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(57) Abstract :
ABSTRACT: Title: A Method for Removal of Turbidity and Suspended Solids from Water Using a Natural Organic Coagulant The present disclosure proposes a method of removing turbidity from water using a natural organic coagulant, specifically Kappa Carrageenan, which is a polysaccharide obtained from red edible seaweed. The effectiveness of Kappa Carrageenan and other coagulants (Sago and Alum) for water treatment are evaluated. Based on the experiments and analysis of the results obtained in the investigation of the coagulation activity of the coagulants, it may be concluded that Kappa Carrageenan gave an improved removal efficiency than Alum at the pH values of 6 and 7 for the lower turbidity range (40 NTU - 70 NTU). It is observed that Sago has almost uniform turbidity removal of 82 % to 86 % at 150 NTU, 200 NTU and 250 NTU samples at the pH value of 6. Also, at the pH value of 7, Kappa Carrageenan exhibited a uniform trend in turbidity removal efficiency ranging from 72 % to 78 % across all the turbidity ranges.

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