# **CURRICULUM VITAE (January 2023)**

# Don Vidheesha Sulakkana Abeysinghe

Graduate Teaching Assistant Department of Food science and Technology, Faculty of Agriculture, University of Peradeniya

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## **Research Interests**

I am interested in the fields of functional foods, food chemistry, natural product extraction, product development, antioxidants, biochemistry, and nano-chemistry.

# **Educational qualifications**

B.Sc. in Agricultural Technology and Management (**Four-Years (Honors) Degree**) Major: Food Science & Technology, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka; FGPA 3.50/4.00 (**Second Class-upper division Honors**); (2017-2022).

Graduateship in Chemistry (**Four-Years (Honors) Degree**), Institute of Chemistry Ceylon, Sri Lanka; FGPA 2.27/4.00 (**General Honors**); (2017-2022).

**Key Courses Followed in B.Sc. in Agricultural Technology and Management:** Biochemistry and Human Nutrition, Food Chemistry, Food Analysis, Applied Human Nutrition, Food Sanitation and Sensory Evaluation, Food Regulations & Food Quality Control, Fats and Oils Technology, Meat, Fish, Egg Product Technology, Food Microbiology, Dairy Product Technology, Food Preservation, Food Processing for Product Development, Food Process Technology, Agricultural Product Quality and Processing, Practical in Product Development, and Animal Product Processing Technology, Statistics.

**Key Courses Followed in Graduateship in Chemistry:** Organic chemistry, Inorganic chemistry, Physical chemistry, Titrimetry, Quantum mechanics, Biochemistry, Particle physics, Nano-chemistry, Industrial chemistry, Food chemistry, Environmental chemistry, Electro chemistry, Thermodynamics, Analytical instrumentation, Statistics, Natural products, Spectroscopy, Chromatography.

Successfully conducted a 4 month long **undergraduate thesis project** as a partial fulfillment of the requirements of B.Sc. degree on "Process Optimization to Extract Oleoresin and Essential Oil from the Leaves of Allspice [*Pimenta dioica* (L.) Merill.] and Screening of Its Essential Oil Composition, Antioxidant Capacity and Potential to Develop New Products" Secured 4.00/4.00 of GPA

#### **Memberships**

**Associate membership** - Institute of Chemistry Ceylon Since 19<sup>th</sup> September 2022

**Student membership** - Registration no:  $11672/E_2$  - Sri Lanka Association for the Advancement of Science (SLASS) - Since  $12^{th}$  August 2022

### Awards, Scholarships and Honors

• Alfred Baur's Memorial Gold Medal -Overall Best Oral Presentation - Faculty of Agriculture Undergraduate Research Symposium (FAURS), Faculty of Agriculture, University of Peradeniya, Sri Lanka – 2021/2022.

- Session's best oral presentation —Session on "Food Quality, Safety & Product Development"—Faculty of Agriculture Undergraduate Research Symposium (FAURS), Faculty of Agriculture, University of Peradeniya, Sri Lanka 2021/22.
- **Winner-** Graphical Abstract Competition Faculty of Agriculture Undergraduate Research Symposium (FAURS), Faculty of Agriculture, University of Peradeniya, Sri Lanka 2021/22.
- **1**<sup>st</sup> **Runners up-** Research story book competition—Faculty of Agriculture Undergraduate Research Symposium (FAURS), Faculty of Agriculture, University of Peradeniya, Sri Lanka 2021/22.
- **3**<sup>rd</sup> **Runners up-** Research video competition—Faculty of Agriculture Undergraduate Research Symposium (FAURS), Faculty of Agriculture, University of Peradeniya, Sri Lanka 2021/22.
- **Best oral presentation** Final year research presentations, Department level- Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya 2022
- **First place** Scientific research merit award nomination, Department level- Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya 2022

# **Professional Experience**

Teaching Assistant (January 02, 2023- to date), Department of Food Science Technology, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka.

#### **Nature of Duties**

- 1. Conducted practical classes & tutorial classes for undergraduates.
- 2. Marked weekly assignments and practical reports of following subjects related to the field Food Science & Technology.
  - Biochemistry and Human Nutrition
  - Food chemistry
  - Food Analysis
  - Basic laboratory skills
  - Food Microbiology
- 3. Assistant in the research projects conducted by the department.
- 4. Assisting in experiments of undergraduate research projects.

Research internship (September 01, 2022- December 01, 2022), STAY Naturals Private Limited., No. 45, Ambangangawatte Road, Kawatayamuna, Kawdupelelle, Matale, Sri Lanka. 21072

#### **Nature of Duties**

- 1. Conducted a research project on "Process Optimization to Extract Oleoresin and Essential Oil from the Leaves of Allspice [*Pimenta dioica* (L.) Merill.] and Screening of Its Essential Oil Composition, Antioxidant Capacity and Potential to Develop New Products"- Data collection and analysis of data for a period of 3 months.
- 2. Hands on experience of extraction of oleoresins, essential oils, analytical instrumentation (Shimdzu GC 20114, GC-HS 2030, HPLC)
- 3. Studying and getting an exposure on overall operations of the company

#### **Publications**

## **Abstracts in Conference Proceedings/ Scientific presentations**

- **Abeysinghe D.V.S.**, Mendis B.E.P., Rajapakse R.P.N.P., Rengaraj T. and De Silva U.K.S.K. Process Optimization to Extract Oleoresin and Essential Oil from the Leaves of Allspice [Pimenta dioica (L.) Merill.] and Screening of Its Essential Oil Composition, Antioxidant Capacity and Potential to Develop New Products. Proceedings of the 8<sup>th</sup> Faculty of Agriculture undergraduate research symposium 2021/22 Abstracts, Theme 3: Food Quality, Safety and Product Development, Faculty of Griculture, University of Peradeniya, Sri Lanka, 28<sup>th</sup> December 2022, 207p.
- Wickremeratne, S.A., Nipunika, M.M., Marapana, R.A.A.P., **Abeysinghe, D.V.S**. and Abeysinghe, D.C. (2022). Bioactive compounds and antioxidant capacity of tender shoots of five tea (*Camellia sinensis* L.) cultivars grown in three different elevations in Sri Lanka. Proceedings of the 78 <sup>th</sup> Annual Sessions 2022 Part I Abstract Sri Lanka Association for the Advancement of Science (SLAAS), 11<sup>th</sup> 16 <sup>th</sup> December 2022, 9 p.
- Panagoda, P.C.J., Marapana, R.A.A.P., Nipunika, M.M., **Abeysinghe, D.V.S**. and Abeysinghe, D.C. (2022). Evaluation of total phenolic, flavonoid contents and antioxidant capacity of three main tea (*Camellia sinensis*) grades manufactured in seven regions of Sri Lanka. Proceedings of the 78 <sup>th</sup> Annual Sessions 2022 Part I Abstract Sri Lanka Association for the Advancement of Science (SLAAS), 11 <sup>th</sup> 16 <sup>th</sup> December 2022, 10 p.

### **Research Programs**

# **Titles of the Projects:**

Process Optimization to Extract Oleoresin and Essential Oil from the Leaves of Allspice [*Pimenta dioica* (L.) Merill.] and Screening of Its Essential Oil Composition, Antioxidant Capacity and Potential to Develop New Products – 2022. (**Completed**)

Bioactive compounds and antioxidant capacity of tender shoots of five tea ( $Camellia\ sinensis\ L.$ ) cultivars grown in three different elevations in Sri Lanka. – 2022. (Completed)

Evaluation of total phenolic, flavonoid contents and antioxidant capacity of three main tea (*Camellia sinensis*) grades manufactured in seven regions of Sri Lanka. – 2022. (**Completed**)

Haplotyping and Network Analysis of Salinity Tolerance Gene Hkt1;5 in Rice – Since 2019 (On-going)

# **Technical Expertise Related to Research**

Experienced in conducting bioassays.

• Antioxidant assays. Total polyphenolic content, Total flavonoid content, Ferric reducing antioxidant power assay (FRAP)

Spectroscopy: UV/Visible and FTIR

Chromatography: Gas chromatography and Head space gas chromatography

Product development and sensory evaluation

## **English Language Proficiency**

- Distinction ('A' pass) for General English at the G.C.E. (O/L) Examination, 2012.
- All the BSc studies were conducted in English medium.

## **Computer Literacy**

- Data management using MS office packages (office 365 package), Data analysis using the statistical package SAS version 9.4, Minitab, IBM SPSS Statistics 26 software.
- Graphic designing using Adobe photoshop 2022, Adobe lightroom 2022, Adobe premiere pro-2022, Adobe after effects 2022, Adobe InDesign 2022 software.
- Chemical drawing using chem draw ultra-12.0, chemsketch software.
- 3D modeling using blender software.
- Compilation of research project reports, writing research manuscripts, research proposal formulation and standard formatting of seminar presentations, posters, and abstracts.

#### **Other Skills**

• Photography, cinematography, flyer designing, public speaking, acting, story writing.

### **Professional Training & Workshops**

- Training program- FSSC 22000 training program STAY Naturals Private Limited., No. 45, Ambangangawatte Road, Kawatayamuna, Kawdupelelle, Matale, Sri Lanka. 21072 -2022.
- Workshop Personal financial literacy and entrepreneurship for the undergraduates of Sri Lanka
  2020
- Certificate level course "Basic molecular biology techniques for beginners"–University of Peradeniya- 2019.
- Certificate level course Residential training program on Tamil language –National institute of language education and training- 2018.
- Training program Residential training program on Teamwork, Leadership and Citizenship development - University of Peradeniya, Sri Lanka -2018
- Diploma ICT and computing IDM Achievers international campus 2017

## **Extra-curricular activities**

#### **Debates**

• First place - English camp, Thurstan Collage, Colombo 03 - 2011

## **Sports**

- $\bullet$  Second runners up 100 m butterfly men Interfaculty Fresher's Championship, University of Peradeniya 2019
- Champions Chess Faculty Championships, Faculty of Agriculture, University of Peradeniya, Sri Lanka -2019 and Inter-house sports meet Thurstan collage, Colombo 03 2008 and 2009

### **Student Associations**

- President 2021 and Vice-president 2020-Biology Guild, Faculty of Agriculture, University of Peradeniya, Sri Lanka.
- Chief Organizer 2021 and Senior Coordinator 2020 -Perabeats Media Club, University of Peradeniya, Sri Lanka 2021.

- Chief Editor Students for the Exploration and Development of Space (SEDS), University of Peradeniya, Sri Lanka 2021.
- Vice-president International students' forum (ISF), Faculty of Agriculture, University of Peradeniya 2021/22
- Vice-president Soil Science Society, Faculty of Agriculture, University of Peradeniya- 2021/22
- Sub-editor Green Hearts Society, Faculty of Agriculture, University of Peradeniya 2020
- Senior member Red jersey holder University Explorers' Club, University of Peradeniya Since 2020 and Sub-editor University Explorers' Club, University of Peradeniya 2021
- Member Rotaract Club, University of peradeniya 2020

# Leadership

- Team leader UniBioquest World Champion team of University of Peradeniya 2020
- Team captain Chess team of Faculty of Agriculture, Fresher's Championship, University of Peradeniya 2019.
- Team captain Swimming team (men) of Faculty of Agriculture, Fresher's Championship, University of Peradeniya 2019
- Team captain Chess team of Thurstan collage, Colombo 03 2008
- Head prefect Sri Purwarama Dhamma School, Horana, Sri Lanka 2014

## **Participation**

- Team leader UniBioquest World Champion team of university of Peradeniya 2020 and team member 2019, 2020 and 2021 UniBioquest World Champion team of university of Peradeniya
- Team member Innovative Solutions for waste management Competition by institution of engineering technology 2021
- Organizer SEDS virtual junior Astro night 2020, Students for the Exploration and Development of Space (SEDS), Sri Lanka 2020
- Team member Team Thaptrobane 2.0, Sri Lanka International Mars Hackathon 2020
- Team member Team Megha, Sri Lanka Singapore Space Challenge 2020
- First place Individual competition "I am a responsible media citizen" Lanka development journalist forum (SDJF) in partnership with Helvetas and European Union 2020
- First place landscape photography, First runners up University Life and Landscape Photography Category- Captures'21 photography competition.
- Highly commended performance Short story writing AFELA creative series, inter university creative competition – 2021

#### Referees

Prof. B.E.P. Mendis

Professor

Department of Food Science & Technology,

Faculty of Agriculture,

University of Peradeniya, Peradeniya (20400),

Sri Lanka

E: ereshamendis@agri.pdn.ac.lk

Prof. R.P.N.P. Rajapakse

Professor/Head

Department of Food Science & Technology, Faculty of Agriculture, University of Peradeniya,

Peradeniya (20400),

Sri Lanka

E: niranjanp@agri.pdn.ac.lk

Date: 8th of January 2023

I hereby certify that the particulars submitted by me in this application are true and accurate. I am aware that if any of these particulars are found to be false or inaccurate, I am liable to be disqualified before selection and to be dismissed without any compensation if the inaccuracy is detected after appointment.

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D. Vidheesha S. Abeysinghe