

Name	HEMA DIWAN
Area	Environmental Engineering & Management
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Personal Home Page	

Educational Qualifications

Ph.D (Heavy Metal Remediation), M.Sc. Gold Medalist,

NET, SLET (Env. Sc)

Post Graduate Certificate course in Agricultural Policy (PGCAP)

Academic Affiliation

1. Post- Doctoral Fellow (IISc-DBT Funded project), Jan 2010-Dec 2011

Development of genetically encoded FRET-based nanosensor for high throughput detection of heavy metal

2. Senior Research Fellow (CSIR Funded), Apr 2008-Dec 2009

Awards & Honours

1. Awarded Young Scientist Award by National Environmental Science Academy, New Delhi-2009
2. Awarded Best Research Presentation Gold Medal in the BRPM Competition of Academy of Environmental Biology-2008
3. Awarded Senior Research Fellowship, CSIR-EMR, 2008
4. Nominated for ISCA Young Scientist Program, 2007
5. Qualified UGC-NET in Environmental Sciences, 2003, 2004
6. Qualified UGC-SLET in Environmental Sciences, 2004
7. Medal of Merit for securing First position in University, M.Sc (Env Sc.), MDU.
8. Roll of Honour, B.Sc, MDU.

Area Of Research: Climate Change, Sustainability, Waste Management, Industrial Waste Management, Remediation

Publications/ Articles/ Cases

Journal Publications

1. **Diwan H**, Ahmad A, Iqbal M 2008. Genotypic variation in the phytoremediation potential of Indian mustard for chromium. *Environmental Management*, 41, 734-741
2. **Diwan H**, Ahmad A, Iqbal M 2010. Chromium accumulation and activation of antioxidant defence system in Indian mustard cv Pusa Jai Kisan. *International Journal of Phytoremediation* 12:142–158
3. **Diwan H**, Ahmad A, Iqbal M, 2010. Induction of phytochelatins and antioxidant defence system in *Brassica juncea* and *Vigna radiata* in response to chromium treatments. *Plant Growth Regulation* DOI 10.1007/s10725-010-9454-0
4. **Diwan H**, Ahmad A, Iqbal M 2010. Uptake related parameters as indices of phytoremediation potential. *Biologia* (65, 6: 1004-1011)
5. **Diwan H**, Ahmad A, Iqbal M 2012. Chromium induced alterations in photosynthesis and its related parameters in Indian mustard. *Journal of Environmental Biology* 33, 239-244
6. **Diwan H**, Ahmad A, Iqbal M 2014 Chromium as a pollutant: Phytotoxicity, phytotolerance and phytoremediation (Communicated)

Book Chapter

7. Ahmad A, **Diwan H**, and Abrol YP (2010). Global change, stress and plant productivity. In: Abiotic Stress Adaptation in Plants: Physiological, Molecular and Genomic Foundation (Eds. Hans J Bohnert, Ashwani Pareek, Sudhir K Sopory and Govindjee), Springer, USA, pp. 503-521
8. Khan I, **Hema Diwan** and Ahmad A(2013) Chromium Toxicity and Tolerance in Crop Plants In: Crop Improvement Under Adverse Conditions Springer, USA, pp. 309-332

Paper Presentations in Conferences/Seminars/Symposiums

1. Phytoremediation potential of soybean for Cr contaminated water: **Conference on Recent Trends In Environmental Biology And Biotechnological Approach To Conserve Biodiversity, Gulbarga, 22-25 Oct, 2005.**
2. Genotypic variations in phytoremediation potential of Indian mustard to chromium: **ISCA Young Scientist's Award Programme, Annamalai University, 3-7 Jan, 2007.**
3. Evaluation of some food crops for their phytoremediation capacity against Cr stress: **Golden Jubilee Conference On Challenges and Emerging Strategies for Improving Plant Productivity, New Delhi, 12-15 Nov, 2008 (Poster).**
4. Evaluation of genotypes of Indian mustard for their phytoremediation capacity against Cr stress: **28th annual session of Academy of Environmental Biology, 20-22 Nov, 2008**
5. Evaluation of plant species for chromium phytoremediation: 22nd

**Annual Conference of National Environmental Science Academy,
Dec 27-29, 2009.**

- 6.** Poster presentation in International Conference on Nitrogen, **2010.**
- 7.** Chromium pollution and its attenuation through green technology:
**International Conference on Environment and Human Health,
28-29 November, 2012**
- 8.** Heavy metal pollution and role of phytoremediation, **National
Conference on Environmental Pollution, Soil Health and
Sustainable Agriculture, Amity University, Noida, 15-17 Jan 2013**

Unit Based Programmes:

Risk Analysis, Hazop study and Disaster Management,
For BPCL, 9-11Feb, 2015