Sodium Ion-Imprinted porous polymer beads to remove Na in Industry Application

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Sodium metal ion imprinted polymer sorbents other manufacturing processes to build and identify the optimum characteristics and a mixture of organic and metal separation and recovery of certain metal ions, only a continuous separation process with the aim is developing the plan.

Sodium ion-imprinted porous micro-particles were prepared by two functional monomers, methacrylic acid and vinyl pyridine, formed a complex with the template Sodium ion through ionic interactions. The Sodium/monomer complex was polymerized in the presence of an ethylene glycol dimethacrylate cross-linker by a suspension polymerization. The micro-particles approximate size 100-1000µm. After the imprinting sites were provided through removal of the template, were obtained for batch separation applications. The chemical structure, morphology and adsorption capacity of the Na-imprinted micro-porous particles were analyzed using SEM and AAS.