

## **PROFILE**

<b>Name</b>	Mrs.Hemlata Padmakar Jambhulkar
<b>Designation</b>	Principal Tech.Off. / Tech.Off.Grp III(7)
<b>Qualification</b>	BSc. (1987) [Microbiology, Botany and Chemistry] MSc (1989) [Chemistry]
<b>Experience</b> (in years)	35 years experience
<b>Expertise</b> (for e.g.: Water, Waste, Energy, Business Development etc.)	<ul style="list-style-type: none"> <li>• Remediation of metal contaminated soil</li> <li>• Phytoremediation of mine spoil overburden dumps and fly ash dumps</li> <li>• Bioaccumulation of heavy metals by different plant species grown on fly ash dump</li> <li>• Terrestrial carbon sequestration &amp; mitigation through afforestation</li> <li>• Management of domestic wastewater through constructed wetland</li> <li>• Wastewater management through land treatment</li> <li>• NABET accredited FAE in Soil Conservation (SC) and Water Pollution Monitoring, Prevention &amp; Control (WP)</li> <li>• EIA studies with respect to Thermal power plants sector, River valley sector and petroleum refinery sector</li> </ul>
<b>Publications</b> (in Nos.)	<p>1) Asha Juwarkar, Ashok Juwarkar, Sarita Mowade, <b>Hemlata Jambhulkar</b>, Anjali Shrivastava, Atul Kulkarni, Pranjali Amte and Purushottam Khanna. Role of biofertilizer in Reclamation of manganese mine spoil dumps. <i>Biofertilizer Newsletter</i>. July and December, 1998, 5 (1, 2): 18 -24.</p> <p>2) A.A. Juwarkar, A.B. Kulkarni, <b>H.P. Jambhulkar</b> and P. Khanna. Reclamation of mine spoil dump through an integrated biotechnological approach, NEERI's experience. MEGA EVENT organized by Ministry of Steel and Mines 6-8 Aug 1998: <i>Indian Mineral Industry – A perspective</i>, pp. 297-307.</p> <p>3) A. A. Juwarkar and <b>H.P. Jambhulkar</b>. Restoration of fly ash dump through biological interventions. <i>Environmental Monitoring and Assessment</i> Volume 139, No.1-3, April 2008</p>

pp.no.355 -365.

4) A.A. Juwarkar and **H. P. Jambhulkar** Phytoremediation of coal mine spoil dump through Integrated Biotechnological Approach. *Bioresource Technology*.Vol.99 /11, Oct.; 2008 pp.4732 - 4741.

5) **Hemlata P. Jambhulkar** & Asha A. Juwarkar. Assessment of bioaccumulation of heavy metals by different plant species grown on fly ash dump. *Ecotoxicology and Environmental Safety*. (2009). Vol.72, pp.1122-1128.

6) Asha Ashok Juwarkar, Lal Singh, S.K. Singh, **Hemlata P. Jambhulkar**, Prashant R. Thawale and Harsha Kanfade. Natural vs. reclaimed forests on manganese mine spoil at Gumgaon, Nagpur, India - a case study of successional change, reclamation technique and phytodiversity. *International journal of Mining, Reclamation and Environment* (2014). Volume 29, Issue 6 Pp. No 476-498.

7) Juwarkar AA, Singh L, Kumar GP, **Jambhulkar H P**, Kanfade H & Jha A K. Biodiversity Promotion in Restored mine land through plant animal interaction. *Journal of Ecosystem & Ecography*. (2016).Volume 6, Issue 1, Pp.No.1-10

8) **Hemlata P. Jambhulkar**, Siratun Montaha .S Shaikh and M Suresh Kumar. Fly ash toxicity, emerging issues and possible implications for its exploitation in agriculture; Indian scenario: A review *Chemosphere* (2018). Vol.213, December 2018 pp 333-344

9) **Hemlata P. Jambhulkar** & M Suresh Kumar (2019). Eco restoration approach for mine spoil overburden dump through biotechnological route. *Environmental Monitoring and Assessment* Nov.2019, 191-772

10) **Hemlata P Jambhulkar**. (2023).Beneficial & adverse impacts of fly ash amelioration on soil health; A review. *Journal of Indian Association for Environmental Management* Oct. 2023, Vol.43, No.3, pp. 01- 08.

11) **Hemlata P Jambhulkar**. (2024). Emerging issues and concerns for vegetation and plant growth responses to fly ash: A Review. *Journal of Indian Association for Environmental Management* Sept. 2024, Vol.44, No.3, pp. 48-56.

***Publications in International / National Conference / Symposium / Seminar Papers / Posters : 11***

### **Books/ Manuals / Catalogues written**

(1) A.S .Juwarkar, P.R. Thawle, **H. P. Jambhulkar** and Asha Juwarkar, (1998). Management of Wastewater through Crop Irrigation – An Eco-friendly approach In. *Ecotechnology for Pollution Control and Environmental Management*. R.K.

	<p>Trivedy and A. Kumar (Ed), 1998, Enviro Media, Karad. India.</p> <p>(2) Dr. Neeta Thacker, Dr. Leena Deshpande, Mrs. Shivani Dhage, Dr T. K. Ghosh, <b>Mrs. Hemlata Jambhulkar</b> and Er. D. B. Satpute. "Guidance Manual for Drinking Water Quality Monitoring and Assessment". <i>Sponsored by US Environmental Protection Agency Washington DC, U.S.A.</i> October 2007 and Published by NEERI, Nagpur.</p> <p>(3) Asha A. Juwarkar &amp; <b>Hemlata P Jambhulkar</b> (2009). Reclamation of mine spoil dump using integrated biotechnological approach at Sasti Coal Mine, Maharashtra In <i>Sustainable Rehabilitation of Degraded Ecosystems</i>. O.P. Chaubey, Vijay Bahadur and P. K. Shukla, Aavishkar Pub. ISBN: 81-7910-288-6.</p>
<b>Patents</b>	Nil
<b>Honors &amp; Awards</b> (If any)	<b>Awards</b> <p>(1) Selected by the Association for Overseas Technical Scholarship, Tokyo, Japan to participate in the training course on "<b>Industry and Environment Protection for India.</b>" Organized jointly by Association for Overseas Technical Scholarship (AOTS) and New Energy Development Organization (NEDO) Tokyo, Japan during October 30 to November 17, 2000.</p> <p>(2) Dubai international award 2007 for best practices to improve the living environment to the technology, "<b>Ecological restoration of degraded lands through biotechnological approaches.</b>" included in the Global 329 Good Practices (<i>Member of the Team</i>).</p> <p>(3) Awarded best paper award entitled, "<b>Assessment of bioaccumulation potential of heavy metals on fly ash dump</b>". Presented in X<sup>th</sup> all India meeting of 'Women in Science' held at CSIR-NEERI, Nagpur during December 21-23,2007 and organized by Indian Women Scientist Association, Nagpur</p> <p>(4)NABET accredited FAE in Soil Conservation (<b>SC</b>) and Water Pollution Monitoring, Prevention &amp; Control (<b>WP</b>)</p>
<b>Research Scholars</b> (in Nos.)	Nil