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PHYTOREMEDIATION AN EFFECTIVE TECHNIQUE FOR FUTURE ENVIRONMENTAL CHALLENGES

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Abstract

Many challenges are facing our life on Earth like climate change, reduction of resources as well as pollution of millions of square kilometers all over the world. Methods such as chemical and physical remediation have been widely used for the decontamination of the polluted sites. However, these methods are in need for continuous development due to high operating costs and complex technical implementations. One of the most promising methods that has been shown good decontamination capacity in case of metals and hydrocarbons is the phytoremediation. In phytoremediation livings plants is acting as the agents capable of absorbing contaminants from either soil or water. Many plants have shown the ability to absorb contaminants and acting as a phytoremediation agents like sunflowers (*Helianthus annuus*) and alfalfa (*Medicago sativa*). Phytoremediation is gathering huge attention due to many factors such as cost effectiveness, easy to use and acceptance by society due to that plants are taking the action on sites. However, this method is still suffering from the need for long period of time to reach to its goals. In this presentation, we will focus on the future performance of the use of phytoremediation to decontaminate polluted sites.

Keywords: phytoremediation, contamination, remediation, circular economy

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