

Department of Food Science and Technology Faculty of Agriculture, University of Peradeniya, Sri Lanka

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# CHATHURIKA JAYASEKARA

EMPLOYMENT	<ul> <li>Lecturer (Probationary), Department of Food Science and Technology, University of Peradeniya, Sri Lanka         10<sup>th</sup> July 2023 Up to date (01 year &amp; 02 months).</li> <li>Lecturer, Department of Applied and Natural Sciences, University College of Matara, Sri Lanka         16<sup>th</sup> April 2019 - 07<sup>th</sup> July 2023 (04 years &amp; 04 months).</li> <li>Lecturer (Probationary), Department of Applied and Natural Sciences, University College of Matara, Sri Lanka         16<sup>th</sup> April 2016 - 16<sup>th</sup> April 2019 (03 years).</li> <li>Quality Assurance Manager, Manchiee De Coco Products PLC, Sri Lanka         November 2015 - April 2016 (06 months).</li> <li>Graduate Teaching Assistant, Department of Food Science and Technology, University of Peradeniya, Sri Lanka         February 2015 – November 2015 (10 months).</li> <li>Team member, Global GAP Certification Implementation Team, Walters Bay Teas, Sri Lanka         January 2014 - August 2014 (Part time: 08 months).</li> <li>In plant trainee, Ceylon Cold Stores PLC, Sri Lanka         October 2010 – November 2010 (01 months).</li> </ul>
PROFESSIONAL QUALIFICATION	Registered Nutritionist (Sri Lanka Medical Council): Reg.No.286
EDUCATION	Post Graduate Institute of Agriculture, University of Peradeniya, Sri Lanka M.Sc.in Food and Nutrition (March 2017)

#### Faculty of Agriculture, University of Peradeniya, Sri Lanka

B.Sc.(Hons) in Food Science and Technology (December 2014)

Second class honours upper division

#### International College of Business and Technology (ICBT), Sri Lanka

Diploma in Human Resources Management, (December 2012)

Distinction pass

#### Girls' High School, Kandy, Sri Lanka

#### **PATENT**

LK/P/1/22818- Natural umami flavor from dehydrated and roasted ingredients

#### **PUBLICATIONS**

#### Book Chapter (n=01)

**Jayasekara, C.,** Mendis, E. and Kim, S., 2020. Seafood in the human diet for better nutrition and health. [Book chapter]: Encyclopedia of Marine Biotechnology, pp.2939–2959.

#### Working paper

Advancements in Vanilla Postharvest Processing: Maximizing Vanillin Content.

#### Conference Proceedings (n=03)

**Jayasekara, J.M.C.M.** and Samarakoon, S.M.C.S., 2021. The potential contribution of soy isoflavones in the health of menopausal women, revealing the avenues for the soy food manufacturing industry. [Full Paper] International Research Symposium – 2021, University of Vocational Technology, Sri Lanka, pp.366-371.

Jayasekara, J.M.C.M., 2021. Usage of domestic refrigerators for safe food storage among Sri Lankan families. [Full Paper] International Research Symposium – 2021, University of Vocational Technology, Sri Lanka, pp.372-379.

**Jayasekara, J.M.C.M.,** Illeperuma, D.C.K. and Shanthini, R., 2015. Effect of extraction temperature upon the quality of sesame oil, and investigation of factors affecting its marketability in Sri Lanka. [Abstract] Proceeding of the Peradeniya University International Research Sessions, Food, Nutrition and Livestock, Sri Lanka, 19, abstract no. 499.

#### **Google Drive Link:**

https://drive.google.com/drive/folders/1caK4bueDc7NWVJjLvVZeV5tLW7FujBrT?usp=drive\_link

### CONFERENCE **PRESENTATIONS**

#### Presentations (n=03)

Jayasekara, J.M.C.M. and Samarakoon, S.M.C.S., 2021. The potential contribution of soy isoflavones in the health of menopausal women, revealing the avenues for the soy food manufacturing industry. International Research Symposium - 2021, University of Vocational Technology, Sri Lanka.

Jayasekara, J.M.C.M., 2021. Usage of domestic refrigerators for safe food storage among Sri Lankan families. International Research Symposium - 2021, University of Vocational Technology, Sri Lanka.

Jayasekara, J.M.C.M., Illeperuma, D.C.K. and Shanthini, R., 2015. Effect of extraction temperature upon the quality of sesame oil, and investigation of factors affecting its marketability in Sri Lanka. Proceeding of the Peradeniya University International Research Sessions, Food, Nutrition and Livestock, Sri Lanka.

#### RESEARCH GRANT Principal Investigator.

Value: 02 million LKR (Approximately 6,200 USD).

Title: Assessment of toxic trace metals contamination in free range and commercial broiler chicken liver available in wet market in Central, Western and Eastern provinces in Sri Lanka.

#### **HQP**

#### (n=05) HQP underlined, Corresponding author \*

#### **PUBLICATIONS**

Jayasinghe D. G. V., Prasantha B. D. R\*., Udayakumara E. M. S. and Jayasekara J. M. C. M., 2024. Utilization of Eggshell Waste as a Calcium Source and Investigation of its Physicochemical Properties. [Abstract & presentation] Proceeding of the Peradeniya University International Research Sessions, Sri Lanka, 25, p.247.

Kaduruwana D.R., Madumali P.K.J.H., Samarakoon E.R.J\*. and Jayasekara J.M.C.M., 2024. Impact of Heat Moisture Treatment on Morphology and Physicochemical Properties of Starches Extracted from Kiri Ala (Xanthosoma sagittifolium), Hulankeeriya (Maranta arundinacea) and Buthsarana (Canna indica). [Abstract & presentation] Proceeding of the Peradeniya University International Research Sessions, Sri Lanka, 25, p.286.

Kumara I. D. S. U. S., Jayanath N. Y.\*, and Jayasekara J. M. C. M., 2024. Study on the Development of Off flavors and Off-odors in PET Bottled Drinking Water During Storage Using a Trained Sensory Panel. [Abstract & presentation] Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, p.190.

Sewwandi, R.K., Jayasekara, J.M.C.M.\* and Kumari, E.M.S.H., 2023. Development of a non-dairy mix fruit incorporated ice cream. [Abstract & presentation] Proceeding of the Peradeniya University International Research Sessions, Sri Lanka, 24, p.182.

#### Submitted full paper

<u>Sewwandi. K.M.N.K.</u>, Varunitha. P., Dissanayake. D.M.S.H., **Jayasekara. J.M.C.M.\*** Detection of Adulteration in Non-Labeled Chili and Turmeric Powders Available in the Retail Market in the Matara City Area. Paper ID- 06, International Research Symposium 2024, University of Vocational Technology, Sri Lanka.

#### **Working paper**

Exploring Natural Remedies and Functional Foods for Managing Recurrent Urinary Tract Infections in Postmenopausal Women: A Bioactive Compound Approach.

Jayasekara. J.M.C.M.\*

# RESEARCH COLLABORATIONS

### Local Collaborators (n=10)

.,			
Prof.JK Vidanarachchi, Professor, Department of Animal Science, University of Peradeniya	Active research grant:  Assessment of toxic trace metals contamination in free range and commercial broiler chicken liver available in wet market in central, western and eastern provinces in Sri Lanka.		
Prof.BMLDB Suriyagoda, Professor, Department of Crop Science, University of Peradeniya			
Prof. PCG Bandaranayaka, Professor, Agriculture Biotechnology Center, University of Peradeniya			
Dr. N Pathirana, Lecturer, Department of Zoology, University of Peradeniya			
Ms. TIG Prabhashwari, Lecturer, Department of Animal Science, University of Peradeniya	_		
Dr. Shashie Abeywickrema, Senior Lecturer,	Working project:		
Department of Food Science and Technology, University of Sri Jayawardanapura	Investigation of Taste and Smell Alterations in Pre- Menopausal and Post-Menopausal Women		
Ms.APHI Abeysuriya, Lecturer, Department of	Working paper:		
Food Science and Technology, University of Ruhuna	Advancements in Vanilla Postharvest Processing: Maximizing Vanillin Content.		
Prof. BEP Mendis, Professor, Department of	Book Chapter:		
Food Science and Technology, University of Peradeniya	Jayasekara, C., Mendis, E. and Kim, S., 2020. Seafood in the human diet for better nutrition and health.: Encyclopedia of Marine Biotechnology, pp.2939–2959.		
Prof. DCK Illeperuma, Senior Professor,	Undergraduate research supervisors:		
Department of Food Science and Technology, University of Peradeniya	Effect of extraction temperature upon the quality of sesame oil, and investigation of factors affecting its marketability in Sri Lanka.		
Prof. R shanthini, Senior Professor, Department of Chemical and Process Engineering, University of Peradeniya			

# International Collaborator (n=01)

Dr. SMCS Samarakoon, Senior Lecturer, Centre for Applied Science and Primary Industries, Waikato Institute of Technology, New Zealand The Potential Contribution of Soy Isoflavones in the Health of Menopausal Women, Revealing the Avenues for Soy Food Manufacturing Industry

TEACHING (UNDERGRADUATE )	COURSE (n=12)	ВАТСН	NO OF STUDENT S	NOTIONAL HOURS		
	Design of a food processing factory (BFST 4104)	BFST 2018	48	30		
	Food processing and product development (FT 4102)	FT 2018	20	07		
		FT 2017	18	07		
	Food process technology (FT 4103)	FT 2018	20	07		
		FT 2017	18	07		
	Practical in product development (FT 4105)	FT 2018	20	10		
		FT 2017	17	10		
	Practical in product development (BFST 3201)	BFST 2019	52	20		
		BFST 2018	48	20		
	Postharvest technology of fruits and vegetables (BFST	BFST 2019	52	60		
	3101)*	BFST 2018	48	60		
	Food processing for product development (BFST 3105)	BFST 2019	52	08		
		BFST 2018	48	08		
	Kernel and nut products technology (BFST 2202)	BFST 2019	52	07		
		BFST 2020	50	07		
	Processing of beverages (BFST 2206)	BFST 2019	52	12		
		BFST 2020	50	12		
	Agricultural product quality and processing (FT 2101)**	ATM 2020	220	30		
	Food preservation (BFST 1205)	BFST 2021	51	08		
	Task project (BFST 1104)*	BFST 2021	51	60		
	*- Course coordination and teaching, **-Practical coordination and teaching					
TEACHING (HND STUDENTS)						
	COURSE (n=10)	BATCH	NO OF STUDENT S	NOTIONAL HOURS		
	COURSE (n=10)  In factory process line and equipment improvement	BATCH FDT 2019	STUDENT			
			STUDENT S	HOURS		
	In factory process line and equipment improvement	FDT 2019	STUDENT S 28	HOURS		
	In factory process line and equipment improvement	FDT 2019 FDT 2018	STUDENT S 28 34	HOURS  110 110		
	In factory process line and equipment improvement	FDT 2019 FDT 2018 FDT 2017	STUDENT S 28 34 27	HOURS  110 110 110		
	In factory process line and equipment improvement (D15C001M22)*	FDT 2019 FDT 2018 FDT 2017 FDT 2016	STUDENT S 28 34 27 35	HOURS  110 110 110 110		
	In factory process line and equipment improvement (D15C001M22)*	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019	STUDENT S 28 34 27 35	HOURS  110 110 110 110 85		
	In factory process line and equipment improvement (D15C001M22)*	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019 FDT 2018	STUDENT S 28 34 27 35 32 34	HOURS  110 110 110 110 110 85 85		
	In factory process line and equipment improvement (D15C001M22)*  Food Processing Technology II (D15C001M14)*  Food processing plant and machinery cleaning and	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019 FDT 2018 FDT 2017	STUDENT S 28 34 27 35 32 34 35	HOURS  110 110 110 110 85 85 85		
	In factory process line and equipment improvement (D15C001M22)*  Food Processing Technology II (D15C001M14)*	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019 FDT 2018 FDT 2017 FDT 2016	STUDENT S 28 34 27 35 32 34 35 35	HOURS  110 110 110 110 85 85 85 85		
	In factory process line and equipment improvement (D15C001M22)*  Food Processing Technology II (D15C001M14)*  Food processing plant and machinery cleaning and	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019 FDT 2018 FDT 2017 FDT 2016 FOT 2021 FOT 2021 FOT 2020	STUDENT S 28 34 27 35 32 34 35 35 35	HOURS  110 110 110 110 85 85 85 85		
	In factory process line and equipment improvement (D15C001M22)*  Food Processing Technology II (D15C001M14)*  Food processing plant and machinery cleaning and	FDT 2019 FDT 2018 FDT 2017 FDT 2016 FDT 2019 FDT 2018 FDT 2017 FDT 2016 FOT 2022 FOT 2021	STUDENT S 28 34 27 35 32 34 35 35 35 35 35	HOURS  110 110 110 110 85 85 85 80 80		

	FDT 2017	30	80	
	FDT 2016	35	80	
	FDT 2015	02	80	
Food manufacturing processing control- I	FOT 2021	35	70	
(D15T001M06)*	FOT 2020	35	70	
	FDT 2019	32	70	
	FDT 2018	34	70	
	FDT 2017	30	70	
	FDT 2016	35	70	
	FDT 2015	02	70	
Resources planning for food processing-I	FOT 2022	35	90	
(D15T001M05)*	FOT 2021	35	90	
(	FOT 2020	35	90	
	FDT 2019	32	90	
	FDT 2019	34	90	
	FDT 2018 FDT 2017			
		30	90	
	FDT 2016	35	90	
	FDT 2015	02	90	
Fundamentals of food chemistry (D15T001M04)*	FOT 2021	35	60	
	FOT 2020	35	60	
Food processing technology -I (D15C001M04)*	FOT 2021	35	130	
	FOT 2020	35	130	
	FDT 2019	32	130	
	FDT 2018	34	130	
	FDT 2017	30	130	
	FDT 2016	35	130	
Preparation of food raw materials and ingredients	FOT 2021	35	90	
(D15C001M03)*	FOT 2020	35	90	
	FDT 2019	32	90	
	FDT 2018	34	90	
	FDT 2017	30	90	
	FDT 2016	35	90	
Nutrition, diet and exercise related to cosmetology*	CBC 2017	12	60	
Fruit and vegetable processing (D15S001)*	FOT 2022	35	150	
	FOT 2021	35	150	
	FOT 2020	35	150	
	FDT 2019	32	150	
	FDT 2018	34	150	
	FDT 2017	30	150	
	FDT 2016	35	150	
*-Course coordination and teaching	. 5. 2010		133	
Course coordination and teaching				

## **ACADEMIC** Head of Academics (Acting), University College of Matara (06 months) **ADMINISTRATIVE** Head of Division, Division of Applied and Natural Sciences, University College of Matara (03 **POSITIONS** vears) Member of the Board of Management, University College of Matara (03 years) Course coordinator, Food technology course, University College of Matara (03 years) Member of the Board of Studies, University College of Matara (07 years) **TEACHING** Short course in food business startup- (working on the short course as the course INNOVATION/ coordinator)(2024) Curriculum development developing course FT 4103 Post-Harvest Technology for Value Addition DEVELOPEMENT of Food (2024) Certificate in teaching in higher education, University of Peradeniya, Sri Lanka (February, 2024). Vocational pedagogy training conducted by the TVEC (Tertiary and vocational education commission) with YouLead; supported by the US government development agency, Sri Lanka (September 2022). National Competency Standards (NCS) and Curriculum Development, Staff Development Centre and Tertiary and Vocational Education Commission, Sri Lanka (February 2021). Certificate in teaching technical and vocational education in competency-based training; University of Vocational Technology, Sri Lanka (September 2017). Developing quality in major step: the path ahead in TVET (May 2017). Technology transfer to enhance standards and quality of value-added rice-based products, Sri Lanka Export Development Board and Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya (December 2014). **STUDENTS'** Profood- propack quiz competition 2023, University of Peradeniya COMPETITION Profood-propack exhibition 2023 and 2024, University of Peradeniya **MENTORING** Food Innovo- 2023, World Food Day celebration, University of Peradeniya Food Innovation 2020, University College of Matara Food and Nutrition for a Happy and Healthy Life, 2017, University College of Matara **EDITORIAL** Faculty newsletter-2024, Faculty of Agriculture, University of Peradeniya. **ACTIVITY** Year Planner, 2020, 2021- University College of Matara. Peradeniya University International Research Sessions 2023, University of Peradeniya CONFERENCE **SESSION** Session: Ecosystems and Environmental Health COORDINATION 35<sup>th</sup> PGIA Congress 2023, Postgraduate Institute of Agriculture, University of Peradeniya Session: Technological Solutions for Efficient Resources Management **CONFERENCE** Conference (n=03) Paper title (papers n=08) **REVIEW**

	Proceedings of the Postgraduate Institute of Science Research Congress, 2024, Sri Lanka	Paper ID:265 Evaluating the effectiveness of pepper plant distribution programs through regional analysis of survival rates in Sri Lanka	
	Peradeniya University International Research Sessions 2024, University of Peradeniya, Sri Lanka	Paper ID: 358  Evaluation of physicochemical properties of extracted mucilages and powders from three selected plants in Sri Lanka for the development of novel gelling agents Paper ID: 362  Development of a Test Method to Validate the Efficacy of the Spray Drying Technology of Coconut Milk Using Surrogate Microorganism <i>Escherichia coli</i> (Migula) Castellani and Chalmers ATCC® BAA-1427 TM	
	Undergraduate Research Symposium of Technology (URSOT) 2024, Faculty of Technology, Rajarata University of Sri Lanka	Paper ID: 551  Assessment of the effectiveness of plant mucilage in enhancing the keeping quality of fresh produce Paper ID: 552  Extraction and characterization of arrowroot ( <i>Maranta arundinacea</i> ) starch and fiber Paper ID:572  Design and development of prototype pyramid-shaped solar dryer Paper ID: 588  Extraction and characterization of mucilages extracted from different plant sources Paper ID: 583  Replacement of firewood with fruit and vegetable waste.	

### EVENT ORGANIZING

- Inauguration and Orientation of 2022 batch, Faculty of Agriculture, University of Peradeniya,
   2024.
- School-University Partnership Program,2023, Faculty of Agriculture, University of Peradeniya.
- Inauguration and Orientation of 2016 to 2022 batches, University College of Matara. From year 2016 to 2023. (07 batches)
- Elysium 2007 exhibition- Girls' High School, Kandy.