



Preparation of Calcium Phosphate with Oyster Shells

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Author(s)

Hiroaki Onoda, Hironari Nakanishi

ABSTRACT

Oyster shells have received attention for use as a calcium resource. For this study, calcium phosphate was prepared from phosphoric acid and oyster shells. The influences of the concentration of phosphoric acid and pH in the preparation conditions were studied from the yields of calcium phosphate and unreacted carbonate, and the Ca/P ratios in precipitates. The yield of calcium phosphate and carbonate was low in the preparation condition with 0.1 mol/l of phosphoric acid. The obtained precipitates were the mixture of calcium hydrogen phosphate dihydrate and the unreacted calcium carbonate. The reactivity of the oyster shells with phosphoric acid was discussed from the yields and Ca/P ratios in precipitates.

KEYWORDS

Calcium Phosphate; Oyster Shells; Calcium Carbonate; Yield; Powder Properties

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