

Thanuja Jayatunga

Research Scientist

Quality Assurance Department

Qualifications	BS.c Special in Chemistry (University of Kelaniya)
Contacts	Phone: E-mail: thanujaj@iti.lk
Specialized Fields	Quality Assurance, Analytical Chemistry
Interest Areas	Quality Assurance, FT-NIR,
Publications	 H.G.T.H Jayatunga, W. H Weerathunga, H.P.P.S Somasiri, K.R.R Mahanama, 2023, Use of Process-Based Marker Compounds to Identify Different Coconut Oils, Food analytical method, https://doi.org/10.1007/s12161-023-02552-y. H.G.T.H Jayatunga, H.P.P.S Somasiri, K.R.R Mahanama, 2020, Rapid determination of adulteration in virgin and copra coconut oil using Fourier transform near infrared spectroscopy, International Journal of Food Science and Nutrition, 5(3), 38-43. H.G.T.H Jayatunga, C K Jayasuriya, 2016, Development of a biodegradable polymer composite based on natural rubber and screw-pine leave particles for manufacturing gloves, Journal of Emerging trends in engineering and applied science, 7(2) 56-60. Abstract
	 Jayatunga H G T H, Weeratunge H D, Somasiri H P P S, Mahanama K R R, Comparison of volatile compounds identified by two different techniques in virgin coconut oil, 6th ITI Biennial research symposium,32. Jayatunga H. G. T. H., Somasiri H. P. P. S., Mahanama K. R. R., Determination of adulteration of pure coconut oil with used coconut oil by FT-NIR spectroscopy, 2020, 2nd Asian International conference on multidisciplinary research 2020. Jayatunga H. G. T. H., Somasiri H. P. P. S., Mahanama K. R. R., Development of a fingerprint to identify the different types of coconut oil, 2020, International conference on applied science. Jayatunga H G T H, Weeratunge H D, Somasiri H P P S, Mahanama K R R, Identification of aroma constituents in copra coconut oil, 2019, ITI Biennial

research symposium, 8.

- ➤ Jayatunga H. G. T. H, Somasiri H. P. P. S, Mahanama K. R. R, 2018, Determination of iodine and saponification value of coconut oil using an FT-NIR technique, Annual research symposium of University of Colombo, 228.
- ➤ Jayatunga H. G. T. H, Somasiri H. P. P. S, Mahanama K. R. R, 2017, Rapid determination of adulteration in coconut oil using FT-NIR spectroscopy, International conference on food quality safety and security(FOOD QualSS 2017), 6.
- ➤ Jayatunga H. G. T. H, Somasiri H. P. P. S, Mahanama K. R. R, 2017, Use of FT-NIR technique to determine the iodine value of edible oil, 3rd biennial research symposium of Industrial Technology Institute, 53.
- ➤ Jayatunga H. G. T. H, 2014, Development of biodegradable polymer composite for glove material based on natural rubber and Screw-Pine leave particle, 2014, Peradeniya International Research Symposium (IPUSE), 420.
- Sumaradiwakara S, Gunasekara L, Medis B, Karunaratne U, Jayatunga T, Slegers R, Fernandopulle N, 2009, Preliminary study on DNA barcoding of Cinnamon varieties in Sri Lanka, 14th international Forestry and Environment Symposium at University of Sri Jayawardanapura, 69-70

Major Projects Undertaken

- Development of reference material for coconut oil
- Research project of development of near infrared spectroscopic method to detect adulterated coconut oil and its authenticity
- Research work on Development of biodegradable polymer composite based on Natural rubber latex and Screw-Pine leaf particles for gloves
- Consultancy for implementation on ISO 17025:2017 to;

Camso Loadstar Central Manufacturing Plant,

Camso Loadstar Research, development laboratory

Gem & Jewelry Authority laboratory,

Ceylon Petroleum Storage Terminal,

Ceylon petroleum cooperation,

Ferentino Tire company laboratory,

Water resources board,

MAS industrial park laboratory,

Lanka Phosphate Limited

> Trainings programs on ISO 17025:2017, Measurement Uncertainty