

## **ABSTRACTS**

International Conference & Exhibition on Pure and Applied Chemistry 2002

May 29-31, 2002, Bangkok, Thailand



Chemical Society of Thailand



Department of Chemistry Faculty of Science Chulalongkorn University

## ANEN-19P

## SEPARATION OF COPPER(II) IONS FROM WASTE WATER BY 2-(2'-THIAZOLYLAZO)-p-CRESOL RESIN

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A chelating resin (P-TAC) was prepared from the adsorption of 2-(2'-thiazolylazo)-p-cresol (TAC) in a mixture of 1:1 triethylamine and dimethylformamide on polystyrene divinylbenzene. This chelating resin (P-TAC) has ability to adsorp copper(II) ions. The pH of the solution and shaking time for sorption of copper (II) ions by P-TAC was optimized. The maximum capacity of chelating resin (P-TAC) for copper(II) ions obtained from batch experiment at pH 9.0 after shaking for 12 hours was 0.6427 mmol/g and from column experiment was 0.0498 mmol/g. The suitable solvents for the desorption of copper(II) ions from P-TAC was studied. It was found that the suitable eluent was 1.0 molar hydrochloric acid, which had 12.64 % desorption.