

**Name : Hsueh-Chuan Hsu**

**Education :**

- ▣ **Ph.D., Materials Science and Engineering, National ChungHsin University**
- ▣ **Master, Materials Science and Engineering, National ChengKung University**
- ▣ **Bachelor, Chemical Engineering, National Central University**

**Career Experience :**

- ▣ **Library Director, Central Taiwan University of Science and Technology**
- ▣ **Director, Department Dental Technology and Materials Science**
- ▣ **Professor, Department Dental Technology and Materials Science**

**Courses Taught :**

- ▣ **Dental Materials**
- ▣ **Metallic Materials**
- ▣ **Corrosion**

**Professional Fields :**

- ▣ **Biomaterials**
- ▣ **Dental Materials**

**Research Interests :**

- ▣ **Titanium Alloy, Soft Metal, Corrosion**

**Representative Publication in 5 Years :**

**Journal Articles :**

- 1.** Shih-Ching Wu, **Hsueh-Chuan Hsu**, Shih-Kuang Hsu, Ya-Chu Chang, Wen-Fu Ho Synthesis of hydroxyapatite from eggshell powders through ball milling and heat treatment, Journal of Asian Ceramic Societies, Volume 4, Issue 1, March **2016**, Pages 85-90.
- 2.** Shih-Kuang Hsu, Pai-Ling Chang, Wen-Fu Ho, **Hsueh-Chuan Hsu**, Huei-Jyuan Liao, Shih-Ching Wu\* (**2015**, Dec). Osteogenesis ability of biomimetic modified 3Y-TZP ceramic using chemical treatment. Thin Solid Films, 596:118-127. (IF=1.759; MATERIALS SCIENCE, COATINGS & FILMS, R/C=6/17=35%,**SCI**)
- 3.** Shih-Ching Wu, **Hsueh-Chuan Hsu**, Shih-Kuang Hsu, Ya-Chu Chang, Wen-Fu Ho\* (**2015**, Nov). Effects of heat treatment on the synthesis of hydroxyapatite from eggshell powders. Ceramics International, 41:10718-10724. (IF=2.605; MATERIALS SCIENCE, CERAMICS, R/C=4/26=15%,**SCI**)
- 4.** **Hsueh-Chuan Hsu**, Shih-Ching Wu, Shih-Kuang Hsu, Feng-Wei Lin, Wen-Fu Ho\* (**2015**, Aug). Fabrication and characterization of novel porous titanium microspheres for biomedical applications. Materials Characterization, 10:317-323. (IF=1.845; MATERIALS SCIENCE, CHARACTERIZATION & TESTING, R/C=4/33=12%,**SCI**)
- 5.** Shih-Ching Wu, **Hsueh-Chuan Hsu**, Shih-Kuang Hsu, Feng-Wei Lin, Wen-Fu Ho\* (**2015**, Jul). Preparation and characterization of porous calcium-phosphate microspheres. Ceramics International, 41:7596-7604. (IF=2.605; MATERIALS SCIENCE, CERAMICS, R/C=4/26=15%,**SCI**)
- 6.** **Hsueh-Chuan Hsu**, Shih-Ching Wu, Shih-Kuang Hsu, Kuan-Huang Hsu, Wen-Fu Ho\* (**2015**, Mar). Machinability evaluation of Ti-5Nb-xFe alloys for dental applications. Journal of Materials Engineering and Performance, 24(3):1332- 1339. (IF=0.998; MATERIALS SCIENCE, MULTIDISCIPLINARY, R/C=178/260=68%,**SCI**)
- 7.** **Hsueh-Chuan Hsu**, Shih-Ching Wu, Shih-Kuang Hsu, Yu-Chen Chang, Wen-Fu Ho (**2015**, Feb). Fabrication of nanotube arrays on commercially pure titanium and their apatite-forming ability in a simulated body fluid. Materials Characterization, 100, 170-177. (IF=1.845; MATERIALS SCIENCE, CHARACTERIZATION & TESTING, R/C=4/33=12%,**SCI**)
- 8.** **Hsueh-Chuan Hsu**, Shih-Ching Wu, Shih-Kuang Hsu, Chien-Ting Li, Wen-Fu Ho (**2015**, Jan). Effects of chromium

addition on structure and mechanical properties of Ti–5Mo alloy. Materials & Design, 65, 700-706. (IF=3.501; MATERIALS SCIENCE, MULTIDISCIPLINARY, R/C=43/260=16%,**SCI**)

9. Shih-Kuang Hsu, **Hsueh-Chuan Hsu**, Wen-Fu Ho, Chun-Hsu Yao, Pai-Ling Chang, Shih-Ching Wu (2014, Dec). Biomolecular modification of zirconia surfaces for enhanced biocompatibility. Thin Solid Films, 572(1), 91-98. (IF=1.759; MATERIALS SCIENCE, COATINGS & FILMS, R/C=6/17=35%,**SCI**)

10. Wen-Fu Ho (2014, Jun). Structure and mechanical properties of as-cast Ti–5Sn–xCr alloys. Materials Science and Engineering: A. (IF=2.567; METALLURGY & METALLURGICAL ENGINEERING, R/C=5/74=6%,**SCI**)

### Conference Papers :

1. **Hsueh-Chuan Hsu**, Wen-Yu Hsiao, Wen-Fu Ho, Shih-Kuang Hsu, Shih-Ching Wu (2015, Oct). Bioactivity of porous Ti-Nb-Mo prepared by mechanical alloying process. The 66th General Session of the Japanese Society for Dental Materials and Devices (JSDMD).
2. Wen-Fu Ho, Peng-Hsiang Wang, **Hsueh-Chuan Hsu**, Shih-Ching Wu, Shih-Kuang Hsu (2015, Oct). Characteristics of calcium phosphate on the surface of porous titanium prepared by sponge replication method. The 66th General Session of the Japanese Society for Dental Materials and Devices (JSDMD).
3. **Hsueh-Chuan Hsu**, Ching-Min Liang, Cheng-Feng Wang, Wen-Fu Ho, Shih-Kuang Hsu, Shih-Ching Wu, Hsi-Chen Lin (2015, Apr). Corrosion resistance of ternary Ti-Nb-Mo alloys in Hank's solution. The 65th General Session of the Japanese Society for Dental Materials and Devices (JSDMD).
4. **Hsueh-Chuan Hsu**, Wen-Yu Hsiao, Wen-Fu Ho, Shih-Ching Wu, Shih-Kuang Hsu (2015, Apr). A study on the porous structure and mechanical properties of a biomedical Ti-Nb-Mo alloy. The 65th General Session of the Japanese Society for Dental Materials and Devices (JSDMD).
5. Shih-Ching Wu, Ying-Ting Wu, Wen-Fu Ho, **Hsueh-Chuan Hsu**, Shih-Kuang Hsu (2015, Apr). A study of antibacterial peptides grafted onto nanohydroxyapatite powders. The 65th General Session of the Japanese Society for Dental Materials and Devices (JSDMD).

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