ANNUAL RESEARCH REVIEW

2025

National Institute of Fundamental Studies- Sri Lanka

Ministry of Science and Technology

WE ARE THE PREMIER INSTITUTE FOR ADVANCING FUNDAMENTAL SCIENCES

OUR VISION

TO BE A WORLD RENOWNED CENTER OF EXCELLENCE FOR RESEARCH IN FUNDAMENTAL STUDIES

OUR MISSION

INITIATE, PROMOTE AND ENGAGE IN ADVANCED RESEARCH IN FUNDAMENTAL STUDIES FOR THE ENHANCEMENT OF SCIENTIFIC KNOWLEDGE AND DEVELOPMENT OF HUMAN RESOURCES CONTRIBUTING TO NATIONAL DEVELOPMENT.

Message from the Hon. Minister

Annual Research Review - National Institute of Fundamental Studies

It gives me great pleasure to send this message for the Annual Research Review (ARR) of the National Institute of Fundamental Studies (NIFS), a premier institution dedicated to advancing basic sciences in Sri Lanka. The ARR remains a distinctive and exemplary initiative within our national research landscape, demonstrating a culture of accountability and excellence through its rigorous annual evaluation of research programmes and scientific performance.

Science, technology, and innovation are central to Sri Lanka's future. Fundamental research, as undertaken at NIFS, forms the essential foundation for applied research, technological advancement, and industrial growth. By strengthening basic sciences, we secure the intellectual and technological capacity necessary for long-term national progress.

I am pleased that NIFS continues to be ranked among the country's leading research institutions, reflecting the dedication, integrity, and high standards upheld by its scientists and leadership. The Annual Research Review provides a valuable platform to assess achievements, refine priorities, and align research efforts with national development needs.

This year also marks important progress in strengthening our national innovation ecosystem. The revival and active implementation of the Viddhatha Programme is bringing scientific knowledge closer to communities and supporting rural development. The establishment of incubation centres provides structured support for innovation, entrepreneurship, and technology-based enterprises emerging from research institutions.

The commercialization of research findings is vital. Research must extend beyond academic publication and contribute directly to economic growth, industry development, and societal well-being. To this end, the Ministry has taken effective steps to promote technology transfer, intellectual property development, and stronger engagement between research institutions and industry.

Equally important are partnerships. Enhanced collaboration among research institutes, universities, and other stakeholders has been actively initiated and strengthened by the Ministry, fostering a more coordinated and impactful national research framework.

As Sri Lanka moves toward a knowledge-driven economy, institutions such as NIFS will play a pivotal role in generating new knowledge, nurturing future scientists, and translating research into meaningful national benefit. I commend all those involved in organizing this year's Annual Research Review and wish the event every success.

Hon. Prof. Chrishantha Abeysena M.P.
Minister of Science and Technology

Message from the Chairman

In 2025, we have strengthened our commitment to ensuring that fundamental research at NIFS not only advances knowledge but also contributes more directly to national development and innovation.

It is with great pleasure and a deep sense of responsibility that I present the Chairman's Message for the 2025 Annual Research Review of the National Institute of Fundamental Studies (NIFS). Over the past year, the Institute has continued to consolidate its position as Sri Lanka's premier centre for fundamental scientific research while expanding its contribution to national priorities and socio-economic development.

In a rapidly changing global landscape, the importance of strong foundations in basic science has become even more evident. At NIFS, our research programmes in advanced materials, nanotechnology, energy, food chemistry, environmental sciences, and biodiversity conservation have continued to generate high-quality scientific outputs while addressing critical national challenges. The Institute's sustained ranking among the leading research institutions in the country reflects the dedication, integrity, and scholarly excellence of our scientists and leadership.

During 2025, particular emphasis was placed on strengthening the pathways from discovery to application. While remaining firmly grounded in fundamental inquiry, the Institute enhanced efforts toward value addition, technology transfer, and research commercialization. Greater attention has been given to intellectual property management, industry engagement, and collaborative research initiatives that align scientific excellence with national development needs.

We have also reinforced interdisciplinary collaboration within the Institute and expanded partnerships with universities, research organizations, and industry stakeholders. These collaborations are vital in maximizing resources, avoiding duplication, and accelerating innovation. At the same time, continued investment in young researchers, mentorship, and capacity building ensures that NIFS remains a nurturing ground for the next generation of Sri Lankan scientists.

The achievements recorded this year—ranging from advancements in renewable energy materials and mineral value addition to innovations in food security and environmental sustainability—demonstrate the Institute's ability to respond to both immediate and long-term national priorities. Importantly, they reaffirm our conviction that fundamental science is the engine that drives sustainable progress.

On behalf of the Board of Governors, I extend my sincere appreciation to the Director, the scientific and administrative staff, our collaborators, and all stakeholders who have supported the mission of NIFS. Their commitment and professionalism continue to uphold the Institute's reputation as a beacon of scientific excellence.

As we look to the future, we remain steadfast in our mission: to deepen scientific inquiry, uphold the highest standards of research integrity, foster innovation, and contribute meaningfully to the advancement and prosperity of Sri Lanka.

Prof. Sanath Rajapakse Ph.D. (Hokkaido *University, Japan)*, F.N.A.S (S.L.)
Chairman
National Institute of Fundamental Studies
Sri Lanka

Message from the Director

It is with great pleasure that I present the Director's Message for the 2025 Annual Research Review of the National Institute of Fundamental Studies (NIFS).

As Sri Lanka's premier institute dedicated exclusively to basic scientific research, NIFS remains firmly anchored in its core mandate: the pursuit of fundamental knowledge. We believe that strong nations are built upon strong foundations in science, and that curiosity-driven research is essential for long-term innovation, resilience, and intellectual independence. At the same time, we are ever mindful that scientific inquiry must remain responsive to the evolving needs of our country.

During the past year, we have taken deliberate steps to align our research priorities with the policies and strategic directions of the Government and the Ministry. The national emphasis on strengthening the research culture, enhancing innovation, promoting value addition to local resources, and encouraging commercialization of research findings has resonated strongly with our institutional vision. We are particularly encouraged by the Government's positive and constructive response to the needs of the research community, including its recognition of the importance of sustained investment in science and technology.

Our scientists have continued to produce high-quality research across multiple disciplines while also advancing projects with clear societal and economic relevance. From environmental sustainability and natural resource value addition to advanced materials, health, and energy-related research, NIFS has worked to ensure that fundamental science remains the driving force behind practical solutions. We firmly believe that promoting basic research does not stand in contrast to addressing national needs; rather, it is the most reliable pathway to achieving sustainable and transformative development.

This year has also been marked by strengthened collaborations—with universities, industry partners, government agencies, and international institutions—creating a dynamic ecosystem where ideas can move from laboratory to application. By fostering interdisciplinary approaches and encouraging innovation-oriented thinking, we aim to bridge the gap between discovery and deployment.

As we move forward, NIFS will continue to uphold excellence in fundamental research while consciously contributing to national priorities. We do so with gratitude for the support extended by the Government and the Ministry, with confidence in the capabilities of our scientific community, and with optimism about the role that science can play in shaping Sri Lanka's future.

We remain committed to ensuring that the knowledge generated at NIFS not only advances global scholarship but also meaningfully serves our nation and its people.

Prof. D.S.A. Wijesundara F.N.A.S (S.L.)
Acting Director/CEO
National Institute of Fundamental Studies
Sri Lanka

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SECTION I – RESEARCH PROGRAMMES

Project leaders are responsible for the authenticity of the reports they have submitted

Evolution, Ecology & Biodiversity Research Programme

Prof. Suresh P. Benjamin ***Research Professor***
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Research Project Introduction:
Biodiversity research explores ecosystem functions, with a focus on the Western Ghats–Sri Lanka hotspot. Tropical mountains, including Sri Lanka's central highlands, harbour many endemic species. We estimate that over 90% of invertebrates remain undiscovered, with some species restricted to a single mountain peak. These species may face threats from habitat loss and climate change, making conservation efforts crucial. Understanding their distribution and ecological roles is essential for preserving biodiversity and mitigating environmental impacts, including climate change, in this unique region.

Research Activities:
The following research activities were conducted:

1. **Molecular Phylogeny of Ground Spiders** (Araneae: Zodariidae, Liocranidae): A revision of selected Sri Lankan genera—*Cryptothele, Oedignatha, Utivarchna,* and *Mallinella*—was carried out based on morphology and target gene analysis.

2. **Taxonomic Revisions of Jumping Spiders** (Araneae: Salticidae): A morphological and molecular study of Sri Lankan jumping spiders, focusing on genera *Epidelaxia, Rhene,* and *Spartaeini.* Salticidae, the largest spider family, currently includes ~6950 species in 695 genera worldwide.

3. **Phylogenetics and Taxonomy of Crab Spiders** (Araneae: Thomisidae): This study aims to clarify Sri Lankan crab spider biodiversity, redefine genera in phylogenetic terms, and position them within the Thomisidae tree of life.

4. **Biodiversity patterns of herbivore scarab chafers of Sri Lanka** (Sericini: Coleoptera: Scrabeaidae). This study aims to clarify the Ecology, Evolution and Biodiversity of Sri Lankan scarab chafers.

Results/Key findings:
Twenty-four new spider species were discovered and described in nine peer-reviewed papers; several belong to endemic radiations. The diversification study of the jumping spider genus *Epidelaxia* was updated to include Indian species. Biodiversity research on *Cryptothele, Utivarchna,* and *Mallinella* was published. *Oedignatha* from Sri Lanka is revised, with 20 new species to be described soon. Additionally, the diversity and morphological disparity of Sri Lankan scarab chafers were published in Ecological Entomology. Our results indicate that small changes in diversity are linked to small alterations in disparity, although significant shifts in diversity do not necessarily correspond to substantial disparity change.

From L to R: Mr. N.P. Athukorale, Dr. U.G.S.L. Ranasinghe, Ms. K.M.R.K.T. Herath, Prof. S.P. Benjamin, Mr. D.N.G. Dayananda, Mr. D. Jayawardana

Food Chemistry Research Programme

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Research Project Introduction:
From its humble beginning in 2018, food chemistry programme at NIFS has grown strength to strength covering various aspects of food chemistry. During the last seven years, we explore selected under-utilized plant resources in Sri Lanka for their nutritional values to develop functional foods. Phytochemical explorations of lesser known plant species are also undertaken as a part of development of plant-based products with therapeutic potential. Additionally, the programme has also embarked on quality improvements of crude plant oils meant for food and cosmetic applications.

Research Activities:
During the year 2025, our attention was focused on three sub-themes. Firstly, food and nutritional evaluation of edible soft stem of banana (Musa spp.) trees of four local varieties. Secondly, phytochemical exploration of a study to isolate and purify the phyto nutrients present in Yaki naran (*Atlantia ceylanica*) and their therapeutic potential as anti-hyperglycaemic agent. Under oil seed investigation, a study was undertaken to compare the nutritional benefits of raw and defatted residues of sesame seeds (*Sesamum indicum* L.) obtained from two local cultivars, namely Uma and ANKSE3.

Results/Key findings:
Altogether six pure compounds were isolated from the leaves of Yaki naran (*Atlantia ceylanica*). Out of these six, the most dominant compound structurally elucidated using NMR spectroscopy and was assessed for its biological activities. Under the second sub-theme, soft stem of banana (*Musa* spp.) trees of four local varieties were found to be a potential raw material for carboxy-methyl-cellulose preparation and a source of dietary fiber. Under the oil seed sub-theme, fat was the main constituent of the raw sesame seeds regardless of the cultivar, while protein was the predominant constituent of their defatted residues.

From L to R: Mr. D.G.C.S. Ilangarathne, Prof. J.M.N. Marikkar, Ms. H.F. Fahmidha

Microbial Biotechnology Research Programme

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Research Project Introduction:
We have developed Biofilm biofertilizers (BFBF) and evaluated its potential as a microbial ameliorator in different agroecosystems and the environment. Our current focus is on cross-disciplinary benefits of using developed microbial biofilms (DMB), including biofilm nutraceuticals as next-generation medicine, and other industrially important applications such as bioremediation agents, biostimulants, and sustainable life support systems for space exploration.

Research Activities:
During 2025, a national eco-friendly fertilizer program was implemented in four provinces, including one Mahaweli region. It is aimed to promote sustainable fertilizer practices for paddy farmers as a national policy. Key institutions involved are NIFS, the Department of Agriculture, and the Mahaweli Authority. The program introduced modern practices such as biofilm biofertilizers (BFBF), nutrient-rich organic or hybrid pellet fertilizers, and a 50% reduction in chemical fertilizer use. In addition, research was carried out to investigate the polymicrobial interactions and mechanisms of action of developed microbial biofilms (DMB) across various ecosystems. Further to this, efforts were focused on developing biofilms for other applications, including medicine, environmental management, postbiotic production, and space exploration.

Results/Key findings:
The national program introduced advanced eco-friendly fertilizer practices such as Biofilm biofertilizer, nutrient-enriched organic/hybrid pellet fertilizers leading to a 50% reduction in chemical fertilizer usage. When compared to using only chemical fertilizers, these practices led to a 30% increase in paddy yield. Our research revealed that the DMB could enhance water and nutrient use efficiency, as well as crop quality in rice, tea, and mushroom cultivations. In addition, we have developed microbial biofilms, which are capable of remediating perchlorate contaminations in the environment, reactivating dormant microbes in soil and gut ecosystems and supporting space explorations by acting as sustainable life support systems.

From L to R: 1st raw - Prof. G. Seneviratne, Dr. M. Premarathna
2nd raw - Mrs. H.M.R.M. Thilakarathne, Mrs. S.D.P.N. Jayasinghe, Mrs. A.J.M.S.H. Jayasekara, Ms. K.A.D. Sathsarani, Ms. R.G.V.D. Munasinghe
3rd raw - Mr. S.M.D.B. Ariyarathne, Mr. S.S.W.B.M.S.N.B. Ekanayake, Mr. S.G.A.T.N. Wijerathna, Mr. D.M.P.C. Senanayake, Mr. K.T.S.B. Kaluarachchi, Ms. P.G.U. Sammani, Mr. R.D. Pathirana, Mr. D.C. Madanayake, Mr. U.G.H.M. Premarathna

Microbiology & Soil Ecosystems Research Programme

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Research Project Introduction:
The microbiology project investigates cyanobacteria-based bioremediation of textile wastewater, including pollutant removal, toxicity reduction, dye biodegradation, and fatty-acid profiling of treated biomass. The project also evaluates the bioactive and nutritional potential of native Sri Lankan cyanobacteria for nutraceutical, pharmaceutical, and food applications. In parallel, the soil ecosystem programme examines carbon sequestration dynamics across major vegetation types, providing critical data for climate-change mitigation and establishing a national carbon-accounting framework.

Research Activities:
The microbiology project continues to evaluate textile wastewater (TWW) bioremediation using cyanobacteria and co-cultures, assessing decolorization, pollutant removal, phytotoxicity, and the structural and enzymatic biodegradation of synthetic dyes. Parallel studies examine short- and long-term preservation of isolates through sub-culturing and cryopreservation. Investigations were also focused on strains rich in proteins, carbohydrates, and bioactive compounds such as phenols, flavonoids, and antioxidants, highlighting cyanobacteria as a potential nutritional and secondary-metabolite production platform. Expansion and maintenance of a cyanobacteria-specific culture collection are ongoing. A completed study assessed green biomass incorporation for soil fertility and land productivity, with emphasis on organic farming in the Jaffna Peninsula. Ongoing work evaluated soil carbon sequestration, nutrient retention, and heavy-metal accumulation in urban wetlands, tank cascade systems, and associated dry-zone vegetation. New research investigates vegetation restoration effects on soil carbon and physicochemical properties of abandoned chena lands.

Results/Key findings:
Cyanobacterial strains and co-cultures effective in textile wastewater bioremediation were identified, demonstrating strong structural and enzymatic degradation of synthetic dyes. Wastewater-grown biomass showed desirable fatty acid profiles suitable for biodiesel production. Several strains possessing high phenol content and strong antioxidant and free radical scavenging activity were also recorded. Some strains were found to be fast growing and capable of producing high biomass and valuable pigments. Building on this sustainability focus, most farmers in Jaffna practiced integrated farming using *Crotalaria juncea* as green manure. Sunn hemp incorporated at 50% flowering improved soil nutrients, brinjal growth, and yield. In addition, digital soil carbon maps were developed for the Muthurajawela wetland complex, and soil carbon storage was quantified across land uses of Katupotha tank cascade system in Mihintale.

From L to R (seated): Prof. R.R. Ratnayake, Ms. W.D.U. Premarathna
Ms. H.M.C.S. Herath, Mr. P.G.N.S. Wijewardene, Mr. M.R.S. Ahsan, Ms. S.M. Dissanayake

Molecular Microbiology & Human Diseases Research Programme

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Research Project Introduction:
The Molecular Microbiology and Human Diseases project aims to elucidate the dynamics of the human microbiome and the host's physiological response, and also the influence of climate and the effects of anthropogenic activities on environmental microbes. The project addresses both communicable and non-communicable diseases of global and local significance. By studying gene expressions, molecular mechanisms underlying pathogenicity, and developing early diagnostic tools, the project contributes to a deeper understanding of microbe–host interactions, thereby addressing critical health challenges.

Research Activities:
The research activities performed comprised of multiple subprojects. Studies conducted included an analysis of serum transcriptomic profiles of latent tuberculosis patients to identify potential biomarkers that can predict disease reactivation and enable early diagnosis. Two projects were focusing on antimicrobial resistance associated with emerging threat of microplastics; one investigating the airborne-microplastics and antibiotic resistance bacteria at the Gohagoda Municipal Solid Waste dumping site. The second one was examining the distribution of microplastic - associated microbial communities in the Kandy Lake. The other study evaluated the spatiotemporal variations in airborne communities and correlates microbial abundance with respiratory disease incidence in Kandy city using active air sampling, climatic monitoring, and hospital epidemiological data analysis. The two sub projects focused on identification of antibiotic-resistant bacteria in selected hot springs, and molecular characterization of microcystin-producing gene clusters in cyanobacteria were completed. To achieve the goals, state-of-the-art molecular techniques such as next-generation sequencing (NGS) and bioinformatics are used along with Raman spectroscopy.

Results/Key findings:
1. The airborne bacterial abundance was significantly affected by meteorological conditions, including temperature, relative humidity, and rainfall, acting synergistically. Bacterial concentrations peaked at moderate temperatures, whereas increased rainfall was associated with a marked reduction in the colony counts and changes in the microbial community composition.
2. Microplastics collected from the Kandy Lake were carriers of diverse bacterial communities with identified genera including *Bacillus, Pseudomonas, Escherichia, Acinetobacter*, and *Aeromonas*, highlighting potential environmental and public health concerns.
3. Higher recombination in mcyH than mcyA gene with elevated non-conservative mutations in studied cyanobacterial strains indicated a recombination–mutation–driven divergence in microcystin biosynthetic potential.

From L to R: Mr. M.L.M. Wickramasinghe, Ms. I. Rathnayaka, Ms. V.K. Thantilage, Ms. A.G.A.G.L.K. Chandrarathne, Ms. H. Jayanetti, Prof. D.N. Magana-Arachchi, Ms. P.M.C.N. Jayathilake, Ms. K.W.A.S.K. Karandawela, Ms. G.H.S.S. De Silva, Ms. I.M.R.D.K. Rathwita, Ms. K.K.D. Chiranthika

Nutritional Biochemistry Research Programme

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Research Project Introduction:

Child malnutrition and non-communicable diseases remain significant public health challenges in Sri Lanka. Inadequate dietary practices and limited nutrition knowledge are key contributing factors to these issues. The Nutritional Biochemistry program focuses on evaluating the potential of underutilized food sources to improve public nutrition, while also assessing the nutritional status of diverse population groups.

Research Activities:

This research program seeks to enhance the nutritional status of the Sri Lankan population through a series of studies. One study investigated the nutritional and functional properties of duckweed as an alternative protein and bioactive source. Another study is underway among adolescents in Sri Lanka's Central Province, focusing on dietary patterns, physical activity, nutritional status, and related factors. A collaborative study explored dietary choices, nutrient intake, biomarker validation, and sociodemographic determinants among twins and offspring through the Sri Lankan Twin Registry.

Results/Key findings:

Analyzed duckweed species possess robust nutritional profiles, especially rich in protein (up to 33%), omega-3 fatty acids, essential minerals, and bioactive compounds with antidiabetic, anti-obesity, and antimicrobial effects. Optimized cultivation and processing could enable duckweed to serve as a sustainable, functional protein source for improving nutrition and reducing malnutrition. The COTASS-3 study shows widespread deficiencies in energy, macronutrients, and several key vitamins and minerals among both males and females, with distinct gender-specific inadequacies under economic crisis.

From L to R:-Ms. P. Hellarawa, Ms. A. Gunasekara, Ms. N. Senevirathne, Ms. I. Rathnayaka, Prof. R. Liyanage, Ms. M. Wickramasinghe, Ms. M. Dissanayake, Ms. A. De Soysa, Ms. R. Hiththatiyage, Ms. Y. Jayakodi

Plant Taxonomy & Conservation Research Programme

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Research Project Introduction:

The Plant Taxonomy and Conservation project focuses on systematics of Sri Lankan flora, restoration ecology, promoting sustainable plant use, investigating conservation factors, and conducting mycological research. It also manages the NIFS-Sam Popham Arboretum, a leading site for Assisted Natural Regeneration, playing a key role in preserving biodiversity and supporting sustainable environmental practices. Through these efforts, the project contributes to the conservation and sustainable use of Sri Lanka's plant and fungal species

Research Activities:

An island-wide field survey of forested habitats was conducted to document threatened angiosperm species. Following collection, propagules were established in nurseries at the National Institute of Fundamental Studies (NIFS) and the Royal Botanic Gardens, Peradeniya. Systematic research was carried out on the genera *Memecylon*, *Elatostema*, *Palaquium*, and *Isonandra*, while restoration efforts focused on *Stemonoporus moonii, Khaya stylosa*, *Justicia capitata*, *Polyspora dassanayakei*, and *Eugenia haekeliana*. To further the systematic studies on *Diospyros* and *Acranthera*, international collaborations were established with the Missouri Botanical Garden, the University of Hyderabad, and the Singapore Botanic Gardens. Additionally, the angiosperm collection at the National Herbarium was enhanced and annotated. Mycological research included taxonomic work on the genus Ganoderma and an ethno-ecological study of medicinal and edible mushrooms in the Kandy District. Finally, an in vitro evaluation of the endemic species *Diplodiscus verrucosus* was conducted to assess its bioactive potential for commercial application.

Results/Key findings:

Results include the publication of *Discovery: Additions to the Flora of Ceylon*, detailing 210 new angiosperm records for Sri Lanka. Field surveys across the island resulted in the collection of 597 specimens, including 255 threatened and eight novel taxa. The National Herbarium collection was enhanced by 480 accessions and 78 taxonomic annotations. Ex-situ conservation was supported by the propagation of 200 nursery plants. Mycology studies focused on the morphological and molecular characterization of 20 edible mushroom samples and 28 *Ganoderma* isolates. Pharmacological evaluation of *Diplodiscus verrucosus* extracts through (TLC) and bioassays (DPPH and α-amylase inhibition) identified extracts with potent antioxidant and antidiabetic properties.

From L to R (Sitting): Mr. R.B. Hapukotuwa, Dr. H.D. Jayasinghe, Prof. D.S.A. Wijesundara, Mr. C. Lekamge, Ms. S. Perera
From L to R (Standing): Ms. A.R.G.T.K. Agalawela, Ms. R.M.P. Wijesinghe, Ms. H.K.G.B.M. Premarathne, Ms. P.G.S.M. Silva

Primate Biology Research Programme

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Research Project Introduction:
The research involves observational studies of primates in their natural forest habitats. Its aims are to: (1) establish new knowledge concerning the evolution of social behavior in primates; (2) provide a scientific basis for nature conservation; and (3) disseminate new knowledge through scientific publications and professionally produced documentary films. The popular media and our presentations serve not only to educate and entertain, but also to gain public support for conservation in the local and international communities.

Research Activities:
Comparative primate socioecology: Toque macaques *Macaca sinica*, gray langurs *Semnopithecus priam*, and purple-faced langurs *S. vetulus*, and the nocturnal loris *Loris lydekkarianus*. Regular census of these four species is the basis for population ecology and comparative studies.
Statistical analysis of changes in the nutritional composition of milk samples from wild toque macaques were compared to similar studies of captive primates and overturned long-standing assumptions by emphasizing plasticity in milk composition as adaptations promoting infant and mother survival under nutrient harsh environment relevant also to humans.
Conservation activities involved interventions at Polonnaruwa as well as leadership in local government sponsored (GA) projects promoting nature education and tourism. Invited consultation with the Ministry of Agriculture on ways to protect farmers from monkey crop depredations.
An undergraduate student was supported by a stipend and supervised in ecological studies of gray langurs at Polonnaruwa. International and local presentation promoted knowledge and science education.

Results/Key findings:
Captive cercopithecine primates benefit from a constant and resource rich environment and wean their infants by seven months postpartum. In contrast, under the harsh environment of wild toque macaques [TM] lactation may extend to nearly 2 years. TM mothers supplant the nutrient intake of their self-feeding infants. When TM infants begin to drink and obtain sugar from fruit in the environment the composition of milk is reduced in water and sugar, whereas fat and minerals that are essential for infant growth increase in the milk. The changes in the composition of TM milk safeguard maternal health and infant survival.

From L to R: Mr. C. Pathirathne, Prof. W.P.J. Dittus, Mr. S. Rathnayaka

Rhizobium Project

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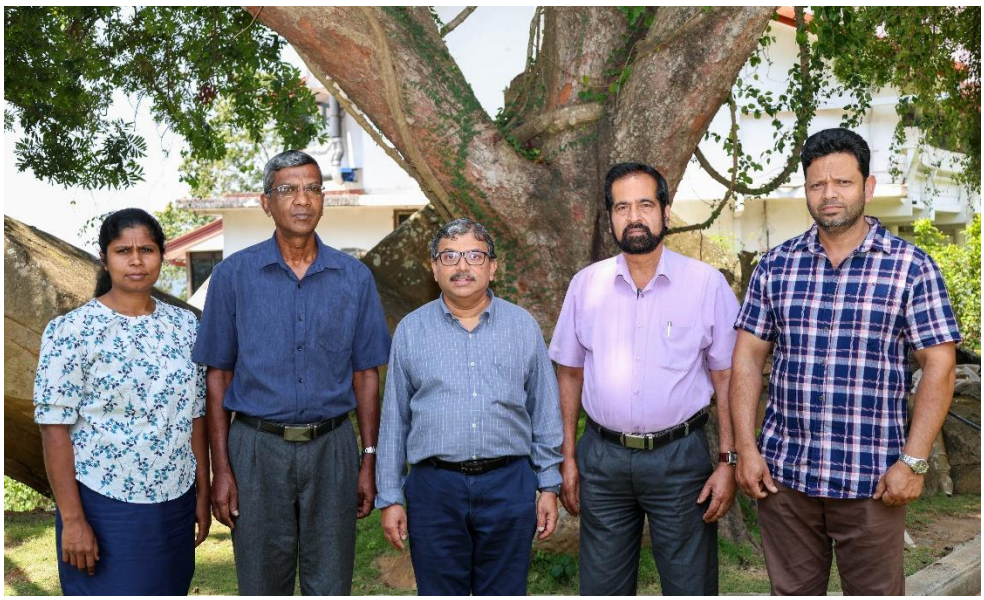
Research Project Introduction:
The Rhizobium Inoculant Research & Production Facility (RIRPF) was affiliated to the NIFS and commenced in January 2012 under the collaborative and consultative division (CCD) of the NIFS. In 2018, RIRPF was absorbed to the Microbial Biotechnology Unit (MBU) of the NIFS. The main mission of the project is to produce Rhizobium biofertilizers (RBF) and familiarize them in local legume cultivations for minimizing the chemical nitrogen fertilizer (urea) application.

Research Activities:
A new carrier material for RBF was formulated and tested under lab and greenhouse conditions. Extension programs for the popularization of RBF were conducted in the central province in collaboration with the Provincial Department of Agriculture (central province), and also with Plenty Foods (Pvt.) Ltd. A large number of field demonstrations on vegetable bean were conducted to educate farmers on the novel method of biofertilizer application. These also included the use of RBF with Biofilm biofertilizer (BFBF) in legume cultivations in the central province.

Results/Key findings:
Initial rhizobial counts in the new carrier material showed promising results. It was found that the bean yield with the novel method of biofertilizer application (i.e. RBF + BFBF) was the highest, followed by the yield with the RBF alone, and then the yield with the recommended level of chemical fertilizers for beans. This combined application of the biofertilizers is a world's-first method for legume cultivation.



From L to R: Mr. A.H.M.A.K. Tennakoon, Ms. D. Aberathne, Prof. G. Senevirathna, Mr. E.M.H.G.S. Ekanayake, Mr. R.K.G.K. Kumara

Condensed Matter Physics & Solid-State Chemistry Research Programme

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Research Programme Introduction:

This programme focuses on understanding the fundamental physical properties of scientifically intriguing and technologically innovative materials for the development of dye-sensitized and quantum dot-sensitized solar cells, rechargeable batteries, and supercapacitors. Through diverse, cutting-edge projects, this programme integrates advanced nanostructured materials into energy generation and storage devices, including hybrid devices, addressing the growing demand for sustainable solutions.

Research Activities:

(a) Linoleic acid was investigated as a novel co-adsorbent in DSSCs by modifying the TiO_2 photoanode to control dye aggregation and suppress interfacial charge recombination. (b) Sustainable counter electrodes were developed using coconut shell–derived charcoal for CdS quantum dot solar cells. The material was deposited, and optimized as a low-cost alternative to noble metals. (c) Plasmonic-enhanced multifunctional composite photoanodes were prepared for dye-sensitized solar cells using hierarchically structured TiO_2 microspheres integrated with a P25 TiO_2–based photoanode and device performance was optimized. (d) A gel polymer electrolyte was prepared for rechargeable magnesium batteries using polyethylene oxide (PEO) complexed with magnesium triflate and plasticized with ethylene carbonate and propylene carbonate and electrolyte composition was optimized. e) Initiated the development of a photo-supercapacitor, integrating dye-sensitized solar cells and supercapacitors using commercially available activated carbon and super-conductive carbon composites, with a focus on simultaneous energy conversion and storage.

Results/Key findings:

(a) DSSCs fabricated with a TiO_2/dye/linoleic acid (0.95 mM)–modified photoanode showed a 25% efficiency improvement compared to unmodified TiO_2 photoanodes. (b)QDSSCs using coconut shell charcoal counter electrodes delivered an efficiency of 2.93%**,** outperforming conventional Pt counter electrodes **(**1.26%**). (**c) DSSCs incorporating composite photoanodes with 10% TiO_2 microspheres exhibited a 13% enhancement in efficiency. (d) The optimized Mg^{++} ion gel polymer electrolyte demonstrated high room-temperature ionic conductivity with a total ionic transference number of 0.98. e) Carbon-based composite electrodes improved the electrochemical performance of photo-supercapacitors, delivering modest photovoltaic efficiency and functional capacitance, with further optimization ongoing.

1st Raw - From L to R: Prof. G.K.R. Senadeera, Prof. M.A.K.L. Dissanayake, Dr. J.M.K.W. Kumari,
2nd Raw - From L to R: Miss. P.U. Sandunika, Mr. T.M.H.G. Thilakarathna, Miss. C.B.D. Kolamunna, Mr. M.A.S.A. De Silva, Mr. D.D.S. Senevirathna, Mr. K.L.A.C. Lakshan, Miss. G.G.S. Sewwandi

Energy & Advanced Material Chemistry Research Programme

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Research Programme Introduction:
Investigation on renewable energy as an alternative energy source is the main research focus of the group. The main research interests include the study of problems associated with the conversion of solar energy into chemical energy such as hydrogen via water splitting and converting atmospheric carbon dioxide into fuels as well as thin film solar cells in converting solar energy into electrical energy.

Research Activities:

(I) Investigation of the role of polarons in photocatalysis and chemical reactions, with a focus on how the kinetic and thermodynamic behaviour of polarons affects charge transport and recombination, which contribute to controlling the catalytic activity of Transition Metal Oxide (TMOs)-based photocatalytic systems. Polaron-rich TMOs with localized polaronic electrons can be activated by thermal energy and infrared irradiation, and these engineered oxides will be studied to determine the effect of charge carrier generation, separation, and transport in understanding the role of polarons in catalysis.

(II) Thin film solar cells based on $AgBiS_2$ light harvesting materials are underperforming due to inherent charge recombination process. To address this, systematic passivation and removal of S-vacancy in $AgBiS_2$ q-dot particles was investigated. The redesigned $AgBiS_2$ photoelectrodes were used in photovoltaic device topologies to investigate how the controlled decrease of S-vacancies and surface defect passivation improves charge carrier separation while suppressing recombination.

Results/Key findings:

Polaron-mediated photocatalysis – Photocatalytic reaction rates increased with the introduction of polarons to TMOs, where the density of oxygen vacancies governed polaron transport kinetics from bulk to surface. Impedance analysis revealed more efficient interfacial charge transfer compared to pristine TMOs, and the key mechanisms of polaronic electron regeneration were further clarified.

$AgBiS_2$ quantum dot passivation with CdS/ZnS for photovoltaic enhancement –The initial efficiency of the photovoltaic cell prior to passivation was low. Adding an ultrathin ZnS passivation layer increased photocurrent and improved photovoltaic performance by passivating surface defects and reducing backscattering of photoelectrons at the $AgBiS_2$-Q-Dot Layer and electrolyte interface.

From L to R: Ms. K.A.D.M.S. Sarathchandra, Mr. P.R.M. Gunasinghe, Mr. P.K.B.D. Pussewala, Mr. R.P.P.D. Rajakaruna, Mr. D.C. Rajapakse, Prof. J. Bandara, Ms. U.V.K. Udayangani, Ms. M.D.I. Abeywardane, Ms. D.L. Panabokke, Ms. H.P.V.D. Perera

Material Processing & Device Fabrication Research Programme

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Research Project Introduction:
The Material Processing and Device Fabrication (MPDF) research program focuses on developing next-generation energy conversion and storage technologies through advanced materials engineering. The projects encompass high-efficiency and stable dye-sensitized solar cells via optimized photoanodes and electrolytes, thin-film perovskite solar cells, biomass-derived hybrid supercapacitors optimized using machine-learning approaches, and sustainable exfoliation and purification of Sri Lankan natural graphite for energy and electronic applications.

Research Activities:
The research activities of the Material Processing and Device Fabrication (MPDF) program focus on advanced materials development for sustainable energy conversion and storage. Key activities include the design and optimization of next-generation dye-sensitized solar cells through novel photoanode architectures and electrolyte engineering to achieve high efficiency and long-term stability. Parallel efforts involve the fabrication and performance enhancement of thin-film perovskite solar cells using low-cost, scalable processing techniques. The program also investigates biomass-derived electrode materials by studying different coconut shell activation methods and developing hybrid supercapacitors, with machine learning employed to optimize material properties and device performance. In addition, environmentally sustainable methods for exfoliation and purification of Sri Lankan natural graphite are developed for applications in energy storage, electronics, and value-added carbon materials.

Results/Key findings:
The MPDF research program has generated significant outcomes in both energy conversion and storage. In dye-sensitized solar cells, silver-doped TiO_2 photoelectrodes fabricated via spray pyrolysis demonstrated enhanced light harvesting, improved charge transport, and increased power conversion efficiency, confirming the effectiveness of controlled metal doping and scalable fabrication techniques. In parallel, supercapacitor studies revealed that pyrolyzed sucrose functions as an efficient green binder for coconut shell–based activated carbon electrodes, delivering improved electrical conductivity, mechanical stability, and electrochemical performance. These results validate sustainable material strategies for high-performance, low-cost energy devices and have been disseminated through peer-reviewed publications.

1st Raw - From L to R: Ms. K.D.C. Gunasinghe, Mr. W.V.N.S. Bowaththa, Mr. H.M.G.K.B. Herath, Mr. H.G.L.I. Dasanayake, Mr. P.A.H.L.I. Pathiraja, Mr. P.P.B. Gunarathne, Ms. G.G.U.M. Bandara
2nd Raw - From L to R: Ms. D.M. Aluthpatabendi, Prof. G.R.A. Kumara, Mr. B.L. Kanchana, Mr. D.J.D.S. Gamage

Nanotechnology & Advanced Materials Research Programme

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Research Programme Introduction:
Nanotechnology and Advanced Materials fields have already contributed to present technological advancements through introducing novel materials derived mainly from minerals. Sri Lanka possesses useful minerals but such target-oriented value addition is unfortunately lacking. Therefore, those factors inherent to the country are seriously considered, in performing our fundamental/advanced but target oriented scientific investigations. The National Centre for Advanced Battery Research, a dedicated facility for upgrading our minerals for battery applications, is operated under this project

Research Activities:
Value addition to Sri Lankan minerals and related materials for advanced/high-tech/nano-technological applications.: Development of local minerals and related materials by finding viable solutions, through performing fundamental/advanced scientific investigations, for the ultimate use of our mineral resources in highly profitable advanced/high-tech/nano-technological applications.1. Scaling-up process of battery grade graphite 2. Modify graphite crystal structure to intercalation bigger ions. 3. Upgrade other potential local minerals through purification and modification.

Development of low-cost and performance enhanced advanced materials for energy conversion by low-cost and nano material synthesis techniques: Development of low-cost and performance enhanced advanced materials by synthesizing advanced transition metal oxide (TMO) semiconducting materials through nano material synthesis techniques and deriving advanced materials from purified Sri Lankan minerals, for energy conversion applications. 1. Developing transition metal oxide (TMO) materials for battery applications 2. Scaling-up of battery geometries that utilizes our novel materials and components 3. Fabricating vein graphite/nano-structured TMO composite for sensors, supercapacitor applications.

Results/Key findings:
New knowledge/information has been added on types, occurrence and elimination of impurity associated with SLVG and SLVQ, while revealing its potential for demanding rechargeable batteries. - Optimization/scaling-up of our invented purification/modification processes have been carried out to batch-reactor level and it successfully demonstrated the capability of marking a significant step towards bridging gaps existing between laboratory achievements and industrial requirements. - Investigations done on CuO and Cu_2O added substantial knowledge on improving efficiency in rechargeable batteries. The developed CuO, p-type Cu_2O and n-type Cu_2O revealed their capability for next-generation high-performance batteries. – The novel work performed with vein graphite/nano-structured TMO composite, showed their highly promising potential for sensors, supercapacitor applications

From L to R: Mr. W.T.R.S. Fernando, Mr. W.G. Jayasekara, Ms. H.M.H.D.K. Naranpanawa, Dr. H.W.M.A.C. Wijayasinghe, Mr. S.M.M.U. Sivirathna

Natural Products Research Programme

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Research Project Introduction:
The research under this project explores natural products for agricultural and human health applications, focusing on plant and fungal extracts, bioactive compounds, and LC-MS profiling. Its aims are to identify potential uses of these extracts in disease management and crop protection. Additionally, the study investigates postharvest disorders in guava, mango, and avocado, assessing their causes and developing effective management strategies to enhance fruit quality and shelf life. Findings from these research work will contribute to sustainable agriculture and improved human health.

Research Activities:
Identification of plant extracts with bioactive properties.
Investigation of extracts from plant sources for use in agriculture and human health and LCMS profiling of bioactive extracts.
Investigation of extracts from epiphytic and endophytic fungi, for use in agriculture and human health.
Cause and control of postharvest fungal diseases and disorders of edible and export-oriented fruits.

Results/Key findings:
Nine compounds from fermentation of *Diaporthe melonis*, an endophytic fungus of *Acalypha indica* L. (Euphorbiaceae), They are 1,8-dimethoxynaphthalene (**1**), 8-methoxynaphthalen-1-ol (**2**), 4-hydroxybenzoic acid (**3**), 1-(2,6-dihydroxyphenyl)butanone (**4**), methyl (4-hydroxyphenyl)acetate (**5**), 3-nitropropanoic acid (**6**), phomonitroester (**7**), felinone A (**8**) and (4R,6R)-4-hydroxy-6-methyltetrahydro-2H-pyran-2-one (**9**). The EtOAc crude extract resulted in strong cytotoxicity, radicle elongation inhibition and a strong potential to inhibit α-glucosidase enzyme. This is the first report of the strong α-glucosidase and strong phytotoxicity of compound **4**.
Fermentation of *Aspergillus niger* of *Basella alba* furnished five naphtho-γ-pyrone type compounds, TMC 256A1 (**10**), rubrofusarin B (**11**), fonsecin B (**12**), aurasperone A (**13**), and fonsecinone A (**14**). Compounds **10**, **11** and **12** showed phytotoxic activity in lettuce seed germination bioassay with IC_{50} values of 45.4, 49.7 and 47.8 ppm percentage radicle growth inhibition.

From L to R: Ms. H.H.K. Hapuarachchi, Mr. H.A.K.D. Premasiri, Mr. Y.G.A.D.K. Bandara, Mr. D.S. Jayaweera, Dr. N.P. Piyasena, Mr. M.M.S.B. Amarakoon, Prof. N.K.B Adikaram, Prof. U.L.B. Jayasinghe, Ms. M.M.U. Chathurangani, Ms. D. Aththanayake, Ms. M.M.U. Shakyangani, Ms. A. Kahandawa, Ms. R.H.M.Y.A. Bandara

Computer Science, Mathematics and Statistics Research Programme

Prof. S.R. Kodituwakku ***Research Professor***
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Research Project Introduction:
This research advances computer science, mathematics, and statistics through innovation in software engineering, AI, generative AI, image processing, and machine learning, contributing to national and global development while addressing real-world challenges.

Research Activities:
Project, I develop artificial intelligence and machine learning algorithms for software engineering, focusing on system analysis and design. A novel decision-support matrix applies discriminative AI to address conceptual modeling challenges. An NLP-based system is being refined with machine learning and trained using a custom dataset built from real industry data. Project II investigates automated conversion of wireframe images into interactive UI designs and code using Generative AI and deep learning. A new dataset is being developed, and a conditional GAN is employed to transform wireframes into UI images, while optimizing network architecture, parameters, and training strategies.

Results/Key findings:
Project 1 develops an NLP-based system refined with machine learning, using a custom industry dataset. A hybrid Generative–Discriminative AI framework is proposed to identify non-functional requirements from SRS, incorporating a novel RNN to improve accuracy and performance. Project II applies cGANs to convert wireframes into UI designs, demonstrating effective automation. Results show accelerated design workflows, with strong quantitative performance (SSIM = 0.76, PSNR = 27.6), confirming high-quality UI generation.

Prof. S.R. Kodituwakku, Mr. K.G.S.N. Samaraweera,

Earth Resources and Renewable Energy Research Programme

Prof. N. Deepal Subasinghe ***Research Professor***
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Research Programme Introduction:
The ER & RE project focuses on renewable energy and mineral resources in Sri Lanka. With geothermal and mineral assets largely unexplored, there is strong potential for national growth. Sub-projects examine geothermal energy, Sri Lankan mineralogy and petrology, and geological hydrogen. A thermoelectricity initiative improves efficiency of power generation from waste heat.

Research Activities:
Researchers employ geophysical techniques such as resistivity, magnetic, and electromagnetic surveys to map subsurface features critical for harnessing geothermal energy, a promising renewable resource. Geochemical and mineralogical studies provide complementary insights. The potential presence of "white hydrogen" (naturally occurring geological hydrogen) is also being investigated. Detailed petrological and mineralogical analyses of local rocks help determine their origin, economic potential, and scientific importance. In a separate project, applications of thermoelectricity are explored. Thermoelectric materials play a vital role in electronic and electrical systems. Both theoretical and experimental studies are conducted to understand heat-transfer mechanisms and their influence on thermoelectric performance, with particular emphasis on composite materials used in electric-vehicle battery packs.

Results/Key findings:

- Initiating research work on finding the potential geological hydrogen resources in Sri Lanka.
- Proposing to enhance the hot water yield in low enthalpy geothermal systems in Sri Lanka.
- Revealing the subsurface structures of Wahava geothermal area using magnetic methods.
- Reviewing the genesis, classification, tectonic setting and economic potential of granitic pegmatites.
- Exploring the formation of Sri Lankan rock types and the various lithological regions.
- Extending recharging intervals of battery packs used in electric vehicle and other applications, using thermoelectric generators.
- Creating innovative materials with improved heat transfer and electrical insulation properties.

Ms. D.R.T.L Harischandra, Ms. M.G.R. Shyamamala, Prof. N.D Subasinghe, Ms. P.M.P. Sewwandi, Dr. A.M.N.N. Adikaram

Water Quality Research Program

Prof. Rohan Weerasooriya ***Research Professor***
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Research Project Introduction:
In 2020, Government of Sri Lanka targeted achieving UN's SDG 6 by ensuring safe drinking water for all by 2025. However, this target was not met yet due to various reasons. Over 3.5 million Sri Lankan people are living under drinking water stress. Many rural villages cannot be connected to the national water supply grid due to prohibitively high costs. We propose a sustainable, community-scale solution by examining molecular water behavior under high salinity. We also aim to develop novel sensors for water quality monitoring.

Research Activities:
Using molecular modeling method, we elucidated the growth mechanism of vertically aligned carbon nanotubes synthesized by chemical vapor deposition to enable the development of tunable water desalination membranes using Sri Lankan graphite. At present, many rural water treatment units require routine maintenance and operational intervention by local villagers who often lack adequate technical knowledge. Moreover, most existing treatment plants are designed to process water from a single, fixed source, limiting their adaptability. To address these challenges, we automated the treatment process through the design of a universal electronic controller. The Kelani River, a critical freshwater resource in Sri Lanka, exhibited substantial spatial variability in water quality; however, current national ambient water quality standards are prescribed as fixed values. They do not adequately reflect natural or anthropogenic variations. This research therefore proposes the introduction of region-specific ambient water quality ranges derived using statistical quantile-based approaches.

Results/Key findings:
This work advances materials and water technologies relevant to Sri Lanka's water security. Alumina-assisted chemical vapor deposition enabled record-length growth of vertically aligned carbon nanotubes, offering a scalable, low-cost route to tunable, super-hydrophobic desalination materials. Groundwater chemistry in the dry zone was shown to be governed by lithology and fracture-controlled hydro-stratigraphic units. An eco-friendly, starch-based visible-light photochemical method was developed for selective Cr(VI) removal from electroplating effluents. Automated centrifugal microfluidic lab-on-a-chip systems improved COD analysis efficiency while minimizing reagents and waste. Rainwater quality assessment has identified agriculture, infrastructure, roofing materials, road dust, and atmospheric deposition as dominant sources of contamination.

From L to R: Prof. R. Weerasooriya, Dr. Z. Wu, Prof. Xing Chen, Prof Yu Huang, Ms. S.P. Hemachandra, Ms. P.M.C.J. Bandara, Ms. D.M.R.D. Dissanayake, Mr. I.M. Dahanayaka, Mr. L. Senarathne, Mr. S.M.L.M.B. Senarathne, Ms. R.M.K.M.N .Jayathilaka, Ms. W.M.I.T. Lahirumali, Ms. P.K.K. Pathirana, Ms. T.M.V.G. Tennakoon, Ms. D.K.N.S. Kumari, Ms. W.D.G.C. Wannetti, Ms. S.H.U. Hansani,, Ms. H.M.S.N. Deegala, Mr. S.A. Witharana, Mr. K.M.S.A. Gunawardane, Mr. A.W.M.P.C.A. Udugama, Ms. E.G.V.P. Chandrasekara, Ms. H.A.S.M. Senarathne, Ms. W.K.K.N.S. Wellalagoda, Ms. S.D.S.E. Jayathissa, Ms. I.M. Jayalath, Mr. K.M.N.K.B. Kuruppu, Ms. T.M.P.T. Tennakoon, Ms. B.V.N. Sewwandi, Ms. N. Mudannayake

Material Development and Pollutant Remediation Research Programme

Dr. Lakmal Jayarathna ***Research Fellow***
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Research Project Introduction:
This project focuses on the design and synthesis of innovative materials for efficient pollutant removal from the air, water, and soil. Integrating advanced materials science with green chemistry principles, the initiative aims to develop cost-effective and sustainable remediation solutions. By addressing challenges of contaminant adsorption and material regeneration, the research seeks to provide scalable technologies for real-world environmental remediation.

Research Activities:
The research activities focused on the synthesis, modification, characterization, and application of zeolite-based functional materials for environmental and sensing applications. One major study involved the development of boron-modified Linde Type A (LTA) zeolites stabilized with nano zero-valent iron (nZVI) for efficient nitrate reduction in water. Microwave-assisted hydrothermal synthesis and green tea-extract-based nZVI stabilization were employed. The effects of pH, temperature, and nitrate concentration on reaction pathways were evaluated through nitrogen mass balance analysis. Another research component investigated ZSM-5-modified ZnO nanorods for enhanced N_2O gas sensing at low operating temperatures, identifying an optimized ZnO: ZSM-5 ratio which improved response time a nd sensitivity, supported by comprehensive material characterization. Additionally, systematic work was carried out on converting natural kaolin into metakaolin and subsequently synthesizing zeolite Y and its protonic form, with each transformation verified using FTIR, XRD, and TGA analyses, demonstrating a robust route for zeolite production from natural resources in Sri Lanka.

Results/Key findings:
The studies demonstrated successful synthesis and functional enhancement of zeolite-based materials for environmental and sensing applications. Boron-modified LTA zeolites stabilized with nano zero-valent iron achieved high nitrate reduction efficiency, with reaction pathways strongly influenced by pH and temperature, favoring nitrogen gas formation under optimized conditions. ZSM-5-modified ZnO nanorods exhibited significantly improved N_2O gas sensing performance, including higher sensitivity, faster response, and lower operating temperature compared to pristine ZnO. Additionally, natural kaolin was effectively converted into metakaolin and subsequently into zeolite Y and H-Y, confirmed by structural and thermal analyses, validating a cost-effective and sustainable synthesis route.

From L to Right: Ms. M.A.T.N. Meegahakumbura, Ms. A.M. Hasara, Ms. M.A.K. Madhumekala, Dr. I.P.L. Jayarathne, Mr. J.M.S.G.B. Navarathne, Mr. J.R.Y.M. Gamlath

SECTION II – RESEARCH PERFORMANCE IN YEAR 2025

PUBLICATIONS IN JOURNALS

BIOLOGICAL SCIENCES RESEARCH DIVISION
Evolution, Ecology and Biodiversity Research Programme

1. Burgo, A., Catley, K., Grismado, C.J., Dupérré, N., **Benjamin, S.P.,** Hormiga, G., Griswold, C., Martínez, L., and Ramírez, M.J. (2025). Systematics of the colour-polymorphic spider genus *Cybaeolus*, with comments on the phylogeny of the family Hahniidae (Araneae). *Zoological Journal of the Linnean Society*, 203(1), p.1-45. [SJR Quartile: Q1].
https://doi.org/10.1093/zoolinnean/zlae165

2. Ranasinghe, U.G.S.L., Eberle, J., **Benjamin, S.P.,** Scherber, C. and Ahrens, D. (2025). Morphospace disparity and species diversity in Sri Lankan phytophagous scarab beetles—A comparison by forest types, altitude and sites. *Ecological Entomology*, 50, p.618-629. [SJR Quartile: Q1].
http://www.doi.org/10.1111/een.13427

3. **Benjamin, S.P.,** Dhiya'ulhaq, N.U., Deeleman-Reinhold, C., Buchori, D., Hidayat, P., Scheu, S., and Drescher, J. (2025). Taxonomic notes on the crab-spider genera *Nyctimus* Thorell, 1877 and *Zametopina* Simon, 1909 (Araneae, Thomisidae) with descriptions of six new species from Southeast Asia. *Zookeys*, 1255, p.95–125. [SJR Quartile: Q1].
http://www.doi.org/10.3897/zookeys.1255.158380

4. Dhiya'ulhaq, N.U., **Benjamin, S.P.,** Buchori, D., Hidayat, P., Scheu, S., and Drescher, J. (2025). Expanding the taxonomy of crab spiders (Araneae, Thomisidae) in Sumatra: A new genus, five new species, and regional records. *Zookeys*, 1241, p.205–246. [SJR Quartile: Q1].
http://www.doi.org/10.3897/zookeys.1241.148348

5. Ranasinghe, U.G.S.L., and **Benjamin, S.P.** (2025). Phylogenetic placement of Sri Lankan goblin spiders (Araneae, Oonopidae): Integrating new taxa and taxonomic implications. *Evolutionary Systematics*, 9(2), p.259–270. [SJR Quartile: Q1].
http://www.doi.org/10.3897/evolsyst.9.168533

6. Dayananda, N., and **Benjamin, S.P.** (2025). Five new species of the genus *Mallinella* Strand, 1906 (Araneae: Zodariidae) from Sri Lanka. *Zootaxa*, 5570(1), p.100-118. [SJR Quartile: Q2].
https://doi.org/10.11646/zootaxa.5570.1.4

7. Ranasinghe, U.G.S.L., and **Benjamin, S.P.** (2025). Phylogenetic position and redescription of *Orchestina manicata* Simon, 1893 (Araneae: Oonopidae). *Journal of Insect Biodiversity and Systematics*, 11(1), p.117–127. [SJR Quartile: Q3].
http://www.doi.org/10.61186/jibs.11.1.117

8. **Benjamin, S.P.,** and Ranasinghe, U.G.S.L (2025). A review of some species of *Ebrechtella* Dahl, 1907 (Araneae: Thomisidae) with description of two new species. *ZooNova - Occasional papers in Zoology*, 41, p.1-13. [SJR Quartile: N/A]
http://www.doi.org/10.5281/zenodo.15007801

9. Dayananda, N., and **Benjamin, S.P.** (2025). Six new species of *Utivarachna* Kishida, 1940 (Araneae: Trachelidae) from Sri Lanka, with a key to the Sri Lankan species. *ZooNova - Occasional papers in Zoology*, 45, p.1-25. [SJR Quartile: N/A].
http://www.doi.org/10.5281/zenodo.17611175

Food Chemistry Research Programme

1. Ulpathakumbura, B.S.K., Gunarathna, K.M.R.U., **Marikkar, J.M.N.**, Feng, Y., Johnson, L., and Jun, L. (2025). A review on coconut testa: nutritional attributes, physical properties, biological activities, and product innovation. *Future Foods*, 12,100827, p. [SJR Quartile: Q1]. http://www.doi.org/10.1016/j.fufo.2025.100827

2. Fahmidah, H.F., **Jayasinghe, L., Marikkar, J.M.N.,** Muneeb, M., Arshad, M., Al Kheraif, A.A., Husain, F.M., Adil, M., and Khan, R. (2025). Bioactivity studies of different solvent extracts of defatted residues from *Terminalia catappa* L. seed kernels. *Journal of Food Biochemistry*, 2025,8590029, p.1-9. [SJR Quartile: Q1]. https://doi.org/10.1155/jfbc/8590029

3. Yalegama, L.L.W.C., Hewapathirana, H.P.T.D., and **Marikkar, J.M.N.** (2025). Investigation of physicochemical and textural properties of sandwich bread incorporating defatted dehydrated coconut flour. *Discover Food*, 5,295, p.1-13. [SJR Quartile: Q1]. https://doi.org/10.1007/s44187-025-00498-0

4. Illangarathne, D.G.C.S., **Marikkar, J.M.N**., Bandara, B.G.R.R., Hewapathirana, H.P.T.D., and Yalegama, L.L.W.C. (2025). Comparative analysis of coconut testa oil recovered by dry and wet processing methods. *Grasas y Aceites*, 76(1), p.1-13. [SJR Quartile: Q3]. https://doi.org/10.3989/gya.1100242.2260

5. Liyadipitiya, N., Ekanayeka, U., **Jayarathna, L**., Ulpathakumbura, B.S.K., **Jayasinghe, L.,** and **Marikkar, J.M.N.** (2025). Nutritional composition and bioactivity studies on edible soft stem of banana (*Musa* spp). *Agricultural Science and Technology*, 17(1), p.10-23. [SJR Quartile: N/A]. http://www.doi.org/10.15547/ast.2025.01.002

6. Hewapathirana, H.P.T.D., Lakdusinghe, W.M.K., Yalegama, L.L.W.C., Chandrapeli, C.A.T.D., and **Marikkar, J.M.N.** (2025). Physical, nutritional and functional quality of defatted coconut residue from four coconut (*Cocos nucifera* L.) varieties; as a dietary supplement for the food industry. *International Journal on Coconut R & D*, 41, p.7-15. [SJR Quartile: N/A]. http://www.doi.org/10.37833/cord.v41i.484

7. Kulathunge, T.D.A.D.K., **Jayasinghe, L.,** Wickramarachi, P.A.S.R., **Marikkar, J.M.N.,** and **Adikaram, N.K.B.** (2025). Prospecting bioassays and enzyme inhibitory activities of *Alysicarpus vaginalis*, *Biophytum reinwardtii*, *Mikania cordata*, and *Plumeria obtusa*. *Journal of Multidisciplinary and Translational Research*, 10(1), p.77-93. [SJR Quartile: N/A]. https://doi.org/10.4038/jmtr.v10i1.83

Microbial Biotechnology Research Programme

1. Manawasinghe, I.S., Hyde, K.D., Balasuriya, A., Suwannarach, N., Boonyuen, N., Harishchandra, D.L., Karunarathna, S.C., Khuna, S., Kumla, J., Priyashantha, A.K.H., Samarakoon, M.C., Srinuanpan, S., Thambugala, K.M., Ali, S., Cheewangkoon, R., Dong, Z.Y., Htet, Z.H., Hu, Y., Karunarathna, A., Luo, M., Iamwan, S., Madhushan, A., Maharachchikumbura, S.S.N., Mapook, A., **Premarathna, M.,** and **Seneviratne, G**., Tao, Q., Tibpromma, S., Wen, T.C., Yang, E., Kularathnage, N.D., Rajwar, S., Senanayake, I.C., Singh, G., Singh, R., Song, J., Galappaththi, M.C.A., McComb, J., McHenry, M.P., Patabendige, (2025). The emerging role of fungi in sustainable farming and global food security. *Mycosphere*, 16(1),–p.4936–5064. [SJR Quartile: Q1]. https://www.mycosphere.org/volume-16/issue-1.html

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CHEMICAL AND PHYSICAL SCIENCES RESEARCH DIVISION

Condensed Matter Physics & Solid-State Chemistry Research Programme

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Nanotechnology and Advanced Materials Research Programme

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EARTH AND SPACE SCIENCES RESEARCH DIVISION
Earth Resources and Renewable Energy Research Programme

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ENVIRONMENTAL SCIENCE RESEARCH DIVISION

a. Water Quality Research

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b. Material Development and Pollutant Remediation

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ABSTRACTS

BIOLOGICAL SCIENCES RESEARCH DIVISION
Evolution, Ecology and Biodiversity Research Programme

1. Wijerathna, W.M.H.U., Ameena, M.S.Z., Ranasinghe, S.L., and **Benjamin, S.P.** (2025). Comparative analysis of taxonomic and functional diversity in habitat-driven beetle assemblages of tropical lowland and submontane Forests. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research-2025, National Institute of Fundamental Studies*.

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Microbial Biotechnology Research Programme

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Microbiology & Soil Ecosystem Research Programme

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Molecular Microbiology and Human Diseases Research Programe

1. Gunathilaka, H.M.S.A.T., Dissanayake, C., Gunasekaran, E., Thotawatthage, C., and **Magana-Arachchi, D.N.** (2025). Altitude-driven variations in airborne bacterial Communities: A comparative study from Piduruthalagala and Colombo, Sri lanka. *Proceedings of the Postgraduate Institute of Science Research Congress, University of Peradeniya*.

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Nutritional Biochemistry Research Programme

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Plant taxonomy and Conservation Research Programme

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10. Herath, H.M.N.D., **Jayasinghe, H.D.,** and Kariyawasam, I.U. (2025). Molecular phylogenetic and comparative morpho-anatomical study on some selected *Madhuca* Spp. (Sapotaceae) in Sri Lanka. *Proceedings of the International Forestry and Environment Symposium, Vol. 29*. *Department of Forestry and Environmental Science, University of Sri Jayewardenepura*.

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12. Jinasena, N.K., Dissanayake, D.D.M.O., Anupama, Y.A.H., and **Wijesundara, D.S.A.** (2025). Enhancement of water quality in Kandy Lake with duck weed: An assessment of efficacy. *Proceedings of the International Forestry and Environment Symposium, Vol. 29*. *Department of Forestry and Environmental Science, University of Sri Jayewardenepura*.

Primate Biology Research Programme

1. **Dittus, W.P.J.** (2025). Resolving bias against macaques (*Macaca sinica*) in Sri Lanka's culture of tolerance for wildlife. *IPS Congress, Madacascar*.

CHEMICAL AND PHYSICAL SCIENCES RESEARCH DIVISION

Condensed Matter Physics & Solid-State Chemistry Research Programme

1. Sandunika, P.U., **Dissanayake, M.A.K.L., Senadeera, G.K.R.,** and **Kumari, J.M.K.W.** (2025). Effect of sintering temperature of activated carbon/graphite/platinum nanoparticle composite counter electrodes on the performance of dye-sensitized solar cells. *Proceedings of the Postgraduate Institute of Science Research Congress*, *University of Peradeniya*.

2. Thilakarathna, T.M.H.G., **Senadeera, G.K.R., Dissanayake, M.A.K.L., Kumari, J.M.K.W.,** and Sandunika, P.U. (2025). Development of Pt free counter electrode for dye sensitized solar cells using composite of graphite, graphene quantum dots and MnO_2. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

3. Durairajapillai, J.J.A., Jayathissa, S.D.S.E., Liyanage, C.S., Dahanayake, U., and **Kumari, J.M.K.W.** (2025). Removal of dye waste from Batik home industries using low-cost agricultural waste: Areca nut peels as a natural adsorbent. *Proceedings of the International Conference on Applied and Pure Sciences ICAPS*, *University of Kelaniya*.

4. Anuththara, H.N., Sewwandi, G.G.S., Thotawatthage, C.A., **Dissanayake, M.A.K.L.,** and **Kumari, J.M.K.W.** (2025). Extraction and physicochemical characterization of fungal-derived chitosan from *Pleurotus ostreatus* (mushroom) stems. *International Conference on Applied and Pure Sciences*, *University of Kelaniya*.

5. Aberathne, E.M.K.K., Sandunika, P.U., Wijewardane, H.O., **Dissanayake, M.A.K.L.,** and **Kumari, J.M.K.W.** (2025). Synthesis, characterization, and performance evaluation of Supercapacitors using kerosene oil-derived carbon soot as an Electrode material. *Applied Sciences Undergraduate Research Sessions ASURS, Rajarata University of Sri Lanka*.

6. Anuththara, H.N., Karunarathne, A.K., Sewwandi, G.G.S., Thotawatthage, C.A., **Dissanayake, M.A.K.L.,** and **Kumari, J.M.K.W.** (2025). Synthesis, optimization and characterization of mushroom (*Pleurotus ostreatus*) stems derived chitosan based gel polymer electrolytes for Magnesium ion battery application. *Applied Sciences Undergraduate Research Sessions ASURS, Rajarata University of Sri Lanka*.

7. Aberathne, E.M.K.K., Anuththara, H.N., Wijewardane, H.O., and **Kumari, J.M.K.W.** (2025). Optimization and performance evaluation of dye-sensitized solar cells using cockscomb flower extract as a natural sensitizer. *12th Ruhuna International Science & Technology Conference*, *University of Ruhuna*.

8. Sandunika, P.U., **Dissanayake, M.A.K.L., Senadeera, G.K.R., Kumari, J.M.K.W.,** and Sewwandi, G.G.S. (2025). Development of Activated carbon/Graphite/Pt nanoparticles composite counter electrodes for dye-sensitized solar cells: A cost-effective alternative to Platinum. *3rd International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA)*, *University of Jaffna.*

9. **Kumari, J.M.K.W., Senadeera, G.K.R.,** and **Dissanayake, M.A.K.L.** (2025). Enhancing the efficiency of dye-sensitized solar cells through the intergration of Reduced Graphene Oxide (RGO) into multi-layered photoanode. *3rd International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA)*, *University of Jaffna.*

10. **Dissanayake, M.A.K.L.** (2025). Innovative TiO_2 nanostructures for enhanced dye-sensitized solar cell performance. *International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA)*, *University of Jaffna*.

Energy & Advanced Material Chemistry Research Programme

1. Sarathchandra, M., and **Bandara, J.** (2025). Light soaking effect on the performance of Sb_2S_3 based solar cells under low light intensity. *Proceedings of the Postgraduate Institute of Science Research Congress*, *University of Peradeniya, Sri Lanka.*

2. Wickramasinghe, W.M.M.D., Abeysundara, W.T, and **Bandara, J.** (2025). Preparation of $Cu/Cu_2O/Cuo/SrTiO_3$ photocathode for enhanced photoelectrochemical water splitting. *Proceedings of the Postgraduate Institute of Science Research Congress*, *University of Peradeniya, Sri Lanka.*

Material Processing and Device Fabrication Research Programme

1. Deegala, D.A.M.S.D.B., Gamage, D.J.D.S., and **Kumara, G.R.A.** (2025). A comparative study of activated carbon coating techniques on nickel foam current collectors. *10th International Conference of Sabaragamuwa University of Sri Lanka*, *Sabaragamuwa University of Sri Lanka.*

2. Bambaradeniya, R.R.M.M.N.B., Jayathilaka, A.P.S.P., Gamage, D.J.D.S., and **Kumara, G.R.A.** (2025). Enhanced supercapacitor performance through MnO_2-doped coconut shell–derived activated carbon electrodes. *Annual Research Conference on Resilience and Innovation through Multidisciplinary Research, University of Colombo.*

3. Gamage, D.J.D.S., Bandara, T.M.W.J., and **Kumara, G.R.A.** (2025). Optimizing $Na_2SO_4(aq)$ electrolyte concentration for supercapacitors fabricated with activated carbon derived from waste water filters. *Proceedings of the Postgraduate Institute of Science Research Congress, University of Peradeniya, Sri Lanka*.

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6. Weerasinghe, M.I.U., Gamage, D.J.D.S., Bandara, T.M.W.J., and **Kumara, G.R.A.** (2025). Utilizing activated carbon from water filter residues as a counter electrode in dye-sensitized solar cels. *International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA), University of Jaffna*.

7. Gamage, D.J.D.S., Weerasinghe, M.I.U., Bandara, T.M.W.J., and **Kumara, G.R.A.** (2025). Development of energy storage supercapacitors using activated carbon derived from used water filters. *International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA)*, *University of Jaffna*.

8. Rodrigo, B.K.S.V., Gunarathne, P.P.B., and **Kumara, G.R.A.** (2025). Comparative analysis of the oil absorbency in expanded Needle- type and platy-type graphite samples from Sri Lanka. *International conference on Advanced Materials for Clean Energy and Health Applications* (*AMCEHA), University of Jaffna.*

9. Dayarathne, B.A.N.Y.P., Weerasinghe, M.I.U., and **Kumara, G.R.A.** (2025). Enhanced efficiency in dye-sensitized solar cells using Lanthanum Oxide and Tin Oxide composite photoanodes sensitized with an N719 dye. *11th International Conference on Multidisciplinary Approaches*, *University of Sri Jayewardenepura*.

10. Jayathilaka, A.P.S.P., Gamage, D.J.D.S., Bandara, T.M.W.J., and **Kumara, G.R.A.** (2025). Enhanced electrochemical performance of Tin Oxide-doped coconut shell charcoal-derived activated carbon for energy storage applications. *Proceedings of Peradeniya University International Research Symposium and Exposition*, *University of Peradeniya*.

11. Weerasinghe, D.G.D.M., Weerasinghe, M.I.U., Wanniarachchi, S. and **Kumara, G.R.A.** (2025). Comparative Analysis of Light-harvesting Efficiency and photovoltaic efficiency of N719 and D719 dyes in dye-sensitized solar cells. *Proceedings of Peradeniya University International Research Symposium and Exposition, University of Peradeniya*.

12. Weerasinghe, M.I.U., Samarathunga, S.L.M.D.K.V., Bandara, T.M.W.J. and **Kumara, G.R.A.** (2025). Fabrication of dye-sensitized solar cells based on natural pigments extracted from the *Bixa orellana* seeds. *Proceedings of Peradeniya University International Research Symposium and Exposition*, *University of Peradeniya*.

Nanotechnology and Advance Materials Research Programme

1. Samarakoon, Y.M.I.B., Ranathunga, R.J.K.U., Amaraweera, T.H.N.G., and **Wijayasinghe, H.W.M.A.C.** (2025). Development of SiO_2-based anode material from Sri Lankan vein quartz for rechargeable Lithium-ion batteries. *2nd International 7th Biennial Research Symposium*, *Industrial Technology Institute*.

2. Naranpanawa, H.M.H.D.K., Amaraweera, T.H.N.G., Balasooriya, N.W.B., Karunarathna, D.G.G.P., and **Wijayasinghe, H.W.M.A.C.** (2025). Designing a scale-up framework with life-cycle thinking: enhancing the sustainability of HCl acid leaching for graphite anodes in Lithium-ion battery. *The 16th International Conference on Sustainable Built Environment 2025 and Next-Gen Innovation & Advancement (DIAMOND 75)*, *Kandy.*

3. Naranpanawa, H.M.H.D.K., Amaraweera, T.H.N.G., Sivirathna, S.M.M.U., Balasooriya, N.W.B., Karunarathna, D.G.G.P., and **Wijayasinghe, H.W.M.A.C.** (2025). Laboratory-level feasibility of mild oxidation method scale-up for battery-grade Sri Lankan vein graphite. *Proceedings of the Postgraduate Institute of Science Research Congress*, *University of Peradeniya*.

4. Senavirathna, S.H.D., Sivirathna, S.M.M.U., Thotawatthage, C.A., and **Wijayasinghe, H.W.M.A.C.** (2025). Preparation and characterization of activated nano carbon derived from bamboo culms for sustainable electrode applications. *International Research Conference*, *General Sir John Kotelawala Defence University*.

5. Senavirathna, S.H.D., Thotawatthage, C.A., **Wijayasinghe, H.W.M.A.C.,** Bandara, T.M.W.J., and Sivirathna, S.M.M.U. (2025). Development of a supercapacitor utilizing natural rubber-based electrolyte and activated nano carbon electrodes derived from bamboo culms. *Applied Sciences Undergraduate Research Sessions (AURS 2025)*, *Rajarata University of Sri Lanka.*

Natural Products Research Programme

1. Jayasekara, J.MC.N., Senevirathne, U.N., Premasiri, H.A.K.D., Jayasinghe, Y.A., Peiris, P.M., **Piyasena, N., Jayasinghe, L.,** and Jayasinghe, R.D. (2025). Comparative analysis of antioxidants presents in aerial vs. Root parts of *Cyperus rotundus* across differential geographical locations in Sri Lanka. *Third International Conference on Emerging Trends in Healthcare Sciences*, *Eastern University, Sri Lanka*.

2. Yusra, M.N.F., Bandara, Y.G.A.D.K., **Piyasena, N.P., Adikaram, N.K.B., Jayasinghe, L.,** and Napagoda, M.T. (2025). Antioxidant, anti-dyslipidemic, and cytotoxic properties of medicinal plants: *Ipomoea cordatotriloba* Denn., *Eclipta prostrata* (L.) L., *Portulaca oleracea* L., and *Peperomia pellucida* (L.) Kunth. *Proceedings of the Young Scientists Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

3. **Marikkar, J.M.N**., Ulpathakumbura, S., and J**ayasinghe, L.** (2025). Exploring digestive enzyme inhibitory properties of five edible leafy plants of Sri Lanka. *International Conference on the Sustainable Development of Marine Bioresources*, *South China Sea Institute of Oceanology, Colombo.*

4. Bandara, Y.G.A.D.K., Chathurangi, S.A.D., Premasiri, H.A.K.D., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Evaluation of selected biological activities of *Colletotrichum gloeosporioides*, *Nigrospora oryzae*, and *Marasmius palmivorus*. *International Conference on the Sustainable Development of Marine Bioresources*, *Colombo*.

5. Kahandawa, K.R.D.A.K., Chathurangi, S.A.D., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Evaluation of antioxidant and bioactivity potential of *Saraca indica* and *Erythrina subumbrans* flowers. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

6. Rathnayake, W.M.K.A.K., Chathurangi, S.A.D., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Assessment of the biological activities of methanolic extract of *Flueggea leucopyrus* Willd. and *Eryngium foetidum* L. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

7. Subhasinghe, S.A.R.N., Chathurangi, S.A.D., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Antioxidant, cytotoxic and phytotoxic activities of methanolic leaf extract of *Bombax ceiba* L. and *Anisomeles indica* L. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

8. Nanayakkara, K.H.S.T., Bandara, Y.G.A.D.K., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Investigating the bioactive properties of traditional medicinal plants: emphasis on *Eleusine indica* and *Mimosa pudica*. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

9. Gunathilake, K.V.P., Bandara, Y.G.A.D.K., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Comparative evaluation of antioxidant, enzyme inhibitory, cytotoxic, and phytotoxic activities of *Olax zeylanica* and *Hygrophila auriculata* leaf extracts. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

10. Abeysinghe, M.M.H.S., Bandara, Y.G.A.D.K., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Phytochemical and pharmacological profiling of *Nymphoides hydrophylla* leaves, flowers, and roots. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

11. Karunadasa, H.M.D.D., Premasiri, H.A.K.D., Nelum, K.G., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). In vitro bioactivity evaluation of leaf extracts of Sri Lankan plants *Osbeckia octandra* and *Crotalaria pallida* Aiton. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

12. Hathurusinghe, H.W.D.K., Bandara, Y.G.A.D.K., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Comparative in vitro evaluation of antioxidant, cytotoxic, antidiabetic, and phytotoxic activities of *Annona reticulata* L. plant parts. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

13. Wanninayake, W.M.Y.B., Chathurangi, S.A.D., **Adikaram, N.K.B. Jayasinghe, L.,** and **Piyasena, N.** (2025). Comparative bioactivity of *Sargassum* sp., *Hypnea* sp., and *Chaetomorpha* sp. collected from Kalpitiya and Udappuwa during the northeast monsoon. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

14. Hearth, R.H.V.C., Premasiri, H.A.K.D., **Piyasena, N.P.,** Jayaweera, D.S., **Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Bioactivity assessment of methanolic extract of *Murraya paniculata* and *Alpinia calcarata* plant leaves: antioxidant, cytotoxic and phytotoxic potential. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

15. Chathurangi, S.A.D., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Bioactivity studies of the endophytic fungi Phyllosticta capitalensis isolated from *Syngonium angustatum* leaves. *Proceedings of the Postgraduate Institute of Science Research Congress*, *University of Peradeniya*.

16. Wijewardana, K.G.R.A.C., Bandara, Y.G.A.D.K., Jayaweera, D.S., **Piyasena, N.P., Adikaram, N.K.B.,** and **Jayasinghe, L.** (2025). Comparative study on bioactivity evaluation of methanolic leaf extracts of *Thespesia populnea* and *Ricinus communis*. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

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18. Wijerathna, P.D.J.S.N., Bandara, Y.G.A.D.K., **Adikaram, N.K.B., Jayasinghe, L.,** and **Piyasena, N.P.** (2025). A preliminary study on selected biological activities of P*sychotria sarmentosa*. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies*.

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22. Marasinghe, M.M.S.H., Panagoda, G.J., Nanayakkara, B.S., **Piyasena, N.P**. and Jayasuriya, K.M.G.G. (2025). Evaluation of antimicrobial, antioxidant properties and toxicity of *Ocimum Tenuiflorum* L. extracts. *University of Peradeniya, Proceedings of the Postgraduate Institute of Science Research Congress*.

23. **Piyasena, N.P.**, Sinniah, G.D., Weerakoon, N.C. and Senanayake, P.D. (2025). Endophytic Fungi from Tea Cultivars: Identification and *in vitro* Antagonism Against *Fusarium ambrosium*, a Symbiont of Shot Hole Borer (*Euwallacea fornicates*). *International Tea Symposium, 10th and 11th November 2025, Colombo, Sri Lanka*.

Earth Resources and Renewable Energy Research Programme

1. Shyamamala, M.G.R., Bandara, T.M.W.J., and **Subasinghe, N.D.** (2025). Waste heat recovery of a rechargeable electric vehicle battery pack using thermoelectric generators. *Proceedings of the Postgraduate Institute of Science Research Congress, University of Peradeniya, Sri Lanka.*

2. Liyanage, H., and Subasinghe, N.D. (2025). A fractal analysis of the dependence of the three body problem on initial conditions. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies.*

3. Adikaram, A.M.N.M., Thilakarathne, M.P., and **Subasinghe, N.D.** (2025). Assessment of background radiation levels in collegiate science classes: A case study, Kandy, Sri Lanka. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies.*

4. Senevirathne, K.H., Dharmapriya, P.L., Malaviarachchi, S.P.K., Wickramasinghe, G., **Subasinghe, N.D.** (2025). Petrogenetic significance of cordierite in the southwestern and central highland complex, Sri Lanka. *Proceedings of the Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies.*

5. Karunarathna, B.G.H.D., Thilakarathne, M.P., Adikaram, A.M.N.M., **Subasinghe, N.D.** (2025). Integrated resistivity and magnetic survey for subsurface dyke geometry, Wahawa, Sri Lanka. Proceedings of the *Young Scientists' Conference on Multidisciplinary Research, National Institute of Fundamental Studies.*

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8. Samaranayake, S.A., Prasanna, H.M.I., **Subasinghe, N.D.**, De Silva, N., Thilakarathna, M.P., Wijewardane, H.O., Dahanayake, U. (2025). Crustal thinning and wedge-type structure of the Vijayan complex: Insights from a 2D gravity survey. *Proceedings of the Annual Technical Sessions, Geological Society of Sri Lanka.*

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Water Quality Research

1. Chandrasekara, E.G.V.P., Kuruppu, K.M.N.K.B., Deegala, H.M.S.N., Sewwandi, B.V.N., and Wu, Z. (2025). Advanced CFD simulations for optimizing fluid transfer in centrifugal microfluidic chips for *in-situ* pollutant detection. *Proceedings of Peradeniya University International Research Symposium and Exposition University of Peradeniya*.

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3. Hansani, S.H.U., **Weerasooriya, R.,** and Dharmapriya, P.L. (2025). Multivariate analysis on hydrogeochemical evolution of groundwater in a geologically controlled aquifer system. *Proceedings of the Postgraduate Institute of Science Research Congress, University of Peradeniya, Sri Lanka.*

4. Jayathissa, S.D.S.E., Sewwandi, B.V.N., Dahanayake, U., and **Weerasooriya, R.** (2025). Spin-coated thin-film nanocomposite membranes with multi-walled Carbon nanotubes for enhanced water desalination at reduced pressure flux. *Applied Sciences Undergraduate Research Sessions ASURS*, *Rajarata University of Sri Lanka*.

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6. Wijerathna, K.M.C., Sewwandi, N., Ranatunga, R.J.K.U., and **Weerasooriya, R.** (2025). Improving the Performance of Carbon nanotube-based membranes for water desalination. *Proceedings of Peradeniya University International Research Symposium and Exposition*, *University of Peradeniya*.

Material Development and Pollutant Remediation

1. Mihidula, T.G.M., Navarathne J.M.S.G.B., and **Jayarathna, L.** (2025). Rapid Synthesis of 3-Mecraptopropionic acid capped cdte QDs using L-ascorbic acid in atmospheric Conditions. *Proceedings of Peradeniya University International Research Symposium and Exposition*, *University of Peradeniya*.

2. Rathnayake, H., Navarathne, J.M.S.G.B., Perera, M.D.R., Bandara, A., and **Jayarathna, L.** (2025). Crystallographic evolution and phase interaction in ZsM-5-Modified ZnO Nanomaterials A Powder X-Ray Diffraction Study. *Proceedings of the Postgraduate Institute of Science Research Congress, University of Peradeniya, Sri Lanka.*

3. Navarathne, J.M.S.G.B., Perera, M.D.R., Rathnayake, H., Wijesinghe, M.B., **Jayarathna, L.** and Bandara, A. (2025). Testing of Gas Sensing Performance of Zeolite-modified ZnO Nanomaterials. *Proceedings of Peradeniya University International Research Symposium and Exposition*, *University of Peradeniya*.

4. Edirisinghe, E.B.R.N.U., Young, S.M., and **Jayarathna, L.** (2025). Assessment and Characterization of Microplastics presence in the Leachate from the Gohagoda Dumpsite Kandy Sri Lanka. *The 16th International Conference on Sustainable Built Environment 2025 and Next generation innovation and Advancement - Diamond 75*, *Kandy*.

5. Gamage, K.L., Young, S.M., **Jayarathna, L**., and R. Shanmugapriya,R. (2025). Assessment of Microplastics in Landfill Leachate, soil at the dump site and sediments of the nearby water steam around the Karadiyana Open Dump site, Sri Lanka. *The 16th International Conference on Sustainable Built Environment 2025 and Next generation innovation and Advancement - Diamond 75*, *Kandy*.

6. Madhumekala, M.A.K., Bandara, W.M.A.T., and **Jayarathna, L.** (2025). Influence of Boron incorporation on the properties of faujasite zeolite. *Proceedings of the Young Scientist's Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

7. Chandrawansha, D.W.M.D.S., Mihidula, T.G.M., and **Jayarathna, L.** (2025). The impact of sunlight exposure time on microplastic release from bottled water in tropical climate. *Proceedings of the Young Scientist's Conference on Multidisciplinary Research*, *National Institute of Fundamental Studies*.

8. Madhumekala, M.A.K, **Jayarathna, L.,** and Bandara, W.A.T. (2025). Synthesis and study of structure directing agents on structural properties of boron modified Zeolites. *Proceedings of the Postgraduate Institute of Science Research Congress, Sri Lanka*.

9. Hapugoda, M., Amarasena, L., Mannapperuma, A., Madhumekala, M.A.K., Bandara, A., and **Jayarathna, L.** (2025). Catalytic conversion of 2-chlorophenol in atmospheric condition using copper incorporated Boroalumino LTA type Zeolite. *Proceeding of the 3rd International conference on Advanced Materials for Clean Energy and Health Applications*, *University of Jaffna*.

10. Madhumekala, M.A.K., Bandara, W.M.A.T., and **Jayarathna, L.** (2025). Synthesis and characterization of Boron-modified Linde Type-A Zeolites investigate the influence of varying Boron-to-Aluminum ratio on their structural properties. *Proceeding of the 3rd International Conference on Advanced Materials for Clean Energy and Health Applications*, *University of Jaffna*.

CONFERENCE PROCEEDINGS

Microbial Biotechnology Research Programme

1. Ariyarathne, S.M.D.B., **Premarathna, M.,** Balasooriya, B.L.W.K., **Seneviratne, G.,** Wijerathna, M.A.N.S., Pathirana, R., and Jayasundara, J.M.U.D. (2025). Development and characterization of radio-photo-autotrophic biofilms: A promising candidate for sustainable life support systems. *Proceedings (Part II) of 23rd Agricultural Research Symposium*, (p.331-335), Faculty of Agriculture and Plantation Management: Wayamba University of Sri Lanka.

2. Senavirathna, I.U., Manawasinghe, I.S., **Premarathna, M.,** Balasooriya, B.L.W.K., and **Seneviratne, G.** (2025). Assessing Genetic Diversity and DNA Polymorphis of *Fusarium oxysporum*. *Proceedings (Part II) of 23rd Agricultural Research Symposium*, (p.461 – 465), Faculty of Agriculture and Plantation Management: Wayamba University of Sri Lanka.

BOOKS & BOOK CHAPTERS

Books/ Monographs

1. **Jayasinghe, H.D.** (2025). *DISCOVERY: Additions to the Flora of Ceylon* (1st). Sri Lanka: Dilmah Conservation, Colombo.

Books Chapters

1. **Magana-Arachchi, D.N.,** and Gunathilaka, H.M.S.A.T. (2025). Cyanotoxins: Industrial Potential. *Biotoxins - Biotechnological and Therapeutic Applications* (p. 89-120). Switzerland, Springer Nature.

2. Bandara, S.M.D.C., and **Ratnayake, R.R.** (2025). Biofuels: Sustainable Alternatives for Green Aviation and Global Energy Transition. *Clean Energy Technologies: Status and Perspective of Next-Generation Fuels* (p. 131-158). Singapore, Springer Nature, Singapore Pte Ltd.

3. **Magana-Arachchi, D.N.,** Bandara, T., and Gunathilaka, H.M.S.A.T. (2025). Plastisphere as a Vector for Pathogenic Microbes and Antibiotic Resistance. *Plastisphere* (p. 312-327). Boca Raton, Taylor & Francis Group.

4. **Marikkar, J.M.N.,** Ulpathakumbura, B.S.K., and Lai, O.M. (2025). Understanding Lipid Oxidation Influences in Halalan Toyyiban Products. *Halalan Toyyiban Lipids Processing and Utilization* (p. 61–68). India, AIJR Publisher.

5. Jayasena, S., Perera, M., Wijayarathna, D., **Seneviratne, G.,** Wijesundera, S., and Chinthaka, S.D.M. (2025). Heterogeneous Microbial Biofilms: A Promising Solution for Combating Terrestrial Microplastic Pollution. *Combating Plastic Pollution in Terrestrial Environment - Challenges and Strategies for a Sustainable Future* (p. 271-283). Singapore, Springer.

GRANTS

Grants – *New*

1. **Benjamin, S.P.,** and Ahrens, D. received a Research Grant from the Alexander von Humboldt Foundation on 2025-07-01 for the *Research Group Linkage Programme*. (Grant Value – 17,000,000 LKR)

2. Glaeser, J., and **Benjamin, S.P.** received a Training Grant from the German Academic Exchange Service on 2025-07-01 for *DAAD RISE Worldwide 2025*. (Grant Value – 1,400,000 LKR)

3. Herath, K.M.R.K.T., and **Benjamin, S.P.** received a Research Grant from the American Arachnological Society on 2025-05-14 for *Unravelling the Enigma of Phyaces: Phylogenetic and Biogeographic Insights into Sri Lanka's Endemic Salticids*. (Grant Value – 500 USD)

4. **Dissanayake, M.A.K.L.** received a Research Grant from Gothenburg University, Sweden on 2025-05-01 for research on *Magnesium–Seawater battery*. (Grant Value – 1,000,000 LKR)

5. **Dissanayake, M.A.K.L.,** and Bandara, T.M.W.J. received a Research Grant from Sivananthan Laboratories, Inc., USA on 2025-06-01 for the *development of novel colloidal quantum dot structures for biomedical sensors*. (Grant Value – 3,000,000)

6. **Dissanayake, M.A.K.L.,** and **Kumari, J.M.K.W.** received a Research Grant from the National Research Council of Sri Lanka on 2025-09-01 for *synthesis and characterization of novel materials for electrolytes and electrodes to be used in the development of low-cost Magnesium-ion rechargeable batteries for energy storage*. (Grant Value – 2,900,000 LKR)

7. **Jayarathna, L.** received a Research Grant from the National Research Council on 2025-06-05 for *investigation of occurrence and accumulation of microplastics in Kandy Lake and mid-channel using nanotechnological strategies*. (Grant Value – 2,950,000 LKR)

8. **Jayasinghe, H.D.** received an Instrument Grant from IDEA WILD on 2025-09-16 to purchase Two (2) Seagate Portable 5TB External Hard Drive HDDs, Two (2) Seagate Portable 2TB External Hard Drive HDDs, One (1) Artman LP-E6 LP-E6NH Battery 2-Pack, One (1) Vortex Diamondback HD 8×42 Binoculars, One (1) Tent (from inventory), One (1) Digital Caliper, and One (1) 22-piece Advanced Dissection Kit. (Grant Value – 329,353.96 LKR)

9. Kathriarachchi, H.S., Kariyawasam, I.U., **Jayasinghe, H.D.,** and **Wijesundara, D.S.A.** received a Research Grant from the National Research Council of Sri Lanka on 2025-04-30 for *phylogeny, taxonomy and niche dynamics of Memecylon (Melastomataceae) species in Sri Lanka: An integrative approach for conservation and ecological implications*. (Grant Value – 2,950,000 LKR)

10. **Liyanage, R.** received a Research Grant from the Peradeniya University Research Council on 2025-05-19 for *evaluation of nutritional composition, antioxidant activity of water lily seeds, and characterization of water lily seed starch*. (Grant Value – 2,750,000 LKR)

11. **Liyanage, R.** received a Research Grant from the Sri Lanka Council for Agricultural Research Policy (SLCARP) on 2025-05-28 for *revitalizing Sri Lanka's coastal resources: A multidisciplinary exploration to harness the potential of seaweeds*. (Grant Value – 5,819,100 LKR)

12. **Marikkar, J.M.N.** received a Research Grant from the Sri Lanka Council for Agricultural Research Policy on 2025-06-01 for the *Inter-institutional Multidisciplinary Research Grant Scheme – 2025*. (Grant Value – 6,000,000 LKR)

13. Premarathne, H.K.G.B.M., and **Wijesundara, D.S.A.** received a Research Grant from the Tropical Microbiology Research Foundation on 2025-12-01 for the project *taxonomy, phylogeny and ethnomycological study of edible and medicinal mushrooms in selected locations of Kandy District, Sri Lanka*. (Grant Value – 135,000 LKR)

14. **Rathnayake, R.** received a Research Grant from the Postgraduate Institute of Science on 2025-05-02 for *analysis of micro- and macronutrients and heavy metal content of soil and water samples collected from tanks and associated vegetation types in the Katupotha tank cascade system*. (Grant Value – 620,000 LKR)

15. **Wijesundara, D.S.A.,** and Silva, P.G.S.M. received a Research Grant from the Sri Lanka Council for Agricultural Research Policy (SLCARP) on 2025-06-01 for *In vitro pharmacological and bioactive potential evaluation of Diplodiscus verrucosus: A foundation for future value addition and market applications*. (Grant Value – 4,838,800 LKR)

Grants - *Ongoing*

1. **Jayasinghe, H.D.,** Kathriarachchi, H.S., Mayakaduwa, D.M.R.G., and Perera, S.A.T.A. received a Research Grant from the Wildlife and Nature Protection Society of Sri Lanka (Ceylon) on 2024-09-01 for the conservation of a possibly extinct, critically endangered endemic plant species in Sri Lanka: *Justicia capitata* (T. Anderson ex Hook. f.) L.H. Cramer. *(Grant Value – LKR 1,500,000.00)*

2. **Magana-Arachchi, D.N.,** and Medegedara, D. received a Research Grant from the National Research Council of Sri Lanka on 2022-11-22 for *Transcriptome analysis of mycobacteria in serum exosomes of latent tuberculosis patients for candidate biomarker identification*. *(Grant Value – LKR 1,500,000.00)*

3. Narangammana, L.K., **Subasinghe, N.D.,** and Bandara, T.M.W.J. received a Research Grant from the Postgraduate Institute of Science on 2023-02-01 for the development and investigation of non-toxic, low-cost thermoelectric materials using organic and inorganic semiconductors.
(Grant Value – LKR 620,000.00)

4. **Piyasena, N.P. (**PI), Ranatunga, M.A.B. (CI – Tea Research Institute of Sri Lanka), Napagoda, M.T. (CI – Faculty of Medicine, University of Ruhuna), and Egodage, U. (CI – Faculty of Medicine, University of Ruhuna**)** received a Research Grant from the Sri Lanka Council for Agricultural Research Policy (CARP) on 2024-08-14 for *Effect of the consumption of Sri Lankan black tea and value-added Sri Lankan black tea formulations on blood lipids: A randomized controlled trial*.
(Grant Value – LKR 3,000,000.00)

RESEARCH COLLABORATIONS

Condensed Matter Physics & Solid-State Chemistry Research Programme

1. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with University of Sabaragamuwa from 2024-01-01 to 2028-01-01.
   Summary: Materials for batteries and solar cells.
   Collaborators: Dr. H.N.M. Sarangika, Prof. M.A.K.L. Dissanayake, and Dr. J.M.K.W. Kumari.

2. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Department of Physics, University of Peradeniya from 2024-01-01 to 2028-01-01.
   Summary: Solar cells.
   Collaborators: Mr. E.N. Jayaweera, Ms. U. Gajanayake, **Prof. M.A.K.L. Dissanayake** and **Dr. J.M.K.W. Kumari**.

3. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Department of Physics, University of Peradeniya from 2024-01-01 to 2028-01-01.
   Summary: Solar cells.
   Collaborators: Mr. T.M.W.J. Bandara, **Prof. M.A.K.L. Dissanayake** and **Dr. J.M.K.W. Kumari**.

4. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Chalmers and Gothenburg universities, Sweden, 2025-05-01 to 2027-12-31.
   Summary: Novel materials for solar cells and batteries.
   Collaborators: Prof. B.E. Mellander, Prof. I. Albinsson, **Prof. M.A.K.L. Dissanayake**, Prof. T.M.W.J. Bandara and **Dr. J.M.K.W. Kumari**.

5. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with University of Sabaragamuwa from 2024-01-01 to 2028-01-01.
   Summary: Materials for batteries and solar cells.
   Collaborators: Dr. H.N.M. Sarangika, **Prof. M.A.K.L. Dissanayake,** and **Dr. J.M.K.W. Kumari**.

6. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Department of Physics, University of Peradeniya from 2024-01-01 to 2028-01-01.
   Summary: Solar cells.
   Collaborators: Mr. E.N. Jayaweera, Ms. U. Gajanayake, **Prof. M.A.K.L. Dissanayake** and **Dr. J.M.K.W. Kumari**.

7. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Department of Physics, University of Peradeniya from 2024-01-01 to 2028-01-01.
   Summary: Solar cells.
   Collaborators: Prof. T.M.W.J. Bandara, **Prof. M.A.K.L. Dissanayake** and **Dr. J.M.K.W. Kumari** .

8. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Faculty of Applied Sciences, Rajarata University of Sri Lanka from 2024-06-13 to 2027-01-01.
   Summary: Development of biopolymer-based Electrolytes for Eco-Friendly Energy Storage Applications.
   Collaborators: **Dr. J.M.K.W. Kumari,** and Dr. C.A. Thotawatthage.

9. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Australian National University (Australia) from 2024-08-01 to 2027-08-01.

Summary: Use of non-thermal atmospheric pressure plasma surface treatment for the application of solar cells and supercapacitors.
Collaborators: **Dr. J.M.K.W. Kumari,** and Dr. A.M.J.S. Weerasinghe.

10. Condensed Matter Physics and Solid-State Chemistry research programme of NIFS collaborates with Chalmers and Gothenburg universities, Sweden, 2025-05-01 to 2027-12-31.
Summary: Novel materials for solar cells and batteries.
Collaborators: Prof. B.E. Mellander, Prof. I. Albinsson, **Prof. M.A.K.L. Dissanayake**, Prof. T.M.W.J. Bandara and **Dr. J.M.K.W. Kumari**.

Material Development and Pollutant Remediation Research Programme

7. Material Development and Pollutant Remediation research programme of NIFS collaborates with University of Peradeniya from 2024-01-01 to 2025-01-01.
Summary: User friendly in-field toolkit for detecting adulterants in rice polish used for animal feed formulaion.
Collaborators: **Dr. L. Jayarathna,** and Dr. W.N.U. Perera.

2. Material Development and Pollutant Remediation research programme of NIFS collaborates with University of Peradeniya from 2024-01-01 to 2026-01-01.
Summary: Method development for adulteration identification.
Collaborators: **Dr. L. Jayarathna,** and Dr. N. Perera

3. Material Development and Pollutant Remediation research programme of NIFS collaborates with Sabaragamuwa University from 2022-01-01 to 2027-01-01.
Summary: Water quality development.
Collaborators: **Dr. L. Jayarathna,** and Dr. H. Wijesekara.

4. Material Development and Pollutant Remediation research programme of NIFS collaborates with University of Peradeniya from 2018-01-01 to 2028-01-02.
Summary: New material development and applications.
Collaborators: **Dr. L. Jayarathna,** and Dr. W.A. Bandara.

5. Material Development and Pollutant Remediation research programme of NIFS collaborates with University of Colombo from 2022-07-01 to 2027-07-01.
Summary: Removal of phosphate using Iron oxide-coated super sand.
Collaborators: **Dr. L. Jayarathna,** and Dr. S.M. Young.

6. Material Development and Pollutant Remediation research programme of NIFS collaborates with University of Peradeniya from 2021-01-03 to 2027-01-03.
Summary: Heavy metals and some selected elemental spotlights in milking cows reared in high CKDu Prevalence areas in Sri Lanka.
Collaborators: **Dr. L. Jayarathna,** Dr. G.D.R.K. Perera, and Dr. (Ms.) H.M.S. Wasana.

Natural Products Research Programme

1. Natural Products research programme of NIFS collaborates with Faculty of Dental Sciences, University of Peradeniya from 2021-01-06 to 2025-01-06.
Summary: Extraction and identification of bioactive secondary metabolites from plants.
Collaborators: **Prof. L. Jayasinghe,** and Prof. R. Jayasinghe.

2. Natural Products research programme of NIFS collaborates with Faculty of Medicine, University of Ruhuna from 2024-08-14 to 2027-08-13.

Summary: The proposed study would provide scientific evidence to rationalize the hypolipidemic and cardio-protective effects of Sri Lankan black tea and its value-added products. These data can be used as an effective marketing tool to promote Ceylon Tea in the global market. The regular consumption of these products could improve the quality of life of the people while the cultivation of medicinal herbs used in the formulation of value-added products could generate additional income to the stakeholders.
Collaborators: Prof. M.T. Napagoda. Dr. U.K. Egodage, and **Dr. N. Piyasena**.

3. Natural Products research programme of NIFS collaborates with Tea Research Institute of Sri Lanka from 2024-08-14 to 2027-08-13.
Summary: The proposed study would provide scientific evidence to rationalize the hypolipidemic and cardio-protective effects of Sri Lankan black tea and its value-added products. These data can be used as an effective marketing tool to promote Ceylon Tea in the global market. The regular consumption of these products could improve the quality of life of the people while the cultivation of medicinal herbs used in the formulation of value-added products could generate additional income to the stakeholders.
Collaborators: Dr. M.A.B. Ranatunga, and **Dr. N. Piyasena**.

Material Processing & Device Fabrication Research Programme

1. Material Processing and Device Fabrication research programme of NIFS collaborates with Research Center for Advanced Science and Technology (RCAST) from 2018-01-01 to 2028-12-31.
Summary: Development of Supercapacitors.
Collaborators: Prof. S. Uchida, and **Prof. G.R.A. Kumara**.

2. Material Processing and Device Fabrication research programme of NIFS collaborates with Department of Physics, University of West Georgia, United States from 2022-01-01 to 2026-01-31.
Summary: Development of perovskite solar cells.
Collaborators: Prof. L.A. De Silva, and **Prof. G.R.A. Kumara**.

3. Material Processing and Device Fabrication research programme of NIFS collaborates with Department of Physics, Georgia State University, United States. from 2022-01-01 to 2026-12-31.
Summary: Development of perovskite solar cells.
Collaborators: Prof. A.G.U. Perera, and **Prof. G.R.A. Kumara**.

4. Material Processing and Device Fabrication research programme of NIFS collaborates with Department of Chemistry, University of Peradeniya. from 2022-01-01 to 2026-01-30.
Summary: Development of supercapacitors and dye-sensitized solar cells.
Collaborators: Prof. R.M.G. Rajapakse, and **Prof. G.R.A. Kumara**.

5. Material Processing and Device Fabrication research programme of NIFS collaborates with Department of Physics, University of Jaffna from 2022-01-01 to 2026-01-30.
Summary: Development of perovskite and dye-sensitized solar cells.
Collaborators: Prof. P. Ravirajan, and **Prof. G.R.A. Kumara**.

6. Material Processing and Device Fabrication research programme of NIFS collaborates with Department of Physics, University of Peradeniya. from 2021-08-16 to 2026-12-30.
Summary: Development of supercapacitors and dye-sensitized solar cells.
Collaborators: Prof. T.M.W.J. Bandara, and **Prof. G.R.A. Kumara**.

7. Material Processing and Device Fabrication research programme of NIFS collaborates with Toyota Technological Institute, Japan from 2023-08-01 to 2026-01-30.
Summary: Anode materials for lithium-ion batteries using carbon materials.
Collaborators: Prof. M. Yoshimura, and **Prof. G.R.A. Kumara**.

8. Material Processing and Device Fabrication research programme of NIFS collaborates with Western Norway University of Applied Sciences from 2022-01-02 to 2026-01-01.
Summary: Development of perovskite and dye-sensitized solar cells, development of supercapacitors.
Collaborators: Prof. D. Velauthapillai, and **Prof. G.R.A. Kumara**.

Nutritional Biochemistry Research Programme

1. Nutritional Biochemistry research programme of NIFS collaborates with School of Molecular and Life Sciences, Curtin University, Perth, Australia from 2025-06-14 to 2028-06-14.
Summary: This collaboration focuses on plant-based food science and sustainable ingredients, including cereal and legume proteins, bioactive compounds, and functional food properties to support health and nutrition.
Collaborators: Dr. R.R. Bhattarai, **Prof. R. Liyanage**

8. Nutritional Biochemistry research programme of NIFS collaborates with National Key Laboratory of Green Pesticide, Key Laboratory of Green Pesticide and Agricultural Bioengineering, Ministry of Education, Center for Research and Development of Fine Chemicals, Guizhou University, Guiyang from 2025-10-14 to 2027-01-01.
Summary: The partnership addresses sustainable agriculture through research on green pesticides, bioactive compounds, and agricultural bioengineering.
Collaborators: Prof. Linhong Jin, Ms. Xia Zhou, **Prof. R. Liyanage**

9. Nutritional Biochemistry research programme of NIFS collaborates with Faculty of Agriculture and Faculty of Science, University of Peradeniya from 2025-07-21 to 2026-12-31.
Summary: This study explores the nutritional, bioactive, and functional properties of *Nymphaea nouchali* seeds to support functional food development and sustainable use of indigenous resources.
Collaborators: Dr. R. Samarakoon, Dr. D. Uduwela, **Prof. R. Liyanage**

10. Nutritional Biochemistry research programme of NIFS collaborates with Department of Animal Science, Faculty of Agriculture and Faculty of Veterinary Medicine, University of Peradeniya, Wayamba University, National Aquaculture Development Authority of Sri Lanka from 2025-05-28 to 2028-05-28.
Summary: This multi-institutional study promotes sustainable seaweed utilization in Sri Lanka through policy, socio-economic, nutritional, and aquaculture-focused research.
Collaborators: Prof. B. Jayawardana, Prof. D. de Croos, Dr. S. Jagoda, Dr. S. Weerasooriya, Dr. Kopiyawattage, Ms. P.P. Kumudu, Mr. N. Balachandram, **Prof. R. Liyanage**

Molecular Microbiology & Human Diseases Research Programme

1. Molecular Microbiology and Human Diseases research programme of NIFS collaborates with Respiratory disease treatment unit, Teaching hospital, Kandy from 2018-04-20 to 2031-12-31.
Summary: Information generated on local tuberculosis epidemiology, drug resistance patterns and differential host immune responses , would help in establishing better procedures in controlling drug resistant tuberculosis, improve patient status and reduce the overall health care cost spent on tuberculosis in Sri Lanka.
Collaborators: Dr. R.M.D. Madegedara, and **Prof. D.N. Magana-Arachchi**.

Food Chemistry Research Programme

1. Food Chemistry research programme of NIFS collaborates with University Putra Malaysia from 2023-07-01 to 2026-12-31.
   Summary: Fats and oils have been perceived for a long time as essential nutrients of human diet as well as concentrated sources of energy. They act as carriers of fat-soluble vitamins in the human diet. Besides these, they also play an important role in the transport of substances that determine the growth and development of body muscles as well as the brain. Sri Lanka as a tropical country with a rich biodiversity has got several underutilized oils and fat resources. They are found in edible plants, fruits, seeds and marine animals. Some of them are underutilized due to lack of research on their commercial exploitation. Through systematic studies, these oil resources can be converted into novel food products or ingredients. The novel lipid products can not only be used to address the food and nutritional needs of the society but also can serve as functional foods to mitigate the risk of chronic diseases. In this project, we aim to establish the nutritional profiles of various edible seeds, fruits, and marine animals.
   Collaborators: Prof. O.M. Lai, and **Prof. J.M.N. Marikkar**.

2. Food Chemistry research programme of NIFS collaborates with Faculty of Technology, University of Colombo from 2025-09-02 to 2028-08-31.
   Summary: Nutritional composition and bioactive properties of cocoa can vary significantly based on the region and variety due to differences in climate, soil conditions, and genetic factors. However, cocoa's nutritional and bioactive property studies of locally improved cocoa cultivars still remain underexplored. Other than this, efficient utilization of the by-products through scientific research could lead to sustainable cocoa processing in Sri Lanka, which will reduce waste, and introduce novel functional food ingredients to the market. In this study, it is aimed to bridge these knowledge-gaps by evaluating the nutritional and bioactive potential of selected locally grown cocoa cultivars to enhance their economic and functional value.
   Collaborators: Prof. K. Abesekera, and **Prof. J.M.N. Marikkar**.

3. Food Chemistry research programme of NIFS collaborates with Tea Research Institute of Sri Lanka from 2025-06-01 to 2028-05-31.
   Summary: This research emphasizes the application of NIRS technology as an analytical tool to enhance the technical capabilities of the Sri Lankan tea industry in effective plant nutrient testing. The objective is to provide support for systematically addressing spatial and temporal variabilities in the field through the use of this technology. This aims to facilitate the development of sustainable nutrient management systems, incorporating practices such as site-specific nutrient management.
   Collaborators: Dr. Amali Rathnasekera, and **Prof. J.M.N. Marikkar**.

Microbiology & Soil Ecosystems Research Programme

1. Microbiology and Soil Ecosystems research programme of NIFS collaborates with Central Environmental Authority, Sri Lanka from 2023-01-01 to 2025-12-31.
   Summary: Soil carbon sequestration, nutrient retention, and heavy metal deposition in urban wetland ecosystems of Sri Lanka.
   Collaborators: Dr. A. Gunawardene, and **Prof. R. Rathnayake**.

2. Microbiology and Soil Ecosystems research programme of NIFS collaborates with Faculty of Agriculture, University of Ruhuna from 2023-11-01 to 2025-12-31.
   Summary: Exploring cyanobacterial bioremediation strategies for chemical free treatment of textile wastewater: A comprehensive investigation towards sustainable and eco-friendly solutions.
   Collaborators: Prof. G. Nalina, and **Prof. R. Rathnayake**.

3. Microbiology and Soil Ecosystems research programme of NIFS collaborates with Department of Botany, University of Peradeniya from 2023-10-01 to 2026-03-31.
   Summary: Soil Carbon Sequestration and Heavy Metal Distribution in Different Components of a Tank Cascade System in the Dry Zone of Sri Lanka.
   Collaborators: Prof. G.A.D. Perera, and **Prof. R. Rathnayake**.

4. Microbiology and Soil Ecosystems research programme of NIFS collaborates with Department of Botany, University of Peradeniya from 2023-12-01 to 2025-12-31.
   Summary: Cyanobacteria-mediated Bioremediation of Textile Wastewater Integrating Successive Production of Biodiesel. Structural analysis of textile dye biodegradation.
   Collaborators: Prof. C.L. Abayasekara, and **Prof. R. Rathnayake**.

5. Microbiology and Soil Ecosystems research programme of NIFS collaborates with Faculty of Agriculture, University of Ruhuna from 2024-01-01 to 2025-12-31.
   Summary: Soil Microbial Biomass Carbon variation in different components of the selected tanks associated with the Katupotha tank cascade system in the dry zone of Sri Lanka.
   Collaborators: Prof. W. Kumara, and **Prof. R. Rathnayake**.

6. Microbiology and Soil Ecosystems research programme of NIFS collaborates with CSIRO, Agriculture and Food, Canberra, Australia from 2017-12-18 to 2026-12-31.
   Summary: Regarding the expertise in agricultural modelling.
   Collaborators: Dr. S.B. Karanaratne, and **Prof. R.R. Ratnayake**.

7. Microbiology and Soil Ecosystems research programme of NIFS collaborates with University of Peradeniya, Sri Lanka from 2025-06-05 to 2027-12-31.
   Summary: Mass cultivation and characterization of native cyanobacteria from diverse Sri Lankan ecosystems for nutraceutical and bioactivity assessment.
   Collaborators: **Prof. R.R. Ratnayake,** and Dr. Buddhie Nanayakkara.

8. Microbiology and Soil Ecosystems research programme of NIFS collaborates with JRDC, Peradeniya from 2025-01-01 to 2026-12-31.
   Summary: Assess tank water and associated channels water quality of selected 6 tanks in the Katupotha tank cascade system, Sri Lanka.
   Collaborators: Dr. M. Makehelwela, and **Prof. R.R. Ratnayake**.

Earth Resources & Renewable Energy Research Programme

1. Earth Resources and Renewable Energy research programme of NIFS collaborates with Rajarata University of Sri Lanka, Mihinthale from 2024-12-08 to 2025-02-28.
   Summary: Wahawa Geothermal Field.
   Collaborators: **Prof. N.D. Subasinghe,** and Ms. S.A. Samaranayake.

2. Earth Resources and Renewable Energy research programme of NIFS collaborates with Rajarata University, Mihintale from 2022-01-01 to 2025-06-01.
   Summary: Here we conduct analysis on archeological samples from Yan Oya anicut, Sri Lanka.
   Collaborators: Prof C.R. Withanachchi, and **Prof. N.D. Subasinghe**.

3. Earth Resources and Renewable Energy research programme of NIFS collaborates with National Ocean Affairs Committee, Ministry of Foreign Relations, Sri Lanka from 2016-01-01 to 2025-12-12.
   Summary: Conduct geothermal explorations applying geological, geophysical and geochemical techniques in the geothermal areas of Sri Lanka.
   Collaborators: Ms. S.A. Samaranayake, and **Prof. N.D. Subasinghe**.

4. Earth Resources and Renewable Energy research programme of NIFS collaborates with Geological Survey and Mines Bureau, Sri Lanka from 2016-02-01 to 2025-12-01.
   Summary: Conducting geophysical surveys on geothermal arears in Sri Lanka.
   Collaborators: Mr. Nalin de Silva, and **Prof. N.D. Subasinghe**.

5. Earth Resources and Renewable Energy research programme of NIFS collaborates with Rajarata University, Mihintale from 2016-01-01 to 2025-12-01.
   Summary: Conduct geothermal explorations applying geological, geophysical and geochemical techniques in the geothermal areas of Sri Lanka.
   Collaborators: Dr. U. Dahanayake, Dr. H.O. Wijewardane, and **Prof. N.D. Subasinghe**.

6. Earth Resources and Renewable Energy research programme of NIFS collaborates with Dept. of Physics, University of Peradeniya from 2018-02-01 to 2025-12-01.
   Summary: Here we conduct research on Time-dependent finite-difference model for transient and steady-state analysis of thermoelectric bulk materials.
   Collaborators: Dr. B.M.K. Pemasiri, and **Prof. N.D. Subasinghe**.

7. Earth Resources and Renewable Energy research programme of NIFS collaborates with Dept. of Physics, University of Peradeniya from 2019-01-01 to 2025-02-01.
   Summary: Here we conduct thermoelectric researches by applying various techniques with different materials.
   Collaborators: Dr. L.K. Narangammana, and **Prof. N.D. Subasinghe**.

8. Earth Resources and Renewable Energy research programme of NIFS collaborates with Department of Geology, University of Peradeniya from 2016-01-01 to 2025-12-01.
   Summary: Here we are carrying out various petrological and structural geological studies with the participation of undergraduate and postgraduate students.
   Collaborators: Prof. S.P.K. Malaviarachchi, and **Prof. N.D. Subasinghe**.

Plant Taxonomy & Conservation Research Programme

1. Plant Taxonomy and Conservation research programme of NIFS collaborates with National Herbarium Royal Botanic Gardens, Peradeniya from 2016-03-01 to 2026-12-31.
   Summary: With the national Herbarium many taxonomic studies and conservation documentation activities including the preparation of national red List are conducted.
   Collaborators: Dr. Subhani Ranasinghe, and **Prof. D.S.A. Wijesundara**.

2. Plant Taxonomy and Conservation research programme of NIFS collaborates with Qujing Normal University, Qujing, Yunnan, P.R. China from 2019-08-01 to 2026-12-31.
   Summary: With this collaboration several studies on fungi are conducted. One graduate student is working on fungi in Eucalyptus plantations in Sri Lanka. Studies are also planned on establishing a National mycological repository.
   Collaborators: Prof. Nalin Wijayawardena, and **Prof. D.S.A. Wijesundara**.

3. Plant Taxonomy and Conservation research programme of NIFS collaborates with Agricultural Biotechnology Centre University of Peradeniya from 2018-08-01 to 2025-12-31.
   Summary: Several research activities are conducted through this collaboration. Main projects include research on Sri Lankan Cinnamon and taxonomic studies of genus *Strobilanthes* (nelu).
   Collaborators: Prof. Pradeepa Bandaranayake, and **Prof. D.S.A. Wijesundara**.

4. Plant Taxonomy and Conservation research programme of NIFS collaborates with Natural History Museum United Kingdom from 2017-05-01 to 2026-12-31.

Summary: Taxonomy of Sri Lankan lichens are studied with the collaboration of the natural history museum, UK. There is a graduate student jointly supervised.
Collaborators: Dr. Gothamie Weerakon, and **Prof. D.S.A. Wijesundara**.

11. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of Crop Science, Faculty of Agriculture, University of Peradeniya from 2017-07-01 to 2025-12-31.
Summary: Taxonomic studies of Pteridophytes (ferns) of Sri Lanka is the major research activity in this collaboration.
Collaborators: Dr. R.H.G. Ranil, and **Prof. D.S.A. Wijesundara**.

12. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of Chemistry, University of Peradeniya from 2016-03-01 to 2025-12-31.
Summary: The main research activities of this collaboration are phytochemical studies of higher plants and lichens.
Collaborators: Prof. V. Karunarathne, and **Prof. D.S.A. Wijesundara**.

7. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of National Botanic Gardens from 2023-11-01 to 2025-12-31.
Summary: Conservation of *Kayea stylosa*.
Collaborators: **Prof. D.S.A. Wijesundara, Dr. H.D. Jayasinghe,** and Dr. Achala Attanayake.

8. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of National Botanic Gardens from 2023-11-01 to 2025-12-31.
Summary: Conservation of *Stemonoporus moonii*.
Collaborators: **Prof. D.S.A. Wijesundara, Dr. H.D. Jayasinghe,** and Dr. Achala Attanayake.

10. Plant Taxonomy and Conservation research programme of NIFS collaborates with University of Colombo from 2024-01-09 to 2026-09-30.
Summary: Conservation of *Justicia*
Collaborators: **Dr. H.D. Jayasinghe,** Prof. H.S. Kathriarachchi, Dr. D.M.R.G. Mayakaduwa, and Dr. S.A.T.A. Perera.

11. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of National Botanic Gardens from 2023-11-01 to 2025-12-31.
Summary: Conservation of *Kayea stylosa*
Collaborators: **Prof. D.S.A. Wijesundara, Dr. H.D. Jayasinghe,** and Dr. Achala Attanayake.

12. Plant Taxonomy and Conservation research programme of NIFS collaborates with Department of National Botanic Gardens from 2023-11-01 to 2025-12-31.
Summary: Conservation of *Stemonoporus moonii*.
Collaborators: **Prof. D.S.A. Wijesundara, Dr. H.D. Jayasinghe,** and Dr. Achala Attanayake.

13. Plant Taxonomy and Conservation research programme of NIFS collaborates with University of Hyderabad from 2025-08-07 to 2026-12-31.
Summary: Conservation and taxomonic studies of *Diospyros crumenta* in the Western Ghats-Sri Lanka biodiversity hot spot.
Collaborators: **Dr. H.D. Jayasinghe,** Dr. S. Siddharthan, and Mr. J.K. Jose.

14. Plant Taxonomy and Conservation research programme of NIFS collaborates with Missouri Botanical Garden from 2025-05-28 to 2028-12-31.
Summary : Reconstruct the phylogenetic relationships, clarify species boundaries, and assess hybridization among Sri Lankan *Diospyros* species and conduct population genetic studies to assess the genetic diversity and structure of a selected clade containing endangered *Diospyros* species to help devise strategies to conserve their genetic diversity..
Collaborators : **Dr. H.D. Jayasinghe,** and Dr. Christine Edwards.

15. Plant Taxonomy and Conservation research programme of NIFS collaborates with Singapore Botanic Gardens from 2025-11-19 to 2027-12-31.
Summary: Taxonomic monographing the genus *Acranthera Bremek*.
Collaborators: **Dr. H.D. Jayasinghe,** Dr. C. Junhao, and Mr. H.P. Kiat.

Water Quality Research Programme

1. Water Quality Research Programme research programme of NIFS collaborates with South Africa from 2024-05-09 to 2034-05-09.
Summary: South Africa and Sri Lanka on Science and Technology.
Collaborators: **Prof. R. Weerasooriya,** and G.S. Kannangara.

Microbial Biotechnology Research Programme

1. Microbial Biotechnology research programme of NIFS collaborates with National Key Laboratory of Agricultural Microbiology, College of Resources and Environment, Huazhong Agricultural University, Wuhan 430070, China from 2025-09-15 to 2030-09-15.
Summary: This project aims to establish a collaborative framework in the field of agricultural microbiology, with a strong focus on co-supervision of undergraduate and postgraduate research students, joint research activities, and shared scientific publications..
Collaborators: Peng Cai, and **Dr. M. Premarathna**.

RESEARCH SUPERVISION

M. Phil. Completed

1. Mr. A.G.C.N. Wijerathna was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Nano-Sb_2S_3/TiO_2 Nanotube Arrays on Porous Ti Photoanode for Enhancement of Charge Separation Properties and Photoelectrochemical Activity."* Supervisor: **Prof. J. Bandara.**

2. Ms. M.I.U. Weerasinghe was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Enhancing DSSCs for Efficient and Stable Solar Energy Conversion: Materials, Methods, and Performance Optimization."* Supervisors: Prof. T.M.W.J. Bandara and **Prof. G.R.A. Kumara**.

3. Ms. M.A. Wickramasinghe was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Food Choices, Nutrient Intake, and Biomarker Validation: A Study of the Sri Lankan Twin Registry and Their Offspring (COTASS 3)."* Supervisors: **Prof. R. Liyanage**, Prof. T. Madujith, Prof. F.V. Rijsdijk, Dr. H. Zavos, Prof. R. Jayawardena, and Prof. A. Sumathipala.

4. Ms. S.M.N.S. Nirmani was awarded the M.Phil. degree in 2025 by the University of Sri Jayewardenepura for the thesis titled *"Effect of Functional Properties on Enzymatic Hydrolysis of Selected Underutilized Flours in Sri Lanka."* Supervisors: Dr. C. Jayathilake, Prof. Indira Wickramasinghe, **Prof. R. Liyanage,** and Dr. M. Jayasinghe.

5. Ms. B.S.K. Ulpathakumbura was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Anti-hyperglycemic, Lipase Inhibitory, and Antioxidative Properties of Selected Leafy Edible Plants of Sri Lanka."* Supervisors: **Prof. J.M.N. Marikkar and Prof. L. Jayasinghe**.

6. Ms. A.M. Rekasa was awarded the M.Phil. degree in 2025 by the South Eastern University of Sri Lanka for the thesis titled *"Development of Cereal-Incorporated Fish Sausages from Selected Undervalued Fish Species."* Supervisor: **Prof. J.M.N. Marikkar**.

7. Mr. D.M.G. Dayananda was awarded the M.Phil. degree in 2025 by the University of Peradeniy**a** for the thesis titled *"Diversity of Selected Ground Spider Genera in Sri Lanka Based on Morphology and DNA Barcoding."* Supervisors: **Prof. S.P. Benjamin** and Prof. I. Karunarathne.

8. Ms. W.M.H.U. Wijerathna was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Comparative Analysis of Nocturnal and Ground-Dwelling Beetle Diversity in Selected Sites in Sri Lanka (Coleoptera)."* Supervisors: **Prof. S.P. Benjamin**, Prof. I. Karunarathne, and Dr. S. Ranasinghe.

9. Mr. S.M.D.M.C. Senarathna was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"An Air Pollution Model for the City of Kandy: A Platform to Evaluate Health Outcomes."* Supervisors: Dr. G. Bowatte and **Prof. R. Weerasooriya**.

10. Ms. R.A.L.R. Amarasena was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Remediation of Volatile Phenolic Compounds Using Copper-Modified Synthesized Faujasite Y-Zeolite Catalyst."* Supervisor**: Dr. L. Jayarathna.**

11. Ms. W.R.U.A. Bandara was awarded the M.Phil. degree in 2025 by the University of Peradeniya for the thesis titled *"Characterization of Extracellular Vesicles from Tuberculosis Patient Sera: A Potential Source for Biomarker Identification."*
Supervisor: **Prof. D.N. Magana-Arachchi.**

12. Ms. W.M.S.N. Bandara was awarded the M.Phil. degree in 2025 by the University of Kelaniya for the thesis titled *"Assessment of Socio-Demographic Factors and Accumulation of Cyanotoxins and Hofmeister Ions in Crops and Leafy Vegetables: A Comparison of CKDu Endemic and Non-Endemic Areas."*
Supervisors**: Prof. D.N. Magana-Arachchi,** Prof. M.S. Vithanage, and Prof. R.P.Wanigatunga.

13. Ms. H.R.P. Prasadini was awarded the M.Phil degree in 2025 by University of Peradeniya for the thesis titled "Duckweed As a Sustainable Nutrient- Rich Resource: Biochemical Characterization, Cultivation Optimization, and Cookie Fortification Potential".
Superviser: **Prof. R. Liyanage**.

B.Sc. Research Project Completed

1. Ms. H.N. Anuththara graduated from Rajarata University of Sri Lanka in 2025. Her research project, *"Synthesis, Optimization and Characterization of Mushroom (Pleurotus ostreatus) Stem-Derived Chitosan-Based Gel Polymer Electrolytes for Magnesium-Ion Battery Applications,"* was conducted at the NIFS under the supervision of **Dr. J.M.K.W. Kumari** and Dr. C.A. Thotawatthage from 13 June 2024 to 30 July 2025.

2. Ms. D.M.N. Dissanayake graduated from the University of Sri Jayewardenepura in 2025. Her research project, "*Development of Low-Cost Sustainable Counter Electrodes for DSSC-APSC: Graphene*," was carried out at NIFS under the supervision of **Prof. G.R.A. Kumara** and Dr. T. Senapathi from 11 November 2024 to 31 May 2025.

3. Ms. T.B. Withanawasam graduated from the Open University of Sri Lanka in 2025. Her research project, *"Bioactivity Studies of Eugenia uniflora L. and Vitex negundo L.,"* was conducted at NIFS under the supervision of **Prof. L. Jayasinghe** from 15 June 2023 to 15 November 2025.

4. Ms. S.K. Dantanarayana graduated from the University of Peradeniya in 2025. Her research project, *"Evaluation of Antioxidant, Antidiabetic, Anti-Obesity Properties and Cytotoxicity Effects of Leaf Extracts from Selected Medicinal Plants in Sri Lanka,"* was conducted at NIFS under the supervision of Prof. N.P. Rajapakse, Prof. B.E.P. Mendis, and **Prof. R. Liyanage** from 20 December 2024 to 1 April 2025.

5. Mr. W.K.S. Bandara graduated from the University of Peradeniya in 2025. His research project, *"Comparative In Vitro Analysis of Glucose Releasing Rate and Anti-Obesity Activity of Selected Improved Parboiled and Raw Rice Varieties,"* was conducted at NIFS under the supervision of Dr. R. Samarakoon and **Prof. R. Liyanage** from 2 January 2025 to 1 April 2025.

6. Ms. B.A.G.S. Balachandra graduated from the University of Peradeniya in 2025. Her research project, *"Assessment of Bioactive Properties of Spirulina subsalsa,"* was conducted at NIFS under the supervision of Prof. B.C. Jayawardana and **Prof. R. Liyanage** from 2 January 2025 to 1 April 2025.

7. Ms. A.S. Polwattage graduated from the University of Peradeniya in 2025. Her research project, *"Development of a Decision-Support Mobile Application for Assessing Internal Quality Attributes of Three Watermelon Varieties Using Image Processing and Machine*

Learning Techniques, with Comparative Analysis of Bioactive Compounds and Antioxidant Potential," was conducted at NIFS under the supervision of Prof. B.E.P. Mendis, Prof. S.P. Nissanka, and **Prof. R. Liyanage** from 1 January 2025 to 1 April 2025.

8. Mr. T.W.Y.K. Perera graduated from the University of Peradeniya in 2025. His research project, *"Comparative Analysis of the Impact of Drying Methods on Antioxidant, Antidiabetic, Anti-Aging and Anti-Obesity Activities of Green Algae (Kappaphycus alvarezii): An In Vitro Study,"* was conducted at NIFS under the supervision of Prof. B.C. Jayawardana and **Prof. R. Liyanage** from 17 January 2025 to 1 April 2025.

9. Ms. E.M.S.S.K. Ekanayake graduated from the University of Sri Jayewardenepura in 2025. Her research project, *"Comparison of Antibacterial and Antifungal Activities of Leaves from Selected Ayurvedic Medicinal Plants in Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R. Liyanage** and Dr. F.S. Idroos from 1 November 2024 to 30 May 2025.

10. Mr. S.A.I.S. Subasinghe graduated from the University of Peradeniya in 2025. His research project, *"Evaluation of Bioactive Compounds of Underutilized Seaweeds in Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R. Liyanage**, Prof. B.C. Jayawardana, and Dr. P. Weththasinghe from 7 July 2025 to 24 October 2025.

11. Ms. P.A.R. Yasawardhana graduated from the University of Peradeniya in 2025. Her research project, *"Comparative Assessment of Functional Properties, Bioactivity and Toxicity of Wild, Monocultured and Integrated (with Sea Cucumber) Kappaphycus alvarezii,"* was conducted at NIFS under the supervision of **Prof. R. Liyanage**, Prof. B.C. Jayawardana, and Dr. P. Weththasinghe from 7 July 2025 to 24 October 2025.

12. Mr. S.K.S.P. Kumara graduated from the University of Peradeniya in 2025. His research project, *"Effect of Nitrogen Fertilizer Application Levels on Physicochemical, Functional, and Nutritional Quality Characteristics of Selected Traditional and Improved Rice (Oryza sativa L.) Varieties in Sri Lanka,"* was conducted at NIFS under the supervision of Prof. B.E.P. Mendis, Prof. S.P. Nissanka, **Prof. R. Liyanage**, and Dr. K.G.P.B. Karunarathna from 7 July 2025 to 24 October 2025.

13. Ms. G.A.S.S. Karunarathna graduated from the University of Jaffna in 2025. Her research project, *"Comparative Evaluation of Antioxidant Capacity, Alpha-Amylase Inhibition, and Probiotic Efficacy of Raw and Fermented Foxtail, Pearl, and Kodo Millets Cultivated in Jaffna, Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R. Liyanage**, Prof. S. Vasantharuba, and Dr. S. Sivakanthan from 20 June 2025 to 6 November 2025.

14. Ms. R. Thasmila graduated from the South Eastern University of Sri Lanka in 2025. Her research project, *"Development of Cookies Enriched with Defatted Residues of Tropical Almond (Terminalia catappa L.) Seed Kernels,"* was conducted at NIFS under the supervision of **Prof. J.M.N. Marikkar** and Dr. U. Abdul Majeed from 5 November 2024 to 10 June 2025.

15. Ms. J.J. Natasha graduated from Sabaragamuwa University of Sri Lanka in 2025. Her research project, *"Development of a Bread Spread Incorporating Terminalia catappa L. Fruit Kernel with Jumbo Peanut,"* was conducted at NIFS under the supervision of **Prof. J.M.N. Marikkar** from 27 January 2025 to 6 August 2025.

16. Ms. M.F.F. Fuard graduated from Rajarata University of Sri Lanka in 2025. Her research project, *"Development of Cookies Using Defatted Residues of Sesame (Sesamum indicum L.) Seeds from UMA and ANKSE3 Cultivars,"* was conducted at NIFS under the supervision of **Prof. J.M.N. Marikkar** from 19 May 2025 to 31 October 2025.

17. Ms. H.S. Lahandasinha graduated from the University of Jaffna in 2025. Her research project, *"Development of Creamed Coconut Pol Sambol Using Grated Coconut and Testa,"* was conducted at NIFS under the supervision of **Prof. J.M.N. Marikkar** from 24 June 2025 to 7 November 2025.

18. Ms. G.H.S.S. de Silva graduated from the University of Peradeniya in 2025. Her research project, *"Effect of Montmorillonite Nanoclay on Degradation of Selected Bacterial Biofilms,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 1 April 2024 to 6 January 2025.

19. Ms. S.G.V.S.L. Sapugoda graduated from NSBM Green University in 2025. Her research project, *"Potential of Biofilm Biofertilizer in Remediating Microplastic Pollution in Paddy Cultivation,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 1 January 2024 to 15 January 2025.

20. Ms. D.M.S.I.K. Weerasinghe graduated from the University of Sri Jayewardenepura in 2025. Her research project, *"Potential of Biofilm Biofertilizer in Remediating Microplastic Pollution in Rice Cultivation,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 2 May 2024 to 15 January 2025.

21. Ms. K.A.D.E. Kahandawala graduated from NSBM Green University in 2025. Her research project, *"Impact of Microplastics on Plant Growth and Yield of Rice,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 1 January 2024 to 15 January 2025.

22. Ms. G.G.H.M. Gamage graduated from the University of Peradeniya in 2025. Her research project, *"Impacts of Microplastics on Maize Growth and Rhizosphere Fungi,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 1 May 2024 to 17 January 2025.

23. Ms. H.K.D. Herath graduated from Rajarata University of Sri Lanka in 2025. Her research project, *"In Vitro Development and Characterization of Biofilms Using Marine Microorganisms Isolated from Biofouling Sites,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 23 October 2024 to 7 May 2025.

24. Ms. H.H.M.S.U. Hapukotuwa graduated from Uva Wellassa University of Sri Lanka in 2025. Her research project, *"Effects of Biofilm Biofertilizer on Tea Quality: A Spectroscopic Approach,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 17 March 2025 to 9 September 2025.

25. Ms. H.V.D.N.D. Kulasingha graduated from the University of Colombo in 2025. Her research project, *"Feasibility of Biofilm Biofertilizer in Centella asiatica Cultivation,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 21 March 2025 to 9 September 2025.

26. Ms. S.P.J.C. Karunarathna graduated from the University of Colombo in 2025. Her research project, *"Development of a Method to Differentiate Centella asiatica Grown under Organic and Non-Organic Fertilizer Practices,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 21 March 2025 to 9 September 2025.

27. Ms. I.U. Senevirathna graduated from Wayamba University of Sri Lanka in 2025. Her research project, *"Assessment of Genetic Diversity and DNA Polymorphism of Cryptic Fungal Pathogens,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 27 January 2025 to 22 July 2025.

28. Ms. W.M.K.I.A. Wijesingha graduated from the University of Colombo in 2025. Her research project, *"Taxonomy and Phylogeny of Perchlorate-Reducing Fungal Isolates from Martian Simulant Soil in Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne and Dr. M. Premarathna** from 10 February 2025 to 23 July 2025.

29. Ms. M.D.F. Ruzaina graduated from the University of Jaffna in 2025. Her research project, *"Synergistic Effects of Biofertilizers and Chemical Fertilizers on Early Growth and Symbiotic Nodulation of Black Gram (Vigna mungo L.) under Extremely Low Soil Organic Carbon Content,"* was conducted at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 23 June 2025 to 26 October 2025.

30. Ms. H.M.P.H.K. Herath graduated from the Sri Lanka Institute of Information Technology (SLIIT) in 2025. Her research project, *"Cyanobacteria-Based Textile Wastewater Remediation and Toxicity Evaluation of the Treated Effluent,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 12 November 2024 to 28 February 2025.

31. Mr. E.M.S.S. Ekanayake graduated from Sabaragamuwa University of Sri Lanka in 2025. His research project, *"Estimation of Soil Carbon Stocks in Paddy Lands Associated with a Tank Cascade System in the Dry Zone of Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 4 February 2025 to 8 May 2025.

32. Mr. L.A.N. Deshan graduated from Rajarata University of Sri Lanka in 2025. His research project, *"Antimicrobial Properties and Biochemical Composition of the Mucus of the Sri Lankan Endemic Snail Acavus haemastoma,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 27 November 2024 to 30 July 2025.

33. Ms. M.T.G.S.P. Wickramasinghe graduated from Uva Wellassa University of Sri Lanka in 2025. Her research project, *"Variation of Soil Carbon Fractions in Paddy Lands Associated with the Katupotha Tank Cascade System in the Dry Zone of Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 17 March 2025 to 26 August 2025.

34. Ms. P.A.N.U. Wijesekara graduated from the University of Colombo in 2025. Her research project, *"Restoration Ecology of Chena Cultivation through Assisted Natural Regeneration with Emphasis on Carbon Sequestration, Soil Amelioration, and Faunal Assemblages,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** and **Prof. D.S.A. Wijesundara** from 19 December 2024 to 29 August 2025.

35. Ms. T. Senevirathna graduated from the Open University of Sri Lanka in 2025. Her research project, *"Assessment of Soil Carbon Storage Capacity in Different Components of Selected Tanks Associated with the Katupotha Tank Cascade System in the Dry Zone of Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 1 July 2024 to 31 August 2025.

36. Ms. J.F. Shanjitha graduated from the University of Jaffna in 2025. Her research project, *"Assessment of Total Organic Carbon, Nutrients, and Heavy Metal Concentrations in Paddy Soils of the Katupotha Tank Cascade System in the Dry Zone of Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** from 23 June 2025 to 2 November 2025.

37. Ms. J.A.F. Akeela graduated from the University of Jaffna in 2025. Her research project, *"Response of Rice to Silicon Application with Special Reference to Phytolith Formation, Nutrient Uptake, Growth, and Yield,"* was conducted at NIFS under the supervision of Prof. **R.R. Ratnayake** from 23 June 2025 to 2 November 2025.

38. Ms. U. Kodithuwakku graduated from the University of Moratuwa in 2025. Her research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 24 June 2024 to 30 June 2025.

39. Mr. P. Jayaweera graduated from the University of Peradeniya in 2025. His research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 3 July 2024 to 30 June 2025.

40. Ms. C. Ekanayake graduated from the University of Peradeniya in 2025. Her research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 3 July 2024 to 30 June 2025.

41. Mr. H.M.N.P.P. Kumara graduated from the University of Peradeniya in 2025. His research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 25 June 2024 to 30 June 2025.

42. Mr. K.M.U.S. Chathuranga graduated from Uva Wellassa University in 2025. His research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 24 April 2024 to 30 June 2025.

43. Mr. I.L.C.S. Wickramarathna graduated from the University of Peradeniya in 2025. His research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 24 December 2024 to 30 June 2025.

44. Mr. S. Sanojan graduated from Uva Wellassa University in 2025. His research project in *Geology* was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** from 30 January 2025 to 10 December 2025.

45. Ms. A. Siddeek graduated from Lincoln University in 2025. Her research project, *"Evolution, Ecology and Biodiversity,"* was conducted at NIFS under the supervision of **Prof. S.P. Benjamin** from 1 January 2025 to 31 December 2025.

46. Ms. I.M.S.S. Karunarathne graduated from Rajarata University of Sri Lanka in 2025. Her research project, *"Factors Affecting Germination and Early Seedling Development of Dipterocarpaceae Species in Sinharaja Forest, Sri Lanka,"* was conducted at NIFS under the supervision of **Dr. H.D. Jayasinghe** from 3 June 2024 to 3 January 2025.

47. Ms. R.T. Dissanayake graduated from the Faculty of Agriculture, University of Peradeniya in 2025. Her research project, *"Conservation Biology of Eugenia haeckeliana Trimen: A Pathway to Recovery,"* was conducted at NIFS under the supervision of **Dr. H.D. Jayasinghe**, Dr. R.H.G. Ranil, Prof. D.K.N.G. Pushpakumara, and Prof. S.A.C.N. Perera from 12 October 2024 to 7 April 2025.

48. Mr. K.T. Weerarathna graduated from Rajarata University of Sri Lanka in 2025. His research project, *"Diversity of Poaceae Flora in the Endane Biodiversity Corridor Landscape in Southwestern Sri Lanka,"* was conducted at NIFS under the supervision of **Dr. H.D. Jayasinghe** from 3 June 2024 to 3 January 2025.

49. Ms. R.M.P. Wijesinghe graduated from Sabaragamuwa University of Sri Lanka in 2025. Her research project, *"Inter- and Intra-Species Morphological Characterization of Elatostema (Urticaceae) Species in Sri Lanka,"* was conducted at NIFS under the supervision of **Dr. H.D. Jayasinghe** and Dr. R.G.U. Jayalal from 3 February 2025 to 22 October 2025.

50. Ms. M.W.S.G. Withanawasam graduated from the Institute of Chemistry Ceylon in 2025. Her research project, *"Mechanistic Modeling of Boron Transport by Kelani River Sediments,"*

was conducted at NIFS under the supervision of **Prof. R. Weerasooriya** from 18 November 2024 to 15 November 2025.

51. Ms. D.N.F. Shahnaz graduated from the Institute of Chemistry Ceylon in 2025. Her research project, *"Modeling of Fluoride Transport by Chemically Modified Sand under Flow-Through Conditions (Column Studies),"* was conducted at NIFS under the supervision of **Prof. R. Weerasooriya** from 18 November 2024 to 15 November 2025.

52. Ms. U.D. Karunarathne graduated from the Institute of Chemistry Ceylon in 2025. Her research project, *"Development of a Quantum Dot–Based Detection Method for Microplastic Identification,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** from 13 November 2024 to 9 March 2025.

53. Ms. H.M.N.K. Balawardhana graduated from the Institute of Chemistry Ceylon in 2025. Her research project, *"Spectroscopic Investigation of Chlorophenol Degradation Using a Zeolite-Based Catalyst,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** from 2 December 2024 to 9 March 2025.

54. Mr. W.E.M.D.D. Ekanayake graduated from the Institute of Chemistry Ceylon in 2025. His research project, *"Synthesis of Nanoparticles Using Continuous Stream Flow,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** from 2 December 2024 to 9 March 2025.

55. Mr. J. Senarathne graduated from the University of Peradeniya in 2025. His research project, *"Zeolite-Modified La-Doped ZnO Nanoflowers for Gas Sensing Applications,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara from 25 March 2025 to 30 December 2025.

56. Ms. S. Pigera graduated from the University of Peradeniya in 2025. Her research project, *"Synthesis of Boron-Modified Faujasite-Type Zeolite and Its Palladium Functionalization for Hexane Isomerization,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara from 25 March 2025 to 30 December 2025.

57. Ms. S. Prarthana graduated from the University of Peradeniya in 2025. Her research project, *"Synthesis of Boron-Modified Faujasite-Supported Nano Zero-Valent Iron for Nitrate Reduction,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara from 25 March 2025 to 30 December 2025.

58. Mr. B. Anjana graduated from the University of Peradeniya in 2025. His research project, *"Development of p-Type ZnO-Loaded Zeolite Materials for Enhanced Gas Sensing Performance,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara from 25 March 2025 to 31 December 2025.

59. Mr. L. Bandara graduated from the University of Peradeniya in 2025. His research project, *"Palladium-Impregnated Boron-Modified ZSM-5 Zeolite for Selective Oxidation of Benzyl Alcohol,"* was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara from 25 March 2025 to 31 December 2025.

60. Ms. R.A.K. Dissanayake graduated from the Sri Lanka Institute of Information Technology (SLIIT) in 2025. Her research project, *"Screening and Characterization of Thermostable Amylase and Protease Enzymes from Selected Bacillus spp. Isolated from Hot Springs of Sri Lanka,"* was conducted at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** from 11 November 2024 to 28 February 2025.

61. Ms. P.K.S.S.Alwis graduated from Uva Wellassa University of Sri Lanka in year 2025. The research project on "Effect of acid medium on thermal quenching of vein graphite to synthesize exfoliated vein graphite" was conducted at the NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe,** and Dr. T.H.N.G. Amaraweera from 2024-12-23 to 2025-07-31.

62. Mr. S.G.J.Madhawa graduated from Uwa wellassa university of Sri Lanka submitted the Undergraduate thesis titled "Effect of graphite purification methods for the electrical conductivity." was conducted at the NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe,** and Dr. T.H.N.G. Amaraweera from 2024-12-23 to 2025-07-31.

63. Mr. D.C.M.N.L Dharmaphriya graduated from Uva Wellassa University of Sri Lanka submitted the Undergraduate thesis titled "Comparison of mechanical exfoliation methods to synthesis exfoliated vein graphite" was conducted at the NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe,** and Dr. T.H.N.G. Amaraweera from 2024-12-23 to 2025-07-31.

64. Mr. S.H.D. Senavirathna graduated from Rajarata University of Sri Lanka in year 2025. The research project on "Development of a supercapacitor utilizing natural rubberbased Electrolyte and activated nano carbon electrodes Derived from bamboo culms." was conducted at the NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe,** and Mr. C.A. Thotawatthage from 2025-01-01 to 2025-06-30.

65. Ms. K.K. D.D. Jayawardhane, graduated from the University of Jaffna of Sri Lanka, in year 2025. The research project on, “Comparison of the behavior of grey langurs (*Semnopithecus priam thersites*) in natural, village and temple habitats in Polonnaruwa, Sri Lanka”, was conducted at the NIFS under the supervision of Prof. W.P.J. Dittus from 2024.03.04 – 2025.02.07.

Undergraduate Industrial Traning Completed

1. Ms. G.A.S.S. Karunarathna of the University of Jaffna completed her Industrial Training at the National Institute of Fundamental Studies (NIFS) under the supervision of **Prof. R. Liyanage**, Prof. S. Vasantharuba, and Dr. S. Sivakanthan from 19 May 2025 to 19 June 2025.

2. Ms. D.S. Senanayake of Wayamba University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. R. Liyanage** and Prof. A. Chandrasekara from 07 May 2025 to 19 September 2025.

3. Ms. K.A.D.E. Kahandawala of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 01 April 2024 to 15 January 2025.

4. Ms. S.G.V.S.L. Sapugoda of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 01 April 2024 to 15 January 2025.

5. Ms. A.R.M.W.K. Rathnayake of the University of Kelaniya completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 07 October 2024 to 24 January 2025.

6. Ms. M.H.F. Hafna of the University of Kelaniya completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 07 October 2024 to 24 January 2025.

7. Ms. H.A.D. Hettigoda of the Sri Lanka Institute of Information Technology (SLIIT) completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 04 November 2024 to 31 January 2025.

8. Ms. D.K.C.N. Senarathna of the Sri Lanka Institute of Information Technology (SLIIT) completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 30 December 2024 to 31 January 2025.

9. Ms. A.S.F. Amra of Rajarata University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 21 April 2025 to 16 May 2025.

10. Ms. M.A.N.S. Wijerathna of the University of Kelaniya completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 07 April 2025 to 04 July 2025.

11. Mr. J.M.U.D. Jayasundara of Northumbria University completed his Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 21 May 2025 to 22 August 2025.

12. Ms. A.P.S.P. De Silva of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 03 June 2025 to 22 August 2025.

13. Mr. A.N.M. Naweeth of the Sri Lanka Institute of Information Technology (SLIIT) completed his Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 04 August 2025 to 25 August 2025.

14. Ms. A.J.S.N. Adhikaram of Rajarata University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 20 June 2025 to 26 September 2025.

15. Ms. S.P.D.A. Warnakulasooriya of Wayamba University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 06 August 2025 to 07 November 2025.

16. Ms. W.D.M.U.D. Kapilarathne of the University of Kelaniya completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 01 September 2025 to 12 December 2025.

17. Ms. F.A. Adhham of the University of Kelaniya completed her Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** from 01 September 2025 to 12 December 2025.

18. Ms. S.W.M.R.M.P.R. Udalagama of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 03 December 2024 to 30 April 2025.

19. Ms. Y. Weeraarachchi of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 10 December 2024 to 30 April 2025.

20. Ms. S. Wijerathne of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 01 January 2025 to 30 April 2025.

21. Ms. C. Poornika of NSBM Green University completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 16 January 2025 to 30 April 2025.

22. Ms. A. Arafath of the University of Jaffna completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 19 May 2025 to 19 June 2025.

23. Ms. Y. Sathaniga of the University of Jaffna completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 19 May 2025 to 19 June 2025.

24. Ms. H.M.C.S. Herath of Sabaragamuwa University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 02 May 2025 to 17 October 2025.

25. Ms. K.V.P.M. Samarakoon of Rajarata University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 02 May 2025 to 17 October 2025.

26. Ms. L.I.S. Senanayake of Rajarata University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. R.R. Ratnayake** from 02 May 2025 to 17 October 2025.

27. Ms. K.A.T. Rajapaksha of Rajarata University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. S.P. Benjamin** from 01 April 2025 to 31 December 2025.

28. Ms. U.S.D.S.S. Udugamasooriya of the University of Colombo completed her Industrial Training at NIFS under the supervision of **Dr. H.D. Jayasinghe** and Dr. T. Dharmapriya from 10 February 2025 to 31 July 2025.

29. Ms. H.H.K. Hapuarachchi of Sabaragamuwa University of Sri Lanka completed her Industrial Training at NIFS under the supervision of **Prof. D.N. Magana-Arachch**i from 08 May 2025 to 23 October 2025.

30. Ms. N. Liyanagedara was trained as a Research student in the research area of Molecular Micorobiology and Human Diseases at NIFS under the supervison of **Prof. D.N. Magana-Arachchi** from 2025-01-06 to 2025-04-30.

31. Ms. I.P.I.D. Perera, from Southeastern University of Sri Lanka completed the Industrial Training at NIFS under the supervision of Prof. N.D. Subasinghe from 2025.10.20 to 2025.12.19.

Postgraduate Thesis Submitted

1. Mr. R.P.P.D. Rajakaruna of the University of Peradeniya submitted his M.Phil. thesis titled *"Investigation of Interface Passivation in $AgBiS_2$ Quantum Dot–Sensitized Solar Cells for Enhancing Device Efficiency"* on 18 August 2025. The research was conducted at the National Institute of Fundamental Studies (NIFS) under the supervision of **Prof. J. Bandara**.

2. Ms. H.F. Fahmidah of the University of Peradeniya submitted her M.Phil. thesis titled *"Nutritional Composition, Biological Activities, and Value-Added Products of Terminalia catappa* L. *Seed Kernel"* on 28 July 2025. The research was conducted at NIFS under the supervision of **Prof. J.M.N. Marikkar** and **Prof. L. Jayasinghe**.

3. Ms. A. Muralitharan of the University of Peradeniya submitted her M.Phil. thesis titiled "Thesis title Assessing the effects of green biomass incorporation on soil fertility dynamics and sustainable land productivity in jaffna peninsula" on 15th December 2025. The research was conducted at NIFS under the supervision of **Prof. R. Rathnayake**.

Undergraduate Thesis Submitted

1. Ms. S.F. Sanha of the University of Ruhuna submitted her undergraduate thesis titled *"Evaluation of the Physical Activation Method of Rice Husk for Sustainable Supercapacitor Applications"* on 27 November 2025. The research was conducted at the National Institute of Fundamental Studies (NIFS) under the supervision of **Prof. G.R.A. Kumara** and Mr. C.P. Rupesinghe.

2. Mr. B. Wijewardena of the University of Peradeniya submitted his undergraduate thesis titled *"Modification of FAU Zeolite for Phenol Vapour Degradation"* on 28 December 2025. The research was conducted at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. A. Bandara.

3. Mr. B.G.H.D. Karunarathne from Southeastern University of Sri Lanka submitted the Undergraduate thesis titled "Integrated resistivity and magnetic survey for subsurface Dyke characterisation in Wahawa area" on 2025.05. 28. The research was conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** and Dr. A.M.A.N. Adikaram.

Research Students Trained (2025)

1. Mr. P.D. Ariyasena was trained as a Research student in the research area of *Food Science* at NIFS under the supervision of **Prof. R. Liyanage** from 2024-06-24 to 2025-11-17.

2. Ms. H.M.N.T. Bandara was trained as a Research student in the research area of *Molecular Microbiology* at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** from 2024-02-01 to 2025-05-31.

3. Ms. T.A. Senarathne was trained as a Research student in the research area of *Molecular Microbiology and Human Diseases* at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** from 2025-01-06 to 2025-05-30.

4. Ms. N.M. Liyanagedara was trained as a Research student in the research area of Airborne microplastics and the spread of antibiotic-resistant genes at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** from 2025-01-06 to 2025-04-30.

5. Ms. T.N. Dissanayake was trained in 2025 as a Research student at NIFS in the research area of *Nutritional Biochemistry* under the supervision of **Prof. R. Liyanage** from 2024.11.05 – 2025.01.20.

6. Ms. T.U. Gamage was trained as a Research student in the research area of *Nutritional Biochemistry* at NIFS under the supervision of **Prof. R. Liyanage** from 2025-01-20 to 2025-04-09.

7. Mr. J. Herath was trained as a Research student in the research area of *Food and Nutrition* at NIFS under the supervision of **Prof. R. Liyanage** from 2025-07-31 to 2025-12-31.

8. Mr. S.G.A.S. Wickramasinghe was trained in 2025 as a Research student at NIFS in the research area of *Food and Nutrition* under the supervision of **Prof. R. Liyanage** from 2025.07.14 to 2025.10.09.

9. Ms. J.C. Jayasinghe was trained in 2025 as a Research student at NIFS in the research area of *Food and Nutrition* under the supervision of **Prof. R. Liyanage** from 2025.07.14 to 2025.12.31.

10. Mr. D. Prasan was trained in 2025 as a Research student at NIFS in the research area of *Food and Nutrition* under the supervision of **Prof. R. Liyanage** from 2025.07.14 to 2025.12.31.

11. Ms. D. Kahawita was trained in 2025 as a Research student at NIFS in the research area of *Microbiology and Soil Ecosystems* under the supervision of **Prof. R.R. Ratnayake** from November 2023 – 15th January 2025.

12. Ms. G. Nawarathne was trained in 2025 as a Research student at NIFS in the research area of *Soil Science* under the supervision of **Prof. R.R. Ratnayake** from 3rd January – 27th May 2025.

13. Mr. N.D. Premarathna was trained in 2025 as a Research student at NIFS in the research area of *Soil Science* under the supervision of **Prof. R.R. Ratnayake** from 10th Februay – August 2025.

14. Mr. M. Ranasinghe was trained in 2025 as a Research student at NIFS in the research area of *Soil Science* under the supervision of **Prof. R.R. Ratnayake** from 21st October 2024 – 14th August 2025.

15. Ms. W.M.C.T. Weerakoon was trained in 2025 as a Research student at NIFS in the research area of *Soil Science* under the supervision of **Prof. R.R. Ratnayake** from March 2025 – 10th October 2025.

16. Mr. N. Rathnayake was trained as a Research student in the research area of *Soil Science* at NIFS under the supervision of **Prof. R.R. Ratnayake** from 2024-10-28 to 2025-10-30.

Ph.D. Research Work in Progress

1. Ms. W.I. Sandamali is reading for a Ph.D. degree at the Open University of Sri Lanka in the research area of *Engineering Nanomaterials for Photovoltaics*. Her research is conducted at the National Institute of Fundamental Studies (NIFS) under the supervision of **Prof. G.K.R. Senadeera** and **Prof. M.A.K.L. Dissanayake** since 01 August 2019.

2. Mr. W.T.R.S. Fernando is reading for a Ph.D. degree at the Postgraduate Institute of Science, University of Peradeniya, in the research area of *Cathode Development for Rechargeable Batteries*. His research is conducted at NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe** since 08 December 2020.

3. Ms. H.M.H.D.K. Naranpanawa is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Graphite and Battery Materials*. Her research is conducted at NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe**, Prof. D.G.G.P. Karunarathna, and Dr. T.H.N.G. Amaraweera since 17 July 2024.

4. Ms. K.A.D.M.S. Sarathchandra is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Antimony Sulfide Planar Solar Cells*. Her research is conducted at NIFS under the supervision of **Prof. J. Bandara** since 09 June 2022.

5. Mr. D.C. Rajapakse is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Thermally and NIR-Activated Small Polaron Hopping in Oxygen-Vacancy-Engineered Transition Metal Oxides*. His research is conducted at NIFS under the supervision of **Prof. J. Bandara** since 12 June 2022.

6. Ms. A.T.D. Rathnathilaka is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Microbiology*. Her research is conducted at NIFS under the supervision of **Prof. G. Seneviratne** since 15 October 2018.

7. Mr. E.M.S. Ekanayake is reading for a Ph.D. degree at Uva Wellassa University in the research area of *Conservation Biology*. His research is conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** since 27 April 2021.

8. Ms. T.T. Fernando is reading for a Ph.D. degree at Wayamba University of Sri Lanka in the research area of *Development and Feasibility Evaluation of an Ecosystem Services Model*. Her research is conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** since 03 January 2023.

9. Ms. W.M.R.S.K. Warnasooriya is reading for a Ph.D. degree at the Postgraduate Institute of Science, University of Peradeniya, in the research area of *Soil Science*. Her research is conducted at NIFS under the supervision of **Prof. R.R. Ratnayake** since 18 August 2025.

10. Mr. P. Abeywardena is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Petrology and Structural Geology*. His research is conducted at NIFS under the supervision of Dr. P.L. Dharmapriya, Prof. S. Malaviarachchi, and **Prof. N.D. Subasinghe** since 07 August 2019.

11. Ms. M.P. Thilakarathna is reading for a Ph.D. degree at the University of Sri Jayewardenepura in the research area of *Geostructural Features of Low-Enthalpy Geothermal Fields and the Role of Dolerite Dykes, with Special Reference to the Nelumwewa Hot Spring*. Her research is conducted at NIFS under the supervision of **Prof. N.D. Subasinghe** and Prof. S. Gamage since 01 January 2023.

12. Mr. Z. Wu is reading for a Ph.D. degree at the University of Peradeniya in the research area of *Water Chemistry*. His research is conducted at NIFS under the supervision of **Prof. R. Weerasooriya**, Dr. C. Jayasundara, and Prof. X. Chen since 26 August 2019.

13. Ms. B.V.N. Sewwandi is reading for a Ph.D. degree at the University of Sri Jayewardenepura in the research area of *Carbon Nanomaterials, Computational Modeling, and Water Purification*. Her research is conducted at NIFS under the supervision of Prof. A.R. Kumarasinghe, **Prof. R. Weerasooriya**, Dr. R.J.K.U. Ranatunga, and Prof. X. Chen since 01 January 2024.

M.Phil Research Work in Progress

1. Ms. S.H. Hettiarachchi is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Electrospun Nanofibers, Dye-Sensitized Solar Cells, and Nanofiber Water Filter at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake** and **Prof. G.K.R. Senadeera** since 2020-11-16.

2. Mr. K.M.N.S. Bandara is reading for a M.Phil. degree at the University of Peradeniya in the research area of Optimization of the CdS Layer (prepared by Closed Space Sublimation method) in CdS/CdTe Thin Film Solar Cells at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake**, Dr. D.M.V.A. Seneviratne, and Dr. E.N. Jayaweera since 2021-09-17.

3. Ms. P.U. Sandunika is reading for a M.Phil. degree at the University of Peradeniya in the research area of Solar Cells at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Prof. G.K.R. Senadeera, and Dr. J.M.K.W. Kumari** since 2023-09-01.

4. Ms. G.G.S. Sewwandi is reading for a M.Phil. degree at the University of Peradeniya in the research area of Applications of Quantum Dots in Dye-Sensitized Solar Cells and Bio-Medical Sensors at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Prof. G.K.R. Senadeera,** and **Dr. J.M.K.W. Kumari** since 2024-08-01.

5. Mr. M.D.D.S. Senevirathna is reading for a M.Phil. degree at the University of Peradeniya in the research area of Dye-Sensitized Solar Cells and supercapacitors at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Dr. J.M.K.W. Kumari,** and **Prof. G.K.R. Senadeera** since 2025-03-03.

6. Mr. J.H.T.B. Jayamaha is reading for a M.Phil. degree at the University of Jaffna in the research area of Novel Electrolyte and Electrode Materials for Secondary Sodium-Ion and Magnesium-Ion Batteries at NIFS under the supervision of Dr. K. Vignarooban and **Dr. H.W.M.A.C. Wijayasinghe** since 2019-01-01.

7. Ms. D. Hewawasam is reading for a M.Phil. degree at the University of Moratuwa in the research area of Development of a Commercial-Type Lithium-Ion Battery Using Sri Lankan Graphite at NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe**, Dr. S. Witharana, Dr. L. Subasinghe, Dr. T.H.N.G. Amaraweera, and Prof. I. Albinsson since 2023-02-14.

8. Mr. S.M.M.U. Sivirathna is reading for a M.Phil. degree at the University of Peradeniya in the research area of Graphite at NIFS under the supervision of **Dr. H.W.M.A.C. Wijayasinghe** and Dr. T.H.N.G. Amaraweera since 2024-10-06.

9. Ms. U.V.K. Udayangani is reading for a M.Phil. degree at the University of Sri Jayewardenepura in the research area of Development of Advanced Strategies for Defect Reduction and Carrier Engineering to Enhance the Efficiency of SbS Thin Film Solar Cells at NIFS under the supervision of **Prof. J. Bandara** since 2025-08-01.

10. Mr. P.P.B. Gunarathne is reading for a M.Phil. degree at the University of Sri Jayewardenepura in the research area of Growing Nano-Porous Layer n-Cu2O on Transparent Substrate: An Alternative Approach to Replace the Inverted Device by Proper Structure for Solid-State Dye-Sensitized Solar Cells at NIFS under the supervision of P.K.D.D.P. Pitigala and **Prof. G.R.A. Kumara** since 2023-12-13.

11. Mr. D.J.D.S. Gamage is reading for a M.Phil. degree at the University of Peradeniya in the research area of Material Science and Condensed Matter Physics at NIFS under the supervision of **Prof. G.R.A. Kumara** and Prof. T.M.W.J. Bandara since 2024-11-20.

12. Mr. B.L. Kanchana is reading for a M.Phil. degree at the University of Peradeniya in the research area of Engineering Liquid- and Solid-State Dye-Sensitized and Perovskite Solar Cells Using Novel Photoanodes, Electrolytes, Sensitizers, and Hole Transport Materials at NIFS under the supervision of **Prof. G.R.A. Kumara** and Prof. R.M.G. Rajapakse since 2025-06-02.

13. Mr. Y.G.A.D.K. Bandara is reading for a M.Phil. degree at the University of Peradeniya in the research area of Natural Products Chemistry at NIFS under the supervision of **Prof. L. Jayasinghe** and **Dr. N.P. Piyasena** since 2024-02-01.

14. Mr. H.A.K.D. Premasiri is reading for a M.Phil. degree at the University of Peradeniya in the research area of Natural Products Chemistry at NIFS under the supervision of **Prof. L. Jayasinghe** and **Dr. N.P. Piyasena** since 2024-07-17.

15. Ms. S.A.D. Chathurangi is reading for a M.Phil. degree at the University of Peradeniya in the research area of Natural Products Chemistry at NIFS under the supervision of **Prof. L. Jayasinghe** and **Dr. N.P. Piyasena** since 2024-07-17.

16. Ms. J.M.Y.U. Jayakodi is reading for a M.Phil. degree at the University of Peradeniya in the research area of Food Science and Nutrition at NIFS under the supervision of **Prof. R. Liyanage**, Prof. W.M.T. Madhujith, Prof. R. Jayawardena, and Prof. A. Chandrasekara, Prof. B.M. L.D.B. Suriyagoda since 2024-03-15.

17. Ms. S.S.K. Marasinghe is reading for a M.Phil. degree at the University of Peradeniya in the research area of Food Chemistry at NIFS under the supervision of **Prof. J.M.N. Marikkar** since 2018-06-01.

18. Mr. D.G.C.S. Illangarathne is reading for a M.Phil. degree at the University of Colombo in the research area of Food Chemistry at NIFS under the supervision of **Prof. J.M.N. Marikkar** and Prof. K. Abeysekera since 2025-10-01.

19. Ms. S.D.P.N. Jayasinghe is reading for a M.Phil. degree at the University of Peradeniya in the research area of Microbial Biotechnology Research Program at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2024-04-01.

20. Mr. S.N.B. Ekanayake is reading for a M.Phil. degree at the University of Peradeniya in the research area of Microbial Biotechnology Research Program at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2024-04-01.

21. Ms. A.J.M.S.H. Jayasekara is reading for a M.Phil. degree at the University of Peradeniya in the research area of Microbial Biotechnology Research Program at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2024-04-01.

22. Ms. D.D.M.O. Dissanayake is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Soil Carbon Sequestration at NIFS under the supervision of **Prof. R.R. Ratnayake** and Prof. S. Seneweera since 2018-07-26.

23. Ms. C. Bandara is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Potential of Cyanobacteria for Value Addition at NIFS under the supervision of **Prof. R.R. Ratnayake** and **Dr. L. Jayarathna** since 2022-12-12.

24. Mr. P. Manamendra is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Soil Carbon Sequestration in Wetland Ecosystems at NIFS under the supervision of **Prof. R.R. Ratnayake** since 2023-02-07.

25. Ms. W.D.U. Premarathna is reading for a M.Phil. degree at the University of Peradeniya in the research area of Soil Science at NIFS under the supervision of **Prof. R.R. Ratnayake** since 2023-10-02.

26. Mr. M.R.A. Ahsan is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Microbiology at NIFS under the supervision of **Prof. R.R. Ratnayake** and **Prof. R. Liyanage** since 2025-06-05.

27. Ms. S.K. Anton is reading for a M.Phil. degree at the University of Peradeniya in the research area of Microbiology at NIFS under the supervision of **Prof. R.R. Ratnayake** and **Dr. N.P. Piyasena** since 2025-10-16.

28. Mr. D.R. Charles is reading for a M.Phil. degree at the University of Peradeniya in the research area of Geophysics at NIFS under the supervision of **Prof. N.D. Subasinghe** and Prof. H.M.T.G.A. Pitawala since 2012-02-12.

29. Ms. G. Wijesinghe is reading for a M.Phil. degree at the University of Peradeniya in the research area of Sedimentology and Mineral Exploration at NIFS under the supervision of Dr. P.L. Dharmapriya, Dr. S. Malaviarachchi, Mr. M. Satish-Kumar, and **Prof. N.D. Subasinghe** since 2018-11-24.

30. Mr. R.A. Rathnayake is reading for a M.Phil. degree at the University of Peradeniya in the research area of Thermoelectricity at NIFS under the supervision of **Prof. N.D. Subasinghe** and Dr. B.M.K. Pemasiri since 2020-01-27.

31. Ms. M.G.R. Shyamamala is reading for a M.Phil. degree at the University of Peradeniya in the research area of Thermoelectricity at NIFS under the supervision of **Prof. N.D. Subasinghe** and Prof. T.M.W.J. Bandara since 2024-03-22.

32. Ms. K.M.R.K.T. Herath is reading for a M.Phil. degree at the University of Peradeniya in the research area of Zoology at NIFS under the supervision of **Prof. S.P. Benjamin** and Prof. I. Karunarathne since 2023-10-17.

33. Mr. P.L.C.U.S.B. Lekamge is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Forest Restoration and Conservation at NIFS under the supervision of **Prof. D.S.A. Wijesundara**, Prof. M.C.M. Iqbal, and Prof. H.M.S.P. Madawala since 2017-02-01.

34. Mr. R. Brahmanage is reading for a M.Phil. degree at the University of Colombo in the research area of Fungi in Eucalyptus Plantations at NIFS under the supervision of **Prof. D.S.A. Wijesundara**, Prof. N. Wijayawardena, Prof. S. Ariyawansa, and Prof. C. Nanayakkara since 2022-01-01.

35. Ms. H.K.G.B.M. Premarathne is reading for a M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in the research area of Taxonomy of Mushrooms at NIFS under the supervision of **Prof. D.S.A. Wijesundara** since 2022-10-01.

36. Mr. S.A. Perera is reading for a M.Phil. degree at the Rajarata University of Sri Lanka in the research area of Agriculture at NIFS under the supervision of **Dr. H.D. Jayasinghe** since 2024-01-11.

37. Mr. S.M. Pawuluwage is reading for a M.Phil. degree at the University of Colombo in the research area of Plant Taxonomy at NIFS under the supervision of **Dr. H.D. Jayasinghe**, Prof. H.S. Kathriarachchi, and Dr. I.U. Kariyawasam since 2025-03-19.

38. Ms. P.G.S.M. Silva is reading for a M.Phil. degree at the Postgraduate Institute of Science in the research area of Phytochemistry at NIFS under the supervision of **Prof. D.S.A. Wijesundara**, Prof. L. Jayasinghe, and Prof. J.W. Damunupola since 2025-06-01.

39. Ms. S.H.U. Hansani is reading for a M.Phil. degree at the University of Peradeniya in the research area of Earth Science at NIFS under the supervision of **Prof. R. Weerasooriya**, Dr. P.L. Dharmapriya, and Prof. Yawei Wang since 2023-07-17.

40. Ms. P.K.K. Pathirana is reading for a M.Phil. degree at the University of Peradeniya in the research area of Water Quality at NIFS under the supervision of **Prof. R. Weerasooriya** since 2024-07-17.

41. Ms. M.D.R. Perera is reading for a M.Phil. degree at the University of Peradeniya in the research area of Materials Chemistry at NIFS under the supervision of **Dr. L. Jayarathna** since 2020-11-16.

42. Ms. M.A.K. Madhumekala is reading for a M.Phil. degree at the University of Peradeniya in the research area of Synthesis and Characterization of Boron-Modified Zeolites for Catalytic Activity at NIFS under the supervision of **Dr. L. Jayarathna** and Dr. W.M.A.T. Bandara since 2023-06-01.

43. Mr. M.M.A.K. Mannapperuma is reading for a M.Phil. degree at the University of Peradeniya in the research area of Materials Development – Catalysts at NIFS under the supervision of **Dr. L. Jayarathna** since 2024-01-04.

44. Mr. J.M.S.G.B. Navarathne is reading for a M.Phil. degree at the University of Peradeniya in the research area of Microplastic Detection and Analysis at NIFS under the supervision of **Dr. L. Jayarathna**, Dr. W.M.A.T. Bandara, and Dr. M. Wijesinghe since 2025-06-05.

45. Ms. A.M. Hasara is reading for a M.Phil. degree at the University of Peradeniya in the research area of Synthesis, Modification, and Characterization of Modified Zeolite for Organic Reactions at NIFS under the supervision of **Dr. L. Jayarathna**, Dr. W.M.A.T. Bandara, and Dr. M. Wijesinghe since 2025-09-15.

46. Ms. H.M.S.A.T. Gunathilaka is reading for a M.Phil. degree at the University of Peradeniya in the research area of Molecular Microbiology and Human Diseases at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-01-01.

47. Mr. M.L.M. Wickramasinghe is reading for a M.Phil. degree (pending) in the research area of Molecular Biology, Microbiology, and Environmental Biology at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-08-04.

48. Ms. G.H.S.S. De Silva is reading for a M.Phil. degree (pending) in the research in the research area of Molecular Biology, Microbiology, and Environmental Biology at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-08-04.

49. Ms. H. Jayanetti is reading for a M.Phil. degree (pending) in the research in the research area of Molecular Microbiology and Human Diseases at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-08-04.

M.Sc. Research Work in Progress

1. Ms. A. Karunarathne, M.Sc. student of the Postgraduate Institute of Science, University of Peradeniya, is conducting her M.Sc. research project in the area of *Quantum Dot–Sensitized Solar Cells* at the National Institute of Fundamental Studies (NIFS) under the supervision of Mr. T.M.W.J. Bandara and **Prof. M.A.K.L. Dissanayake**, since 17 July 2022.

2. Mr. K.L.A.C. Lakshan, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *Dye-Sensitized Solar Cells* at NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Prof. G.K.R. Senadeera,** and **Dr. J.M.K.W. Kumari,** since 01 February 2025.

3. Mr. T. Wickramasinghe, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *CdS/CdTe Thin Films* at NIFS under the supervision **of Prof. M.A.K.L. Dissanayake,** Dr. E.N. Jayaweera, and Dr. C.P. Jayalath, since 01 August 2025.

4. Ms. M.D.I. Abeywardane, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Photocatalytic Water Splitting by Polaron-Induced* MnO_{2-x} at NIFS under the supervision of **Prof. J. Bandara**, since 04 August 2025.

5. Mr. D.A.N.C. Abeysekara, M.Sc. student of the Postgraduate Institute of Science, University of Peradeniya, is conducting his M.Sc. research project in the area of *Nanoscience and Nanotechnology* at NIFS under the supervision of **Prof. G.R.A. Kumara** and Prof. R.M.G. Rajapakse, since 02 April 2018.

6. Mr. H.W. Gardiarachchi, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *Dye-Sensitized Solar Cells* at NIFS under the supervision of **Prof. G.R.A. Kumara** and Prof. R.M.G. Rajapakse, since 21 October 2021.

7. Mr. W.V.N.S. Bowaththa, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *Perovskite Solar Cells* at NIFS under the supervision of **Prof. G.R.A. Kumara**, since 01 August 2024.

8. Mr. S.L.M.D.K.V. Samarathunga, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *Dye-Sensitized Solar Cells* at NIFS under the supervision of **Prof. G.R.A. Kumara** and Dr. K.D.M.S.P.K. Kumarasinghe, since 15 December 2024.

9. Mr. H.M.G.K.B. Herath, M.Sc. student of the University of Peradeniya, is conducting his M.Sc. research project in the area of *Materials Science* at NIFS under the supervision of **Prof. G.R.A. Kumara** and Prof. R.M.G. Rajapakse, since 01 May 2025.

10. Ms. I. Rathnayaka, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Food and Nutrition* at NIFS under the supervision of **Prof. R. Liyanage** and Dr. K.M. Mohotti, since 28 March 2024.

11. Mr. I.D. Weerarathne, M.Sc. student of the Postgraduate Institute of Agriculture, University of Peradeniya, is conducting his M.Sc. research project in the area of *Food and Nutrition* at NIFS under the supervision of Dr. R. Samarakoon, **Prof. R. Liyanage,** and Dr. D. Uduwela, since 21 January 2025.

12. Ms. M.F.F. Sazna, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Food Chemistry* at NIFS under the supervision of **Prof. J.M.N. Marikkar** and Prof. T. Madujith, since 16 January 2024.

13. Ms. A.M.A.M. Abeysinghe, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Geothermal Studies* at NIFS under the supervision of **Prof. N.D. Subasinghe,** since 01 December 2020.

14. Ms. A.R.G.T.K. Agalawela, M.Sc. student of the Postgraduate Institute of Agriculture, University of Peradeniya, is conducting her M.Sc. research project in the area of *Plant Taxonomy* at NIFS under the supervision of **Prof. D.S.A. Wijesundara**, Dr. N. Sirimalwatte, and Prof. S.C. Karunarathna, since 03 April 2023.

15. Ms. K.M.S.S. Dissanayake, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Water Quality* at NIFS under the supervision of **Prof. R. Weerasooriya**, since 01 December 2025.

16. Ms. U.G.W.S. Bowaddeniya, M.Sc. student of the University of Peradeniya, is conducting her M.Sc. research project in the area of *Microplastics (Water Quality Research Division)* at NIFS under the supervision of **Dr. L. Jayarathna**, since 01 August 2024.

B.Sc. Research Work in Progress

1. Mr. T.M.H.G. Thilakarathna, Undergraduate student of Open University of Sri Lanka is conducting the research project in the research area of "Solar cells" at the NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Prof. G.K.R. Senadeera,** and **Dr. J.M.K.W. Kumari** since 2024-06-10.

2. Ms. C.B.D. Kolamunna, Undergraduate student of Open University of Sri Lanka is conducting the research project in the research area of "Solar Cells" at the NIFS under the supervision of **Prof. M.A.K.L. Dissanayake, Prof. G.K.R. Senadeera,** and **Dr. J.M.K.W. Kumari** since 2024-08-06.

3. Mr. W.M.I. Pradeep, Undergraduate student of Eastern University of Sri Lanka is conducting the research project in the research area of "Dye sensitized solar cells" at the NIFS under the supervision of **Dr. J.M.K.W. Kumari, Prof. M.A.K.L. Dissanayake,** and G.K.R. Senadeera since 2025-07-16.

4. Mr. M.A.S.A. De Silva, Undergraduate student of The Rajarata University of Sri Lanka is conducting the research project in the research area of "Supercapacitors" at the NIFS under the supervision of **Dr. J.M.K.W. Kumari** since 2025-10-09.

5. Mr. R.M.A.K. Gunathunga, Undergraduate student of Uva Wellassa University is conducting the research project in the research area of "Modification of Sri Lankan Vein Graphite" at the NIFS under the supervision of Dr. T.H.N.G. Amaraweera, and **Dr. H.W.M.A.C. Wijayasinghe** since 2025-11-01.

6. Mr. J.C. Guruge, Undergraduate student of Uva Wellassa University is conducting the research project in the research area of "Preparing Iron Nanoparticle from HCl acid leachate from Sri Lankan vein graphite" at the NIFS under the supervision of Dr. T.H.N.G. Amaraweera, and **Dr. H.W.M.A.C. Wijayasinghe** since 2025-11-01.

7. Ms. D.G.D.M. Weerasinghe, Undergraduate student of University of Ruhuna is conducting the research project in the research area of "Comparison of different dyes in solar cells" at the NIFS under the supervision of **Prof. G.R.A. Kumara,** and S. Wanniarachchi since 2025-01-20.

8. Ms. A.K.R.D.A.K. Kahandawa, Undergraduate student of Open University of Sri Lanka is conducting the research project in the research area of "Natural Products Chemistry" at the NIFS under the supervision of **Prof. L. Jayasinghe,** and **Dr. N.P. Piyasena** since 2024-09-12.

9. Ms. D. Aththanayake, Undergraduate student of Cardiff metropolitan University (ICBT Kandy Campus) is conducting the research project in the research area of "Natural Products Chemistry" at the NIFS under the supervision of **Prof. L. Jayasinghe,** and **Dr. N.P. Piyasena** since 2025-11-03.

10. Ms. H.H.K. Hapuarachchi, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Natural Products Chemistry" at the NIFS under the supervision of **Prof. L. Jayasinghe,** and **Dr. N.P. Piyasena** since 2025-11-18.

11. Ms. M.M. Uththara Shakyangani, Undergraduate student of Cardiff metropolitan University (ICBT Kandy Campus) is conducting the research project in the research area of "Natural Products Chemistry" at the NIFS under the supervision of **Prof. L. Jayasinghe,** and **Dr. N. P. Piyasena** since 2025-11-21.

12. Mr. S M.D.B. Ariyarathne, Undergraduate student of Wayamba University, Sri Lanka is conducting the research project in the research area of "Microbiology" at the NIFS under the supervision of **Prof. G. Seneviratne,** and **Dr. M. Premarathna** since 2025-01-27.

13. Ms. R. Mithurzha, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Microbial Biotechnology" at the NIFS under the supervision of **Prof. G. Seneviratne,** and **Dr. M. Premarathna** since 2025-10-13.

14. Ms. P.G.U. Sammani, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Microbial biotechnology" at the NIFS under the supervision of **Prof. G. Seneviratne,** and **Dr. M. Premarathna** since 2025-11-11.

15. Ms. K.G.M.L. Kodikara, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Microbial biotechnology" at the NIFS under the supervision of **Prof. G. Seneviratne,** and **Dr. M. Premarathna** since 2025-11-17.

16. Mr. A.M.K.C. Bandara, Undergraduate student of The Open University of Sri Lanka is conducting the research project in the research area of "Soil Science" at the NIFS under the supervision of **Prof. R.R. Ratnayake** since 2025-06-18.

17. Ms. S.W.M.R.M.P.R. Udalagama, Undergraduate student of NSBM Green University is conducting the research project in the research area of "Microbiology" at the NIFS under the supervision of **Prof. R.R. Ratnayake** since 2025-09-26.

18. Ms. W.A.Y.B.S. Weeraarachchi, Undergraduate student of NSBM Green University is conducting the research project in the research area of "Microbiology" at the NIFS under the supervision of **Prof. R.R. Ratnayake** since 2025-09-26.

19. Ms. H.M.C.S. Herath, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Microbiology" at the NIFS under the supervision of **Prof. R.R. Ratnayake** since 2025-11-01.

20. Mr. K. Rathnayake, Undergraduate student of Institute of Chemistry, Ceylon, Collage of Chemical Sciences is conducting the research project in the research area of "Biological Sciences" at the NIFS under the supervision of **Prof. N.D. Subasinghe** since 2024-02-24.

21. Mr. H. Dilshan, Undergraduate student of Southeastern University of Sri Lanka is conducting the research project in the research area of "Geophysics, Geology" at the NIFS under the supervision of **Prof. N.D. Subasinghe** since 2024-10-28.

22. Ms. W.D.N.V. Dharmasiri, Undergraduate student of University of Peradeniya is conducting the research project in the research area of "Geology" at the NIFS under the supervision of **Prof. N.D. Subasinghe** since 2025-10-20.

23. Ms. I.P.I.D. Perera, Undergraduate student of South Eastern University of Sri Lanka is conducting the research project in the research area of "Geology" at the NIFS under the supervision of **Prof. N.D. Subasinghe,** Dr. A.M.N.M. Adhikaram since 2025-10-21.

24. Ms. S.D.H. Wijesinghe, Undergraduate student of Faculty of Science, University of Colombo is conducting the research project in the research area of "Plant Taxonomy" at the NIFS under the supervision of **Dr. H.D. Jayasinghe,** and Prof. H. Kathriarachchi since 2025-06-08.

25. Mr. K.M.H. Piumal, Undergraduate student of Rajarata University of Sri Lanka is conducting the research project in the research area of "Plant taxonomy" at the NIFS under the supervision of **Dr. H.D. Jayasinghe,** and Prof. N. Geekiyanage since 2025-06-19.

26. Ms. L.B.M.S.N. Chandrarathne, Undergraduate student of University of Jaffna is conducting the research project in the research area of "Water Quality Research Program" at the NIFS under the supervision of **Prof. R. Weerasooriya** since 2024-05-20.

27. Ms. M.A.T.N. Meegahakumbura, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Microplastic sampling and analysis" at the NIFS under the supervision of Prof. H. Wijesekara, **Dr. L. Jayarathna** since 2025-11-04.

28. Mr. G.R.Y.M. Gamlath, Undergraduate student of Sri Lanka Institute of Information Technology (SLIIT) is conducting the research project in the research area of "Occurrence, Abundance, Mitigation of Microplastics in Kuda Oya, Kegalle." at the NIFS under the supervision of **Dr. L. Jayarathna** since 2025-11-15.

29. Ms. A. De Soysa, Undergraduate student of Sabaragamuwa University of Sri Lanka is conducting the research project in the research area of "Food Science" at the NIFS under the supervision of **Prof. R. Liyanage** since 2025-10-13.

Training as a Research student in Progress

1. Mr. U.M.G.A.S. Udukumbura is training as a Research student at NIFS in the research area of "Mg-Seawater battery" under the supervision of **Prof. M.A.K.L. Dissanayake, Dr. J.M.K.W. Kumari,** and **Prof. G.K.R. Senadeera** since 2025-09-03.

2. Ms. P.N. Geesara is training as a Research student at NIFS in the research area of "Polaron-Induced Oxygen Vacancy Engineering in ZrO_2-x for Thermal and Photocatalytic Ammonia Reforming" under the supervision of **Prof. J. Bandara** since 2025-11-24.

3. Mr. P.R.M. Gunasinghe is training as a Research student at NIFS in the research area of "Enhance the efficiency of SbS Thin film Solar cells" under the supervision of **Prof. J. Bandara** since 2025-12-23.

4. Ms. D.L. Panabokke is training as a Research student at NIFS in the research area of "CO_2 reduction with polaron-induced TMOs" under the supervision of **Prof. J. Bandara** since 2025-12-30.

5. Mr. P.K.B.D. Pussewala is training as a Research student at NIFS student of Institute of Chemistry Ceylon is conducting the research project in the research area of "Photocatalytic

CO_2 reduction by using polaron-induced oxygen vacancy-rich Nb2O5-x" at the NIFS under the supervision of **Prof. J. Bandara** since 2024-11-12.

6. Mr. R.R.M.M.N.B. Bambaradeniya is training as a Research student at NIFS in the research area of "Activated carbon supercapacitors" under the supervision of **Prof. G.R.A. Kumara** since 2023-10-02.

7. Mr. Y.S. Wijerathna is training as a Research student at NIFS in the research area of "Material Science" under the supervision of **Prof. G.R.A. Kumara** since 2025-07-29.

8. Ms. R.H.M.Y.A. Bandara is training as a Research student at NIFS in the research area of "Natural products Chemistry" under the supervision of **Prof. L. Jayasinghe,** and **Dr. N. Piyasena** since 2025-07-25.

9. Ms. S.W.M.Y.D. Hulangamuwa is training as a Research student at NIFS in the research area of "Natural Products Chemistry" under the supervision of **Prof. L. Jayasinghe,** and **Dr. N.P. Piyasena** since 2025-09-10.

10. Mr. K.P. karunarathne is training as a Research student at NIFS in the research area of "Food and Nutrition" under the supervision of **Prof. R. Liyanage** since 2025-07-31.

11. Ms. P. Hellarawa is training as a Research student at NIFS in the research area of "Food and Nutrition" under the supervision of **Prof. R. Liyanage** since 2025-07-31.

12. Ms. D.E.T. Wijesundara is training as a Research student at NIFS in the research area of "Food and Nutrition" under the supervision of **Prof. R. Liyanage** since 2025-10-13.

13. Mr. K.K.G.T.D. Wijerathne is training as a Research student at NIFS in the research area of "Food and Nutrition" under the supervision of **Prof. R. Liyanage** since 2025-10-28.

14. Mr. B.R.M.G.S.B. Rathnayake is training as a Research student at NIFS in the research area of "Food and Nutrition" under the supervision of **Prof. R. Liyanage** since 2025-12-30.

15. Ms. M.F.F. Shamha is training as a Research student in the research area of Food and Nutrition at NIFS under the supervision of **Prof. R. Liyanage** since 2025-07-31.

16. Ms. I.G.N.H. Senevirathne is training as a Research student at NIFS student of University of Peradeniya is conducting the research project in the research area of "Food Science" at the NIFS under the supervision of **Prof. R. Liyanage** since 2025-10-13.

17. Ms. H.W.S.S. Subasinghe is training as a Research student at NIFS student of University of Peradeniya is conducting the research project in the research area of "Food Science" at the NIFS under the supervision of **Prof. R. Liyanage,** Prof. B.C. Jayawardana, and Dr. P. Weththasinghe since 2025-10-24.

18. Mr. N.G.S.D. Kumarasinghe is training as a Research student at NIFS student of The Open University of Sri Lanka is conducting the research project in the research area of "Soil Science" at the NIFS under the supervision of **Prof. R. Rathnayake** since 2024-07-15.

19. Mr. K.H.S.T. Nanayakkara is training as a Research student at NIFS student of NSBM Green University is conducting the research project in the research area of "Microbiology" at the NIFS under the supervision of **Prof. R.R. Ratnayake** since 2025-12-15.

20. Ms. V. Devaraj is training as a Research student at NIFS in the research area of "Fractal Analysis" under the supervision of **Prof. N.D. Subasinghe** since 2022-08-01.

21. Ms. D.T. Nayanama is training as a Research student at NIFS in the research area of "Thermoelectricity" under the supervision of **Prof. N.D. Subasinghe** since 2025-02-25.

22. Mr. G.J.K.D.P. Jayawardhana is training as a Research student at NIFS in the research area of "Evolution, Ecology and Biodiversity Research" under the supervision of **Prof. S.P. Benjamin** since 2025-06-25.

23. Ms. T. Hettiarachchi is training as a Research student in the research area of Primate Biology at NIFS under the supervision of **Prof. W.P.J. Dittus** since 2020-09-28.

24. Mr. K.M.N.K.B. Kuruppu is training as a Research student at NIFS in the research area of "Water Purification" under the supervision of **Prof. R. Weerasooriya** since 2024-10-03.

25. Mr. E.G.V.P. Chandrasekara is training as a Research student at NIFS in the research area of "Water purification" under the supervision of **Prof. R. Weerasooriya** since 2024-10-03.

26. Ms. I.M. Jayalath is training as a Research student at NIFS student of University of Colombo is conducting the research project in the research area of "Water quality" at the NIFS under the supervision of **Prof. R. Weerasooriya** since 2024-02-12.

27. Mr. S. Witharana is training as a Research student at NIFS student of University of Mississippi is conducting the research project in the research area of "Geochemistry" at the NIFS under the supervision of **Prof. R. Weerasooriya** since 2024-03-09.

28. Ms. S.D.S.E. Jayathissa is training as a Research student at NIFS student of Rajarata University of Sri Lanka is conducting the research project in the research area of "Membrane" at the NIFS under the supervision of **Prof. R. Weerasooriya** since 2024-05-04.

29. Ms. T.G.M. Mihidula is training as a Research student at NIFS in the research area of "Water quality research" under the supervision of **Dr. L. Jayarathna** since 2024-07-16.

30. Mr. D.W.M.D.S. Chandrawansha is training as a Research student at NIFS in the research area of "Water quality research- microplastic" under the supervision of **Dr. L. Jayarathna** since 2024-08-06.

31. Ms. V.K. Thantilage is training as a Research student at NIFS in the research area of "Molecular Microbiology" under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-12-15.

32. Miss. K.K.D. Chiranthika is training as a Research student in the research area of Molecular biology, Human diseases at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-07-16.

33. Ms. A.S.K. Karandawela is training as a Research student in the research area of Antimicrobial Resistance and Molecular Microbiology at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-09-01.

34. Ms. I.M.R.D.K. Rathwita is training as a Research student in the research area of Molecular biology and Human diseases at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-09-01.

35. Ms. A.G.A.G.L.K. Chandrarathne is training as a Research student in the research area of Molecular Microbiology and Human Diseases at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-11-03.

36. Ms. C.N. Jayathilake is training as a Research student in the research area of Molecular Microbiology at NIFS under the supervision of **Prof. D.N. Magana-Arachchi** since 2025-11-03.

Undergraduate Industrial Training in Progress

1. Ms. D.D.M.M.A. Dissanayake from Colombo International Nautical and Engineering College (CINEC Campus), Malabe, has been undergoing Industrial Training at the National Institute of Fundamental Studies (NIFS) under the supervision of **Prof. R. Liyanage** since 2025-08-05.

2. Ms. A. Gunasekera from Colombo International Nautical and Engineering College (CINEC Campus), Malabe, has been undergoing Industrial Training at NIFS under the supervision of **Prof. R. Liyanage** since 2025-08-05.

3. Mr. K.T.S.B. Kaluarachchi from Uva Wellassa University of Sri Lanka has been undergoing Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2025-10-27.

4. Mr. S.G.A.T.N. Wijerathna from Uva Wellassa University of Sri Lanka has been undergoing Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2025-10-27.

5. Ms. R.G.V.D. Munasinghe from Uva Wellassa University of Sri Lanka has been undergoing Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2025-10-27.

6. Ms. H.M.N.D. Herath from the University of Sri Jayewardenepura has been undergoing Industrial Training at NIFS under the supervision of **Prof. G. Seneviratne** and **Dr. M. Premarathna** since 2025-12-21.

7. Ms. P.M.P. Sewwandi from the University of Ruhuna has been undergoing Industrial Training at NIFS under the supervision of **Prof. N.D. Subasinghe** since 2025-11-17.

8. Mr. I.M. Dahanayaka from Uva Wellassa University of Sri Lanka has been undergoing Industrial Training at NIFS under the supervision of **Prof. R. Weerasooriya** since 2025-10-27.

9. Ms. D.K.N.S. Kumari from Uva Wellassa University of Sri Lanka has been undergoing Industrial Training at NIFS under the supervision of **Prof. R. Weerasooriya** since 2025-10-27.

Training as an IT/Science Communicator

2. Ms. M. Thotagamuwa served as an IT Trainee at the Science Education and Dissemination Unit (SEDU), National Institute of Fundamental Studies (NIFS), under the supervision of **Dr. I. Piyasinghe**, from 2024-10-18 to 2025-04-11.

3. Mr. R. Amarakoon served as a Volunteer Trainee at the Science Education and Dissemination Unit (SEDU), NIFS, in Photography, Videography, and Video Editing, under the supervision of **Dr. I. Piyasinghe**, from 2025-01-15 to 2025-11-07.

4. Mr. D. Dissanayake served as a Volunteer Science Communicator at the Science Education and Dissemination Unit (SEDU), NIFS, under the supervision of **Dr. I. Piyasinghe**, from 2025-07-25 to 2025-09-01.

5. Mr. L. Dissanayake served as a Volunteer Trainee at the Science Education and Dissemination Unit (SEDU), NIFS, in Videography, Video Editing, Voice-over, and Event Compering, under the supervision of **Dr. I. Piyasinghe**, from 2025-07-25 to 2025-12-01.

6. Mr. M. Bandara served as a Volunteer Trainee at the Science Education and Dissemination Unit (SEDU), NIFS, in Videography and Video Editing, under the supervision of **Dr. I. Piyasinghe**, from 2025-08-12 to 2025-11-24.

7. Mr. S. Ketanwala served as a Volunteer Science Communicator at the Science Education and Dissemination Unit (SEDU), NIFS, under the supervision of **Dr. I. Piyasinghe**, from 2025-08-12 to 2025-09-22.

8. Mr. P. Samarasinghe served as a Volunteer Science Communicator at the Science Education and Dissemination Unit (SEDU), NIFS, under the supervision of **Dr. I. Piyasinghe**, from 2025-08-12 to 2025-11-24.

AWARDS & RECOGNITIONS

Awards

1. **Prof. R. Weerasooriya** received a National Award for Publication at the *National Symposium on Floriculture Research* on 2025-12-19.

2. **Prof. D.S.A. Wijesundara** received a National Award for Excellence in Agricultural Research on 2025-10-24.

3. Ms. S.S.K. Marasinghe, **Prof. J.M.N. Marikkar**, Dr. C. Yalegama, Dr. S. Wimalasiri, **Prof. G. Senevirathne**, **Prof. R. Weerasooriya**, and **Prof. R. Liyanage** received a National Award for a Highly Cited Paper on 2025-08-20.

4. **Prof. M.A.K.L. Dissanayake** received an International Award for being among the Top 2% of World Scientists on 2025-11-01.

5. **Prof. G.R.A. Kumara** received a National Award (SUSRED Award 2024 – NSF) for supervising the MPhil of Mr. A.D.T. Medagedara on 2025-07-16.

6. **Dr. M. Premarathna** received the NIFS Outstanding Scientist Award for Research Excellence on 2025-04-01.

7. H.D.C.L. Oshadi, S.L. Sadanayake, **Prof. D.N. Magana-Arachchi**, R.P. Wanigatunge, R.M.A.U. Rajapaksha, and M.S. Vithanage received a Presidential Award for Scientific Research titled *"Scientific Research on Risk Factors of Endemic Chronic Kidney Disease of Unknown Etiology in Sri Lanka: Retrospects of Water Security in the Dry Zone"* on 2025-12-18.

8. **Prof. J.M.N. Marikkar** received a National Award for a Highly Cited Paper from the *National Science Foundation of Sri Lanka* on 2025-07-16.

9. Ms. H.M.H.D.K. Naranpanawa received an International Award for Best Presenter in the special session *Circular Economy Across the Built Environment* at the *16th International Conference on Sustainable Built Environment 2025 and Next-Gen Innovation & Advancement (DIAMOND 75) – The Kandy Conference 2025* on 2025-12-12.

10. Ms. P.A.R. Yasawardhana was selected among the Best Eight Oral Presentations from the Department of Animal Science, University of Peradeniya on 2025-11-07.

11. Ms. P.A.R. Yasawardhana received the Second Runner-up Award at the *3MT Thesis Competition* of the *Faculty of Agriculture Undergraduate Research Symposium 2025*, University of Peradeniya on 2025-11-07.

12. Mr. S.K.S.P. Kumara received the First Runner-up – Scientific Merit Award at the *Faculty of Agriculture Undergraduate Research Symposium 2025*, University of Peradeniya on 2025-11-07.

13. Mr. S.K.S.P. Kumara received the Second Runner-up – Oral Presentation Award *(Food Quality, Safety and Product Development)* at the *Faculty of Agriculture Undergraduate Research Symposium 2025*, University of Peradeniya on 2025-11-07.

14. Ms. S.K. Dantanarayana received the Best Paper Award (Second Place) in Track 4 for *Evaluation of Antioxidant, Antidiabetic, Anti-obesity Properties and Cytotoxicity Effects of Four Sri Lankan Medicinal Plants* at the *Peradeniya University International Research Sessions and Exposition* on 2025-08-29.

15. Ms. H. Wijerathna received an International Competitive Award at the *Student Conference on Conservation Science*, Society for Conservation Science, Bengaluru on 2025-09-22.

16. Ms. S.M.D.C. Bandara received the Best Oral Presentation Award *(Track: Bioenergy and Biofuel Generation Technology)* at the *International Conference on Emerging Technologies 2025*, Sabaragamuwa University of Sri Lanka on 2025-04-02.

17. Ms. S.M.D.C. Bandara received the Best Oral Presentation Award *(Track: Applied Biotechnology and Microbiology)* at the *International Conference on Emerging Technologies 2025*, Sabaragamuwa University of Sri Lanka on 2025-04-02.

18. Ms. H.K.G.B.M. Premarathne received the Award for Scientific Publications (Research Assistant Category) from the *National Institute of Fundamental Studies* on 2025-04-01.

19. Mr. T.W.Y.K. Perera received the Second Runner-up Award – Poster Presentation *(Food Quality, Safety and Product Development)* at *FAuRS 2024*, University of Peradeniya on 2025-04-10.

20. Ms. S.K. Dantanarayana received the First Place Merit Award *(Agricultural Production and Productivity Improvement)* at *FAuRS 2024*, University of Peradeniya on 2025-04-10.

21. Ms. S.K. Dantanarayana received the Second Runner-up Award – Oral Presentation *(Food Quality, Safety and Product Development)* at *FAuRS 2024*, University of Peradeniya on 2025-04-10.

22. Ms. A.S. Polwattage received the First Runner-up Award – Oral Presentation *(Food Quality, Safety and Product Development)* at *FAuRS 2024*, University of Peradeniya on 2025-04-10.

23. Wu, Z., Sewwandi, B.V.N., Deegala, H.M.S.N., Kuruppu, K.M.N.K.B., Chandrasekara, E.G.V.P., Hemachandra, S.P., Pan, L., Yang, W., Zhang, Z., Chen, X., Jayasundara, A.C.A., and Prof. R. Weerasooriya received an International Award – Editor's Choice (CHERD October Issue) on 2025-11-19.

24. Mr. K.M.H. Piumal received the Best Presenter Award (Crop Science Module) at the *17th Annual Research Symposium 2025*, Faculty of Agriculture, Rajarata University of Sri Lanka on 2025-10-23.

25. Mr. A.M.K.L. Abeykoon received the University of Colombo Academic Excellence Award for best performance in *Plant Sciences* on 2025-08-28.

26. Mr. A.M.K.L. Abeykoon received the Professor B.A. Abeywickrama Award for best student in *Systematics and Ecology* from the University of Colombo on 2025-08-28.

27. Ms. R.M.P. Wijesinghe received the D.S. Rupasinghe Memorial Gold Medal for best performance and highest GPA with a First Class at the *BSc (Hons) in Environmental Sciences and Natural Resource Management*, Sabaragamuwa University of Sri Lanka on 2025-10-22.

28. Dr. P.L. Darmapriya, Dr. S. Malaviarachchi, Prof. C.B. Dissanayake, and **Prof. N.D. Subasinghe** received a Presidential Award for Scientific Research on 2025-12-18.

Recognition

1. **Prof. M.A.K.L. Dissanayake** – Chancellor of the University of Peradeniya from 2025-06-01 to 2030-06-01.

2. **Prof. M.A.K.L. Dissanayake** – Chief Guest for the Alumni Association of the University of Peradeniya in 2025.

3. **Prof. M.A.K.L. Dissanayake** – Chief Guest for the Multidisciplinary Research Symposium of PGIS, University of Peradeniya

4. **M.A.K.L. Dissanayake** – Received the Session Chair for the AMCEHA Conference University of Jaffna on 2025-02-08.

5. **Dr. H.D. Jayasinghe** – Principal Supervisor for the Science Research Projects Competition (SRPC) 2025 at the National Science Foundation on 2025-06-22.

6. **Dr. H.D. Jayasinghe** – Team Leader of the 'Green Climate Fund' Knuckles Project at the Ministry of Irrigation on 2025-05-02.

7. **Dr. H.D. Jayasinghe** – Received consultation for habitat restoration sites at Thalawakele and Maskeliya from the Wildlife and Nature Protection Society on 2025-05-14.

8. **Dr. H.D. Jayasinghe** – Team Member for the Flora and Fauna Protection Ordinance amendment from the Department of Wildlife Conservation on 2025-09-29.

9. **Prof. L. Jayasinghe** – Awarded a Fellowship by the Chinese Academy of Sciences from 2024-05-01 to 2025-01-31.

10. **Dr. J.M.K.W. Kumari** – Chairperson for the Young Scientists Conference on Multidisciplinary Research (YSCMR) at the National Institute of Fundamental Studies on 2025-11-27.

11. **Dr. J.M.K.W. Kumari** – Subject Matter Expert (Lecturer) for the B.Sc. (External) Degree Programmes in Biological and Physical Sciences at Rajarata University of Sri Lanka on 2025-03-01.

12. **Prof. R. Liyanage** – Served as Chairperson of the Young Scientists' Conference on Multidisciplinary Research (YSCMR-2025) at the National Institute of Fundamental Studies on 2025-11-27.

13. **Dr. M. Premarathna** – Adjunct Associate Professor at the National Key Laboratory of Agricultural Microbiology, College of Resources and Environment, Huazhong Agricultural University, Wuhan, China on 2025-09-15.

14. **Prof. D.N. Magana-Arachchi** – Appointed as NIFS Designated Officer responsible for international relations to the Ministry of Science & Technology at the National Institute of Fundamental Studies on 2025-08-08.

15. **Prof. D.N. Magana-Arachchi** – Appointed as NIFS Representative for the Science Week events conducted by the Ministry of Science and Technology on 2025-11-06.

16. **Prof. D.N. Magana-Arachchi** – Participated as NIFS Representative for the meeting with the National Innovation Centre par Excellence (NICE), China at NICE on 2025-11-11.

17. **Prof. J.M.N. Marikkar** – Awarded a Fellowship by INTI International University, Malaysia from 2023-06-01 to 2025-12-31.

18. **Prof. J.M.N. Marikkar** – Chief Guest for the Annual Awards Ceremony of Crescent International School in 2025.

19. **Prof. D.S.A. Wijesundara** – Chairman of the Man and the Biosphere (MAB) National Committee of Sri Lanka under the UNESCO MAB Programme from 2024-06-01 to 2027-06-01.

20. **Prof. D.S.A. Wijesundara** – Chairman of the National Species Conservation Advisory Committee at the Ministry of Environment on 2025-02-01.

21. **Prof. D.S.A. Wijesundara** – Co-chair of the National Invasive Species Specialist Group (NISSG) at the Ministry of Environment on 2025-02-15.

22. **Prof. D.S.A. Wijesundara** – Team Leader of the National Red List Expert Group (Flora) at the Ministry of Environment on 2025-02-01.

23. **Prof. R. Weerasooriya** – Received the Chairmanship from the National Initiative for Chronic Kidney Disease Management of the National Science Foundation, Sri Lanka on 2025-01-01.

24. **Prof. R. Weerasooriya** – Received the Session Chair from "Bridging Research to Address Water and Environmental Challenges in Emerging Nations," University of Peradeniya, Sri Lanka and Colorado School of Mines, USA on 2025-04-21.

25. **Prof. R. Weerasooriya** – Received the Session Chair from the International Water Conference on Climate Change and Environmental Pollution: Challenges and Solutions for Food Security and Public Health, Postgraduate Institute of Science, University of Peradeniya on 2025-03-25.

26. **Prof. R. Weerasooriya** – Received the Session Chair from RESCON 2025, Postgraduate Institute of Science, University of Peradeniya on 2025-11-07.

27. **Prof. N.D. Subasinghe.** Chief guest, Science Day, Trinity College, Kandy. 07.03.2025.

28. **Prof. N.D. Subasinghe.** Chief guest, Astronomy Day, Trinity College, Kandy. 20.09.2025.

29. **Prof. N.D. Subasinghe.** Session chair, Ipurse, University of Peradeniya. 28.08.2025

Evaluator

1. **Dr. J.M.K.W. Kumari** served as an Evaluator for the *Applied Sciences Undergraduate Research Session (ASURS 2025)* – Physical and Chemical Sciences at Rajarata University of Sri Lanka in 2025.

2. **Dr. J.M.K.W. Kumari** served as an Evaluator for the *Science Undergraduate Research Symposium (SURS 2025)* University of Peradeniya in 2025.

3. **Dr. J.M.K.W. Kumari** served as a Judge for the *Three-Minute Thesis (3MT) Competition* at *NIFS* on 2025-08-05.

4. **Prof. R. Liyanage** served as an Evaluator for the *MPhil Thesis* of G.M.M. Kumari, Board of Study in Chemical Sciences, *Postgraduate Institute of Science* in 2025.

5. **Prof. R. Liyanage** served as a Judge for the *Three-Minute Thesis (3MT) Competition* organized by the *National Institute of Fundamental Studies (NIFS)* on 2025-05-20.

6. **Prof. D.N. Magana-Arachchi** Evaluator for A Judging Panel Member for the Presidential Awards for Inventions - Year 2021 to 2022 - Sri Lanka Inventors Commission (SLIC) in 2025.

7. **Prof. D.N. Magana-Arachchi** Evaluator for a Judging Panel Member for the *Three-Minute Thesis (3MT) Competition* organized by *NIFS–Young Scientists' Association (YSA)* in 2025.

8. **Prof. J.M.N. Marikkar** served as an Evaluator for a *Technology Grant Application* considered for funding by the *National Science Foundation (NSF), Sri Lanka* in 2025.

9. **Prof. J.M.N. Marikkar** served as an Evaluator for the *Three-Minute Thesis (3MT) Competition* organized by *Young Scientists' Association (YSA)* in 2025.

10. **Prof. J.M.N. Marikkar** served as an Evaluator for *Experzio 24*, organized by the *Research Unit of Kingswood College, Kandy* in 2025.

11. **Dr. N.P. Piyasena** served as an Evaluator for an *MSc Thesis* titled *"Variation in Total Polyphenolic Content, Water-Soluble Solid Content, Aroma, and Taste of Ceylon Black Teas of Different Climatic Regions"* in 2025.

12. **Dr. N.P. Piyasena** served as an Evaluator for the appointment to a committee investigating the malfunctioning of the HPLC machine at the Department of Pharmacy, Faculty of Allied Health Sciences, University of Peradeniya 2025.

13. **Dr. N.P. Piyasena** Evaluator for Sri Lanka Council for Agricultural Research Policy in 2025.

14. **Dr. M. Premarathna** served as an Evaluator / Judge for the *Three-Minute Thesis (3MT) Competition* organized by the *Young Scientists' Association (YSA)* at the *National Institute of Fundamental Studies (NIFS)* in 2025.

15. **Prof. R. Weerasooriya** served as an Evaluator for *Research Proposals* submitted to the *University Research Council* in 2024.

Editorial Committee

1. **Prof. M.A.K.L. Dissanayake** Evaluator for Committee to evaluate Research proposals from 25th July 2025.

2. **Prof. M.A.K.L. Dissanayake** Editor for Journal of Materials Science-Materials in Electronics in 2025/2026.

3. **Prof. M.A.K.L. Dissanayake** A member of Editorial board of E-magazine at National Institute of Fundamental Studies on 2025-04-30 .

4. **Prof. M.A.K.L. Dissanayake** received the Member of the Editorial Board of Ceylon Journal of Science from 2022-04-18.

5. **Dr. H.D. Jayasinghe** Handling Editor of the Young Scientists Conference on Multidisciplinary Research (YSCMR) 2025 at NIFS on 2025-01-06 .

6. **Dr. H.D. Jayasinghe** Editor for Sri Lanka Naturalist in 2025.

7. **Dr. J.M.K.W. Kumari** Handling Editor for the Young Scientists Conference on Multidisciplinary Research (YSCMR) at National Institute of Fundamental Studies on 2025-11-27

8. **Dr. J.M.K.W. Kumari** member of the Editorial Board of the Young Scientists Conference on Multi-Disciplinary Research (YSCMR) 2025 at National Institute of Fundamental Studies on 2025-06-01 .

9. **Dr. J.M.K.W. Kumari** a member of the editorial board for NIFS e magazine at NIFS from 2025-03-02 .

10. **Prof. R. Liyanage** Handling Editor/YSCMR 2025 at National Institute of Fundamental Studies on 2025-12-27 2025-12-27.

11. **Prof. R. Liyanage** received the Appointed as a Editorial Member of Ceylon Journal of Science from Faculty of Science, UOP on 2025-04-18.

12. **Prof. D.N. Magana-Arachchi** Editor for Handling Editor in the Young Scientists Conference on Multidisciplinary Research (YSCMR) in 2025.

13. **Prof. J.M.N. Marikkar** Editor for the Proceedings Book of the Young Scientists Conference on Multidisciplinary Research in 2025.

14. **Prof. J.M.N. Marikkar** Chief Editor for INSIGHT@NIFS in 2025.

15. **Prof. J.M.N. Marikkar** Editor for Book on Halalan Toyyiban Lipids Processing and Utilizatio in 2025.

16. **Prof. J.M.N. Marikkar** Editor for Letters in Food Research in 2025.

17. **Dr. M. Premarathna** Editor for Current Trends in Biological Sciences in 2025.

18. **Dr. M. Premarathna** Editor for Journal of Trends in Biological Sciences, Acavis Publishers in 2025.

19. **Dr. M. Premarathna** Editor for Insights@NIFS e-Magazine, published by the National Institute of Fundamental Studies (NIFS) in 2025.

20. **Dr. M. Premarathna** Editor for SciSpark e-Magazine, published by Microbial Biotechnology Research Program (MBRP) of the National Institute of Fundamental Studies (NIFS) in 2025.

21. **Dr. M. Premarathna** Editor for the Young Scientists' Conference on Multidisciplinary Research (YSCMR), organized by the Young Scientists' Association at the National Institute of Fundamental Studies in 2025.

22. **Prof. D.S.A. Wijesundara** Editor for Editor in Chief of the Sri Lankn Journal of Biology in 2025.

23. **Prof. D.S.A. Wijesundara** Member of the editorial committee-WILDLANKA at The Department of Wildlife Conservatoin on 2025-01-26.

Examiner

1. **Dr. H.D. Jayasinghe** – Examiner (Judge) for the Three Minute Thesis Competition organized by the Young Scientists' Association (YSA) of NIFS in 2025.

2. **Dr. H.D. Jayasinghe** – Examiner (Panel Member) for the Photography Competition *"Flutter Shutter"* in 2025.

3. **Prof. J.M.N. Marikkar** – Examiner for the courses *Food Chemistry* and *Food Analysis* conducted by the Faculty of Technology, South Eastern University of Sri Lanka in 2025.

4. **Prof. R. Liyanage** – External Examiner for the Final Year Research Projects (BFST 4201 & FT 4201) of the Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya in 2025.

5. **Prof. R. Liyanage** – Thesis Examiner for an M.Phil. degree at the Postgraduate Institute of Science, University of Peradeniya in 2025.

Member of Committees

1. **Prof. S.P. Benjamin** – Member, Research Management Committee (RMC), Research Division, Ministry of Science and Technology, from 2024-01-01 to 2026-12-31.

2. **Prof. M.A.K.L. Dissanayake** – Board Member, Asian Society for Solid State Ionics (ASSSI), ASSSI Board, on 2025-07-27.

3. **Prof. M.A.K.L. Dissanayake** – Member, Committee to Develop the Green Hydrogen National Policy for Sri Lanka, Ministry of Energy, on 2025-09-18.

4. **Prof. M.A.K.L. Dissanayake** – Panel Member and Moderator, Renewable Hydrogen Stakeholder Consultation Workshop, on 2025-09-18.

5. **Prof. M.A.K.L. Dissanayake** – Member, Committee for Determining the Policy Framework on Battery Energy Storage Systems, Ministry of Energy, on 2025-10-03.

6. **Prof. M.A.K.L. Dissanayake** – Member of the Council, University of Peradeniya, from 2025-01-01 to 2025-06-01.

7. **Dr. H.D. Jayasinghe** – Member, Advisory Committee of the Young Scientists' Association (YSA), National Institute of Fundamental Studies (NIFS), on 2025-04-25.

8. **Dr. H.D. Jayasinghe** – Committee Member, Revision of the Strategic Action Plan of NIFS, on 2025-02-21.

9. **Dr. H.D. Jayasinghe** – Committee Member, Annual Research Review 2024, NIFS, on 2025-01-10.

10. **Dr. J.M.K.W. Kumari** – Member, Ethics Committee, National Institute of Fundamental Studies, on 2025-08-28.

11. **Dr. J.M.K.W. Kumari** – Member, Advisory Committee, Young Scientists' Association (YSA), NIFS, on 2025-04-25.

12. **Dr. I. Piyasinghe** – Member, Main Organizing Committee for National Science Day 2025 and National Science Week 2025, Ministry of Science and Technology, on 2025-08-06.

13. **Prof. R.R. Ratnayake** – Member, National Mirror Committee ISI/TC 134, Sri Lanka Standards Institution (SLSI), from 2025-01-01.

14. **Prof. R.R. Ratnayake** – Member, Board of Study in Biochemistry & Molecular Biology, Postgraduate Institute of Science, University of Peradeniya, from 2020-01-02 to 2026-01-02.

15. **Prof. R.R. Ratnayake** – Member, Committee on Development of Ecosystem Services Indicators & Guidelines, Central Environmental Authority, Sri Lanka, from 2020-02-01 to 2026-02-01.

16. **Prof. R. Liyanage** – Member, Audit and Management Committee, National Institute of Fundamental Studies, on 2025-03-03.

17. **Prof. R. Liyanage** – Board Member, Faculty of Technology, University of Jaffna, from 2024-07-29 to 2027-07-29.

18. **Prof. R. Liyanage** – Member, Board of Governors, National Institute of Fundamental Studies, from 2024-05-30 to 2027-05-30.

19. **Prof. D.S.A. Wijesundara** – Member, National Expert Committee on Climate Change Adaptation, Ministry of Environment, on 2025-02-05.

20. **Prof. D.S.A. Wijesundara** – Member, National Biodiversity Expert Committee, Ministry of Environment, on 2025-02-05.

21. **Prof. D.S.A. Wijesundara** – Member, National Expert Committee on Mangrove Conservation and Sustainable Use, Ministry of Environment, on 2025-02-01.

22. **Prof. D.S.A. Wijesundara** – Member, Committee on Ethics, Governance and Research Integrity, Ministry of Science and Technology, on 2025-09-19.

TRAINING & PARTICIPATION

1. **Dr. J. M. K. W. Kumari** and Ms. G. G. S. Sewwandi participated in an Instrument Training Workshop on Closed-Spaced Sublimation conducted by Dr. Ramesh Dhere (Sivananthan Laboratories, USA) from 16–19 June 2025 at the University of Peradeniya.

2. **Dissanayake, M.A.K.L.**, **Seneviratne, G.**, and **Benjamin, S.P.** participated in the TV programme *Shanida Ayubowan* on 08 November 2025, broadcast by Rupavahini TV Channel.

3. **Jayasinghe, H.D.** participated in the National Programme commemorating International Biodiversity Day on 22 May 2025 at Popham's Arboretum, Dambulla.

4. **Kumari, J.M.K.W.**, Hasara, A.M., Navarathne, J.M.S.G.B., and Wickramasinghe, M.L.M. participated in the National Programme *Science Walk 2025* on 11 November 2025 in Colombo.

5. **Magana-Arachchi, D.N.** participated in the National Workshop on *The Role of Diplomacy in Informed Decision-Making at the Science–Policy Interface (Science Diplomacy)* on 10 November 2025 at the Ministry of Science and Technology.

6. **Magana-Arachchi, D.N.** participated in the National Regulatory Impact Assessment (RIA) Proceedings Publication Training Workshop on 10 December 2025 at the Ministry of Science and Technology.

7. **Magana-Arachchi, D.N.** participated in the National Workshop on *Finalizing the Action Plan 2026 and Strategic Plan 2026–2030* on 16 December 2025 at the Ministry of Science and Technology.

8. **Magana-Arachchi, D.N.**, **Benjamin, S.P.**, **Kumara, G.R.A.**, **Jayasinghe, H.D.**, and **Piyasinghe, I. P. K.** participated in the Closing Ceremony of National Science Week, organized by the Ministry of Science and Technology, on 14 November 2025 at the Marquee, Waters Edge, Battaramulla.

9. Premarathne, B.M. and Agalawela, T.K. participated in the National Technical Workshop to prepare guidelines for the SL-GAP Mushroom Code of Practice on 07 August 2025 at the Horticultural Crop Research and Development Institute (HORDI), Gannoruwa Road, Peradeniya.

10. **Piyasinghe, I.** and Samarakoon, K.I.K. participated in a one-day workshop held on 17 September 2025 at the Sri Lanka Institute of Nanotechnology (SLINTEC), under the patronage of the Ministry of Science and Technology, to develop a roadmap for promoting scientific literacy in society and encouraging sustainable media practices.

11. **Premarathna, M. and Seneviratne, G.** participated in the National Exhibition *KNIGHTRO 2025* held from 28–30 August 2025 at Thurstan College, Colombo.

12. **Seneviratne, G.** participated in the TV programme *BIG FOCUS* on 08 October 2025, broadcast by Ada Derana TV Channel.

13. **Wijesundara, D.S.A.** and the Hon. Minister of Science and Technology, Abeysena, Chrishantha, participated in the TV programme *Hathweni Peya* on 10 October 2025, broadcast by ITN TV Channel.

14. Wickramasinghe, M.L.M., Jayanetti, H., and De Silva, G.H.S.S. participated in the programme *The Fusarium Riddle: Insights into Diversity and Host Specificity in Fruit Crops* on 01 October 2025 at the Large Auditorium, National Institute of Fundamental Studies (NIFS), Hantana Road, Kandy.

15. Wickramasinghe, M.L.M., Jayanetti, H., and De Silva, G.H.S.S. participated in the National Workshop on *Statistical Data Analysis Using R Software* on 26 September 2025 at the Main Auditorium, National Institute of Fundamental Studies (NIFS), Hantana Road, Kandy.

16. Wickramasinghe, M.L.M., Jayanetti, H., and De Silva, G.H.S.S. participated in the National Workshop on *Writing High-Quality Articles for Peer-Reviewed Science Journals* on 30 October 2025 at the National Science Foundation (NSF), Colombo 07.

DISSEMINATION OF SCIENCE

Dissemination through Documentaries

1. Science Education and Dissemination Unit (SEDU) of National Institute of Fundamental Studies (NIFS) (Producer), SEDU, NIFS (Director) (2025). දෙහි කුලයේ ශාක (*Citrus* කුලය) [YouTube Video]. Sri Lanka.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

2. SEDU, NIFS (Producer), SEDU, NIFS (Director). (2025). කැඩුම් බිඳුම් අස්ථි සමේ රෝග සුවකරන තරණ ශාකය [YouTube Video]. Sri Lanka.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

3. SEDU, NIFS (Producer), SEDU, NIFS (Director). (2025). වියළි කාලයේදී පමණක් මල් පිපෙන වියළි කලාපීය ශාක [YouTube Video]. Sri Lanka.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

4. IQ Labs (Producer), Dr. Fadil Iqbal (Director). (2025). *Leaving engineering career, Discovered 200 new Plant species in Sri Lanka – Dr. Himesh Jayasinghe* [YouTube]. USA: IQ Labs.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Dr. Himesh Jayasinghe's incredible journey of switching fields from Engineering to Plant Science. He is the author of the book.

5. SEDU, NIFS (Producer), SEDU, NIFS (Director). (2025). කුකුරුමාන් ගහේ සැඟවුනු සමනල උත්පත්තිය [YouTube]. Sri Lanka.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

6. SEDU, NIFS (Producer), SEDU, NIFS (Director). (2025). බත් කුරාගේ ජීවන චක්‍රය [YouTube]. Sri Lanka.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

7. NIFS (Producer), SEDU (Director). (2025). මිනිසා විසින් නිර්මිත වන උයන [Youtube]. Sri Lanka: At Sam-Popham Arboretum, Dambulla.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: Research conversation

8. SLVLOG productions (Producer), Diwakara, B. (Director). (2025). ලංකාවට ආවේණික අලුත් මල් වර්ග 200ක් [Youtube]. Sri Lanka: At SLVLOG productions.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: This talk discusses about the newly published book.

9. Pethiyagoda, R. (Producer), Pethiyagoda, R. (Director). (2025). *The Amazing Discovery of 200+ Native Sri Lankan Plants* [YouTube]. Sri Lanka: In the forest.
   Resource Person(s) from NIFS: **Dr. H.D. Jayasinghe**
   Content Description: DISCOVERY: Additions to the Flora of Ceylon", a new book by Dr Himesh Jayasinghe, which announces the discovery of more than 200 native plant species never recorded before from Sri Lanka.

Dissemination through Printed Media

Newspapers

1. **Wijesundara, D.S.A.** (2025-12-09). *Cyclone Ditwah leaves Sri Lanka's biodiversity in ruins: Top scientist warns of unseen ecological disaster*. The Island**,** p. 01.
2. **G.R.A. Kumara,** (2025-06-09). *Science for national prosperity: Turning Sri Lanka's waste into scientific wealth*. **Daily Mirror**, p. 3.
3. **Premarathna, M.** (2025-03-25). *Developing attitudes of schoolchildren for development*. **The Island**, pp. 1–2.

Dissemination through Electronic Media

Broadcast Media (Television)

1. **Prof. G. Seneviratne** participated in the TV programme BIG FOCUS on 2025-10-08, broadcast by **Ada Derana TV**.
2. **Prof. D.S.A. Wijesundara** and Hon. Minister of Science and Technology, Prof. Chrishantha Abeysena, participated in the TV programme Hathweni Peya on 2025-10-10, broadcast by ITN TV**.**
3. **Prof. M.A.K.L. Dissanayake, Prof. G. Seneviratne**, and **Prof. S. P. Benjamin** participated in the TV programme Shanida Ayubowan on 2025-11-08, broadcast by Rupavahini TV**.**

Dissemination through Digital / Online Media

E-Magazine Articles

1. Ameena, M.S.Z., & **Benjamin, S.P.** (2025-07-01). *Spider silk and the future of tissue repair*. Insights@NIFS, pp. 14–15.
2. **Piyasena, N.P.** (2025-07-22). *Tea and wellbeing*. Insights@NIFS**,** pp. 17–19.
3. Premasiri, H.A.K.D., **Piyasena, N.P.,** & **Jayasinghe, L.** (2025-12-22). *Zingiber officinale: More than a spice – a bioactive powerhouse*. Insights@NIFS**,** pp. 27–29.
4. **Kumari, J.M.K.W.** (2025-12-02). *Quantum leap: A century of quantum theory*. Insights@NIFS, pp. 5–7.
5. Gunathilaka, S., & Magana-Arachchi, D.N. (2025-12-01). *Hidden hotspots: How the environment fuels the rise of antibiotic resistance*. Insights@NIFS, pp. 24–26.
6. Bandara, T., Bandara, U., & **Magana-Arachchi, D.N.** (2025-07-25). *Beyond the skin test: Unlocking tuberculosis clues hidden in the blood*. Insights@NIFS, p. 7.
7. **Premarathna, M.** (2025-12-12). *Into the waters: Prospects of biofilm-mediated respiratory support in humans*. SciSpark, pp. 43–46.
8. **Kumara, G.R.A.** (2025-07-01). *The energy storage solution of the future*. Insights@NIFS, p. 6.
9. Jayasundara, U., & **Premarathna, M.** (2025-08-04). *From tumor-inducing bacteria to tumor-fighting vectors*. SciSpark**,** pp. 20–23.
10. Prathibha, S., & **Premarathna, M.** (2025-08-04). *Evolution of hemoglobin and chlorophyll*. SciSpark**,** pp. 24–27.
11. **Seneviratne, G.,** Ekanayaka, S., & **Premarathna, M.** (2025-08-04). *Inducing natural intelligence in agriculture***.** SciSpark**,** pp. 8–10.
12. **Seneviratne, G.,** et al. (2025-08-04). *SciSpark e-Magazine*. Microbial Biotechnology Research Programme, NIFS, pp. 1–38.
13. Ariyarathne, D., Wijerathna, N., **Premarathna, M.,** & **Seneviratne, G.** (2025-08-07). *A journey to planet K2-18b*. Insights@NIFS, pp. 12–13.

NIFS Newsletter – 2025

- Issue 01: April – June 2025
- Issue 02: July – September 2025
- Issue 03: October – December 2025

Events Organized - Lab Visit

1. Thirty (30) third-year undergraduate students from the University of Peradeniya visited the Microbial Biotechnology Laboratories of the National Institute of Fundamental Studies (NIFS) on 2025-09-01 as part of the course "*Biotic Interactions and Applications*." Resource Persons: **Prof. G. Seneviratne**.

2. Twenty-five (25) students from the Anuradhapura Nanasala visited the Material Processing and Device Fabrication Laboratories of the National Institute of Fundamental Studies (NIFS) on 2025-08-12.
   Resource Persons: **Prof. G.R.A. Kumara**.

3. Sixty-one (61) students from Vijaya College, Matale visited the National Institute of Fundamental Studies (NIFS) toured the following laboratories: Material Processing and Device Fabrication Research Laboratory; Earth Resources and Renewable Energy Research Laboratory; Plant Taxonomy and Conservation Research Laboratory; Biofertilizer Research Laboratory; Molecular Microbiology and Human Diseases Research Laboratory; and Microbiology and Soil Ecosystems Research Laboratory on 2025-02-17. Resource Persons: **Prof. G.R.A. Kumara, Dr. H.D Jayasinghe**, **Prof. R. Rathnayake, Prof. N.D. Subasinghe, Prof. G. Seneviratne,** and **Prof. D.N. Magana-Arachchi**.

4. Forty-eight (48) undergraduate students and six (6) staff members from the Department of Biosystems Technology, Faculty of Technological Studies, Uva Wellassa University visited the Microbial Biotechnology Research Programme laboratories of the National Institute of Fundamental Studies (NIFS) on 2025-08-11.
   Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna**.

5. Twenty-six (26) undergraduate students from the Department of Science and Technology, Faculty of Applied Sciences, Uva Wellassa University visited the Microbial Biotechnology Research Programme laboratories of the National Institute of Fundamental Studies (NIFS)on 2025-07-09.
   Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna**.

6. Twenty-two (22) undergraduate students from the Department of Botany, University of Peradeniya visited the Microbial Biotechnology Unit laboratories of the National Institute of Fundamental Studies (NIFS) on 2025-04-24.
   Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna**.

7. Thirty (30) undergraduate students from the Department of Botany, University of Peradeniya visited the Microbial Biotechnology Unit laboratories of the National Institute of Fundamental Studies (NIFS) on 2025-04-23.
   Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna**.

8. Thirty (30) Microbiology students of Faculty of Science, University of Peradeniya visited to the NIFS to visit the Microbial Biotechnology laboratories on 2025-03-10. Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna**.

Events Organized – Conference

1. National Conference: *"The Young Scientists' Conference on Multidisciplinary Research 2025"* was organized by the Young Scientists Association (YSA) for the Scientific Community at the National Institute of Fundamental Studies on 2025-11-27 with 70 participants.
   Resource Persons: Keynote Speaker Keynote Speaker Mr. Nalaka Vidanagamachchi, System Architect, Apple Inc., Cupertino, USA.

Events Organized – Workshop

1. Internal Workshop: *"Research Workshop"* was organized by the Science Education and Dissemination Unit for the School Community at the St. Thomas' College, Matale on 2025-01-30 with 50 participants.
   Resource Persons: ***Dr. H.D. Jayasinghe,*** *Research Fellow*

2. Internal Workshop: *"Unlock your future with DAAD"* was organized by the Young Scientists' Association (YSA) for the Scientific Community at the Professor Cyril Ponnamperuma Auditorium on 2025-08-28 with 50 participants.
   Resource Persons: Ms. Nimaya Manudewa, DAAD Regional Officer– Sri Lanka.

3. Internal Workshop: *"Field Workshop"* was organized by the Young Scientists' Association (YSA) for the Scientific Community at the Royal Botanic Garden, Peradeniya on 2025-11-12 with 30 participants.
   Resource Persons: ***Dr. H.D. Jayasinghe*** *Research Fellow.*

4. Internal Workshop: *"From Lab Benches to Life Lessons"* was organized by the Prof. Deepal Subasinghe, Science Education and Dissemination Unit for the Scientific Community at the Professor Cyril Ponnamperuma Auditorium on 2025-09-15 with 239 participants. *Resource Persons: Alumni members of NIFS.*

5. Provincial Workshop: *"Hands on Workshop on Renewable Energy Conservation and Storage Devices"* was organized by the Science Education and Dissemination Unit for the School Community at the NIFS on 2025-11-11 with 17 participants. *Resource Persons:* ***Prof. G.R.A. Kumara,*** *Research Professor.*

6. Provincial Workshop: *"Eat Smart, Live Strong "A Workshop on the Power of a Balanced Diet for School Children"* was organized by the Science Education and Dissemination Unit for the School Community at the NIFS on 2025-11-13 with 47 participants. *Resource Persons:* ***Prof. Ruvini Liyanage,*** *Associate Research Professor.*

7. Internal Workshop: *"Hands-on Workshop on Statistical Data Analysis"* was organized by the Science Education and Dissemination Unit for the Scientific Community at the Professor Cyril Ponnamperuma Auditorium on 2025-09-26 with 40 participants. *Resource Persons: Emeritus Professor Pushpakanthi Wijekoon, Department of Statistics and Computer Science, Faculty of Science, University of Peradeniya.*

8. Internal Workshop: *"පරිසර අධ්‍යයන හා දැනුවත් කිරීමේ වැඩසටහන - හ/වීරකැටිය රාජපක්ෂ මධ්‍ය විද්‍යාලය"* was organized by the Science Education and Dissemination Unit for the School Community at the Popham Arboretum, Dambulla on 2025-06-25 with 25 participants. *Resource Persons:* ***Dr. H.D. Jayasinghe,*** *Research Fellow.*

9. Internal Workshop: *"ධර්මරාජ විද්‍යාලය - මහනුවර, පරිසර දින පාසැල් විද්‍යා වැඩමුලුව"* was organized by the Science Education and Dissemination Unit for the School Community at the

Cyril Ponnamperuma Auditorium on 2025-06-11 with 70 participants. *Resource Persons:* ***Dr. H.D. Jayasinghe****, and* ***Dr. L. Jayarathna****.*

10. National Workshop: *"School Science Programme 2025"* was organized by the Science Education and Dissemination Unit for the School Community at the NIFS from 2025-11-18 to 2025-11-20 with 90 participants.
Resource Persons: Prof. R.D. Jayasinghe – Professor of Oral Medicine and Periodontology, Faculty of Dental Sciences, University of Peradeniya, **Prof. R. Weerasooriya** – Research Professor, NIFS, **Prof. M.A.K.L. Dissanayake** – Research Professor, NIFS, **Prof. G.R.A. Kumara** – Research Professor, NIFS, **Prof. N. Marikkar** – Associate Research Professor, NIFS, **Prof. S. Benjamin** – Research Professor, NIFS, **Dr. L. Jayarathne** – Research Fellow, NIFS, **Dr. H.D. Jayasinghe** – Research Fellow, NIFS, **Prof. D. Subasinghe** – Research Professor, NIFS, **Prof. J. Bandara** – Senior Research Professor, NIFS.

11. National Workshop: *"The Sri Lankan Entrepreneur's Blueprint"* was organized by the Ministry of Science and Technology/NIFS for the General Public at the National Institute of Fundamental Studies on 2025-11-25 with 100 participants.
Resource Persons: Mr. Nithya Silva, Media Secretary to the Minister of Science and Technology.

12. National Workshop: *"International Day for Biological Diversity 2025"* was organized by the Biodiversity Division of the Ministry of Environment & NIFS for the General Public at the NIFS Popham Arboretum, Dambulla on 2025-05-22 with 100 participants. Resource Persons: Dr. S. Jayathunge, **Prof. D.S.A. Wijesundara,** Prof. G. Pushpakumara, and Dr. D. Patabendi.

Events Organized – Symposium

1. International Symposium: *"Prof. Cyril Ponnamperuma Memorial Oration: Commemorating 100 Years of Quantum Mechanics"* was organized by the Prof. M.A.K.L. Dissanayake & SEDU for the Scientific Community at the Cyril Ponnamperuma Auditorium on 2025-06-13 with 85 participants.
Resource Persons: **Prof. M.A.K.L. Dissanayake,** Prof. K. Tennakone, and Prof. A. Nanayakkara.

2. Internal Symposium: *"Annual Research Review 2025"* was organized by the NIFS Staff for the Scientific Community at the Prof. Cyril Ponnamperuma Auditorium on 2025-04-01 with 260 participants.
Resource Persons: Chief Guest - Minister Hon. (Prof). Chrishantha Abeysena M.P. Keynote Address- and Prof. Gomika Udugamasooriya (President's Senior Advisor on Science and Technology, University of Houston and the MD Anderson Cancer Research Center in the United States).

Events Organized – Exhibition

1. National Exhibition: *"Knight- Ro 2025 – Education & Innovation Exhibition"* was organized by the Thurstan College, Colombo for the General Public at the Thurstan College, Colombo from 2025-08-28 to 2025-08-30 with 10 participants.
Resource Persons: Research Assistants, Microbial Biotechnology Research Programme, NIFS.

2. *"Technatia'25 -Exhibition"* was organized by the Dharmaraja College,Kandy for the School Community at the Dharmaraja College,Kandy on 2025-10-09 with 10000 participants. Resource Persons : Microbial Biotechnology Research Program, and Science Education and Dissemination Unit .

Events Organized - Special Lectures

1. National Special Lecture: *"Conducted a special lecture for Undergraduate students, and staff members, of Department of Biosystems Technology, Faculty of Technological Studies, Uva Wellassa University"* was organized by the Microbial Biotechnology Research Program for the Scientific Community at the National Institute of Fundamental Studies on 2025-08-11 with 54 participants.
   Resource Persons: **Prof. G. Seneviratne,** and **Dr. M. Premarathna.**

2. Internal Special Lecture: *"Research in Germany: Opportunities and challenges for young scientists"* was organized by the Young Scientists' Association (YSA) for the Scientific Community at the Professor Cyril Ponnamperuma Auditorium on 2025-07-29 with 40 participants.
   Resource Persons: Mr. Julius Gläser, University of Göttingen, Germany.

3. Internal Special Lecture: *"Robotics, Art and AI"* was organized by the Science Education and Dissemination Unit for the Scientific Community at the NIFS premises on 2025-12-24 with 40 participants.Resource Persons: Prof. Damith Herath, Professor of Robotics and Art at the University of Canberra and Head of the Collaborative Robotics Lab.

4. Internal Special Lecture: *"Special Lecture for Science week"* was organized by the Science Education and Dissemination Unite for the Scientific Community at the NIFS Lobby Area from 2024-11-14 to 2025-11-14 with 30 participants.
   Resource Persons: **Prof. D.S.A. Wijesundara**.

5. National Special Lecture: *"A Postgraduate Qualification is Far More Than Just a Piece of Paper"* was organized by the Young Scientists Association (YSA) for the Scientific Community at the Zoom on 2025-12-06 with 70 participants.
   Resource Persons: Prof. Rupika S. Rajakaruna, Senior Professor and Chair, Department of Zoology, Faculty of Science, University of Peradeniya.

6. National Special Lecture: *"Mastering Research Presentation Skills: Practical Strategies to Level Up Your Skills"* was organized by the Young Scientists Association (YSA) for the Scientific Community at the by Zoom on 2025-08-21 with 120 participants.
   Resource Persons: Prof. Nadeesh M. Adassooriya, Department of Chemical and Process Engineering, Faculty of Engineering, University of Peradeniya.

7. National Special Lecture: *"Cite it Right: Referencing for Researchers"* was organized by the Young Scientists Association (YSA) for the Scientific Community at the Online by Zoom on 2025-10-09 with 80 participants.
   Resource Persons: Dr. Gayan Bowatte, Senior Lecturer, Department of Basic Science, Faculty of Allied Health Sciences, University of Peradeniya.

8. Internal Special Lecture: *"The Fusarium Riddle: Insights into Diversity and Host Specificity in Fruit Crops"* was organized by the Science Education and Dissemination Unit and Dr. M. Premarathna for the Scientific Community at the Professor Cyril Ponnamperuma Auditorium on 2025-10-01 with 20 participants.
   Resource Persons : Dr. Ishara S. Manawasinghe (Ph.D), Associate Professor, Beijing Key Laboratory of Environment-Friendly Management on Fruit Diseases and Pests in North China, Institute of Plant Protection, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, P.R. China.

9. Internal Special Lecture: *"Why do most 3MT presentations fail, and how yours won't?"* was organized by the Young Scientists' Association (YSA) for the Scientific Community at the Online on 2025-04-07 with 40 participants.

Resource Persons: Dr. Sumali Dissanayake, Senior Lecturer, Faculty of Agriculture, University of Peradeniya.

10. International Special Lecture: *"Advanced Technology for Modern World "* was organized by the Techno Instruments (Pvt) Ltd and SEDU for the Scientific Community at the Cyril Ponnamperuma Auditorium on 2025-06-19 with 31 participants.
Resource Persons: Mr. Vincent Lim, Channel Partner Manager - Spectroscopy (Agilent Technologies, Singapore) and Mr. Vinayak Azhakaprakalam, Application Engineer - Chromatography/Mass Spectrometry (Agilent Technologies, India).

11. Internal Special Lecture: *"Gel-based materials for thermoelectro-chemical cells"* was organized by the Prof. Deepal Subasinghe and SEDU for the Scientific Community at the Small Auditorium on 2025-05-26 with 25 participants.
Resource Persons: Prof. Muhammad Siyar, National University of Science and Technology Research university, Islamabad, Pakistan.

12. Internal Special Lecture: *"Cardiac Regeneration in Fish Models of Myocardial Infarction"* was organized by the Science Education and Dissemination Unit for the Scientific Community at the Small Auditorium on 2025-04-08 with 30 participants.
Resource Persons: Prof. Pascal Lafontant, Biology Professor, Grinnell College, USA, and is based at University Peradeniya for the year (2024-2025).

13. Internal Special Lecture: *"Taming Underwater Scientific Challenges with Robots"* was organized by the Science Education and Dissemination Unit and **Prof. M.A.K.L. Dissanayake** for the Scientific Community at the Small Auditorium on 2025-02-11 with 11 participants.
Resource Persons: Dr. Gamini Dharmasena, Senior research scientist attached to a US company.

14. Internal Special Lecture: *"variety of NASA's ongoing projects, including solar system exploration and the search for life in the universe"* was organized by the Science Education and Dissemination Unit for the Scientific Community at the Small Auditorium on 2025-02-03 with 30 participants.
Resource Persons: Dr. Henry Throop, Program Scientist in the Planetary Science Division at NASA Headquarters.

Events Organized - Other Events

1. Internal Event : *"Special Visit"* was organized by the National Institute of Fundamental Studies for the Scientific Community at the National Institute of Fundamental Studies on 2025-11-12 with 25 participants.
Resource Persons : Dr. Benjin Luo, Member of the Managing Board and Chief Expert at the National Innovation Center par Excellence (NICE) and the Jiangsu Industrial Technology Research Institute (JITRI), alongside and Ms. Yucheng Hang a key member of NICE and the Secretariat of the World Association of Industrial and Technological Research Organizations (WAITRO).

2. Internal Event : *"Launch of Insights@NIFS – The Official E-Magazine of the National Institute of Fundamental Studies"* was organized by the Science Education and Dissemination Unit for the NIFS Staff at the Cyril Ponnamperuma Auditorium on 2025-07-08 with 60 participants.

3. National Event : *"Three Minute Thesis (3MT) Competition 2025"* was organized by the Young Scientists' Association (YSA) for the Scientific Community at the Cyril

Ponnamperuma Auditorium on 2025-05-20 with 60 participants. Resource Persons : Dr. Piyumali Perera, Senior Lecturer, Department of Zoology, and Director of the Science-Industry Interaction Cell, Faculty of Science, University of Peradeniya Dr. Dilani Hettiarachchi, Senior Lecturer, Department of Biological Sciences, Faculty of Applied Sciences, and a certified Toastmaster and NLP Practitioner Dr. Sanjeewa Rodrigo, Senior Lecturer, Department of Chemistry, The Open University of Sri Lanka and Mr. Manura Weerasinghe a seasoned Toastmaster with over six years of experience in public speaking, is currently serving as the District Webmaster for Toastmasters District 82.

4. Internal Event: *"ජගත් පරිසර දින සැමරුම් වැඩසටහන"* was organized by the Science Education and Dissemination Unit for the NIFS Staff at the NIFS premises from 2025-06-02 to 2025-06-05 with 100 participants.
   Resource Persons: **Prof. D.S.A. Wijesundara, Prof. D.N. Magana-Arachchi, Prof. R. Weerasooriya,** and **Dr. H.D. Jayasinghe**.

5. Internal Event: *"Visit of High Commissioner of India"* was organized by the Director -NIFS for the Scientific Community at the NIFS premises on 2025-05-14 with 30 participants. Resource Persons: His Excellency Mr. Santosh Jha, High Commissioner of India to Sri Lanka.

6. Internal Event: *"Visit of Assistant High Commissioner of India"* was organized by the Director NIFS for the Scientific Community at the NIFS premises on 2025-04-30 with 26 participants. Resource Persons: Ms. V.S. Saranya.

Invited Speeches
Presentations

1. **Dissanayake, M.A.K.L.** (2025). Fascinating physics. Special Lecture, National Institute of Fundamental Studies.
2. **Dissanayake, M.A.K.L.** (2025). Innovative TiO_2 Nanostructures for Enhanced Dye-sensitized Solar Cells Performance. Invited Speech, University of Jaffna.
3. **Dittus, W.P.J.** (2025). Resolution of Human–Monkey Conflict and Monkey Population Census. Presentation, Colombo.
4. **Dittus, W.P.J.** (2025). The Relevance of Primate Studies to Understanding the Human Condition. Invited Speech, Sigiriya.
5. **Jayasinghe, H.D.** (2025). 7th National Report (7th NR) to Convention on Biological Diversity. Presentation, Waters' Edge, Colombo.
6. **Jayasinghe, H.D.** (2025). Bio diversity of Sri Lanka. Special Lecture, Prof. Cyril Ponnamperuma Auditorium, NIFS.
7. **Jayasinghe, H.D.** (2025). Conducting a Research and Presenting its Outputs. Presentation, Popham's Arboretum & Kaludiyapokuna Archeological Site.
8. **Jayasinghe, H.D.** (2025). Conducting a Research and Presenting its Outputs. Presentation, Popham's Arboretum & Kaludiyapokuna Archeological Site.
9. **Jayasinghe, H.D.** (2025). Developing the Fernery Sector. Presentation, Seethawaka Wet Zone Botanic Garden.
10. **Jayasinghe, H.D.** (2025). Discovery: Its Journey and Way Forward. Special Lecture, Genesis by Dilmah.
11. **Jayasinghe, H.D.** (2025). Fascinating Butterflies. Special Lecture, Prof. Cyril Ponnamperuma Auditorium, NIFS.
12. **Jayasinghe, H.D.** (2025). Female-led Native Plant Nursery Initiative. Presentation, Sinharaja Forest Reserve.
13. **Jayasinghe, H.D.** (2025). Field Research Techniques on Environment. Presentation, Horton Plains National Park.

14. **Jayasinghe, H.D.** (2025). Field Session on Identification of Angiosperms. Presentation, Royal Botanic Gardens, Peradeniya.
15. **Jayasinghe, H.D.** (2025). Field Session on Identification of Rainforest Plant Species. Presentation, Ingiriya Forest Reserve.
16. **Jayasinghe, H.D.** (2025). Forest Tree Identification. Presentation, Field Training Center of Forest Department at Inamaluwa and Kalu Diya Pokuna Forest.
17. **Jayasinghe, H.D.** (2025). Greening Our Cities: How Science and Community Can Work Together to Create Better Urban Spaces. Keynote, MJF Centre, Moratuwa.
18. **Jayasinghe, H.D.** (2025). Identification of Butterflies and Plants. Invited Speech, St. Thomas' College, Matale.
19. **Jayasinghe, H.D.** (2025). Identification of Plant Species that can be Permitted for Utilization by Wedda People to Amend the Flora & Fauna Protection Ordinance. Presentation, Department of Wildlife Conservation Head Office.
20. **Jayasinghe, H.D.** (2025). Identification of Threatened Plant Species and the Preparation of Conservation Management Plans. Presentation, Manigala Wana Niwahana, Knuckles Conservation Forest.
21. **Jayasinghe, H.D.** (2025). Importance of Field-based Science and its Utility for Sri Lanka's Development through Dissemination. Keynote, Waters' Edge, Colombo.
22. **Jayasinghe, H.D.** (2025). Plant Diversity. Presentation, Royal Botanic Gardens, Peradeniya.
23. **Jayasinghe, H.D.** (2025). Plant–Animal Interactions. Invited Speech, Education Center, Peradeniya Botanic Garden.
24. **Jayasinghe, H.D.** (2025). Raising Awareness on the National Red List. Presentation, Mirijjawila Botanic Garden, Hambantota.
25. **Jayasinghe, H.D.** (2025). Rediscovery of Critically Endangered and Possibly Extinct Plants and the Importance of Field Surveys. Special Lecture, Henarathgoda Botanic Gardens.
26. **Jayasinghe, H.D.** (2025). Training Course on Forest Tree Identification. Presentation, Sinharaja Forest Reserve.
27. **Jayasinghe, H.D.** (2025). Updating Invasive Alien Species Priority List of Fauna and Flora of Sri Lanka. Presentation, Good Wood Airport Hotel, Katunayake.
28. **Jayasinghe, H.D.** (2025). Workshop on Best Field Practices in Identification of Plants. Presentation, Department of Botany, University of Sri Jayewardenepura.
29. **Jayasinghe, H.D., Jayasuriya, R.B., Premarathne, B.M., & Agalawela, T.** (2025). Plant and Mushroom Taxonomy. Presentation, NIFS.
30. **Jayasinghe, L.** (2025). Chemistry and Bioactivity of Sri Lankan Medicinal Plants and Endophytic Fungi. Invited Speech, Kathmandu, Nepal.
31. **Jayasinghe, L.** (2025). Chemistry and Bioactivity of Sri Lankan Medicinal Plants and Endophytic Fungi. Keynote, Marino Beach Hotel, Colombo.
32. **Jayasinghe, L.** (2025). Climate Change and Sustainable Marine Development. Plenary, Cinnamon Life – City of Dreams, Colombo.
33. **Jayasinghe, L.** (2025). Search for Bioactive Compounds from Sri Lankan Medicinal Plants and Endophytic Fungi. Keynote, Jharkhand Rai University, Ranchi, India.
34. **Kumara, G.R.A.** (2025). Definition of Research. Keynote, Mahamaya Girls' College, Kandy.
35. **Kumara, G.R.A.** (2025). Inspiring Young Minds Through Research. Special Lecture, Waters' Edge, Colombo.
36. **Kumara, G.R.A.** (2025). What is Research? Keynote, SWRD Bandaranayake National College, Kundasale, Kandy.

37. **Marikkar, J.M.N.** (2025). Glucose Homeostasis in the Human Body. Special Lecture, 49th School Science Programme, NIFS, Kandy.
38. **Marikkar, J.M.N.** (2025). Functional Food Attributes of Selected Underutilized Plants. Keynote, Symposium on Functional Foods: Bridging Nutrition and Therapeutics, Putra Nilai, Selangor, Malaysia.
39. **Premarathna, M.** (2025). Developing Attitudes of Schoolchildren for Social and National Benefit. Special Lecture, Colombo.
40. **Premarathna, M.** (2025). World Environment Day. Invited Speech, Dharmaraja College, Kandy.
41. **Seneviratne, G.** (2025). Biofilm Biofertilizer: Concept and Applications. Special Lecture, National Institute of Fundamental Studies.
42. **Weerasooriya, R.** (2025). China–Sri Lanka Decade Collaboration in Water Research and Technology. Keynote, South China Sea Institute of Oceanology, Chinese Academy of Sciences, Colombo, Sri Lanka.
43. **Weerasooriya, R.** (2025). Sri Lanka and China Collaboration Prospects in Synchrotron Research. Invited Speech, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, China.
44. **Weerasooriya, R.** (2025). Keynote Address. China–Sri Lanka Joint Research and Demonstration Center for Water Technology.
45. **Weerasooriya, R.** (2025). Invited Speech. Research Center for Eco-environmental Sciences, Chinese Academy of Sciences, Beijing, China.
46. **Wijesundara, D.S.A.** (2025). Ambuluwawa Biodiversity Complex: A Memorable Journey from the Beginning up to Now. Invited Speech, Ambuluwawa Biodiversity Complex, Gampola.
47. **Wijesundara, D.S.A.** (2025). Biodiversity of Sri Lanka. Special Lecture, NIFS Popham Arboretum, Dambulla.
48. **Wijesundara, D.S.A.** (2025). Biodiversity of Sri Lanka and its Conservation. Special Lecture, Popham Arboretum, Dambulla.
49. **Wijesundara, D.S.A.** (2025). Bioactive Compounds from Sri Lankan Flora: A Rich yet Underexplored Resource for Drug Discovery. Keynote, Marino Beach, Colombo (Ruby Hall).
50. **Wijesundara, D.S.A.** (2025). Conservation of Flora. Presentation, Dry Zone Botanical Garden, Mirijjawila, Hambantota.
51. **Wijesundara, D.S.A.** (2025). Ethics of Biodiversity Conservation. Invited Speech, "Nelum" Hall, Waters Edge, Battaramulla.
52. **Wijesundara, D.S.A.** (2025). Overview of the National Red List 2020. Special Lecture, Henarathgoda Botanic Gardens.
53. **Wijesundara, D.S.A.** (2025). Restoring the Forest Mosaic of Knuckles: Science, Strategies, and Sustainable Solutions. Invited Speech, Nation Builders Association, Kundasale.
54. **Wijesundara, D.S.A.** (2025). The National Red List 2020: Conservation Status of the Flora of Sri Lanka. Presentation, Henarathgoda Botanic Garden, Gampaha.
55. **Dittus, W.P.J.** (2025). Resolving bias against macaques (Macaca sinica) in Sri Lanka's culture of tolerance for wildlife. Plenary, Antananarivo, Madagascar.
56. **Subasinghe, N.D.** (2025). *Let us think!*. Special Lecture, National Institute of Fundamental Studies (NIFS).
57. **Subasinghe, N.D.** (2025). *Fascinating facts on Black Holes*. Keynote, Trinity College, Kandy.
58. **Subasinghe, N.D.** (2025). *Sustainable energy*. Keynote, Trinity College, Kandy.

YOUNG SCIENTISTS ASSOCIATION (YSA)

Committee:

• **Advisors to the YSA** - Dr. Lakmal Jayarathne, Dr. Kalpani Kumari, Dr. Himesh Jayasinghe

• **Co-chairs** – Mr. Kaveesha Premasiri and Ms. Shashikala Sewwandi

• **Co-secretaries** - Mr. Dileep Gamage and Ms. Dinithi Sathsarani

• **Treasurer** – Mrs. Dinushi Chathurangi

• **Committee members** – Mr. Aravinda Bandara, Mr. Sandun Bowaththa, Ms. Kushlani Kaushalya

About YSA:

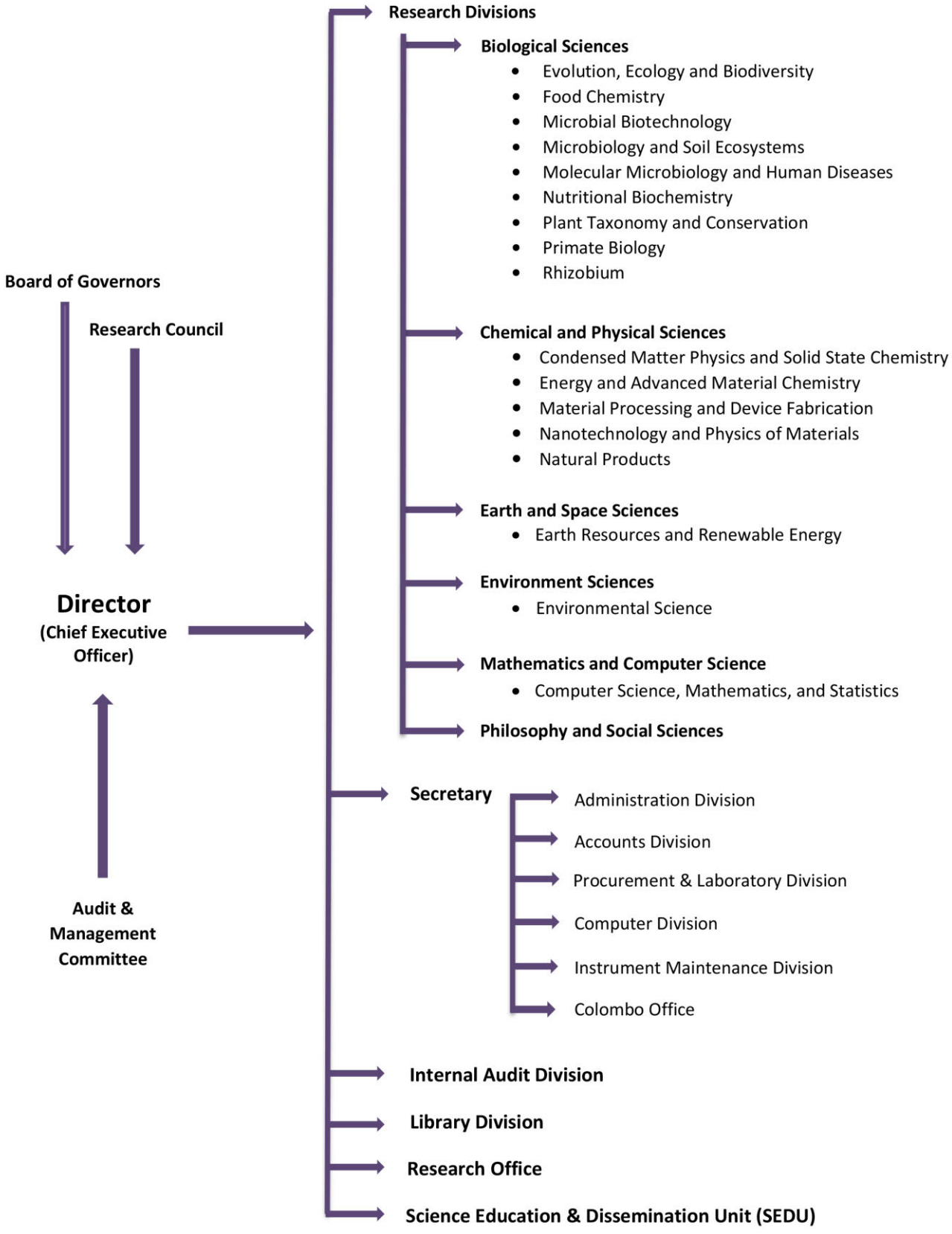
The Young Scientist Association (YSA) is a professional organization committed to the development and advancement of young scientists through academic engagement, collaboration, and capacity building. The Association provides opportunities for professional growth through workshops, mentorship programs, and scientific initiatives that promote fundamental research and scientific literacy. Guided by the principles of inclusivity, lifelong learning, and excellence, YSA fosters a supportive academic commu nity that enables young scientists to enhance their competencies, contribute to scientific progress, and make a meaningful impact on society.

Activities:

- *Successfully completed the Three Minute Thesis (3MT) Competition – 2025, co-chaired by Mr. Dileep Gamage and Ms. Dinithi Sathsarani.*
- *Pre-webinar series organized along with 3MT Competition 2025.*
- *Guest lecture by Mr. Julius Gläser from University of Göttingen, Germany.*
- *Information session on "DAAD" scholarships by Ms. Nimaya Manudewa, Regional Officer, DAAD Information Centre, Colombo.*
- *Successfully completed 7th Young Scientists' Conference on Multidisciplinary Research (YSCMR 2025) with 257 initial abstract submissions, co-chaired by Mr. Chanuka Ilangarathne and Ms. Himashee Naranpanawa*
- *Pre-conference webinar series organized along with Young Scientists' Conference on Multidisciplinary Research 2025.*
- *Field Workshop conducted by Dr. Himesh Jayasinghe at Royal Botanical Garden, Peradeniya.*
- *Donations to people affected by the "Ditwah" cyclone.*
- *"Beema dansala" to devotees at siri dalada wandanawa.*
- *NIFS T-Shirt Campaign (Fundraising campaign).*
- *Supported for the Annual Research Review 2024 by YSA members.*
- *Supported for the institute Vesak lantern creation and decoration by YSA members.*
- *Supported for the School Science Program 2025 by YSA members.*

SECTION III-ORGANIZATION

ORGANIZATIONAL CHART

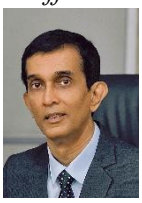


BOARD OF GOVERNORS

A twelve-member Board of Governors administers NIFS with Prof. Sanath Rajapakse as the Chairman. The Board administers the institute and makes rules for the procedures in the conduct of its affairs.

Prof. Sanath Rajapakse
(From 11.04.2025)
Chairman
Appointed by H.E., the President

Prof. Gomika Udugamasooriya
(From 22.11.2025)
Science & Technology Advisor to H.E. the President
Ex-officio Member



Prof. Kapila Seneviratne
(From 30.12.2024)
Chairman
University Grants Commission
Ex-officio Member

Prof. Siril Wijesundara
The Acting Director/NIFS
Ex-officio Member

Prof. Kirthi Tennakone
(From 02.06.2025)
Appointed by H.E., the President

Prof. P.A. Aloy Perera
(From 11.04.2025)
Department of Physics & Electronics
University of Kelaniya
Appointed by H.E., the President

Vacant
Appointed by H.E., the President

Prof. R.D. Jayasinghe
(From 17.02.2025)
Department of Oral Medicine & Periodontology
University of Peradeniya
Appointed by the Hon. Minister

Prof. G.B.B. Herath
(From 17.02.2025)
Department of Civil Engineering
University of Peradeniya
Appointed by the Hon. Minister

Prof. R. Liyanage
Associate Research Professor/NIFS
Elected from the Research Council

Prof. G.R.A. Kumara
Research Professor/NIFS
Elected from the Research Council

Ms. A.A.I. Dilrukshi
(From 21.02.2025)
Director (FOA& Acct) Department of Treasury Operations, Ministry of Finance
Treasury Representative

Mr. C.I. Sakalasooriya
(From 25.08.2025)
Secretary to the Board/NIFS

RESEARCH COUNCIL

The Research Council, whose membership comprises university academics and researchers of the NIFS, served as an advisory body. The Research Council has control over the general direction of research and forwards its recommendations to the Board of Governors.

Chairman

- Prof. D.S.A. Wijesundara, Acting Director, National Institute of Fundamental Studies

Members

Appointed by H.E. the President

- Prof. W.C.S.J. Wickramasinghe, Department of Parasitology, Faculty of Medicine, University of Peradeniya
- Prof. W.A.J.M. De Costa, Department of Crop Science, Faculty of Agriculture, University of Peradeniya

Ex-Officio:

Senior Research Professors, Research Professors, Associate Research Professors, Senior Research Fellows and three research fellows of the National Institute of Fundamental Studies

- Prof. J. Bandara, Senior Research Professor
- Prof. U.L.B. Jayasinghe, Senior Research Professor
- Prof. G. Seneviratne, Senior Research Professor
- Prof. M.A.K.L. Dissanayake, Research Professor (on contract)
- Prof. S.P. Benjamin, Research Professor
- Prof. G.R.A. Kumara, Research Professor
- Prof. R. Weerasooriya, Research Professor (on contract)
- Prof. D.N. Magana-Arachchi, Research Professor
- Prof. R.R. Ratnayake, Research Professor
- Prof. N.D. Subasinghe, Research Professor
- Prof. N. Marikkar, Associate Research Professor
- Prof. R. Liyanage, Associate Research Professor
- Dr. H.W.M.A.C. Wijayasinghe, Senior Research Fellow
- Dr. I.P.L. Jayarathne, Research Fellow
- Dr. M. Premaratne, Research Fellow
- Dr. K.G. Nelum P. Piyasena, Research Fellow

Nominated by the University Grant Commission

- Prof. P. Ravirajan, Department of Physics, Faculty of Science, University of Jaffna
- Prof. Chandana P. Udawatte, Faculty of applied Sciences, Sabaragamuwa University of Sri Lanka
- Prof. M. Vithanage, Ecosphere Resilience Research Centre, University of Sri Jayawardenepura
- Prof. T.M.W.J. Bandara, Department of Physics, Faculty of Science, University of Peradeniya (05.08.2025)
- Prof. H.M.T.G.A. Pitawala, Department of Geology, Faculty of Science, University of Peradeniya

STAFF LIST - 2025

Director	:	Prof. Wijesundara D.S.A.
Secretary	:	Ms. Shiromani M.P.W. *(from 01.11.2023 to 08.05.2025)*
		Prof. Jayasinghe U.L.B. *(from 09.05.2025 to 24.08.2025)*
		Mr. Sakalasooriya C.I. *(from 25.08.2025 – to-date)*

Research Staff

Senior Research Professors

Prof. Bandara J.M.S.
Prof. Jayasinghe U.L.B.
Prof. Seneviratne P.R.G.

Research Professors

Prof. Benjamin S.P.
Prof. Dissanayake M.A.K.L.
Prof. Kumara G.R.A.
Prof. Weerasooriya R.
Prof. Wijesundara D.S.A.
Prof. Magana Arachchi D.N.
Prof. Rathnayake R.R.
Prof. Subasinghe N.D.

Associate Research Professors

Prof. Marikkar N.
Prof. Liyanage N.L.B.R.

Senior Research Fellows

Dr. Wijayasinghe H.W.M.A.C.

Research Fellows

Dr. Jayarathne I.P L.
Dr. Jayasinghe H.D.
Dr. Piyasena K.G.N.P.
Dr. Premaratna U.M.B.
Dr. Kumari J.M.K.W.

Visiting Research Professors (Honorary)

Prof. Adikaram N.K.B.
Prof. Dittus W.P.J.
Prof. Karunaratne V.
Prof. Kulasooriya S.A.
Prof. Nanayakkara A.
Prof. Oi-Ming Lai
Prof. Senadeera G.K.R.
Prof. Vithanage M.

Honorary Visiting Research Fellows

Dr. Nawarathna R.D.
Dr. Nawarathna L.S.
Dr. Ranasinghe S.
Dr. Karunaratne S.

Visiting Scientist (Honorary)

Dr. Edirisinghe V.

Adjunct Professors (Honorary)

Lifetime Research Professors
Prof. Wickramasinghe C.
Prof. Tennakone K.

Adjunct Professors (Honorary)

Other Adjunct Research Professors
Prof. Chandrajith R.
Prof. Chen X.
Prof. Dallavalle S.
Prof. Dharmadasa I.M.
Prof. Fujimoto Y.
Prof. Ismail N.H.
Prof. Junyan L.
Prof. Nammi S.
Prof. Karunaratne S.
Prof. Karunatane S.
Prof. Kuhnert N.
Dr. Rewati R.B.
Prof. Wijekoon P.
Prof. Wei Y.
Prof. Xu Z.
Prof. Xue F.Z.
Prof. Xufeng Z.
Prof. Yonghong L.
Prof. Yoshimura M.
Prof. Yong H.L.

Research Assistants

Computer Science, Mathematics & Statistics Research Programme

Mr. Samaraweera K.G.S.N.	NIFS Research Assistant

Condensed Matter Physics & Solid-State Chemistry Research Programme

Ms. Sewwandi G.G.S.	NIFS Research Assistant
Ms. Sandunika P.U.	NIFS Research Assistant
Mr. Senevirathne M.D.D.S.	NIFS Research Assistant *(From 03.03.2025)*

Earth Resources & Renewable Energy Research Programme

Ms. Shyamamala M.G.R.	NIFS Research Assistant
Dr. Adikaram A.M.N.M.	NIFS Research Assistant *(From 02.06.2025)*

Energy & Advanced Material Chemistry Research Programme

Mr. Rajakaruna R.P.P.D.	NIFS Research Assistant *(Up to 17.10.2025)*
Ms. Sarathchandra K.A.D.M.S.	NIFS Research Assistant (*Up to 31.03.2025)*
Ms. Udayangani U.V.K.	NIFS Research Assistant (*From 01.08.2025)*
Mr. Rajapaksha D.C.	NIFS Research Assistant (*From 21.10.2025)*

Material Development & Pollutants Remediation Research Programme

Ms. Madhumekala M.A.K.	NIFS Research Assistant
Ms. Mannapperuma M.M.A.K.	NIFS Research Assistant *(Up to 05.07.2025)*
Ms. Hasara A.M.	NIFS Research Assistant *(From 15.09.2025)*
Mr. Nawarathne J.M.S.G.B.	Grant Research Assistant

Water Research Programme

Ms. Sewwandi B.V.N.	NIFS Research Assistant
Ms. Pathirana P.K.K.	NIFS Research Assistant
Ms. Hansani H.S.U.	Grant Research Assistant

Evolution, Ecology & Biodiversity Research Programme

Mr. Dayananda D.N.G.	NIFS Research Assistant *(Up to 31.08.2025)*
Ms. Herath K.M.R.K.T.	NIFS Research Assistant

Food Chemistry Research *Programme*

Ms. Fahmida H.F.	NIFS Research Assistant
Mr. Illangarathna D.G.C.S.	NIFS Research Assistant (*From 15.01.2025)*

Material Processing & Device Fabrication Research *Programme*

Ms. Weerasinghe M.I.U.	NIFS Research Assistant *(Up to 14.03.2025)*
Mr. Gamage D.J.D.S.	NIFS Research Assistant
Mr. Kanchana B.L.	NIFS Research Assistant *(From 01.06.2025)*

Microbial Biotechnology Research Programme

Mr. Ekanayake S.	NIFS Research Assistant *(Up to 31.10.2025)*
Ms. Jayasinghe S.D.P.N.	NIFS Research Assistant
Ms. Thilakarathne H.M.R.M.	NIFS Research Assistant *(From 14.07.2025)*
Mr. Pathirana G.P.R.D.	Temporary Research Assistant

Microbiology & Soil Ecosystems Research Programme

Ms. Bandara S.M.D.C.	NIFS Research Assistant *(Up to 2025.09.26)*
Ms. Premaratne W.D.U.	NIFS Research Assistant
Mr. Ahsan M.R.A.	NIFS Research Assistant
Ms. Sangeerththana K.A.	NIFS Research Assistant

Molecular Microbiology & Human Diseases Research Programme

Ms. Bandara H.M.N.T.	NIFS Research Assistant *(Up to 2025.05.31)*
Mr. Wickramasinghe M.L.M.	NIFS Research Assistant *(From 04.08.2025)*
Ms. De Silva G.H.S.S.	NIFS Research Assistant *(From 04.08.2025)*
Ms. Jayanetti H.	NIFS Research Assistant *(From 04.08.2025)*

Nanotechnology & Advanced Materials Research Programme

Mr. Fernando W.T.R.S.	NIFS Research Assistant
Ms. Naranpanawa H.M.H.D.K.	NIFS Research Assistant

Natural Products Research Programme

Ms. Chathurangani S.A.D.	NIFS Research Assistant
Ms. Premasiri H.A.K.D.	NIFS Research Assistant
Mr. Bandara Y.G.A.D.K.	NIFS Research Assistant
Ms. Alakolanga A.G.A.W. *	Grant Research Assistant
	* on leave from Uwa Wellasse University

Nutritional Biochemistry Research Programme

Ms. Prasadini H.R.P.	NIFS Research Assistant
Ms. Wickramasinghe M.	NIFS Research Assistant
Ms. Jayakodi J.M.Y.U.	NIFS Research Assistant

Plant Taxonomy & Conservation Research Programme

Mr. Lekamge P.L.C.U.S.B.	Acting Arboretum Manager
Ms. Premaratne H.K.G.B.M.	Grant Research Assistant
Ms. Agalawala T.	Grant Research Assistant

Rhizobium Project Staff

Mr. Ekanayake E.M.H.G.S.	Research & Development Officer
Mr. Kumara R.K.G.K.	Field Manager
Ms. Aberathne A.H.M.C.D.	Technical Assistant
Mr. Tennakoon A.H.M.A.K.	Technical Assistant

Technical staff attached to Research programmes

Ms. Aluthpatabendi D.M.	Chief Technical Officer
Mr. Athukorale N.P.	Chief Technical Officer
Mr. Jayaweera D.S.	Chief Technical Officer
Mr. Jayasekara Banda W.G.	Chief Technical Officer *(Retired27.06.2025)*
Mr. Pathirana G.P.A.K.	Chief Technical Officer *(Resigned 31.05.2025)*
Ms. Perera R.S.M.	Chief Technical Officer
Ms. Ratnayake R.H.W.M.I.C.	Technical Officer Grade III
Mr. Premarathna H.	Technical Assistant *(Contract basis)*

Other staff members attached to Research Projects

Mr. Hapukotowa R.B.	Laboratory Attendant- Special Grade
Mr. Wijewardena P.G.N.S.	Primary level-unskilled
Ms. Harischandra D.R.T.L.	Lapidarist Gr. III

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Ms. Seneviratne O.W.K.	Senior Staff Assistant
Ms. Liyanage D.M.A.D.E.	Management Assistant Gr. III *(Resigned 31.10.2025)*
Mr. Bandara A.G.J.S.	Office Aid Gr. III

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Mr. Dissanayake D.M.D.B.	Driver Gr. II
Mr. Jayasinghe H.A.D.N.	Driver Gr. II
Mr. Abeysinghe K.P.	Driver Gr. III
Mr. Dahanayaka M.N.	Driver Gr. III

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Ms. Rathnayake R.M.V.P.	Senior Staff Assistant – Clerical
Mr. Keshan M.K.D.	Management Assistant Gr. II
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Mr. Weerasuriya B.J.	Management Assistant Gr. II
Ms. Dineshika K.S.H.	Management Assistant Gr. III

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Mr. Gunathilake D.G.	Record Keeper- Special grade
Ms. Sumanaratne H.M.T.L.	Management Assistant Gr. III
Ms. Wijekoon P.H.G.M.K.K.	Management Assistant Gr. III
Mr. Udapitiya U.B.R.S.	Machinist Gr. III
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Ms. Herath H.M.G.N.N.	Management Asst. Gr. II
Mr. Senevirathne M.C.V.B.	Audio Visual Assistant
Mr. Malwewa M.G.D.K.	Office Aid Gr. II

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