KALAHANDI UNIVERSITY
Manikya Vihar, Bhawanipatna, Kalahandi – 766001, Odisha

FACULTY PROFILE

A. Personal Information	
Name	**Dr JATINDRA KUMAR PRADHAN**
Designation	Assistant Professor
Department	Zoology
Area of Specialisation	Microbiology, Bioremediation, Biohydrometallurgy, Nanobiotechnology, E-waste Management, Bioenergy and Biosystematics and Animal Taxonomy
Date of Joining	17.06.2014
Address	Department of Zoology, Kalahandi University, Bhawanipatna, Kalahandi, Odisha-766001 (India)
Phone Number	+91-7008132929
Email ID	jatin1983@outlook.com; jkpradhan@kalahandiuniversity.ac.in
ORCID ID	0000-0003-4387-1247
Researcher ID	E-5857-2013

B. Qualification

Degree	**Year**	**Institute/College University**	**Subject/Area of Specialization/Research**	**Achievement**
UG	2005	Utkal University	Zoology (Hons)	1st Div.
PG	2007	School of Life Sciences, Sambalpur University	Life Sciences (Zoology Stream) with Microbiology Specialization	1st Div
MPhil	2008	School of Life Sciences, Sambalpur University	Microbial Physiology	1st Div
PhD	2013	Jaypee University of Information Technology, HP	Biotechnology	Awarded
WIPO				

C. Teaching Experience

Designation	**Institute**	**Duration (From – To)**	**Nature of job-Regular/Guest Faculty**
Assistant Professor in Zoology	Kalahandi University (Erstwhile Govt. Autonomous College), Bhawanipatna	17.06.2014 - Continuing	

D. Research Experience

Designation	**Institute**	**Duration (From – To)**	**Level-State/National /International**
Assistant Professor	Kalahandi University (Erstwhile Govt. Autonomous College), Bhawanipatna	17.06.2014 - Continuing	

E. Awards/Honours/Fellowships

Year	**Name of Award**	**Conferring Institute**	**Level-State/National**

			/ International
2017	VIVEKSHREE (BEST TEACHER)	Swami Vivekanand Public School	State

F. **Membership in Professional Bodies**

Duration (From-To)	**Organisation**	**Position**	**Level- State/National / International**
2011	Indian Science Congress Association	Life Member (L18220)	National
2011	National Solid Waste Association of India	Life Member	National
2020	Microbiologists Society, India	Life Member (MS /LM/488)	National

G. Technology Developed (Annexure-A)	1. Eco-Pesticide (Talk based) 2.Green-Fungicide (Talk based) 3. Green-Fungicide (Vermi based)

H. Presentations

Total number of Seminars/webinars	**Attended/Participated**	**Presented Paper/Invited as Resource Person**	**Organized as Convener**
14	14	3	3

For detail information on presentations see Annexure (A)

I. Publications (Peer reviewed) (International)

Number of Publications	**Book Chapter**	**Edited Book**	**UGC Care**	**Scopus/WoS/Publon**
7	3	1	5	7

For detail information on publications see Annexure (B)

J. Refresher Course/Induction/Orientation Programme/Workshop/Other Training Attended

Refresher Course/Induction/Orientation Prog/Worksh op	**Duration (From-To)**	**Organized by**	**In collaboration with**	**Level – State/National/International**
Refresher course- "Research for Development"	30th May to 19th June (2016)	UGC-Human Resource Development Centre (HRDC), Sambalpur University		**National**
FDP on "Nanomaterials and Devices"	27th April to 1st May (2020)	Applied Science Department of National Institute of Teachers Training and Research, Chandigarh		**National**

		(MHRD, Govt. of India)		
FDP on "Research Methodology and Project Writing"	7th July to 11th July (2021)	Institutional Developmental Plan (IDP-OHEEP) of Ramadevi Women's University		**National**

K. Gene Sequence Publications				
For detail information on publications see Annexure (B)				
M. Research Guidance				
Level	**Completed/Awarded**	**Ongoing**	**Guide/Co-guide**	**University**
U.G.	**24**	**8**	**Guide**	**Kalahandi University**
P.G.		**8**	**Gude**	**Kalahandi University**
PhD	**-**	**-**	**-**	**Kalahandi University**
N. Projects Done/Ongoing				
Title of the Project	**PI/Co-PI**	**Amount of Fund**	**Funding Agency**	**Duration**
Recycling of Precious Metals from Electronic Waste: A Forward Step to Develop Sustainable Green Urban Mining Technology using Bioleaching Process	**PI**	**Rs 1,200,000/-**	Science and Engineering Research Board (SERB), DST, Govt. of India	**3 Years**

O. Research Matrix				
Google Scholar Score	**Research gate Score**	**H index**	**i10-index**	
Citation-574	**329.5**	**8**	**6**	

P. Curricular, Co-curricular and Extra-Curricular assignments discharged.		
Position /Assignment	**Organisation**	**Duration**
OIC-College Library	**Govt. College (A), Bhawanipatna**	**2017-2018**
OIC-UGC Cell	**Govt. College (A), Bhawanipatna**	**2018-2019**
Member-Research Cell	**Govt. College (A), Bhawanipatna**	**2016-2019**
Editorial Board Member-Kalahandi Renaissance	**Govt. College (A), Bhawanipatna**	**2017-**

Annexure (A) Details of All Presentations

International

1. **Jatindra Kumar Pradhan** and Sudhir Kumar, (October 21-23, 2009). A case study on E-waste management in India. International Conference on Biotechnological Solutions for Environmental Sustainability, School of Bio Sciences and technology, VIT University: pp-105.
3. Chandan Singh, **Jatindra Kumar Pradhan**, Pradeep Kumar Naik and Harvinder Singh, (December 13-15, 2013). Novel Nanoparticles (Ag, Au and Pt): Biosynthesis and Characterization

   using Liquorice Root Extract. India-Japan Workshop on "Biomolecular Electronics and Organic Nanotechnology for Environment Preservation. Delhi Technological University, New Delhi, India.

4. Chandan Singh, **Jatindra Kumar Pradhan**, Ritesh K. Baboota, Pradeep Kumar Naik and Harvinder Singh, (December 18-21, 2011). Biosynthesis, Characterization and antibacterial activity silver nanoparticles using fenugreek seeds. International Conference on nanomaterials and nanotechnology. Conference Centre at University of Delhi, New Delhi, India.
5. Chandan Singh, **Jatindra Kumar Pradhan** and Harvinder Singh, (September 23-25, 2011). Green chemistry approach for the synthesis of biocompatible nanoparticles for application in cancer therapy. International Conference on Emerging Trends on Food and Health Security in Cold Desert, DIHAR (Defence Institute of High Attitude and Research), Leh-Ladakh, India.

6. S. Khosa, S. Garg, N. Bhatia, **Jatindra Kumar Pradhan**, P. K. Naik and H. Singh, (September 23-25, 2011). The phylogenetic relationship between the endangered pheasant sp. of Himalyan region. International Conference on Emerging Trends on Food and Health Security in Cold Desert, DIHAR (Defence Institute of High Attitude and Research), Leh-Ladakh, India.
7. Chandan Singh, Sonali Singh, **Jatindra K Pradhan**, Nirwan Upmanyu, AK Thakr, PK Naik, H. Singh (February 13-15, 2014) Anti-cancer and antibacterial activity of biosynthesized noble metal (Au, Ag and Pt) nanoparticles, Annual convention of Indian Association for Cancer Research, Rajiv Gandhi Center for Biotechnology.

National

1. **Jatindra K Pradhan**, Sudhir Kumar, (December 5-6, 2014), Bioleaching of Metals from Electronic Waste (e-waste): Prospects and Opportunities, *National Seminar on* 'Science & Technology for Human Development', Indian Science Congress Association – Bhubaneswar Chapter Siksha 'O' Anusandhan University, Bhubaneswar Orissa Environmental Society

2. Udai B. Singh, Renu, Dhanajaya P. Singh, **Jaindra Kumar Pradhan**, Washiullah, Manish Roy and Arun K. Sharma, (February 7, 2014). Bioprospective microbial agents from rhizosphere ecosystems triggering plant defence responses provides protection against sheath blight disease in rice (*Oryza sativa* L.), National seminar on Indian agriculture and rural development in changing global scenario, Institute of agricultural sciences, Banaras Hindu University, India. (**Best Presentation Award**).

3. **Jaindra Kumar Pradhan** and P. K. Sahoo, (March 30, 2013). Dark side of advance trends in Information Technology, Paper presentation, National Conference in Emerging Trends in Information Technology, Department of Computer Sciences and Engineering, Utkal University, India.
4. Successfully participated in the International Webinar on "Covid-19 Awareness" organised by Department of English and Music, MDSD Women's College, Haryana, India held on 8th May 2020.
5. Successfully participated in the webinar on "Art of Writing Research Paper" organised by Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, Uttar Pradesh, India held on 29th May 2020.
6. Successfully participated in the webinar on "Biodiversity and Man" organized by the Department of Botany, Dyal Singh College, University of Delhi, in collaboration with Society for Ecological Research and Natural Resources Management (SERNRM) held on 5th June 2020.
7. Successfully participated in the National Webinar on "Biological Management of COVID-19" organized by Department of Zoology, B.J.B. Autonomous College, Bhubaneswar held on 28th September 2020.

Resource person

1. Provided hands on training as **Resource Person** to the participants in summer training on Environmental Biotechnology & Microbial Techniques (June-July, 2010 & 2012), Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Waknaghat, Solan, (H.P.) India.

2. Invited Guest Speaker: Delivered a talk on "Biomining- An advance Strategy for E-waste Management" as invited guest speaker in a webinar organised by Department of Zoology, St. Joseph University, Nagaland, India on 8th July 2021.

Conferences/Workshop Organize:

1. **As convener**: Organised National Webinar as convener on **"Recent Trends in Animal Sciences (Neuroscience & Nanobiotechnology)"** which was hosted by Department of Zoology, Kalahandi University on 31st May 2021.
2. **As convener**: Organised National Webinar as convener on **"Vaccine: Concepts & Therapeutics"** which was hosted by Microbiologists Society, India in collaboration with Department of Botany & Zoology, Kalahandi University on 26th June 2021.

3. **As convener**: Organised a Workshop as convener on **"Snake: Rescue, Conservation and Snakebite Mitigation"** which was hosted by Department of Zoology, Kalahandi University on 12th September 2022.

Technology Developed

1. Udai B. Singh, Renu, Washiullah, **Jatindra Kumar Pradhan**, Arun K Sharma (2013-14). **Eco- Pesticide-*Pseudomonas fluorescens* (Talk based bioformulation: 10^8cfu/g) an Eco-friendly Biopesticide cum Biofertilizer**. National Bureau of Agriculturally Important Microorganisms (NBAIM), ICAR, Mau Nath Bhanjan, U.P. (India).

2. Udai B. Singh, Renu, Washiullah, **Jatindra Kumar Pradhan**, Arun K Sharma (2013-14). **Green Fungicide-*Trichoderma harzianum* (Talk based bioformulation: 10^6cfu/g) an Eco-friendly and Natural Fungicide**. National Bureau of Agriculturally Important Microorganisms (NBAIM), ICAR, Mau Nath Bhanjan, U.P. (India).

3. Udai B. Singh, Renu, Washiullah, **Jatindra Kumar Pradhan**, Arun K Sharma (2013-14). **Eco-Green Fungicide-*Trichoderma viride* (Vermi based bioformulation: 10^6cfu/g) an Eco-friendly and Natural Biofungicide**. National Bureau of Agriculturally Important Microorganisms (NBAIM), ICAR, Mau Nath Bhanjan, U.P. (India).

Workshops/Training Attended

1. Hands-on Training on Microbial Systematics (March-08-12, 2016), Microbial Type Culture Collection and Gene Bank (MTCC-CSIR-IMTECH), Chandigarh, India.

2. AMI-ASM Workshop on Scientific Writing and Publication (November 3rd, 2011), Association of Microbiologist of India (AMI) and American Society for Microbiology (ASM) at Punjab University, Chandigarh, India.

3. Paradigms of Synthetic Biology (July 26th – July 28th, 2011), Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, India and Fuel Synthesis Division, Joint BioEnergy Institute, Emmerville, CA, USA.

4. Advanced Data Mining, Fusion, and its Biomedical Applications (ADMFBA) (August 31st-September 1st, 2010), Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, India and College of Engineering & Science Lousiana Tech University, LA, USA.

5. Electronic and Electro-optic Materials by Prof. Guru Subramanyam of University of Dayton, USA (May 30th to June 3rd, 2011) at Jaypee University of Information Technology, India, and Indo-US Collaboration for Engineering Education (IUCEE).

Annexure (B) Details of All Publications

International Peer Reviewed Publications

1. **Jatindra Kumar Pradhan and** Sudhir Kumar (2014). Informal E-Waste Recycling: Environmental Risk Assessment of Heavy Metal Contamination in Mandoli Industrial Area, Delhi, India. ***Environmental Science and Pollution Research***, (DOI: 10.1007/s11356-014-2713-2). **(ISSN: 0944-1344 (Print) 1614-7499 (Online))**
2. **Jatindra Kumar Pradhan** and Sudhir Kumar (2012). Metals Bioleaching from Electronic Waste by *Chromobacterium violaceum* and *Pseudomonad sp.* ***Waste Management and Research***. 30(11) 1151-1159. **(ISSN: 0734-242X (Print) 1096-2669 (Online))**
3. **Jatindra Kumar Pradhan** and Sudhir Kumar (2009). E-Waste Management: A Case Study of Bangalore, India. ***Research Journal of Environmental and Earth Sciences***, 1(2), 111-115. **(ISSN: 2041-0484 (Print) 2041-0492 (Online))**

4. Chandan Singh, **Jatindra K. Pradhan**, Sonali Singh, Pradeep K. Naik, Anil Kant, and Harvinder Singh. (2015) Biosynthesis and Antibacterial-Activity of Silver and Gold Nanoparticles Using Liquorice Root: A Green Chemistry Approach ***J. Colloid Sci. Biotechnol. 4, 147-152*** **(ISSN: 2164-9642).**
5. UB Singh, D. Malviya, S. Singh, **JK Pradhan**, et.al., (2016), Bio-prospective microbial agents from rhizosphere eco-systems trigger plant defense responses provide protection against sheath blight disease in rice (Oryza sativa L.), ***Microbiological Research***, 192, 300-312 **(ISSN: 0944-5013)**
6. P. Sanghamitra, B. Pattnaik, R. Nayak, **JK Pradhan** (2016), Waste water characterisation and management in and around GCEK Campus, ***International Journal of Engineering Technology Science and Research*****, 3(4) 142-152 (ISSN: 2394-3386)**
7. Suresh Kumar, Vandana Sharma, **Jatindra Kumar Pradhan**, Sanjay Kumar Sharma, Prem Singh, and Jatinder Kumar Sharma, Structural, Optical and Antibacterial Response of CaO Nanoparticles Synthesized via Direct Precipitation Technique. Nano Biomed. Eng., 2021, 13(2): 172-178. DOI: 10.5101/nbe.v13i2. p172-178.

Book (Ed):

1. Suresh Kumar & **Jatindra Kumar Pradhan** (Eds). (2021) E-waste: Management and Procurement of Environment (1st ed.). Authorspress, New Delhi, India. ISBN 978-93-90588-87-9.

Book Chapter

1. Jitendra Kumar, **Jatindra Kumar Pradhan,** M. S. Bhoyar, G. P. Mishra, P. K. Naik (2014). Molecular Level Approach to Study Genetic Diversity in *Artemisia Annua*

from Trans- Himalayan Region, India. In: Gupta N (ed) **Handbook of medicinal plants and their bioactive compounds**. Research Signpost. **(ISSN: 978-81-308-0548-1)**

2. Nidhi Gupta, RS Chouhan, **Jatindra Kumar Pradhan,** (2014). Rutin: A bioactive flavonoid. In: Gupta N (ed) **Handbook of medicinal plants and their bioactive compounds**. Research Signpost. **(ISSN: 978-81-308-0548-1)**
3. Peeranart Kiddee, **Jatindra Kumar Pradhan**, Sanchita Mandal, Jayanta Kumar Biswas, Binoy Sarkar, An overview of treatment technologies of E-waste, Editor(s): Majeti Narasimha Vara Prasad, Meththika Vithanage, Anwesha Borthakur, Handbook of Electronic Waste Management, Butterworth-Heinemann, 2020, Pages 1-18, ISBN 9780128170304, https://doi.org/10.1016/B978-0-12-817030-4.00022-X.

Gene Sequence Publications

1. Jatindra Kumar Pradhan and S. Kumar, 2012, *Aeribacillus pallidus* strain SJ1, 16S rRNA gene sequence analysis of thermopilic strains isolated from Panamic hot spring, Nubra Valley, Leh-Ladakh, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **JX465654**.
2. Jatindra Kumar Pradhan and S. Kumar, 2012, *Aneurinibacillus thermoaerophilus* strain SJ2, 16S rRNA gene sequence analysis of thermopilic strains isolated from Panamic hot spring, Nubra Valley, Leh-Ladakh, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **JX465655**.
3. K. Sethy, Jatindra Kumar Pradhan and N. Behera, 2012, *Bacillus sonorensis strain* SLS1, 16S rDNA sequence analysis of bacterial strains isolated from fresh coal mine spoil, Basundhara opencast coal mines, MCL, Sundergarh, Odisha, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **KC188799**.
4. K. Sethy, Jatindra Kumar Pradhan and N. Behera, 2012, *Bacillus aerophilus strain* SLS2, 16S rDNA sequence analysis of bacterial strains isolated from fresh coal mine spoil, Basundhara opencast coal mines, MCL, Sundergarh, Odisha, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **KC188800**.
5. K. Sethy, Jatindra Kumar Pradhan and N. Behera, 2012, *Bacillus thuringiensis strain* SLS3, 16S rDNA sequence analysis of bacterial strains isolated from fresh coal mine spoil, Basundhara opencast coal mines, MCL, Sundergarh, Odisha, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **KC188801**.
6. K. Sethy, Jatindra Kumar Pradhan and N. Behera, 2012, *Bacillus weihenstephanensis strain* SLS4, 16S rDNA sequence analysis of bacterial strains isolated from fresh coal mine spoil, Basundhara opencast coal mines, MCL, Sundergarh, Odisha, India (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: **KC188802**.
7. K. Sethy, Jatindra Kumar Pradhan and N. Behera, 2012, *Uncultured bacterium clone* SLS5, 16S rDNA sequence analysis of bacterial strains isolated from fresh coal mine spoil, Basundhara opencast coal mines, MCL, Sundergarh, Odisha, India (Deposited

in GenBank of NCBI, EMBL and DDBJ) Accession number: KC188803. and DDBJ) Accession number: KC188803.

8. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC14 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498594.
9. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC17 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498595.
10. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC18 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498596.
11. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC19 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498597.
12. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC21 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498598.
13. S. Renu, U. B. Singh, M. S. Bhoyar, Jatindra Kumar Pradhan, and A. K. Srivastava, 2013, Xanthomonas campestris pv. Campestris strain XCC22 16S rDNA gene sequence, Partial sequence (Deposited in GenBank of NCBI, EMBL and DDBJ) Accession number: KF498599.

Any other important information/achievement.

1. Appointed as Coordinator of Microbiologists Society, India for Kalahandi University from 2020.

UNDERTAKING

Certified that the information given above are true to the best of my knowledge and belief.

Signature