



## 可分解吸收生物陶瓷材料

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簡歷：

[http://www.mse.ntu.edu.tw/index.php?option=com\\_zoo&task=item&item\\_id=33&category\\_id=26&Itemid=725&lang=tw](http://www.mse.ntu.edu.tw/index.php?option=com_zoo&task=item&item_id=33&category_id=26&Itemid=725&lang=tw)



### 市場及需求：

本發明揭露一種可分解吸收生物陶瓷材料，此生物陶瓷不僅可以在生理環境下進行分解及吸收，且分解速率可以調控，可針對不同缺損位置，提供不同的骨修復速率。

### 技術摘要(含成果)：

本技術揭露的可吸收分解吸收生物陶瓷材料，已經以 5 件專利組合保護，且專利皆已獲證。

### 優勢：

此創新生物陶瓷具較高強度，生物實驗後，顯示此分解吸收生物陶瓷材料不具毒性，細胞可穩定貼附，可誘發鈣磷酸鹽在表面生成，具生物相容性等諸多優點。

### 競爭產品：

相較目前市面上骨填充產品，此創新生物陶瓷的強度較高，不具毒性，細胞可貼附，具生物活性。

### 專利現況：

已領證-- 美國(共 3 件)、中華民國(共 2 件)

- 美國
  - US 8,052,787 B2
  - US 8,263,513 B2
  - US 8,906,817 B2
- 我國
  - I 380832
  - I 488828

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## Innovative Resorbable Bioceramic

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Experience:

[http://www.mse.ntu.edu.tw/index.php?option=com\\_zoo&task=item&item\\_id=33&category\\_id=26&Itemid=725&lang=tw](http://www.mse.ntu.edu.tw/index.php?option=com_zoo&task=item&item_id=33&category_id=26&Itemid=725&lang=tw)



**Market Needs:**

An innovative resorbable bioceramic is developed. Comparing to the current products used in hospitals, the bioceramic developed by our team is resorbable within human body fluid. During resorption, our bioceramic can release adequate calcium ions. These ions are helpful to the ingrowth of the bone. The degradation rate of our bioceramic can be tailored through the use of microstructure engineering. The strength of our bioceramic is relatively higher. The cytotoxicity test reveals no toxicity. Cells can attach to the surface of our product.

**Our Technology:**

The bioceramic developed by our team is resorbable within human body fluid. The patent portfolio combines 5 patents. These patents have been granted already.

**Strength:**

The strength of our bioceramic is relatively higher. The cytotoxicity test reveals no toxicity. Cells can attach to the surface of our product. Calcium phosphate can be found on the surface of the bioceramic after resorption in body fluid.

**Competing Products:**

Comparing to the current bone filler used in hospitals, the bioceramic developed by our team exhibits excellent bio-active characteristics.

**Intellectual Properties:**

- Granted patents in USA
  - US 8,052,787 B2
  - US 8,263,513 B2
  - US 8,906,817 B2
- Granted patents in Taiwan
  - I 380832
  - I 488828

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