

Biodata



Personal Details

Name:	Dr. PALLAVI SINHA
Designation:	Assistant Professor, Dept. of Zoology, Govt. NPG College of Science, Raipur
Date of Joining:	18.09.2017
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Qualification

- **D.Phil** in Biotechnology from University of Allahabad, Allahabad under supervision of Dr. Anjana Pandey. Topic assigned is “**Study of Fe hydrogenase (*hyd A*) in hydrogen producing prokaryote and its comparison with eukaryotic Fe hydrogenase**”.
- **Master of Sciences (M.Sc)** in Zoology with **1st division** (62.5 %)from University of Allahabad, Allahabad in 2005.

Post Doctoral Research Experience

- **Research Associate (DBT-RA)** with Prof D. Das, Bioprocess Engineering Lab, Dept of Biotechnology, **Indian Institute of Technology Kharagpur, West Bengal** (July, 2013 to June, 2016).

Special Achievements

- Selected for **DBT- Research Associateship** in 2013.
- Selected for **Senior Research Fellowship (SRF)** from Council for Scientific & Industrial Research (CSIR) in December 2009.
- Cleared **CSIR –NET** in December 2005 in Life sciences.
- **1st prize** in paper presentation National Seminar on Exciting Frontiers of Research in Science & Technology, Indian Science Congress Association, Allahabad Chapter (February 28- March 1, 2013). Dark fermentative hydrogen production by *Bacillus firmus* : A way to metabolize carbohydrate rich wastes to produce H₂. **Pallavi Sinha**, Anjana Pandey.

Publications

1. **Isolation and Evaluation of a high hydrogen producing lab isolate from cow dung.** AnjanaPandey, **Pallavi Sinha**, ShireenMeherKotay, Debabrata Das. International journal of Hydrogen Energy Volume (ISSN: 0360-3199) 34, Issue 17, (September 2009) **Impact Factor-3.548.**
2. **An Evaluative report and challenges for fermentative biohydrogen production.** **Pallavi Sinha**, Anjana Pandey. International journal of Hydrogen Energy. Volume 36, (2011) **Impact Factor-3.548.**
3. **Optimization of hydrogen production by *Rhodobacter sphaeroides* NMBL-01.** AnjanaPandey, NehaSrivastava, **Pallavi Sinha**. International journal of Biomass and Bioenergy (ISSN: 0961-9534).Volume 37, (2012) **Impact factor-2.975.**
4. **Biohydrogen production from various feed stocks by *Bacillus firmus* NMBL-03.** **Pallavi Sinha**, Anjana Pandey. International journal of Hydrogen Energy Volume 39, Pages 7518-7525 (2014) **Impact Factor-3.548.**
5. **Role of formate hydrogen lyase complex in hydrogen production in facultative anaerobes,** **Pallavi Sinha**, Shantonu Roy, Debabrata Das.International journal of Hydrogen Energy Volume 40, Pages 8806-8815 (2015) **ImpactFactor-3.548.**
6. **Genomic and proteomic approaches for dark fermentative biohydrogen production,** **Pallavi Sinha**, Shantonu Roy, Debabrata Das. Renewable and Sustainable Energy reviews Volume 56 (April 2016) **Impact Factor- 5.901**
7. **Improvement of biohydrogen production with novel augmentation strategy using different organic residues.** **Pallavi Sinha**, Kartik Gaurav, Shantonu Roy, G Balachandar,

Debabrata Das. International Journal of Hydrogen Energy Volume 41, (2016) **Impact Factor-3.548.**

8. Maximizing power generation from dark fermentation effluents in microbial fuel cell by selective enrichment of exoelectrogens and optimization of anodic operational parameters. Jhansi L. Varanasi, **Pallavi Sinha**, Debabrata Das. Biotechnology Letters (ISSN: 0141-5492) (2017).

9. Improvement in energy recovery by dark fermentative biohydrogen followed by biobutanol production process using obligate anaerobes Romit Mitra, G. Balachandar, Vaishali Singh, **Pallavi Sinha**, Debabrata Das. International Journal of Hydrogen Energy Volume 42, (2017) **Impact Factor-3.548.**

10. Article entitled “**IIT-Kharagpur leads the way for Biofuels**” published in magazine Akshay Urja (Scientific magazine published by Ministry of New and Renewable Energy).

Book published

1. Hydrogen production by *Citrobacter* CDN-1 isolated from cow dung, Anjana Pandey, **Pallavi Sinha**. Lambert Academic publishing **ISBN:978-3-659-34479-4. 2013.**

Presentation Given

1. Poster presentation in International Workshop on Biohydrogen Production Technology, Kharagpur (February 07-09, 2008). Isolation and Characterization of a high hydrogen producing lab isolate from cow dung. Anjana Pandey, **Pallavi Sinha**, Kotay SM, Priya Srivastava, Das D.

2. Poster presentation in International Conference on Molecular Biology & Biotechnology, Bansthal (October 19-21, 2008). Biochemical and 16s rRNA gene sequence analysis for establishment of phylogenetic relationship of an isolated microbe, Anjana Pandey, **Pallavi Sinha**, & Priya Srivastava.

3. Oral presentation in Seventy Ninth Annual Session and symposium on “Science and Technology and Young (Career, Creativity, Excitement)”, National Academy of Sciences, India Kolkatta (December 14-16, 2009), Characterization of hydrogen producing lab isolate and study of the effect of different metals in fermentative hydrogen production. Anjana Pandey, **Pallavi Sinha**, Vikash Singh.

4. **Oral presentation** at International conference on radiation, environment and health, Nehru Gram Bharati University Allahabad(19-21 November 2010). Optimization of Hydrogen production and establishment of phylogenetic relationship of an isolated heterotrophic microbe. Anjana Pandey, **Pallavi Sinha**,
5. **Poster presentation** in Eightieth Annual session and National symposium on Climate change –Research awareness and capacity building National Academy of Sciences India, Jaipur (December 2-4, 2010).RAPD Analysis: A tool for differentiation of Hydrogen producing *Citrobacter CDN1* with other hydrogen producing lab isolate. **Pallavi Sinha**, Anjana Pandey.
6. **Poster presentation** in Ninety eighth Indian Science Congress, Chennai (January 3-7, 2011). Fermentative Hydrogen production from the fermentation of Sugarcane Bagasse hydrolyasate by lab isolate *Citrobacter CDN1*. **Pallavi Sinha**, Anjana Pandey.
7. **Poster presentation** at World Congress on Biotechnology, Hyderabad (March 21-23 2011).Fermentative H₂ production by *Citrobacter CDN 1*: A new avenue for management of carbohydrate rich wastes. **Pallavi Sinha**, Anjana Pandey.
8. **Poster presentation** at International conference on mycology and plant pathology biotechnological approaches, Banaras Hindu University, Varanasi (February 27-29, 2012). Biohydrogen production using waste products of sugar cane industry by using fermentative mixed microbial community isolated from cow dung. **Pallavi Sinha**, Anjana Pandey.
9. **Oral presentation** at International conference on Advances in Biological Hydrogen Production and Applications, JNUTH, Hyderabad (December 14-15 2012). Dark fermentative hydrogen production by *Bacillus firmus* exploiting various carbohydrate rich sources. **Pallavi Sinha**, Anjana Pandey.
10. **Oral presentation** at National Seminar on Exciting Frontiers of Research in Science & Technology, Indian Science Congress Association, Allahabad Chapter (February 28-March 1, 2013). Dark fermentative hydrogen production by *Bacillus firmus*: A way to metabolize carbohydrate rich wastes to produce H₂. **Pallavi Sinha**, Anjana Pandey. The presentation was **awarded for 1st prize** in Biotechnology.
11. **Invited lecture** in International Conference of Translational Biotechnology (Biosangam-2016), MNNIT-Allahabad on **Hydrogen biorefinery: Potential utilization of the spent media of fermentative hydrogen production.**