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ADSORPTION OF BINARY MIXTURE "LEAD NICKEL" BY CLAY ADSORPTION D'UN MELANGE BINAIRE « PLOMB-NICKEL » PAR LE KAOLIN

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Abstract : The kaolin was used as adsorbent to remove the nickel and lead in mono adsorption and binary mixture. The process envisaged under static and mono adsorption showed that one gram of kaolin can fix 43.2 mg / g of nickel and 35.69 mg / g of lead according to the Langmuir model with a first pseudo order kinetics where the equilibrium of the pseudo time is 16 minutes for Ni + + and 14 minutes for Mn+ +.The relative affinity RL showed that kaolin has good adsorption capacity.For the binary mixture, experience has shown that the adsorption of nickel is the most important and the pseudo equilibrium is slower than that of the ion alone. However, we have show approximately the mixture model with the generalized Langmuir and Generalized modified Langmuir ones,using both data and single component mixture.Of these two representations, we found a reversal of selectivity for the generalized Langmuir's model and a similar experimental isotherm for Langmuir generalized and modified model..

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