

ประวัติ

รองศาสตราจารย์ ดร.ทณงศักดิ์ ไชยาโส
(ปรัชญาดุษฎีบัณฑิต เทคโนโลยีชีวภาพ)



1. ชื่อ-สกุล : รองศาสตราจารย์ ดร.ทณงศักดิ์ ไชยาโส
Assoc. Prof. Dr. Thanongsak Chaiyaso
2. ตำแหน่งปัจจุบัน พนักงานมหาวิทยาลัย ตำแหน่งอาจารย์ (รองศาสตราจารย์)

3. หน่วยงานและสถานที่ติดต่อได้

สาขาวิชาเทคโนโลยีชีวภาพ สำนักวิชาอุตสาหกรรมเกษตร คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่
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4. ประวัติการศึกษา ประวัติการทำงาน และประสบการณ์ทำงาน

4.1. ประวัติการศึกษา

- 2543 วิทยาศาสตร์บัณฑิต (วิทยาศาสตร์และเทคโนโลยีการอาหาร เกียรตินิยมอันดับสอง)
คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่ จังหวัดเชียงใหม่
- 2550 ปรัชญาดุษฎีบัณฑิต (เทคโนโลยีชีวภาพ)
คณะอุตสาหกรรมเกษตร มหาวิทยาลัยสงขลานครินทร์ หาดใหญ่ จังหวัดสงขลา
- ทุนการศึกษาที่ได้รับ โครงการปริญญาเอกกาญจนาภิเษก สกว. ระยะเวลา 5 ปี
ทุน DAAD (สหพันธ์สาธารณรัฐเยอรมนี) ระยะเวลา 1 ปี

4.2. ประวัติการทำงาน

เริ่ม ปี พ.ศ.	ถึง ปี พ.ศ.	ตำแหน่งงาน	หน่วยงาน
2567	ปัจจุบัน	หัวหน้าสำนักวิชา อุตสาหกรรมเกษตร	คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่
2563	2567	ผู้ช่วยคณบดี	คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่
2564	ปัจจุบัน	รองศาสตราจารย์	สาขาวิชาเทคโนโลยีชีวภาพ คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่

2557	2564	ผู้ช่วยศาสตราจารย์	สาขาวิชาเทคโนโลยีชีวภาพ คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่
2553	2555	หัวหน้าสาขา	สาขาวิชาเทคโนโลยีผลิตภัณฑ์ทางทะเล คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่
2550	2557	อาจารย์	สาขาวิชาเทคโนโลยีชีวภาพ คณะอุตสาหกรรมเกษตร มหาวิทยาลัยเชียงใหม่

การศึกษาดูงานและทุนแลกเปลี่ยนระหว่างประเทศ

1. ทุนแลกเปลี่ยนนักวิจัย โครงการ Core to Core Program ประจำปี 2561 (FY 2018) ณ Yamagata University ประเทศญี่ปุ่น เป็นเวลา 1 เดือน ได้รับการสนับสนุนเงินทุนวิจัยจาก NRCT-JSPS.
2. ทุนแลกเปลี่ยนนักวิจัย โครงการ Core to Core Program ประจำปี 2560 (FY 2017) ณ Kobe University ประเทศญี่ปุ่น เป็นเวลา 1 เดือน ได้รับการสนับสนุนเงินทุนวิจัยจาก NRCT-JSPS.
3. ทุนแลกเปลี่ยนนักวิจัย โครงการ Core to Core Program ประจำปี 2559 (FY 2016) ณ Yamagata University ประเทศญี่ปุ่น เป็นเวลา 1 เดือน ได้รับการสนับสนุนเงินทุนวิจัยจาก NRCT-JSPS.
4. ทุนแลกเปลี่ยนนักวิจัย โครงการ Core to Core Program ประจำปี 2558 (FY 2015) ณ Kobe University ประเทศญี่ปุ่น เป็นเวลา 1 เดือน ได้รับการสนับสนุนเงินทุนวิจัยจาก NRCT-JSPS.
5. ทุนแลกเปลี่ยนนักวิจัย โครงการ Core to Core Program ประจำปี 2557 (FY 2014) ณ Kobe University ประเทศญี่ปุ่น เป็นเวลา 1 เดือน ได้รับการสนับสนุนเงินทุนวิจัยจาก NRCT-JSPS.
6. ทุน Sakura Science Program ประจำปี 2560 (FY 2017) เป็นระยะเวลา 10 วัน ณ Kobe University ประเทศญี่ปุ่น ได้รับการสนับสนุนเงินทุนวิจัยจาก JST.
7. ทุน Sakura Science Program ประจำปี 2559 (FY 2016) เป็นระยะเวลา 10 วัน ณ Kobe University ประเทศญี่ปุ่น ได้รับการสนับสนุนเงินทุนวิจัยจาก JST.
8. ทุน Sakura Science Program ประจำปี 2558 (FY 2015) เป็นระยะเวลา 12 วัน ณ Kobe University ประเทศญี่ปุ่น ได้รับการสนับสนุนเงินทุนวิจัยจาก JST.

6. สาขาวิชาที่มีความชำนาญ เทคโนโลยีชีวภาพทางอุตสาหกรรมเกษตร เทคโนโลยีการหมัก เทคโนโลยีชีวภาพทางอาหาร เทคโนโลยีเอนไซม์ พรีไบโอติกส์และโพรไบโอติกส์ และกระบวนการทางไบโอรีไฟเนอรีเพื่อผลิตสารมูลค่าสูง

7. ผลงานทางวิชาการ (ปี 2006-2026)

7.1. ผลงานตีพิมพ์ในวารสารระดับนานาชาติ (ISI, Scopus)

1. Pothimoi, S., Seesuriyachan, P., **Chaiyaso, T.**, Insomphun, C., Yakul, K., Phimolsiripol, Y., and Moukamnerd, C. 2026. Enhanced sensory, antioxidant, and non-toxic anti-diabetes beverage development via co-culture fermentation of *Lactiplantibacillus plantarum* and *Saccharomyces boulardii* in coffee cherry pulp extracts. *Food Chemistry*: X. 33, 103524.
2. Tapingkae, W., Srinual, O., Srinual, P., Khamtavee, P., Pintalerd, N., **Chaiyaso, T.**, Yachai, M., Tapingkae, T., and Kanmanee, C. 2026. Dietary coffee silverskin supplementation: effect on growth performance, carcass traits, and gastrointestinal health of broilers. *Animals*. 16(4), 598.
3. Srinual, O., Srinual, P., Khetanun, K., Loungmoon, P., Pintalerd, N., **Chaiyaso, T.**, Yakul, K., Kanmanee, C., and Tapingkae, W. 2026. Influence of dietary fermented coffee cherry pulp on growth performance, meat quality, and cecal microbiota in Thai native chickens. *Animals*. 16(6), 965.
4. Thajai, N., Rachtanapun, P., Thanakkasaranee, S., **Chaiyaso, T.**, Punyodom, W., Worajittiphon, P., Tanadchangsang, N., Karbowiak, T., Rachtanapun, C., Noiwan, D., Tongdeesoonorn, W., and Jantasakulwong, K. 2026. Development of antimicrobial egg coatings for extending the shelf life of eggs using cassava starch blended with sodium alginate, liquid paraffin wax, and ZnO nanoparticles. *International Journal of Biological Macromolecules*. 360, 151875.
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6. Ueda, K., Techapun, C., Leksawasdi, N., **Chaiyaso, T.**, Abe-Kanoh, N., and Watanabe, M. 2025. Evaluation of Physicochemical Properties of Defatted Rice Bran Protein Concentrate Obtained by Modified IP-EWT Process. *Cereal Chemistry*. 102(5), 880-893.
7. **Chaiyaso, T.**, Yakul, K., Jirarat, W., Tapingkae, W., Leksawasdi, N., and Rachtanapun, P. 2025. Valorization of Coffee Silverskin via Integrated Biorefinery for the Production of Bioactive Peptides and Xylooligosaccharides: Functional and Prebiotic Properties. *Foods*. 14(15), 2745.

8. **Chaiyaso, T.**, Yakul, K., Jirarat, W., Tapingkae, W., Van Doan, H., and Rachtanapun, P. 2025. Valorization of Coffee Cherry Pulp into Potential Functional Poultry Feed Additives by Pectinolytic Yeast *Kluyveromyces marxianus* ST5. *Animals*. 15(15), 2311.
9. Jaijoi, S., Kaewsalud, T., Yakul, K., Mahatheeranont, S., Sriyotai, W., Sarana Rose, S., Rachtanapun, P., Leksawasdi, N., Watanabe, M. and **Chaiyaso, T.** 2025. β -Glucosidase from *Lactocaseibacillus casei* TISTR 1463: Biochemical characterization and application on biotransformation of pigmented leaf extract from *Oryza sativa* L. (Luem Pua glutinous rice). *Biocatalysis and Agricultural Biotechnology*. 64, 103491.
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11. Tapingkae, W., Srinual, P., Khamtavee, P., Pintalerd, N., **Chaiyaso, T.**, Mongkol Yachai, M., Kanmanee, C., Lumsangkul, C. and Srinual, O. 2025. The Use of Coffee Cherry Pulp Extract as an Alternative to an Antibiotic Growth Promoter in Broiler Diets. *Animals*. 15(2), 244.
12. Srinual, O., Kanmanee, C., Srinual, P., **Chaiyaso, T.**, Yachai, M., Tapingkae, T. and Tapingkae, W. 2024. Innovation and Utilization of Functional Feed Additives from Maize By-Products in Broiler Chickens. *Animals*. 14(22), 3198.
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14. Kanthiya, T., Rachtanapun, P., Boonrasri, S., Kittikorn, T., **Chaiyaso, T.**, Worajittiphon, P., Tanadchangsang, N., Thanakkasarnanee, S., Leksawasdi, N., and Phimolsiripol, Y. 2024. Reinforcement of epoxidized natural rubber with high antimicrobial resistance using water hyacinth fibers and chlorhexidine gluconate. *Polymers*. 16(21): 3089.
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17. Yootoum, A., Jantanasakulwong, K., Rachtanapun, P., Moukamnerd, C., **Chaiyaso, T.**, Pumas, C., Tanadchangsang, N., Watanabe, M., Fukui, T. and Insomphun, C. 2023. Characterization of newly isolated thermotolerant bacterium *Cupriavidus* sp. CB15 from composting and its ability to produce polyhydroxyalkanoate from glycerol. 2023. Microbial Cell Factories. 22(1), 68.
18. Thajai, N., Rachtanapun, P., Thanakkasaranee, S., **Chaiyaso, T.**, Phimolsiripol, Y., Leksawasdi, N., Sommano, S.R., Sringarm, K., Chaiwarit, T., Ruksiriwanich, W., Jantrawut, P. and Kodsangma, A. 2023. Antimicrobial thermoplastic starch reactive blend with chlorhexidine gluconate and epoxy resin. Carbohydrate Polymers, 301, 120328.
19. Rachtanapun, P., Homsaard, N., Kodsangma, A., Phongthai, S., Leksawasdi, N., Phimolsiripol, Y., Seesuriyachan, P., **Chaiyaso, T.**, Chotinan, S., Jantrawut, P. and Ruksiriwanich, W. 2022. Effects of storage temperature on the quality of eggs coated by cassava starch blended with carboxymethyl cellulose and paraffin wax. Poultry Science, 101(1), 101509.
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- supplementation with red yeast (*Sporidiobolus pararoseus*) on productive performance, egg quality, and duodenal cell proliferation of laying hens. *Animals*, 12(3), 238.
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28. Tangpao, T., Charoimek, N., Teerakitchotikan, P., Leksawasdi, N., Jantasakulwong, K., Rachtanapun, P., Seesuriyachan P., Phimolsiripol Y., **Chaiyaso T.**, Ruksiriwanich W., Jantrawut P., Van Doan, H., Cheewangkoon, R. and Sommano, S.R. 2022. Volatile organic compounds from basil essential oils: plant taxonomy, biological activities, and their applications in tropical fruit productions. *Horticulturae*, 8(2), 144.
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- improvement of carboxymethyl chitosan films depending on particle sizes. *Molecules*, 26(19), 6013.
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7.4. ผลงานนำเสนอในที่ประชุมวิชาการในระดับชาติและนานาชาติ

1. Kaewsalud, T., Yakul, K., Peterbauer, C., Haltrich, D. and **Chaiyaso, T.** 2023. Turning Waste into Wealth: Hydrothermal-Enzymatic Processing of Keratin Wastes for Bioplastic Production. November 26 – 29, 2023. The 35th Annual Meeting of the Thai Society for Biotechnology and International Conference “Sustainable Development through Bio-Circular Green (BCG) Economy Model”. The Greenery Resort Khao Yai, Khao Yai National Park, Nakhon Ratchasima, Thailand. (Poster Presentation).
2. Jirarat, W., Watanabe, M., Yakul, K. and **Chaiyaso, T.** 2023. Optimization of phenolic compounds and proteins extraction from coffee silverskin by lowering chemicals process. November 26 – 29, 2023. The 35th Annual Meeting of the Thai Society for Biotechnology and International Conference “Sustainable Development through Bio-Circular Green (BCG) Economy Model”. The Greenery Resort Khao Yai, Khao Yai National Park, Nakhon Ratchasima, Thailand. (Poster Presentation).
3. Yakul, K., Peterbauer, C., Haltrich, D. and **Chaiyaso, T.** 2023. Sustainable Development of Thai Silk Industry by a Biotechnological Process Using Thermostable Alkaline Protease from *Bacillus halodurans* SE5. November 26 – 29, 2023. The 35th Annual Meeting of the Thai Society for Biotechnology and International Conference “Sustainable Development through Bio-Circular Green (BCG) Economy Model”. The Greenery Resort Khao Yai, Khao Yai National Park, Nakhon Ratchasima, Thailand. (Poster Presentation).
4. Jaijoi S., Seesuriyachan P., Mahatheeranont S., and **Chaiyaso T.** 2022. Screening and Selection of β -Glucosidase-producing Lactic Acid Bacteria and Its Biotransformation of Pigmented Rice Leaf Extract. February 14th–15th, 2022. The 6th International Conference on Food and Applied Bioscience. Information Technology Service Center, Chiang Mai University. (Poster Presentation).
5. Pongharn N., Insomphun C., Hanmoungjai P., Jinsiriwanit S. and **Chaiyaso T.** 2021. Screening of Oleaginous Yeasts with Xylose Assimilating Capacity for Lipids and Sugar Alcohols Co-production. November 25, 2021. The 33rd Annual Meeting of the Thai Society for Biotechnology and International Conference (TSB 2021). Hybrid Conference, Bangkok, Thailand. (Oral presentation).
6. Jaijoi S., Seesuriyachan P., and **Chaiyaso T.** 2021. Bioconversion of Pigmented Rice Leaf Extract by β -glucosidase-producing Lactic Acid Bacteria. November 25, 2021. The 33rd

- Annual Meeting of the Thai Society for Biotechnology and International Conference (TSB2021). Hybrid Conference, Bangkok, Thailand. (Oral Presentation).
7. Kaewsalud, T., Yakul, K., Techapun, C., Watanabe, M. and **Chaiyaso, T.** 2020. Optimization of thermostable alkaline keratinase production from *Bacillus halodurans* SW-X and its application on keratin hydrolysate production from chicken feather. The International Conference on Food and Applied Bioscience 2020: Insights for Research and Industry 4.0, February 6-7, 2020. Chiang Mai Grandview Hotel. Chiang Mai. Thailand. (Poster Presentation).
 8. Srisupa, S., Boonchuay, P., Hanmoungjai, P. and **Chaiyaso, T.** 2020. Bioethanol production using cellulose-rich corncob residue by thermotolerant yeasts. The International Conference on Food and Applied Bioscience 2020: Insights for Research and Industry 4.0. February 6-7, 2020. Chiang Mai Grandview Hotel. Chiang Mai. Thailand. (Poster Presentation).
 9. **Chaiyaso, T.**, Yakul, K., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Watanabe, M., Nakamura, K., and Takenaka, S. 2018. Purification, characterization of thermostable alkaline serine protease from *Bacillus halodurans* SE5 and its application on bio-bleaching of yellow cocoon. Core to Core Program (Advanced Research Networks) (2014-2019), December 2-4, 2018 The University Hall, Yamaguchi University, Yamaguchi, Japan. (Poster presentation).
 10. Yakul, K., Kuntiya, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Watanabe, M., Nakamura, K., Takenaka, S. and **Chaiyaso, T.** 2017. Optimization production of thermostable alkaline-protease from *Bacillus halodurans* SE5 and its application on bioactive peptides production from sericin. The 29th Annual Meeting of the Thai Society for Biotechnology and International Conference. November 23-25, 2017. Swissôtel Le Concorde. Bangkok. Thailand. (Oral presentation).
 11. Boonchuay, P., Kuntiya, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Hanmoungjai, P., Watanabe, M., Takenaka, S. and **Chaiyaso, T.** 2017. Optimization of fermentable sugar production from cellulose-rich corncob residue, a solid waste from xylooligosaccharides production process. The 29th Annual Meeting of the Thai Society for Biotechnology and International Conference. November 23-25, 2017. Swissôtel Le Concorde. Bangkok. Thailand. (Poster presentation).

12. Srisupa, S., Techapun, C., Hanmoungjai, P., Watanabe, M., and **Chaiyaso, T.** 2017. Bioethanol production from cellulose-rich corncob residue using a thermotolerant yeast *Candida glabrata* KY618710 via the simultaneous saccharification and fermentation process. The 29th Annual Meeting of the Thai Society for Biotechnology and International Conference. November 23-25, 2017. Swissôtel Le Concorde. Bangkok. Thailand. (Poster presentation).
13. Keawsalud, T. Techapun, C., Seesuriyachan, P., Takenaka, S., Watanabe, M., and **Chaiyaso, T.** 2017. Screening and isolation of thermostable alkaline keratinase producing bacteria from hot spring. The 29th Annual Meeting of the Thai Society for Biotechnology and International Conference. November 23-25, 2017. Swissôtel Le Concorde. Bangkok. Thailand. (Poster presentation).
14. **Chaiyaso, T.**, Boonchuay, P., Kuntiya, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Watanabe, M. and Takenaka, S. 2017. Integrated process for xylooligosaccharides (XOs) and bioethanol productions from corncob. International Joint Seminar Core to Core Program A. Advanced Research Networks “Establishment of an international research core for new bio-research fields with microbes from tropical areas (World-class research hub of tropical microbial resources and their utilization)” and e-ASIA JRP kick-off meeting (Part of The Thailand Research EXPO 2017, August 26, 2017. The Centara Grand & Bangkok Convention Centre, Central World, Thailand (Oral presentation).
15. **Chaiyaso, T.**, Boonchuay, P., Takenaka, S., Watanabe, M., Kuntiya, A., Techapun, C., Lesawasdi, N. and Seesuriyachan, P. 2016. Purification and characterization of thermostable cellulase-free endo-xylanase from *Streptomyces thermovulgaris* TISTR1948 and its application on xylooligosaccharide productions. The 2nd Joint Seminar Core to Core Program A. Advanced Research Network. November 14-15, 2016. Bangsaen Heritage Hotel, Chonburi, Thailand (Oral presentation).
16. Watanabe, M., Techapun, C., Lesawasdi, N., Kuntiya, A., Seesuriyachan, P., **Chaiyaso, T.** and Takenaka, S. 2016. Recovery of protein and phosphorus compound and fermentative lactic acid production from defatted rice bran by using pilot scale plant. The 2nd Joint Seminar Core to Core Program A. Advanced Research Network. November 14-15, 2016. Bangsaen Heritage Hotel, Chonburi, Thailand (Poster presentation).

17. Takenaka, S., Osaka U., Kuntiya, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Watanabe, M., **Chaiyaso. T.** 2016. Characterization of lipase from thermotolerant *Streptomyces thermoviolaceus* strain TCW. The 2nd Joint seminar Core to Core Program A. Advanced Research Networks on “Establishment of an international research core for new bio-research fields with microbes from tropical areas”, November 14-15, 2016, Bangsaen Heritage Hotel, Chonburi, Thailand. (Poster presentation).
18. **Chaiyaso, T.**, Manowattana, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P. and Watanabe, M. 2016. High efficiency bioconversion of crude glycerol into lipids and carotenoids by *Sporidiobolus pararoseus* operating in the airlift bioreactor. The 5th International Conference on Biomass Energy & Exhibition (ICBE 2016). China National Convention Center, Beijing, People Republic of China. October 16-19, 2016. (Oral Presentation)
19. Srisuwan, W., Techapun, C., Seesuriyachan, P., Watanabe, M. and **Chaiyaso, T.** 2015. Screening of oleaginous yeast for lipid production using rice residue from food waste as a carbon source. The 6th International Conference on Fermentation Technology for Value Added Agricultural Products (FerVAAP2015). July 29-31, 2015. Centara Hotel & Convention Center, Khon Kaen, Thailand. (Poster Presentation).
20. Boonchuay, P., Takenaka, S., Watanabe, M., Kuntiya, A., Techapun, C., Leksawasdi, N., Seesuriyachan, P., Hanmoungjai, P. and **Chaiyaso. T.** 2015. Purification and characterization of thermostable cellulase-free endo-xylanase from *Streptomyces thermovulgaris* TISTR1948. The 6th International Conference on Fermentation Technology for Value Added Agricultural Products (FerVAAP2015). July 29-31, 2015. Centara Hotel & Convention Center, Khon Kaen, Thailand. (Oral Presentation).
21. Manowattana, A., Techapun, C., Watanabe, M. and **Chaiyaso, T.** 2015. Application of airlift bioreactor for the enhancement of carotenoids production by *Sporidiobolus pararoseus* using crude glycerol as a carbon source. The 6th International Conference on Fermentation Technology for Value Added Agricultural Products (FerVAAP2015). July 29-31, 2015. Centara Hotel & Convention Center, Khon Kaen, Thailand. (Poster Presentation).
22. **Chaiyaso, T.**, Kuntiya, A., Techapun, C. Leksawasdi, N., Seesuriyachan, P., Takenake, S. and Watanabe, M. 2014. Purification and characterization of lipase from thermotolerant *Streptomyces thermocarboxydus* ME168 and its application on sugar esters synthesis. New

- Core to Core Program. Advanced Research Networks, The 1st Joint Seminar, August 10-11, 2014. Centara Grand & Bangkok Convention Centre, Central World, Bangkok, Thailand. (Poster Presentation).
23. Takenaka, S., Kuntiya, A., Seesuriyachan, P., **Chaiyaso, T.**, Techapun, C. Leksawasdi, N. and Watanabe, M. 2014. Characterization of halotolerant extracellular enzymes from *Bacillus subtilis* FP-133. New Core to Core Program. Advanced Research Networks, The 1st Joint Seminar, August 10-11, 2014. Centara Grand & Bangkok Convention Centre, Central World, Bangkok, Thailand. (Oral Presentation).
24. Manowattana, A., Seesuriyachan, P. Techapun, C., and **Chaiyaso, T.** 2014. Microbial conversion of biodiesel-derived crude glycerol into carotenoids by *Sporobolomyces pararoceus* TISTR5213. AMBC Conference. February 19-21, 2014. Bangkok, Thailand. (Poster Presentation).
25. Manysoat, S., Jomduang, S. and **Chaiyaso, T.** 2013. Effect of Loog-pang sources on Job's tears Sato production. The 5th International Conference on Fermentation Technology for Value Added Agriculture Products (FerVAAP2013). August 21-23, 2013. Centara Hotel & Convention Centre, Khon Kaen, Thailand. (Poster Presentation).
26. Manowattana, A., Seesuriyachan, P. Techapun, C., and **Chaiyaso, T.** 2012 β -Carotene production by red yeast *Sporobolomyces pararoseus* TISTR5213 using waste glycerol as a sole carbon source. International Conference on Food and Applied Bioscience. February 6-7, 2012. Kantary Hills Hotel, Chiang Mai, Thailand. (Poster Presentation).
27. Boonchuay, P., Techapun, C., Hanmoungjai, P. and **Chaiyaso, T.** 2012 Enzymatic production of xylooligosaccharide (XO) from selected agricultural wastes. International Conference on Food and Applied Bioscience. February 6-7, 2012. Kantary Hills Hotel, Chiang Mai, Thailand. (Poster Presentation).
28. Manowattana, A., Seesuriyachan, P., Techapun, C. and **Chaiyaso, T.** 2011. Optimization of carotenoids production by red yeast *Sporobolomyces pararoseus* TISTR5213 using waste glycerol as a sole carbon source. 4th International FerVAAP Conference. August 29-31, 2011. Khon Kaen, Thailand. (Poster Presentation).
29. **Chaiyaso, T.**, Seesuriyachan, P., Leksawasdi, N. and Techapun, C. 2011. Biodiesel production from crude physic nut oil (*Jatropha curcas* L.) catalyzed by immobilized

- lipases. Asian Congress on Biotechnology; Biotechnology for better life. May 11-15, 2011. Shanghai, China. (Oral Presentation).
30. Manowattana, A., Ta-inthorn, P., Seesuriyachan, P., Techapun, C. and **Chaiyaso, T.** 2010. Carotenoids production from red yeasts using waste glycerol as a sole carbon source. International Conference on Agriculture and Agro-Industry (ICAAI2010). Food, Health and Trade, November 19-20, 2010. Mae Fah Luang University, Chiang Rai, Thailand. (Oral Presentation).
 31. **Chaiyaso, T.**, Zimmermann, W., Prasertsan, P. and H-Kittikun, A. Biodiesel Production from Palm Oil Catalyzed by Lipase from *Burkholderia multivorans* PSU-AH130. 2007. The International Conference on Biorefinery, October 20-22, 2007. Beijing, China. (Oral Presentation).
 32. **Chaiyaso, T.**, Zimmermann, W., and H-Kittikun, A. Isolation and characterization of lipase from *Actinomycetes* ME168 and application on sugar ester synthesis. 2005. RGJ-Ph.D. Congress VI. April 28-30, 2005. Pattaya, Thailand. (Poster Presentation).
 33. **Chaiyaso, T.**, Zimmermann, W., and H-Kittikun, A. Biocatalysis synthesis of sugar fatty acid esters from palm fatty acid distillates (PFAD). 2004. Innovation Biotechnology: The Opportunity for Kitchen of the World. December 12-15, 2004. Phitsanulok, Thailand. (Oral presentation).
 34. **Chaiyaso, T.**, H-Kittikun, A., and Zimmermann, W. Biocatalysis synthesis of carbohydrate fatty acid esters from palm fatty acid distillates. 2004. International Congress on Biocatalysis (Biocat2004). August 28 – September 1, 2004. Technical University Hamburg-Harburg, Hamburg, Germany. (Poster Presentation).

7.5. ผลงานทางวิชาการอื่น ๆ

1. อนุสิทธิบัตรชื่อการประดิษฐ์ “กระบวนการผลิตยีสต์สีแดงในรูปแบบผงแห้ง” เลขที่คำขอ 1803001375 วันที่ยื่นขอ 19 มิถุนายน 2561.

8. รางวัลที่ได้รับ

1. รางวัล Best Oral Presentation Award in Sustainable Environment and Value-added of Wastes Session ในการนำเสนอผลงานวิจัยหัวข้อ "Screening of Oleaginous Yeasts with Xylose Assimilating Capacity for Lipids and Sugar Alcohols Co-production" ในงานประชุม Thai

- Society for Biotechnology and International Conference (TSB2021) แบบออนไลน์ เมื่อวันที่ 25 พฤศจิกายน 2564 นำเสนอโดยนางสาวณัฐนิชา ปงหาญ รหัสนักศึกษา 629931005 โดยมี ผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษา
2. รางวัล Best Oral Presentation Award in Environmental Biotechnology Session เรื่อง “Purification and Characterization of Thermostable Alkaline Keratinase from *Bacillus halodurans* SW-X and Its Use in Chicken Feather Valorization for Keratin Hydrolysate Production, a Substrate for Bioplastic starch/keratin” ในงานประชุมวิชาการ Thai Society for Biotechnology International Conference Online เมื่อวันที่ 2 เมษายน 2564 นำเสนอโดยนาย ธีรวัฒน์ แก้วสลด รหัสนักศึกษา 619951004 โดยมี ผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก
 3. รางวัล Best Poster Award เรื่อง “Optimization of thermostable alkaline keratinase production from *Bacillus halodurans* SW-X and its application on keratin hydrolysate production from chicken feather” ในงานประชุมวิชาการ The 5th International Conference on Food and Applied Bioscience (FAB 2020) เมื่อวันที่ 6-7 กุมภาพันธ์ 2563 นำเสนอโดยนาย ธีรวัฒน์ แก้วสลด รหัสนักศึกษา 619951004 โดยมี ผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก
 4. รางวัลวิทยานิพนธ์ระดับดีในสาขาเกษตรศาสตร์และชีววิทยาประจำปีงบประมาณ 2563 จากสำนักงาน การวิจัยแห่งชาติ (วช.) เรื่อง “การผลิตไซลอลิโกแซ็กคาไรด์และไบโอเอทานอลจากซังข้าวโพดโดยวิธี ทางเอนไซม์ : Enzymatic Productions of xylooligosaccharide and bioethanol from corncob” เมื่อวันที่ 15 พฤศจิกายน 2562 ของ ดร.พินิต บุญช่วย โดยมี ผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก
 5. รางวัล Best Poster Presentation Awards at TSB 2017 (Session: Environmental Biotechnology) เรื่อง “Screening and isolation of thermostable alkaline keratinase producing bacteria from hot spring” ในงานประชุมวิชาการ The 29th Annual meeting of the Thai Society for Biotechnology an International Conference (TSB 2017) เมื่อวันที่ 24 พฤศจิกายน 2560 นำเสนอ โดยนาย ธีรวัฒน์ แก้วสลด รหัสนักศึกษา 609931008 โดยมี ผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก
 6. Excellent Paper Award – Selected Papers (2019) เรื่อง “Bioconversion of biodiesel-derived crude glycerol into lipids and carotenoids by an oleaginous red yeast *Sporidiobolus pararoseus* KM281507 in an airlift bioreactor” ได้รับรางวัลจาก The Society for Biotechnology,

Japan (SBJ) เมื่อวันที่ 16 กันยายน 2562 ผลงานของ ดร.อัจฉรา มะโนวัฒนา โดยมีผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก

7. รางวัลชมเชย ความนิยมด้านการนำเสนองานวิจัยเด่น เรื่อง “Characterization of thermostable alkaline protease from *Bacillus halodurans* SE5 and its application in degumming coupled with sericin hydrolysate production from yellow cocoon” ในการประชุมวิชาการระดับบัณฑิตศึกษา สกสว. ปี 2562 สำนักงานคณะกรรมการส่งเสริมวิทยาศาสตร์ วิจัยและนวัตกรรม (สกสว.) เมื่อวันที่ 8 สิงหาคม 2562 นำเสนอโดยนายกมล ยากุล รหัสนักศึกษา 599951009 โดยมีผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก
8. รางวัลดุชนิพนธ์ดีเด่น (The Best Doctoral Thesis Award) ประจำปีการศึกษา 2561 เรื่อง “Enzymatic Productions of Xylooligosaccharide and Bioethanol from Corncob (การผลิตไซโลโอลิโกแซ็กคาไรด์และไบโอเอทานอลจากซังข้าวโพดโดยวิธีทางเอนไซม์)” ได้รับรางวัลจากมหาวิทยาลัยเชียงใหม่ เมื่อวันที่ 24 มกราคม 2562 ของ ดร.พินพนิต บุญช่วย โดยมีผู้ช่วยศาสตราจารย์ ดร.ทงศักดิ์ ไชยาโส เป็นอาจารย์ที่ปรึกษาหลัก