

一、現職及與專長相關之經歷（指與研究相關之專任職務，請依任職之時間先後順序由最近者往前追溯）

服務機構	服務部門／系所	職稱	起訖年月（西元年／月）
現職：副教授	養生與健康行銷學系	副教授	自 101 / 02 至 迄今 / _
經歷：	養生與健康行銷學系	助理教授	自 101 / 08 至 101 / 02
	通識教育中心	助理教授	自 96 / 08 至 101 / 02
台灣科技大學	高分子工程	博士後研究員	自 95 / 08 至 96 / 07
日本 OSG 株式會社	海外部(台灣)	國際顧問	自 99 / 01 至 迄今
同威投資有限公司	開發部	顧問	自 106 / 01 至 迄今
陶邦股份有限公司	開發部	執行顧問	自 106 / 08 至 迄今
好魚安股份有限公司	研發部	執行顧問	自 108 / 01 至 迄今
宗寅國際實業有限公司	開發部	執行顧問	自 110 / 01 至 110 / 12

二、專長（請填寫與研究方向有關之學術專長名稱）

1、生物技術	2、生醫材料	3、界面化學	4、草本萃取應用
5、科普教育	6、跨界整合	7、專案設計	8、善因營銷

三、計劃案

計畫名稱	補助單位	擔任工作
組織修復及再生之多層膜結構製備及應用開發	科技部（一般型）	計畫主持人
奈米生醫農學之應用(國家型) 奈米骨組織工程及偵測(3/3)	科技部(國家型科技計畫)	共同主持人
奈米生醫農學之應用(國家型) 奈米骨組織工程及偵測(2/3)	科技部(國家型科技計畫)	共同主持人
奈米生醫農學之應用(國家型) 奈米骨組織工程及偵測(1/3)	科技部(國家型科技計畫)	共同主持人
人骨混摻分解性高分子做為同種移植骨材料之研製與評估	科技部(產學合作研究計畫-應用型)	計畫主持人
科普活動：小蝦米、大科學	科技部(大眾科學教育計畫)	計畫主持人
藻類萃取物乳液其抗氧化力分析及其作為敷材之生物相容性評估	科技部(一般型)	計畫主持人
2008 科學季：目眩神迷-生物視覺博覽會	科技部(大眾科學教育計畫)	共同主持人
高中職科學教師尖端科技研究經驗培育計畫--高中職基因人才培訓計畫	科技部(人才培育補助計畫)	共同主持人

四、著作目錄

(A) 期刊論文：

1. Yu-Lin Kuo*, **Fu-Chen Kung**, Chi-Liang Ko, Akitoshi Okino, Tai-Chin Chiang, Jhao-Yu Guo, Song-Yu Chen. Tailoring surface properties of polyethylene terephthalate by atmospheric pressure plasma jet for grafting biomaterials. *Thin Solid Films*. 2020, Volume 709,138132. (SCI). (跨國合作)
2. **Fu-Chen Kung**, Yu-Lin Kuo, Oguzhan Gunduz, Chi-Chang Lin. Dual RGD-immobilized poly(L-lactic acid) by atmospheric pressure plasma jet for bone tissue engineering. *Colloids and Surfaces B: Biointerfaces*, 2019, Volume 178, 358-364. (SCI). (跨國合作)
3. **Fu-Chen Kung***, Injectable collagen/RGD systems for bone tissue engineering applications. *BIO-MEDICAL MATERIALS AND ENGINEERING*, **2018**; 29(2):241-251. (SCI).
4. Wing P. Chan, **Fu-Chen Kung,*** Yu-Lin Kuo, Ming-Chen Yang, and Wen-Fu Thomas Lai, Alginate/Poly(γ -glutamic Acid) Base Biocompatible Gel for Bone Tissue Engineering, *BioMed Research International*, **2015**, 2015,185841. (SCI).
5. **Fu-Chen Kung**, Chi-Chang Lin, Wen-Fu T. Lai, Osteogenesis of human adipose-derived stem cells on hydroxyapatite-mineralized poly(lactic acid) nanofiber sheets, *Materials Science and Engineering: C*, **2014**,45, 578 (SCI).
6. Cheng-An J. Lin, Wen-Kai Chuang, Zih-Yun Huang, Shih-Tsung Kang, Ching-Yi Chang, Ching-Ta Chen, Jih-Liang Li, Jimmy K. Li, Hsueh-Hsiao Wang, **Fu-Chen Kung**, Ji-Lin Shen, Wen-Hsiung Chan, Chih-Kuang Yeh, Hung-I Yeh, Wen-Fu T. Lai, and Walter H. Chang, Rapid Transformation of Protein-Caged Nanomaterials into Microbubbles As Bimodal Imaging Agents, *ACS Nano*, **2012**, 6 (6), 5111. (SCI).
7. Yu-Lin Kuo *, Te-Li Su, **Fu-Chen Kung**, T.-J. Wu, A Study of Parameter Setting and Characterization of Visible-Light Driven Nitrogen-modified Degussa P25 Photocatalysts, *Journal of Hazardous Materials*, 2011, Vol. 190, pp. 938-944. (SCI).
8. Te-Li Su*, Yu-Lin Kuo, T.-J. Wu, **Fu-Chen Kung**, Experimental analysis and optimization of synthesis property of the nitrogen-modified TiO₂ visible-light photocatalysts,” *Journal of Chemical Technology & Biotechnology*. 2011, 87(1), 160-164. (SCI).
9. Yu-Lin Kuo, Te-Li Su, K.-J. Chuang, H.-W. Chen*, **Fu-Chen Kung**, Preparation of Platinum- and Silver-Incorporated TiO₂ Coatings in Thin Film Photoreactor for the decomposition of o-Cresol,” *Environmental Technology*, 2011, 33(15-16), 1799-1806. (SCI).
10. Y.-M. Su, **Fu-Chen Kung**, Te-Li Su, P.-C. Tsai, C.-C. Lai, Yu-Lin Kuo*, Materials Characteristics and Electric Performance of SiOX Addition in GDC Electrolytes, *Journal of the Chinese Institute of Engineers*, 2011, Vol. 34, pp. 31-38. (SCI).
11. Te-Li Su, **Fu-Chen Kung***, Yu-Lin Kuo,” Optimization of High Performance Engineering Plastics in Thin Wall Part Injection Molding,” *Advanced Materials Research*, 2011, Vol. 213, pp. 58-62. (EI)
12. L-S. Chang, Te-Li Su, Ming-Chien Yang, **Fu-Chen Kung***, Effect of diallyl disulfide immobilization on the immunoreaction of polysulfone membranes. *TEXT. RES. J*, 2010, vol. 80 no. 11 1038-1046. (SCI).
13. Te-Li Su, Yu-Lin Kuo, H.-W. Chen, **Fu-Chen Kung***, P.-C. Tsai, Grey Relational Analysis of an Automatic Identifying System for Cloth Texture, *Fibres & Textiles in Eastern Europe*, 2010, Vol.18, No. 2 (79) pp. 60-64. (SCI).
14. H.-L. Huang, J.-T. Wu, Te-Li Su, Ming-Chien Yang, Yu-Lin Kuo, **Fu-Chen Kung***. Reduction of free radicals and endotoxin by conjugated linoleic acid loaded in in-situ synthesized poly(N-isopropyl acrylamide) thin layer. *J Appl Polym Sci.*,2009, 113, 3222-3227. (SCI).
15. Yu-Lin Kuo, **Fu-Chen Kung**, Te-Li Su., Superior stability of ultrathin and Nanocrystalline TiZrN Films

- as Diffusion Barriers for Cu Metallization, *Nanoscience and Nanotechnology Letters*, 2009, 1, 37-41
16. Te-Li Su, L.S. Chang, **Fu-Chen Kung**, Intelligent computerized fabric texture recognition system by using Grey-based neural fuzzy clustering. *ICWAPR*, 2009, p 185-189. (EI)
 17. **F.-C.Kung,*** Weng Y.-J., Optimizations of the Processing Parameters of High Performance Engineering Plastic in Injection Molding. *Polym. Plast. Technol. Eng.* 2008, 47, 1-8.
 18. Te-Li Su, **Fu-Chen Kung***, Yu-Lin Kuo, Application of back-propagation neural network fuzzy clustering in textile texture automatic recognition system, *ICWAPR*, 1, 46-49,2008 (EI)
 19. **Fu-Chen Kung**, J.-J. Chang, Ming-Chien Yang, The reduction of oxidative stress, anticoagulation of platelet, and inhibition of lipopolysaccharide by conjugated linoleic acid bonded on polysulfone membrane, *Polym. Adv. Tech.* 2007, 18, 286–291, (SCI)
 20. **Fu-Chen Kung**, Ming-Chien Yang* , Effect of conjugated linoleic acid immobilization on the hemocompatibility of cellulose acetate membrane, *Colloid Surface B*, 2006 47, 36-42, (SCI)
 21. **Fu-Chen Kung**, Ming-Chien Yang*, Effect of conjugated linoleic acid grafting on the hemocompatibility of polyacrylonitrile membranes, *Polym. Adv. Tech.*, 2006, 17, 419-425, (SCI)
 22. **Fu-Chen Kung**, Ming-Chien Yang*, The effect of covalently bonded conjugated linoleic acid on the reduction of oxidative stress and blood coagulation for polysulfone hemodialyzer membrane, *Int. J. Biol. Macromol.* 2006., 38, 157-164, (SCI)
 23. **Fu-Chen Kung**, W.-L. Chou, Ming-Chien Yang*, In vitro evaluation of cellulose acetate hemodialyzer immobilized with heparin, *Polym. Adv. Tech.*, 2006, 17, 453-462, (SCI)

(B) 研討會論文：

1. Chi-Chang Lin, Yu-Lin Kuo, Te-Li Su, WenFu Lai and **Fu-Chen Kung*** , Preparation of Ultra-thin plate composing structure for Tissue Repairing and Tissue regeneration, 11th International Conference on Materials Chemistry –MC 11, 2013/07/8-11
2. Chi-Chang Lin*, **Fu-Chen Kung** and WenFu Lai, Preparation of hydroxyapatite deposited electrospun PLA sheets for bone cell adhesion, 11th International Conference on Materials Chemistry –MC 11, 2013/07/8-11.
3. L. H. Chiu, **Fu-Chen Kung**, Ming-Chien Yang, Y. H. Tsai, W. H. Chang, W. F T Lai. A novel near infra-red fluorescent probes to repair metal artifact after implantation. 2013 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2013. 2013/05/12-16.
4. Yu-Lin Kuo*,**Fu-Chen Kung**, Ju-Yen Chen, Kuang-Hui Chang, Surface Modification on PET Using Low-Temperature Atmospheric Pressure Plasma Jet for Grafting Thermosensitive F127 Polymer, 11th Asia-Pacific Conference on Plasma Science and Technology (APCPST 2012), 2012/10/2-5
5. Yu-Cheng Lin, Jung-Jhih Chang, Yen-Hsien Lee, Ming-Chien Yang,* **Fu-Chen Kung** , Electrospun scaffolds made of alginate, chitosan, collagen and hydroxyapatite for bone tissue engineering , 3th International NanoMedicine Conference, 2012/07/2-4
6. Te-Li Su, Ming-Chien Yang, W.-F. Lai, **Fu-Chen Kung***, (2012) Using alginate hydrogel with delayed gelation as scaffold of MG63 cells for bone defects. 2012 International Conference on Condensed Matter and Materials Physics.
7. Te-Li Su, Ming-Chien Yang, W.-F. Lai, **Fu-Chen Kung***, (2011) Preparation and properties of antioxidant sol with alginate/F127/poly(γ -glutamic acid), 10th International Conference on Materials

Chemistry, 2011/07

8. Te-Li Su, **Fu-Chen Kung***, and Yu-Lin Kuo, Optimization of High Performance Engineering Plastics in Thin Wall Part Injection Molding, International Conference on Advanced Material Research 2010.
9. Te-Li Su, L.S. Chang, **Fu-Chen Kung***, (2009) Intelligent computerized fabric texture recognition system by using Grey-based neural fuzzy clustering, International Conference on Wavelet Analysis and Pattern Recognition 2009.
10. Te-Li Su, **Fu-Chen Kung***, Yu-Lin Kuo, (2008) Application of back-propagation neural network fuzzy clustering in textile texture automatic recognition system, International Conference on Wavelet Analysis and Pattern Recognition 2008.
11. Yu-Lin Kuo, **Fu-Chen Kung**, M.-T. Hung, Y.-H. Lo, C. Lee, (2008) Superior stability of ultrathin and nanocrystalline TiZrN films as diffusion barriers for Cu metallization. The 4th International Conference on Technological Advances of Thin Films & Surface Coatings.

(C) 專書及專書論文：

- 1、**Fu-Chen Kung***, L.S. Chang, Ming-Chien Yang , Effect of antioxidants grafting on the hemocompatibility of HD. VDM Verlag, ISBN 978-3-639-15904-2

五、 專利或技術報告

發明專利

- 1). 可塑性材料及其製造方法,專利證號:I483988,2015/05/11
- 2). 修復耳膜之醫藥組成物及其用途,專利證號:I448296,2014/08/11
- 3). 注射式之骨修復複合材料,專利證號:I435728,2014/05/01

中華民國新型專利

- 4). 高含氧免動力型水產類受精卵自動翻轉裝置 (審核中)
- 5). 量產型活體餌料生物收集裝置 (審核中)
- 6). BLOOD DIALYSIS TUBE, BLOOD DIALYSIS UNIT AND BLOOD DIALYZER 血液透析纖維管、血液透析單元以及血液透析器， M360046
- 7). 試管結構，M366992
- 8). 提升食味的米糠微粒， M377063
- 9). 可調式淨水裝置，M333231
- 10). 可攜式馬桶， M377181
- 11). 具除臭功能之可攜式馬桶， M377182
- 12). 養殖結構， M350984
- 13). CHOPSTICK HAVING SPOON FUNCTIONALITY 具有湯匙功能之筷子， M349726
- 14). COVER HAVING STRAW, AND CONTAINING DEVICE UTILIZING THE SAME 具有吸管之蓋子及使用此蓋子之容納裝置，M349729
- 15). PAINTING TOOL AND PAINTING TOOL COMBINATION STRUCTURE 塗刷工具及塗刷工具組合結構，M349753
- 16). 椅體支撐結構，M349232
- 17). 生態養殖裝置，M333060

- 18). 瓦斯安全點火裝置，M333519
- 19). 安撫奶嘴，M328283
- 20). 水陸兩棲式高密度立體養殖塔裝置，M3263
- 21). 具提示結構之感測裝置，M341457
- 22). 模組化養殖盒,專利證號:M509528,2015/10/01
- 23). 健康園藝手套,專利證號:M477789,2014/05/11
- 24). 光觸媒包埋結構,專利證號:M459022,2013/08/11
- 25). 汽車警示裝置,專利證號:M437796,2012/09/21
- 26). 多功能美容髮夾,專利證號:M431620,2012/06/21
- 27). 收納式輔助輪椅裝置,專利證號: M431696, 2012/06/21
- 28). 輔助下床之床具,專利證號: M425660, 2012/04/01
- 29). 具減重控制功能之餐具,專利證號:M424875, 2012/03/21
- 30). 具有療癒及養護功能之吹風機頭罩,專利證號: M424053, 2012/03/11
- 31). 移動式輔助扶手裝置,專利證號: M423720, 2012/03/01

新式樣專利

- 32). THUMTACK 圖釘， D129472

六、得獎紀錄

- 1、2018年美國 RESI(The Redefining Early Stage Investments)創新挑戰賽(Innovation Challenge)
第三名