

## CURRICULUM VITAE



**Name:** Mr. SAKSIT CHANTHAI

**Academic position:** Associate Professor in Chemistry

**Education:** 1997 Ph.D. (Chemistry/Applied Biochemistry), Sophia University (Tokyo), Japan

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1987 M.Sc. (Chemistry/Analytical Chemistry), Chiang Mai University, Thailand

1981 B.Sc. (Chemistry), Khon Kaen University, Thailand

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**Fields of Interests:** Sample preparation and Instrumental Methods of Analysis of Foods and Drinks, and Bioanalytical Chemistry

### Current Research Topics:

1. Analysis of volatile aroma compounds, phenolic compounds and fruit organic markers and plant pigments related to their antioxidant activity.
2. Preconcentration and ultra-trace analysis of essential elements and toxic heavy metals and their speciation analysis including free and bound cyanides.
3. Studies on multi-functionalized graphene oxide/chitin/chitosan and its analytical applications.
4. Studies on in-land fish myoglobins involving structural and functional properties.

### Research Presentation and Publications (1982 - present)

#### International Publications:

- 1) Kongsri, S., Techawongstien, S., Luthria, D. and Chanthai, S. (2015) Adsorption enhancement of plant carotenoid onto mesoporous nanocrystalline hydroxyapatite in the presence of sodium dodecyl sulfate. *Adsorption Science and Technology* (submitted)

- 2) Nuengmatcha, P., Mahachai, R. and Chanthai, S. (2015) Adsorption of functionalized thiol-graphene oxide for the removal of mercury from aqueous solution. *Asian J. Chem.*, **27**(5): xx-xx.
- 3) Limchoowong, N., Techawongstein, S., Luthria, D. and Chanthai, S. (2015) Optimization study of suitable pre-reduction agents for selenium analysis in tomato samples by flow injection-hydride generation atomic absorption spectrometry. *Inter. Food Res. J.* (accepted).
- 4) Sripakdee, T., Sriwicha, A., Jansam, N., Mahachai, R. and Chanthai, S. (2015) Determination of total phenolics and ascorbic acid related to an antioxidant activity and thermal stability of the Mao fruit juice. *Inter. Food Res. J.* (accepted).
- 5) Srirachoen, P., Techawongstein, S., Luthria, D. and Chanthai, S. (2014) Standardization of antioxidant power of gallic acid, catechin, trolox,  $\alpha$ -tocopherol, ascorbic acid and BHT with DPPH, ABTS and FRAP assays to direct total antioxidant activity of tomato extracts using ultrasound assisted extraction. *Inter. J. Phytomedicine* (accepted).
- 6) Maokam, C., Techawongstien, S. and Chanthai, S. (2014) Determination of major and minor capsaicinoids in different varieties of the *Capsicum* fruits using GC-MS and their inhibition effect of the chilli extract on the amylase activity. *Inter. Food Res. J.* **21**(6), xx-xx.
- 7) Songsungkan, J. and Chanthai, S. (2014) Determination of synergic antioxidant activity of the methanol/ethanol extract of allicin in the presence of total phenolics obtained from the garlic capsule compared with fresh and baked garlic clove. *Inter. Food Res. J.* **21**(6), xx-xx.
- 8) Nuengmatcha, P., Mahachai, R. and Chanthai, S. (2014) Thermodynamic and kinetic study of the intrinsic adsorption capacity of graphene oxide for malachite green removal from aqueous solution. *Oriental J. Chem.*, **30**(4): 1463-1474.
- 9) Nuengmatcha, P., Mahachai, R. and Chanthai, S. (2014) Removal of Hg(II) from aqueous solution using graphene oxide as a highly potential adsorbent. *Asian J. Chem.*, **26**(Suppl.), S85-S88.
- 10) Sripakdee, T., Mahachai, R. and Chanthai, S. (2014) Determination of total phenolic compounds and flavonoid contents related to antioxidant activity of the "Mao" concentrate juice from various sources. *Asian J. Chem.*, **26**(Suppl.), S100-S102.
- 11) Sarawan, S. and Chanthai, S. (2014) Ultra-trace determination of methyl carbamate and ethyl carbamate in local wines by GC-FID following preconcentration with C18-SPE. *Oriental J. Chem.* **30**(3), 1021-1029.
- 12) Phimchan, P., Chanthai, S., Bosland, P.W. and Techawongstien, S. (2014) Enzymatic changes in phenylalanine ammonia-lyase, cinnamic-4-hydroxylase, capsaicin synthase, and peroxidase activities in *Capsicum* under drought stress. *J. Agric. Food Chem.* **62**, 7057-7062.
- 13) Taharn, N., Techawongstien, S. and Chanthai, S. (2014) Determination of arsenic chilli and tomato grown in North East Thailand. *ScienceAsia* **40**(1), 53-59.
- 14) Chueachot, R. and Chanthai, S. (2014) Spectrophotometric determination of trace cyanide in fruit wines by the catalytic reaction of ninhydrin following micro-distillation. *Oriental J. Chem.* **30**(1), 119-131.

- 15) Nuengmatcha, P., Mahachai, R. and Chanthai, S. (2014) Optimization study of graphene oxide synthesis with Improvement of C/O ratio. *Asian J. Chem.* **26(5)**, 1321-1323.
- 16) Taharn, N., Techawongstein, S. and Chanthai, S. (2014) Determination of major-to-trace elements in hot chilli and tomato varieties economically grown in the Northeast of Thailand by ICP-OES following microwave assisted digestion. *Inter. Food Res. J.* **21(2)**, 517-522.
- 17) Songsungkan, J. and Chanthai, S. (2014) Study of the allicin extract chelated with some heavy metals ( $\text{Cu}^{2+}$ ,  $\text{Co}^{2+}$  and  $\text{Pb}^{2+}$ ) by fluorescence quenching method and its antioxidant activity. *Asian J. Chem.*, **26(1)**, 132-136.
- 18) Kinaree, S. and Chanthai, S. (2014) Ultra-trace determination of Pb(II) and Cd(II) in drinking water and alcoholic beverages using homogeneous liquid-liquid extraction followed by flame atomic absorption spectrometry. *Chem. Papers* **68(3)**, 342-351.
- 19) Jumepaeng, T., Jantayota, R., Hemmood, S., Komolwanich, S., Wuthisarn, S., Luthria, D.L and Chanthai, S. (2014) Micro-hydrodistillation and gas chromatographic methods for the determination and comparison of some volatile aroma compounds in citronella grass and lemongrass from fresh and dried leaf samples and citronella incense products. *Acta Chromatographia* **26(1)**, 1-14.
- 20) Kongsri, S., Ladawan Na Ayuttaya, P., Yookhum, S., Techawongstein, S. and Chanthai, S. (2013) Characterization of hydroxyapatite nanoparticles from fish scale waste and its adsorption of carotenoids. *Asian J. Chem.* **25(10)**: 5847-5850.
- 21) Panichlertumpi, B. and Chanthai, S. (2013) Ultra-trace determination of Hg(II) in drinking water and local Thai liquors by homogeneous liquid-liquid extraction followed by fluorescence quenching of its ternary complex. *Anal. Methods*, **5**, 987-997.
- 22) Kongsri, S., Janpradit, K., Buapa, K., Techawongstein, S. and Chanthai, S. (2013) Nanocrystalline hydroxyapatite from fish scale waste: Preparation, characterization and application for selenium adsorption in aqueous solution. *Chem. Engineer. J.* **215-216**: 522-532.
- 23) Jumepaeng, T., Prachakool, S., Luthria, D.L. and Chanthai, S. (2013) Determination of antioxidant capacity and  $\alpha$ -amylase inhibitory activity of the essential oils from *citronella grass (Cymbopogon nardus Rendle)* and *lemongrass (Cymbopogon citratus Stapf.)* *Inter. Food Res. J.* **20(1)**: 481-485.
- 24) Phimchan, P., Techawongstien, S. Chanthai, S. and Bosland, P.W. (2012) Impact of drought stress on the accumulation of capsaicinoids in capsicum cultivars with different initial capsaicinoid levels. *HortScience*, **47(9)**: 1204-1209.
- 25) Kongsri, S., Techawongstein, S. and Chanthai, S. (2012) The effect of sodium dodecyl sulfate on the supramolecular complexation between chitosan and  $\beta$ -carotene. *Asian J. Chem.*, **24(12)**, 5457-5459.
- 26) Tongpoothorn, W., Chanthai, S., Sriuttha, M., Saosang, K., Ruangviriyachai, C. (2012) Bioactive properties and chemical constituents of methanolic extract and its fractions from *Jatropha curcas* oil. *Industrial Crops and Products*, **36** (1), 437-444.
- 27) Juangsamoot, J., Ruangviriyachai, C., Techawongstien, S. and Chanthai, S. (2012) The effect of antioxidant capacity of capsaicinoids from hot chilli pepper on the autoxidation of oxymyoglobin. *J. Applicable Chem.*, **1(2)**: 257-271.

- 28) Chotichayapong, C., Wiengsamut, K., Chanthai, S., Sattayasai, N., Tamiya, T., Kanzawa, N. and Tsuchiya, T. (2012) Isolation of heat-tolerant myoglobin from Asian swamp eel (*Monopterus albus*). *Fish Physiol. Biochem.*, **38** (5): 1533-1543.
- 29) Chanthai, S., Juangsamoot, J., Ruangviriyachai, C. and Techawongstien, S. (2012) Determination of Capsaicin and Dihydrocapsaicin in Some Chilli Varieties by RP-HPLC-PDA after magnetic stirring extraction and clean up with C<sub>18</sub> cartridge. *Inter. Food Res. J.* **19**(3), 1217-1226.
- 30) Chanthai, S., Prachakool, S., Ruangviriyachai, C. and Luthria, D.L. (2012) Influence of extraction methodologies on the analysis of five major volatile aromatic compounds of citronella grass (*Cymbopogon nardus*) and lemongrass (*Cymbopogon citratus*) grown in Thailand. *JAOAC Inter.*, **95**(3), 763-772.
- 31) Chanthai, S., Juangsamoot, J., Ruangviriyachai, C. and Techawongstien, S. (2012) Determination of capsaicin and dihydrocapsaicin in some chilli varieties using accelerated solvent extraction associated with solid-phase extraction methods and RP-HPLC-Fluorescence. *E-J Chem.*, **9**(3), 1550-1561.
- 32) Jumpaeng, T., Luthria, D. and Chanthai, S. (2012) The effect of surfactant on headspace single drop microextraction for the determination of some volatile aroma compounds in citronella grass and lemongrass leaves by gas chromatography. *Anal Methods*, **4**(2), 421-428.
- 33) Arnnok, P., Ruangviriyachai, C., Mahachai, R., Techawongstien, S. and Chanthai, S. (2012) Determination of total phenolics and anthocyanin in the pericarp of hot chilli pepper (*Capsicum annuum* L.). *Inter. Food Res. J.* **19**(1), 235-243.
- 34) Chanthai, S., Yaisoongnern, J., Ruangviriyachai, C., Mahachai, R. and Techawongstien, S. (2012) Simultaneous determination of ascorbic acid, dehydroascorbic acid, 5-hydroxymethylfurfural and furfural in hot pepper, wine and fruit juice by HPLC-PDA. *Global J. Anal. Chem.*, **3**(5): 1-10.
- 35) Uawonggul, N., Kongsri, S. and Chanthai, S. (2011) Study on dye-binding interactions of chitosan from the fish scale of Tilapia (*Tilapia nilotica*). *Inter. J. Pure and Applied Chem.*, **6**(2): 139-147.
- 36) Chanthai, S., Suwamart, N. and Ruangviriyachai, C. (2011) Solid-phase extraction with diethyldithiocarbamate as chelating agent for preconcentration and trace determination of copper iron and lead in fruit wine and distilled spirit by flame atomic absorption spectrometry. *E-J Chem.*, **8**(3): 1280-1292.
- 37) Tongpoothorn, W., Sriuttha, M., Homchan, P., Chanthai, S. and Ruangviriyachai, C. (2011) Preparation of activated carbon derived from *Jatropha curcas* fruit shell by simple thermo-chemical activation and characterization of their physico-chemical properties. *Chemical Engineering Research and Design*, **89**(3), 335-340.
- 38) Boonchiangma, S., Chanthai, S., Srijaranai, S. and Srijaranai, S. (2011) Chemical compositions and non-enzymatic browning compounds of Thai honey: A kinetic study. *J. Food Process Eng.*, **34**, 1584-1596.
- 39) Ruangviriyachai, C., Niwaswong, C., Kosaikanon, N., Chanthai, S. and Chaimart, P. (2010) Pineapple peel waste for bioethanol production. *J. Biotech.* **150**, Supplement (Nov), 10.
- 40) Arnnok, P., Ruangviriyachai, C., Mahachai, R., Techawongstien, S. and Chanthai, S. (2010) Optimization and determination of polyphenol oxidase and peroxidase activities in hot pepper (*Capsicum annuum* L.) pericarb. *Inter. Food. Res. J.*, **17**(2), 385-392.

- 41) Tansupo, P., Suwannasom, P., Luthria, D.L., Chanthai, S. and Ruangviriyachai, C. (2009) Optimised separation procedures for the simultaneous assay of three plant hormones in liquid biofertilisers. *Phytochemical Analysis*, **21(2)**, 157-162.
- 42) Tansupo, P., Chamonkolpradit, W., Chanthai, S. and Ruangviriyachai, C. (2009) Removal of heavy metals from artificial metals contaminated water samples based on micelle-templated silica modified with pyoverdin I. *J. Envir. Sci.*, **21**, 1009-1016.
- 43) Tansupo, P., Budzikiewicz, H., Chanthai, S. and Ruangviriyachai, C. (2008) Effect of pH on the mobilization of copper and iron by pyoverdin I in artificially contaminated soils. *ScienceAsia* **34(3)**, 287-292.
- 44) Tessiri, T., Wangboonskul, J., Ruangviriyachai, C. and Chanthai, S. (2007) High-performance liquid chromatography with amperometric detection of medroxyprogesterone acetate in human plasma with 2,4-dinitrophenylhydrazine as derivatizing agent and solid-phase extraction for sample clean-up. *ScienceAsia* **33(4)**, 405-410.
- 45) Chanthai, S., Suwamat, N., Ruangviriyachai, C. and Danvirutai, P. (2007) Speciation analysis of arsenic(III), arsenic(V) and total As by continuous flow-hydride generation-atomic absorption spectrometry in Thai fruit wines and distilled spirits. *ASEAN Food J.* **14(3)**, 181-196.
- 46) Tansupo, T.P., Budzikiewicz, H., Chanthai, S. and Ruangviriyachai, C. (2007) Effect of pyoverdin I produced by *Pseudomonas aeruginosa* on the mobilization of copper (II) and iron (III) contaminated in natural soil and sea sand samples. *Inter. J. Pure and Applied Chem.*, **2(1)**, 93-98.
- 47) Pongpinyo, P., Wongphattagul., W., Hengrasmee, S. and Chanthai, S. (2006) Chemically modified silica gel with DETA-silane as bonded stationary phase for gas-solid chromatography – A theoretical and practical approach. *Inter. J. Pure and Applied Chem.*, **1(3)**: 433-441.
- 48) Pongpinyo, P., Wongphattagul., W., Hengrasmee, S. and Chanthai, S. (2006) Chemically modified silica gel with DETA-silane as complexing bonded sorbent for pre-concentration and determination of heavy metal in natural water using solid-phase extraction method. *Inter. J Pure and Applied Chem.*, **1(3)**: 423-432.
- 49) Chanthai, S., Charoentud, T., Ruangviriyachai, C. and Danvirutai, P. (2006) Solid-phase extraction and HPLC analysis of trace aldehydes as their 2,4-dinitrophenylhydrazones in local Thai wines. *Inter. J. Pure and Applied Chem.*, **1(2)**: 235-244.
- 50) Chanthai, S., Kunno, R., Ruangviriyachai, C. and Danvirutai, P. (2006) Determination of some mineral contents in Thai fruit wines by inductively coupled plasma-atomic emission spectrometry. *Inter. J. Pure and Applied Chem.*, **1(2)**: 245-251.
- 51) Chanthai, S., Ogawa, M., Tamiya, T., and Tsuchiya, T. (1998) Studies on thermal denaturation profiles of holo- and reconstituted myoglobins from bonito and sperm whale. *Fisheries Sci.*, **64(3)**, 411-414.
- 52) Chanthai, S., Nieda, K., Ogawa, M., Tamiya, T., and Tsuchiya, T. (1998) Effect of heating on autoxidation rates of fish holo- and reconstituted myoglobins. *Fisheries Sci.*, **64(4)**, 574-577.
- 53) Chanthai, S., Nieda, K., Ogawa, M., Tamiya, T., and Tsuchiya, T. (1998) Changes in light scattering intensity of fish holo-, apo- and reconstituted myoglobins under thermal denaturation. *Fisheries Sci.*, **64(5)**, 846-847.

- 54) Chanthai, S., Ogawa, M., Tamiya, T., and Tsuchiya, T. (1996) Studies on thermal denaturation of fish myoglobins using differential scanning calorimetry, circular dichroism, and tryptophan fluorescence. *Fisheries Sci.*, **62** (6), 927-932.
- 55) Chanthai, S., Ogawa, M., Tamiya, T., and Tsuchiya, T. (1996) Studies on thermal denaturation of fish apomyoglobins using differential scanning calorimetry, circular dichroism, and fluorescence. *Fisheries Sci.*, **62** (6), 933-937.

#### **National Publications:**

- 56) Choichayapong, C., Kunthadong, P., Thongdee, W., Khottawong, W. and Chanthai, S. (2013) Investigating the influence of capsaicinoids and phenolic compounds from hot pepper extracts on deceleration of autooxidation of myoglobin. *Proceedings of Pure and Applied Chemistry International Conference 2013 (PACCON2013)*, Jan. 23-25, Bangsaen Beach , Chonburi, Thailand.
- 57) Pasan, S., Klangphukeaw, S., Gafni, A., Schauerte, J., Wisser, K., Chanthai, S., Patramanon, R. (2012) Membrane permeabilization of HS-1 N- and C-domains on bacterial living cells and model membrane. *Proceedings of the 13<sup>th</sup> FAOBMB Congress 2012*, Bangkok, Thailand.
- 58) Kunno, R., Ruangviriyachai, C. and Chanthai, S. (2009) Sample preparation for trace analysis of iron, copper and zinc in Thai fruit wines by ICP-AES. *Walailak J. Sci. & Tech.*, 6(2): 243-254.
- 59) Nansathit, A., Apipattarakul, S., Phaosiri, C., Pongdontri, P., Chanthai, S. and Ruangviriyachai, C. (2009) Synthesis, isolation of phenazine derivatives and their antimicrobial activities. *Walailak J. Sci. & Tech.*, 6(1): 79-91.
- 60) Nittayachit, P., Chanthai, S. and Petkam, R. (2009) Effects of chlorpyrifos on acetylcholinesterase activity in the brain, plasma and red blood cell of Nile Tilapia (*Oreochromis niloticus*). *KKU Res J* 14(1), 55-67.
- 61) Chamongkolpradit, W., Budzikiewicz, H., Chanthai, S. and Ruangviriyachai, C. (2008) Immobilization and characterization of Pyoverdin I onto modified micelle-templated silica (MTS) surface as a chelating agent. *KKU Res. J.*, **13**(2): 182-196.
- 62) Tongpoothorn, W., Homchan, P., Chanthai, S. and Ruangviriyachai, C. (2008) Preparation and characterization of activated carbon from *Jatropha curcas* fruit shell by different chemical activating agents. *KU Sci. J.*, 26 (1-2), 72-77.
- 63) Sriuttha, M., Tupjun, M., Chanthai, S. and Ruangviriyachai, C. (2008) Preliminary preparation of activated carbon from Mangosteen (*Garcinia Mangostana* L.) shell. *KU Sci. J.* 26 (1-2), 78-84.
- 64) Chanthai, S. (2008) Speciation analysis of heavy metals contaminated in food and drinks, and from environmental samples. *KKU Sci. J.* **36**(1), 16-28. (in Thai)
- 65) Tongtumma, S. Chanthai, S., Bunyarachata, W. and Ruangviriyachai, C. (2007) A study on an influence of some factors affecting on pyocyanin *KKU Sci. J.* **35**(2), 123-133. (in Thai)
- 66) Hongthani, W., Chanthai, S., Bunyarachata, W. and Ruangviriyachai, C. (2007) Production and analysis of antibiotic phenazine from *Pseudomonas aeruginosa*. *KKU Sci. J.* **35**(1) 49-59. (in English)

- 67) Saosoong, K., Tongtumma, S., Chanthai, S., Wongphathanakul, W., Bunyatratchata, W. and Ruangviriyachai, C. (2007) Isolation and study of chemical properties of pyocyanin produced from *Pseudomonas aeruginosa* TISTR 781 (ATCC 9027). *KKU Res. J.* **12**(1): 24-32. (in English)
- 68) Chanthai, S., Phuwongpha, N. and Danvirutai, P. (2005) Analysis of lead and arsenic in local spirits. *KKU Sci. J.* **33** (3-4): 98-104. (in Thai).
- 69) Chanthai, S., Phuvongpa, N. and Danvirutai, P. (2005) Chemical analysis of locally produced wines. Part II. Total solids and some heavy metals. *J. Academic Service Center Khon Kaen University*, **13** (1): 36-40 (in Thai).
- 70) Trivong, Y., Wajiprasi, S., Srithunyarat, T. and Chanthai, S. (2004) Analysis of thermal properties of some organic mixtures by scanning differential calorimetry. *KKU Sci. J.* **32**(3): 168-177 (in Thai).
- 71) Chanthai, S. and Danvirutai, P. (2004) Chemical analysis of locally produced wines. Part I. Acidity and organic compounds. *J. Academic Service Center Khon Kaen University*, **12**(1): Jan.-Mar., 23-29 (in Thai).
- 72) Ruttanasook, S., Techawongstien, S., Techawongstien, S. and Chanthai, S. (2003) Studies on capsaicin contents of some chilli varieties. *Agricultural Sci. J.* **34** (1-3, Suppl.): 432-435 (in Thai).
- 73) Chanthai, S., Nangtarach, S., Mool-a-mart, S., Nantachai, K. and Danvirutai, P. (1999) Determination of alcohols and other volatiles in mango and grape wines by gas chromatography. *J. Science KKU*, **27**(3): 137-142 (in Thai).
- 74) Wanapat, M., Sriwattanasombat, P. and Chanthai, S. (1985) The utilization of diets containing untreated rice straw, urea-ammonia treated rice straw and urea-ammonia treated rice straw and water hyacinth (*Eichhornia crassipes*) *Trop. Anim. Prod.*, **10**:50.
- 75) Wanapat, M., Prasertsuck, S., Chanthai, S., (1985) Effects of ensiling rice straw with urea and supplementing with dried cassava leaves on digestion by water buffaloes. *Trop. Anim. Prod.*, **10**(1): 44-49.
- 76) Wanapat, M., Prasertsuk, S., Chanthai, S., Sivapraphagon, A. (1983) Improvement of rice straw utilization by ensiling with urea for cattle during the dry season. *Thai J. Agric. Sci.*, **16**: 267 (in Thai).

#### **Oral presentations:**

- 1) Nuengmatcha, P., Mahachai, R. and Chanthai, S. (2014) Adsorption of thiol-functionalized graphene oxide for the removal of mercury from aqueous solution. *Paper presented at the 8<sup>th</sup> ICMMA, Hoseo University*, Nov. 27-29, Cheonan-Asan, Republic of Korea.
- 2) Maokam, C., Techawongstien, S. and Chanthai, S. (2013) Determination of major and minor capsaicinoids in *Capsicum* fruits using GC-MS and their inhibition effect of the crude extract on the amylase activity. *Paper presented at the 8<sup>th</sup> IMA2013*, Porto Palace Hotel, Sept. 15-19, Thessaloniki, Greece.
- 3) Thaharn, N., Techawongstein, S. and Chanthai, S. (2013) Optimization study on the determination of Inorganic arsenic species in hot chilli pepper and tomato varieties using microwave assisted digestion followed by FI-HGAAS. *Paper presented at the Colloquium Spectroscopicum Internationale XXXVIII*, University of Tromso, June 16-20, Tromso, Norway.

- 4) Kongsri, S., Ladawan Na Ayuttaya, P., Yookhum, S., Techawongstein, S. and Chanthai, S. (2012) Characterization of hydroxyapatite nanoparticles from fish scale waste and its adsorption of carotenoids. ***Paper presentation at the 6<sup>th</sup> ICMMA, Hanbat National University***, Nov. 22-24, Daejeon, Republic of Korea.
- 5) Kongsri, S., Techawongstein, S. and Chanthai, S. (2012) Chitosan interactions with  $\beta$ -carotene: Study of aggregation and flocculation by resonance light scattering and Fourier Transform infrared spectroscopic methods. ***Paper presented at the ICGTCS-2012, the Inder Residency Hotel***, Mar. 3-4. Udaipur, India.
- 6) Sarawan, S., Ruangviriyachai, C. and Chanthai, S. (2011) Determination of trace amounts of methyl carbamate and ethyl carbamate in local Thai fruit wines by gas chromatography. ***Paper presented at the 7<sup>th</sup> IMA 2011***, Sept. 18-22, Chania, Crete, Greece.
- 7) Thanawat J. and Chanthai, S. (2011) Determination of Volatile Aroma Compounds in Citronella Grass and Lemongrass by Single Drop Microextraction and GC. ***Paper presented at the PACCON 2011***, Jan. 5-7, Miracle Grand Hotel, Bangkok, Thailand.
- 8) Chanthai, S., Yaisoongnern, J., Ruangviriyachai, C., Mahachai, R and Techawongstien, S. (2010) Simultaneous determination of ascorbic acid, dehydroascorbic acid, 5-hydroxymethylfurfural and furfural in hot pepper, wine and fruit juice by HPLC-PDA. ***Paper presented at the 11<sup>th</sup> ICCA***, Nov. 20-23, Luxor, Egypt.
- 9) Chanthai, S., Arnnok, P., Ruangviriyachai, C., Mahachai, R. and techwongstien, S. (2009) Evaluation of phenolic oxidase and peroxidase activities in relation to anthocyanin and total phenolic compounds in hot pepper fruits. ***Paper presented at the 11<sup>th</sup> AFC***, Oct. 21-23, Bandar Seri Begawan, Brunei Darussalam.
- 10) Chanthai, S., Prachakool, S. and Ruangviriyachai, C. (2009) Comparative analysis of some volatile aroma compounds, total phenolics and antioxidant activity of essential oil of citronella grass and lemongrass leaves. ***Paper presented at the IMA2009***, Oct.4-8, Athens, Greece.
- 11) Chanthai, S., Kinaree, S. and Ruangviriyachai, C. (2009) Homogeneous liquid-liquid extraction for preconcentration and trace determination of lead in drinking water, distilled spirit and wine by FAAS. ***Paper presented at the CSIXXXVI, Aug.29-Sept. 3***, Budapest, Hungary.
- 12) Boonchiangma, S., Srijaranai, S. and Chanthai, S. (2009) Sample preparation for sugars and carboxylic acids determination in sugar industry: dialysis technique. ***Paper presented at PERCH-CIC Congress VI***, May 3-6, Jomtien Palm Beach Resort Pattaya, Chonburi, Thailand.
- 13) Sriuttha, M., Tupjun, M., Chanthai, S. And Ruangviriyachai, C. (2009) Preliminary characteristics of activated carbon derived from Mangosteen (*Garcinia Mangostana* L.) Shell. ***Paper presented at PERCH-CIC Congress VI***, May 3-6, Jomtien Palm Beach Resort Pattaya, Chonburi, Thailand.
- 14) Nittayachit, P., Chanthai, S. and Petkam, R. (2009) Effect of chlorpyrifos on acetylcholinesterase activity in the brain, plasma and red blood cell of Nile Tilapia (*Oreochromis niloticus*). ***Paper presented at the TRF-MAG Congress III***. April 1-3, Jomtien Palm Beach Resort Pattaya, Chonburi, Thailand.
- 15) Nittayachit, P., Chanthai, S. and Petkam, R. (2008) Effect of chlorpyrifos on acetylcholinesterase activity in the brain, plasma and red blood cell of Nile Tilapia (*Oreochromis niloticus*). ***Paper presented at the TRF-MAG Congress II***. April 4-6, Jomtien Palm Beach Resort Pattaya, Chonburi, Thailand.



- 16) Chanthai, S., Juangsamoot, J., Ruangviriyachai, C. and Techawongstien, S. (2007) Sample preparation and analysis of capsaicinoids in hot pepper samples and their antioxidant activity affecting on myoglobin autooxidation using both magnetic stirring extraction and accelerated solvent extraction associated with SPE clean-up and determined by HPLC-PDA/UV-Visible and fluorescence. *Paper presented at the Singapore International Chemistry Conference (SICC-5) and Asia-Pacific International Symposium on Microscale Separation and Analysis (APCE 2007)*. Dec. 16-19, Suntec Singapore International Convention & Exhibition Center, Singapore.
- 17) Boonchiangma, S., Srijaranai, S. and Chanthai, S. (2007) The determination of hydroxymethylfurfural of Maillard reaction in honey. *Paper presented at the Singapore International Chemistry Conference (SICC-5) and Asia-Pacific International Symposium on Microscale Separation and Analysis (APCE 2007)*. Dec. 16-19, Suntec Singapore International Convention & Exhibition Center, Singapore.
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