



Curriculum Vitae

Institute of Nutrition, Mahidol University (INMU)
999 Phutthamonthon 4 Rd., Salaya, Phutthamonthon



ชื่อ – นามสกุล : กัณฐมณี ทุไพบระ
Name : Kantamanee Thuphairo
Email Address : kantamanee.thu@mahidol.edu

➤ ตำแหน่งปัจจุบัน (Current position) : นักปฏิบัติการวิจัย

➤ การศึกษา (Education) :

2012–2015 Master of Science (Food Science for Nutrition)
Institute of Nutrition, Mahidol University, Thailand
วิทยาศาสตร์มหาบัณฑิต (สาขาวิทยาศาสตร์การอาหารเพื่อโภชนาการ)
สถาบันโภชนาการ มหาวิทยาลัยมหิดล

2008 – 2012 Bachelor of Science (Biotechnology)
Faculty of Science, Mahidol University, Thailand
วิทยาศาสตรบัณฑิต (สาขาเทคโนโลยีชีวภาพ)
คณะวิทยาศาสตร์ มหาวิทยาลัยมหิดล

➤ งานวิจัยที่สนใจและมีความเชี่ยวชาญ (Research Interest and Expertise)

1. Determination of phytochemicals by high performance liquid chromatograph (HPLC).
2. Determination of body composition, energy expenditure and breast milk intake by isotope ratio mass spectrometer (IRMS).
3. Determination of fructans (Inulin, fructo-oligosaccharide) by gas chromatograph (GC).



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➤ ประสบการณ์ในการทำวิจัย (Research Experiences)

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| 2023-present | Determination of fructans (Inulin, fructo-oligosaccharide) by gas chromatograph (GC). |
| 2023-present | Determination of stable isotope (deuterium and oxygen-18) by isotope ratio mass spectrometer (IRMS). |
| 2022-2023 | Determine qualities of oil samples such as peroxide value, iodine value, saponification value and acid value. |
| 2022-2023 | Develop and validate analytical methods for cannabidiol (CBD) tetrahydrocannabinol (THC) in hemp and hemp products by high performance liquid chromatograph (HPLC). |
| 2020-2022 | Develop and validate analytical methods for bioactive compounds in herbal medicine and products by ultra performance liquid chromatograph (UPLC). |
| 2013-2015 | Antioxidant activity and inhibition of key enzymes relevant to Alzheimer's disease from sweet pepper (<i>Capsicum annuum</i>) extracts. |
| 2011-2012 | Process optimization for recombinant therapeutic protein in <i>Escherichia coli</i> . |



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➤ การฝึกอบรม (Training)

- 2023 ISO13528:2022 Statistical methods for proficiency testing by interlaboratory comparison (Fundamental) (Online)
By Thailand Proficiency Testing Program
- 2023 Statistics for analytical chemistry (Online)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2023 Measurement uncertainty for analytical chemistry (Online)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2023 Control chart (Online)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2023 Quality assurance in analytical chemistry (Online)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2023 Management of equipment in ISO/IEC 17025 (Online)
By National Food Institute
- 2023 Agilent fatty acid workshop tips & tricks by GCQQQ training
By Mahidol University Frontier Research Facility, Mahidol University
- 2023 How to select GC column and direct injection solid sample to GC/GCMS by pyrolysis technique
By Central Instrument Facility, Faculty of Science (Phayathai), Mahidol University
- 2022 HALAL Training
By Welltech Biotechnology co., ltd
- 2022 GHPs Training
By Welltech Biotechnology co., ltd
- 2021 Overview and basic operation of GC-MS/MS (Online)
By Center of Applied Thai Traditional Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University



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- 2021 LC-MS/MS Training
By Center of Applied Thai Traditional Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University
- 2021 ISO/IEC 17025:2017 Requirements (Online)
By Bureau of Laboratory Quality Standards, Department of Medical Sciences
- 2021 Method validation for testing laboratory (e-learning)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2021 Quality control for testing laboratory (e-learning)
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2020 GMP Training
By Center of Applied Thai Traditional Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University
- 2019 Lecture and workshop on fundamentals of LC-MS and LC-MS/MS
By Central Laboratory (Thailand) Co., Ltd.
- 2019 Method validation on chemical analysis
By Department of Science Service, Ministry of Higher Education, Science, Research and Innovation
- 2019 Enhancement of safety practice of chemical laboratory training (ESPreL)
By Center for Occupational Safety, Health and Environment Management (COSHEM), Mahidol University
- 2019 Workshop on biosafety guideline for modern biotechnology
By Institute of Molecular Biosciences, Mahidol University
- 2019 Fundamental of high performance liquid chromatography basic maintenance and troubleshooting of Ultimate 3000 series
By Archemica Lab Co.,Ltd.
- 2019 Analytical method validation and AOAC guideline
By Central Instrument Facility, Faculty of Science, Mahidol University Trainings



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- 2018 HPLC column for food & biotechnology by Shodex
By Central Instrument Facility, Faculty of Science, Mahidol University
- 2018 Workshop on high performance liquid chromatography
By Central Instrument Facility, Faculty of Science, Mahidol University
- 2018 Invitation special seminar and workshop on TruSpec CHN/S analysis
By The Petroleum and Petrochemical College, Chulalongkorn University
- 2018 AAS inorganic analysis (AAS, ICP-OES, ICP-MS)
By Salaya Central Instrument Facility, Mahidol University
- 2017 Solid-phase extraction (SPE) workshop for sample preparation
By Salaya Central Instrument Facility, Mahidol University
- 2017 MALDI-TOF/TOF mass spectrometer for proteomics
By Salaya Central Instrument Facility, Mahidol University
- 2017 HPLC concepts overview
By Central Instrument Facility, Faculty of Science, Mahidol University
- 2017 Capillary electrophoresis (CE) PA800 training
By Pilot Plant, Mahidol University
- 2017 Standard and quality: ISO/IEC 17025: 2005-requirements
By Faculty of Engineering, Mahidol University
- 2016 Real-time PCR training course: principles and applications
By Salaya Central Instrument Facility, Mahidol University
- 2016 FPLC training course: principles and applications
By Salaya Central Instrument Facility, Mahidol University



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➤ การเผยแพร่ผลงาน (Publications)

○ ระดับชาติ (National)

1. Nantakornsuttanan N, **Thuphairo K** and Suttisansanee U. Chili peppers and potential Alzheimer's disease prevention. *Food Focus*. 2016, 11(125): 24-25.
2. **Thuphairo K**, Kruawan K, Srichamnong W, Charoenkiatkul S and Suttisansanee U. Antiacetylcholinesterase properties of sweet pepper (*Capsicum annuum*) extracts in different solvents. *Agricultural Sci J*. 2014; 45(2)(Suppl.): 121-124.
3. Nantakornsuttanan N, Phanyotha T, **Thuphairo K**, Charoenkiatkul S and Suttisansanee U. Antioxidant activities and total phenolic contents from different varieties of chili peppers extracts. *Agricultural Sci J*. 2014; 45(2)(Suppl.): 365-368.
4. **Thuphairo K** and Suttisansanee U. Sweet pepper and health promoting compounds. *Journal of Nutrition Association of Thailand*. 2014; 48(2): 1-11.
5. **Thuphairo K**, Kruawan K, Srichamnong W, Charoenkiatkul S and Suttisansanee U. The investigation of total phenolic compounds and antioxidant activities of sweet pepper (*Capsicum annuum*) extracted by solvents with different polarities. *Agricultural Sci J*. 2013; 44(2)(Suppl): 293-296.



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○ ระดับนานาชาติ (International)

1. Yapan P, Thongkloung P, Phaophan A, Yaiyiam C, Kamkang P, **Thuphairo K**, Wataganara T. Preeclampsia prediction and prophylaxis in routine first-trimester screening services. Donald School J Ultrasound Obstet Gynecol. 2020; 14 (3): 237-244.
2. **Thuphairo K**, Phanyotha T, and Suttisansanee U. Bioactive compounds, antioxidant activity and inhibition of key enzymes relevant to Alzheimer's disease from sweet pepper (*Capsicum annuum*) extracts. Preventive nutrition and food science. 2019; 24(3): 327-337.
3. Nantakornsuttanan N, **Thuphairo K**, Kukreja RK, Charoenkiatkul S and Suttisansanee U. Antiacetylcholinesterase inhibitory activities of different varieties of chili peppers extracts. International Food Research Journal. 2016; 23(5): 1953-1959.