## Curriculum Vitae



**Wirote Youravong,** Ph.D Associate Professor

#### Affiliation

- O Center of Excellence in functional food and gastronomy & Center of Excellence in Membrane Science and Technology, Faculty of Agro-industry, Prince of Songkla University, Hat Yai, Thailand
- O E-mail: wirote.y@psu.ac.th

## Education

- O Ph.D (Food Engineering), University of Reading, UK
- O M.Eng (Food Engineering), KMITT, Thailand
- O B.Sc (Agro-industry), PSU, Thailand

## **Employment**

- O Prince of Songkla University, 1995-present
- O Foremost Friesland (Thailand) PLC
- O Thai-Danish Dairy-Farm Promotion Organization
- O Continental Pacific (1979) limited

## Other appointments

- O Vice president for student development and alumni affairs, Prince of Songkla University, 2022-present
- O Committee member of the Faculty of Veterinary science, Prince of Songkla University, 2017-present
- O Committee member of the Faculty of Environmental management, Prince of Songkla University, 2016-present
- O Editorial board member: Journal Applied Membrane Science and Technology, 2007-present
- O Member of Prince of Songkla University Council (2017-2022)
- O Committee member of Prince of Songkla Scientific Center, 2014-2022
- O Executive committee member of the Food Science and Technology Association of Thailand (FoSTAT) (2014-2022)
- O Executive committee member of Agro- industry Academic council (AIAC), Thailand (2014-2022)

- O Dean of the Faculty of Agro-industry, PSU (2014- 2022)
- O Committee member of outreach center, Prince of Songkla University, 2018-2020
- O Committee member of the Faculty of medical Technology, Prince of Songkla University, 2015-2016
- O Director for Membrane Science and Technology Research Center, PSU, (2007-2013)
- O Acting Dean, Faculty of Agro-industry, PSU (Dec 2006- Mar 2007)
- O Associate Dean, Faculty of Agro-industry, PSU (2002-2007)
- O Associate Director for Membrane Science and Technology Research Center, PSU, (2002- 2007)
- O Conference chair: International conference on membrane science and technology (MST2008, MST2012)
- O Scientific committee: International conference on membrane science and technology during 2003-2017

#### Research area/interests:

- O Food and bioprocess engineering
- O Membrane technology for water, food and bioproduct applications
- O Advanced separation process of bioactive ingredients and bio-products for functional foods and nutraceutical applications
- O Non-thermal process for foods and bioproducts
- O Prebiotic and peptide: process development, bioactivity studies and functional food product development
- O Sustainability in Agro-food sector

#### Current research

- O Production of bioactive peptides from mung bean protein and food processing waste using microbial and enzymatic membrane reactors
- O Membrane as a clean technology in Agro-food industries
- O Forward osmosis/ for concentration of fruit juice, low molecular weight functional foods and bio products
- O Computational fluid dynamic simulation in membrane process
- O Production and properties of prebiotic from cassava, algae and food processing waste
- O Functional fruit juice, milk and plant protein products: process and product development, and bioactive activity studies
- O Sustainability in Agro-food sector

#### Selected research article

- Liew, Zhen-Shen., Ho, Yeek-Chia, Lau., Woei Jye., Youravong, Wirote., Sirinupong, Tippawan., Liang, and Yong Yeow., (2023), Investigations on membrane performance for coconut water concentration under pressure and by osmotically driven process; Journal of chemical technology and biotechnology, 98(7), 1722-1730
- 2. Kaewsedam, Thitirat, Youravong, Wirote, Li, Zhenyu, Wichienchot, Santad., (2023), Modulation of gut microbiota and their metabolites by functional mulberry juice non-thermally pasteurized using microfiltration Functional foods in health and decease, 12(9), 547-563
- 3. Deka Andriantopo Putri., Wirote Youravong and Santad Wichienchot., 2022, In vitro human fecal fermentation of agarooligosaccharides from Gracilaria fisheri, Bioactive carbohydrate and dietary fibre, 27, 100299
- 4. Penporn Sriniworn., Santad Wichienchot and Wirote Youravong., 2022, Purification of Soybean oligosaccharides of tofu whey using a hybrid process based on enzymatic hydrolysis and nanofiltration, Journal of Applied membrane science & technology, 26(2), 1-10
- 5. Jianfei Pei., Shanshan Gao., Sarper Sarp., Haihua Wang., Xiaonan Chen., Jin Yu., Tianli Yue., Wirote Youravong and Zhenyu Li, 2021, Emerging forward osmosis and membrane distillation for liquid food concentration: A review, Comprehensive reviews in Food Science and Food Safety, 20(2), 1190-1936
- 6. Phalgun Natarajan., B. Sasikumar., S. Elakkiya ., G. Arthanareeswaran ., A.F. Ismail., Wirote Youravong., Erna Yuliwati., Pillared cloisite 15A as an enhancement filler in polysulfone mixed matrix membranes for CO2/N2 and O2/N2 gas separation, 2021, Journal of Natural Gas Science and Engineering, 86.103720
- 7. Zhanga, J., Li, S., Wang, W., Pei, J., Zhanga, J., Yue, T., Youravong., W and Li, Z, 2021, Bacteriocin assisted food functional membrane for simultaneous exclusion and inactivation of Alicyclobacillus acidoterrestris in apple juice, Journal of MembraneScience, 68, 118741.
- 8. Sirinupong, T., Youravong, W and Tirawat., 2020, Vibration-assisted forward osmosis process for Mao (Antidesma Bunius L. Spreng.) juice concentration: water flux enhancement and preservation of phytochemicals., International Food Research Journal, 27(6),1156-1166

- 9. Siriporn Chunkao , Wirote Youravong , Chutha T. Yupanqui, Adeola M. Alashi and Rotimi E. Aluko, 2020, Structure and Function of Mung Bean ProteinDerived Iron-Binding Antioxidant Peptides, Foods, 1406
- 10. Marthosa, S., Youravong, W and Anancharoenwong, E, 2020, Influence of Pretreatments on Sustainability of Bioethanol Production from NapierGrass, International Journal of Integrated Engineering, 12(05), 197-202
- 11. Pei, J., Pei., S, Wang, W., Youravong, W and Li, Z, 2020, Athermal forward osmosis process for the concentration of liquid egg white: Process performance and improved physicochemical property of protein, Journal of Food Chemistry, 312, 126032
- 12. Kasiwut, J., Youravong, W and Sirinupong, N, 2019, Angiotensin converting enzyme inhibitory peptides produced from tuna cooking juice hydrolysate by continuous enzymatic membrane reactor, Journal of Food Biochemistry,43(2), e13058
- 13. Budseekoada, S., Yupanquic, C.T., Alashid, A.M., Aluko, R.E and Youravong, 2019, Anti-allergic activity of mung bean (Vigna radiata (L.) Wilczek) protein hydrolysates produced by enzymatic hydrolysis using non-gastrointestinal and gastrointestinal enzymes, Journal of Food Biochemistry, 43, 1-15
- 14. Budseekoada, S., Yupanquic, C.T., Sirinupong, N., Alashid, A.M., Aluko, R.E and Youravong, W, 2018, Structural and functional characterization of calcium and iron-binding peptides from mung bean protein hydrolysate, Journal of Functional Foods, 4, 333-341.
- 15. Sirinupong, T., Youravong, W., Tirawat, D., Lau, W.J., Lai, G.S and Ismail, A.F, 2018, Synthesis and characterization of thin film composite membranes made of PSF-TiO<sub>2</sub>/GO nanocomposite substrate for forward osmosis applications, Arabian Journal of Chemistry, 11(7),1144-1153.
- 16. Kasiwut, J., Sirinupong, N and Youravong, W, 2018, The Anticoagulant and Angiotensin I-Converting Enzyme (ACE) Inhibitory Peptides From Tuna Cooking Juice Produced By Alcalase, Current Nutrition & Food Science, 14(3), 225-234.
- 17. Martosa, S., Youravong, W., Kongmanklang, C and Kongnakorn, W, 2018, Applications and characterization of silicalite-1/polydimethylsiloxane composite membranes for the pervaporation of a model solution and fermentation broth, Journal of Polymer Engineering, 39(2), 152-160.
- 18. Saelin, S.., Wattanachant and Youravong, W., 2017, Evaluation of water holding capacity in broiler breast meat by electrical conductivity, International Food Research Journal, 24(6), 2593-2598.

- 19. Lertwittayanon, K., Youravong, W and Lau, W.J., 2017 Enhanced catalytic performance of Ni/ $\alpha$ -Al2O3 catalyst modified with CaZrO3 nanoparticles in steam-methane reforming, International Journal of Hydrogen Energy, 42 , 28254-28265
- 20. Thuanthong, M., De Gobba, C., Sirinupong, N., Youravong W and Otte, J. 2017, Purification and characterization of angiotensin-converting enzyme-inhibitory peptides from Nile tilapia (Oreochromis niloticus) skin gelatin produced by an enzymatic membrane reactor, Journal of Functional Foods, 33, 243-254
- 21. Narin Charoenphun and Wirote Youravong, 2017, Influence of gas-liquid twophase flow on angiotensin-I converting enzyme inhibitory peptides separation by ultra-filtration, Journal of the Science of Food and Agriculture, 97(1) 309-316
- 22. Penporn Sriniworn, Wirote Youravong and Wassa, Khongnakorn, 2016, Recovery of protein from mung bean processing waste by rotary ultrafiltration, Journal of Engineering Science and Technology, 7: 947-961
- 23. Lertwittayanon, K., Truektrong, O., Inthanu, W and Youravong, W. 2016, Electroless Plating of Pd on Macro-Porous Alumina Support for H₂Purification, Key Engineering Materila, 657, 556-559
- 24. Mantaka Thuanthong, Nualpun Sirinupong, Wirote Youravong, 2016, Triple Helix Structure of Acid Soluble Collagen derived from Nile tilapia Skin as Affected by Extraction Temperature, Journal of the Science of Food and Agriculture, 96: 3795-3800
- 25. Rusman, Dasaesamoh., Wirote, Youravong. and Santad, Wichienchot, 2016 Digestibility, fecal fermentation and anti-cancer of dragon fruit oligosacchairdes, International Food Research Journal, 23(6): 2581-2587
- 26. Rusman, Dasaesamoh., Wirote, Youravong. and Santad, Wichienchot, 2016, Optimization on pectinase extraction and purification by yeast fermentation of oligosaccharides from dragon fruit (*Hyloceus undatus*), International Food Research Journal, 23(6): 2601-2607
- 27. Chiraphon Chaikliang, Santad Wichienchot, Wirote Youravoug and Potchanapond Graidist, 2015, Evaluation on prebiotic properties of Beta-glucan and oligo-Beta-glucan from mushrooms by human fecal microbiota in fecal batch culture, Functional Foods in Health and Disease; 5(11): 395-405
- 28. Santad Wichienchot, Wirote Youravong, Suwattana Prueksasri and Budsaraporn Ngampanya, Recent researches on prebiotics for gut health in Thailand, 2015, Functional Foods in Health and Disease; 5(11): 381-394
- 29. Mokhtar, N. M., Lau, W.J, Ismail, A.F, Youravong, W, Khongnakornb W, and Lertwittayanon, K, 2015, Performance evaluation of novel PVDF–Cloisite 15A

- hollow fiber composite membranes for treatment of effluents containing dyes and salts using membrane distillation, RSC Advances, 5, 38011–38020
- 30. Aporn Laorko., Sasitorn Tongchitpakdee and Wirote Youravong, 2015, Economic Assessment for Cold Sterilization and Clarification of Pineapple Juice and Coconut Water using Microfiltration, J. Applied Membrane Science and Technology, 17: 35-46
- 31. Penporn Sriniworn, Wirote Youravong and Santad Wichienchot. 2015. Permeate flux enhancement in ultrafiltration of tofu whey using pH-shifting and gasliquid two-phase flow, Separation Science and Technology, 50, 2367-2374
- 32. Jirawadee Kasiwut, Wirote Youravong, Pittaya Adulyatham and Nualpun Sirinupong, 2015, Angiotensin I-converting enzyme inhibitory and Ca-binding activities of peptides prepared from tuna cooking juice and spleen proteases, International Journal Food Science and Technology, 50, 389–395
- 33. Mantaka Tauntong, Nualpun Sirinupong and Wirote Youravong, 2014, Effect of Pre-Hydrolysis by Alcalase on Enzymatic Membrane reactor Performance in Production of Low Molecular Weight Peptide from Nile Tilapia Skin Gelatin, Kasetsart Journal. (Nat. Sci.) 48: 1-13
- 34. Watsa Khongnakorn., Weerapong Bootluc and Wirote Youravong, 2014, Surface Modification of CTA-FO Membrane by CO2 Plasma Treatment, Journal of Teknol 70(2): 71-75
- 35. Sothyreak, Chhun., Wats,a Khongnakorn and Wirote Youravong, 2014, Energy consumption for brine solution recovery in direct contact membrane distillation, Advanced materials Research, 931-932: 256-260
- 36. Aporn, Laorko, Sasitorn Tongchitpakdee and Wirote Youravong, 2013, Storage quality of pineapple juice non-thermally pasteurized and clarified by microfiltration, J Food Engineering, 16(2): 554-561
- 37. Narin, Charoenphun., Wirote, Youravong and Benjamas, Cheirsilp, 2013, Determination of reaction kinetics of hydrolysis of Tilapia (*Oreochromis niloticus*) muscle protein for manipulating production of bioactive peptides with antioxidant activity, angiotensin-I-converting anzyme (ACE) inhibitory activity and Ca-binding properties, Int J Food Sci Tech, 48 (2): 419-428
- 38. Narin, Charoenphun, Benjamas, Cheirsilp, Nualpun, Sirinupong and Wirote, Youravong, 2013, Calcium-binding peptides derived from tilapia (*Oreochromis niloticus*) protein hydrolysate, Eur Food Res Technol, 236 : 57-63
- 39. Muhammadameen, Hajihama and Wirote, Youravong, 2013, Concentration and desalination of protein derived from tuna cooking juice by nanofiltration, J Teknol, 65(4): 1-6

- 40. Aporn Laorko., Sasitorn Tongchitpakdee and Wirote Youravong, 2012, Effect of gas sparging on fouling and fouling mechanism during microfiltration of pineapple juice and coconut water, J. Appli Membr Sci Tech, 15: 31-41
- 41. Aporn Laorko, Zhen-yu Li., Sasitorn Tongchitpakdee and Wirote Youravong, 2011, Effect of gas sparging on flux enhancement and phytochemical properties of clarified pineapple juice by microfiltration, Sep Purif Technol, 80: 445-451
- 42. Aporn Laorko, Zhen-yu Li., Sasitorn, Tongchitpakdee., Suphitchaya Chantachum. and Wirote Youravong, 2010, Effect of membrane property and operating conditions on phytochemical properties and permeate flux during clarification of pineapple juice, J Food Eng, 100: 514-521
- 43. Adisorn, Khatprathum., Piyarat, Siriwongpaisaan. and Wirote, Youravong., 2010, Concentration of Protein in fish mince wash water discharged from surimi processing plant by ultrafiltration, Desalination and water treatment, 21: 1-7
- 44. Wirote Youravong, Zhen-yu Li, Aporn Laorko, 2010, Influence of gas sparging on clarification of pineapple wine by microfiltration, J Food Eng, 9:, 427-432
- 45. Zhen-Yu Li, Aran H-Kittikun and Wirote Youravong, 2010, Protein hydrolysis by protease isolated from tuna spleen by membrane filtration: A comparative study with commercial proteases. LWT, 43(1), 166-172
- 46. Zhen-Yu Li, Aran H-Kittikun and Wirote Youravong. 2009. Purification of protease from pre-treated tuna spleen extract by ultrafiltration: An altered operational mode involving critical flux condition and diafiltration. Sep Purif Technol, 66: 368 374.
- 47. Zhen-Yu Li, Aran H-Kittikun and Wirote Youravong, 2008, Separation of protease from yellowfin tuna spleen extract by ultrafiltration: effect of hydrodynamics and gas sparging on flux enhancement and selectivity, J Membrane Sci, 311(1-2): 104-111
- 48. Zhen-Yu Li, Wirote Youravong and Aran H-Kittikun, 2008, Removal of suspended particles from extract of tuna spleen by microfiltration: experimental evaluation of a low fouling condition, J. Food Eng, 85 (2): 309-315
- 49. Zhen-yu Li, Aran H-Kittikun and Wirote Youravong, 2008, Removal of suspended solids from tuna spleen extract by microfiltration: a batch process design and improvement, Biochemical Eng J, Vol. 38(2): 226-233
- 50. Aporn Laorko , Zhenyu Li, Wirote Youravong, Sasitorn Tongjitpakdee and Supitchaya Chantachum, 2007 Cold sterilization of coconut water using membrane filtration: effect of membrane property and operating condition, J Appli Membrane Sci Tech, 6: 9-17

- 51. Zhen-Yu Li, Wirote Youravong and Aran H-Kittikun, 2006, Analysis of fouling mechanism during dead end microfiltration of tuna spleen, J. Anhui U of tech and sci, 21: 1-6
- 52. Ritthipairote, T., Youravong, W. and Wanichapichart, P., 2006, Flux, rejection and fouling during ultrafiltration and microfiltration of sugar palm sap using a pilot plant scale. Songklanakarin J Sci Techno, 28(4): 817-828
- 53. Zhen-yu, Li., Youravong, W. and H-Kittikhun, A., 2006, Separation of protease enzymes from yellowfin tuna extract by ultrafiltration. Bioresource Technol, Vol. 97: 2364-2370.
- 54. Youravong, W., Pakdeekong, M. and Taksinpatanapong, P., 2005, Influence of membrane properties on pineapple wine clarification and fouling behavior. J. Appli Membrane Sci Tech, 1: 9-18
- 55. Tachratanamanee, R, Cherdrungsi, K. and Youravong, W, 2004, Fractionation of protein in surimi waste water using membrane filtration. J. Teknologi, 41(F): 1-10
- 56. Youravong, W, Lewis, M.J. and Grandison, A.S., 2003, Critical flux in ultrafiltration of skimmed milk. Trans. IChemE, Part C, 81: 303-308.
- 57. Youravong, W, Grandison., A.S. and Lewis, M.J., 2003, The effect of physicochemical change on critical flux of skimmed milk ultrafiltration, Songklanakarin J Sci Techno, 24:929-939
- 58. Youravong, W, Grandison, A.S. and Lewis, M.J., 2002, The effect of hydrodynamic and physicochemical changes on critical flux of milk protein suspensions. J. of Dairy Research, 69: 443-455
- 59. Grandison, A.S., Youravong, W and Lewis M.J., 2000, Hydrodynamic factors effecting flux and fouling during ultrafiltration of skimmed milk, Lait, 80 (1): 165–174.

## **Book chapter**

- 1. Youravong, W and Marthosa, S. 2017, Membrane Technology in Fish-processing Waste Utilization: Some Insights on Sustainability, Book chapter in Sustainability Challenges in the Agro-food Sector, Bhat, R (Ed). John Wiley & Sons, Inc., SBN: 978-1-119-07276-8
- 2. Charoenphun, N and Youravong, W. 2017. Utilization of by-products and waste generated from the tilapia processing industry, Book chapter in Tilapia and Trout: harvesting, prevalence and benefits, Barbara Richardson (Ed), Nova Science Publishers, Inc. ISBN: 978-1-53610-557-5.
- 3. Youravong, W. and Li, Z.Y. 2009. Membrane Technology in the Fishery Industry A State of the Art, Book chapter in Biochemical Engineering: Biotechnology in Agriculture, Industry and Medicine, Fabian E. Dumont and Jack A. Sacco (Eds). Nova Science Publishers, Inc. ISBN: 978-1-60741-257-1.

## Conference proceeding/attending

- 1. Wirote Youravong, Innovation Processing of Membrane Filtration for Foods: Minimum thermal pasteurization of fruit juice by microfiltration, the 21<sup>st</sup> Food Innovation Asia Conference, 13-15 June, 2019, BITEC, Bangkok, Thailand.
- 2. Wirote Youravong, Membrane technology as a minimum thermal process for the fruit juice industry, Invited speaker, the 13<sup>th</sup> International conference on membrane science and technology (MST2017), 16<sup>th</sup>Noverber, 2017, Patra Jasa Hotel, Semarang, Indonesia
- 3. Wirote Youravong, An enzymatic membrane reactor for nutraceutical and functional foods. Keynote speaker, the 11<sup>th</sup> International conference on membrane science and technology (MST2013), 27-29 August, 2013, Seri Pacific Hotel, Kuala Lumpur, Malaysia
- 4. Mantaka Tauntong, Wirote Youravong and Nualpun Sirinupong, Acetic acid removal of fish skin collagen by ultrafiltration, the 11<sup>th</sup> International conference on membrane science and technology, 27-29 August, 2013, Seri Pacific Hotel, Kuala Lumpur, Malaysia
- Penporn Sriniworn, Santad Wichienchot and Wirote Youravong, Separation of oligosaccharides from UF- pretreated tofu whey by nanofiltration, the 11<sup>th</sup> international conference on membrane science and technology, 27-29 August, 2013, Seri Pacific Hotel, Kuala Lumpur, Malaysia
- Muhammadameen Hajihama, Wirote Youravong, Concentration and desalination of protein derived from tuna cooking juice by nanofiltration, the 11<sup>th</sup> international conference on membrane science and technology, 27-29 August, 2013, Seri Pacific Hotel, Kuala Lumpur, Malaysia
- 7. Rusman Dasaesamoh, Wirote Youravong and Santad Wichienchot,
  Optimization of oligosaccharides extraction from dragon fruit's flesh.the 4<sup>th</sup>
  International conference on Natural products for health and beauty. 28-30
  November, 2012. Chiang Mai Royal Orchid, Chiang Mai, Thailand.
- 8. Kridsada Keawyok, Wirote Youravong, and Santad Wichienchot, Extraction of prebiotics from dragon fruit's peel, the 4<sup>th</sup> International conference on Natural products for health and beauty. 28-30 November, 2012. Chiang Mai Royal Orchid, Chiang Mai, Thailand.
- 9. Narin, Charoenphun, Benjamas, Cheirsilp, and Wirote, Youravong, Influence of gas/liquid two phase flow during ultrafiltration of tilapia protein hydrolysate on Ca-binding peptide separation. The 10<sup>th</sup> International on membrane on membrane science and technology. 22 -24 August, 2012. Amari Atrium hotel, Bangkok, Thailand.

- 10. Penpron, Sriniworna., Santad, Wichienchot, and Wirote, Youravong., Enhance of pepremate flux during soy whey ultrafiltration by gas sparging and pH modification. The 10<sup>th</sup> International on membrane on membrane science and technology. 22 -24 August, 2012. Amari Atrium hotel, Bangkok, Thaialand.
- 11. Narin, Charoenphun, Benjamas, Cheirsilp, and Wirote, Youravong, Production of antioxidant peptides from tilapia protein hydrolysate using membrane bioreactor. The 38<sup>th</sup> Congress on Science and Technology of Thailand (STT 38), 17-19 October 2012, Chiang Mai, Thailand.
- 12. Narin, Charoenphun, Benjamas, Cheirsilp, and Wirote, Youravong, Ca-binding peptides derive for tilapia (*Oreochromis niloticus*) protein hydrolysate. The international conference on food structures, Digestion health (FSDH), 7 9 March 2012, Convention Centre, Palmerston North, New Zealand.
- 13. Narin, Charoenphun, Benjamas, Cheirsilp, and Wirote, Youravong, Influence of gas/liquid two phase flow during ultrafiltration of tilapia protein hydrolysate on Ca-binding peptide separation. The 10<sup>th</sup> International on membrane on membrane science and technology. 22 -24 August, 2012. Amari Atrium hotel, Bangkok, Thailand.
- 14. Wirote, Youravong,, Membrane as clean technology for the food industry, Keynote Speaker, The 8<sup>th</sup> International on membrane on membrane science and technology. 30-31 November, 2010. Institute of Technology Bandung, Bandung, Indonesia
- 15. Wirote, Youravong., Membrane technology in fishery waste utilization., Keynote speaker, The 7<sup>th</sup> International on membrane on membrane science and technology. 13-15 May, 2009. Corus Hotel, Kuala lumper, Malaysia
- 16. Zhenyu, Li H-Kittikhun, A and Youravong, W., A multi stages membrane filtration process for separation and purification of proteases from the waste of fishery industry. The 6<sup>th</sup> Regional symposium on membrane science and technology. 13<sup>th</sup>-15<sup>th</sup> August, 2008. Phuket Graceland Resort & Spa Hotel, Phuket, Thailand.
- 17. Khatprathum, A., Siriwongpaisaan, P. and Youravong, W, Functional properties of protein recovery from wash water fish mince in surimi industry using ultrafiltration, Food innovation Asia conference,12-13 June, 2008, Bitec, Bangna, Bankok, Thailand
- 18. Khatprathum, A., Siriwongpaisaan, P. and Youravong, W, Concentration of protein in surimi wash water using ultrafiltration: performance and modeling of permeate flux, The 4<sup>nd</sup> Regional symposium on membrane science and technology. 26-29 April, 2006. Nanyang Technological University, Singapore
- 19. Sakpetch, P., Suntinanalert, P and Youravong, W, Diafiltration and concentration of protein hydrolysate mixture by nanofiltration, The 4<sup>nd</sup> Regional symposium on

- membrane science and technology. 26-29 April, 2006. Nanyang Technological University, Singapore
- 20. Ritthipairote, T., Sripaiboon, P. and Youravong, W, Fouling and fouling mechanism during membrane filtration of sugar palm Sap using ceramic membrane, The 4<sup>nd</sup> Regional symposium on membrane science and technology. 26-29 April, 2006. Nanyang Technological University, Singapore
- 21. Zhenyu, Li., Youravong, W. and H-Kittikhun, A, Effect of crossflow velocity on suspended solid removal: critical flux and limiting flux in microfiltration of tuna spleen extract. The 4<sup>nd</sup> Regional symposium on membrane science and technology. 26-30 April, 2006. Nanyang Technological University, Singapore
- 22. Sakpetch, P., Suntinanalert, P and Youravong, W The possibility of separating NaCl from protein hydrolysate mixtures using nanofiltration, The 3<sup>nd</sup> Regional symposium on membrane science and technology. 26-29 April, 2005. Institute of Technology Bandung, Indonesia
- 23. Rhittipairote, T, Youraovng, W and Wanichapichat, P. Clarification of sugar palm sap using a pilot scale microfiltration. The 2<sup>nd</sup> Regional symposium on membrane science and technology. 22<sup>nd</sup>-25<sup>th</sup> April, 2004. The University technology Malaysia, Jahor, Malaysia.
- 24. Zhenyu, Li, Youravong, W and Kittikhun, A.H., Separation of protease enzymes from yellowfin tuna viscera by ultrafiltration. the 2<sup>nd</sup> Regional symposium on membrane science and technology. 22-25 April, 2004 .The University technology Malaysia, Jahor, Malaysia.
- 25. Youravong, W, Grandison, A.S, Lewis, M.J. The effect of physicochemical changes on critical flux of skimmed milk ultrafiltration. Proceeding of regional symposium on membrane science and technology, 16-17 January 2003, BP Samila Beach Hotel, Songkhla, Thailand
- 26. Youravong, W, Flux and fouling during ultrafiltration of surimi wash water, the 5<sup>th</sup> international conference on membrane science and technology, 10-14<sup>th</sup> November 2003, UNESCO center for membrane science and technology, The University of New South Wales, Australia.

## Consultancy

Fields

-Process development for novel foods and bio-products, clean/green technology in agro-industry, Membrane technology: process development, system & plant design and industrial applications, thermal and non- thermal aseptic processing technology

-Operation management in food industry and supply chain

Major industry

Membrane system manufacturing, Seafood industry, fruit & vegetable industry, dairy industry, functional food industry, palm oil industry, rubber industry

# Technical training course/workshop

# Course director/Trainer

- Membrane technology in the food, palm oil mill and rubber industries
- UHT technology for beverage and dairy industries
- Heat and mass transfer in food processing

## Course Trainer

- Process authority of thermal process sterilization for the food industries (Series of Food Safety Course of Thai Food and Drug Administration)
- Retort supervisor of thermal process sterilization for the food industries (Series of Food Safety Courses of Food and Drug Administration, Thailand)