

國立台灣大學技術行銷表

台大案號: _____ (由產學組填寫)

產學合作中心聯絡人:

電話:

e-mail:

產品/技術名稱	聚醚多胺油性與水性分散奈米碳管與樹脂硬化技術
發明人/單位	林江珍教授/台灣大學 高分子科學與工程學研究所
產品/技術說明	本發明以油性及水性聚醚多胺及其聚醚多胺之衍生物為奈米碳管分散劑。發明重點有:穩定分散奈米碳管於有機溶劑，長達六個月以上。高濃度奈米碳管於有機介質。可製造膠狀奈米碳管，更進一步能再稀釋分散。分散劑為反應形化學結構，可用於 Epoxy、PU、PI、Polyesters。
應用範圍	奈米複合材料、光電元件、生醫材料，例如:抗電磁波複合材料、PI 銅薄積層板輕量化、鎖模雷射原件等、高靈敏之生醫檢測電極。
產品/技術優勢	本發明之分散劑具有三種功能：分散劑、交連劑、環境應答，技術超越美國與中國。中華民國尚無此分散技術。
市場潛力	分散劑合成之原料為大宗化學品，成本低廉，但經由分散理念設計，可將奈米碳管分散至介質，進而應用至奈米複合材料、光電元件、生醫材料。
產品/技術 智財權保護方式	(由技轉組填寫)

Marketing Abstract of NTU's Invention Disclosure

NTU's docket no: _____ (由技轉室填寫)

TTO contact :

Tel :

e-mail :

Title	Multiple functional poly(oxyalkylene) amine as dispersants for applying carbon nanotubes in organic solvents and water-based resins
Inventor (s)	Prof. Jiang-Jen-Lin/ Institute of Polymer Science and Engineering, National Taiwan University
Brief Description	Design and synthesis of multiple functional poly(oxyalkylene) amine dispersants for dispersing carbon nanotubes (CNT). CNT can successfully dispersed in mediums in high concentration and long-term dispersing stability. Furthermore, CNT can be prepared as gel form and re-dispersable in medium. Dispersants have active site for curing epoxy, PU, PI and polyesters.
Fields of Application	Nanocomposites, opto-electrical devices and medical devices, for example, anit-EMI film, light PCB based CNT-PI matrix, mode-lock laser devices, high sensitive bio-medical sensors, etc.
Advantages	Multiple functional poly(oxyalkylene) amine can have three functionality: dispersant, curing agent and environmental response. The designation in this patent is better than that of America and China.
Market Potential	The raw materials for synthesis of Multiple functional poly(oxyalkylene) amine are common chemicals. The raw materials are inexpensive, however, the final compounds with our designation will be more functional and can be applied in dispersion of CNT, nanocomposites, opto-electrical devices and bio-medical materials.
IP Right(s)	(由技轉室填寫)