

Name: Dr. HEMA GUPTA (JOSHI)

Date of joining Visva-Bharati: 1.9.2007

Date of Birth: 15.12.1974

Highest Qualification: Ph.D.

Area of expertise/ interest: Plant community ecology, succession, mangroves

Number of Research Scholars produced: Two

Number of Research Scholars currently working: Four

Research Articles/ Book publication:

Joshi, H. and M. Ghose. 2002. Structural variability and biomass production of mangroves in Lothian island of Sundarbans, India. pp. 146-158. *In: S. Javed & A.G. de Soyza (eds.) Research and Management Options for Mangrove and Saltmarsh Ecosystems.* ERWDA, Abu Dhabi, UAE.

Joshi, H. and M. Ghose. 2003. Forest structure and species distribution along soil salinity and pH gradient in mangrove swamps of the Sundarbans. *Tropical Ecology* **44**: 195-204.

Gupta (Joshi), H. 2012. Vegetation structure, floristic composition and soil nutrient status in three sites of tropical dry deciduous forest of West Bengal, India. *Indian Journal of Fundamental and Applied Life Sciences* **2(2)**: 355-364.

Gupta (Joshi), H. and M. Ghose. 2012. Vegetation structure and species diversity of mangroves in Lothian Island, Sundarbans, India. *In Pollen Biology, Biodiversity and Climate Change* (ed.) A. J. Solomon Raju, Today & Tomorrow Printers and Publishers, New Delhi, pp. 205-217. ISBN 81-7019-480-6 (India), ISBN 1-55528-337-3 (USA)

Gupta (Joshi), H. and M. Ghose. 2014. Community structure, species diversity and aboveground biomass of the Sundarbans mangrove swamps. *Tropical Ecology* **55(3)**: 283-303.

- Nag, A. and **H. Gupta (Joshi)**. 2014. A physicochemical analysis of some water ponds in and around Santiniketan, West Bengal, India. *International Journal of Environmental Sciences* **4(5): 676-682**.
- Nag, A. and **H. Gupta (Joshi)**. 2014. Population structure and natural regeneration of Sal (*Shorea robusta* Gaertn. F.) in dry deciduous forests of West Bengal. *International Journal of Scientific Research in Environmental Sciences* **2(11): 421-428**.
- Malakar, S., **H. Gupta (Joshi)** and M. L. Kumar. 2015. Species composition and some physico-chemical properties of an age series of overburden dumps in Raniganj Coalfields, West Bengal, India. *International Journal of Scientific Research in Environmental Sciences* **3(7): 239-247**.
- Ganguli, S., **H. Gupta (Joshi)** and K. Bhattacharya. 2016. Vegetation structure and species diversity in Garhjungle sacred forest, West Bengal, India. *International Journal of Environmental & Agriculture Research (IJOEAR)*, **2(9): 72 – 79**.
- Ganguli, S., **H. Gupta (Joshi)** and K. Bhattacharya. 2016. Vegetation Structure, Species Diversity and Regeneration Status in Ballavpur Wildlife Sanctuary, West Bengal, India. *Elixir Environment & Forestry*, **99: 43067-43074**.
- Ganguli, S., **H. Gupta (Joshi)** and K. Bhattacharya. 2016. Soil N-transformation Rates in Two Differently Managed Dry Deciduous Forests of West Bengal, India. *World Journal of Research and Review (WJRR)*, **3(4): 45-49**.
- Gupta (Joshi), H.** and M. Ghose. 2017. Distribution of mangroves and soil parameters in the Lothian Island of Sundarbans, India – a GIS approach. *In: (ed. R. Dasgupta) Advances in Growth Curve and Structural Equation Modeling: Proceedings 2017 - Topics from the Indian Statistical Institute*. Springer Proceedings in Mathematics and Statistics, Springer Nature Singapore Pte Ltd. 2017. pp 25-43. ISBN: 978-981-13-0979-3
- Malakar, S. and **H. Gupta (Joshi)**. 2018. Successional changes in some physico-chemical properties on an age series of overburden dumps in Raniganj Coalfields,

West Bengal, India. In: (ed. R. Dasgupta) *Advances in Growth Curve and Structural Equation Modeling: Topics from the Indian Statistical Institute on the 125th Birth Anniversary of P.C. Mahalanobis*. Springer Nature Singapore Pte Ltd. 2018.pp 101-112. ISBN: 978-981-13-1842-9.

Malakar, S. and **H. Gupta (Joshi)**. 2019. Composition and Diversity of Tree Saplings in Raniganj Coalfield of West Bengal. *International Journal of Research and Analytical Reviews*, **6(1)**: 667-672.

Kumar, M. L., Nag, A., Malakar, S. and **H. Gupta (Joshi)**. 2020. Population Structure and Diversity of Trees in Amarkutir, a Tropical Dry Deciduous Forest of West Bengal, India. *Indian Journal of Ecology*, **47(1)**: 150- 154.

Malakar, S. and **H. Gupta (Joshi)**. (2020).Vegetation structure, composition and species diversity in an age series of coal mine overburden dumps. *Indian Journal of Ecology*, 47(2), pp.467- 479.

Kumar, M.L., Nag, A., Sinha, B. and **H. Gupta (Joshi)**. (2020). Estimation of Air Pollution Tolerance Index (APTI) and Anticipated Performance Index (API) of Selected Tree Species in Santiniketan, Birbhum, West Bengal, India. *Plant Archives*, 20(2), pp 8183-8188.

Nag, A. and **H. Gupta (Joshi)**. (2020). Population Structure and Regeneration Status of Selected Tree Species in Eight Tropical Dry Deciduous Forests of West Bengal, India. *International Journal of Botany Studies*, 5(6), pp. 621-627.

Ganguli, S. and **H. Gupta (Joshi)**. (2020). Regeneration status of some tree species in Garhjungle Sacred forest, West Bengal, India. *Indian Journal of Ecology*, 47(4), pp. 1033-1037.

Research Project: UGC-MRP entitled “Vegetation study of tropical dry deciduous forests in relation to soil N-transformations in the lateritic zone of West Bengal” from July 2015 to June 2018, Amount approved Rs.6,93,200/-