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# PERCH

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## Separation of Cadmium from Waste Water by 2-(2'-Thiazolylazo)-p-Cresol Resin

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### Objective

Preconcentration and separation of cadmium (II) ion on P-TAC (2-(2'-Thiazolylazo)-p-cresol on polystyrene divinylbenzene).

### Methods

2-(2'-Thiazolylazo)-p-cresol resin (P-TAC) was prepared by immobilization of 2-(2'-Thiazolylazo)-p-cresol on polystyrene divinylbenzene. The capacity of the P-TAC for cadmium (II) ion was determined by batch and column experiments. Desorption of cadmium (II) ion on P-TAC by various eluents was investigated.

### Results

The maximum capacity of the chelating resin (P-TAC) for cadmium (II) ion at pH 7.5 obtained from batch experiment is 0.2289 mmol/g and that obtained from column experiment is 0.0615 mmol/g .

### Conclusion

pH of the separating solution has effected on the capacities for cadmium (II) ion on P-TAC.

**Keywords:** 2-(2'-thiazolylazo)-p-cresol (TAC), cadmium (II) ion

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