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*หัวหน้าหน่วยวิจัยด้านวัสดุอัจฉริยะและเทคโนโลยีนวัตกรรม  
สำหรับการประยุกต์ทางเภสัชกรรมแห่งมหาวิทยาลัยธรรมศาสตร์*

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### **Personnel Information**

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### **Education**

**2012**

**Doctor of Philosophy (Ph.D., PceuPhT)** (RGJ-Ph.D. scholarship)  
Department of Pharmaceutical Technology, Faculty of Pharmacy,  
Silpakorn University, Thailand

Researched at The University of Western Australia, Australia  
(November 2011- February 2012)

Researched at Toho University, Japan (June 2010- September 2010)

**2007**

**Bachelor of Laws (LL.B.)**  
School of Law, Sukhothai Thammathirat Open University, Thailand

**2004**                                    **Bachelor of Pharmacy (B. Pharm) (Honors)**  
Department of Pharmacy (Pharmaceutical Technology)  
Faculty of Pharmacy, Silpakorn University, Thailand

### **Work Experience**

- 2004 - 2005:**                            Worked in Samut Songkhram Provincial Public Health Office as a pharmacist
- 2005 - 2007:**                            Worked in Naphalai hospital as a pharmacist
- 2012 :**                                    Worked in Boots retail as a pharmacist
- 2012 :**                                    Worked in Sanamchan Hospital as a pharmacist
- 2013 – present:**                        Work in the Faculty of Pharmacy, Thammasat University as a lecturer

### **Publication/Presentation**

#### **Patent**

1. Manee Luangtana-anan and Pakorn Kraisit. “Nanoparticle formation by using shellac and chitosan for a protein encapsulation” (Submitted)

#### **Publication**

1. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan. “Nanoparticle formation by using shellac and chitosan for a protein delivery system” *Pharmaceutical Development and Technology*, Vol.18 No.3 (2013) pp 686-693.
2. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Manee Luangtana-anan, Katsuhide Terada, Yasuo Yoshihashi, and Etsuo Yonemochi. “Determination of Surface Free Energy and Contact Angle for Hydrolyzed Shellac” *Advanced Materials Research* Vol. 506 (2012) pp 270-273.
3. Amolnat Tunsirikongkon, **Pakorn Kraisit**, Supawadee Seubsasana, Arunporn Itharat and Narong Sarisuta. “Formulation Development of Herbal Capsule Containing Oleoresin of *Zingiber Officinale* Extract” *International Journal of Pharmacy and Pharmaceutical Sciences*, Vol. 5, Issue 4 (2013) pp 439-445.
4. **Pakorn Kraisit**, Manee Luangtana-Anan and Narong Sarisuta. “Effect of Various Types of Hydroxypropyl Methylcellulose (HPMC) Films on Surface Free Energy and Contact Angle” *Advanced Materials Research* Vol. 1060 (2015) pp 107-110.

5. S. Pooonpun, A. Polnok, O. Paeratakul, **Pakorn Kraisit**, N. Sarisuta. “Mechanical and adhesive properties of cellulosic film coats containing polymeric additives” *Pharmazie* Vol. 70 (2015) pp 1-6.
6. Sureewan Duangjit, Arunporn Itharat and **Pakorn Kraisit**. “Relationship between lactose and microcrystalline cellulose as diluents on physical characteristics of banana extract tablet using computer program” *Isan Journal of Pharmaceutical Sciences* Vol. 10 (2015) pp 251-258.
7. Sureewan Duangjit, **Pakorn Kraisit**, Luangtana-Anan M. “An investigation of propranolol-loaded chitosan nanoparticles for transmucosal delivery: Physical characterization” *Thai Journal of Pharmaceutical Sciences* Vol.40 (2016) pp 25-28.
8. Jongjan Mahadlek, Sureewan Duangjit, Tanasait Ngawhirunpat, Sureewan Bumrunghai, **Pakorn Kraisit**. “Development of Topical Gel-Based Formulation for Enhancing Transdermal Delivery of Capsaicin: Physical properties characterization” *Thai Journal of Pharmaceutical Sciences* Vol.41 (2017) pp 117-120.
9. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan. “Preparation and Characterization of Hydroxypropyl Methylcellulose/Polycarbophil Mucoadhesive Blend Films Using a Mixture Design Approach” *Chemical and Pharmaceutical Bulletin* Vol 65 (2017) pp 284–294.
10. **Pakorn Kraisit**, Sontaya Limmatvapirat, Manee Luangtana-anan and Pornsak Sriamornsak. “Buccal administration of mucoadhesive blend films saturated with propranolol loaded nanoparticles” *Asian Journal of Pharmaceutical Sciences* Vol 13 (2018) pp 34-43.
11. **Pakorn Kraisit** and Narong Sarisuta. “Development of Triamcinolone Acetonide-Loaded Nanostructured Lipid Carriers (NLCs) for Buccal Drug Delivery Using the Box-Behnken Design” *Molecules* Vol 23 (2018) pp 1-14.
12. Sureewan Duangjit and **Pakorn Kraisit**. “Optimization of orodispersible and conventional tablets using simplex lattice design: Relationship among excipients and banana extract” *Carbohydrate Polymers* Vol 193 (2018) pp 89-98.
13. **Pakorn Kraisit**. “Impact of hydroxypropyl methylcellulose (HPMC) type and concentration on the swelling and release properties of propranolol hydrochloride matrix tablets using a simplex centroid design” *International Journal of Applied Pharmaceutics* Vol 11 (2019) pp 143-151.

14. Siriporn Kittiwisut and **Pakorn Kraisit**. “Physicochemical characterization of propranolol-loaded chitosan nanoparticles for a buccal drug delivery system” *International Journal of Applied Pharmaceutics* Vol 12 (2020) pp 243-247.
15. **Pakorn Kraisit**, Namon Hirun, Jongjan Mahadlek, Sontaya Limmatvapirat. “Fluconazole-loaded solid lipid nanoparticles (SLNs) as a potential carrier for buccal drug delivery of oral candidiasis treatment using the Box-Behnken design” *Journal of Drug Delivery Science and Technology* Vol 63 (2021) Article number 102437
16. **Pakorn Kraisit**, Namon Hirun, Premjit Limpamanoch, Sontaya Limmatvapirat. “Using a simplex centroid design and fatty acids to optimize fluconazole-loaded solid lipid nanoparticles (SLNs)” *International Journal of Applied Pharmaceutics* Vol 13 (2021) pp 206-209.
17. **Pakorn Kraisit** and Narong Sarisuta. “Optimization of diclofenac sodium-loaded nanostructured lipid carriers (NLCs) using the box-behnken design” *Key Engineering Materials* Vol 901 (2021) pp 137-143.
18. **Pakorn Kraisit**, Etsuo Yonemochi, Takayuki Furuishi, Jongjan Mahadlek, Sontaya Limmatvapirat. “Chitosan film containing antifungal agent-loaded SLNs for the treatment of candidiasis using a Box-Behnken design” *Carbohydrate Polymers* Vol 283 (2022) pp 1-14.
19. Namon Hirun, **Pakorn Kraisit**, Vimom Tantishaiyakul. “Thermosensitive Polymer Blend Composed of Poloxamer 407, Poloxamer 188 and Polycarbophil for the Use as Mucoadhesive In Situ Gel” *Polymers* 14 (2022) 1836.
20. Namon Hirun, **Pakorn Kraisit**. “Drug-Polymers Composite Matrix Tablets: Effect of Hydroxypropyl Methylcellulose (HPMC) K-Series on Porosity, Compatibility, and Release Behavior of the Tablet Containing a BCS Class I Drug” *Polymers* 14 (2022) 3406.
21. **Pakorn Kraisit**, Premjit Limpamanoch, Namon Hirun, Sontaya Limmatvapirat. “Design and development of 3D-printed bento box model for controlled drug release of propranolol HCl following pharmacopeia dissolution guidelines” *International Journal of Pharmaceutics* 628 (2022) 122272.

22. Namon Hirun, **Pakorn Kraisit**, Siriwat Soontaranon. "Role of Bovine Serum Albumin Addition in Micellization and Gel Formation of Poloxamer 407" *Polymers* 15(11) (2023) 2465.

### **Presentation**

1. **Pakorn Kraisit** and Manee Luangtana-anan. "Application of chitosan base and chitosan glutamate in microparticles for protein delivery system". Silpakorn University Research Fair 2, 18-19/12/08.
2. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan." Effect of Chitosan Salts on Complex of Shellac for Protein Delivery System" RGJ-Ph.D. Congress X"Climate Change and Its Impacts, April 3 – 5, 2009.
3. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan." Formation of protein loaded nanoparticles between two biodegradable polymers by ionic cross-linking" 5th Thailand Pharmacy Congress, November 27-28, 2009.
4. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan. "Two Biodegradable Polymers on Nanoparticulate Formation as Protein Drug Delivery System" Pharmacy Congress at Chulalongkorn university, 3 Dec 2010.
5. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Manee Luangtana-anan, Katsuhide Terada, Yasuo Yoshihashi, and Etsuo Yonemochi. "Determination of Surface Free Energy and Contact Angle for Hydrolyzed Shellac" Chiang Mai International Conference on Biomaterials & Applications 2011, August 9-10, 2011.
6. **Pakorn Kraisit**, Lee-Yong Lim and Manee Luangtana-Anan. "Uptake of FITC-BSA in Caco-2 Cell Monolayers: A comparison Between FITC-BSA Solution and FITC-BSA loaded Chitosan Shellac Nanoparticles" Drug Discovery & Therapy World Congress, June 3-6, 2013, Boston, USA.
7. **Pakorn Kraisit**, Manee Luangtana-Anan and Narong Sarisuta. "Effect of Various Types of Hydroxypropyl Methylcellulose (HPMC) Films on Surface Free Energy and Contact Angle" PharmaTech 2014, December 1-2, 2014, Bangkok, Thailand.
8. Ratchanee Klinchan, Arunporn Itharat, Jitpisute Chunthorng-Orn and **Pakorn Kraisit**. "Formulation of *Musa sapientum* Pulp. Extract Tablets" 18<sup>th</sup> World

- Congress on Clinical Nutrition (WCCN) 2014, December 1-3, 2014, Ubon Ratchathani, Thailand.
9. **Pakorn Kraisit**, Sontaya Limmatvapirat, Jurairat Nunthanid, Pornsak Sriamornsak, and Manee Luangtana-anan. “Comparison between Glucose and Trehalose as Using for Cryoprotectant of Freeze-dried Nanoparticle” ICPAM 2015, January 22-23, 2015, Chonburi, Thailand.
  10. Sureewan Duangjit, Arunporn Itharat and **Pakorn Kraisit**. “Relationship between lactose and microcrystalline cellulose as diluents on physical characteristics of banana extract tablet using computer program” The international Conference on Herbal and Traditional medicine, January 28-30, 2015, Khon Kaen, Thailand.
  11. **Pakorn Kraisit**, Manee Luangtana-Anan. “Effect of different concentrations of chitosan on stability upon storage of freeze-dried nanoparticle with using glucose as cryoprotectant” The 75th FIP World Congress of Pharmacy and Pharmaceutical Sciences 2015, 29 September – 3 October 2015, Düsseldorf, Germany.
  12. Duangjit S, **Pakorn Kraisit**, Luangtana-Anan M. “An investigation of propranolol-loaded chitosan nanoparticles for transmucosal delivery: Physical characterization” 32nd International Annual Meeting in Pharmaceutical Sciences, March 10 – 11, 2016, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Thailand.
  13. **Pakorn Kraisit**, Sureewan Duangjit. “Effect of Plasticizers on Physicochemical and Mechanical Properties of Hydroxypropyl methylcellulose (HPMC) Film Using Simplex Lattice Mixture Design” The 5th International Conference on Pharmaceuticals, Nutraceuticals and Cosmetic Science, August 3 – 4, 2017, The Tawana Hotel, Bangkok, Thailand.
  14. **Pakorn Kraisit**, Sontaya Limmatvapirat, Pornsak Sriamornsak, Manee Luangtana-Anan. “Morphological and Physicochemical Properties of Hydroxypropyl Methylcellulose (HPMC) Films: Effects of Various Types of Plasticizers” The 5th International Conference on Pharmaceuticals, Nutraceuticals and Cosmetic Science, August 3 – 4, 2017, The Tawana Hotel, Bangkok, Thailand.
  15. **Pakorn Kraisit**, Namon Hirun, Premjit Limpamanoch, and Sontaya Limmatvapirat. “Optimizing Fluconazole-loaded Solid Lipid Nanoparticles (SLNs) Using a Simplex Centroid Design and Fatty Acids” International Conference and Exhibition on Pharmaceutical Sciences and Technology 2021, June 23-24, 2021, Online Conference, Bangkok, Thailand.

16. **Pakorn Kraisit**, and Narong Sarisuta. “Optimization of Diclofenac Sodium–Loaded Nanostructured Lipid Carriers (NLCs) Using the Box-Behnken Design” International Conference and Exhibition on Pharmaceutical Sciences and Technology 2021, June 23-24, 2021, Online Conference, Bangkok, Thailand.