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## **The preparation of Chitosan / Carboxymethyl Cellulose / TPP-Polyelectrolyte gel beads and its application on drug delivery system**

Mon Chun Liu 、Ming Zhou Chen 、Tsai-Yi Weng and Chang Tay Lin\*

Chia Nan College of Pharmacy and Science *Tainan, Taiwan*

Correspondence e-mail address: [ctlinted@mail.chna.edu.tw](mailto:ctlinted@mail.chna.edu.tw)

### **Abstract**

The purpose of this study was the preparation and characterization of drug containing polymer gel beads. Chitosan was dissolved with drug in 5 wt% acetic acid solution. Different chitosan gel beads were obtained by polyelectrolyte complexation with sodium salt of carboxymethyl cellulose and tripolyphosphate. The effect of drug entrap ratio, gel particle size, morphology and physical properties on drug released behavior were investigated. The results showed that the release rate was consistent with T. Higuchi model.

**Keyword :** Chitosan 、 Polyelectrolyte Complexation 、 Carboxymethyl Cellulose 、  
T. Higuchi model.