICB, Kolkata under Jadavpur University (2010); Post-doctorate, Australian National University (ANU) (2014- 2015)]

Areas of Interest:

- Drug discovery and development from natural sources and synthetic molecules, especially against cancer, Leishmania, neurological disease, dementia, inflammation, pain, immunodeficiency disorders, auto-immune disorders, and diabetes.
- Industrial scale-up of bioactive lead compounds from Indian traditional medicinal plants.
- Liposome, metal-oxide-based drug delivery against Leishmaniasis, inflammation, and Cancer.
- Repurposing of old drugs for new uses against Diseases.
- Assessment of heavy metals in drinking water derived from the ground surface and development of a removal methodology using a bio-engineering herbal technology process.
- *In-silico* pharmacological drug design.
- Phytopharmacology
- Waste valorization for bioremediation and therapeutics development
- Biopesticides, bioherbicides, Biofertilizers
- Herbal carbon quantum dots as theragnostic agents.
- Green application of Natural Exopolysaccharides

Work Experience: [In chronological order with the recent one at the last.]

Name of the Organization	Designation	Period		Nature of Post (permanent/temporary/Ad-hoc/ contractual etc.)
		From	To	
National Homeo Laboratory Kolkata-70015	Analytical Chemist	04.05.2000	30.09.2003 [1.5 yrs study leave]	Permanent
IICB, Kolkata-32	Junior Research Fellow	01.10.2003	31.01.2004	Contractual
Gupta College of Technological Science, Pharmacy College Asansol-I-1	Lecturer	02.02.2004	30.06.2004	Ad-hoc
Indian Institute of Chemical Biology, Kolkata	Senior Research Fellow (Ph. D. Scholar)	01.07.2004	17.11.2008	Contractual
Dr. B.C. Roy College of Pharmacy and A.H.S, Durgapur	Assistant Professor	19.11.2008	31.10.2013	Permanent
Dr. B.C. Roy College of Pharmacy and A.H.S, Durgapur	Associate Professor	01.11.2013	31.01.2015	Permanent
Australian National University, The John Curtin School of Medical Research	Endeavour Postdoc Research Fellow	07.07.2014	03.01.2015	Contractual
NIPER KOLKATA	Guest Faculty	01.01.2011	31.12.2013	Contractual
Assam University	Assistant Professor	02.02.2015	Continuing	Permanent

Awards and Honors (if any): [Maximum up to 5] [In chronological order, with the recent one at the last.]

Award Details	Awarding Agency	Year	Remark (if any)
Recipient of National Scholarship for excellent performance in Madhyamik (Secondary) Examination	West Bengal State Govt. India	1993	National Level

Recipient of Fast Track Young Scientist Award for research Achievement	DST(SERB); Govt. of India	2013	National Level
Recipient of Prestigious Australian Endeavour Research Fellow	Higher Education of Govt of Australia; Australian Research Council	2014	International
Recipient of the Australian Endeavour Research Ambassador	Higher Education of Govt of Australia	2016	International
Recipient of short-term visiting fellowship in the Center of Molecular and Macromolecular Studies[CBMM] in Poland, Lodz	Polish Academy of Sciences, PAN	2025	International

Projects: [In chronological order with the recent one at the last. Mention shall be made if the project is ongoing or completed]

Project Title	Awarding Agency	Period	Amount Sanctioned	Ongoing/ Completed
Screening and Pharmacological evaluation of medicinal plants against asthma and arthritis	DST(SERB), Govt. of India	2013-2016	18 Lakhs	Completed as P.I.
In vitro pharmacological evaluation against dementia and cerebral stroke of isolated secondary metabolites from <i>Gelsemium sempervirens</i> , withaferin-A & withanolide and development of nanophytosome formulation with optimised lead phyto-molecules.	UGC- STARTUP GRANT	2017-2019	6 Lakhs	Completed as P.I.
Bioprospecting of a few selected Ethnomedicinal plants of North-East India for Phytocharacterization with in vitro and in vivo validation against inflammation, pain and Rheumatoid Arthritis	Indian Council of Medical Research. (I.C.M.R., Govt. of India)	2021-2023	32 Lakhs	Completed as P.I.
Empowerment of Schedule Cast Community through Innovative Herbal Technologies in Borjalenga Block of Cachar District, Assam	DST-SEED	2025-2028	78.5 Lakhs	Ongoing as PI

Consultancy/International Collaboration: [In chronological order with the recent one at the last.]

Details	Year	Remark (if any)

Publications in Peer-Reviewed Journals (Maximum 7)

Authors	Title of the Paper	Name of the Journal	Journal details	ISSN
Palit P*, Chattopadhyay D, Thomas S, Kundu A, Kim HS, Rezaei N	Phytopharmaceuticals mediated Furin and TMPRSS2 receptor blocking: can it be a potential therapeutic option for Covid-19?	Phytomedicine [I.F. -11.3]	2021 May 1;85:153396.	Online ISSN: 1618-095X Print ISSN: 0944-7113
Chowdhury, A., Ikbali, A.M.A., Pratihari, B., Paul, B., Sengupta, D., Kargarzadeh, H., Chattopadhyay, D., De, S. and Palit, P*.	Black turmeric (<i>Curcuma caesia</i>) derived biogenic carbon nanodots: green synthesis, characterization, in vitro antioxidant potential, bio-evaluation studies, and photocatalytic degradation of Rhodamine-B	Fullerenes, Nanotubes and Carbon Nanostructures [I.F. -2.2]	2026 Jul 13:1-9[Taylor & Francis Publisher]	ISSN: 1536-4046
Debnath R, Ikbali AM, Ravi NK, Kargarzadeh H, Palit P*, Thomas S	Carbon nanodots-based polymer nanocomposite: A potential drug delivery armament of phytopharmaceuticals	Polymers [I.F. -5.8]	2025 Jan 29;17(3):365 [MDPI Publishers]	ISSN: 2073-4360
Tiwari ON, Bobby MN, Kondi V, Halder G, Kargarzadeh H, Ikbali AM, Bhunia B, Thomas S, Efferth T, Chattopadhyay D, Palit P*	Comprehensive review on recent trends and perspectives of natural exopolysaccharides: pioneering nanobiotechnological tools.	International journal of biological macromolecules [I.F. -8.7]	2024 Apr 1;265:130747[Elsevier]	Online ISSN: 1879-0003 Print ISSN: 0141-8130
Padhy DS, Palit P*, Ikbali AM, Das N, Roy DK, Banerjee S.	Selective inhibition of peptidyl-arginine deiminase (PAD): can it control multiple inflammatory	Inflammopharmacology[I.F. -6.3]	2023 Apr;31(2):731-44.[Springer nature]	Electronic ISSN 1568-5608 Print ISSN 0925-4692

	disorders as a promising therapeutic strategy?			
A. Kumar, A. M. Ashif Iqbal, M. Ahmed Laskar, A. Sarkar, A. Saha, P. Bhardwaj, S. Das, S. Kumar Singh, P. Ghosh, H. Kargarzadeh, P. Palit* , M. Dutta Choudhury	Exploration of Potential Anti-Inflammatory Cum Anti-Rheumatoid-Arthritis Phyto-Molecule Through Integrated Green Approach: Network Pharmacology, Molecular Docking, Molecular Dynamics, In-Vitro and Ex-Vivo Study	Chem. Biodiversity [I.F. - 2.9]	2024 Dec;21(12):e202401137[Wiley publisher]	Online ISSN:1612-1880 Print ISSN:1612-1872
Kumar, A., Roy, D.K., Pandey, N., Majhi, H.S., Rawat, R., Pughat, A., Palit, P* , and Tiwari, O.N.	A comprehensive review of microbial exopolysaccharides for bioremediation of environmental pollutants and industrial waste toxicants using sustainable strategies: bottlenecks and future perspectives	World Journal of Microbiology and Biotechnology [I.F. -4.7]	2026 Aug 7;42(8):451.[Springer-Nature Publisher]	Electronic ISSN 1573-0972 Print ISSN 0959-3993

Contributed Book Chapters Published in Edited Books of Reputed Publishers (Maximum 5)

Authors	Title of chapter	Name of the Edited Book	Book details	ISBN
Patel S, Prajapati C, Rai SN, Palit P* , Singh SK.	Epigenetic Reprogramming by Endophytes: Unlocking Silent Biosynthetic Gene Clusters for Next-Generation Phytopharmaceuticals	<i>In Phytoceuticals for Sustainable Medication</i>	2026 Feb 24 (pp. 87-122). Singapore: Springer Nature Singapore.	Print ISBN 978-981-95-7587-9 Online ISBN 978-981-95-7588-6
Choudhury A, Palit P* , Mandal SC.	<i>Bixa orellana</i> (Annatto or Lipstick Tree): A Potential Healer of Health Complications as an Indian Spice	In Medicinal Spices and Herbs from India	2024 Dec 13 (pp. 233-251). Apple Academic Press.	9781003511694
Mukherjee D, Palit P* , Roychoudhury S, Halder S, Mandal SC	White tea: An emerging gift of nature and bioprospection towards the development of novel herbal formulations, nutraceuticals, and	In Advances in medicinal and aromatic plants	2024 Jul 5 (pp. vol2-403). Apple Academic Press.	9781032686905

	cosmetics			
Debnath R, Ikbāl AM, Choudhury A, Mandal SC, Palit P*.	Artificial intelligence: A major landmark in the novel drug discovery pathway for the remarkable advancement in the healthcare system	Concepts in pharmaceutical biotechnology and drug development	2024 May 21 (pp. 413-436). Singapore: Springer Nature Singapore.	978-981-97-1148-2
Barbhuiya TK, Das N, Palit P*.	Quantum Dots: Can They Be a Potential Antiviral Agent and Nano-Carrier Tool for Efficient Drug Delivery for Combating Viral Infections?	In Nanotechnology Platforms for Antiviral Challenges	2023 Feb 8 (pp. 101-124). CRC Press.	9781003243175

Peer-reviewed publications in Proceedings of National/ International Conference/Workshop/ Symposium (Maximum 5)

Authors	Title of the Paper	Name of the Program and Organizer	Publisher Details	ISBN/ISSN
Amresh Kumar, M. Dutta Choudhury, Partha Pallit*	Functional beverages of wheatgrass juice: broad spectrum application in the treatment of various diseases.	International Conference in 2018, Integrated Management of Crop Diseases University of Bhagalpur	Today and tomorrow's printers and Publisher, New Delhi, 2018:405-412.	ISBN: 81-7019-621-6

Patents/ Policy Document (Maximum 5)

Title of Patent	Patent No. & Granting Authority	Date of Award	International/ National
A system for synthesizing 4-aminoquinoline derivatives for the treatment of malignancies and infectious diseases	German patent awarded, Ref. no. DE 20 2023 102 215 U1	2023.06.15	International [GERMAN UTILITY PATENT]