

Name: Dr. Arjun Patra

Designation: Assistant Professor

Department: Pharmacy



Centre/School/Special Centre: Natural Resources

Department: Pharmacy

Phone: 07752260027(O); 7587471798(M)

Email: drarjunpatra22@gmail.com; arjun.patra@ggu.ac.in

Qualifications:

- B. Pharm. (2002) from Berhampur University
- M. Pharm. (2004) from Birla Institute of Technology, Ranchi
- Ph.D. (2011) from Birla Institute of Technology, Ranchi
- Postdoctoral Research (2016-2017) from USA

Area of Interest/Specialization: Pharmacognosy

- Medicinal plant research
- Bioassay guided drug discover
- Nanodelivery of natural products in cancer
- Synthesis and applications of metal nanoparticles
- Phytopharmacology

Experience

S. No.	Name of the Inst./Employer	Position Held	Duration (From-to)	Major Job Responsibilities and Nature of Experience
1.	Guru Ghasidas University	Assistant Professor	30 December 2011 to till date	Teaching and Research
2.	Banasthali University	Assistant Professor	07 July 2010 to 24 December 2011	Teaching and Research
3.	IFTM University	Lecturer to Professor	31 October 2007 to 05 July 2010	Teaching and Research
4.	Royal College of Pharmacy and Health Sciences, Odisha	Lecturer	01 July 2004 to 29 October 2007	Teaching and Research

Awards and Honors

- Recipient of Raman Fellowship for Postdoctoral Research in USA.
- Branch Topper during M. Pharm.
- Qualified GATE – 2002 (All India Rank 424).
- Best Poster presentation in International Conference in Innovations in Pharmaceutical Sciences during 27-28 February, 2016 at Indore, India.
- Prize winning (2nd prize) oral paper presentations at IPA & APTI State Level Convention, Orissa in 2006 and 2007.
- Prize winning (1st prize) oral paper presentations at Orissa Pharmaceutical Conference-2010, Berhampur, Orissa.

Research Projects

1. Pharmacological Evaluation, Quality Control and Standardization of Some Potential Antidiabetic Plants. Principal Investigator from UGC, India. (2013-2015); amount: 6.0 lakh.
2. Anticancer Potential of *Hygrophila spinosa* T. Anders: Formulation Development and *in vitro* Screening. Postdoctoral research under Raman Fellowship from UGC.
3. DST-FIST. Member of Project Implementation Group. (2021-2026); amount: 49.0 lakh.

International Collaboration/Consultancy

Collaboration with scientists in USA and Saudi Arabia for drug development for cancer therapeutics.

Nature of Consultancy Provided:

- Extraction, chromatography and bioassay guided fractionation for drug discovery
- Preparation of metal nanoparticles (silver, gold, zinc oxide, copper & copper oxide, and iron oxide) of various herbal extracts followed by understanding their characterization.
- Fundamental principles in Cell culture and MTT assay.

Best Peer Reviewed Publication (up-to 10)

1. Gourav Rakshit, Pankaj Dagur, Swaha Satpathy, **Arjun Patra***, Alok Jain, Manik Ghosh. Flavonoids as potential therapeutics against novel coronavirus disease-2019 (nCOVID-19). Journal of Biomolecular Structure and Dynamics, 2021, 1-13. (Impact Factor: 3.31)
2. Swaha Satpathy, **Arjun Patra**, Muhammad Delwar Hussain, Mohsin Kazi, Mohammed S. Aldughaim, Bharti Ahirwar. A fraction from *Pueraria tuberosa* extract, rich in antioxidant

- compounds, alleviates ovariectomized-induced osteoporosis in rats and inhibits growth of breast and ovarian cancer cells. PLoS ONE, 2021, 16(1): e0240068. (Impact Factor: 3.24)
3. Swaha Satpathy, **Arjun Patra**, Bharti Ahirwar, Muhammad Delwar Hussain. Process optimization for green synthesis of gold nanoparticles mediated by extract of *Hygrophila spinosa* T. Anders and their biological applications. Physica E: Low-dimensional Systems and Nanostructures, 2020, 121: 113830. (Impact Factor: 3.382)
 4. **Arjun Patra**, Swaha Satpathy, Muhammad Delwar Hussain. Nanodelivery and anticancer effect of a limonoid, nimbolide, in breast and pancreatic cancer cells. International Journal of Nanomedicine, 2019, 14: 8095-8104. (Impact Factor: 6.40)
 5. Sandeep Kumar Singh, **Arjun Patra***. Evaluation of adaptogenic potential of *Polygonatum cirrhifolium* (Wall.) Royle: *In vitro*, *in vivo* and *in silico* studies. South African Journal of Botany, 2019, 121: 159-177. (Impact Factor: 2.315)
 6. Swaha Satpathy, **Arjun Patra**, Bharti Ahirwar, Muhammad Delwar Hussain. Antioxidant and anticancer activities of green synthesized silver nanoparticles using aqueous extract of tubers of *Pueraria tuberosa*. Artificial cells, Nanomedicine and Biotechnology, 2018, 46 (S3): S71-S85. (Impact Factor: 5.678)
 7. Swaha Satpathy, **Arjun Patra**, Muhammad Delwar Hussain, Bharti Ahirwar. Amelioration of postmenopausal osteoporosis and anticancer properties of an antioxidant enriched fraction from *Hygrophila spinosa* T. Anders. South African Journal of Botany, 2018, 117: 247-255. (Impact Factor: 2.315)
 8. **Arjun Patra**, Swaha Satpathy, Anitha K. Shenoy, Jason A. Bush, Mohsin Kazi, Muhammad Delwar Hussain. Formulation and evaluation of polymeric mixed micelles of quercetin for treatment of breast, ovarian and multi-drug resistant cancers. International Journal of Nanomedicine, 2018, 13: 2869-2881. (Impact Factor: 6.40)
 9. Sandeep Kumar Singh, **Arjun Patra***. Evaluation of phenolic composition, antioxidant, anti-inflammatory and anticancer activities of *Polygonatum verticillatum* (L.). Journal of Integrative Medicine, 2018, 16: 273-282. (Impact Factor: 3.034)
 10. Swaha Satpathy, **Arjun Patra**, M. Delwar Hussain, Bharti Ahirwar. Simultaneous estimation of genistein and daidzein in *Pueraria tuberosa* (Willd.) DC by validated high-performance thin-layer chromatography (HPTLC) densitometry method. Journal of Liquid Chromatography & Related Technologies. 2017, 40(10): 499-505 (Impact Factor: 1.312)

Recent Books/Book Chapters/Monographs etc.

Books Published: 03 and Book Chapters: 11

1. Experimental Pharmacology-I. Nirali Prakashan, ISBN: 9789388897556.
2. Experimental Pharmacology-II. Nirali Prakashan, ISBN: 9789389108965.
3. Experimental Pharmacology-III. Nirali Prakashan, ISBN: 9789389944815.

Research Supervision

PhD completed: 01

PhD pursuing: 01

Administrative Responsibilities

- Member of project implementation group of DST-FIST
- Member of committee constituted for starting pilot plant in the department
- Earlier Secretary of IAEC of CPCSEA
- Looking after SIF submission to PCI for the department

Additional Information

- APTI (Life member)
- InPharm Association (Life member)
- AAPS (Annual 2016-2017)
- Conference/Seminar Presentation: 20
- Invited lecture/Session chaired: 06