

The ~~major final~~ objectives of this study are to ~~perform a~~ visually evaluate the crystallization mode ~~observation~~ evaluation of the crystallization ~~modestyle~~ of Octacalcium phosphate [OCP: $\text{Ca}_8(\text{PO}_4)_4(\text{HPO}_4)_2 \cdot 5\text{H}_2\text{O}$] ~~in the~~ porous molded bodies ~~made~~ from biocompatible polymers and the bonding state of biocompatible polymers and OCP crystal interfaces. ~~Further, this study intends to evaluate and a evaluation of~~ the mechanical properties of biocompatible polymers crystallized ~~using by~~ OCP; to gain foundational knowledge ~~with respect to the formation on the mechanisms of for forming~~ bone and bone-like ~~bone~~ graft materials. ~~In this present study Here,~~ ~~as it was a~~ 1-year ~~long--study investigation~~, we selected gelatin, which ~~is a has~~ biocompatible polymer, ~~s based and for on~~ which ~~at the protocol for the preparation of porous bodies with the cancellous bones porous body preparation method~~ has already been established. ~~Subsequently, and we focused~~ on the evaluation of the ~~is~~ OCP formation mechanism, ~~which This mechanism~~ is an essential part of ~~calcification in~~ bone formation ~~calcification~~ and is ~~of considerably pivotal~~ important ~~tee in case offer~~ bones that exhibit ~~acquiring~~ high mechanical strength in bones and ~~degree manifestations~~ of flexibility. ~~Furthermore, Not only this~~ the aforementioned mechanism ~~it is also essential to for the preparation of the high-performance functionality~~ biomaterials ~~to which it is applied~~. Therefore, by combining the two evaluations of the evaluation of the crystal interface ~~on a and micro scale level with that, and evaluation of the mechanical strength of macro scale bodies formation,~~ mutual feedback could be provided ~~on the influence that micro-generated phenomena have on bulk, we could obtain knowledge over a wide range not possible with a unidirectional investigation.~~ Therefore, we should be able to obtain a broad range of knowledge that cannot be achieved by separately conducting each of the investigations. This can be achieved by combining the evaluation of the crystal interface on a micro-scale level with that of the mechanical strength of the macro-scale bodies and obtaining feedback with respect to the bulk influence of the micro-generated phenomena.

OCP is ~~one of thea~~ main inorganic components of ~~young~~ bones, and is ~~a mainly composed of~~ highly biocompatible materials. ~~Moreover, Not only that. a~~ As this unique ~~crystalline~~ structure is able to carry drugs inside the crystal structure, it shows promise as a raw material for new ~~combination medical materials.~~ Further, OCP is promising as a raw material for the fabrication of ~~new combination of medical materials because this unique crystalline structure can carry drugs within the crystal structure.~~ ~~However On the other hand,~~ with the use of OCP ~~and, and above~~

Comment [Editor1]: [Level 3]

[Clarity and Readability]

[Language]

Clarity and readability was greatly enhanced by breaking down large sentence into smaller parts and improving word choice.

Comment [Editor2]: [Level 3]

[Conjunctive Adverb] [Grammar]

A conjunctive adverb is a part of speech that is an adverb by design but has the characteristic of a conjunction. It can be used to link different clauses or sentences.

Comment [Editor3]: [Level 3]

[Redundancy] [Language]

The sentences which have redundant information aren't necessarily grammatically incorrect, but they have unnecessary words, which affects overall readability of a sentence.

Comment [Editor4]: [Level 3]

[Clarity and Readability]

[Language]

Clarity and readability was greatly enhanced by rephrasing sentences and using more appropriate and clearer word choice.

Crimson Japan

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~~all, with OCP incorporating or carrying pharmaceutical components drug-carrying OCP itself, it has been~~ difficult to obtain molded bodies with the appropriate size and strength ~~that can be~~ ~~be~~ ~~utilized~~ as a bone graft material. When OCP powder is ~~simply~~ kneaded into biocompatible polymers, ~~the resulting material~~ does not ~~acquire the~~ ~~become a material with the~~ flexibility of bones, ~~therefore, it is very important to ensure~~ ~~so~~ the crystallization ~~of OCP directly onto~~ ~~process~~ ~~on the bone~~ ~~is very important~~. ~~Controlling OCP crystallization promises to enable preparation of biomaterials with “suppleness” like bone.~~ ~~The control of OCP crystallization enables the preparation of biomaterials characterized by bone-like “suppleness.”~~

Comment [Editor5]: [Level 3]

[Spelling error] [Language]

Spelling error rectified