• 系統編號	RC8904-0132		
• 計畫中文名稱	高分子材質之水性分散液製備包覆顆粒之研究---濕式造粒法		
• 計畫英文名稱	Preparation of Coated Granules Using Polymeric Aqueous Dispersion		
• 主管機關	行政院國家科學委員會	• 計畫編號	NSC82-0412-B038-005
• 執行機構	台北醫學院藥學系		
• 本期期間	8108 ~ 8207		
• 報告頁數	0 頁	• 使用語言	英文
• 研究人員	許明照；李坤勇；王涵瑩 Sheu, Ming-Thau；Lee, Kun-Yong；Wang, Han-Ying		
• 中文關鍵字	高分子材質水性分散液；溼式造粒法；包覆顆粒；造粒劑		
• 英文關鍵字	Polymeric aqueous dispersion；Wet granulation；Coated granule；Granulating agent		
• 中文摘要	查無中文摘要		
• 英文摘要	The main objective of this study is to evaluate the potential possibility of Wet-granulating drug particles into coated granules in a planetary-typer Mixer using polymeric aqueous dispersion as a granulating agent. The factors evaluated can be divided into the process and formulation variables. In this study, the process variables that have been examined include the pouring rate of aqueous dispersion and stirring rate. The formulation variables that have been studied include the additional amount of plasticizer, and the polymer content in aqueous dispersion and its viscosity etc.. The extent of influence of these factors have been judged mainly based on the coating efficiency, which is indicated by the dissolution time need for certain fraction being released. Simultaneously, the physical properties of coated granules, including flowability, bulk and tapped densities and size distribution etc., have been tested. Furthermore, coated granules have been compressed into matrix tablets after mixing with excipients. Hopefully, the kind of excipients and its used amount, which building into the tablets with desired controlled-release property, can be screened. Moreover, the effects of compression pressure on the controlled-release characters of the tablets have been evaluated and been used as a reference to screen the formulation for the matrix tablets. The results indicated that slower stirring rate, larger amount of polymer in the formulation would result in better coating efficiency. The compression pressure did not affect the drug release rate. It is determined by the drug solubility itself. The addition of alcohol in the formulation could not improve coating efficiency. Drug release could be delayed by adding excipients. As for drug		

release mechanism, could be described to by Hiquchi equation transport model.