

Curriculum Vitae



Name	Assoc. Prof. Rathapon Asasutjarit, Ph.D.
Areas of Expertise	1. Application of polymers and surfactants as drug and cosmetic delivery systems 2. Nanotechnology for drug and cosmetic delivery 3. Skin and ophthalmic drug delivery
Email address	rathapona@hotmail.com; rathapon@tu.ac.th

Qualifications			
Degree	Title	Year	University
Ph.D.	Ph.D. in Pharmaceutics	2007	Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand
M.Sc.	M.Sc. in Pharmaceutics	2002	Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand
B.Sc.	B.Sc. in Pharmacy (1 st Class Honor)	1998	Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

Publications (Updated: 8 January 2021)

- Rattanathada, T., Plengsuriyakarn, T., **Asasutjarit, R.**, Cheoymang, A., Karbwang, J., Na-Bangchang, K. Development of oral pharmaceutical formulation of standardized crude ethanolic extract of *Atractylodes lancea* (Thunb) DC. **J. Chin Pharm Sci.** 2020; 29(4): 280-293
- Asasutjarit, R.**, Sookdee, P., Veeranondha, S., Fuongfuchat, A., Itharat, A. Application of film-forming solution as a transdermal delivery system of piperine-rich herbal mixture extract for

- anti-inflammation. **Heliyon**. 2020; 6: e04139.
- Asasutjarit, R.**, Managit, C., Phanaksri, T., Treesuppharat, W., Fuongfuchat, A. Formulation development and in vitro evaluation of transferrin-conjugated liposomes as a carrier of ganciclovir targeting the retina. **Int J Pharm**. 2020; 577:119084.
- Asasutjarit, R.**, Meesomboon, T., Adulheem, P., Kittiwisut, S., Sookdee, P., Samosornsuk, W., Fuongfuchat, A. Physicochemical properties of alpha-mangostin loaded nanomeulsions prepared by ultrasonication technique. **Heliyon**. 2019; 5(9):e02465.
- Jansook, P., Kulsirachote, P., **Asasutjarit, R.**, Loftsson, T. Development of celecoxib eye drop solution and microsuspension: A comparative investigation of binary and ternary cyclodextrin complexes. **Carbohydr Polym**. 2019; 225:115209.
- Sooksai, N., Treesuppharat, W., Theeramunkong, S., **Asasutjarit, R.** Andrographolide-loaded nanoemulsion and its activity against non-melanoma skin cancer cells. **Key Engineering Materials**. 2019. 819: 139-144.
- Thummawan, C. Itharat, A., Asasutjarit, R. Anti-inflammatory activities of nanoemulsion containing Benjakul remedy extract. **TMJ (Thammasat Medical Journal)** 2019; 19 (2) Apr-Jun, 359-370.
- Sookdee, P., **Asasutjarit, R.**, Veeranondha, S., Itharat, A. Evaluation of in vitro anti-inflammatory activity, cytotoxic activity and physicochemical properties of activated carbon-treated Sahasthara ethanolic extract. **J. Med. Assoc. Thai**. 2017; 100 (Suppl.5): S215-S223.
- Touarawong, T., Samart, C., Rattanachuen, W., Theerachayanan, T., Sarisuta, N., **Asasutjarit, R.** Preparation of lyophilized single chain polypeptide-loaded liposomes for ophthalmic use. **Thai J. Pharm. Sci**. 2017; 41 (Suppl): 97-100.
- Asasutjarit, R.**, Theerachayanan, T., Kewsuwan, P., Veeranondha, S., Fuongfuchat, A., Ritthidej, GC. Gamma sterilization of diclofenac sodium loaded- N-trimethyl chitosan nanoparticles for ophthalmic use. **Carbohydr. Polym**. 2017; 157: 603-612. DOI:0.1016/j.carbpol.2016.10.029.
- Asasutjarit, R.**, Theerachayanan, T., Kewsuwan, P., Veeranondha, S., Fuongfuchat, A., Ritthidej, GC. Development and evaluation of diclofenac sodium loaded-N-trimethyl chitosan nanoparticles for ophthalmic use. **AAPS PharmSciTech**. 2015; 16 (5): 1013-1024. DOI: 10.1208/s12249-015- 0290-4.

- Asasutjarit, R.**, Larpmahawong, P., Fuongfuchat, A., Sareedenchai, V., Veeranondha, S.
Physicochemical properties and anti-*Propionibacterium acnes* activity of film forming solutions containing alpha-mangostin rich extract. **AAPS PharmSciTech**. 2014; 15 (2): 306-316. DOI: 10.1208/s12249-013-0057-8.
- Asasutjarit, R.**, Sorrachaitawatwong, C., Tipchuwong, N., Pouthai, S. Effect of formulation compositions on particle Size and zeta potential of diclofenac sodium-loaded chitosan nanoparticles. **World Academy of Science, Engineering and Technology: Int. J. Pharm. Sci.** 2013; 7 (9): 454-456.
- Uthumpa, C., Indranupakorn, R., **Asasutjarit, R.** Development of nanoemulsion formulations of ginger extract. **Adv. Mater. Res.** 2013; 68: 12-15.
- Ukosaramik, P., Tangyuenyongwatana, P., and **Asasutjarit, R.** Microemulsion formulation of *Angelica sinensis* root extract on clove oil/nonionic surfactant/water mixture. **Thai J. Pharm. Sci.** 2012; 36 (Suppl): 166-169.
- Wichitchan, R., Tangyuenyongwatana, P., and **Asasutjarit, R.** Preparation and characterizations of microemulsion of *Zingiber cassumunar* rhizomes extract. **Thai J. Pharm. Sci.** 2012; 36 (Suppl): 170-173.
- Asasutjarit, R.**, Thanasanchokpibull, S, Fuongfuchat, A, Veeranodha, S. Optimization and evaluation of thermoresponsive diclofenac sodium ophthalmic in situ gels. **Int. J. Pharm.** 2011; 411: 128-135.
- Rathapon Asasutjarit** and Kusawadee Maluangnont. Effect of Encouragement Methods for Lesson Review on Learning Achievement in the Topic of Rheology of Pharmacy Students at Rangsit University. **Journal of Srinakharinwirot Research and Development (Human Sciences and Social Sciences)**. 2010; 2 (suppl. 1): 157-166.
- Asasutjarit, R.** A topical DNA vaccine using nanoparticles: A newly promising and painless vaccination. **Bull.Health, Sci. & Tech.** 2009; 9(1-2): 1-10.
- Asasutjarit, R.**,Fuongfuchat, A. Development of thermoresponsive diclofenac ophthalmic in situ gel formulations. **Proceedings of RSU Research Conference 2009**, Apr 2; Rangsit University, 2009. p. 2-8.
- Asasutjarit, R.** Formulation of thermoresponsive diclofenac ophthalmic gels using the rheological approach. **Bull.Health, Sci. & Tech.** 2008; 8(1): 35-44.

Asasutjarit, R, Lorenzen, S, Sirivichayakul, S, Ruxrungtham, K, Ruktanonchai, U, Ritthidej, GC.

Effect of Solid Lipid Nanoparticles Formulation Compositions on Their Size, Zeta potential and Potential for In Vitro pHIS-HIV-hugag Transfection. **Pharm. Res.** 2007; 24: 1098-1107.

A-sasutjarit, R, Sirivat, A, Vayumhasuwan, P. Viscoelastic properties of carbopol 940 gels and their relationships to piroxicam diffusion coefficients in gel bases. **Pharm. Res.** 2005; 22:2134-2140.

Conference/Meeting

Papawee Sookdee, Sukitaya Veeranondha, Asira Fuongfuchat, Arunporn Itharat, and **Rathapon**

Asasutjarit. Application of film-forming solution as a transdermal delivery system of piperine-rich herbal mixture extract for anti-inflammation. The International Conference and Exhibition on Pharmaceutical Sciences and Technology 2020 (PST2020). Bangkok, Thailand. 19-20 May 2020. (Online Meeting: due to COVID-19 pandemic situation).

Rathapon Asasutjarit, Kriyapa Lairungruang, Papawee Sookdee, Chittima Managit, Teva Phanaksri, and Worapapar Treesuppharat. ***In vitro* Evaluation of Liposomal Ganciclovir Targeting the Retinal Cells**. The Euroscicon Conference on Nanoscience and Graphene Nanotechnology 2019. ANA Crowne Plaza Narita Hotel, Tokyo, Japan. 25-27 November 2019.

Nawarat Sooksai, Worapapar Treesuppharat, Sewan Theeramunkong, and **Rathapon Asasutjarit**. Andrographolide-loaded nanoemulsion and its activity against non-melanoma skin cancer cells. The International Conference and Exhibition on Pharmaceutical Sciences and Technology 2019 “Pharmaceutical Engineering and Pharmaceutical Sciences for Human Health”. The Ambassador Bangkok Hotel, Bangkok, Thailand. 18-19 June 2019.

Rathapon Asasutjarit, Papawee Sukdee, Sukitaya Veeranodha and Asira Fuongfuchat.

Physicochemical properties of a topical film forming solution containing alcoholic extract of Sahastara remedy, a Thai Traditional medicine, for anti-inflammation. 2018 AAPS PharmSci 360°, Advancing Pharmaceutical Sciences, Careers and Community, Walter E. Washington Convention Center, Washington D.C., USA. November 4-7, 2018.

Tunradee Meesomboon, Mukta Dechawibool, Siriporn Kittiwisut, Asira Fuongfuchat,

Rathapon Asasutjarit. Formulation of nanoemulsions containing alpha-mangostin rich extract against acne inducing bacteria. The 2nd Research Symposium on Pharmaceutical

Sciences, 2018, Thammasat University, Pathumthani, Thailand, April 26, 2018.

Rathapon Asasutjarit, Tinnapop Tourawong. Preparation and Evaluation of Single Chain Polypeptide-Loaded Liposomes for Ophthalmic Use. AAPS Annual Meeting and Exposition 2017, San Diego Convention Center, San Diego, USA. November 13-15, 2017.

Tinnapop Tourawong, Chantip Samart, Woraphol Rattanachuen, Thitaree Theerachayanan, Narong Sarisuta, **Rathapon Asasutjarit**. Preparation of lyophilized single chain polypeptide-loaded liposomes for ophthalmic use. The 33rd International Annual Meeting in Pharmaceutical Sciences “Advances in Pharmaceutical Sciences: Transition from Basic to Translational Research”, The Berkeley Hotel Pratunam, Bangkok, Thailand. March 2-3, 2017.

Papawee Sookdee, **Rathapon Asasutjarit**, Arunporn Itharat. Effect of activated carbon on anti-inflammatory activity and physicochemical properties of product containing Sahasthara remedy extract. Annual Academic Meeting in Medicine “Patient-Centered Care”, Faculty of Medicine, Thammasat University, Thailand. June 20-22, 2016.

Rathapon Asasutjarit, Thitaree Theerachayanan, Prartana Kewsuwan, Sukitaya Veeranondha, Asira Fuongfuchat and Garnpimol C. Ritthidej. Sterilization of diclofenac sodium-loaded trimethylchitosan nanoparticles for ophthalmic use by gamma-irradiation. FIP 2015: 75th FIP's World Congress of Pharmacy and Pharmaceutical Sciences, Congress Centre Düsseldorf, Düsseldorf, Germany. September 29-October 3, 2015.

Rathapon Asasutjarit, Chayanid Sorrachitawatwong, Nardauma Tipchuwong, and Sirijit Pouthai. Effect of Formulation Compositions on Particle Size and Zeta Potential of Diclofenac Sodium-Loaded Chitosan Nanoparticles. ICPPS 2013: International Conference on Pharmacy and Pharmaceutical Sciences, River View Hotel Singapore, Singapore 12-13 September, 2013.

Rathapon Asasutjarit, Papassara Larpmahawong, Vipaporn Sareedenchai, Asira Fuongfuchat, Development of Film Forming Lotion Containing Mangosteen Peel Extract against Bacteria causing Acne. The 9th Annual Meeting of National Thai Medicine, Folk Medicine and Alternative Medicine. Impact Exhibition and Convention Center, Muang Thong Thani, Nonthaburi, 5-6 September, 2012. (*Compliment Award, Oral presentation*)

Rathapon Asasutjarit, Somchai Luangsanam, Narong Moolsri, and Asira Fuongfuchat. Effect of autoclaving on physicochemical properties of thermoresponsive diclofenac sodium

ophthalmic in situ gels. The 27th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2010.

Rathapon Asasutjarit and Kusawadee Maluangnont. Effect of Encouragement Methods for Lesson Review on Learning Achievement in the Topic of Rheology of Pharmacy Students at Rangsit University. The 4th Annual Research Meeting of Srinakarinwirot University, 2010.

Rathapon Asasutjarit, Chanwit Kammat, Thumrongrat Pukpinyo, Watunya Witisil, Suthira Thanasanchokpibull, Susiri Preedasuttichit and Asira Fuongfuchat. Evaluation of sustained release effect of thermoresponsive diclofenac sodium ophthalmic in situ gel. The 26th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2009.

Rathapon Asasutjarit and Asira Fuongfuchat. Development of thermoresponsive diclofenac ophthalmic in situ gel formulations. RSU Research Conference 2009, Rangsit University, Thailand 2009.

Rathapon Asasutjarit, Chanwit Kammat, Thumrongrat Pukpinyo, Watunya Witisil, Suthira Thanasanchokpibull, Susiri Preedasuttichit and Asira Fuongfuchat. Thermoresponsive diclofenac sodium ophthalmic in situ gels. The 25th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2008.

Rathapon Asasutjarit, Chanwit Kammat, Thumrongrat Pukpinyo, Watunya Witisil, Suthira Thanasanchokpibull, Susiri Preedasuttichit and Asira Fuongfuchat. Thermoresponsive diclofenac sodium ophthalmic in situ gels. The 25th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2008.

Rathapon Asasutjarit, Kitti Sermklar, Panya Kaewmafai, Anukul Chatpailsalsakul and Kusawadee Maluangnont. Factors influencing learning achievement in rheological topic of pharmacy students, Rangsit University, academic year 2007, The 25th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2008.

Rathapon Asasutjarit, Tharinee Kaewpalurg, Wara Sripinyo and Benchawan Chamsai.

Formulation of thermosetting diclofenac ophthalmic gels using rheological approach, The 24th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2007.

Rathapon Asasutjarit, Sven-Iver Lorenzen, Sunee Sirivichayakul, Kiat Ruxrungham, Uracha

Ruktanonchai, Richard H. Guy, and Garmpimol C. Ritthidej, *Delivery of pHIS-HIV-hugag into Skin using Solid Lipid Nanoparticles and Chitosan Nanoparticles*, The 24th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2007.

Rathapon Asasutjarit, Sven-Iver Lorenzen, Sunee Sirivichayakul, Kiat Ruxrungham, Uracha

Ruktanonchai, Richard H. Guy, and Garmpimol C. Ritthidej, *Delivery of pHIS-HIV-hugag into Skin using Solid Lipid Nanoparticles and Chitosan Nanoparticles*, The 34th Annual Meeting and Exposition of the Controlled Release Society Long Beach Convention Center, Long Beach, CA. USA 7-11 July 2007.

Rathapon Asasutjarit, Uracha Rungsardthong, and Garmpimol C. Ritthidej, *Effect of*

Formulation Compositions on Zeta Potential and Ability of Solid Lipid Nanoparticles to Form Complex with Plasmid DNA, The 33rd Annual Meeting and Exposition of the Controlled Release Society, Austria Center, Vienna, Austria 22-26 July 2006.

Rathapon A-sasutjarit, Anuvat Sirivat and Panida Vayumhasuwan, *Viscoelastic Properties of Carbopol*

940 gels and Their Relationships to Piroxicam Diffusion Coefficients, The 19th Annual Research Meeting in Pharmaceutical Sciences, Chulalongkorn University, Thailand 2002.

Awards and Prizes

2016	Outstanding Teacher Award in Pharmaceutical Sciences, Faculty of Pharmacy, Thammasat University (15 September 2016)
2015	Outstanding Research Award in Health Sciences, Researchers Day, Thammasat University Year 2015 (28 November 2015). Title: Development and evaluation of diclofenac sodium loaded-N-trimethyl chitosan nanoparticles for ophthalmic use
2012	Compliment Award for the oral presentation in The 9 th Annual Meeting of National Thai Medicine, Folk Medicine and Alternative Medicine. Impact Exhibition and Convention Center, Muang Thong Thani, Nonthaburi, 5-6 September, 2012. Title: Development of Film Forming Lotion Containing Mangosteen Peel Extract against Bacteria causing Acne.
2011	Publishing Award Grant for International Publications “60 th Year of Elegance of the City”: 300 International Publications for moving forward to the National Research University: Songkran 2010 to Songkran 2011, Srinakharinwirot University. Title:

Optimization and evaluation of thermoresponsive diclofenac sodium ophthalmic in situ gels

2009

Outstanding Research Award for the oral presentation in the Annual Research Meeting Year 2009, Rangsit University. Title: Development of thermoresponsive diclofenac ophthalmic in situ gel formulations