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PERSONAL INFORMATION

Sex: Female

EDUCATION

Doctor of Philosophy (PhD. Applied Marine Biotechnology and Engineering)

2011 – 2015 **Faculty of Life Science, Department of Marine Food Science and Technology, Gangneung-Wonju National University, Republic of Korea**

Master's Degree of Science (MS. Food Science and Technology)

2006 – 2011 **Faculty of Agro-Industry, Major Food Science and Technology, Chiang Mai University, Thailand**

Bachelor's Degree of Science (BS. Biotechnology)

2001 – 2005 **Faculty of Agro-Industry, Major Agro-Industrial Biotechnology, Chiang Mai University, Thailand**

PUBLICATIONS

Arunrat. K., Wangtueai, S., Palanisamy, S., You, S., Rod-in, W., **Surayot, U.** (2025). Sulfated fucan polysaccharide from *Holothuria scabra* attenuates LPS-induced inflammation in RAW264.7 macrophages via modulation of NF-κB and MAPK signalling pathways, Journal of Agriculture and Food Research, 22, 102122.

Summat, T., You, S., Rod-in, W., Wangtueai, S., **Surayot, U.** 2024. Extraction and molecular characterisation of polysaccharides from *Suaeda maritima* for their immunomodulatory effects. Journal of Agriculture and Food Research. 18, 101293.

Rod-in, W., You, S., Park, W.J., **Surayot, U.** 2024. *Suaeda maritima* polysaccharides attenuate LPS-induced inflammation of RAW264.7 cells and antioxidative activity. International Immunopharmacology. 137, 112482.

Chanmangkang S., Maneerote J., **Surayot U.**, Panya A.,You SG., Wangtueai S. 2024

2024. Physicochemical and biological properties of collagens obtained from **tuna tendon** by using the ultrasound-assisted extraction. Journal of Agriculture and Food Research. 15, 100984.

Summat T., Wangtueai S., You SG., Rod-in W., Park WJ., Karnjanapratum S., Seesuriyachan, P., **Surayot U.** 2023. *In Vitro* **Anti-Inflammatory Activity** and Structural Characteristics of Polysaccharides Extracted from *Lobonema smithii* Jellyfish. **Marine Drugs**. 21(11), 559.

Rod-In, W., **Surayot, U.**, You, SG., Park, W.J. 2023. Inhibitory effects of polysaccharides from Korean ginseng berries on LPS-induced RAW264.7 macrophages. PLoS ONE, 18(11 November), e0294675.

Jindapon N., Klinmalai P., **Surayot U.**, Tanadchangsaeng N., Pichaiaukrit W., Phimolsiripol Y., Vichasilp C., Wangtueai S. 2023. Preparation, Characterization, and Biological Properties of **Hydroxyapatite from Bigeye Snapper** (*Priacanthus tayenus*) Bone. International Journal of Molecular 24(3), 2776

Janpet C., Manakit P., Klinmalai P., Kaewprachu P., Jaisan C., **Surayot U.**, Chakrabandhu Y., S. Wangtueai. 2022. Characteristics and functional properties of **gelatin and gelatin hydrolysate** from bigeye snapper (*Priacanthus tayenus*) bone. Food Research. 6(2),403–412.

Sriphochanart, W., Krusong, W., **Surayot, U.,** Mekkerdchoo, O., Sriprom, P. 2022. Germinated Brown Rice Preparation for Value Added Material for **Healthy Brewed Vinegar**. Current Applied Science and Technology. 22, 1–14.

Surayot, U., Wangtueai, S., You, S., Palanisamy, S., Krusong, W., Brennan, CS., Barba, FJ., Phimolsiripol, Y., Seesuriyachan, P. 2021. Extraction, Structural Characterisation, and **Immunomodulatory Properties** of Edible *Amanita hemibapha* subspecies *javanica* (Corner and Bas) Mucilage Polysaccharide as a Potential of **Functional Food**. Journal of Fungi. 2021, 7, 683. https://doi.org/10.3390/jof7090683.

Surayot, U., Wangtueai, S., You, S., Techapun, C., Phimolsiripol, Y., Leksawasdi, N., Krusong, W., Barba, FJ., Seesuriyachan, P. 2021. Sulphation and Hydrolysis Improvements of Bioactivities, and **Immuno-Modulatory Properties** of Edible *Amanita hemibapha* Subspecies *javanica* (Corner and Bas) Mucilage Polysaccharide as a Potential in Personalized Functional Foods. Journal of Fungi. 7, 847. https:// doi.org/10.3390/jof7100847.

Surayot, U., Yelithao, K., Tabarsa M., Lee DH., Palanisamy S., Prabhu NP., Lee, JH., You, SG. 2019. Structural characterization of a polysaccharide from *Certaria islandica* and assessment of **immunostimulatory activity**. Process Biochemistry. 83, 214–221.

Yelithao, K., **Surayot, U.,** Lee C., Palanisamy S., Prabhu N.P., Lee, J. H., & You, S. G. 2019. Studies on structural properties and **immune-enhancing activities** of glycomannans from *Schizophyllum commune*. Carbohydrate Polymer. 218, 37–45.

Yelithao K., **Surayot U**., Park WJ., Lee SM., Lee HL., You SG. 2019. Preparation and **immune-enhancing activities of chemical modified polysaccharide** from *Polygonatum sibiricum.* International Journal of Biological Macromolecules. 122, 10–18.

Lee JY., Li C., **Surayot U**., Yelithao K., Lee SM., Park WJ., Tabarsa M., You SG. 2018. Molecular structures, chemical properties and biological activities of polysaccharide from ***Smilax glabra* rhizome**. International Journal of Biological Macromolecules. 120, 1726–1733.

Surayot U., Lee SM., You SG. 2018. Effects of sulfated fucan from the sea cucumber *Stichopus japonicus* on **natural killer cell activation and cytotoxicity**. International Journal of Biological Macromolecules. 108, 177–184.

Gavlighi HA., Tabarsa M., You SG., **Surayot U**., Ghaderi-Ghahfarokhi M. 2018. Extraction, characterization and **immunomodulatory property** of pectic polysaccharide from pomegranate peels: Enzymatic vs conventional approach. International Journal of Biological Macromolecules. 116, 698–706.

Surayot U., You SG. 2017. Structural effects of polysaccharides from *Codium fragile* on **NK cell activation and cytotoxicity**. International Journal of Biological Macromolecules. 98, 117–124.

Tabarsa M., You SG., Dabaghian EH., **Surayot U**. 2017. Water-soluble polysaccharides from *Ulva intestinalis*: Molecular properties, structural elucidation and **immunomodulatory activities**. Journal of Food and Drug Analysis. 1–10.

Cao RA, **Surayot U.**, You SG. 2017. Structural characterization **of immunostimulating protein-sulfated fucan** complex extracted from the body wall of a sea cucumber, *Stichopus japonicas*. International Journal of Biological Macromolecules. 99, 539–548.

Surina S., **Surayot U.**, Seesuriyachan P., You SG., Phimolsiripol Y. 2017. **Antioxidant and immunomodulatory activities** of sulfated polysaccharides from purple glutinous rice bran (*Oryza sativa* L.). International Journal of Food Science and Technology. 99, 1–11.

Surayot U., Lee JH., Kanongnuch C., Peerapornpisal Y., Park WJ., You SG. 2016. Structural characterization of sulfated arabinans extracted from *Cladophora glomerata* Kützing and their **macrophage activation**. Bioscience, Biotechnology, and Biochemistry. 80, 972–982.

Surayot U., Lee JH., Park WJ., You SG. 2016. Structural characteristics of polysaccharides extracted from *Cladophora glomerata* Kützing **affecting nitric oxide of RAW264.7 cells**. Bioactive Carbohydrate and Dietary Fibre. 7, 26–31.

Kim JK., Park JH., Jang EH., **Surayot U.**, You SG. 2016. **Immunomodulatory effect** of sulfated polysaccharides and its low molecular form isolated from *Enteromorpha prolifera* in BALB/c Mice. Journal of Chitin and Chitosan. 21, 82–88.

Yelithao K., **Surayot U**., Lee JH., You SG. 2016. **RAW264.7 cell activating glucomannans** extracted from rhizome of *Polygonatum sibiricum*. Preventive Nutrition and Food Science. 21, 245–254.

Surayot U., Wang J., Lee JH., Kanongnuch C., Peerapornpisal Y., You SG. 2015. Characterization and **immunomodulatory activities** of polysaccharides from *Spirogyra neglecta* (Hassall) Kützing. Bioscience, Biotechnology, and Biochemistry. 79, 1644–1653.

Tabarsa M., Shin Il-S, Lee JH., **Surayot U.**, Park WJ, You SG. 2015. **An immune-enhancing water-soluble α-glucan** from *Chlorella vulgaris* and structural characteristics. Food Science and Biotechnology. 24, 1933–1941.

Surayot U., Wang J., Seesuriyachan P., Kuntiya A., Tabarsa M., Lee YJ., Kim JK, Park WJ., You SG. 2014. Exopolysaccharides from lactic acid bacteria: Structural analysis, molecular weight effect on **immunomodulation**. International Journal of Biological Macromolecules. 68, 233–240.

Surayot U., Jomduang S. 2013. Qualitative comparison of fermented drinks from wort obtained from fermentation of germinated unpolished purple rice with and without addition of commercial enzymes. Food and Applied Bioscience Journal. 1, 49-58.

RESEARCH INTERESTS

- Biological activity of polysaccharides
- Structure analyses of polysaccharides (FT-IR, GC-MS&NMR spectroscopy)
- Structure-bioactivity relationship of polysaccharides
- Structural modifications of polysaccharides (chemically)
- Polysaccharides and dietary fibers (novel polysaccharides from natural products)
- Functional food
- Herbal extracts
- Bioactive compounds

WORK EXPERIENCES

2023 –Now	Lecturer at Faculty of Agro-Industry (Samut Sakhon), Chiang Mai University, Thailand
2018 – 2023	Lecturer at College of Maritime Studies and Management, Chiang Mai University, Thailand
2015 – 2018	A postdoctoral researcher at East Coast Life Science Institute, Gangneung-Wonju National University, Republic of Korea
2006 – 2011	Flight Attendant at Japan airlines, Japan