



1. **Name:** Miss Kanlaya Jumpatong
2. **Work Position:** Assistant Professor of Chemistry
3. **Workplace:** Department of Chemistry
School of Science
University of Phayao
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4. Academic Qualification:

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| 2003 – 2008 | Ph.D. (Chemistry), Chiang Mai University, Chiang Mai, Thailand
Thesis: Electrocoagulation of Some Colouring Matters in Aqueous Alcoholic Solutions and Its Application
Supervisor: Associate Professor Dr. Duang Buddhasukh
Co- advisor: Professor Stephen G. Pyne |
| 2000 - 2002 | M.Sc.(Chemistry), Chiang Mai University, Chiang Mai, Thailand.
Thesis: Electrocoagulation of Some Heavy Metals
Supervisor: Associate Professor Dr. Duang Buddhasukh |
| 1994 – 1997 | B.Sc. (Chemistry), Chiang Mai University, Chiang Mai, Thailand
Senior project: Extraction of Alkaloids from <i>Solanum laciniatum</i> Leaves
Supervisor: Associate Professor Dr. Duang Buddhasukh |

5. Scholarships and awards:

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| 2022 | Outstanding Researcher award in “Mae Ing Shibori Model” at Phayao Research Conference: Economic and Social Recovery from Covid-19 by Research and Innovation, University of Phayao, Phayao, Thailand. |
| 2021 | Outstanding award in “Mae Ing Shibori Model” at Social Innovation Driving Unit: SID 2021, Tops Plaza Phayao, Phayao, Thailand. |
| 2020 | Outstanding personnel award in “Administration”, Science and Technology, University of Phayao. |
| 2020 | Outstanding award in “Thung Mok Model” at Thailand Research Expo 2020, Centara Grand and Bangkok Convention Centre at Centralworld, Bangkok, Thailand. |
| 2019 | Poster presentation awards in “Study of Natural dye properties from the fruits of <i>Harrisonia perforate</i> (Blanco) Merr. in Phayao Province” at The 11 th National Science Research Conference (src11), Srinakharinvirot University, Bangkok, Thailand. |
| 2016 | EnT Best Case Studies award in University Engagement Thailand “Thung Mok Model” |
| 2013 | Education Volunteer award in Volunteer Spirit 2013 “Natural dyeing process development” |
| 2003 – 2008 | Ph.D. Scholarship supported by The Royal Golden Jubilee Ph.D. Program and the Thailand Research Fund |
| 2005 | Poster presentation awards in The 1 st International Conference on Natural Products for Health and Beauty entitle “Study of Electrocoagulation of Some Natural Colouring Matters in Aqueous Alcoholic Solutions” |
| 2000 – 2003 | M.S. research supported by Graduate School of Chiang Mai University |

6. Work experiences:

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| 2019 – Present | Vice - Dean for Administration and Planning of School of Science, University of Phayao, Thailand |
| 2013 – 2019 | Vice - Dean for Administration of School of Science, University of Phayao, Thailand |

2009 – 2012	Head of Chemistry Department, School of Science, University of Phayao, Thailand
2007 – Present	Lecturer (Organic chemistry); Department of Chemistry, School of Science, University of Phayao, Thailand
2006	Visiting research fellow at Department of Chemistry, University of Wollongong, Australia from April 11, 2006 – February 16, 2007, under supervision of Prof. Stephen G. Pyne.
1998 – 2000	Researcher of “Dyeing Process Development for Small Scale Industry using Natural Dyes” at Department of Industrial Chemistry, Faculty of Science, Chiang Mai University, Chiang Mai, Thailand

7. Research Project

2022	Utilization from Stingless bees biodiversity in the safe agricultural area, Phayao Province for Health and Beauty. Funding agency: University of Phayao
2022	Research Knowledge to Encourage and Develop Local Knowledge for Sustainable development and applications Funding agency: University of Phayao
2020	Social Innovation Project “Mae Ing Shibori Model” under Scheme of Social Innovation Driving Unit Funding agency: National Innovation Agency (NIA)
2019	Study on Antioxidant activities and Biological Activities of Phenolic Compounds of Jerusalem artichoke (<i>Helianthus tuberosus</i> L.) in Phayao Province. Funding agency: University of Phayao
2019	Preliminary study of <i>Helianthus tuberosus</i> L. extract for skin cosmetic formulation Funding agency: University of Phayao
2018	Research knowledge to create the science and technology model for sustainable development and application in accordance with the speech of the His Majesty the King “Thai Lue Weaving Group, Ban Thung Mok, Ban Mang Sub-District, Chiang Muan District, Phayao Province.” Funding agency: National Research Council of Thailand (NRCT)
2017	Development of Natural Dyeing Process from Ping-Khao (<i>Clerodendrum glandulosum</i> Lindl.) in Genetic Conservation Area, University of Phayao

- Funding agency: University of Phayao
- 2017 Determiration of Antioxidant activities and Biological Activities of Phenolic Compounds from Ping - Khao (*Clerodendrum glandulosum* Lindl.) Province
Funding agency: University of Phayao
- 2017 Biological activities and Nutritional Values of *Pak-Wanpa* and *Pak-Wanpa cultivated* (*Melientha suavis* Pierre.) in Phayao Province
Funding agency: University of Phayao
- 2016 Science and Technology Villages Project: Tai Lue Natural Dyeing Cotton Village, Tung-Mok (5th year)
Funding agency: Ministry of Science and Technology
- 2015 Science and Technology Villages Project: Tai Lue Natural Dyeing Cotton Village, Tung-Mok (4th year)
Funding agency: Ministry of Science and Technology
- 2015 Testing of Antioxidant Activities and Biological Activities of Crude Extracts from Pak-Wanpa (*Melientha suavis* Pierre.) Funding agency: University of Phayao
- 2014 The Isolation and Characterization of Bioactive Compounds in MaKhang Daeng (*Dioecercis erythroclada* (Kurz) Tirveng.) and Ma Khang Khao (*Tamilnadia uliginosa* (Retz.) Tirveng. & Sastre) in Plant Genetic Conservation Area Funding agency: University of Phayao
- 2014 Science and Technology Villages Project: Tai Lue Natural Dyeing Cotton Village, Tung-Mok (3rd year)
Funding agency: Ministry of Science and Technology
- 2013 Science and Technology Villages Project: Tai Lue Natural Dyeing Cotton Village, Tung-Mok (2nd year)
Funding agency: Ministry of Science and Technology
- 2012 Science and Technology Villages Project: Tai Lue Natural Dyeing Cotton Village, Tung-Mok (1st year)
Funding agency: Ministry of Science and Technology
- 2012 The Diversity of Bamboo Found in Both Plant Genetic Conservation Area at Phayao University and Its Perimeter and Their Utilization According to a Local Wisdom
Funding agency: National Research Council of Thailand (NRCT)
- 2010 Development of Dyeing Process and Determiration of Biological Activities of Phenolic Compounds from

Indigenous Plants in Genus *Cratoxylum* (Clusiaceae)
Grown in Northern Thailand
Funding agency: National Research Council of Thailand
(NRCT)

8. Conferences:

- 2019 Proceeding, “Quantitative Determination of Phenolic and Tannin contents and Antioxidant Activity of Paper Mulberry” at The 45th on Science and Technology of Thailand (STT45), Mae Fah Luang University, Chiang Rai, Thailand
- 2019 Poster presentation, “Study of Natural dye properties from the fruits of *Harrisonia perforate* (Blanco) Merr. in Phayao Province” at The 11th National Science Research Conference (src11), Srinakharinvirot University, Bangkok, Thailand.
- 2018 Proceeding, “Toxicity study of Ma Khang Daeng (*Dioecerciserythroclada* (Kurz) Tirveng.) and Ma Khang Khao (*Tamilnadia uliginosa* (Retz.) Tirveng. & Sastre) in rats.” at The First International conference on Innovation of Functional Foods in Asia (IFFA) 2018, University of Phayao, Phayao, Thailand.
- 2013 Proceeding, “Chemical compositions and antibacterial activity of *Plectranthus Rotundifolius* extracts” at pure and applied chemistry international conference 2013 (PACCON2013) at Bangsaen Beach, Thailand
- 2011 Poster presentation, “Study on antioxidant activity of *Cratoxylum formosum* (Jack) Dyer subsp. *Pruniflorum* (Kurz) Gogel and *Cratoxylum formosum* (Jack) Dyer” at the Pure and applied chemistry international conference 2011 (PACCON 2011), Miracle Grand Hotel, Bangkok, Thailand
- 2011 Poster presentation, “Evaluation of antioxidant activity of *Ficus auriculata* L. fruit extracts” at the 5th Botanic Conference of Thailand at Faculty of Science, Kasetsart University, Bangkok, Thailand.
- 2011 Poster presentation, “Evaluation of antioxidant activity of some indigenous vegetables in the north of Thailand” at the 1st Asean’s Advance International Food Conference (Thailand Food Conference 2011), IMPACT, Muang Thong Thani, Phoenix rooms, Hall 7-8, Bangkok Thailand.
- 2005 Poster presentation, “Study of Electrocoagulation of Some

- Natural Colouring Matters in Aqueous Alcoholic Solutions” at the First International Conference on Natural Products for Health and Beauty, Taksila Hotel, Mahasarakam, Thailand
- 2005 Poster presentation, “Isolation of Solasodine from The Leaves of *Solanum laciniatum* by Electrocoagulation Method” at the 6th Annual RGJ Ph.D. Congress, Jomtein Palm Beach Resort, Chonburi, Thailand
- 2004 Poster presentation, “Electrocoagulation in Aueous Alcoholic Solutions and Its Application in Isolating Phenolic Substances from Mangosteen” at the International Colloquium 2004 Health Benefits and Applications of Polyphenols, Faculty Associated Medical Sciences, Chiang Mai University, Thailand
- 2004 Attended in The 5th Annual RGJ Ph.D. Congress at Jomtein Palm Beach Resort, Chonburi, Thailand
- 2002 Poster presentation, “Recovery of Electrocoagulated Phenolic Compounds” at the 28th Congress on Science and Technology of Thailand at, Queen Sirikit National Convention Center, Bangkok, Thailand
- 2001 Poster presentation, “Study of Lead Ion Removal by Electrocoagulation” at the 27th Congress on Science and Technology of Thailand, Lee Gardens Plaza Hotel, Songkla, Thailand

9. Publications:

Lapinee C, **Jumpatong K**, Sansomchai P. Inhibition of *Streptococcus mutants* by Extracted from *Streblus asper* for Oral Care Product. J Applied Sci 2022; 22 (1): 1-7.

Jumpatong K, Bullen J, Chaiwangsri T, Kambooncho S, Lapinee C. Assessment of antioxidant activity of Jerusalem artichoke (*Helianthus tuberosus* L.) tuber extracts from Phayao Province, Thailand. Med Plant - Inter J Phyto and Related Indus 2021; 13(4): 529-534.

Sansomchai P, **Jumpatong K**, Lapinee C, Utchariyajit K. *Melientha suavis* Pierre. Extract: Antioxidant and Sunscreen Properties for Future Cosmetic Development. CMU J Nat Sci 2021; 20(1): 1685-1994.

Sirita J, Chomsawan B, Yodsoontorn P, Kornochalert S, Lapinee C, **Jumpatong K**. Antioxidant activities, phenolic and tannin contents of paper mulberry (*Broussonetia papyrifera*) extract. Med Plant - Inter J Phyto and Related Indus 2020; 12(3): 0975-4261.

Chalom S, **Jumpatong K**, Wangkarn S, Chantarac S, Phalarakshd C, Dheeranupattana S, et al. Utilization of electrocoagulation for the isolation of alkaloids from the aerial parts of *Stemona aphylla* and their mosquitocidal activities against *Aedes aegypti*. *Ecotox and Environ Safety* 2019; 182 (109448).

Chartarrayawadee W, Too CO, Ross S, Ross GM, **Jumpatong K**, Noimou A, et al. Green synthesis and stabilization of earthworm like gold nanostructure and quasi-spherical shape using *Caesalpinia sappan* Linn. Extract. *Green Process Synth* 2018; 7(5): 424 - 432.

Jumpatong K, Thung Mok Model. *Socially - engaged Scholarship*. Engagement Thailand (EnT), The Thailand Research Fund, Bangkok, Thailand, Chapter 5 (Product & Process), 2016; 142-145.

Jumpatong K, Phutdhawong W, Chowwanapoonpohn S, Garson, MJ, Pyne S G, and Buddhasukh D. Electrocoagulation In Aqueous Alcoholic Solutions. *Trends in Electrochemistry Research*. Nova Science Publishers, Inc. Hauppauge NY, USA, Chapter 5, 2007;143-160.

Phutdhawong N, **Jumpatong K**, Chairungsi N, Wangkarn S, and Buddhasukh D. Application of Electrocoagulation to The Isolation of Alkaloids. *Chiang Mai J Sci* 2007; 34(1), 127-133.

Chairungsi N, **Jumpatong K**, Suebsakwong P, Sengpracha W, Phutdhawong, W and Buddhasukh D. Electrocoagulation of Quinone Pigments. *Molecules*. 2006; 11, 514-522.

Chairungsi N, **Jumpatong K**, Phutdhawong W and Buddhasukh D. Solvent Effects in Electrocoagulation of Selected Plant Pigments and Tannin. *Molecules*. 2006; 11, 309-317.

Jumpatong K, Phutdhawong W and Buddhasukh D. Dechlorophyllation by Electrocoagulation. *Molecules*. 2006; 11, 156-162.

Jumpatong K, and Buddhasukh D. Electrocoagulation of Some Heavy Metals. *Chiang Mai J. Sci.*, 2003; 30(1): 33 – 40.