Chemistry, biochemistry, toxicity and pollution of molybdenum: a mini review

ABSTRACT

Molybdenum is used in various industries. Its pollution has been recorded globally and is an emerging pollutant. Molybdenum is poorly represented in the literature as compared to heavy metals such as mercury, chromium, arsenic, lead and cadmium for instance, due to the metal’s low toxicity to humans. It has now been reported that molybdenum is very toxic to embryo and spermatogenesis of fish and mice and this worrying trend would place molybdenum at the forefront of toxicology and bioremediation studies in the future. This mini review attempts to summarize what we know on its chemistry, biochemistry, toxicity and pollution with the hope that this knowledge would be useful for future studies on molybdenum’s removal from the environment.

Keyword: Molybdenum; Chemistry; Biochemistry; Toxicity; Pollution; Mini review