Optical interference technique for investigating the growth dynamics of aquatic plants under heavy metal stress

Bio data

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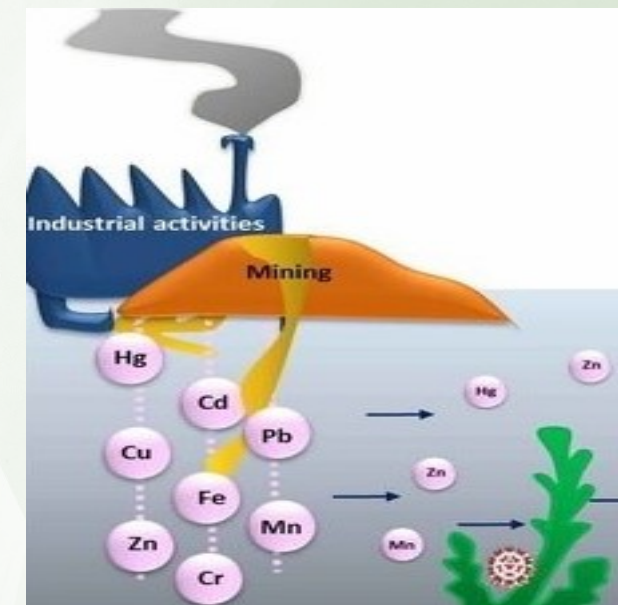**Nationality:** Uyghur of China
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Why I select this program

Heavy metal pollution is one of the biggest environmental problems facing the global mining industry. This will directly affect the natural environment and ultimately affect people's lives. Waste water from coal mining area that includes mine water and coal washing water. water flows directly into the nearby rivers polluting the natural environment. The polluted waste water contains many harmful heavy metals, such as Fe, Cu, Mn , Zn, Cr and many. The polluted water flowing into the river will affect the growth of aquatic plants growing in the local rivers.

Research summary

It has long been known that aquatic plants, both living and dead, are heavy metal accumulators and, therefore, the use of aquatic plants for the removal of heavy metals from wastewater has gained high interest. Two aquatic plants that grow more common in rivers and lakes are widely used in experiments, and they are Myriophyllum and Ceratophyllum. In terms of metal selection, I plan to use the common heavy metals of Cu Fe, and Mn. Aquatic plants grown under normal and , in heavy metal contaminated water for a certain period of time will be investigated by Optical interference technology for effects on growth.