

Associate Professor Ts. Dr. Liew Kai Bin

Research Interest

Nanoparticles, micelle formulations, drug targeting study for anti-cancer, orally disintegrating tablet, orally disintegrating film taste masking study, formulation development, powder technology, bioequivalence study, HPLC analysis

Publications

- 1.) Liew KB, Peh KK, Yvonne TFT. Taste masking evaluation of sweetening agents on donepezil. *Malaysian Journal of Pharmaceutical Sciences*. 2010. Supplement issue no 1. 149-150. Publisher: USM.
- 2.) Liew KB, Peh KK, Yvonne TFT. Characterization of oral disintegrating film containing Donepezil for Alzheimer Patients. *AAPS Pharm Sci Tech*. 2011. DOI: 10.1208/s12249-011-9729-4. Publisher: Springer. **ISI Impact factor: 1.954.**
- 3.) Liew KB, Gabriel OKL, Peh KK, Yvonne TFT. Simple high performance liquid chromatography method for determination of Norfloxacin in plasma and application in bioequivalence study. *International Journal of Pharmacy and Pharmaceutical Sciences*. 2012. 4(3): 247-251. Publisher: Innovare Academic Sciences. **Scopus Impact factor: 0.49.**
- 4.) Liew KB, Gabriel OKL, Peh KK, Yvonne TFT. Development and application of simple HPLC-UV method for Fluconazole quantification in human plasma. *International Journal of Pharmacy and Pharmaceutical Sciences*. 2012. 4(4): 107-111. Publisher: Innovare Academic Sciences. **Scopus Impact factor: 0.49.**
- 5.) Liew KB, Peh KK and Yvonne TFT. Effect of polymer, plasticiser, and filler on orally disintegrating film. *Drug Development and Industrial Pharmacy*. DOI: 10.3109/03639045.2012.749889. Publisher: Informa Healthcare. **ISI Impact factor: 2.429.**
- 6.) Liew KB, Gabriel OKL, Peh KK, Yvonne TFT. Pharmacokinetics and bioequivalence of metronidazole tablets in healthy Malaysian volunteers. *Latin American Journal*

- of Pharmacy*. 2013. 32 (1): 43-51. Publisher: COLEGIO FARMACEUTICOS PROVINCIA DE BUENOS AIRES. **JCR Impact factor: 0.372.**
- 7.) Liew KB, Peh KK, Yvonne TFT. RP-HPLC analytical method development and optimization for quantification of donepezil in pharmaceutical dosage form. *Pakistan Journal of Pharmaceutical Sciences*. 2013. 26(5): 961-966. Publisher: University of Karachi. **ISI Impact factor: 0.682.**
- 8.) Liew KB, Gabriel OKL, Peh KK, Yvonne TFT. Three Ways Cross-over Bioequivalence study of Three Cephalexin Formulations in Healthy Malay Volunteers. *Drug Development and Industrial Pharmacy*. DOI: 10.3109/03639045.2013.798805. Informa Healthcare. **ISI Impact factor: 2.429.**
- 9.) MF Cheah and KB Liew. Haloperidol induced neuroleptic malignant syndrome: Case report. *Journal of Pharmacy and Clinical Sciences*. 2013. 7(Apr-June):22-25. Publisher: Academic Research Publishing Agency Press.
- 10.) Liew KB, Peh KK and Yvonne TFT. Orally Disintegrating Dosage Forms: Breakthrough Solutions for Non-compliance. *International Journal of Pharmacy and Pharmaceutical Sciences*. 2013. 5(4): 4-8. Publisher: Innovare Academic Sciences. **Scopus Impact factor: 0.49.**
- 11.) Liew KB and Peh KK. Stability Indicating HPLC-UV Method for the Determination of Dapoxetine HCl in Pharmaceutical Product. *Acta Poloniae Pharmaceutica*. 2014. 71(3): 393-400. Publisher: POLSKIE TOWARZYSTWO FARMACEUTYCZNE. **ISI Impact factor: 0.877.**
- 12.) Liew KB, Tan YTF and Peh KK. Taste Masked and Affordable Donepezil Hydrochloride Orally Disintegrating Tablet as Promising Solution for Non-Compliance in Alzheimer Disease Patient. *Drug Development and Industrial Pharmacy*. DOI:10.3109/03639045.2014.884130. Publisher: Informa Healthcare. **ISI impact factor: 2.429.**
- 13.) Liew KB, Loh GOK, Tan YTF and Peh KK. Randomised Two Ways Cross-over Bioequivalence Study of Two Amoxicillin Formulations and Inter-Ethnicity Pharmacokinetic Variation in Healthy Malay Volunteers. *Biomedical Chromatography*. 2014. 28(9): 1246-1253. Publisher: Wiley – Blackwell. **ISI impact factor: 1.729.**
- 14.) Liew KB, Loh GOK, Tan YTF and Peh KK. Improved Protein Deproteinization Method for the Determination of Meloxicam in Human Plasma

- and Application in Pharmacokinetic Study. *Biomedical Chromatography*. 2014. 28(12): 1782-1788. Publisher: Wiley – Blackwell. **ISI impact factor: 1.729.**
- 15.) Liew KB, Peh KK, Yvonne TFT. Effect of Deproteinizing Agent and Quantification of Donepezil Hydrochloride in Human Plasma. *Pakistan Journal of Pharmaceutical Sciences*. 2014. 27(5): 1303-1307. Publisher: University of Karachi. **ISI impact factor: 0.682.**
- 16.) Khalid S.H., Liew KB, Loh GOK and Peh KK. Stability Indicating HPLC-UV Method for the Determination of Curcumin in Curcuma Longa Extract and Emulsion Formulation. *Food Chemistry*. 2015. 170: 321-326. Publisher: Elsevier. **ISI impact factor: 4.052.**
- 17.) Kai Bin Liew, Gabriel Onn Kit Loh, Yvonne Tze Fung Tan and Kok Khiang Peh. Simultaneous quantification of sildenafil and N-desmethyl sildenafil in human plasma by UFLC coupled with ESI-MS/MS and pharmacokinetic and bioequivalence studies in Malay population. *Biomedical Chromatography*. 2015. 29(6): 953-960. Publisher: Wiley – Blackwell. **ISI impact factor: 1.729.**
- 18.) Kai Bin Liew and Odeniyi Michael Ayodele. Application of freeze drying technology in manufacturing of orally disintegrating film. *Pharmaceutical Development and Technology*. doi:10.3109/10837450.2014.1003657. Publisher: Taylor and Francis Online. **ISI impact factor: 1.566.**
- 19.) Kai Bin Liew and Kok Khiang Peh. Investigation on the effect of polymer and starch on the tablet properties of lyophilized orally disintegrating tablet. *Archive of Pharmacal Research*. 2015. 1-10. DOI: [10.1007/s12272-014-0542-y](https://doi.org/10.1007/s12272-014-0542-y). Publisher: Pharmaceutical Society of Korea. **ISI impact factor: 2.49.**
- 20.) Kai Bin Liew and Kok Khiang Peh. Stability indicating HPLC method for simultaneous quantification of sildenafil citrate and dapoxetine hydrochloride in pharmaceutical products. *Pakistan Journal of Pharmaceutical Sciences*. 2018. 31(6): 2515-2522. Publisher: University of Karachi. **ISI impact factor: 0.682.**
- 21.) Sim KYI, KB Liew and Janakiraman AK. Effect of polymers and processing method on physical characterization of orally disintegrating film. *International Research Journal of Pharmacy*. 2018. 9(10): 33-38. Publisher: Moksha Publishing House. **SCOPUS Index: 0.13.**
- 22.) Liew KB, Gaurav A and Mandal UK. A review on co-processed excipients: Current and future trend of excipient technology. *International Journal of*

- Pharmacy and Pharmaceutical Sciences. 2019. 11(1):1. DOI: 10.22159/ijpps.2019v11i1.29265. **SCOPUS Index: 0.51.**
- 23.) Amanda Ng Thing Wei, Ashok Kumar Janakiraman, Kai Bin Liew, Melbha Starlin and Shiek Abdul Kadhar Mohamed Ebrahim Habibur Rahman. The effects of the combination of biodegradable and synthetic polymers on the release behaviour of Nateglinide matrix tablets. *Journal of Excipients and Food Chemicals*. 2019. 10(1): 1-10. **SCOPUS Index: 0.42.**
- 24.) Nurul Ain Zulkifli, Fashli Syafiq Abdul Razak, Chiau Ming Long and Kai Bin Liew. The effect of disintegrants on the physical properties of a cocoa butter based fast melt tablet developed by a fusion moulding method. *Journal of Excipients and Food Chemicals*. 2019. 10 (2): 1 – 7. **SCOPUS Index: 0.70.**
- 25.) Liew KB, Gaurav A and Mandal UK. Effect of processing methods on xylitol-starch base co-processed adjuvant for orally disintegrating tablets application. *Pakistan Journal of Pharmaceutical Sciences*. 2020. 33(2): 551-559. **ISI impact factor: 0.682.**
- 26.) Ensieh Izadi, Gull Afshan, Rahul P. Patel, Venkatesan M. Rao, Kai Bin Liew, Meor Mohd Redzuan Meor Mohd Affandi, Nurolaini Kifli, Amal Suleiman, Kah Seng Lee, Md. Moklesur R. Sarker, Syed Tabish Zaidi and Long Chiau Ming. Levofloxacin: Insights Into Antibiotic Resistance and Product Quality. *Frontier in Pharmacology*. 2019. 10(881): 1-7. doi: 10.3389/fphar.2019.00881. **ISI impact factor: 4.40.**
- 27.) Chun Zheng Ng, Yen Loong Lean, Siang Fei Yeoh, Qi Ying Lean, Kah Seng Lee, Amal Khalil Suleiman, Kai Bin Liew, Yaman Walid Kassab, Yaser Mohammed Al-Worafi, Long Chiau Ming. Cold chain time-and temperature-controlled transport of vaccines: a simulated experimental study. *Clinical and Experimental Vaccine Research*. 2020. 9 (1), 8-14.
- 28.) Vishnu A/L Mahesparan, Fashli Syafiq Abd Razak, Long Chiau Ming, A.B.M. Helal Uddin, Md Zaidul Islam Sarker, Liew Kai Bin. Comparison of disintegrant-addition methods on the compounding of orodispersible tablets. *International Journal of Pharmaceutical Compounding*. 2020. 24(2): 160-167.
- 29.) Liew Kai Bin, Ashok Kumar Janakiraman, Fashli Syafiq Abd Razak, A.B.M. Helal Uddin, Md Zaidul Islam Sarker, Long Chiau Ming, Bey Ying Goh. Supercritical fluid technology and its pharmaceutical applications: a revisit with

- two decades of progress. *Indian Journal of Pharmaceutical Education and Research*. 2020. 54(2): S1-S11.
- 30.) SL Ng, TN Soon, WH Yap, KB Liew, YC Lim, LC Ming, YQ Tang, BH Goh. Convalescent plasma: A potential therapeutic option for COVID-19 patients. *Asian Pacific Journal of Tropical Medicine*. 2020. 13(11): 477.
- 31.) Syahiera Ezzah Noor Azman, Fashli Syafiq Abd Razak, Wan Hamirul Bahrin Wan Kamal, Gan Kok Zheng, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker, Liew Kai Bin. Investigation of Fillers Effects on the Compounding of Freeze-dried Orodispersible Tablets Containing *Annona muricata* Extract. *International Journal of Pharmaceutical Compounding*. 2020. 24(6): 513 – 518.
- 32.) Fashli Razak, Nur Aisyah Mohamad Azman, Liew Kai Bin, Long Chiau Ming. Development and Characterization of a Superdisintegrant Enhanced Effervescent Tablet. *International Journal of Pharmaceutical Research*. 2020. 12(3): 1977-1985.
- 33.) Anandarajagopal Kalusalingam, Nasyika Samsudin, Abdullah Khan, Krupavaram Bethalla, Vijay Kotra, Kai Bin Liew, Mei Jun Loy, Siew Mei Yee, Chiau Ming Long. Qualitative analysis and in-vitro anthelmintic evaluation of *Cleome gynandra* stem. *International Journal of Pharmaceutical Research*. 2021. 13(1): 215 – 220.
- 34.) Nur Ain Omar, Fashli Syafiq Abd Razak, Tang Cher Hing, A.B.M. Helal Uddin, Zaidul Islam Sarker, Ashok Kumar Janakiraman and Liew Kai Bin. Development and evaluation of cosmetic cream formulation containing *Annona muricata* leaves extract. *Latin American Journal of Pharmacy*. 2021. 40(2): 1-9.
- 35.) Pervaiz Akhtar Shah, Haroon Khalid Syed, Areeba Pervaiz, Umar Farooq Gohar, Muhammad Saleem, Muhammad Shahid Iqbal & Kai Bin Liew. Development and Validation of In Vitro-In Vivo Correlation (IVIVC) Model for Microparticulate Lornoxicam Loaded Controlled Release Tablet. 2021. *Latin American Journal of Pharmacy*. 40(2): 1-8.
- 36.) Anandarajagopal K, Sugalia S, Abdullah Khan, Bama Menon, Tan Ching Siang, Poonguzhali S, Kai Bin Liew, Vijay Kotra. Scientific evaluation of anti-inflammatory potential of *Macrotyloma uniflorum* seeds extracts. *International Journal of Research in Pharmaceutical Sciences*. 2021. 12(2): 1-6.

- 37.) Pearly Chia Zhi Qing, Ashok Kumar Janakiraman, Shiek Abdul Kadhar Mohamed Ebrahim Habibur Rahman, Liew Kai Bin. An Overview of Cocoa Butter: Novel Excipients for Oral Tablets. *International Journal of Pharmaceutical Research*. 2021. 13(1): 3234 – 3238.
- 38.) Cristina Stasi, Caterina Silvestri, Fabio Voller, CZ Ng, YL Lean, SF Yeoh, QY Lean, KS Lee, AK Suleiman, KB Liew, YW Kassab, YM Al-Worafi, LC Ming, CY Leow, A Kazi, CM Hisyam Ismail, C Chuah, BH Lim, CH Leow, KK Banga Singh, HT Tran, DA Truong, VD Ly, HT Vu, TV Hoang, CT Nguyen, NT Chu, VT Nguyen, DT Nguyen, K Miyazawa, T Kokuho, HV Dang, DK Yang, HH Kim, JY Yoo, M Ji, BH Han, S Oh, BH Hyun, DK Lee, J Park, DW Seo, YW Park, YH Kim, HU Jung, OS Jeong, EJ Hong, H Kim, JI Lee, SK Kim, J Jung, SH Kwak, MJ Hong, SH Kim. [Hepatitis B vaccination and immunotherapies: an update](#). *Clinical and experimental vaccine research*. 2020. 9(1): 1-7.
- 39.) Anandarajagopal K, Abdullah Khan, Sheerlin Ting Enn Xuan, Ee Kok Mun, Kai Bin Liew, Mei Jun Loy, Bama Menon, Ching Siang Tan. Preliminary Phytochemical Analysis and Evaluation of Anthelmintic Activity of Pistacia vera Endocarp. *International Journal of Pharmaceutical Sciences Review and Research*. 2020. 64(2): 98-101. DOI:[10.47583/ijpsrr.2020.v64i02.016](https://doi.org/10.47583/ijpsrr.2020.v64i02.016)
- 40.) Pek Xyen Tan, Krishnapriya Thiyagarasaiyar, Cheng-Yau Tan, You-Jin Jeon, Mohd Shahrul Mohd Nadzir, Yong-Jiang Wu, Liang-Ee Low, Atanas G. Atanasov, Long Chiau Ming, Kai Bin Liew, Bey-Hing Goh, and Yoon-Yen Yow. Algae-Derived Anti-Inflammatory Compounds against Particulate Matters-Induced Respiratory Diseases: A Systematic Review. *Marine Drugs*. 2021. 19(317): 1-15. <https://doi.org/10.3390/md19060317>
- 41.) Mohammad F. Bostanudin, Eugen Barbu and Kai Bin Liew. Hydrophobically Grafted Pullulan Nanocarriers for Percutaneous Delivery: Preparation and Preliminary In Vitro Characterisation. *Polymers* 2021, 13, 2852. <https://doi.org/10.3390/polym13172852>
- 42.) Li Pei Ang, Yen Loong Lean, Anandarajagopal Kalusalingam, Abdullah Khan, Vijay Kotra, Md. Moklesur Rahman Sarker, Kai Bin Liew, Chiau Ming Long. Determination of Aristolochic Acid-I and -II Using Isocratic RP-HPLC Method. *Progress in Drug Discovery and Biomedical Science*. 2021. 4, 1; a0000234. doi: 10.36877/pddbbs.a0000234.

- 43.) Raja Nurul Batrisyia, Ashok Kumar Janakiraman, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker, Liew Kai Bin. A review on the solubility enhancement technique for pharmaceutical formulations. *Journal of natural volatile essential oil*. 2021, 8(4): 3976 – 3989.
- 44.) Krupavaram. B, Kogila A/P Subramaniama, Long Chiau Ming, Tan Ching Siang, Bama V.V Menon, Anandarajagopal K, H. Jaasminerjiit Kaur, Shashidharan Menon, Abdullah Khan, Liew Kai Bin. Evaluation of ethanolic extract of *Citrulluslanatus* seeds for analgesic and anti-pyretic activity in animal model. *Journal of natural volatile essential oil*. 2021, 8(4): 4017-4039
- 45.) Said Moshawih, Rabi'atul Nur Amalia Abdullah Juperi, Ganesh Sritheran Paneerselvam, Long Chiau Ming, Kai Bin Liew, Bey Hing Goh, Yaser Mohammed Al-Worafi, Chee-Yan Choo, Shobna Thuraisingam, Hui Poh Goh, Nurolaini Kifli. General Health Benefits and Pharmacological Activities of *Triticum aestivum*. *Molecules*. 2022. 27(1948): 1-20.
<https://doi.org/10.3390/molecules27061948>
- 46.) Mahendra CK, Ser H-L, Pusparajah P, Htar TT, Chuah L-H, Yap WH, Tang Y-Q, Zengin G, Tang SY, Lee WL, Liew KB, Ming LC, Goh BH. Cosmeceutical Therapy: Engaging the Repercussions of UVR Photoaging on the Skin's Circadian Rhythm. *International Journal of Molecular Sciences*. 2022. 23(5):2884.
<https://doi.org/10.3390/ijms23052884>
- 47.) Umi Haida Nadia Mohamed Jefri, Abdullah Khan, Ya Chee Lim, Kah Seng Lee, Kai Bin Liew, Yaman Walid Kassab, Chee-Yan Choo, Yaser Mohammed Al-Worafi, Long Chiau Ming, Anandarajagopal Kalusalingam. A systematic review on chlorine dioxide as a disinfectant. *Journal of Medicine and Life*. 2022. 15(3): 1-6. DOI 10.25122/jml-2021-0180.
- 48.) Mohamad Fariz Haiqal Ruslan, Ashok Kumar Janakiraman, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker, Liew Kai Bin. Comparison of Solvent Casting and Spray Casting Method on Compounding of an Orally Disintegrating Film Containing Amlodipine Besylate. *International Journal of Pharmaceutical Compounding*. 2022. 26(2): 149-156.
- 49.) Chew Yik Ling, Lee Hon Kent, Khor Mei Ann, Bontha Venkata Subrahmanya Lokesh, Gabriel Akyirem Akowuah, Liew Kai Bin. Forced degradation of flibanserin bulk drug: development and validation of stability

- indicating RP-HPLC method. *Indian Journal of Pharmaceutical Education and Research*. 2022; 56(1): 1-10.
- 50.) Kai Bin Liew, Ashok Kumar Janakiraman, Ramkanth Sundarapandian, Syed Haroon Khalid, Fizza Abdul Razzaq, Long Chiau Ming, Abdullah Khan, Anandarajagopal Kalusalingam, Pit Wei Ng. A review and revisit of nanoparticles for antimicrobial drug delivery. *Journal of Medicine and Life*. 2022; 15(3): 328 – 335.
- 51.) Moshawih S, Goh HP, Kifli N, Idris AC, Yassin H, Kotra V, Goh KW, Liew KB & Ming LC. Synergy between machine learning and natural products cheminformatics: Application to the lead discovery of anthraquinone derivatives. *Chemical Biology & Drug Design*. 2022. 00: 1–32. <https://doi.org/10.1111/cbdd.14062>
- 52.) Sue Kei Lee, Zi Xin Lee, Yau Yan Lim, Kai Bin Liew, Gabriel Akyirem Akowuah and Yik Ling Chew. Ramie (*Boehmeria nivea*), a functional food and herbal medicine for inflammatory bowel disease (IBD) and promotes optimal health. *The Natural Products Journal*. DOI: 10.2174/2210315512666220302160241
- 53.) Kai Bin Liew, Long Chiau Ming, Bey Hing Goh, Kok Khiang Peh. Fast melt cocoa butter tablet: effect of waxes, starch and PEG 6000 on physical properties of the preparation. *Molecules*. 2022. 27(3128): <https://doi.org/10.3390/molecules27103128>
- 54.) Pervaiz Akhtar Shah, Haroon Khalid Syed, Abdul Rehman Sohail, Areeba Pervaiz, Muhammad Shahid Iqbal and Kai Bin Liew. Comparison of solvent evaporation and ultrasonic assisted synthesis in the development and characterization of nimesulide nanosponges. *Tropical Journal of Pharmaceutical Research*. 2022. 21(6):1139 – 1145. <http://dx.doi.org/10.4314/tjpr.v21i6.X>
- 55.) Riyanto Teguh Widodo, Aziz Hassan, Kai Bin Liew, Long Chiau Ming. A directly compressible pregelatinised sago starch: a new excipient in the pharmaceutical tablet formulations. *Polymers*. 2022. 14(3050): 1-14. O. <https://doi.org/10.3390/polym14153050>.
- 56.) Yik-Ling Chew, Mei-Ann Khor, Zhao Xu, Sue-Kei Lee, Jing-Wen Keng, Sze-Huey Sang, Gabriel Akyirem Akyirem Akowuah, Khang Wen Goh, Kai Bin Liew, Long Chiau Ming. *Cassia alata*, *Coriander sativum*, *Curcuma longa* Linn,

and Azadirachta indica: food ingredients as complementary and alternative therapies for atopic dermatitis: a comprehensive review. *Molecules*. 2022. 27(5475): 1-19. <https://doi.org/10.3390/molecules27175475>

- doi.org/10.3390/molecules27175475
- 57.) Ashok Janakiraman Kumar, Tahani Islam, Kai Bin Liew, Manogaran Elumalai, Hanish Singh JC. Improved bioavailability of poorly water soluble vorinostat by self micro-emulsifying drug delivery system. *Beni-Suef University Journal of Basic and Applied Sciences*. 2022. 11(99): 1-13.
 - 58.) Raja Nurul Batrisyia Hamzah, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker, Yik Ling Chew and Liew Kai Bin. Comparison of Microemulsion and Solvent Evaporation Technique for Solubility Enhancement of Amlodipine Besylate. *Malaysian Journal of Medicine and Health Sciences*. 2022. 18(4): 135-140.
 - 59.) Kai Bin Liew, Hii Shou Hui, Yik Ling Chew, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker. Application of co-processed excipient as a novel method to compound orally disintegrating tablets. *International Journal of Pharmaceutical Compounding*, 2022, 26(3): 255 – 263.
 - 60.) Nurul Hanisah Saiful Azmi, Long Chiau Ming, A.B.M. Helal Uddin, Zaidul Islam Sarker, Liew Kai Bin. Investigation of the effect of excipients in the compounding of amlodipine besylate orally disintegrating tablet. *International Journal of Pharmaceutical Compounding*. 2022. 26(1): 80-87.
 - 61.) Oluwadamilare. T. Olarindea, SailajaNandennagari, KrupavaramBethala, Shreya Rekhi, Reshma Annam, Khang Wen Goh, Kai Bin Liew. Burnout and its association with occupational stress among physicians and nurse practitioners. *Neuroquantology*. 2022. 20(11): 3752 – 3759.
 - 62.) Yik Ling Chew, Yahia Kahlous, A.B.M. Helal Uddin, Zaidul Islam Sarker, Kai Bin Liew. A review on the development of granulation technology in the past two decades. *Journal of Pharmaceutical Negative Results*. 2022. 13(7): 93-95.
 - 63.) Nur Afiqah Mohammad Nasri, A.B.M. Helal Uddin, Zaidul Islam Sarker, Chew Yik Ling, Liew Kai Bin. Effect of concentration of lipid with surfactant and ultrasonification power on the formation of naringenin-loaded solid lipid nanoparticles. *Journal of Pharmaceutical Negative Results*. 2022. 13(7): 104-110.

- 64.) Liew Kai Bin, Hii Shou Hui, A.B.M. Helal Uddin, Zaidul Islam Sarker, Chew Yik Ling. Co-processed excipients: A revisit of its development in the past two decades; a review. *Journal of Pharmaceutical Negative Results*. 2022. 13(7): 96-103.
- 65.) Liew Kai Bin, Fariz Haiqal, Bin Ruslan, A.B.M. Helal Uddin, Zaidul Islam Sarker, Ashok Kumar Janakiraman. Orally disintegrating film: a revisit of its two decades development. *European Chemical Bulletin*. 2022. 11(9): 16-20.
- 66.) Muhammad Mirza Ismat Muzamil, A.B.M. Helal Uddin, Zaidul Islam Sarker, Ashok Kumar Janakiraman, Liew Kai Bin. Effect of concentration of lipid and temperature on the formation of naringenin loaded solid lipid nanoparticles. *European Chemical Bulletin*. 2022. 11(9): 21-28.
- 67.) Nur Syazwana Farhanis Roslan, Liew Kai Bin, Mohammad F. Bostanudin, Fashli Syafiq Abd Razak. Comparison of various fillers on the physical properties of compounded tablets. *Journal of Pharmaceutical Negative Results*. 2022. 13(7): 125-132.
- 68.) Tariqul Islam, Md Zaidul Islam Sarker, ABM Helal Uddin, Shah Samiur Rashid, Liew Kai Bin. Evaluation of safe mixed solvents in N-phenylbenzamide synthesis for alteration of hazardous dipolar aprotic solvents in amide drug synthesis. *Tetrahedron*. 2023. 131, <https://doi.org/10.1016/j.tet.2022.133210>.
- 69.) Jessica-Ai-Lyn Yon, Sue-Kei Lee, Jing-Wen Keng, Sek-Chuen Chow, Kai-Bin Liew, Swee-Sen Teo, Wan Mastura Shaik Mossadeq, Philip J. Marriott, Gabriel Akyirem Akowuah, Long Chiau Ming, Bey Hing Goh and Yik-Ling Chew. Cassia alata (Linnaeus) Roxburgh for Skin: Natural Remedies for Atopic Dermatitis in Asia and Their Pharmacological Activities. *Cosmetics*. 2023. 10(5), <https://doi.org/10.3390/cosmetics10010005>
- 70.) Wan Nurfatini I. W. Ahmada, Liew Kai Bin*, Lokesh B. V. S. and Shaharuddin A. Rashid. Formulation and in-vitro evaluation of a novel mefenamic acid topical cream. *Indian Drugs*. 2023. 60(1): 33-43.

Book Chapters

- 1.) Haroon K Syed, Sajid Asghar, Kai Bin Liew, Ikram U Khan, Fizza A Razzaq, Saba Rafique. *Polymer Composites for Organ Reconstruction*.

- Encyclopaedia of Material: Composites. 2021. doi:10.1016/B978-0-12-819724-0.00034-3
- 2.) Haroon K Syed, Sajid Asghar, Kai Bin Liew, Ikram U Khan, Saad Salman. Multifunctional Polymer Matrix Composites. Encyclopaedia of Material: Composites. 2021. doi:10.1016/B978-0-12-819724-0.00024-0
 - 3.) Kai Bin Liew, Choon Fu Goh, Sajid Asghar, Haroon K.Syed. Overview of Mechanical and Physicochemical Properties of Polymer Matrix Composites. Encyclopaedia of Material: Composites. 2021. <https://doi.org/10.1016/B978-0-12-819724-0.00049-5>
 - 4.) Poonguzhali S, KB Liew and Anandarajagopal K. Oxidative stress, cancer and phenolic antioxidants. Health Benefits of Phenolic Antioxidants. 2022. DOI: <https://doi.org/10.52305/TYAS3020>
 - 5.) KB Liew, MH E, S Poonguzhali and Ashok Kumar Janakiraman. Evolution of Microcrystalline Cellulose (MCC) in Co-processed Excipient Technology. Advances in Material Science Research. 2022. Ed. Maryann C. Wythers.

Research Grant

- 1.) Skim Penyelidikan Siswazah University Penyelidikan (USM-RU-PRGS) (May 2010 – April 2012) – RM 9000 (PI)
- 2.) UCSI University Pioneer Scientist Incentive Fund (PSIF) – Development and evaluation of a novel direct compressible xylitol-starch base co-processed adjuvant for orally disintegrating tablet application (October 2015 – November 2016) – RM24,000. (PI)
- 3.) UCSI University Pioneer Scientist Incentive Fund (PSIF) – Design and Characterization of Self-microemulsifying System of Vorinostat and Enhanced Bioavailability (28 Dec 2017 – 30 Jan 2019) – RM25,000. (Co-Investigator)
- 4.) UoC CRGS grant – Development and Evaluation of A Memantine Hydrochloride Fast Melt Orally Disintegrating Tablet Using Cocoa Butter by Fusion Moulding Method (Jan 2021 – Dec 2022) – RM 20,000 (PI)

- 5.) UoC CRGS grant – Development and Characterization of a Targeted Drug Delivery System of Naringenin Loaded PLGA-DOTA-Bombesin Nanoparticles (Jan 2021 – Dec 2022) – RM 20,000 (Co-Investigator)
- 6.) M.O.H.E. Fundamental Research Grant Scheme (FRGS) - Development of a Luteolin Loaded Folate Decorated Vitamin E TPGS-Poloxamer Long Circulating Micelle for Multi Drug Resistant Breast Cancer Smart Targeting (Sept 2021 – Aug 2024) – RM 144,300 (PI)
- 7.) M.O.H.E. Fundamental Research Grant Scheme (FRGS) - Mechanistic Understanding and Evaluation of Anti-Inflammatory, Toxicity and Wound Healing Activities of Cassia alata Leaves Polyphenols using Atopic Dermatitis Models (SEPT 2021 – Aug 2024) – RM 168,000 (Co-investigator)
- 8.) UTAR Research Fund 2021. Effects of epigallocatechin-3-gallate in restoration of insulin resistance, hyperglycaemia and dyslipidaemia in a rodent model (Dec 2021 – Dec 2022) – RM 59,100 (co-investigator)

Awards

- 1.) Silver medal award winner. Malaysian Technology Expo 2012, 16 – 18th February 2012, Putra World Trade Center. Title: Development of oral disintegrating dosage form for Alzheimer patients. Peh KK, Yvonne TFT, Liew KB.
- 2.) Bronze medal award winner. Korea International Woman's Invention Exposition 2012, 3 – 6th May 2012, COEX Hall A 1&2, Seoul, Korea. Title: Oral disintegrating dosage form dosage form systems. Yvonne TFT, Peh KK, Liew KB.
- 3.) Best oral presenter award. 1ST International Conference on Industrial Pharmacy. 16 – 17th August 2014, Swiss Garden Resort. Title: Effects of polymers and starch on physical properties of lyophilized orally disintegrating tablet.
- 4.) Teaching Excellence Award Commitment worth Honouring (T.E.A.C.H.) 2016 – Awardee of Best New Lecturer Award
- 5.) Silver medal award winner. Malaysian Technology Expo 2020, 20 – 22nd February 2020, Putra World Trade Center. Title: Cocoa butter: A healthier alternative to fast melt tablet. Dr Ashok Kumar Janakiraman, Pearly Chia Zhi

Qing, Dr. Shiek Abdul Kadhar Mohamed Ebrahim Habibur Rahman, A.P. Dr Mogana Sundari A/P Rajagopal, Dr Liew Kai Bin

- 6.) Best Performing Staff Award (Faculty of Pharmacy, University of Cyberjaya).
- 7.) Gold medal award winner. Malaysian Technology Expo 2021 – Asian Youth Innovation Award Category. Ong Khai Kee, Ashok Kumar Janakiraman, Shiek Abdul Kadhar Mohamed Ebrahim Habibur Rahman, Liew Kai Bin. Fabrication of cocoa butter base amlodipine besylate fast melt tablets.
- 8.) Bronze medal award winner. Seoul International Invention Fair (SIIF) 2021, 1-4 Dec 2021.
- 9.) Gold medal award winner. 32rd International Invention, Innovation and Technology Exhibition 2021, 13-14th Dec 2021, Kuala Lumpur Convention Center. Liew Kai Bin, Ashok Kumar Janakiraman, Fashli Syafiq Bin Abdul Razak, Mohamad Fariz Haiqal Bin Mohd Ruslan, Raja Nurul Batrisyia Binti Raja Hamzah, Muhammad Harith Syahmi Bin Noor Samsudin, Nurul Hanisah Binti Saiful Azmi. Fabrication of patient friendly oral fast dissolving film by electro spray method.
- 10.) Silver medal award, MTE 2022, 17th – 21st Oct 2022 (virtual). Liew Kai Bin, Ashok Kumar Janakiraman, Fashli Syafiq Bin Abdul Razak, Mohamad Fariz Haiqal Bin Mohd Ruslan, Raja Nurul Batrisyia Binti Raja Hamzah, Loke Ying Hui. A novel approach of patient friendly drug delivery: oral dissolving film (ODF).
- 11.) Bronze medal award, MTE 2022, 17th – 21st Oct 2022 (virtual). Liew Kai Bin, Shamima Abdul Rahman, Long Chiau Ming, Goh Choon Fu, Chew Yik Ling, Loke Ying Hui. Patient friendly chocolate based drug delivery system: fast melt cocoa butter tablet (FMT).

Conferences and Presentation

- 1.) Liew KB, Peh KK, Yvonne TFT. Taste masking evaluation of sweetening agents on donepezil. 1st Pharmaceutical Sciences Conference and Exhibition (PSCE) at Vistana Hotel, Penang (Malaysia). 10 – 11th October 2010.
- 2.) Liew KB, Peh KK, Yvonne TFT. Development of oral disintegrating dosage form for Alzheimer patients. Malaysian Technology Expo 2012 (MTE) at Putra World Trade Center, Kuala Lumpur (Malaysia). 16 – 18th February 2012.

- 3.) Liew KB, Peh KK, Yvonne TFT. Oral disintegrating dosage form dosage form systems. Korea International Woman's Invention Exposition 2012 (KIWIE) at COEX Hall A 1&2, Seoul (Korea). 3 – 6th May 2012.
- 4.) Liew KB and Peh KK. Effect of polymers and starch on physical properties of lyophilized orally disintegrating tablet. 1st International Conference on Industrial Pharmacy at Swiss-Garden Beach Resort, Kuantan (Malaysia). 16-17th August, 2014.
- 5.) Liew KB and E MH. Academic publication: The A-Z approach of writing a scientific manuscript. Seminar on Writing Journal for Online International Journal at Hotel Royal Perintis, Medan (Indonesia). 27th September 2014.
- 6.) Liew KB and Peh KK. Taste masking of drug causing mucosal irritation. Federation of Asian Pharmaceutical Association (FAPA) Conference and Exhibition 2014 at Sutera Harbour Resort, Kota Kinabaru (Malaysia). 9 – 12th October, 2014.
- 7.) Liew Kai Bin, Anand Gaurav and Uttam Kumar Mandal. Development and characterization of novel xylitol-starch base co-processed adjuvant for ODT Application. 6th Asia Pacific Pharmacy Education Workshop at MSU University, Shah Alam, 20 – 22nd October 2016.
- 8.) Sim Kheng Yi-Ing, Ashok J Kumar, Liew Kai Bin. Investigation of effect of polymers and processing method on the development of orally disintegrating film. Asean Young Pharmacist Group Leadership Summit 2017, International Medical University, 11 – 13th November 2017.
- 9.) Tahani Islam, Ashok Kumar Janakiraman, Liew Kai Bin, Manogaran Elumalai and Hanish Singh. Design and characterization of vorinostat loaded self-micro-emulsifying drug delivery system. International Conference on 4th Industrial Revolution and Its Impact. Walailak University, Thailand, 27-30th March 2019.
- 10.) Comparison of various taste masking techniques on dapoxetine HCl and palatability study. Fukuoka University Seminar, 1st July 2019.
- 11.) Nurul Ain Zulkifli, Fashli Syafiq Abd Razak, Long Chiau Ming, Liew Kai Bin. Formulation and evaluation of cocoa butter based fast melt tablet containing mangosteen pericarp extract. MOHAMM, NIH Shah Alam, 27-29th August 2019.
- 12.) Vishnu A/L Mahesparan, Fashli Syafiq Abd Razak, Long Chiau Ming, Liew Kai Bin. Comparison of disintegrant addition methods on the physical

properties of orodispersible tablets containing garcinia mangostana linn pericarp extract. MOHAMM, NIH Shah Alam, 27-29th August 2019.

- 13.) Ashok Kumar Janakiraman, Pearly Chia Zhi Qing, Shiek Abdul Kadhar Mohamed Ebrahim Habibur Rahman, Mogana Sundari A/P Rajagopal, Liew Kai Bin. Cocoa butter: A healthier alternative to fast melt tablet at Malaysian Technology Expo 2020, 20 – 22nd February 2020, Putra World Trade Center.
- 14.) Mohamad Fariz Haiqal Bin Mohd Ruslan, Ashok Kumar Janakiraman, Liew Kai Bin. Development and evaluation of orally disintegrating film containing amlodipine besylate. 2nd -3rd August 2021, 3rd International Conference of Pharmacy and Health Sciences.
- 15.) Nurul Hanisah Saiful Azmi, Liew Kai Bin. Formulation optimization of amlodipine orally disintegrating tablets. 2nd -3rd August 2021, 3rd International Conference of Pharmacy and Health Sciences.
- 16.) Hii Shou Hui, Chew Yik Ling, Liew Kai Bin. Development and evaluation of co-processed excipient for orally disintegrating tablet application. 2nd -3rd August 2021, 3rd International Conference of Pharmacy and Health Sciences.
- 17.) Raja Nurul Batrisyia Raja Hamzah, Ashok Kumar Janakiraman, Liew Kai Bin. Solubility enhancement of amlodipine besylate using solvent evaporation method and microemulsion technique. 2nd -3rd August 2021, 3rd International Conference of Pharmacy and Health Sciences.
- 18.) Liew Kai Bin, Ashok Kumar Janakiraman, Fashli Syafiq Bin Abdul Razak, Mohamad Fariz Haiqal Bin Mohd Ruslan, Raja Nurul Batrisyia Binti Raja Hamzah, Muhammad Harith Syahmi Bin Noor Samsudin, Nurul Hanisah Binti Saiful Azm. Fabrication of patient friendly oral fast dissolving film by electrospray method. 32rd International Invention, Innovation and Technology Exhibition 2021, 13-14th Dec 2021, Kuala Lumpur Convention Center.
- 19.) Orally disintegrating dosage forms: its challenges and opportunities. 30th October 2021. ISPE Dicord Talk.
- 20.) Ganesan Gobal; Liew Kai Bin, Shamima Abdul Rahman, Long Chiau Ming, Chew Yik Ling and Goh Choon Fu. Development and Evaluation of Memantine Hydrochloride Fast Melt Orally Disintegrating Tablet (FMODT) using Cocoa Butter by Fusion Molding Method. 30th and 31st July 2022, AASP Conference 2022 (virtual conference).

- 21.) Muhammad Mirza Ismat Muzamil and Liew Kai Bin. Effect of Concentration of Lipid and Temperature on The Formation of Naringenin Loaded Solid Lipid Nanoparticles. 30th and 31st July 2022, AASP Conference 2022 (virtual conference).
- 22.) Nur Afiqah Mohammad Nasri and Liew Kai Bin. Effect of Concentration of Lipid and Surfactant and Ultrasonification Power on The Formation of Naringenin-Loaded Solid Lipid Nanoparticles. 30th and 31st July 2022, AASP Conference 2022 (virtual conference).
- 23.) Ying Hui Loke and Liew Kai Bin. Development and Characterization of Co-processed Excipient Comprising Xylitol, Mannitol and Microcrystalline Cellulose for Orally Disintegrating Tablet Application. 30th and 31st July 2022, AASP Conference 2022 (virtual conference).

Patent

Name of invention: Fabrication of cocoa butter fast melting tablets by simple freezing method

Application no: 202241026059

App. No: TEMP/E-1/28824/2022-CHE

Inventors: Ashok Kumar Janakiraman, Pearly Chia Zhi Qing, Liew Kai Bin, S.M. Habibur Rahman, S. Ramkanth, Saminathan Kayarohanam, Vetriselvan Subramaniyam