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Ph.D., BHU



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### Research Projects:

SN	Title	Funding agencies
1	Effects of heavy metals/metalloids contamination of soils on micronucleus induction in <i>Tradescantia</i> and on microbial enzyme activities	UGC
2	Heavy Metal Speciation of Dust Deposited on Plant Leaves and its Effect on Biochemical Parameters of Leaf (Chlorophyll, Ascorbic acid, Leaf extract pH and Relative Water Content)	UGC

### Honors/Awards

- ❖ Awarded DBT RGYI, 2012.
- ❖ Awarded Dr. D.S. Kothari Postdoctoral Fellowship by UGC, (May, 2009)
- ❖ Awarded Extended SRF in Earth Sciences (2008) by CSIR, New Delhi.
- ❖ *Selected as Post Doctoral fellow in Université de Corse, UMR CNRS 6134, Sciences Pour l'Environnement, B.P. 52, 20 250 Corte (France) under Prof. Vanina Pasqualini for the year 2009 (tenure 1 year)*
- ❖ *Selected for Postdoctoral scholarship by Ministry of National Education and Religious Affairs, General Directorate of European & International Affairs, Directorate of International Relations in Education, Section A', Scholarship Department, Andrea Papandreou 37, 15180 Marousi, Greece for the academic year 2008-2009. Decision No. 109572/I/26.08.08*
- ❖ Awarded CSIR-JRF in Life Sciences (2004).

**Member Academic Bodies:** Member Board of Studies in Botany, GGV

## Education

Sl.No.	Institution /Boards	Degree	Year	Division	Field of Study
1	BHU	Ph.D.	2008		Air Pollution & its impact on plants
2	BHU	M.Sc	2004	1 <sup>st</sup>	Botany (Stress & Terrestrial)
3	Purvanchal	B.Sc.	2001	1 <sup>st</sup>	Botany and Chemistry
4	CBSE	12 <sup>th</sup>	1998	1 <sup>st</sup>	Science
5	CBSE	10 <sup>th</sup>	1996	1 <sup>st</sup>	Science

## Position and Employment (Starting with the most recent employment)

Sl No.	Institution	Position	From (Date)	To (date)
1	Guru Ghasidas Vishwavidyalaya	Assistant Professor	10/08/09	Present
2	BHU	Ext. SRF	22/01/09	08/08/09
3	BHU	SRF	13/07/06	21/01/09
4	BHU	JRF	13/07/04	12/07/06

## List of Publications

1. **Prajapati, S.K.**, Meravi, N., 2015. Effect of Fly Ash on the Photosynthetic Parameters of *Zizyphus mauritiana*. *Advances in Forestry Letters*, 4: 1-5
2. Meravi, N., **Prajapati, S.K.**, 2014. Effects of Heavy Metals/Metalloids Present in Fly Ash from Coal Fired Thermal Power Plant on Photosynthetic Parameters of *Mangifera indica*. *Environmental Skeptics and Critics*, 3(4): 88-92.
3. **Prajapati, S.K.**, Meravi, N., 2014. Heavy Metal Speciation of Soil and *Calotropis procera* from Thermal Power Plant Area. *Proceedings of the International Academy of Ecology and Environmental Sciences*, 4(2): 68-71.
4. Meravi, N., **Prajapati, S.K.**, 2013. Effects of Heavy Metals/Metalloids Contamination of Soils on Micronucleus Induction in *Tradescantia pallida*. *Environmental Skeptics and Critics*, 2(2): 58-62
5. **Prajapati, S.K.**, 2012. Biomonitoring and speciation of road dust for heavy metals using *Calotropis procera* and *Delbergia sissou*. *Environmental Skeptics and Critics*, 1(4):61-64.
6. **Prajapati, S.K.**, 2012. Ecological effect of airborne particulate matter on plants. *Environmental Skeptics and Critics*, 1(1):12-22.
7. Meravi, N., Singh, S., **Prajapati, S.K.**, 2012. Phytoremediation of Chromium & Cobalt Using *Pistia stratiotes*: a sustainable approach. *Proceedings of the International Academy of Ecology and Environmental Sciences* 2(2):136-138.

8. **Prajapati, S.K.**, Tripathi, B.D. 2009. Distribution of vehicular pollutants in street canyons of Varanasi, India: a different case. *Environmental Monitoring and Assessment*. 148 (1-4), 167-172.
9. **Prajapati, S.K.**, Tripathi, B.D. 2008. Assessing the Genotoxicity of Urban Air Pollutants in Varanasi City Using *Tradescantia* Micronucleus (Trad-MCN) Bioassay. *Environment International*. 34(8), 1091-1096.
10. **Prajapati, S.K.**, Tripathi, B.D. 2008. Seasonal Variation of Leaf Dust Accumulation and Pigment Content in Plant Species Exposed to Urban Particulates Pollution. *Journal of Environmental Quality*. 37: 865-870.
11. **Prajapati, S.K.**; Tripathi, B.D., 2008. Anticipated Performance Index of Some Tree Species Considered for Green Belt Development in and around an Urban Area: a Case Study of Varanasi City, India. *Journal of Environmental Management*. 88(4)1343-1349.
12. **Prajapati, S.K.**; Tripathi, B.D. 2008. Biomonitoring Seasonal Variation of Urban Air Polycyclic Aromatic Hydrocarbons (PAHs) Using *Ficus benghalensis* Leaves. *Environmental Pollution*. 151: 543-548.
13. **Prajapati, S.K.**; Tripathi, B.D.; 2007. Biomonitoring Trace-element Levels in PM10 Released from Vehicles Using Leaves of *Saraca indica* and *Lantana camara*. *AMBIO: A Journal of Human Environment*. 36 (8): 704-705.
14. Pandey, S. K., Tripathi, B.D., Mishra, V.K., **Prajapati, S. K.**, 2006. Size fractionated speciation of nitrate and sulfate aerosols in a sub-tropical industrial environment. *Chemosphere*. 63: 49-57.

#### Conference proceedings:

1. **Prajapati, S.K.**, Meravi, N., 2015. Comparative Study on Effects of Heavy Metals/Metalloids Present in Fly Ash from Coal Fired Thermal Power Plant on Photosynthetic Parameters of *Ficus bengalensis* and *Plumeria rubra*. Pp.118-123. In: S N Tripathi (eds.) Proceedings of National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective, ISBN: 978-93-5235-335-4.
2. Meravi, N., **Prajapati, S.K.**, 2015. Heavy Metal Speciation of Fly Ash Leachate and its Genotoxicity Assessment Using Trad-MCN Bioassay". Pp. 147- 148. In: S N Tripathi (eds.) Proceedings of National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective, ISBN: 978-93-5235-335-4.

#### Books

- ❖ **Prajapati, S. K.**, Vehicular Pollution: Biomonitoring and its Impact on Plants, Lap-Lambert Academic Publishing, Germany, ISSN: ISBN 978-3843372060

#### Book Chapter

- ❖ Meravi, N., **Prajapati, S.K.**, 2015. Biomonitoring the Genotoxicity of Heavy Metals/Metalloids Present in Soil Contaminated by Fly Ash from Coal-Fired Thermal Power Plant Using *Tradescantia pallida*. pp 169-176. In: Ansari, A.A., Gill, S.S., Newman, L., Lanza, G.R. (eds) *Phytoremediation: Management of Environmental Contaminants Vol 1 Springer Publications, New York* (ISBN 978-3-319-10394-5).

## Articles

- ❖ E-letter Science (Native and Non-Native Species for Biofuels. *Science*(2006;313:1742)

## Orientation/Refresher Course Attended

- ❖ Refresher Course in Environmental Studies (MD) 15 at UGC HRDC, Rani Durgawati Vishwavidyalaya, Jabalpur M.P from 20/4/15 to 9/5/15.
- ❖ 9<sup>th</sup> UGC Sponsored Orientation Programme at ASC, Guru Ghasidas Vishwavidyalaya, Bilaspur from 16/12/13to 12/1/14

## Invited Lecture

SNo	Title of Lecture	Title of Conference/ Seminar etc.	Organized by
1	Analysis of Floral Diversity	<i>Characterization of Biodiversity of Tropical Forest Ecosystems of Achanakmar-Amarkantak, Biosphere Reserve of Chhattisgarh, India</i>	Academic Staff College, GGv, Bilaspur.

## Seminars/Symposium/Workshops

- ❖ Presented paper entitled “Comparative Study on Effects of Heavy Metals/Metalloids Present in Fly Ash from Coal Fired Thermal Power Plant on Photosynthetic Parameters of *Ficus bengalensis* and *Plumeria rubra*” in DST-SERB Supported National Conference on Climate Change Organized by Department of Botany, DDU College (University of Delhi) on March 02-03, 2015.
- ❖ Presented poster entitled “Effects of Heavy Metals on Photosynthesis of Tree Species” in Regional Meet on Science Education 2015 at RIE, Ajmer on 28 February, 2015.
- ❖ Presented poster entitled “Effect of heavy metals/metalloids present in fly ash from coal-fired thermal power plant on photosynthetic parameters of *Calotropis procera* ” in Tropical Ecology Congress (TEC 2014) “Tropical Ecosystems in a changing World” organized by JNU, New Delhi (10<sup>th</sup> -12<sup>th</sup> December, 2014).
- ❖ Presented paper entitled “Heavy metal speciation of fly ash leachate and its genotoxicity assessment using Trad-MCN bioassay” in International Conference on “Environmental Biology and Ecological Modeling, (ICEBEM-2014)”, organized by Department of Zoology, Visva-Bharati Santiniketan – 731 235, India (February 24-26, 2014)
- ❖ Presented paper entitled “Effects of heavy metals/metalloids contamination of soils due to fly ash on micronucleus induction in *Tradescantia pallida*” in Two Days National Workshop on Particle Accelerator for Interdisciplinary Research (Under the Aegis of ISPA) February 18-19, 2014, Department of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya, Bilaspur-495009 (C.G.), INDIA
- ❖ Presented paper entitled “Effects of Heavy Metals/Metalloids Present in Fly Ash from Coal Fired Thermal Power Plant on Photosynthetic Parameters of *Mangifera indica*” in International Conference on Emerging Challenges and Issues in Environmental Protection, organized by Department of Applied

Chemistry and Biotechnology, Raipur Institute of Technology, C.G. (23-24, January, 2014)

- ❖ Presented paper entitled “Effects of Heavy Metals/Metalloids Present in Fly Ash from Coal Fired Thermal Power Plant on Photosynthetic Parameters of *Zizyphus mauritiana*” in National Seminar on Environmental Issues: Protection, Conservation and Management, organized by Department of Environmental Studies, Vishva-Bharati (22-23 Nov. 2013)
- ❖ Workshop cum Theme Meeting on “Ion Beam Induced Material Modifications & Neutron Generation using 3 MV Particle Accelerator: Applications in Physical, Chemical and Life Sciences, Department of Pure and Applied Physics, GGV, Bilaspur (19-20 August, 2013)
- ❖ Presented paper entitled “Role of soil micro-organism in pesticide management” Plant Biology and its Role in Sustainable Food and Energy Production, Department of Botany, GGV, Bilaspur (17-18, March, 2012)
- ❖ Presented paper entitled “Anticipated Performance Index of Some Tree Species Considered for Green Belt Development in and around an Urban Area: a Case Study of Varanasi City, India” International Seminar on Climate Change and Global Environmental Politics, Faculty of Social Sciences, BHU (18<sup>th</sup> March, 2009)