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(57) Abstract :
Employment of waste materials as low-cost adsorbents has become a matter of attraction due to their contribution in reduction of experimental and practical costs and for environmental protection. Exemplary embodiments of the present disclosure are directed towards adsorption of phenol followed by biodegradation for the purpose of economic efficiency and for obtaining significant results. The waste eggshells were employed for adsorption of phenol present in waste water and biodegradation of adsorbed phenol was achieved by employing activated sludge. The obtained data indicated that egg shells possessed the potential to treat phenol and the activated sludge could treat COD of 23-94% and phenol of 0-98%, respectively.

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