

1. Name: Dr Sarita Das
2. Research Area: Pharmaceutical Microbiology
3. Educational Qualification: MSc, MPhil, PhD
4. Work Experience: Research: >20 years
Teaching: >8 years



5. Dissertation/ Thesis Supervision:

PHD GUIDANCE: ONGOING

- Sangeeta Rani Tripathy
- Jyotirmayee Dash

M.PHIL. GUIDANCE: COMPLETED

- S. Panigrahi – Antiuropathogenic activity of *Punica granatum* L. seed extract (2016)
- P. Naik – Effect of *Hemidesmus indicus* R. Br. root extract against UTI causing bacteria (2016)
- J.K. Padhy – Wound healing activity of *Tridax procumbens* L. leaf extract (2016)
- Y. Prasanti – Antibacterial activity of silver nanoparticles (AGNPs) (2016)
- K.R. Sahoo – Bioactive potential of *Hemidesmus indicus* R.Br. in urinary tract infection (2017)
- K.T. Dash – Effect of *Punica granatum* L. seed extract against clinically isolated uropathogens (2018)

M.SC. GUIDANCE: COMPLETED

- Sweta Pradhan – Isolation, characterization and identification of fungal pathogens from rotten fruits (2019)
- Sripada Patro – Isolation, characterization and identification of fungal pathogens from spoiled vegetables (2019)
- Jyotismita Nayak – Phytochemical analysis and antimicrobial study of *Andrographis paniculata* Nees. (2019)
- Abhilipsa Parhi – Antibacterial activity of Green synthesized copper nanoparticles (CuNPs) (2020)
- Shasmita Patro – Isolation identification and characterization of endophytic microbes from *Catharanthus roseus* (2020)
- Subhasmita Jena – Floristic study and medicinal uses of plants from Bhanja Bihar Campus (2020)
- Arpita Kumari Behera – Isolation, identification and characterization of endophytic microbes from *Adhatoda vesica* (2020)

6. Research Publications:

JOURNAL PUBLICATIONS:

- Dash, K.T., Parida, B. Das, S. Phytochemical analysis and antibacterial activity of *Punica granatum* L. seed extract against uropathogens. Accepted by Research journal of Biotechnology
- Tripathy S. R. Dash, J. Das, S. Medico-Ethnobotanical studies of Odisha State, India for urogenital disorders : A review. Accepted by TMR Integrative Medicine
- Das S. Therapeutic efficacy of Roscovitine against cancer. Accepted Book Chapter for Handbook of Oxidative Stress in Cancer: Therapeutic Aspects. Springer Nature Publication
- Das, S. Natural therapeutics for urinary tract infections – A review. Future J. of Pharmaceutical Sciences, 6:64. Springer Nature Publication (2020)
- Das, S., Prasanti, Y., Naik, P., Padhy, J.K., Panigrahi, S. Bactericidal activity of green synthesized silver nanoparticles (AgNPs) against *Escherichia coli* and *Staphylococcus aureus*. Res. J. Biotech. 14(5): 89-96. (2019)

- Das, S. Sahoo, K.R. Parida, B. Bactericidal activity of *Hemidesmus indicus* R.Br. root extract against clinically isolated uropathogens. *J. Med. Plant Studies* 6(6): 180-192. (2018)
- Das, S. Panigrahi, S. Panda, P. Antiurobacterial activity of *Punica granatum* L. seed extract. *European J. Med. Plants* 22(2): 1-12. (2018)
- Das, S. Dileepan, T. Johnson, D. R. Kaplan, E. L. Cleary, P. P. Enzyme-linked immunosorbent assay for group A Streptococcal anti-DNase B in human sera, using recombinant proteins - comparison to the DNA methyl green micromethod. *J. Immunol. Methods* 451: 111-117. (2017)
- Das, S. Naik, P. Panda, P. Effect of *Hemidesmus indicus* R.Br. root extract on urinary tract infection causing bacteria. *Int. J. Herbal Med.* 5(5): 160-168. (2017)
- Das, S. Padhy J.K. and Panda P. Bioactive potential of *Tridax procumbens* L. leaf extract against skin infection causing bacteria. *Int. J. Herbal Med.* 5(3): 127-133. (2017)
- Das, S. and Singh Bisht, S. The Bioactive and Therapeutic Potential of *Hemidesmus indicus* R. Br. (Indian Sarsaparilla) Root. *Phytother. Res.* 27: 791–801. (2013)
- Das, S. and Devaraj, S.N. *Hemidesmus indicus* R. Br. root extracts reduce *Salmonella typhimurium* - induced inflammation in rat intestine by repressing its type three secretory proteins. *J. Med. Plant Res.* 3(10), 719-727. (2009)
- Das, S. and Devaraj, S.N. Effect of *Hemidesmus indicus* R. Br. Root extract against *Salmonella typhimurium* – induced apoptosis in murine macrophage cell line (P388D1). *Ind. J. Med. Res.* 128, 647-657. (2008)
- Das, S. and Devaraj, S.N. Protective role of *Hemidesmus indicus* R. Br. root extract against *Salmonella typhimurium*-induced cytotoxicity in Int 407 cell line. *Phytother. Res.* 21, 1209-1216. (2007)
- Das, S. and Devaraj, S.N. Glycosides derived from *Hemidesmus indicus* R. Br. root inhibit adherence of *Salmonella typhimurium* to host cells: receptor mimicry. *Phytother. Res.* 20, 784-793. (2006)
- Das, S. and Devaraj, S.N. Antienterobacterial activity of *Hemidesmus indicus* R.Br. root extract. *Phytother. Res.* 20, 416-421. (2006)
- Das, S., Prakash, R. and Devaraj, S.N. Antidiarrhoeal effects of methanolic root extract of *Hemidesmus indicus* (Indian sarsaparilla) - an in vitro & in vivo study. *Ind. J. Expt. Biol.* 41, 363-366. (2003)
- Das, S., Dash, S.K. and Padhy, S.N. Ethnomedicinal information's from the tribals of Orissa state - review. *J. Hum. Eco.* 14(3), 165-227. (2003)

7. Research funded projects: Title, funding agency, amount, year of completion/under progress

- *Role of natural glycosides in antiadhesive therapy and uropathogenesis (UGC-BSR startup grant of Rs 10 lakh) (Completed: 2017-2020)*

8. University Administration: Position, Duration

- Asst. Suptd. Working Ladies hostel, Feb 2016 to Sept. 2016
- Asst. Suptd. Saberi Ladies hostel, Sept. 2016 to May 2018
- Asst. Suptd. Chilika Ladies hostel, June 2019 to May 2020
- Suptd. Anshupa Ladies hostel, May 2020 to till date
- Cultural Coordinator, Berhampur University, Mar, 2021 to till date
- Coordinator, PG Dept. of Botany, June 2021 to till date

9. Member of Committees in University and outside

- Asst. Advisor, Student union, 2016-2018
- Member in Sports Council
- Member in LEC, BU

10. Awards and Recognitions, if any

- *First Class First in M.Sc. Botany 1999 Khallikote (Auto) College, Berhampur.*
- *First Prize in State level, Dr. G.P. Pattnaik Memorial Essay Competition, Conducted by Utkal University (1999).*
- *Qualified Joint CSIR-UGC Junior Research Fellowship (JRF) & Lectureship, National Eligibility Test (NET) held on 19-12-1999 and 25-06-2000.*
- *Rank holder in National Eligibility Test (NET) held on 25-06-2000. Appeared Dr Shyama Prasad Mukherjee (SPM) Fellowship examination (August, 2001).*
- *Post-doctoral Fellowship from University of Minnesota, USA, (July, 2007)*
- *CSIR – RA Fellowship (March, 2011)*

11. Any other information such as conferences attended, visits abroad, reviewer / editorial member etc

CONFERENCE PUBLICATIONS:

- *Presented paper in 21st Odisha Bigyan O Pribesh Congress and National seminar on Harnessing Science for a better Future held on 23-24th Nov. 2019 at SOA University, Bhubaneswar. "Isolation, characterization and identification of fungal pathogens from spoiled fruits and vegetables".*
- *Presented a paper in National seminar cum workshop on Proteomics in public health held on 15th & 16th March 2019 at Utkal University. "Use of recombinant DNase B in diagnosis of group A Streptococcal infection".*
- *Presented a paper in Int. Conf. on chemical and biological sciences in drug discovery 2019 held on 08-10 March 2019 at Berhampur University. "Enzyme-linked....recombinant DNase B".*
- *Presented a paper in National Conf. on Biodiversity, Biotechnology and Bioinformatics: Innovative and emerging trends held on 22nd & 23rd Feb. 2019 at Berhampur University. "Eco-friendly ... Staphylococcus aureus".*
- *Presented a paper in National Conf. on crossroads of biological sciences and its applications held on 15th & 16th Feb. 2019 at Berhampur University. "Wound healing ... Pseudomonas aeruginosa".*
- *Presented paper in 43rd Annual conference of Odisha Botanical Society and National seminar on Plants for sustainable development held on 23-24th Dec 2018 at Centurion University, Bhubaneswar. "Scientific validation of ... pathogenic bacteria".*
- *Presented paper in 20th Odisha Bigyana O Paribesh Congress and National seminar held on 17-18th Nov 2018 at NISER, Bhubaneswar. "Preparation of His tagged....Streptococcus".*
- *Presented a paper in 42nd Annual conference of Odisha Botanical Society and National seminar on biotech. Interv. for Env. Stress Manag. in plants and microbes held on 21-22nd Jan 2018 by Utkal University "Inhibition of Salmonella typhimurium-induced pathogenesis by Hemidesmus indicus R.Br. root extract"*
- *Presented a paper in National seminar on HIV & AIDS stigma and rights of women held on 28th-29th March, 2017 at Berhampur University. "HIV/AIDS: etiology, prevalence and challenges faced by Indian women".*
- *Presented a paper in National seminar on adverse impact of global climate change.....coastal India and its management held on 26th-27th March, 2016 at Berhampur University. "Role of microbes in combating global warming".*
- *Presented a paper in National seminar on Microbial Technology: Perspective and Application, held on 25-26th Dec. 2015, organized by OUAT, Bhubaneswar. "Cloning, expression and, purification of DNase B derived from Streptococcus pyogenes.*
- *Presented a paper in International Conference on Natural Products, Free radicals & Radioprotectors in Health (NFRH) held on 17-19th Jan. 2004 at Annamalainagar. "Active constituents from Hemidesmus*

indicus root extract inhibit SPI-1 encoded pathogenicity and reduces *Salmonella typhimurium* induced gastroenteritis.”

- Presented a paper in International Congress of Indian Pharmacy Graduates held on 8th & 9th Nov. 2003 at Annamalainagar. “Biochemical cross talk between pathogen and plant product: *Salmonella typhimurium* vs *Hemidesmus indicus*.”
- Poster presented in XXIX Annual meeting of the Indian Immunology Society & Symposium on Immunoparasitology on “Identification and characterization of virulence factors and a possible vaccine candidate for *Shigella flexneri*.....” at Bhubaneswar held on 27-29th Nov. 2002
- Presented a paper in 23rd Annual Conference of Indian Associate of Biomedical Scientists at JIPMER, Pondicherry held on 5th & 6th Oct. 2002.
- Presented a paper in 2nd National Siddha Conference at Chennai held on 27th & 28th July, 2002.

INVITED TALKS:

- Delivered a talk on “Interference of Natural Compounds with Bacterial Pathogenesis”, in AICTE sponsored Faculty Induction Program for newly appointed Pharmacy faculties on 17-03-21 available online link: <https://youtu.be/W-0YdEd91I8>
- Delivered an invited talk on “Recombinant Proteins as diagnostic markers” in National Conference on Recent Advances in Biological Research, 2020 organized by Herbal Biosciences, Bhubaneswar on 8-10th Aug. 2020 available online link:

https://drive.google.com/file/d/1yTnfnMgl_QnGErfNu_C6zvEN7HXhKldZ/view?usp=sharing

- Delivered a lecture on “Microflora & Host Pathogen Interaction” in the induction programme of newly recruited SSB lecturers on 22-12-2019, organized by HRDC, Berhampur University
- Presented an invited Talk on “Normal Microflora and Human Health” 25th Sept. 2019, organized by Binayak Acharya Government College, Berhampur.
- Presented a specially invited talk on “Bioactive potential of *Hemidesmus indicus* R. Br. Root extract against *Salmonella typhimurium*-mediated pathogenesis” in International conference on Recent trends of chemical and biological science in medicine, natural products and drug discovery held on 3rd-5th March, 2017 at Berhampur University.

ORIENTATION/REFRESHER COURSES:

- Participated in the UGC, Govt. of India, sponsored Orientation Programme at UGC-HRDC, Utkal University, Bhubaneswar 18-08-2017 to 15-09-2017.
- Participated in the UGC, Govt. of India, Sponsored refresher course in “Environmental Sciences” at UGC-HRDC, Andhra University, Vishakhapatnam, AP from 23-12-2019 to 05-01-2020.
- Participated in the UGC, Govt. of India, Sponsored refresher course in “Life Sciences: Synthetic Biology” at UGC-HRDC, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh from 14-12-2020 to 28-12-2020.

SEMINARS/CONFERENCES ORGANIZED:

- **Asst. Organizing Secretary** - National Conference on Biodiversity, Biotechnology and Bioinformatics : Innovative and emerging trends (NCBBBIET, 2019) held on 22nd & 23rd Feb. 2019, organized by Department of Botany, BU
- **Organizing Secretary** - National Conference on Recent Advances in Plant Sciences, Biotechnology and Bioinformatics (RAPSBB, 2020) held on 17th & 18th Feb. 2020, organized by Department of Botany, BU
- **Organizing Secretary** - International e-Conference on Current status of Biosciences, (ICCSB 2021) held on 30th & 31st March 2021, organized by Department of Botany, BU

MEMBER IN PROFESSIONAL OR OTHER BODIES:

- *Life member of Odisha Botanical Society*
- *Life member of Department of Botany, Alumni Association, BU*
- *Member of BU teachers Association*

HONORARY REVIEWER IN RESEARCH JOURNALS:

- *International Journal of Nanosciences and Nanotechnology*
- *Journal of Plant Research International*
- *Plant Cell, Biotech. and Mol. Biology*
- *Asian Journal of Advanced Research and Reports*
- *Journal of Basic and Applied Research International*
- *AIMS Molecular Science*
- *Issues in Biological Sciences and Pharmaceutical Research*
- *International Research Journal of Public and Environmental Health*