References

Akimzhanova, Z. and Guney, M. (2022), "Bioaccessibility of potentially toxic elements in toys and children's jewelry", *Curr. Opin. Environ. Sci. Health*, **30**, 100397. https://doi.org/10.1016/j.coesh.2022.100397.

Al-Ghouti, M.A. and Da'ana, D.A. (2020), "Guidelines for the use and interpretation of adsorption isotherm models: A review", *J. Hazard. Mater.*, **393**, 122383. https://doi.org/10.1016/j.jhazmat.2020.122383.

Azeez, M., Adesanwo, O. and Adepetu, J. (2015), "Effect of copper (Cu) application on soil available nutrients and uptake", *Afr. J. Agric. Res.*, **10**(5), 359-364. https://doi.org/10.5897/AJAR2014.9010.

Benhafsa, F.M., Bouchama, A., Chadli, A., Tadjer, B. and Addad, D. (2022), "Comparative study of Pb (II) adsorption from water on used cardboard and powdered activated carbon", *Membr. Water Treat.*, **13**(2), 73-83. https://doi.org/10.12989/mwt.2022.13.2.073.

Brennecke, D., Duarte, B., Paiva, F., Caçador, I. and Canning-Clode, J. (2016), "Microplastics as vector for heavy metal contamination from the marine environment", *Estuar. Coast. Shelf Sci.*, **178**, 189-195. https://doi.org/10.1016/j.ecss.2015.12.003.

Corradini, F., Meza, P., Eguiluz, R., Casado, F., Huerta-Lwanga, E. and Geissen, V. (2019), "Evidence of microplastic accumulation in agricultural soils from sewage sludge disposal", *Sci. Total Environ.*, **671**, 411-420. https://doi.org/10.1016/j.scitotenv.2019.03.368.

Dissanayake, P.D., Kim, S., Sarkar, B., Oleszczuk, P., Sang, M.K., Haque, M.N., Ahn, J.H., Bank, M.S. and Ok, Y.S. (2022), "Effects of microplastics on the terrestrial environment: A critical review", *Environ. Res.*, **209**, 112734. https://doi.org/10.1016/j.envres.2022.112734.

El Nemr, A., Khaled, A., Abdelwahab, O. and El-Sikaily, A. (2008), "Treatment of wastewater containing toxic chromium using new activated carbon developed from date palm seed", *J. Hazard. Mater.*, **152**(1), 263-275. http://doi.org/10.1016/j.jhazmat.2007.06.091.

FAO (2021), "Assessment of Agricultural Plastics and Their Sustainability—A Call for Action", Food and Agriculture Organization of the United Nations, Rome.

Fred-Ahmadu, O.H., Bhagwat, G., Oluyoye, I., Benson, N.U., Ayejuyo, O.O. and Palanisami, T. (2020), "Interaction of chemical contaminants with microplastics: Principles and perspectives", *Sci. Total Environ.*, **706**, 135978. https://doi.org/10.1016/j.scitotenv.2019.135978.

Gao, F., Li, J., Sun, C., Zhang, L., Jiang, F., Cao, W. and Zheng, L. (2019), "Study on the capability and characteristics of heavy metals enriched on microplastics in marine environment", *Mar. Pollut. Bull.*, **144**, 61-67. https://doi.org/10.1016/j.marpolbul.2019.04.039.

Gao, H., Liu, Q., Yan, C., Mancl, K., Gong, D., He, J. and Mei, X. (2022), "Macro-and/or microplastics as an emerging threat effect crop growth and soil health", *Resour. Conserv. Recycl.*, **186**, 106549. https://doi.org/10.1016/j.resconrec.2022.106549.

Guo, X., Hu, G., Fan, X. and Jia, H. (2020), "Sorption properties of cadmium on microplastics: the common practice experiment and a two-dimensional correlation spectroscopic study", *Ecotoxicol Environ. Saf.*, **190**, 110118. https://doi.org/10.1016/j.ecoenv.2019.110118.

Hahladakis, J.N., Velis, C.A., Weber, R., Iacovidou, E. and Purnell, P. (2018), "An overview of chemical additives present in plastics: Migration, release, fate and environmental impact during their use, disposal and recycling", *J. Hazard. Mater.*, **344**, 179-199. https://doi.org/10.1016/j.jhazmat.2017.10.014.

Hur, J. and Jho, E.H. (2021), "Current research trends on the effects of microplastics in soil environment using earthworms: Mini-review", *J. Korean Soc. Environ. Eng.*, **43**(4), 299-306. https://doi.org/10.4491/KSEE.2021.43.4.299.

Hwang, K. (2016), "Agricultural benefits and soil pollution of plastic mulching", Korean Institute of Science and Technology Information.

Ju, W., An, J. and Jho, E. (2021), "Adsorption characteristics of Cd and Pb on microplastic films generated in agricultural environment", *J. Korean Soc. Environ. Eng.*, **43**(1), 32-42. https://doi.org/10.4491/KSEE.2021.43.1.32.

Kim, S., Jo, E.H. and Choi, S. (2022), "Microplastic release from damaged commercial teabags", *Membr. Water Treat.*, **13**(1), 21-28. https://doi.org/10.12989/mwt.2022.13.1.021.

Koelmans, A.A., Besseling, E. and Foekema, E.M. (2014), "Leaching of plastic additives to marine organisms", *Environ. Pollut.*, **187**, 49-54. https://doi.org/10.1016/j.envpol.2013.12.013.

Kumar, R., Verma, S., Harwani, G., Paridar, D. and Mishra, S. (2022), "Adsorptive and kinetic studies of toxic metal ions from contaminated water by functionalized silica", *Membr. Water Treat.*, **13**(5), 227-233. https://doi.org/10.12989/mwt.2022.13.5.227.

Lin, Z., Hu, Y., Yuan, Y., Hu, B. and Wang, B. (2021), "Comparative analysis of kinetics and mechanisms for Pb(II) sorption onto three kinds of microplastics", *Ecotoxicol. Environ. Saf.*, **208**, 111451. https://doi.org/10.1016/j.ecoenv.2020.111451.

Öz, N., Kadizade, G. and Yurtsever, M. (2019), "Investigation of heavy metal adsorption on microplastics", *Appl. Ecol. Environ. Res.*, **17**(4), 7301-7310. http://doi.org/10.15666/aeer/1704_73017310.

Park, H., Singhal, N. and Jho, E.H. (2015), "Lithium sorption properties of HMnO in seawater and wastewater", *Water Res.*, **87**, 320-327. https://doi.org/10.1016/j.watres.2015.09.032.

Sparks, D.L. (2003), *Environmental Soil Chemistry*, 1st Ed., Academic Press Inc., San Diego, California, U.S.A.

Statistics Korea (2022), Agricultural waste vinyl generation 2004-2020; Statistics Korea, Daejeon, South Korea.

Turner, A. and Filella, M. (2017), "Bromine in plastic consumer products–Evidence for the widespread recycling of electronic waste". *Sci. Total Environ.*, **601**, 374-379. https://doi.org/10.1016/j.scitotenv.2017.05.173.

Turner, A. and Filella, M. (2021), "Hazardous metal additives in plastics and their environmental impacts", *Environ. Int.*, **156**, 106622. https://doi.org/10.1016/j.envint.2021.106622.

Vargas, A.M., Cazetta, A.L., Martins, A.C., Moraes, J.C., Garcia, E.E., Gauze, G.F., Costa, W.F. and Almeida, V.C. (2012), "Kinetic and equilibrium studies: Adsorption of food dyes Acid Yellow 6, Acid Yellow 23, and Acid Red 18 on activated carbon from flamboyant pods", *Chem. Eng. J.*, **181**, 243-250. https://doi.org/10.1016/j.cej.2011.11.073.

Wang, C., Zhao, J. and Xing, B. (2021), "Environmental source, fate, and toxicity of microplastics", *J. Hazard. Mater.*, **407**, 124357. https://doi.org/10.1016/j.jhazmat.2020.124357.

Zhang, S., Han, B., Sun, Y. and Wang, F. (2020), "Microplastics influence the adsorption and desorption characteristics of Cd in an agricultural soil", *J. Hazrad. Mater.*, **388**, 121775. https://doi.org/10.1016/j.jhazmat.2019.121775.

Zhu, F., Yan, Y., Doyle, E., Zhu, C., Jin, X., Chen, Z., Wang, C., He, H., Zhou, D. and Gu, C. (2022), "Microplastics altered soil microbiome and nitrogen cycling: The role of phthalate plasticizer", *J. Hazard. Mater.*, **427**, 127944. https://doi.org/10.1016/j.jhazmat.2021.127944.