

Pharmacy

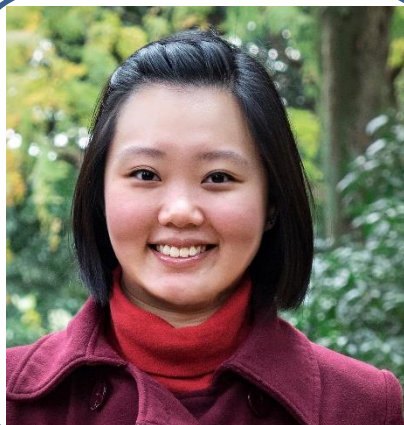
Department Seminar

Date: 5th June 2017

Time: 5pm

Venue: S4A Level 3
Room A & B

Disintegrant-moisture interaction on tablet performance: A study with crospovidone



Tze Ning graduated with a BSc (Pharmacy) Hons from NUS. She completed her pre-registration training at Tan Tock Seng Hospital and is a registered pharmacist with the Singapore Pharmacy Council. She is pursuing her Ph.D. under the supervision of A/P Paul Heng. Her research focus is on the effect of moisture sorption and its implications on excipient performance and drug stability.

Water activity has been widely used in the food industry to predict microbial spoilage in foods. Much emphasis was placed on manipulating water activity to suppress undesirable chemical reactions, prolong enzymatic activity, prevent sticking and caking problems in powders, and preserve the physical appearance of food by controlling moisture migration.

While water activity is not a widely applied measurement in the pharmaceutical industry, the large foundation of basic information established via research in other areas makes it easily applicable to pharmaceutical systems. Water activity research is particularly valuable in evaluating moisture-sensitive and hygroscopic materials.

In this seminar, we will discuss some findings with crospovidone, a superdisintegrant commonly used in immediately release tablet formulations. Methods to utilize water activity data will also be shared, alongside its application to pharmaceutical excipients.