

ASST PROF DR PAVALEE CHOMPOORAT TRIDTITANAKIAT
Chiang Mai University, Asst Dean of Faculty of Agro-Industry,
Mae Hia, Chiang Mai 50100, Thailand
Phone: +669-3576-3571
Email: pavalee.t@cmu.ac.th



SUMMARY

Asst. Prof. Dr. Pavalee Chompoorat Tridtitanakiat is an innovative researcher specializing in cereal and starch chemistry, functional legume-based ingredients, and health-oriented food innovation. Her research focuses on the development of next-generation cereal and protein-rich foods through precision processing approaches, including biotransformation, fermentation-driven functionality enhancement, and sustainable protein innovation. She has strong expertise in the valorization of legumes and plant-based raw materials, particularly in improving protein quality, dietary fiber functionality, and bioactive potential for health-promoting applications. Her work integrates cereal science, rheological characterization, and green processing technologies to develop sustainable bakery and cereal-based products aligned with future food trends. Through research, teaching, and international collaboration, she is committed to advancing alternative proteins and health-oriented food systems for future generations.

EDUCATION

- Doctor of Philosophy, Food Science (Phi Beta Delta Honor) May/2014
Oklahoma State University, Stillwater, OK, USA
Dissertation: Comparison of gluten viscoelasticity components with traditional dough and baking tests
- Master of Science, Food Science (Golden Key International Honor) May/2011
Oklahoma State University, Stillwater, OK, USA
Thesis: Assessment of variation in hard red winter wheat flour properties from creep-recovery, extensibility tests and gluten content compared with traditional wheat quality testing
- Bachelor of Science, Postharvest Technology (First Class Honor) June/2008
Maejo University, Chiang Mai, Thailand
Thesis: The casue of scald reduction treatment in sweet basil (*Ocimum basilicum* L.)

WORK EXPERIENCES

- Assistant Dean, International Relations Dec/2024 - Present
Assistant Professor, Cereal Chemist April/2023 – Present
Product Development Technology program, *Chiang Mai University, Chiang Mai, Thailand*
- Head of Division of Product Development Technology August/2024 -August/2025
- Teaching courses:
 - Functional and Nutritional products
 - Product development technology
 - Quality planning in product development
 - Starch technology
 - Research projects:
 - Development of Processing Technology for Value Added Thai Temperate Cereal. 2025-2026. Project director. Granted by Thailand Science Research and Innovation (TSRI) RDI Fund – Fundamental Fund (Basic Research) for 500,000 Baht
 - Potential Development of Flour and Concentrated Protein from Red Kidney Beans as Innovative Product for Health Promotion and Prevention of Non-Communicable Disease. 2025-2026. Project director. Granted by Thailand Science Research and Innovation (TSRI) RDI Fund – Fundamental Fund (Basic Research) for 850,000 Baht
 - Study on the Protective Effects of Piper Sarmentosum Leaves Against Non-Communicable Diseases and Their Potential Applications. 2025-2026. Project director. Granted by Thailand Science Research and Innovation (TSRI) RDI Fund – Fundamental Fund (Basic Research) for 350,000 Baht
 - Plant-Based Protein Innovation for the Future of Healthy Eating. 2024-2025. Project director. Granted by Thailand Science Research and Innovation (TSRI) RDI Fund – Fundamental Fund (Basic Research) for 800,000 Baht
 - Industry Enhancement Activity through the Development of Alternative Protein Products. 2024-2025. Co-researcher. Regional Industrial Promotion Center 1 for 650,000 Baht
 - Food Product Development for Older Adults. 2024-2025. Co-researcher. Regional Industrial Promotion Center 1 for 1,000,000 Baht
 - Developing low glycemic gluten-free sourdough bread with red kidney bean protein isolate. 2024-2025. Project director. Granted by Chiang Mai University for 400,000 Baht
 - Developing functional avocado chip. 2024-2025. Project director. Granted by Chiang Mai University for 140,000 Baht

- Deveoping gluten-free bread roll with watermeal powder for food security. 2023-2024. Project director. Granted by Chiang Mai University for 200,000 Baht
- Identifying harvesting index with digital imaging and artificial intelligence for reducing of loss in banana supply chain. 2023-2024. Project director. Granted by Chiang Mai University for 60,000 Baht
- Development of a high-protein breakfast cereal product. 2023-2024. Project director. Granted by Chiang Mai University for 70,000 Baht

Adjunct Lecturer

Dec/2020 - 2022

Faculty of Applied Sciences

UCSI University, UCSI Education Sdn Bhd, Kuala Lumpur Campus, Malaysia

- Courses:
 - Topics related to Food Science and Technology, Bakery technology, Cereal chemistry, Gluten-free product, Food rheology, Postharvest technology, Legume technology

Visiting Professor, Cereal laboratory

July/2019

Robert M. Korr Food and Agricultural Product Centers

Oklahoma State University, Stillwater, OK, USA

- Research project:
 - Modeling rheological properties of gluten free batter and its relationship with gluten free roll qualities

Visiting Professor, Cereal laboratory

Sep/2018 – Nov/2018

Robert M. Korr Food and Agricultural Product Centers

Oklahoma State University, Stillwater, OK, USA

- Research projects:
 - Effect of formulation on gluten-free ramen noodle quality: selection of red kidney bean as a functional ingredient
 - Impact of drying process on functional properties of okara flour and the relation to gluten-free roll properties

Visiting Professor, Cereal laboratory

Nov/2017 – Mar/2018

Robert M. Korr Food and Agricultural Product Centers

Oklahoma State University, Stillwater, OK, USA

- Research projects:
 - Effect of thermal process on sensory properties of red kidney bean soup
 - Thermal process effect on rheological and physical properties of red kidney bean batter and gluten free cake
 - Rheological properties of gluten free wonton dough with red kidney bean flour
 - Defatting and proximate analysis of spray dried cricket powder for effective and functional insect protein isolates for food applications
 - Mealworm powder as a novel source of food protein in bread: Defatting and proximate analyse

Assistant professor, Cereal Chemist

March/2015 – 2023

Postharvest Technology program, *Maejo University, Chiang Mai, Thailand*

- Head of postharvest technology program
 - Manager of packing house
 - Executive committee of Engineering and Agro-Industry department
 - Executive research committee of Engineering and Agro-Industry department
 - Chair advisor of postharvest club in Engineering and Agro-Industry department
 - Deputy of Institute of Certified Agricultural Production System (ICAPS)
- Mar 2016 – Nov 2016*
- Teaching courses:
 - Value Added Cereal Grains and Legumes
 - Processing of Agricultural Produce
 - Quality Analysis of Agricultural Produce
 - Packing House Management of Postharvest Agricultural Produce
 - Physical and Sensory Testing on Fresh Produce
 - Research projects:
 - Supply chain management for food loss reduction of mango CV. Nam Dok Mai and longan cv. Dor. 2023-2024. Co-researcher. Granted by Agricultural Research Development Agency (ARDA) for 2,871,567 Baht
 - Kinetic study on date palm during storage at various temperature levels. 2019-2020. Co-researcher. Granted by Maejo University for 25,000 Baht
 - Development of gluten-free starchy Thai sweet and low-fat Thai custard for older adult. 2018-2019. Project director. Granted by Agricultural Research Development Agency (ARDA) for 491,200 Baht

- Development of gluten-free wonton and ramen with red kidney bean flour including medical and economic study. 2018-2019. Project director. Granted by Agricultural Research Development Agency (ARDA) for 2,285,272 Baht
- Product development from by-products such as okara and spent coffee ground. 2016-2017. Project director. Granted by Maejo University for 400,000 Baht
- Study of postharvest loss of longan. 2015-2017. Co-researcher. Granted by The Thailand Research Fund (TRF) for 1,404,480 Baht
- Developing of an organic tea from coffee leaf. 2016-2017. Co-researcher. Granted by Maejo University for 250,000 Baht
- Developing of functional gluten-free cake from local red bean flour for celiac disease patients. 2015-2016. Project director. Granted by Agricultural Research Development Agency (ARDA) for 519,160 Baht

Project leader in bakery team, R&D food scientist

June/2013 – Nov/2014

International Fiber Corporation, North Tonawanda, NY, USA

- Product development: high fiber low-calories products especially gluten free products (high fiber bread, low sodium bread, lite bagel, gluten free bread, gluten free yellow layer cake, gluten free muffin, gluten free tortillas, french baguette, dinner rolls, reduced sugar submarine roll, sponge and yellow layer cake, low fat cookie, tortillas, pasta, corn bread mix, and donut)
- Studied for applications of fiber in bakery products
- Studied shelf-life and physical properties of bread and frozen dough Ensured that fiber products meet quality and safety standards
- Organized sensory evaluations to ensure samples meet specific characteristics
- Provided technical support to quality control, marketing, sales team, and external customers in the areas of product solutions and ingredient functionality
- Conducted a sale training for company's distributors about fiber in food application

Graduate Research Assistant, Cereal laboratory

Jan/2009 – May/2013

Oklahoma State University, Stillwater, OK, USA

- Developed and improved cornbread mix rich in fiber and protein
- Worked with breeders on measuring wheat flour qualities such as their extensibility, strength, and baking properties to select the best wheat line and discard the lowest wheat line quality
- Collaborated with cereal groups from other universities for developing a novel compression-recovery test
- Modeled an effect of additives, temperature, and gluten substitution on rheological properties of gluten and dough
- Studied the changes of gluten secondary structures under various conditions (e.g. temperature, stress)
- Supervised undergraduate and graduate students in cereal laboratory

INTERNATIONAL AND NATIONAL WORK ON SCIENTIFIC ACTIVITIES AND INVITED SPEAKERS

Editorial Boards

1. International academic journal, Agriverse.

Keynote speaker

1. 'Advancing Agro-biodiversity Through Functional Crop Innovation: A Model for Nutritional Resilience and Climate Adaptation'. 2026. The 12th International conference of agriculture, SAFE network organization, Vietnam.
2. 'Innovations in Gluten-free and High-Protein Plant-Based Food Products: Enhancing Nutrition and Sustainability'. 2025. The 11th International conference of agriculture, SAFE network organization, Vietnam.
3. 'Sustainable solutions for reducing food waste in the mango supply chain: challenges, innovation and opportunities' 2024. 2nd International Conference Khairun University (IConKU) 2024, Indonesia.
4. 'Pandemic COVID-19 disruption on the agricultural sustainable for food demand and future energy'. 2020. webinar on the 2nd International Conference of Agriculture. Organized by SAFE network, Indonesia.
5. 'Food Supply Chain during Covid-19 Pandemic in Thailand'. 2020. webinar on Food Supply Chain During Covid-19 Pandemic in Indonesia, Malaysia and Thailand. Organized by SAFE network, Indonesia.
6. 'An innovation uniaxial compression test for measuring rheological properties of gluten with different qualities'. 2019. 5th International conference on Food, Agriculture and Natural resources 2019 (FANRes 2019), Ternate, Indonesia.

Invited Speaker

1. 'Strengthening Community Services Based on Ecotourism in Generating Society Welfare' 2023. 2nd International Community Service Seminar Universitas Warmadewa, Indonesia
2. 'Engaging industry, community and alumni as strategic partner in Thailand' 2023. Symposium on strategy & transformation management for Tertiary Education (SSTM-TEd 2023) , Malaysia
3. 'Post-harvest Technology and innovation in Thailand' 2023. The 10th International conference of agriculture, SAFE network organization, Indonesia

4. 'Modeling rheological properties of gluten-free red kidney bean cupcake with rice flour addition' 2022. International conference on Food, Agriculture and Natural resources 2022 (FANRes 2022), Indonesia
5. 'Time-temperature effect on chemical properties of okara flour with modeling rheological properties of gluten-free product' 2021. 6th International conference on Food, Agriculture and Natural resources 2021 (FANRes 2021)
6. 'AgriFood supply chain in Thailand after COVID-19' 2020. The 2nd International conference of agriculture (ICA-2), SAFE network organization, Indonesia
7. 'Food supply chain during COVID-19 Pandemic in Thailand' 2020. Universitas Pembangunan Nasional 'Veteran' and SAFE network organization, Indonesia
8. 'Alternative ingredients for healthy gluten-free product' 2019. Khairun University, Ternate, Indonesia
9. 'Gluten Free Products and Bakery Markets'. 2016. University of Brawijaya, Malang, Indonesia
10. 'Gluten Free Product'. 2016. University of Jember, Jember, Indonesia
11. 'Agriculture in Thailand'. 2016. Universitas Wisnuwardana, Malang, Indonesia

Community Service/Research Project

1. 'Improving of Storage Technic Coffee Green Beans and Application of Digital Management Business in "Tri Guna Karya" Catur Village, Kintamani Bangli'. 2024. International Community Service Collaboration. Universitas Warmadewa, Bali, Indonesia
2. 'Community Service on Enhancing Green Bean Quality through Fermentation Techniques and Utilizing Coffee Waste'. 2024. International Community Service Collaboration. University of Mataram, Lombok, Indonesia

Scientific Coordinator/Committee

1. FAB2026, Scientific committee, The 8th International Conference on Food and Applied Bioscience 2026
2. SAFE 2026, Project Coordinator, International Conference on Sustainable agriculture, Food, and Energy, Indonesia
3. SAFE 2023, Steering Coordinator, International Conference on Sustainable agriculture, Food, and Energy, Indonesia
4. SAFE 2019 International Conference on Sustainable agriculture, Food, and Energy, Indonesia
5. FANRes 2018 - 2022 International Conference on Food, Agriculture and Natural Resources, Indonesia

Trainer and speaker

1. 'Postharvest management of garlic'. 2020. Extension work, Mae Hongson, Thailand
2. 'Grain and grain quality testing, processing, valued products and its promotion'. 2019. Training for RDTC trainers on Dairy, meat & Fruit/Vegetable processing and value addition, Maejo University, Chiang Mai, Thailand
3. 'Value Added Products from longan: Bakery products'. 2017. Extension work, Chiang Rai, Thailand
4. 'Value Added Products from Cereal Grains: Germinated brown rice and Bakery Products'. 2017. Maejo University, Chiang Mai, Thailand
5. 'How to added value to longan'. 2017. Chiang Rai, Thailand
6. 'Health and Hygiene Practices on Organic Produces'. 2016. Maejo University Chiang Mai, Thailand
7. 'How to added value to fruits, vegetables and seeds'. 2015. Maejo University, Chiang Mai, Thailand

Professional Award

1. Best Food for Future awards. 2024. High-protein noodle. Hylife innovation excellence awards 2024, Thailand
2. Sliver medal in Product innovation. 2024. International Conference on Sustainable agriculture, Food, and Energy, Korea
3. The best presenter for oral presentation. 2023. The 8th International Conference of Food, Agriculture and Natural Resources (IC-FANRes) Join with the 2nd International Conference of Sustainable Industrial Agriculture (IC-SIA), Indonesia
4. Seventh place in Danisco Knowledge Award competition, product development. 2013. Dupont Company, USA

BOOKS, PATENTS, JOURNAL AND CONFERENCE PAPERS

Books:

1. How, H., **Trititanakiat, P.C.**, Manaf, Y.N.A., & Pui, L. (2024). *Mango seed as major contributor to industrial starch and other macromolecules: an update on nutraceutical values and industrial application*. 1st. Elsevier
2. Raseetha, S., Aida, F.M.N.A., **Chompoorat, P.**, Murtini, E.S., Fuggate, P., Roslan, N.F.A., & S.A. Nur-Diana. (2021). *Postharvest and Postmortem Processing of Raw Food Materials*. 1st. Woodhead Publishing.
3. **Chompoorat, P.**, The soy story: The ultimate gluten free okara cookbook. Chaiyorn Co.,Ltd, 2017. Print.

Patents:

1. **Chompoorat P.**, inventor; 2023. Longan powder with vitamin supplement. Thailand petty patent 2303000957.
2. **Chompoorat P.**, inventor; 2022. Formulation and method of frozen dough with red kidney bean. Thailand petty patent 2003000577.
3. **Chompoorat P.**, inventor; 2022. Formulation and method of gluten-free Thai starchy sweet. Thailand petty patent 2003000577.
4. **Chompoorat P.**, inventor; 2020 Dec 11. Formulation and method of Thai tradition sweet. Thailand petty patent 2003000577.

5. **Chompoorat P.**, inventor; 2017 Nov 10. Formulation and method of gluten-free product. Thailand petty patent 1703002228.

Journals:

1. Suriati, L., Tanaka, F., **Tritditanakiat, P. C.**, Wigati, L. P., Yan, X., Fenze, M., Nkede, F. N., Van, T.T., Wardak, M.H., & Sukmadewi, D. K. T. 2026. Innovation in Adding Natural Antimicrobial Agents to Improve the Physicochemical Performance of Konjac-Glucomann-Based Edible Films. *Progress in Color, Colorants and Coatings*, 19(2), 135-148.
2. Phetcharat, C., Vitale, J. D., **Tritditanakiat, P. C.**, Saiprasert, W., & Lu, W. 2026. Exploring Red Kidney Bean Flour as a Partial Substitute to Rice Flour in Gluten-free Ramen Noodles: Consumers' WTP in Thailand. *Economia agro-alimentare/Food Economy-Open Access*.
3. Chaiwong, N., Chailangka, A., Zubairu, I. K., Wirjantoro, T. I., **Tritditanakiat, P. C.**, Castagnini, J. M., & Phimolsiripol, Y. 2026. Protein conjugates and probiotic interactions of dairy products for innovative and future functional foods. *Quality Assurance and Safety of Crops & Foods*, 18(1), 167-194.
4. Machinjili, T., Maluwa, C., Raungsri, C., Chuljerm, H., **Tritditanakiat, P. C.**, Salvador, E. M., & Kulprachakarn, K. 2026. Unlocking the Antioxidant Potential of Pigeon Peas (*Cajanus cajan* L.) via Wild Fermentation and Extraction Optimization. *Foods*, 15(2), 310.
5. Jomngam, P., Sukwatthanasinit, K., Kulphet, C., Noiwan, D., **Tritditanakiat, P.C.** 2025. Effects of Edible Coating on Postharvest Quality and Shelf Life of Fresh-Cut Cabbage. *Maejo Journal of Agricultural Production*, 7(3), 117-128.
6. Yudhistira, R. A., Waziroh, E., Tritditanakiat, P. C., & Murtini, E. S. 2025. Tempeh, a local plant-based ingredient, and its application in gluten-free noodles with potential as a VO₂Max booster: A review. *Advances in Food Science, Sustainable Agriculture and Agroindustrial Engineering (AFSSAAE)*, 8(4), 429-444.
7. Supri, S., Lim, T. W., Rahman, M. N. A., **Tritditanakiat, P. C.**, & Rovina, K. 2025. Sustainable valorization of chicken bone waste into high-performance activated carbon for efficient removal of organophosphorus pesticides. *Discover Chemistry*, 2(1), 283.
8. Mangku, I. G. P., Pandit, I. G. S., Indiani, N. L. P., & Tritditanakiat, P. C. 2025. Improving Storage Technique Coffee Green Beans and Application of Digital Management Business in "Tri Guna Karya" Catur Village, Kintamani, Bangli. *AJARCADE (Asian Journal of Applied Research for Community Development and Empowerment)*, 9(3), 333-339.
9. Chaiwong, N., Gavahian, M., **Tritditanakiat, P. C.**, Therdtatha, P., Moukamnerd, C., Leksawasdi, N., & Phimolsiripol, Y. 2025. Ultrasound-accelerated Maillard reaction to improve functional and antioxidant properties of hemp protein-carboxymethyl chitosan conjugates as a future food ingredient. *Innovative Food Science & Emerging Technologies*, 104118.
10. Fuadi, M. R., Yuniarto, K., Antesty, S., AP, Y., Mustafid, M. A., Ariyana, M. D., ... & **Tritditanakiat, P. C.** 2025. Peningkatan Kualitas Green Bean Melalui Teknik Fermentasi Dan Pemanfaatan Limbah Kopi Untuk Produksi Kompos di Desa Sajang, Sembalun, Lombok Timur. *Jurnal Pengabdian Magister Pendidikan IPA*, 8(2), 302-306.
11. Indiani, N. L. P., Putra, I. B. U., Mangku, I. G. P., **Tritditanakiat, P. C.**, Trisnayanthi, N. N., & Darmawan, A. R. 2024. Acceleration of Siamese Citrus Agro Business through Food Processing Technology and Digital Marketing. *Community Service Journal (CSJ)*, 7(1), 18-25.
12. Ni Made Ayu Suardani S., Ida Bagus Wayan Gunam, **Tritditanakiat, P.C.**, Ni Made Defy Janurianti, I Made Griya Adi Parta, Putu Diah Wahyun. 2023. *The testing of photochemical compounds, antioxidant activities, and antibacterial activities of "Sambel Matah" composition from Bali*. *Canrea Journal: Food Technology, nutrition and culinary journal*, 86-99. Q3
13. **Chompoorat, P.**, Hernández-Estrada, Z. J., Rayas-Duarte, P. 2023. *Modeling the Influence of Okara Flour Supplementation from Time-Temperature Drying Treatment on the Quality of Gluten-Free Roll Produced from Rice Flour*. *Foods*, 12(18), 3421. Q1
14. Adhima Adhamatika, Erni Sofia Murtini, Wenny Bektu Sunarharum, **Chompoorat, P.** Destiana Adinda Putri. 2023. *The application of pandan leaves powder (Pandanus amaryllifolius Roxb.) as a natural coloring on the pandan steamed bun production*. *Food Science and Technology*, 11(1), 44-53.
15. **Chompoorat, P.**, Fasasi, A., Lavine, B.K., and Rayas-Duarte, P. 2022. *Gluten Conformation at Different Temperature and Additive Treatments*. *Foods*, 11(3), 430-441. Q1
16. **Chompoorat, P.** and Kantanet, N. 2022. *Impact of Storage Temperature on Physiological Changes and Shelf Life of Mango CV. Mahachanok*. *Advances in Biological Sciences Research*, 16, 385-392.
17. Yao, L.S., Solohinm M.I., **Chompoorat, P.**, Ying, L.L., Phing, P.L. 2021. Quality assessment of mangosteen in different maturity syages by hand-held near-infrared spectroscopy. *Malaysian Journal of Analytical Sciences*. 25(5), 751-765.
18. **Chompoorat, P.**, Kantanet, N., Hernández-Estrada, Z. J., Rayas-Duarte, P. 2020. *Physical and Dynamic Oscillatory Shear Properties of Gluten-Free Red Kidney Bean Batter and Cupcakes Affected by Rice Flour Addition*. *Foods*, 9(5), 616. Q1
19. Zulkeflee, W., **Chompoorat, P.**, Siva, R. 2020. *Physicochemical and sensory properties of bread added with chicken eggshell powder*. *Malaysian Journal of Analytical Sciences*. 24(6), 873-881.

20. **Chompoorat, P.** and Phimphimol J. 2019. *Development of a highly nutritional and functional gluten free cupcake with red kidney bean flour for older adults*. Food and Applied Bioscience Journal. Special Issue on Agriculture and Agro-Industry 7.
21. **Chompoorat, P.**, Rayas-Duarte, P., Hernández-Estrada, Z. J., Phetcharat, C. & Khamsee, Y. 2018. *Effect of heat treatment on rheological properties of red kidney bean gluten free cake batter and its relationship with cupcake quality*. Journal of food science and technology, 55(12), 4937-4944.
22. **Chompoorat, P.**, Josué Hernández-Estrada, Z., Mulvaney, S.J., Payton, M.E., Lavine, B.K., Fasasi, A., and Rayas-Duarte, P. 2018. *Comparison of rheological properties of wet gluten: creep-recovery and biaxial compression*. LWT-Food science and Technology, 98, 197-203. Q1
23. **Chompoorat, P.**, Ambardekar, A., Mulvaney, S., Rayas-Duarte, P. 2013. *Rheological characteristics of gluten after modified by DATEM, Ascorbic Acid, Urea and DTT using creep-recovery test*. Journal of Modern Physics 4, 1-8.

Conference Papers:

1. Clarica C., Nichapat B., Nuntiya J., Chawanluk R., **Triditanakiat Chompoorat, P.** 2025. *Enhancing the Functional Potential of Wolffia globosa via Controlled Drying Techniques*. CMU Annual Resaerch Summit 2025. August 18-19, 2025
2. **Triditanakiat Chompoorat, P.**, Josué Hernández Estrada, Z. and Rayas-Duarte, P. 2024. *Rheological properties of gluten-free noodle with red kidney bean flour: Insights from small and large deformation tests*. Tech congress, Novi Sad, Serbia. October 16-18, 2024.
3. **Triditanakiat Chompoorat, P.** and Rayas-Duarte, P. 2024. *Advancing the texture and functionality of plant-based meat: Investigating the synergistic effects of gluten quality, quantity and food additives on cereal-based protein structures through innovative material engineering techniques*. 3rd trilateral symposium on sustainability strategies for climate action and mitigation of climate change impacts, Chiang Mai, Thailand. August 28-29, 2024.
4. **Triditanakiat Chompoorat, P.**, Intawong J. and Witono Y. 2023. *Effect of Biduri (Calotropis gigantean) latex protease on gluten-free bread*. 8th International conference on Food, Agriculture and Natural resources 2023 (FANRes 2023), Jember, Indonesia. November 24-26, 2023.
5. **Triditanakiat Chompoorat, P.**, Noiwan D. and P. Sonchan. 2023. *Variation in gluten-free cake properties with date palm powder substitution*. The International Conference on Agriculture, Food, and Environmental Sciences (ICAFES 2023), Virtual conference. October 19, 2023.
6. Fuangchoom, V., Narkprasom, N., **Triditanakiat Chompoorat, P.** and Narkprasom, K. 2023. *Encapsulation of crude extract powder from Dimocarpus longan*. International Conference on Sustainable Agriculture, Food and Energy (SAFE 2023), Chiang Mai, Thailand. May 28-29, 2023.
7. **Triditanakiat Chompoorat, P.** 2022. *Time-temperature effect on chemical properties of okara flour with modeling rheological properties of gluten-free product*. 7th International conference on Food, Agriculture and Natural resources 2022 (FANRes 2022), Virtual conference. November 24-25, 2022
8. **Triditanakiat Chompoorat, P.**, Jedsadaporn, W., Josué Hernández Estrada, Z., Rayas-Duarte, P. and Siva R. 2022. *Rheological properties of reduced-fat cheesecake with Greek-style yogurt*. 4th ICAAI, Chiang Rai, Thailand. November 10-11, 2022.
9. Kantanet, N. and **Chompoorat, P.** 2021. *Impact of storage temperature on physiological changes and shelf life of mango CV. Mahachanok*. 6th International conference on Food, Agriculture and Natural resources 2021 (FANRes 2021), Virtual conference. August 4-5, 2021.
10. Wuttirat, R., Seaheng S., **Chompoorat, P.**, and Rayas-Duarte, P. 2021. *Functional bread: effect of red kidney bean peanut flour on dough and bread characteristics*. Virtual Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. USA.
11. **Chompoorat, P.**, Josué Hernández Estrada, Z., Noiwan D. and Rayas-Duarte, P. 2019. *Modeling viscoelastic properties of gluten-free red kidney bean noodle*. International Conference on Sustainable Agriculture, Food and Energy (SAFE 2019), Phuket, Thailand. October 20, 2019. Oral presentation
12. **Chompoorat, P.**, Josué Hernández Estrada, Z., and Rayas-Duarte, P. 2019. *An innovation uniaxial compression test for measuring rheological properties of gluten with different qualities*. 5th International conference on Food, Agriculture and Natural resources 2019 (FANRes 2019), Ternate, Indonesia. September 17-19, 2019. (Keynote speaker)
13. **Chompoorat, P.**, Rahong, N. 2019. *Effect of red kidney bean flour substitution on physical properties of gluten-free ramen*. 5th International conference on Food, Agriculture and Natural resources 2019 (FANRes 2019), Ternate, Indonesia. September 17-19, 2019. (Poster presentation)
14. **Chompoorat, P.** 2019. *Modeling rheological properties of pre-gelatinized red kidney bean flour for gluten-free cupcake*. International Mini-symposium on Food, Agriculture and Natural Resources 2019, Jember, Indonesia. March 1-3, 2019. Oral presentation (Invited speaker)
15. **Chompoorat, P.** and Rayas-Duarte, P. 2019. *Rheological characteristics in relation to consumer perception of Alua, gluten-free soft starchy candy with mixture of gluten-free flour and gum*. International Conference on Quality

- Education for sustainable Development, Metro Manila, Philippines. February 8-10, 2019. Oral presentation (Invited speaker)
16. **Chompoorat, P.** 2018. *Development of a high nutrition and functional gluten free cupcake with red kidney bean flour for older adults.* 3rd ICAAI, Chiang Rai, Thailand. November 15-17, 2018. Poster presentation
 17. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Evaluation of mechanical properties of gluten subjected to heat treatment.* AACC International Annual Meeting, London, England. October 21-23, 2018. Oral presentation
 18. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Gluten free wonton dough wrapper with red kidney bean flour: shear and axial compression strain analyses.* AACC International Annual Meeting, London, England. October 21-23, 2018. Poster presentation
 19. **Chompoorat, P.** and Rayas-Duarte, P. 2018. *Using okara flour as a source of nutraceutical and functional food for gluten free hamburger bun.* International Conference on Green Agro-Industry and Bioeconomy, Malang, Indonesia. September 18-20, 2018. Oral presentation
 20. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Rheological behavior of commercial wet gluten with vital wheat gluten using small and large strain.* 45th North American Thermal Analysis Society Conference, Philadelphia, Pennsylvania. August 6-9, 2018. Poster presentation
 21. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Variation of gluten quality- and quantity induced changes via the gluten structure in relation to viscoelastic properties.* 4th ICC Latin American Cereals Conference, Mexico City, Mexico. March 11-14, 2018. Oral presentation
 22. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Variation of physical and dynamic oscillatory shear properties of gluten free red kidney bean cake batter and cake with rice.* 4th ICC Latin American Cereals Conference, Mexico City, Mexico. March 11-14, 2018. Poster presentation
 23. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Thermal process effect on rheological and physical properties of red kidney bean batter and gluten free cake.* Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. February 20, 2018. Poster presentation
 24. **Chompoorat, P.,** Mongkolupathum, P., Wisutthiphaet, S., Josué Hernández Estrada, Z., Rayas-Duarte, P. 2018. *Rheological properties of gluten free wonton dough with red kidney bean flour.* Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. February 20, 2018. Poster presentation
 25. **Chompoorat, P.,** Josué Hernández Estrada, Z., Rayas-Duarte, P. 2017. *Dynamic oscillatory technique for measuring properties of red kidney bean gluten free with rice flour cake batter.* 67th Australasian Grain Science Conference, Christchurch, New Zealand. September 20-21, 2017. Oral presentation
 26. **Chompoorat, P.,** Phetcharat, C. 2017. *Consumer perception of red kidney bean gluten free cake quality.* 67th Australasian Grain Science Conference, Christchurch, New Zealand. Oral presentation
 27. **Chompoorat, P.,** Josué Hernández Estrada, Z., Mulvaney S., Carver, B.F., Rayas-Duarte, P. 2017. *Viscoelastic modelling technique for measuring quality of wheat breeder samples.* 67th Australasian Grain Science Conference, Christchurch, New Zealand. September 20-21, 2017. Poster presentation
 28. **Chompoorat, P.** 2016. *Sustainable Pulse: An Ingredient of Gluten Free Products.* Theme: The harmony between Ecological Health and Health Care, The 9th China-ASEAN Education Cooperation Week & the 2nd China-ASEAN Education Ministers Roundtable Conference, Guizhou, P.R. China. Oral presentation
 29. **Chompoorat, P.,** and Rayas-Duarte. 2013. *Modeling elastic and flow properties of gluten after reducing hydrogen bond using urea.* ACS meeting, Keplinger Hall, University of Tulsa, Tulsa, OK. Oral presentation
 30. **Chompoorat, P.,** Mulvaney, S., and Rayas-Duarte. 2013. *Viscoelastic properties of commercial hard red winter gluten during thermal treatment.* Research Symposium, Alumni Center, Oklahoma State University, Stillwater, OK. Oral presentation
 31. **Chompoorat, P.,** Mulvaney, S., and Rayas-Duarte. 2013. *Effect of ascorbic acid on viscoelastic properties of gluten measured by creep strain and their correlation to dough, batter and baking properties.* Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Oral presentation
 32. **Chompoorat, P.,** S. Goswami, R. Javid., and Rayas-Duarte. 2013. *Modulators of bitterness and their effect on gluten properties.* Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Poster presentation
 33. **Chompoorat, P.,** S. Goswami, R. Javid, A. Nault, B. Vengarai, P. Vijayakumar, P. Priyesh, and P. Rayas-Duarte. 2013. *Development of functional food products for active young adults.* Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Poster presentation
 34. **Chompoorat, P.,** Mulvaney, S., and Rayas-Duarte. 2012. *Modeling the effect of protein quantity and quality on rheological properties of gluten measured by creep-recovery and compression-recovery tests.* AACC International Annual Meeting, Hollywood, FL. Oral presentation
 35. **Chompoorat, P.,** Mulvaney, S., and Rayas-Duarte. 2012. *Modeling of flow and elastic properties of a biopolymer.* BMBGSA Symposium, Oklahoma State University, Stillwater, OK. Oral presentation

36. **Chompoorat, P.**, Mulvaney, S., and Rayas-Duarte. 2012. *Effect of protein substitutions on rheological properties of commercial gluten measured by creep-recovery and compression tests*. Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Oral presentation
 37. **Chompoorat, P.**, Mulvaney, S., and Rayas-Duarte. 2012. *The effect of DATEM on physicochemical properties of gluten and dough of commercial hard red winter wheat flours*. Research Symposium, Alumni Center, Oklahoma State University, Stillwater, OK. Oral presentation
 38. **Chompoorat, P.**, Hernandez, Z., and Rayas-Duarte, P. 2012. *Viscoelastic properties of gluten proteins from hard red winter wheat evaluated by compression-recovery and correlations with functionality*. Oklahoma Academy of Science annual technical meeting, University of Central Oklahoma, Edmond, OK. Poster presentation
 39. **Chompoorat, P.**, and Rayas-Duarte. 2012. *Comparisons of relationship and variance of rheological properties of gluten, dough and batter systems with baking properties*. AACC International Annual Meeting, Hollywood, FL. Poster presentation
 40. **Chompoorat, P.**, Mulvaney, S., and Rayas-Duarte. 2012. *Variation of physicochemical properties of gluten and dough as a function of DATEM addition*. Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Poster presentation
 41. **Chompoorat, P.**, Mulvaney, S., and Rayas-Duarte. 2011. *The effect of DATEM on physicochemical properties of gluten and dough of commercial hard red winter wheat flours*. Research Symposium on Multivariate Methods in Community Ecology, LSW 103, Oklahoma State University, Stillwater, OK. Poster presentation
 42. **Chompoorat, P.**, Mulvaney, S., and Rayas-Duarte. 2010. *The effect of temperature on rheological properties of wheat gluten*. Research Symposium, Robert M Kerr Food & Agricultural Products Center, Oklahoma State University, Stillwater, OK. Poster presentation
-