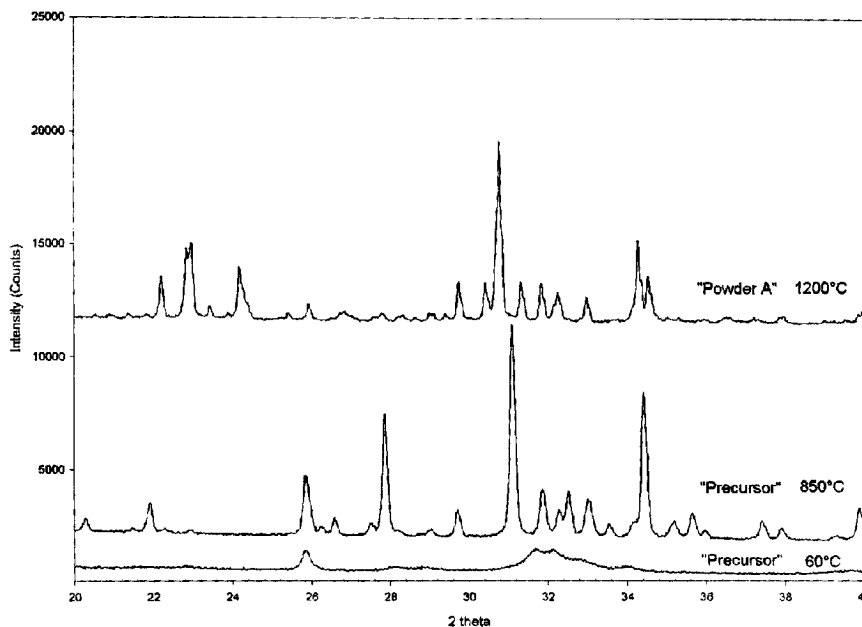




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(54) Titre : NOUVELLE COMPOSITION DE CIMENT AU PHOSPHATE DE CALCIUM ET METHODE DE PREPARATION CONNEXE  
(54) Title: A NEW CALCIUM PHOSPHATE CEMENT COMPOSITION AND A METHOD FOR THE PREPARATION THEREOF



Powder XRD traces of the precursors and the powder obtained in Example-1

(57) **Abrégé/Abstract:**

The invention describes a new calcium phosphate cement powder, whose composition can best be described over the Ca/P molar ratio range of 1.35 to 1.40, most preferably 1.39, and whose two components were prepared by wet chemical synthesis procedures. One component is chemically- synthesized, bi-phasic alpha-TCP ( $\text{Ca}_3(\text{PO}_4)_2$ , 95 wt%) + HA ( $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$ , 5 wt%) powder, while the second component is again a chemically-synthesized, single-phase DCPD ( $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ ) powder. A setting solution ( $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$ ) is used to form a self-setting calcium phosphate cement from the powder mixture. This cement can be used as bone filler or bone substitute in applications, which require higher rates of resorption.