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## New Methodologies in Phosphate Pollution Control: using bio-sorbents derived from *Terminalia arjuna* and *Madhuca indica* plants

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**Abstract:** The adsorption nature of bio-sorbents derived from *Terminalia arjuna* and *Madhuca Indica* plants towards Phosphate ions has been investigated by varying the various physicochemical parameters such as pH, time of equilibration, and sorbent dosage using simulated waters. The conditions have been optimized for the maximum removal of Phosphate from waters. The effect of commonly found co-ions in natural waters on the % of extraction of Phosphate has been studied. The methodologies developed have been successfully applied to industrial and natural lake sample.

**Key Words:** Phosphate, Pollution control, Bio-sorbents, *Terminalia arjuna* and Madhuca Indica plants.

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