

LIST OF PUBLICATIONS

Faculty: Dr Deep Raj

Department of Environmental Sciences

JOURNAL PUBLICATIONS

Singh, S., Maiti, S.K. and **Raj, D.**, 2023. An approach to quantify heavy metals and their source apportionment in coal mine soil: a study through PMF model. *Environmental Monitoring and Assessment*, 195(2), 306.

Kumar, A., **Raj, D.**, Maiti, S.K., Maleva, M. and Borisova, G., 2022. Soil Pollution and Plant Efficiency Indices for Phytoremediation of Heavy Metal (loid) s: *Two-Decade Study (2002–2021)*. *Metals*, 12(8), 1330.

Raj, D., Kumar, A. and Maiti, S.K., 2022. Health Risk Assessment of Children Exposed to the Soil Containing Potentially Toxic Elements: A Case Study from Coal Mining Areas. *Metals*, 12(11), 1795.

Raj, D. and Maiti, S.K., 2020. Risk assessment of potentially toxic elements in soils and vegetables around coal-fired thermal power plant: a case study of Dhanbad, India. *Environmental Monitoring and Assessment*, 192(11), pp.1-18.

Raj, D., Kumar, A. and Maiti, S.K., 2020. Mercury remediation potential of Brassica juncea (L.) Czern. for clean-up of flyash contaminated sites. *Chemosphere*, 248, p.125857.

Raj, D. and Maiti, S.K., 2020. Sources, bioaccumulation, health risks and remediation of potentially toxic metal (loid) s (As, Cd, Cr, Pb and Hg): an epitomised review. *Environmental monitoring and assessment*, 192(2), pp.1-20.

Raj, D., Kumar, A. and Maiti, S.K., 2020. Brassica juncea (L.) Czern.(Indian mustard): a putative plant species to facilitate the phytoremediation of mercury contaminated soils. *International Journal of Phytoremediation*, 22(7), pp.733-744.

Ghosh, S.P., **Raj, D.** and Maiti, S.K., 2020. Risks assessment of heavy metal pollution in roadside soil and vegetation of national highway crossing through industrial area. *Environmental Processes*, 7(4), pp.1197-1220.

Raj, D., Kumar, A. and Maiti, S.K., 2019. Evaluation of toxic metal (loid) s concentration in soils around an open-cast coal mine (Eastern India). *Environmental Earth Sciences*, 78(22), pp.1-19.

Raj, D. and Maiti, S.K., 2019. Sources, toxicity, and remediation of mercury: an essence review. *Environmental monitoring and assessment*, 191(9), pp.1-22.

Raj, D. and Maiti, S.K., 2019. Bioaccumulation of potentially toxic elements in tree and vegetable species with associated health and ecological risks: a case study from a thermal power plant, Chandrapura, India. *Rendiconti Lincei. Scienze Fisiche e Naturali*, 30(3), pp.649-665.

Raj, D., 2019. Bioaccumulation of mercury, arsenic, cadmium, and lead in plants grown on coal mine soil. *Human and Ecological Risk Assessment: An International Journal*, 25(3), pp.659-671.

Raj, D., Chowdhury, A. and Maiti, S.K., 2017. Ecological risk assessment of mercury and other heavy metals in soils of coal mining area: A case study from the eastern part of a Jharia coal field, India. *Human and Ecological Risk Assessment: An International Journal*, 23(4), pp.767-787.

BOOK CHAPTERS

Deep Raj, PS Paul and SK Maiti (2017). Chapter: Improvements in Fertility of Reclaimed Coalmine Dumps Due to Afforestation –A Case Study from North Karanpura Area, CCL, India. *Sustainable Mining Practices*. Page: 45-54, Narosa Publishing House, New Delhi. (Editors: AK Gorai and DS Nimaje).

Deep Raj and SK Maiti (2020). Chapter: Brassica juncea (L.) Czern. (Indian mustard): A potential candidate for the phytoremediation of mercury from soil. *Sustainability in Environmental Engineering and Science, Lecture Notes in Civil Engineering 93*, Page: 67-72, Springer Nature, Singapore. (Editors: S Kumar, A Kalamdhad, and MM Ghangrekar). https://doi.org/10.1007/978-981-15-6887-9_7.

SK Maiti, D Ghosh and **Deep Raj** (2021). Chapter: Phytoremediation of flyash: bioaccumulation and translocation of metals in natural colonizing vegetation on flyash lagoons. *Handbook of Flyash*. Page: 501-523, Elsevier (Editor: Kamal K Kar). <https://doi.org/10.1016/B978-0-12-817686-3.00011-6>.