

## Dr. Mamta Awasthi

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<b>Date of Birth</b>	19 July 1968
<b>Present Position</b>	Assistant Professor, NITH since 24 <sup>th</sup> June 2009
	Basic Pay: 107800 Total emolument:130000 (approx.)
<b>Educational qualification and Research Experiences/Awards</b>	UG (1988); PG (1990); Ph.D. 1995. All degrees from Banaras Hindu University, Varanasi PhD Supervisor: Prof. L.C. Rai CSIR Research Associate (Direct): 2002-2006, Rajiv Gandhi University, Itanagar JRF, SRF (BHU, MoEn, GATE): 1991-1997
<b>PhD and MTech Supervision</b>	PhD degree Awarded:03; PhD on-going: 02 MTech degree Awarded: 45; MTech students Enrolled: 04
<b>Research Publications</b>	<b>34</b> (SCI/Scopus indexed: 24; Technical Journal:1) Other reputed peer reviewed papers: 9
<b>Other Publications</b>	Book Chapters: 6 Conference Paper presented/proceeding: 21;
<b>Country Visited</b>	Singapore
<b>Honors</b>	Editorial Member, Journal: BIOINFO Environment and Pollution Member, HP State Pollution Control Board

### Scopus or SCI indexed Publication Details

1. Malik, P., **Awasthi, M.**, & Sinha, S. (2021). Techno-economic and Environmental analysis of biomass-based hybrid energy systems: A Case study of a Western Himalayan State in India , Sustainable Energy Technologies and Assessments, **Elsevier, SCI indexed**, Impact Factor: **3.427** (Accepted)
2. Malik, P., **Awasthi, M.**, & Sinha, S. (2021). Techno-economic analysis of decentralized biomass energy system and CO2 reduction in the Himalayan region", International Journal of Energy and Environmental Engineering, Springer (**SCI Indexed**), doi: <https://link.springer.com/article/10.1007/s40095-020-00370-0>, **IF:1.87**
3. Malik, P., **Awasthi, M.**, & Sinha, S. (2020). Biomass-based gaseous fuel for hybrid renewable energy systems: An overview and future research opportunities. Int J Energy Res. 2020;1-31. <https://doi.org/10.1002/er.6061> (**SCI Indexed**), **Impact factor:3.741**, 2019
4. Malik, P., **Awasthi, M.**, & Sinha, S. (2020). Study of grid integrated biomass-based hybrid renewable energy systems for Himalayan terrain. International Journal of

- Sustainable Energy Planning and Management, ISSN no 2246-2929, Volume 28, Issue 2, Pgs 325-336, DOI: <http://dx.doi.org/10.5278/ijsepm.3674> (**Scopus Indexed**)
5. Malik, P., **Awasthi, M.**, & Sinha, S. (2020). Study on an Existing PV/Wind Hybrid System Using Biomass Gasifier for Energy Generation. *Pollution*, 6(2), 335-346, DOI:[10.22059/POLL.2020.293034.719](https://doi.org/10.22059/POLL.2020.293034.719) (**Scopus Indexed, web of science**)
  6. **Mamta Awasthi** (2020) Effect of heavy metals interaction with ammonium on growth behavior of *C.vulgaris* *Research Journal of Chemistry and Environment*, Volume 24(3)pp.45-51, (**Scopus Indexed**)
  7. **Mamta Awasthi** and Sandeep Kumar (2020) Analysis Of Phosphate Removal Using  $\text{Ca(OH)}_2$  Modified Zeolite Based Adsorbents , IWRA, volume 9(1),pp.37-43 ISSN no.2277-1301 (Technical Journal of Indian Geographical Committee)
  8. Vivek Agarwal and **M. Awasthi** (2019) Potential of *Cordia Obliqua* for turbidity removal in potable water. *Research Journal of Chemistry and Environment* Vol 23(8), pp.136-42, 0972-0626 (**Scopus Indexed**)
  9. Malik, P., **Awasthi, M.**, & Sinha, S. (2019, December). Analysis of sensitive parameters influencing a SPV/WT/Biomass/Battery based hybrid system. In 2019 8th International Conference on Power Systems (ICPS) (pp. 1-6). IEEE,DOI: 10.1109/ICPS48983.2019.9067637 (**Scopus Indexed**)
  10. Vivek Prakash Pankaj and **Mamta Awasthi** (2015) Optimization and validation of microalgal growth condition by response surface methodology (RSM)". *International Journal of Bio-Science and Bio-Technology (IJBSBT)*, Vol.7, No.1, 199-206, ISSN: 2233-7849 Publisher: SERSC (*Science & Engineering Research Support soCiety, Republic of Korea*) (**Scopus Indexed**)
  11. **Mamta Awasthi** and Shiwali Rana (2013) Saccharification of Banana Peels for Ethanol Production, *International Journal of Applied Engineering Research* ISSN : 0973-4562, Volume 8 No. 12-50 (**Scopus Indexed**)
  12. Vivek Prakash Pankaj & **Mamta Awasthi** (2013) Algal Biorefinery. *International Journal of Engineering Research and Technology*, Volume 6 (1), pp. 9-15, ISSN 0974-3154 (**Scopus Indexed**)
  13. **Awasthi, M.** (2012). Relevance of Alkaline Phosphatase activity of immobilized green and cyanobacteria for heavy metal toxicity monitoring *J. Mater. Environ. Sci.* 3(3): 446-451, ISSN 2028-2508(**Scopus Indexed**)
  14. **Awasthi, M.** and Rai, L.C. (2006). Interactions between Zinc and Cadmium Uptake by Free and Immobilized Cells of *Scenedesmus quadricauda* (Turp.) Breb. *Acta Hydrochim. Hydrobiol.*,Germany 34 (1-2): 20-26 Online ISSN: 1863-0669, ISBN ISSN 0323-4320 **Impact factor: 1.502 (SCI)**
  15. **Awasthi, M.** Das, D.N. and Singh R.K. (2006). Qualitative algal analysis from the fish-gut: tested in the rice-fish cropping system. *International Journal of environmental Science and Technology*, Supplement 3 (1) pISSN 1735-1472 e ISSN 1735-2630 **Impact factor: 2.037(SCI)**
  16. **Awasthi, M.** (2005). Nitrate reductase activity: a solution to nitrate problems tested in free and immobilized algal cells in presence of heavy metals. *International Journal of*

Environmental Science & Technology 2: 201-206 pISSN 1735-1472 e ISSN 1735-2630  
**Impact factor: 2.037(SCI)**

17. **Awasthi, M.** and Rai, L.C. (2005). Toxicity of Nickel, Zinc and Cadmium to nitrate uptake in free and immobilized cells of *Scenedesmus quadricauda*. *Ecotoxicology and Environmental Safety*, 61(2): 268-272, USA, ISSN: 0147-6513 **Impact factor: 4.527(SCI)**
18. **Awasthi, M.** and Das, D.N. (2005). Heavy metal stress on growth, photosynthesis and enzymatic activities of free and immobilized *Chlorella vulgaris*. *Annals of microbiology*, 55 (1):1-7 Italy ISSN: 1590-4261 (print version) ISSN: 1869-2044 (electronic version) **Impact factor: 1.607(SCI)**
19. **Awasthi, M.** and Das, D.N. (2005). Impact of Ni, Zn and Cd on growth rate, photosynthetic activity, nitrate reductase and alkaline phosphatase activity of free and immobilized *Scenedesmus quadricauda*. *Algological Studies*, Czech Republic, 115: 53-64, ISSN 1864-1318, **Impact factor: 1.367(SCI)**
20. **Awasthi, M.** and Rai, L.C. (2004). Adsorption of nickel, zinc and cadmium by immobilized green algae and cyanobacteria: a comparative study. *Annals of microbiology*, Italy, 54(3): 257-267 ISSN: 1590-4261 (print version) ISSN: 1869-2044 (electronic version), **Impact factor: 1.67(SCI)**
21. **Awasthi, M.** and Rai, L.C. (2004). Effect of nickel and cadmium on ammonium uptake kinetics of free and immobilized cells of *Anacystis nidulans*. *Acta Hydrochim. Hydrobiol.*, Germany, Now Clean-Soil, Air, Water 32 (2):149-153 Online ISSN: 1863-0669, ISBN ISSN 0323-4320, **Impact factor: 1.502(SCI)**
22. **Awasthi, M.** and Das, D.N. (2004). Heavy metal toxicity on nitrate reductase activity of free and immobilized algal cells. *Algology*, Ukraine, 61(3): 240-245, *International Journal of Algae*, 6 (2): 151- 157, ISSN: 1521-9429 Print ISSN: 1940-4328 Online **(SCI)**
23. Rai, S., Singh, U.P., **Awasthi, M.** and Pandey, S. (1998). Physiological responses of the cyanobacterium *Anacystis nidulans* to a magnetic field. *Electro- and Magnetobiology*, USA (now *Electromagnetic Biology and Medicine*). 17:145-160. ISSN (printed): 1061-9526. ISSN (electronic): 1525-6081, **Impact factor: 1.041(SCI)**
24. **Awasthi, M.**, Das, D.N. and Singh R.K. (2006) Seasonal Algal Analysis from the Fish-gut Tested in the Rice-fish Cropping System. *Research Journal of Chemistry and Environment*. 10: 75-79 ISSN No. 0972-0626, **Impact factor: 0.292 (Scopus Indexed)**