

# Golden Jubilee Souvenir Magazine



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#### Message from the Chairman of the University Grants Commission



I extend my warmest greetings and heartfelt congratulations to the Faculty of Science of the University of Jaffna on the momentous occasion of its Golden Jubilee. This significant milestone marks fifty years of dedicated service to science education, pioneering research, and meaningful contributions to national development and society at large. The Faculty of Science commenced its academic journey in 1974 at the Undergraduate Section of Jaffna College, Vaddukoddai, with degree programmes in Mathematics and Statistics. In 1975, it broadened its academic scope with

the introduction of the Biological and Physical Sciences through the establishment of five core departments—Botany, Chemistry, Mathematics and Statistics, Physics, and Zoology. The remarkable progress and achievements of the Faculty of Science must be viewed in the context of the many challenges and constraints it has faced over the decades, including periods of severe adversity and uncertainty. Despite these circumstances, the Faculty has demonstrated resilience, determination, and an unwavering commitment to maintaining academic standards and delivering quality undergraduate and postgraduate education. Its ability not only to survive but to grow steadily stands as a testament to the dedication of its academic and non-academic staff, as well as the perseverance of its students.

Over the past fifty years, the Faculty of Science has produced generations of highly competent graduates who have excelled both nationally and internationally, making significant contributions to academia, industry, research, and public service. The collective efforts of its staff, students, and alumni have been instrumental in building the Faculty's distinguished reputation and in strengthening the scientific capacity of the nation. As the Faculty celebrates this Golden Jubilee, it provides an opportune moment to honour its rich legacy while also reflecting on its future direction. I am confident that the Faculty of Science will continue to uphold the highest standards of academic integrity, foster intellectual curiosity and innovation, and remain committed to social responsibility, thereby serving as a centre of excellence in scientific education and research in Sri Lanka and beyond. I take this opportunity to convey my best wishes and felicitations to the Dean, members of the Faculty Board, academic and non-academic staff, students, and alumni for their commitment and collective efforts in organising the Golden Jubilee celebrations and in compiling this commemorative souvenir, which aptly captures the spirit and achievements of fifty years of scientific excellence.

I wish the Faculty of Science continued success, growth, and distinction as it embarks on the next chapter of its proud and inspiring journey.

# Senior Professor Kapila Seneviratne

Chairman, University Grants Commission

#### Message from the Chancellor



I extend my warmest greetings to the Faculty of Science of the University of Jaffna on the momentous occasion of its Golden Jubilee. This significant milestone marks fifty years of steadfast commitment to excellence in science education, pioneering research, and dedicated service to society.

The Faculty of Science commenced its academic activities in 1974 at the Undergraduate Section of Jaffna College, Vaddukoddai, initially offering programmes in Mathematics and Statistics. In 1975, the Faculty broadened its academic scope by introducing courses in the Biological and Physical Sciences through five departments - Botany, Chemistry,

Mathematics and Statistics, Physics, and Zoology. In the 1990s, the establishment of the Departments of Computer Science and Fisheries further strengthened the Faculty's academic profile and enhanced its responsiveness to emerging disciplinary developments and national needs.

I have been closely associated with the Faculty of Science and the University of Jaffna since 1977 - first as a Visiting Academic from the University of Peradeniya and then from 1981 to 2012 as a member of the academic staff including as Head of the Department of Physics for a decade and as Dean of the Faculty for a further decade. It is therefore with immense pride and deep personal satisfaction that I witness the Faculty's sustained growth, innovation, and unwavering commitment to academic excellence in meeting the evolving demands of the modern world.

Over five decades, the Faculty of Science has produced generations of highly competent graduates who have excelled both nationally and internationally, contributing meaningfully to academia, industry, and society at large. The dedication and perseverance of its academic and non-academic staff, together with the achievements of its students and alumni, have been central to building the Faculty's distinguished reputation and strengthening the nation's scientific capacity.

As the Faculty celebrates this Golden Jubilee, it provides an opportunity not only to honour its rich legacy and remarkable achievements, but also to reflect on its vision for the future. I am confident that the Faculty of Science will continue to uphold the core values of academic integrity, intellectual curiosity, and social responsibility, serving as a beacon of scientific advancement and higher learning in Sri Lanka and beyond.

I extend my appreciation to the Dean, staff, students, and alumni for their collective efforts in organising the Golden Jubilee celebrations and in compiling this souvenir, which aptly captures the spirit and legacy of fifty years of scientific excellence.

I wish the Faculty of Science continued success and distinction in all its future endeavours.

# Prof. R. Kumaravadivel

Chancellor, University of Jaffna

#### Message from the Vice Chancellor



It is with great joy that I extend my warm greetings to the Faculty of Science, University of Jaffna, on the momentous occasion of its Golden Jubilee Celebration. This remarkable milestone marks fifty years of consistent commitment to excellence in science education, pioneering research, and invaluable service to society.

Established in 1974, alongside the founding of the Jaffna Campus, the Faculty of Science has been a cornerstone of the University from its very inception. It began with a single Department of Mathematics and

Statistics, laying the foundation for what would later evolve into a vibrant centre for scientific learning and research. Today, the Faculty proudly comprises seven departments, offering a wide spectrum of academic programmes and research opportunities. Over the past five decades, it has nurtured generations of scientists, educators, and professionals who have made remarkable contributions both nationally and internationally.

I have been closely associated with the Faculty of Science since 1979. First, as an alumnus of this Faculty, I remember with gratitude the praiseworthy role my teachers and other academics played in educating and supporting thousands of students.

Later, I joined the Faculty as an academic. The Faculty was instrumental in shaping my intellectual growth and academic journey. I also had the honour of serving as the Head of the Department of Mathematics and Statistics, as well as the Dean of the Faculty. I take immense pride in witnessing its continued growth, innovation, and unwavering commitment to academic excellence in meeting the ever-evolving needs of the modern world. This Jubilee provides an opportunity not only to celebrate the Faculty's rich history and remarkable achievements but also to reflect on its vision for the future. The dedication and perseverance of its academic and non-academic staff, together with the enthusiasm and achievements of its students and alumni, have been instrumental in shaping the Faculty's distinguished reputation.

As we look ahead, I am confident that the Faculty of Science will continue to uphold the core values of academic integrity, intellectual curiosity, and social responsibility, serving as a beacon of scientific advancement and higher learning in Sri Lanka and beyond.

I extend my sincere appreciation to the Dean, staff, students, and alumni for their collective efforts in organizing this Golden Jubilee celebration and in compiling this souvenir, which captures the spirit and legacy of fifty years of scientific excellence.

I wish the Faculty of Science continued success in all its future endeavours.

#### Prof. S. Srisatkunarajah

Vice-Chancellor, University of Jaffna & Professor in Mathematics

#### Message from the Dean, Faculty of Science



It is with profound pride and deep gratitude that I convey this message to mark the Golden Jubilee of the Faculty of Science, University of Jaffna. Fifty years of dedicated service to higher education and scientific advancement stand as a fitting tribute to the vision, resilience, and collective endeavour of generations of academics, administrators, students, alumni, and partners who have shaped the Faculty's distinguished legacy.

The Faculty commenced its academic journey in 1974 at the Undergraduate Section of Jaffna College, Vaddukoddai, with degree

programmes in Mathematics and Statistics. In 1975, it expanded into the Biological and Physical Sciences with the establishment of five departments—Botany, Chemistry, Mathematics and Statistics, Physics, and Zoology. The subsequent creation of the Departments of Computer Science and Fisheries in the 1990s further strengthened the Faculty's academic profile, enabling it to respond effectively to emerging disciplinary developments and national priorities.

Over the past two years, beginning with the *VINGNANAM Research Conference* in 2024, the Golden Jubilee Organising Committee has played a pivotal role in coordinating a wide range of academic, cultural, sporting, and STEM outreach initiatives. These activities reflect the Faculty's engagement with society and its commitment to nurturing scientific curiosity beyond the University. I sincerely appreciate the dedication and tireless efforts of all members of the Golden Jubilee Committee, student societies, and the Faculty of Science Alumni Association for their invaluable contributions.

Having served for nearly three decades as a member of the Department of Physics, and over five years as Dean since June 2020, I have witnessed and contributed to a transformative phase in the Faculty's development. During this period, the Faculty has consolidated its position as a leading centre of scientific excellence within both the University of Jaffna and the national higher education system. These achievements reflect the dedication of our academic and non-academic staff, the enthusiasm of our students, and the support of the University administration, alumni, funding agencies, and national and international collaborators.

A defining feature of recent progress is the Faculty's emphasis on research and development. Through meaningful international collaborations, the Faculty has secured several large-scale and highly competitive research grants, enhancing research infrastructure and human capacity. It has emerged as the highest contributor to the University's research output, accounting for approximately 40 per cent of quality publications.

As we move forward, the Faculty remains committed to advancing scientific knowledge, nurturing future scientists, strengthening research excellence, and contributing meaningfully to national development and global scholarship. I extend my heartfelt appreciation to all who have contributed to its success and wish the Faculty continued excellence in the years ahead.

#### Prof. Punniamoorthy Ravirajan

Dean, Faculty of Science & Senior Professor of Physics

#### Message from the Chair, Golden Jubilee celebrations committee



It is with profound pride and personal fulfillment that we share this message as we celebrate the Golden Jubilee of the Faculty of Science at the University of Jaffna. Fifty years of unwavering commitment to scientific progress and higher education reflect the vision, resilience, and shared efforts of the many academics, supporting staff, and students who have built our distinguished legacy. Having served this Faculty for over twenty years, I am deeply gratified to see how our modest origins have matured into a cornerstone of academic excellence.

Our faculty's academic journey commenced in 1974 with a foundational focus on Mathematics and Statistics. By 1975, the faculty had blossomed into a multidisciplinary hub, with the establishment of five core departments: Botany, Chemistry, Mathematics and Statistics, Physics, and Zoology. For fifty years, these departments have served as the pillars of our institution, nurturing generations of scientists, educators, and innovators who have made their mark globally.

As Chairman of the Golden Jubilee Committee, it has been an honor to oversee a year-long tribute to our rich history. Our commemorative calendar has been a vibrant reflection of our Faculty's diversity and dynamism.

Beyond the laboratory, various sports tournaments and cultural events brought together our staff, students, and the Alumni Association, strengthening the vital bonds of our scientific community. We celebrate not just our people, but our tangible progress—marked by the acquisition of advanced laboratory equipment, the construction of new facilities, and the rigorous revision of our curricula to ensure we remain at the global forefront of science.

The commemorative session on 30<sup>th</sup> December 2025 stands as the pinnacle of our celebrations. It is a day dedicated to gratitude. We gather to recognize our "jubilant staff" whose decades of dedicated service are the very heartbeat of this Faculty. We also celebrate the excellence of the students and staff who succeeded in our jubilee tournaments, proving that the pursuit of excellence is a holistic endeavor.

This Souvenir Magazine is a lasting testament to our collective journey. It captures fifty years of achievements, from major research breakthroughs to the physical expansion of our campus. This Golden Jubilee magazine is more than a retrospective; it is the catalyst for our next half-century of innovation and growth.

I wish to express my deepest gratitude to the Golden Jubilee Committee, the Faculty Board, and all stakeholders for their tireless efforts in making this milestone a landmark success. To my colleagues and students: may we continue to pursue knowledge with the same passion and integrity that has defined the Faculty of Science since 1974.

# **Prof. G. Sashikesh**Chairman, Golden Jubilee Committee & Professor in Chemistry Faculty of Science

#### Message from the Chief Editor, Golden Jubilee Souvenir, Faculty of Science



It is a great pleasure to be part of the Golden Jubilee celebrations of the Faculty of Science, University of Jaffna, both as an academic and as an alumna of the Faculty.

To commemorate the significant milestones and achievements in the distinguished journey of the Faculty, the Golden Jubilee Celebrations Committee resolved to publish this *Golden Jubilee Souvenir Magazine*. This publication brings together five decades of academic excellence, made possible by the dedicated contributions of the Faculty's academic staff.

The contents of this Souvenir are organized into nine sections, reflecting the Faculty's evolution and accomplishments. These include its historical development, academic departments, degree programmes and curriculum, major developmental initiatives, research and development activities, details of centres, student unions and societies and their contributions, future development plans of the Faculty, an annexure highlighting the academic excellence and scholarly contributions of staff, and a gallery capturing significant events over the years.

As the Chief Editor of this Souvenir, I wish to extend my sincere gratitude to the academic staff of the Faculty for providing the necessary information and materials for compiling this publication. I am especially thankful to the Dean of the Faculty, Prof. P. Ravirajan, for his immense support and guidance at every stage of this endeavour. I also wish to acknowledge the valuable assistance of Prof. S. N. Surendran, Prof. A. Ramanan and Prof. G. Sashikesh in data collection, compilation and editing. My appreciation is further extended to Dr. K. Gunaalan and Mr. S. Thivas for their tireless efforts in preparing photographs and staff profile images. I offer my special thanks to Professor T. Sananthanan for the cover page and layout design.

I am also grateful to the members of the Golden Jubilee Celebrations Committee and the Heads of Departments for their constructive comments and suggestions throughout the preparation of this Souvenir. My sincere thanks are due to Guru Printers for ensuring the timely production of this publication.

I firmly believe that this Golden Jubilee Souvenir serves not only as a tribute to our past, remembered with gratitude, but also as an inspiration to broaden our horizons and advance further in science education and research at the University of Jaffna.

### **Prof. Ms. Thulasitha W. Shanthakumar** Chief Editor, Golden Jubilee Committee & Professor in Zoology Faculty of Science

#### **Golden Jubilee Souvenir Magazine**

#### **Synopsis**

The Golden Jubilee Souvenir Magazine of the Faculty of Science, University of Jaffna, commemorates fifty years of dedicated service to higher education, scientific inquiry, and national development. This publication stands as a tribute to the vision, perseverance, and collective efforts of generations of academics, administrators, students, and partners who have contributed to the Faculty's growth and excellence since its inception.

Chapter One provides a comprehensive overview of the Faculty, beginning with a preamble that reflects its founding vision and mission. It traces the historical evolution of the Faculty of Science, highlighting key milestones, institutional growth, and transformative phases over the past five decades. The chapter further outlines the organizational structure, infrastructure facilities, staff profiles, and student statistics, followed by detailed accounts of the seven academic departments: Botany, Chemistry, Computer Science, Fisheries, Mathematics and Statistics, Physics, and Zoology, showcasing their academic strengths and scholarly contributions.

**Chapter Two** focuses on academic programmes and curriculum development. It documents the evolution of programme structures, the range of degree programmes offered, and the systematic processes of curriculum design, revision, monitoring, and review. This chapter reflects the Faculty's sustained commitment to academic relevance, quality assurance, and responsiveness to national and global scientific advancements.

Chapter Three highlights major Research and Development (R&D) projects that have strengthened the Faculty's academic, research, and physical infrastructure. It outlines support received from national and international funding agencies, including the Sri Lankan National Research Council and National Science Foundation, the Swiss and Norwegian Research Councils, the Asian Development Bank, the World Bank (IRQUE, HETC, and AHEAD projects), the Norwegian Directorate for Higher Education and Skills (HRNCET and CBERC projects), and the Swedish International Development Cooperation Agency (Sida). These staff-led initiatives have significantly enhanced the Faculty's higher education and research capacity, contributing to the University's overall development. The chapter also highlights improvements in teaching and learning environments, research capacity building, human resource development, and the establishment of new facilities, including those for Computer Science and Fisheries.

**Chapter Four** is dedicated to research and development activities, showcasing the Faculty's vibrant research culture. It highlights conferences, symposia, undergraduate research forums, and student-led scientific initiatives. The chapter also introduces the VINGNANAM Journal of Science and outlines collaborative research efforts fostered through Memoranda of Understanding with national and international institutions.

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**Chapter Five** presents the specialized centres established under the Faculty, including the Centre for Research in Entomology and the Centre for Science Education, emphasizing their roles in advancing research, outreach, and science education.

**Chapter Six** celebrates student life and leadership through an overview of the Science Students' Union and various departmental and professional societies. These student organizations play a vital role in fostering academic engagement, professional development, teamwork, and excellence in extracurricular activities.

**Chapter Seven** outlines future development plans, presenting the Faculty's strategic vision for academic expansion, research innovation, infrastructure development, and global engagement as it moves beyond its Golden Jubilee.

The Annexure provides a comprehensive record of achievements and recognitions, including national and international research and development grants, patents, fellowships, prestigious awards, endowments, and Memoranda of Understanding.

**Overall,** this Golden Jubilee Souvenir Magazine serves not only as a historical record but also as a source of inspiration, reaffirming the Faculty of Science's unwavering commitment to academic excellence, research innovation, and service to society over the past fifty years and into the future.

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#### 1. Overview of the faculty

#### 1.1 Preamble

The Faculty of Science commenced its academic activities in 1974 at the Undergraduate Section of Jaffna College, Vaddukoddai, initially offering programmes in Mathematics and Statistics. In 1975, the Faculty expanded its academic scope by introducing courses in the Biological and Physical Sciences through five departments—Botany, Chemistry, Mathematics and Statistics, Physics, and Zoology. After two decades of dedicated service, the establishment of the Departments of Computer Science and Fisheries further strengthened the Faculty's academic profile and enhanced its responsiveness to emerging disciplinary developments and national needs.

The Faculty of Science proudly celebrates its Golden Jubilee in the year 2024/2025, marking the completion of five decades since its establishment. As one of the most esteemed and oldest science faculties in the country, it has continually expanded its horizons across the fields of biological, physical, and computer sciences, producing highly competent graduates who meet global standards of excellence.

In its remarkable journey, the Faculty of Science has illuminated the path of many scholars who now excel across the globe in diverse fields. It has provided a strong foundation for learning, discovery, and innovation, helping students grow into skilled scientists and leaders.

Through its visionary leadership, dedicated academic staff, and ever-evolving curriculum, the faculty has not only nurtured generations of scientists and industrialists but also strengthened the nation's scientific capacity. As it celebrates its Golden Jubilee, the Faculty of Science proudly reaffirms its mission to advance learning, research, and innovation, empowering minds to shape a sustainable and enlightened future for all.

#### Vision

"The vision of the faculty is to be a recognised center of science learning in Sri Lanka".

#### Mission

"The mission of the faculty is to produce competent graduates who excel in learning and research in basic sciences and who could contribute to the development of the nation".

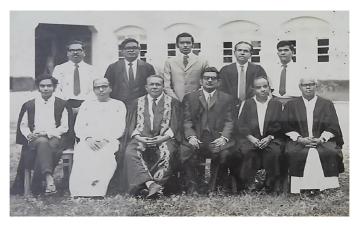
#### 1.2 History of the Faculty of Science, University of Jaffna

The Faculty of Science, University of Jaffna, has a distinguished and eventful history that parallels the evolution of higher education in northern Sri Lanka. Since its inception in 1974, it has remained steadfast in its mission to advance scientific knowledge, foster innovation, and contribute to both national and global development through education, research, and community engagement. Guided by its vision to be a centre of excellence in science and technology, the Faculty has continuously adapted to emerging academic, technological, and societal challenges, nurturing generations of scientists, educators, and innovators who continue to make meaningful contributions locally and internationally.

#### Foundations (1974–1978): Laying the Academic Bedrock

The journey of the Faculty of Science began on 1 August 1974 with the establishment of the Jaffna Campus of the University of Sri Lanka, the sixth campus in the national university system. Initially based at Parameswara College, Thirunelvely, the Faculty commenced operations at the Undergraduate Section of Jaffna College, Vaddukoddai, offering courses in Mathematics and Statistics.

# The University of Sri Lanka – Jaffna Campus The Pioneers 1974/ 1975



**Seated (L–R):** Prof. K. Indrapala (Dean of Humanities and Head, Department of History), Prof. K. Kailasanathakurukkal (Head, Department of Hindu Civilization), Dr. L. H. Sumanadasa (Vice-Chancellor), Prof. K. Kailasapathy (President and Head, Department of Tamil), Prof. P. Kanagasapapathy (Dean of Science and Head, Department of Mathematics and Statistics), Mr. K. P. G. Wijayasurendra (Deputy Registrar).

**Standing (L–R):** Dr. S. Mageswaran (Head, Department of Chemistry), Prof. V. K. Ganeshalingam (Head, Department of Zoology), Mr. K. Ratnathilaka (Assistant Treasurer), Mr. R. S. Thambiah (Librarian-in-Charge), Prof. K. Kunaratnam (Head, Department of Physics).

In 1975, the Faculty broadened its academic scope with the introduction of programmes in Biological and Physical Sciences, leading to the establishment of five foundational departments: Botany, Chemistry, Mathematics & Statistics, Physics, and Zoology, headed by distinguished academics Dr. A. Sivapalan, Prof. S. Mageswaran, Prof. K. Kanagasapapathy, Prof. K. Kunaratnam, and Prof. V. K. Ganeshalingam, respectively, from the Universities of Colombo and Peradeniya.

Thirty-five students were admitted to these courses in the academic year 1975/76. As the facilities available in the small laboratories at Vaddukoddai were grossly inadequate for work beyond the First Year Courses and future development at Vaddukoddai was not possible due to acute shortage of freshwater and space, a decision was taken to put up new buildings for the Faculty of Science at Thirunelvely where the Faculty of Humanities and the administrative offices were sited.

The Faculty shifted to the Thirunelvely premises in June 1978 soon after the completion of the Natural Science Block (Stage I), the foundation for which was laid on May 07, 1975. In 1977, funds were voted for a building to the Department of Physics. With the completion of the Natural Science Block I in 1978, the Faculty moved to its permanent site in Thirunelvely, marking the beginning of a lasting culture of academic excellence, research curiosity, and community service.

#### Autonomy and Early Growth (1979–1985): Building Capacity

A defining milestone was reached on 1 January 1979 when the Jaffna Campus gained autonomy as the University of Jaffna. This transition ushered in an era of institutional strengthening and academic expansion. Infrastructure development supported this progress, with the completion of the Physics Block in 1980 and the Mathematics and Statistics Block in 1985. The latter also housed a pioneering Computer Unit, an early recognition of the role of computing in scientific advancement and higher education. These developments underscored the Faculty's commitment to modernising science education and equipping students with the skills necessary for the technological age.

#### Resilience and Renewal (1986-1996): Advancing Amid Adversity

The late 1980s and early 1990s were marked by both academic growth and resilience in the face of adversity. In 1986, the University Library was established as an independent facility, and the same year saw the launch of the VINGNANAM Journal of Science, a platform for disseminating scholarly research. The Chemistry Block was completed in 1988, and the Department of Computer Science was established in 1991, further strengthening the Faculty's academic framework.

The prolonged civil conflict in the region brought immense challenges. Following the mass displacement of civilians in October 1995, the University administration was temporarily relocated to the Faculty of Agriculture premises in Kilinochchi. Despite these disruptions, academic activities resumed in Jaffna by May 1996, a testament to the faculty's resilience, determination, and unwavering commitment to its mission of advancing education and research under difficult circumstances.

#### Consolidation and Modernization (1999–2010): Rebuilding for the Future

A transformative phase of reconstruction and modernisation followed, marking a new chapter in the Faculty's post-conflict development. The establishment of the Centre for the Development of Fisheries (CDF) in 1999 represented a strategic milestone, advancing marine and aquatic sciences to address regional and national priorities.

International partnerships played a pivotal role in strengthening the Faculty's research capacity and infrastructure. In 2001, support from the Asian Development Bank (ADB) enabled the establishment of a spectroscopic laboratory at the Department of Chemistry, while assistance from SIDA in 2003 facilitated the installation of a fibre-optic network across the University, ushering in a new era of digital connectivity. That same year, the introduction of a four-year Bachelor of Science in Education programme responded to the country's growing need for qualified science educators.

The Faculty achieved several key milestones during this period: in 2004, it received an LKR 87 million IRQUE/QEF grant for the Physical Sciences and organised a Science Exhibition to inspire school children; in 2005, it completed the Computer Unit Block; in 2007, it launched a four-year subject-specific BSc in Computer Science degree programme; in 2009, it established the Department of Fisheries; and in 2010, it relocated the Computer Unit to the Library Block, enhancing access to digital learning resources. Together, these initiatives broadened access to science education, strengthened research capacity, and deepened the integration of scientific inquiry with community development.

#### Research Intensification and Global Links (2012–2018): Scaling Excellence

The Faculty entered a phase of accelerated research growth and international engagement during this period. In 2012, two HETC-QIG grants strengthened both the Physical and Biological Sciences, and the completion of Natural Science Block II in 2013 expanded laboratory facilities. The introduction of the Extended Honours Degree Programme in Applied Science in 2014 diversified academic pathways and enhanced professional opportunities for students.

The Faculty's internationalisation gained momentum with the President's Scholarship Scheme (2016), which brought international students to Jaffna. A landmark Memorandum of Understanding (MoU) signed with the Western Norway University of Applied Sciences (HVL) in 2017, supported by NOK 4.7 million (LKR 85 million), initiated a five-year collaboration on

nanomaterials and clean energy. In 2018, the Royal Norwegian Embassy awarded LKR 112 million to further research on clean energy technologies.

The establishment of the Clean Energy Research Laboratory (CERL) in 2018 and the hosting of the 1<sup>st</sup> VINGNANAM International Research Conference (VIRC) under the theme "Exploring Science for a Smart Future" highlighted the faculty's growing leadership in cutting-edge and sustainable scientific research.

#### Expansion and Diversification (2019–2023): Towards Innovation and Impact

Under the World Bank-funded AHEAD Project, the construction of the Computer Science Block commenced in 2019, with an investment of LKR 247.7 million, a landmark in the Faculty's infrastructural and technological expansion. That same year, the Faculty hosted AMCEHA 2019 (the International Conference on Advanced Materials for Clean Energy & Health Applications), which attracted over 400 participants, including 120 international delegates, solidifying its standing as a hub for global scientific collaboration.

In 2019, a consortium agreement was signed between the Arctic University of Norway, UiT (the grantee), University of Ruhuna (UoR), which is the focal point, University of Jaffna (UoJ) and National Aquatic Resources Research & Development Agency (NARA) for a collaboration project NORLANKA BLUE - an innovative research and education network in fisheries, aquaculture and aquatic sciences. Under this grant, UiT and the collaborative Universities jointly secured a grant of up to NOK 4.99 million over the period of five years (2019 - 2023), fostering research and educational capacities of staff and students, as well as industry linkages, through both direct project involvement and policy mechanisms.

In 2020, marking a significant milestone in its 50-year history, the University of Jaffna established its first research centre, the Centre for Research in Entomology (CRE), within the Department of Zoology. The CRE was created to consolidate and coordinate entomological research and outreach activities, serving as a focal point for advancements in the field. Equipped with modern instruments and state-of-the-art facilities, the centre supports advanced research in entomology, leading to MPhil and PhD degrees. Research grants (from National Science Foundation of Sri Lanka and National Research Council of Sri Lanka) facilitated the procurement of essential equipment, while further enhancements were made possible through the generous donation of research instruments by alumni. The CRE has also fostered international collaborations with University of Bern under the SPIRIT (Swiss Programme for International Research by Scientific Investigation Teams) programme.

Between 2019 and 2023, the Faculty secured LKR 175 million in faculty development grants and development-oriented research work on Battery research, reinforcing its commitment to innovation and applied research and the Laboratory for Energy Conversion and Storage (2023), while the Social Welfare Centre and the Faculty Research Centre of Excellence, both launched in 2022, enhanced interdisciplinary collaboration and research excellence.

International partnerships flourished during this period. Memoranda of Understanding were signed with the University of Bergen (2022) and the University of Konstanz, Germany (2023), facilitating collaboration in renewable energy, natural sciences and computational linguistics. In partnership with HVL and the University of Bergen (UiB), the Faculty also secured LKR 200 million from the Norwegian Directorate for Higher Education and Skills to support student training and academic exchange programmes for funding five PhD students who would be mainly working at the University of Bergen and Western Norway University of Applied Sciences under joint supervision from all three universities.

As the regional centre for science education in the Northern Province, the Faculty has long been a leader in outreach and community engagement. To strengthen and coordinate these efforts, the Centre for Science Education (CSE) was established in 2021 to promote science literacy, teacher development, and community-based learning. In line with the Faculty's vision, the CSE aims to evolve into a Department of Science Education, furthering its mission to foster scientific understanding and community empowerment.

#### Recent Developments and the Way Forward (2024–2025): Sustaining Momentum

The Faculty's role as a platform for scientific exchange and innovation has been further reinforced through the 2<sup>nd</sup> and 3<sup>rd</sup> VINGNANAM International Research Conferences (2022 and 2024) and the 3<sup>rd</sup> International Conference on Nanomaterials for Clean Energy and Health Applications (AMCEHA 2025). These events collectively attracted more than 400 researchers, including over 150 international participants, fostering a vibrant culture of global collaboration.

During the Golden Jubilee of the faculty, the completion of the ground floor of the Fisheries Science Block marked another important milestone, strengthening research and teaching in fisheries and aquatic sciences. Looking ahead, the Faculty remains committed to producing globally competent graduates, advancing interdisciplinary research, and contributing to sustainable national development through science and technology.

#### **Legacy and Vision**

From humble beginnings in borrowed classrooms in 1974 to its present stature as a dynamic centre of teaching, research, and innovation, the Faculty of Science, University of Jaffna, stands as a beacon of resilience, excellence, and service. Guided by its core values of integrity, inclusivity, and innovation, it continues to advance in key fields such as physical sciences, computer sciences, biological innovation, and fisheries development.

With an unwavering dedication to community engagement, environmental sustainability, and global collaboration, the Faculty seeks to inspire future generations of scientists and innovators. Its enduring mission, to advance scientific knowledge for the betterment of humanity, remains the cornerstone of its success and its vision for the future.

## 1.3 Milestones in the Journey of Faculty of Science

Year	Key events				
	The Jaffna Campus of the University of Sri Lanka was established as the sixth campus on 1 August 1974 at the Parameswara College premises, Thirunelvely.				
1974	The Faculty of Science commenced operations at the Undergraduate Section of Jaffna College, Vaddukoddai, initially offering courses only in Mathematics and Statistics.				
1975	The Faculty began offering courses in Biological and Physical Sciences, establishing five departments: Botany, Chemistry, Mathematics & Statistics, Physics, and Zoology.				
1978	The Faculty was relocated to the Thirunelvely premises in June 1978 with the completion of the Natural Science Block I.				
1979	The Jaffna Campus became an independent and autonomous institution, officially named the University of Jaffna, on 1 January 1979.				
1980	The Physics Block was completed and opened for use in September 1980.				
	The Mathematics and Statistics Block was completed.				
1985	A Computer Unit was established and operated from the western half of the ground floor of this block.				
1986	The Library was shifted to its own building following the partial completion of the Library Block.				
	Inaugurated the publication of VINGNANAM Journal of Science.				
1988	The Chemistry Block was completed and opened for academic use.				
1991	The Department of Computer Science was established, occupying the eastern half of the ground floor of the Mathematics and Statistics Block.				
1995	Following the mass exodus of civilians from Jaffna and Valikamam in October 1995, the University administration was temporarily shifted to the Faculty of Agriculture premises at Kilinochchi.				
1996	The University resumed operations in Jaffna in May 1996.				
1999	The Centre for the Development of Fisheries (CDF) was established.				

	Asian Development Bank grant of US\$ 150,000 awarded to the Faculty of Science to purchase laboratory equipment.
2003	A new degree programme BSc in Education (four-year degree programme) was introduced.
	A fibre optic network was established across the university, including the Faculty of Science, with the support from SIDA grant worth of LKR 150 million.
	The Physical Science stream secured LKR 77 million IRQUE/QEF grant for enhancing undergraduate education.
2004	The Department of Computer Science occupied the full ground floor of the Mathematics and Statistics Block.
	The Faculty organised a Science Exhibition to foster scientific creativity among school children in the Northern Province.
2005	The Computer Unit Block was completed in the Faculty premises, and the Computer Unit was relocated there.
2007	A four-year subject-specific degree programme in Computer Science commenced.
2009	The Department of Fisheries was established.
2010	The Computer Unit was relocated to the first floor of the Library Block.
2012	The Faculty secured two HETC-QIG grants benefiting the Physical Science and Biological Science streams worth of LKR 25 million each.
2013	The Natural Science Block II was completed and opened for academic activities.
	The Faculty introduced the Extended Honours Degree Programme in Applied Science.
2014	A student study hall was established between the departments of Mathematics and Physics under the World Bank funded HETC grant for the Physical Science study programme.
2016	Under the President's Scholarship Scheme, two international students were admitted to the BSc Hons (Computer Science) study programme.
2017	A Memorandum of Understanding was signed with the Western Norway University of Applied Sciences, securing NOK 4.7 million (≈LKR 85 million) for a five-year collaborative research programme on nanomaterials for clean energy under the HRNCET Project.

2018	The Faculty secured LKR 112 million from the Royal Norwegian Embassy for a three-year project (2018–2021) on nanomaterials for clean energy applications.  A state-of-the-art Clean Energy Research Laboratory was established in the Department of Physics.  The Faculty hosted the first VINGNANAM International Research Conference under the theme "Exploring Science for a Smart Future" on 4 July 2018.
2019	The foundation stone for the Computer Science block was laid on 29 May 2019 under the World Bank-funded AHEAD project worth LKR 247.7 million.  The HRNCET project organised the International Conference on Advanced Materials for Clean Energy & Health Applications (AMCEHA).  The Faculty secured LKR 175 million in World Bank grants for faculty and departmental development projects.  The Annual Solar Eclipse Observation Camp was held at the university with support from the Ministry of Technology and Innovation and the Royal Norwegian Embassy.
2020	The Faculty organized an exhibition under the theme of "Science Education for a Bright Future – 2020" from 4 - 7 March 2020 to foster scientific creativity among school children in the Northern Province.  The Faculty thrived in academic activities during the COVID19 pandemic.  A state-of-the-art Centre for Research in Entomology (CRE) was opened on 25 September 2020 at the Department of Zoology.  The Faculty submitted Self-Evaluation Reports (SERs) to the QAC of the UGC for the BSc Hons (Computer Science), BSc Hons, and BSc study programmes for evaluation.
2021	Faculty Social Welfare Centre, Incubation Cell, The Faculty Research Centre of Excellence and English Language Laboratory were established (2021/2022) under the AHEAD Faculty Development project grant funded by the World Bank and opened for student use.  The student study hall was refurbished under the World Bank funded AHEAD grant for the Faculty development to provide more facilities for students to utilise their free time.

	T
	MoU was signed with the University of Bergen for five years and extended period of MoU Western Norway University of Applied Sciences for another five years.  The new building for the Department of Computer Science, funded under the World Bank supported AHEAD project, was ceremonially opened on June 1, 2022, with significant contributions from DCS alumni towards furniture and amenities.
	significant contributions from DC3 alumin towards furniture and amenities.
2022	An MoU was signed with the Computer Society of Sri Lanka, Information Communication and Technology Agency and Dialog Axiata PLC. for the establishment of an IoT Innovation Llaboratory at the Department of Computer Science and the donation of laboratory equipment worth of LKR 15 million were donated.
	The Faculty hosted the second VINGNANAM International Research Conference on 21 July 2022.
2023	The Laboratory for Energy Conversion and Storage in the Dept. of Physics was established, and the Chemistry Research Laboratory in the Dept. of Chemistry was refurbished and equipped with advanced instrumentation under the World Bank–funded Development Oriented Research Project, and both facilities were opened for student use.
	MoU signed with University of Konstanz, Germany to foster Research in Natural Language Processing and Computational Linguistics.
2024	The Faculty hosted the third VINGNANAM International Research Conference on 6 September 2024.
	The international Conference on Advanced Materials for Clean Energy & Health Applications (AMCEHA) 2025 held at the faculty of Science.
2025	The Faculty celebrates Golden Jubilee 2024/2025 on 30 December 2025. The first floor of the Department of Fisheries new building and the New Board Room of the Faculty of Science were ceremonially opened on the same day.

#### 1.4 Organizational Structure and Infrastructure Facilities

The Faculty of Science has sustained its quality by offering standard degree programmes in Biological, Physical and Computer Sciences inbuilt with various co-curricular and skill development programmes. Under the leadership of dedicated deans of the Faculty from its inception, Faculty expands its wings in the main premises by accommodating seven departments such as Departments of Botany, Chemistry, Computer Science, Fisheries, Mathematics and Statistics, Physics, and Zoology; and other common facilities which includes Social Welfare Centre, English Language Laboratory, Faculty Incubation Cell, Faculty Research Centre of Excellence, Science Students Common Room and Student Hot spot – study hall within the faculty premises.

In this golden jubilee, the Faculty is proudly expanding further by opening a new building for the Department of Fisheries and a Board Room for the Faculty within the premises.

#### 1.4.1 Faculty Sub-committees

With the vision of enriching the undergraduate and postgraduate degree programmes, research and development, and the design and infrastructure, the Faculty Board of Science has established the following sub-committees:

- Curriculum Development, Revision, and Monitoring Committee
- Internal Quality Assurance Cell
- Newsletter and Handbook Committee
- Science Faculty Research Committee
- Bio-safety Committee
- Animal Ethics Review Committee
- Faculty Career Guidance Cell
- Building Committee
- Strategic Management Planning Committee
- Web and IT Services Committee

The Standard Operating Procedures (SOPs) and Terms of References (TORs) for each of the above committees were developed and are in operation to ensure good practices.

In addition to the above facilities at the Faculty, staff and students of the faculty utilize the common library and computer unit of the University. The faculty adopted modern platforms that combine Learning Management Systems (LMS), Open Educational Resources (OER), and facilities like interactive smart boards and other IT tools to support teaching to meet global standards.

Along with the lecture halls and laboratories, most of the departments have seminar rooms, departmental libraries, and computer laboratories to facilitate teaching, learning and research activities at undergraduate and postgraduate levels.

Further, Deputy Proctor, Student Counsellors and Academic Counselors of the faculty serve for the student discipline and welfare at the faculty.

#### 1.4.2 Deans of the Faculty of Science

Over the past five decades, the Faculty of Science at the University of Jaffna has been guided by a succession of distinguished deans whose leadership has been instrumental in its growth and success. Prof. P. Kanagasabapathy (October 1974 - January 1977) served as the founding dean, laying a solid foundation for the faculty's future endeavors. He was succeeded by Prof. K. Kunaratnam (January 1977 - May 1978), who continued to build upon this groundwork. Prof. V. Tharmaratnam (June 1978 - December 1984) then took the helm, followed by Prof. K. Kunaratnam in his second term (January 1985 - March 1988). Leadership was subsequently assumed by Prof. V. K. Ganeshalingam (April 1988 - February 1991), succeeded by Prof. S. Mageswaran (March 1991 - October 1996). Prof. V. K. Ganeshalingam returned for a second term (November 1996 - November 1999), after which Prof. R. Kumaravadivel (November 1999 -July 2010) led the faculty through a decade of significant growth. Following him, Prof. K. Kandasamy (July 2010 - July 2013) took over the leadership, succeeded by Prof. S. Srisatkunarajah (July 2013 - July 2016). Prof. R. Vigneswaran (July 2016 - April 2017) then assumed the role, followed by Prof. J. P. Jeyadevan (May 2017 - May 2020). The faculty is currently headed by Senior Professor P. Ravirajan, who has been leading since June 2020. Each of these leaders has played a pivotal role in steering the faculty toward academic excellence and research innovation, leaving an indelible mark on its history.

# **Deans of the Faculty**



Prof.P.Kanagasabapathy (Oct 1974 - Jan 1977)



**Prof. K. Kunaratnam** (Jan 1977 - May 1978 & Jan 1985 - Mar 1988)



Prof. V. Tharmaratinam (May 1978 - Dec 1984)



Prof. V. K. Ganeshalingam (Apr 1988 - Feb 1991 & Nov 1996 - Nov 1999)



Prof. S. Maheswaran (Mar 1991 - Oct 1996)



Prof. R. Kumaravadivel (Nov 1999 - Jul 2010)



Prof. K. Kandasamy (Jul 2010 - Jul 2013)



Prof. S. Srisatkunarajah (Jul 2013 - Jul 2016)



Prof. R. Vigneswaran (Jul 2016 - Apr 2017)

### **Deans of the Faculty**



Prof. J. P. Jeyadevan (May 2017 - May 2020)



Prof. P. Ravirajan (June 2020 - To date)

# Vision Through Time

Across five decades of academic excellence, our Deans have led the Faculty of Science with vision and dedication, steering it toward innovation, integrity, and impact

# **Emiretus Professors of the Faculty**



Prof. K. Kunaratnam (Physics)



Prof. V .K. Ganeshalingam (Zoology)



Late Prof. V. Tharmaratinam (Mathematics)



Prof. R. Kumaravadivel (Physics)



Late Prof. S. Maheswaran (Chemistry)



Late Prof. (Ms.) R. Maheswaran (Chemistry)



Prof. K. Kandasamy (Physics)

Knowledge as a Living Force

True Scientists never retire; their curiosity lives on in every student they have inspired and every idea they have set in motion

#### 1.5 Staff Profiles and Students' Statistics

#### 1.5.1 Staff Profiles

At present, the Faculty of Science comprises seven departments, namely Botany, Chemistry, Computer Science, Fisheries, Mathematics and Statistics, Physics, and Zoology, all located within the main premises of the University of Jaffna at Thirunelvely. The Faculty is supported by a strong and dedicated workforce consisting of 86 academic staff members, 59 academic support staff on contract, and 80 non-academic staff, all of whom contribute significantly to the advancement of higher education. The academic strength of the Faculty is reflected in the high level of staff qualifications. Approximately 95 % of the academic staff hold postgraduate qualifications, of whom nearly 74 % possess doctoral degrees, while up to 30 % serve at the professorial level. This highly qualified academic community underpins the Faculty's excellence in teaching, research, and academic leadership.

#### 1.5.1 Highest academic qualifications obtained by the academic staff of the Faculty

Department	PhD	MPhil/MSc	BSc	Total
Botany	7	3	0	10
Chemistry	14	0	0	14
Computer Science	10	1	2	13
Fisheries	4	1	1	6
Mathematics & Statistics	12	7	1	20
Physics	8	3	-	11
Zoology	9	3	-	12
Total	64	18	04	86
Percentage	74 %	21 %	5 %	100%

#### 1.5.2 Designation of the academic staff: Department-wise

	Designation					
Department	Professors (Chair)	Professors	Associate Professors	Senior Lecturer	Lecturer	Total
Botany	-	3	1	6	-	10
Chemistry	1	6	-	7	-	14
Computer Science	-	2	-	8	3	13
Fisheries	1	-	-	3	2	6
Mathematics & Statistics	-	2	-	17	1	20
Physics	1	3	-	5	2	11
Zoology	1	4	-	7	-	12
Total	4	20	1	52	9	86
Percentage	5 %	23 %	1 %	61 %	10 %	100 %

Faculty members play a vital role in the governance and administration of the University, serving in key leadership positions such as Director of the Centre for Quality Assurance, Director of the Career Guidance Unit, Director of Student Welfare, Alumni Officer, and Vice-Chancellor. These contributions clearly demonstrate the Faculty's strong institutional engagement and leadership capacity at the University level. In addition, members of the Faculty contribute significantly at the national level through their service on key statutory and advisory bodies, including the National Research Council, the Arthur C. Clarke Institute for Modern Technologies, the National Education Council, and the Research Council of the National Institute of Fundamental Studies.

Beyond their academic and administrative responsibilities, Faculty members are deeply engaged in research and scholarly pursuits. They publish extensively in high-impact international journals and successfully secure competitive national and international research grants through collaborations with leading and prestigious universities worldwide. These endeavours substantially enhance the research profile, global visibility, and academic standing of both the Faculty of Science and the University of Jaffna.

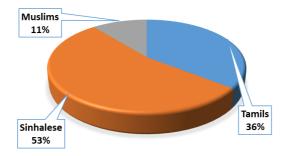
#### 1.5.2 Students' Statistics

From its inception, the Faculty of Science has experienced steady and sustained growth in student enrolment. At present, the Faculty admits over 400 students annually across the Biological Sciences, Physical Sciences, and direct-intake Computer Science degree programmes. This continued expansion reflects the Faculty's strengthened academic capacity, the increasing national demand for science-based education, and its growing reputation for academic excellence.

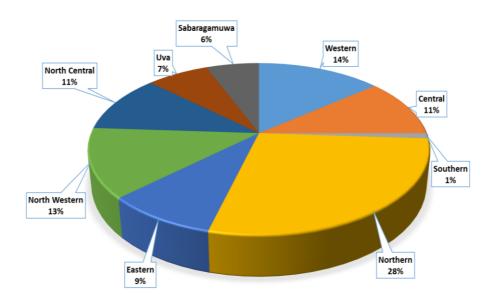
1.5.2.1 Stream-wise enrolment of the new entrants in the last four Academic Years

Academic	No. of the Batch	Biological	Computer	Physical	Total
Year	No. of the Batch	Science	Science	Science	TOLAI
2023/2024	50	133	94	217	444
2022/2023	49	123	81	201	405
2021/2022	48	121	95	179	395
2020/2021	47	111	93	206	410
2019/2020	46	113	217	71	401

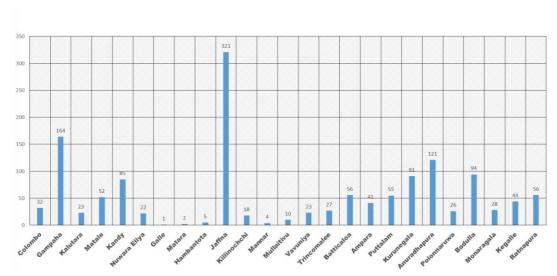
Since 2010, the Faculty has attracted students from all regions of Sri Lanka, fostering a vibrant learning environment characterised by multi-ethnic and multicultural diversity. In recent years, the Faculty has also welcomed a number of international students through the President's Scholarship Scheme, further enriching the academic and cultural landscape of the Faculty. As a result, the total student population now exceeds 1,300 across all levels of study, underscoring the Faculty's role as a major contributor to undergraduate science education within the University of Jaffna.



Student composition with different ethnicities in the current academic year



Provincial-wise student population in the current academic year



District-wise student population in the current academic year

#### 1.5.2.2 Gender-wise breakdown of the students in the current academic year

Gender		Leve	el of study		
Gender	1	2	3	4	Total
Male	182	166	209	52	609
Female	223	204	177	96	700
Total	405	370	386	148	1309

The gender composition of the student population reflects a balanced and inclusive academic environment, with a slightly higher representation of female students across most levels of study. Female students constitute a marginal majority of the total enrolment, particularly at Levels 1, 2, and 4, reflecting positive trends in gender participation in science education. The stream-wise intake over recent academic years demonstrates sustained demand across all disciplines, with particularly strong enrolment in Biological Sciences and Computer Science, aligned with national workforce needs and global disciplinary trends. Overall, the enrolment trends reflect the Faculty's capacity to attract high-quality students, its responsiveness to evolving academic and national priorities, and its continued commitment to inclusive, equitable, and high-quality science education.

#### 1.6 Overview of the Departments

#### 1.6.1 Department of Botany

The Department of Botany traces its origins to 1975, when the undergraduate Botany programme at Jaffna College was transferred to the newly established Jaffna Campus. The department was founded under the leadership of Dr. A. Sivapalan, the first Head of the Department, together with Mr. K. Arumuganathan, who formed the initial academic team. A significant milestone followed with the appointment of Prof. K. Theivendirarajah in 1978, whose leadership strengthened the department's academic and research foundation.

A major milestone in the department's development was the introduction of the Special Degree in Botany in 1980, followed by the first postgraduate degree programme in 1986. The department also launched its first PhD programme with international collaboration, marking the beginning of its strong research culture. Over the years, various academic programmes were introduced or strengthened, including full-time Master's programmes, applied diploma courses, and later, new Honours degree pathways. Curriculum reforms, particularly the adoption of a modular credit system, helped modernise the department's academic structure.

Infrastructure development has significantly supported its growth. Key facilities were enhanced or newly established, including laboratories for molecular biology, microbiology, plant pathology, and tissue culture, as well as a dedicated herbarium and glasshouse. The completion of new science blocks and upgrades to specialised labs have further strengthened teaching and research. The department has secured numerous national research grants and has maintained active collaborations with local universities, research institutes, and agencies. These partnerships have contributed to advancements in key research areas such as biotechnology, molecular biology, plant physiology, and microbiology. Staff members have published widely and contributed to academic books, reports, and chapters, helping establish the department's reputation for scholarly excellence. The department's progress, however, has not been without challenges. During periods of conflict, it faced severe staff shortages, interruptions to degree programmes, and limitations in facilities. Yet, through the commitment of young academic recruits and strong institutional support, teaching and research activities were successfully revitalised.

Today, the department accommodates over 120 undergraduate students each year and provides facilities for Honours and postgraduate research. While continued upgrades in equipment and resources remain a priority, the department is committed to enhancing its research capacity, strengthening collaborations, and expanding its contributions to scientific development and community engagement.

#### **Heads of the Department**

The Department of Botany has been led by several distinguished academics since its establishment, with each contributing to its growth and academic development. The

department's first head, Dr. A. Sivapalan, served from 1975 to 1977, followed by Prof. K. Theivendirarajah, who held the position from 1978 to 1986. Leadership then transitioned to Dr. S. Kandiah (1986 - 1989), after which Prof. K. Theivendirarajah resumed the role from 1989 to 1991.

In the early 1990s, leadership transitioned to Mrs. A. P. Arudchandran, who served from 1991 to 1992, followed by Prof. K. Chitravadivelu, who led the department from 1992 to 1996 and again from 1997 to 1998. Prof. K. Ganeshalingam briefly served as head from 1996 to 1997, followed by Prof. R. Kumaravadivel in 1997.

Ms. N. Ravimannan then took on the role from 1998 to April 2011, making significant contributions to the department over more than a decade. Leadership continued with Ms. K. Niranjan (May 2011 - May 2017), followed by Prof. P. Sevvel (May 2017 - August 2020) and Prof. R. Kapilan (August 2020–October 2022) and Prof. E. C. Jeyaseelan (October 2022 - September 2025). The department is currently led by Dr. A. Vengadaramana, who has been serving since October 2025.

# **Heads of Department of Botany**



**Dr. A. Sivapalan** (1975 - 1977)



Prof. K. Theivendirarajah (1978 - 1986 & 1989 - 1991)



**Dr. S. Kandiah** (1986 - 1989)



Prof. K. Chitravadivelu (1992 - 1996 & 1997 - 1998)



Prof. K. Ganeshalingam (1996-1997)



Prof. R. Kumaravadivel (1997 - 1998)



Ms. N. Ravimannan (1998-2011)



Ms. K. Niranjan (2011-2017)



Prof. P.Sevvel (2017-2020)

# **Heads of Department of Botany**



Prof. R. Kapilan (2020-2022)



Prof. E. C.Jeyaseelan (2022-2025)



Dr. A.Vengadaramana (2025 - To date)

## **Staff Profile- Botany**



Prof. R. Kapilan BSc(Hons) (Jaffna) MPhil (Jaffna) PhD (Alberta, Canada) Professor



Ms. K. Niranjan BSc Hons (Jaffna) MPhil (Peradeniya) Senior Lecturer



Prof. P. Sevvel BSc (Madras, India) MSc (Madras, India) PhD (Belfast, UK) Professor



Dr. (Ms.) N. Krishnapillai BSc Hons (Jaffna) MPhil (Peradeniya) PhD (Peradeniya) Senior Lecturer



Prof. E. C. Jeyaseelan BSc Hons (Jaffna) PhD (Reading, UK) Professor



Dr. (Ms.) G. Rajkumar BSc Hons (Jaffna) PhD (Colombo) Senior Lecturer



Prof. A. C. Thavaranjit BSc Hons (Jaffna) MSc (Kelaniya) Associate Professor



Dr. A. Vengadaramana BSc Hons (Jaffna) MPhil (Jaffna) PhD (Peradeniya) Senior Lecturer



Ms. N. Ravimannan BSc Hons (Jaffna) MPhil (Peradeniya) Senior Lecturer



Dr. (Ms.) T. Jeyaseelan BSc Hons (Jaffna) PhD (Peradeniya) Senior Lecturer

## **Support Staff - Botany**



Mr. P.T.J. Jashothan Staff Technical Officer



Mr. A.N. Jeevanarajah Staff Technical Officer



Mr. K. Jeyakumar Staff Technical Officer



Ms. M. Sivabalasunthar Staff Technical Officer



Mr. T. Jalagoban
Technical Officer



Mr. K.
Pushpartnam
Laboratory
Attendant



Mr. B. Ragulan

Laboratory

Attendant



Mr. K. Vijayakumar Laboratory Attendant



Mr. K. Kirubananthan Laboratory Attendant



Mr. K. Suren Laboratory Attendant



Mr. T.K. Jeyakumar Works Aide



Mr. A. Vijenthiran

Works Aide

# **Department of Botany**



#### 1.6.2 Department of Chemistry

The Department of Chemistry of the then Jaffna Campus of the University of Sri Lanka was established in October 1974 by taking over the Undergraduate Section of Jaffna College, Vaddukoddai and absorbing three of its staff members: two Assistant Lecturers, Mr. K. Kumaraswamy, Mr. S. Kandiah, and one Laboratory Attendant, Mr. S. Selvarajah. Dr. S. Mageswaran, who joined as the Founding Head in May 1975, provided the early leadership that shaped the department's academic direction.

Between 1975 and 1978, the department functioned at Jaffna College with limited physical and human resources, including inadequate laboratory space, equipment and chemicals. In 1978, it was relocated to the Thirunelvely premises and temporarily housed in the Natural Science Block. Until 1984, teaching and practical work were conducted in makeshift laboratories without essential facilities. With the completion of the ground floor of the new Chemistry Block in 1984, the department finally moved into its purpose-built space.

The department faced significant setbacks during periods of conflict, including the loss of infrastructure, equipment and official records. Major damage to the Chemistry Block occurred in 1987 and again during the mass exodus in 1995–1996. Despite these challenges, the department consistently recovered and rebuilt its teaching and research facilities. Following the passing of the founding Head in 1998, the Chemistry Block was named the Mageswaran Block in his honour, and annual memorial lectures have been held since 1999.

From the 2000s onward, the department benefitted from major national development projects such as IRQUE, HETC and AHEAD, which significantly improved laboratory facilities, teaching—learning processes, student support services and research capacity. Curriculum reforms introduced from 1985 onwards—including the semester system, modularisation, enhanced practical components, ICT integration, action projects and industrial training—have ensured alignment with national and global academic standards.

Today, the department offers BScHons in Chemistry and BScHons in Applied Science in Chemistry, and contributes to the three-year BSc study programme. Its research activities span natural products, nanomaterials, macromolecular chemistry, hydrochemistry, medicinal chemistry and computational chemistry, supported by national and international collaborations.

The department maintains an active outreach profile and hosts one of the university's most vibrant student bodies, the Chemical Society, which promotes academic enrichment through competitions, publications and community-oriented activities.

#### **Heads of the Department**

The Department of Chemistry has been guided by distinguished academics since its inception, each contributing to its development and academic excellence. The department was first led by Prof. S. Mageswaran, who served from 1975 to 1978, followed by Prof. P. Thurairajan from 1978 to 1979. Leadership then returned to Prof. S. Mageswaran, who held the position from 1979 to 1987 and again from 1988 to 1991, with Dr. V. Pasupathy briefly serving as Acting Head in 1987. Prof. Ms. R. Mageswaran played a significant role in the department, holding multiple terms as Head from 1987 to 1988, 1991 to 1995, 1998 to 2003, and again from 2006 to 2007. Between these periods, Dr. N. Sivapalan led the department from 1996 to 1998, and Prof. Ms. M. Senthilnanthanan served from 2003 to 2006, with an additional term as Acting Head in 2007. From 2007 to 2010, Prof. R. Srikaran led the department, followed by Prof. J. P. Jeyadevan (2010 - 2013), Dr. T. Manoranjan (2013 - 2016), Prof. P. Abiman (2016 - 2017 Acting, 2017 - 2020), Prof. P. Iyngaran served from 2020 to 2023 and Prof. K. Velauthamurty (2022 - 2025). The department is currently led by Dr. Ms. J. Prabagar, who has been in office since 2025.

## **Heads of Department of Chemistry**



Prof. S. Mageswaran (1974 - 1978 (Act) & Nov.1979 - Mar.1987 & Dec.1988 - Mar.1991)



Prof. P. Thurairajan Aug.1978- Nov.1979)



Dr.V.Pasupathy (Mar.1987 - May 1987 (Act))



Prof. (Ms.) R. Mageswaran (May 1987 - Dec. 1988 & Mar. 1991 - Dec. 1995 & Mar. 1998 - Apr. 2003 & Jul. 2006 - Feb. 2007)



Dr. N. Sivapalan (Jan.1996-Mar.1998)



Prof.(Ms.) M. Senthilnanthanan (Apr.2003 - Jun. 2006 & Feb.2007-Aug.2007 (Act))



Prof. R. Srikaran (Aug.2007- Aug.2010)



Prof. J. P. Jeyadevan (Sep.2010-Sep.2013 & May 2017)



Dr.T. Manoranjan (Sep. - Dec.2013 (Act) & Dec.2013 - Dec.2016)

## **Heads of Department of Chemistry**



Prof. P. Abiman (Dec.2016 - Apr.2017 (Act)& Jun.2017 - May 2020)



Prof. P. lyngaran (Jun.2020 - May 2023)



Prof. K. Velauthamurty (Jun.2023-Nov.2025)



Dr.(Ms.) J.Prabagar (Nov.2025-To date)

## **Staff Profile- Chemistry**



Prof. (Ms.) M. Senthilnanthanan BSc Hons (Jaffna) PhD (Leeds, UK) Chair Professor



Prof. G. Sashikesh BSc Hons (Jaffna) DPhil (Oxford, UK) Professor



Prof. K. Velauthamurty BSc Hons (Jaffna) PhD (Peradeniya) Senior Professor



Prof. P. lyngaran BSc Hons (Jaffna) PhD (Cambridge, UK) Professor



Prof. J.P. Jeyadevan BScHons (Jaffna) PhD (Liverpool, UK) Professor



Dr. T. Manoranjan BSc Hons (Jaffna) PhD (Peradeniya) Senior Lecturer



Prof. P. Abiman BSc Hons (Jaffna) DPhil (Oxford, UK) Professor



Dr. (Ms.) J. Prabagar BSc Hons (Jaffna) DPhil (Oxford, UK) Senior Lecturer



Prof. R. Srikaran BSc Hons (Jaffna) PhD (Sheffield, UK) Professor



Dr. (Ms.) R. Senthooran BSc Hons (Jaffna) MPhil (Peradeniya) PhD (Canterbury, New Zealand) Senior Lecturer

## **Staff Profile- Chemistry**



Dr. (Ms.) S. Yohi BScHons (Jaffna) MS (South Dakota, USA) PhD (South Dakota, USA) Senior Lecturer



Dr. A. Manjceevan BSc Hons (Jaffna) MSc (Peradeniya) PhD (Peradeniya) Senior Lecturer



Dr. (Ms.) S. Selvakumar BSc Hons (Jaffna) PhD (Colombo) Senior Lecturer



Dr. (Ms.) P. Malathy BSc Hons (Jaffna) PhD (Tulane, USA) Senior Lecturer

## **Support Staff - Chemistry**



Mr. A. Lakshman Staff Technical Officer



Mr. A.Thabesan Staff Technical Officer



Ms. N. Yogenthiram
Staff Technical
Officer



Mr. S. Satheesan Technical Officer



Mr. G. Senthilnathan Technical Officer



Ms. R. Senthooran Technical Officer



Mr. K. Ithayakumaran Technical Officer



Mr. M. Chithirangan Management Assistant



Mr. W. J. Abiyooth Laboratory Attendant



Mr. K. Aravinth

Laboratory

Attendant



Mr. R. Arunpirasath Laboratory Attendant



Mr. S. Thivas

Laboratory

Attendant

## **Support Staff - Chemistry**



Mr. T. Kogularaj Laboratory Attendant



Mr. M. Sasikaran Laboratory Attendant



Mr. E. Donaldon

Laboratory

Attendant



Mr. S. Thaneshan

Laboratory

Attendant

# **Department of Chemistry**



#### 1.6.3 Department of Computer Science

The Department of Computer Science (DCS) at the University of Jaffna was established in 1991 under the leadership of Prof. K. Kunaratnam, with strong support from Prof. S. Mageswaran and the foundational academic contributions of Dr. S. Kanaganathan, who also developed the initial curriculum. The department began with modest resources, including a small computer laboratory shared among students, and a basic reference section for computer science literature. Its progress was severely disrupted during the 1995 mass exodus, during which all equipment and books were lost. Nevertheless, DCS resumed operations in 1996 and gradually rebuilt its academic and physical resources.

Despite constraints in staffing during its early years, the dedication of its founding academics ensured continuity in teaching, curriculum development, and administration. The department steadily expanded its academic team as graduates from its own programmes qualified for recruitment. Support from temporary instructors, non-academic staff, and administrative personnel were vital in maintaining smooth academic operations through challenging periods. DCS has evolved into a vibrant academic centre offering three major degree programmes: the BSc in Computer Science, the BScHons in Computer Science, and the BScHons in Applied Science. Significant curriculum reforms were implemented in 2014 to align the BSc programme with ACM/IEEE recommendations, later earning the programme an 'A' grade in the 2023 national quality assurance review. The curriculum now integrates emerging fields such as Artificial Intelligence, Data Science, and Software Engineering, complemented by strong industry partnerships that enhance practical training and employability.

The department's research profile has expanded through national and international collaborations, competitive grants, and funded infrastructure developments, including the establishment of an IoT Innovation Laboratory. Its academics have received prestigious research awards, fellowships, and international scholarships, demonstrating the department's growing global footprint. DCS obtained the Council's approval to commence postgraduate programmes (MCS and MSc (CS)), thereby strengthening advanced training and research capacity.

Student development remains a core focus of the department of computer science. The department hosts active student bodies including CompSoc, the IEEE Student Branch, the GenZ Student Chapter of the Computer Society of Sri Lanka, and the Gavel Club. It also organises major annual and biennial events such as SL-SWCS and UoJCoders, providing platforms for research, innovation, and coding skill development. Today, DCS stands as a leading centre for computer science education in the region, supported by modern facilities, a strong academic team, and a commitment to excellence in teaching, research, and community engagement.

#### **Heads of the Department**

The Department of Computer Science has been led by distinguished academics since its establishment, contributing to its growth in research and technology-driven education. The department's first head, Prof. K. Kunaratnam, served from January 1991 to November 1993, followed by Dr. S. Kanaganathan, who led from November 1993 to January 1996. Dr. S. Mahesan then took over, serving two terms from January 1996 to August 1999 and later from November 2000 to February 2008, with Mr. K. Kannan acting as head between these terms from September 1999 to September 2000. Leadership continued with Dr. E. Y. A. Charles, who headed the department from March 2008 to February 2014. Dr. K. Thabotharan continued the leadership as the head of the department from March 2014 to May 2017. Prof. A. Ramanan then led the department from June 2017 to August 2020, after which Mr. S. Suthakar served from September 2020 to September 2023. The department is currently headed by Dr. Ms. B. Mayurathan, who has been serving since October 2023.

## **Heads of Department of Computer Science**



**Prof. K. Kunaratnam** (1991-1993)



**Dr. S. Kanaganathan** (1993-1996)



Dr. S. Mahesan (1996-1999 & 2000-2008)



Mr. K. Kannan (1999 - 2000(Act.))



Dr. E. Y.A. Charles (2008-2014)



**Dr. K. Thabotharan** (2014 - 2017)



Prof. A. Ramanan (2017-2020)



Mr. S.Suthakar (2020-2023)



Dr. (Ms.) B. Mayurathan (2023 - To date)

## **Staff Profile- Computer Science**



Prof. A. Ramanan BScHons (Jaffna) PhD (Southampton, UK) Professor



Mr. S. Suthakar BScHons (Jaffna) MPhil (Jaffna) Senior Lecturer



Prof. M. Siyamalan BScHons (Jaffna) MSc (Nice, France) PhD (Dundee, UK) Professor



Dr. K. Sarveswaran BScHons (Peradeniya) MSc (Moratuwa) PhD (Moratuwa) Senior Lecturer



Dr. E.Y.A. Charles BScHons (Jaffna) PhD (Cardiff, UK) Senior Lecturer



Dr. S. Shriparen BScHons (Jaffna) MSc (Colombo) PhD (QUT, Australia) Senior Lecturer



Dr. K. Thabotharan BScHons (Jaffna) MSc (Akron, USA) PhL (Uppsala, Sweden) PhD (Colombo) Senior Lecturer



Dr. T. Kokul BScHons (Jaffna) PhD (QUT, Australia) Senior Lecturer



Dr. (Ms.) B. Mayurathan BScHons (Jaffna) PhD (Peradeniya) Senior Lecturer



Dr. (Ms.) J. Samantha Tharani BScHons (Jaffna) Ph.D. (Griffith, Australia) Senior Lecturer

## **Staff Profile- Computer Science**



Dr. (Ms.) R. Nirthika BScHons (Jaffna) PhD (Jaffna) *Lecturer* 



Ms. N. Kesavi BScHons (Jaffna) Lecturer



Ms. M. Mayuravaani BScHons (Jaffna) Lecturer

## **Academic Support Staff - Computer Science**



Mr. T. Sugirthan

Asst. Network

Manager



**Mr. V. Visithan**Programmer Cum
Systems Analyst

## **Support Staff - Computer Science**



Mr. Y. Hajanthan Technical Officer



Ms. A. Vahini Management Assistant



Mr. N. Thileepan Staff Management Assistant

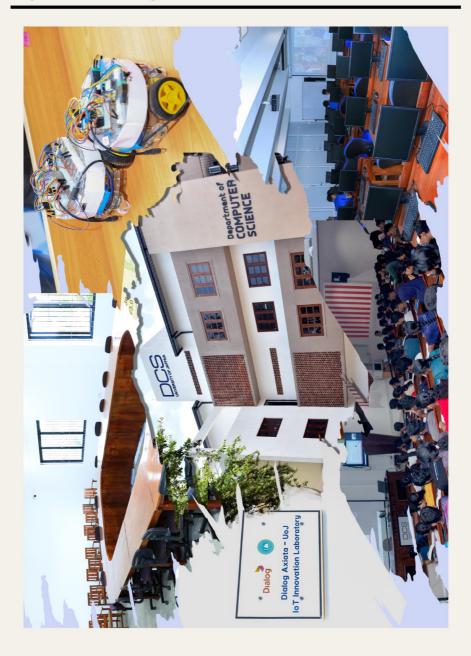


Mr. A. Arulnesan

Laboratory

Attendant

# **Department of Computer Science**



#### 1.6.4 Department of Fisheries

The Department of Fisheries originated from the Centre for Development of Fisheries, founded in 1998 through the dedicated efforts of Prof. K. Chitravadivelu. The Centre initially offered a Diploma in Fisheries Science, aimed at strengthening the capacity of fishing communities in the Northern Province. The Department of Fisheries officially began its operations on August 1, 2009, with Prof. Ms. Sivashanthini Kuganathan, a staff from the Department of Zoology, as the founder and head of the department.

Growing demand for fisheries-related education and the introduction of similar degree programmes at other universities created a need for an advanced academic pathway in the region. In response, a proposal was developed to introduce Fisheries Science as a major subject for biological science students, which received rapid approval from the University's academic and administrative bodies. Following further endorsement by the University Grants Commission (UGC), a four-year honours degree curriculum was established, and the Department of Fisheries was officially gazetted on 5 June 2009. Since its inception, the department has offered both the general and honours degree programmes in Fisheries Science, along with an MPhil degree under the Faculty of Graduate Studies. The undergraduate curriculum is multidisciplinary, covering areas such as marine and fisheries biology, oceanography, limnology, molecular biology, ecology, toxicology, microbiology, statistics, economics, and social science. These programmes are designed to produce graduates equipped to address national and regional challenges in fisheries and aquatic resource management.

The Diploma in Fisheries Science, offered from 1998, was discontinued in 2012 after the establishment of full-fledged degree programmes. The department initially relied on academic support from other science disciplines, later supplemented by temporary and visiting lecturers. Limited cadre positions and infrastructure posed significant challenges for conducting lectures, practical classes, and research. Over the years, the department operated in multiple temporary locations, with constrained laboratory and office facilities, restricting student intake and overall expansion.

Despite these limitations, the department has made notable achievements. More than 400 undergraduates and 50 honours graduates have completed their degrees, alongside a growing number of MPhil graduates. The department has also facilitated international research training opportunities through overseas programmes and has contributed significantly to research output, community engagement, and environmental monitoring, including studies on fisheries ecosystems, pollution, climate impacts, and marine productivity.

With land now allocated for a dedicated building, the department aims to expand its academic portfolio, reintroduce the diploma programme, and launch new applied science degree pathways in sustainable fisheries, ocean management, and marine conservation. Enhanced

infrastructure remains essential for realising these aspirations and strengthening the department's role in advancing fisheries science and regional development.

#### **Heads of the Department of Fisheries**

The Department of Fisheries has had a stable leadership since its inception. Prof. Ms. S. Kuganathan served as the department's first head from August 2009 to September 2024, playing a crucial role in its establishment and development. In August 2024, Dr. Ms. S. Sathyaruban assumed leadership and currently serves as the Head of the Department, continuing its growth and academic progress.

# **Heads of Department of Fisheries**



(2009 -2024)



Prof. (Ms.) S. Kuganathan Dr. (Ms.) S. Sathyaruban (2024-To date)

### **Staff Profile- Fisheries**



Prof. (Ms.) S. Kuganathan BScHons (Jaffna) MSc (North Wales, UK) PhD (Annamalai, India) Chair & Senior Professor



Dr. N. Ragavan BScHons (Jaffna) MSc (SJP) PhD (SJP) Senior Lecturer



Dr. (Ms.) S. Sathyaruban BScHons (Jaffna) MPhil (Jaffna) PhD (SJP) Senior Lecturer



Ms. S. Gobiraj BScHons (Jaffna) M.Phil (Jaffna) Senior Lecturer



Dr. K. Gunaalan BSc Hons (Ruhunu) MSc (UNIBO, Italy) PhD (DTU, Denmark) Senior Lecturer



Ms. T. Arudselven BScHons (Jaffna) MSc (AIT, Thailand) Lecturer

## **Support Staff - Fisheries**



Mr. K.
Harichandra
Technical Officer



Mr. T. Partheepan
Technical Officer



Ms. A. Niroshna Laboratory Attendant



Mr. N. Ilankeeran

Laboratory

Attendant

# **Department of Fisheries**



#### 1.6.5 Department of Mathematics and Statistics

The Department began its academic activities in September 1974 at the undergraduate section of Jaffna College, which had been incorporated into the newly established Jaffna Campus. In its formative years, the Department faced significant spatial challenges, relocating several times before moving to the Health Centre and later the Physics Block in Thirunelvely in 1978. Foundational development took place in 1980, and the completion of the ground floor of the Mathematics Block in 1983 provided much-needed space. The remaining floors were completed in 1985, marking the beginning of a stable physical setting for departmental operations.

The Department was established under the leadership of Prof. P. Kanagasabapathy, who served as the founding Head. The early phase was characterised by the recruitment of staff, the initiation of teaching in Mathematics and Statistics, and the gradual expansion of academic programmes. Several staff members pursued postgraduate studies abroad, allowing the Department to strengthen its academic profile over time. Despite ongoing regional challenges, including limitations in resources and disruptions to university operations, the Department continued to grow in both teaching and research capacity.

Curricular revisions occurred periodically to meet evolving academic standards, including the transition to a Grade Point Average system in 2004. The introduction of computer-related training and extension courses also enabled the Department to diversify its academic portfolio while supporting students' emerging needs. Research output increased steadily, with staff contributing to national and international academic forums.

Between the late 1990s and 2010s, the Department experienced renewed growth, with the return of staff after postgraduate studies, the promotion of several academics, and the establishment of a stronger research culture. The Department also implemented revised syllabi, introduced new degree pathways, and contributed to faculty-level curriculum reforms. Infrastructure improvements—including upgrades to laboratories and lecture halls—were supported through national projects.

Today, the Department of Mathematics and Statistics functions as a well-established academic entity within the Faculty of Science. It is supported by a dedicated team of academic and non-academic staff who continue to uphold the Department's commitment to excellence in teaching, research, and service to the University community. Under successive leadership, the Department has maintained steady progress and continues to develop in alignment with contemporary academic and professional needs.

#### **Heads of the Department**

The Department of Mathematics & Statistics has a long and distinguished history of leadership, with several eminent academics contributing to its growth and development. The department's first head, Prof. P. Kanagasabapathy, served from 1974 to 1977, followed by Prof. V. Tharmaratnam, who led from 1978 to 1983. Leadership then transitioned to Mr. P. Makinan, who had the longest tenure, serving from 1983 to 2005. After his tenure, Prof. S. Srisatkunarajah took over from 2005 to 2006, followed by Prof. R. Vigneswaran, who served from 2006 to 2009. Prof. S. Srisatkunarajah returned for a second term from 2009 to 2013, after which Prof. Vigneswaran resumed leadership from 2013 to 2016. Subsequent leadership included Mr. S. Selvarajan (2016 - 2019), Dr. S. Arivalzahan (2019 - 2022), and Ms. N. Satkunanathan (2022 - 2023). The department is currently headed by Dr. N. Varathan, who has been leading since 2023.

## **Heads of Department of Mathematics & Statistics**



Prof. P. Kanagasabapathy (1974- 1977)



Prof. V. Tharmaratnam (1978-1983 & 1991-1994)



Mr. P. Makinan (1983-2005)



Prof. S. Srisatkunarajah (2005 - 2006 & 2009 - 2013)



Prof. R. Vigneswaran (2006-2009 & 2013-2016)



Mr. S. Selvarajan (2016-2019)



**Dr. S. Arivalzahan** (2019-2022)



Ms. N. Satkunanathan (2022-2023)



Dr. N. Varathan (2023- To date)

#### **Staff Profile- Mathematics and Statistics**



Prof. S. Srisatkunarajah BScHons (Jaffna) Dip in Ed. (OUSL PhD (Heriot-Watt, UK) Professor



Mr. A. Laheetharan BSc Hons (Jaffna) MPhil (Peradeniya) Senior Lecturer



Prof. K. Kannan BScHons (Jaffna) MSc (Madras) PhD (Southampton, UK) Professor



Dr. N. Varathan BSc Hons (Jaffna) MSc (Peradeniya) MSc (Memorial, Canada) PhD (Peradeniya) Senior Lecturer



Mr. S. Selvarajan BSc Hons (Jaffna) PG Dip. (Peradeniya) MPhil (SJP) Senior Lecturer



Dr. R. Prasanthan BScHons (Jaffna) MSc (Southern Illinois, USA) PhD (Southern Illinois, USA) Senior Lecturer



Ms . N. Satkunanathan BSc Hons (Jaffna) MSc (Peradeniya) MSc (Memorial, Canada) Senior Lecturer



Dr. T. Mathanaranjan BScHons (Jaffna) PhD (Peradeniya) Senior Lecturer



Dr. S. Arivalzahan BSc Hons (Jaffna) MSc (NUS, Singapore) PhD (Monash, Australia) Senior Lecturer



Dr. S. Arumairajan BSc Hons (Jaffna) PhD (Peradeniya) Senior Lecturer

### **Staff Profile- Mathematics and Statistics**



Mr. M. Khokulan BScHons (Jaffna) MPhil (Jaffna) Senior Lecturer



Dr. R. Tharshan BScHons (Jaffna) MSc (WSU,USA) PhD (Peradeniya) Senior Lecturer



Dr. N. Ramaruban BScHons (Jaffna) PhD (Cincinatti, USA) Senior Lecturer



Dr. M. Arunmaran BScHons (Jaffna) PhD (UniSA, Australia) Senior Lecturer



Dr. B. Kethesan BScHons (Jaffna) MSc (Madras, India) PhD (Madras, India) Senior Lecturer



Dr. S. Mayuran BScHons (Jaffna) PhD (Cincinnati, USA) Senior Lecturer



Mr. B. Muraleetharan BScHons (Jaffna) MPhil (Jaffna) Senior Lecturer



Ms . J. Duwarahan BScHons (Jaffna) MPhil (Peradeniya) Senior Lecturer



Mr. M. Annanthakrishna BScHons (Jaffna) MPhil (Colombo) Senior Lecturer



Ms. J. Tharangi BScHons (Jaffna) Lecturer

## **Support Staff - Mathematics and Statistics**



Kartheepan
Technical Officer



Mr. T. Nanthakopi
Technical Officer



Ms. N. Kantharuban Management Assistant



Mr. J. Kajenthiran Health Service Labour

# **Department of Mathematics & Statistics**



#### 1.6.6 Department of Physics

The Department of Physics at the University of Jaffna was established in April 1975, initially functioning from the Physics Laboratory at the Jaffna College, Vaddukoddai. Prof. K. Kunaratnam, the founding Head and Chair Professor, led a small academic and technical team who supported the first cohort of about twenty students admitted in September 1975. Early challenges—including inadequate facilities and severe water shortages—prompted the relocation of the Department to Thirunelvely in March 1978, followed by the move of the Faculty of Science in July the same year. Purpose-built facilities were eventually realised in 1982 with the completion of the Physics Block, shared with other science departments and equipped with essential lecture and laboratory spaces.

The Department's progress was repeatedly disrupted by the civil conflict. From 1987 onwards, curfews, displacement, and damage to infrastructure hindered academic activities. A major setback occurred in 1995, when laboratory and office equipment valued at over thirty-five million rupees was destroyed, halting research for several years. Despite these challenges, the Department remained committed to academic continuity and quality.

The Department offers a range of degree programmes, including a three-year General Degree and two four-year Honours Degrees. The Honours Degree in Physics, introduced in 1979, has been taught exclusively in English since its inception and has been sustained through rigorous external moderation by international examiners. Student enrolment has grown steadily from around twenty in 1975 to nearly three hundred today.

From the early 2000s, the Department expanded its research capacity through national and international grants, enabling the establishment of advanced laboratories specialising in materials science, solar energy, and energy storage technologies. It has also developed postgraduate programmes, including a Master's in Physics of Materials and two Master's programmes in Clean Energy Technologies through international collaboration. The Department's leadership has fostered a remarkable culture of student advancement, with many graduates securing competitive scholarships abroad.

Engagement in international conferences, undergraduate research symposia, and community-centred STEM outreach has further strengthened the Department's impact. Its staff and students have earned national and international recognition for research excellence, contributing significantly to scientific advancement and educational development. Today, the Department stands as a resilient and evolving academic unit, shaped by dedication, innovation, and an enduring commitment to Physics education and research.

#### **Heads of the Department**

The Department of Physics has had a succession of distinguished leaders, each contributing to the department's academic growth and research excellence. The department was first headed by Prof. K. Kunaratnam, who served from April 1975 to October 1980, followed by Dr. V. Ramachandran, who led from October 1980 to October 1981. Prof. K. Kunaratnam then returned for a second term from October 1981 to February 1985. Leadership transitioned to Prof. R. Kumaravadivel, who served from February 1985 to February 1988, followed by Prof. K.Kandasamy, who took over from March 1988 to March 1994. Prof. R. Kumaravadivel resumed leadership from April 1994 to November 1999, and Prof. K. Kandasamy returned for two additional terms from March 2000 to March 2003 and later from September 2009 to August 2010. Subsequent leadership included Dr.L. Jeyanathan (March 2003 - June 2004), Dr. S. Sivaraya (June 2004 - April 2005), and Dr. N. Sivayogan (June 2006–June 2009). Prof. P.Ravirajan then led the department from October 2010 to September 2016, followed by Prof. K. Vignarooban (October 2016 - February 2020). More recent leadership included Dr. T. Pathmathas, who served from June 2020 to June 2023. The department is currently headed by Dr. A. Thevakaran, who has been leading the department since July 2023.

## **Heads of Department of Physics**



Prof. K. Kunaratnam (1975-1980 &, 1981-1985)



Dr. V.Ramachandran (1980-1981)



Prof.R.Kumaravadivel (1985-1989 & 1994-1999)



Prof. K. Kandasamy (1988-1994 & 2000-2003 & 2009-2010)



Dr. L. Jeyanathan (2003-2004)



Dr. S. Sivaraya (2004-2005 (Act.))



Dr. N. Sivayogan (2006-2009)



**Prof. P. Ravirajan** (2010-2016 & *Mar.* 2020-May 2020)



Prof. K. Vignarooban (2016-2020)

# **Heads of Department of Physics**



Dr. T. Pathmathas (2020-2023)



Dr. A. Thevakaran (2023 - To date)

### **Staff Profile- Physics**



Prof. P. Ravirajan BScHons (Jaffina) MSc (Peradeniya) DIC, PhD (London, UK) Chair & Senior Professor



Dr. A. Thevakaran BScHons (Jaffna) PhD (Colombo) Senior Lecturer



Prof. K. Vignarooban BScHons (Jaffna) MPhil (Peradeniya) PhD (Cincinnati, USA) Professor



Mr. S. Senthuran BScHons (Jaffna) MSc (Belfast, UK) MPhil (Peradeniya) Senior Lecturer



Prof. M. Thanihaichelvan BSc (Eng) Hons (Anna, India) MSc (East London, UK) PhD (Wellington, New Zealand) CEng (UK) Professor



Dr. P.A. Amalraj BScHons (Jaffna) PhD (Canterbury, New Zealand) Senior Lecturer



Prof. (Ms.) U. Sutharsini BScHons (Jaffna) PhD (Malaya, Malaysia) Professor



Dr. K. Prashanthan BScHons (Jaffna) MRes, DIC (Imperial College London, UK) PhD (HU Berlin, Germany) Senior Lecturer



Dr. T. Pathmathas BScHons (Jaffna) ICT Dip. in Theoretical HEP (Trieste, Italy) MSc (Peradeniya) PhD (Cape Town, South Africa) Senior Lecturer

## **Staff Profile- Physics**



Ms. K.H.D.D. Kumari BScHons (Jaffna) *Lecturer* 



Ms. S. Praveena BScHons (Jaffna) Lecturer

## **Support Staff - Physics**



Mr. T.
Mathiamuthan
Staff Technical
Officer



**Mr. V. Tharsan** *Technical Officer* 



Ms. A. Thenuga Technical Officer



Ms. R. Renuka Technical Officer



Mr. R.
Dixithjanagan
Technical Officer



Mr. K. Chandrakumar Technical Officer



Mr. T. Pirapakaran Staff Management Assistant



Mr. A. Sasiruban

Laboratory

Attendant



Mr. S. Thineswaran Laboratory Attendant



Mr. K. Jeyaseelan

Laboratory

Attendant



Mr. J. Subas

Laboratory
Attendant



Mr. T. Suresh

Laboratory

Attendant

## **Support Staff - Physics**



Mr. K. Sarmilan

Laboratory

Attendant



Mr. S. Nisanthan

Laboratory

Attendant

## **Department of Physics**













#### 1.6.7 Department of Zoology

The Department of Zoology, one of the earliest established at the University of Jaffna, began in 1974 during the formative years of the Jaffna Campus of the University of Sri Lanka. It initially operated from the Jaffna College undergraduate section in Vaddukoddai and commenced its academic journey under the leadership of Prof. V. K. Ganesalingam, who assumed duties as the founding Professor and Head on 1 August 1975.

A major development occurred in July 1978 with the relocation of the Faculty of Science to the newly built Natural Science Block (NSB I) in Thirunelvely. The civil unrest of the 1980s and 1990s affected staffing, facilities, and continuity of academic activities, but the Department persevered through these challenges. Infrastructure was further strengthened with the inauguration of NSB II in November 2016.

Over the years, the Department has established a wide array of specialised teaching and research facilities, including laboratories for physiology, molecular biology, toxicology, environmental studies, microscopy, cell culture, entomology, and bioinformatics. The Animal House, Insectary, and a well-curated Animal Museum further support both teaching and research.

The first cohort of Bio Science students entered the Faculty in 1975 when Zoology was offered alongside Chemistry and Botany. The Special Degree in Zoology commenced in 1979, later undergoing multiple curriculum reforms, including the adoption of the GPA system in the early 2000s. In addition to the three-year BSc general degree programme, the department offers four-year degree programmes such as BSc Hons in Zoology, BSc Applied Science in Entomology and BSc Applied Science in Aquatic biology. Significant improvements to teaching and infrastructure were supported through major grants under the HETC/QIG (2013–2015) and AHEAD (2019–2023) programmes. National and International grants secured by the academics of the department further strengthen the undergraduate and postgraduate research.

Research activity has expanded substantially, with notable strengths in biodiversity, entomology, animal physiology, fisheries and marine biology, limnology, aquaculture, pest biology, vector biology, genetics, toxicology and environmental sciences, herpetology, ornithology and sustainable development. The molecular laboratory and advanced molecular biology research laboratory provide additional support in all of the above fields to step into advanced research and recognition.

International collaborations with leading institutions across the UK, USA, India, Switzerland, South Korea, Australia, and Thailand have enhanced research capacity and global engagement. The Department also contributes to community-focused conservation initiatives, including projects supporting biodiversity protection in the Northern Province.

Postgraduate training has become a core strength, with students completing M.Phil. and Ph.D. research within the Department. A major milestone was the establishment of the Centre for Research in Entomology (CRE) in 2020, the university's first research centre, consolidating expertise in entomology. National and International research grants secured by the academics support the research in the Department. In addition, alumni support also fills the gaps in certain areas.

The department further expands its activities via the Zoological Students' Association (ZSA), which conducts various programmes for students including undergraduate research symposia, competitions, training programmes, and community outreach activities.

Recently, the Jaffna Entomological Society (JES) has been established by the senior academics of the Department who expertise in Entomology with the participation of field experts from other institutions on the first commemoration day of our founder, Professor Emeritus. V. K. Ganeshalingam, 23 May 2023. The JES is dedicated to serve the insects and environment. Through its academic programmes, research contributions, and community engagement, the Department of Zoology continues to strengthen its role as a dynamic centre for teaching, research, and regional development.

#### **Heads of the Department**

The Department of Zoology has been led by a series of distinguished academics, each playing a crucial role in its development and academic progress. The department's first head, Prof. K. Ganeshalingam, served from August 1975 to September 1986, followed by Prof. Ms. N. Selvarajah, who held the position from October 1986 to July 1990. Leadership then transitioned to Prof. K. Chithiravadivelu, who led from July 1990 to March 1991. Prof. Ms. N. Selvarajah resumed the role from November 1996 to March 1997. Dr. Ms. P. Krishnarajah subsequently took over, serving from June 1997 to October 2001. From December 2001 to August 2003, Dr. K. Parameswaran led the department, followed by Ms. J. Nanthakumar (August 2003 - May 2005). Prof. Ms. S. Kuganathan then served from June 2005 to June 2008, after which Ms. N. Ratnasabapathy took on leadership from July 2008 to December 2011. More recent heads include Prof. Ms. R. Gnaneswaran (January 2012 - December 2017), Prof. T. Eswaramohan (January 2018 - March 2021), and Dr. Ms. A. Sivaruban (April 2021 - April 2024). The department is currently headed by Ms. P. Sivakumar, who has been leading since May 2024.

## **Heads of Department of Zoology**



Prof.K. Ganeshalingam (1975-1986)



Prof. (Ms.) N. Selvarajah (1986-1990 & 1996-1997)



Prof.K.Chithiravadivelu (1990 - 1991)



Dr. (Ms.) P.Krishnarajah (1997-2001)



**Dr. K. Parameswaran** (2001-2003)



Ms. J. Nanthakumar (2003-2005)



Prof. (Ms.) S.Kuganathan (2005- 2008)



Ms. N. Ratnasabapathy (2008- 2011)



Prof. (Ms.) R. Gnaneswaran (2012- 2017)

## **Heads of Department of Zoology**



**Prof. T. Eswaramohan** (2018- 2021)



**Dr. (Ms.) A. Sivaruban** (2021 - 2024)



Ms. P.Sivakumar (2024-To date)

### Staff Profile- Zoology



Prof. S. N. Surendran BScHons (Jaffna) PhD (Colombo) Chair & Senior Professor



Ms. R. Nithiyagowry BScHons (Jaffna) MPhil (Jaffna) Senior Lecturer



Prof. (Ms.) R. Gnaneswaran BScHons (Jaffna) MPhil (Peradeniya) PhD (Peradeniya) Professor



Dr. (Ms.) A. Sivaruban BScHons (Jaffna) PhD (Jaffna) Senior Lecturer



Prof. K. Gajapathy BScHons (Jaffna) PhD (Jaffna) Professor



Mr. W. Venkatesh Luckshman BScHons (Jaffna) MS (Oklahoma, USA) Senior Lecturer



Prof. T. Eswaramohan BScHons (Jaffna) PhD (Colombo) Professor



Ms. P. Sivakumar BScHons (Jaffna) MPhil (Peradeniya) Senior Lecturer



Prof. (Ms.) Thulasitha W. Shanthakumar BScHons (Jaffna) MPhil (Jaffina) PhD (JNU. South Korea) Professor



Dr. (Ms.) G. Parththuran BScHons (Peradeniya) PhD (Colombo) Senior Lecturer

## **Staff Profile- Zoology**



Dr. S. Arthiyan BSc Hons (Jaffna) MSc (Peradeniya) PhD (Jaffna) Senior Lecturer



Dr. (Ms.) K.Senthooran BSc Hons (Jaffna) MPhil (Jaffna) PhD (Peradeniya) Senior Lecturer

## **Support Staff - Zoology**



Mr. K. Sribandakaran Staff Technical Officer



Ms. P. Niranjan
Staff Technical
Officer



Mr. R. Partheepan Technical Officer



Mr. S. Nishanthan Technical Officer



Mr. P. Pathmaruban Management Assistant



Mr. K. Kajalaksan Laboratory Attendant



Mr. K. Rathangan

Laboratory

Attendant



Mr. K. Lingkesh

Laboratory

Attendant



Mr. S. Narthanan

Laboratory

Attendant



Mr. M. Rajkumar Works Aide



Mr. S. Suthakaran Works Aide



Mr. R. Sivakaran Works Aide

# Department of Zoology



### Staff - Dean's office



Prof. P. Ravirajan

Dean of the

Faculty



Ms. Vijitha Prasath Senior Assistant Registrar



Mr. S. D. Jeshanthan Senior Staff Management Assistant



Mr. M. Nishanth

Management
Assistant



Ms. Keerthana Vavananth Management Assistant



Ms. S. Tharshika

Management

Assistant



Mr. B. Narendran
Works Aide



Mr. B. Krishdeepan Works Aide

#### 2. Programmes and Curriculum Development & Revision

#### 2.1 Evolution of Structure of Academic Programme

The Faculty of Science, since its inception in 1974, operated under a year-end based academic system. In 1974, the Faculty commenced the academic activity by offering Mathematics and Statistics only. Then in 1975, the University Grants Commission assigned the first batch of students to the Faculty of Science to pursue the Bio Science stream (comprising Botany and Zoology) and the Physical Science stream (including Chemistry, Mathematics, Physics and Statistics). Extensive preparations were undertaken to design the syllabi and teaching curricula, alongside the procurement of essential laboratory equipment, library books, and scientific periodicals, to facilitate the implementation of the course unit system.

By 1979, most departments had commenced special degree programs in Botany, Chemistry, Mathematics, Physics, Statistics, and Zoology, initially enrolling two students per discipline. In 1985, the Faculty introduced the semester-based academic structure, marking a major transformation in the teaching and evaluation process. This transition necessitated revisions to the curriculum, syllabi, and examination regulations, aligning the Faculty's practices with contemporary trends in higher education modernization.

Further curriculum revisions were implemented in 1991, introducing the two-principal subject system under which teaching and examinations were conducted. A major structural reform in the undergraduate degree program followed in the early 2000s, with the adoption of the Grade Point Average (GPA) system for assessing student performance. Officially implemented in 2004, this reform represented a significant step toward enhancing academic standards and ensuring compliance with the Sri Lanka Qualifications Framework (SLQF).

The current structure and syllabi were introduced in 2018 and implemented for students enrolled in the 2016/2017 academic year. Collectively, these progressive changes reflect the Faculty's continuous efforts to strengthen academic quality, uphold educational excellence, and align with evolving national and global standards in science education.

#### 2.2 Degree programmes

The Faculty of Science offers a range of three-year and four-year degree programmes, providing students with opportunities for specialized academic and research training in various scientific disciplines.

#### **BSc Degrees (Three-Year Programme)**

The three-year Bachelor of Science (BSc) degree is available in three main streams.

Stream of study	Name of the Degree	Abbreviation	
Biological Sciences	Packalar of Caionas	DCo	
Physical Sciences	Bachelor of Science	BSc	
Computer Science	Bachelor of Science in Computer Science	BSc (Computer Science)	

#### **BScHons degrees (Four- year Programme)**

For students seeking advanced specialization and research opportunities, the four-year Bachelor of Science Honours (BScHons) degree is offered across multiple disciplines. Selection for the BScHons (subject-specific) degree programme is conducted at the end of the second year (Level 2) based on student performance and the availability of places.

In contrast, selection for the BScHons in Applied Science degree programme takes place at the end of the third year (Level 3).

Students in the Physical Science stream or those admitted through direct UGC intake to study Computer Science can pursue the Bachelor of Science Honours in Computer Science.

These degree programmes are designed to provide students with comprehensive academic training, hands-on research experience, and practical skills, preparing them for careers in scientific research, industry, and academia.

The Faculty of Science provides students with a diverse selection of principal subjects across its Biological Science, Physical Science, and Computer Science streams. In the Biological Science stream, students can specialize in Botany, Chemistry, Fisheries Science, or Zoology, gaining a comprehensive understanding of life sciences and their applications.

The subject-specific Honours degree programmes are:

Subject of study	Name of the Degree	Abbreviation	
Botany	Bachelor of Science Honours in Botany	BScHons (Botany)	
Chemistry	Bachelor of Science Honours in Chemistry	BScHons (Chemistry)	
Computer Science (Physical Science Stream)	Bachelor of Science Honours in Computer Science	BScHons (ComputerSc)	
Computer Science (Direct-intake)	Bachelor of Science Honours in Computer Science	BScHons (Computer Science)	
Fisheries Science	Bachelor of Science Honours in Fisheries Science	BScHons (Fisheries)	
Mathematics (Pure & Applied Science)	Bachelor of Science Honours in Mathematics	BScHons (Mathematics)	
Physics	Bachelor of Science Honours in Physics	BScHons (Physics)	
Statistics	Bachelor of Science Honours in Statistics	BScHons (Statistics)	
Zoology	Bachelor of Science Honours in Zoology	BScHons (Zoology)	
Applied Science	Bachelor of Science Honours in Applied Science	BScHons (AppliedSc)	

The Physical Science stream offers six principal subjects: Applied Mathematics, Chemistry, Computer Science, Physics, Pure Mathematics, and Statistics, allowing students to develop expertise in mathematical, computational, and physical sciences. Additionally, students admitted through direct intake for Computer Science pursue Computer Science as their primary subject, equipping them with the necessary skills and knowledge for careers in technology and software development. These subject offerings ensure that students receive specialized and well-rounded education, preparing them for advanced studies, research, and professional careers in their respective fields.

Depending on the demand and the availability of the resources, the following supplementary subjects are offered in Level 3 (Third year): Environmental Science, Food and Nutrition, and Information Technology (for students who are not offered Computer Science as a subject in Levels 1 & 2), Electronics (for students who are not offered Physics as a subject in Levels 1 & 2).

The faculty conducts 90 hours (15 hours per week) of English language proficiency courses to the new entrants in collaboration with the Department of English Language Teaching (DELT) prior to commencing the principal and supplementary courses. It should be noted that a student

should possess a Pass (overall band score 4.0 out of 9.0) in an English language proficiency course for the award of a degree.

In line with the graduate profile of the faculty, several other skill enhancement short courses on computer literacy, life skills development, and Mathematics for Biological Science Students have been conducted as pre-semester courses. Further, the career guidance cell of the faculty conducts Career Fairs to the final year students in collaboration with leading institutions.

#### 2.3 Curriculum Development, Revision, and Monitoring Committee (CDRMC)

The Faculty of Science, University of Jaffna, has periodically revised its curricula and academic programmes since its establishment in 1974, adapting to evolving academic and professional requirements. These revisions were initially carried out through various procedures and guidelines that were in place at different times. A more structured and standardized process was introduced in 2013 with the establishment of the University Curriculum Evaluation Committee. Subsequent external review reports emphasized the importance of instituting a dedicated faculty-level mechanism to coordinate and monitor curriculum development. In response, the Curriculum Development, Revision, and Monitoring Committee (CDRMC) was constituted at the 172<sup>nd</sup> meeting of the Faculty Board of Science, with its Terms of Reference formally approved at the 173<sup>rd</sup> Faculty Board meeting held on 8 November 2019. The Standard Operating Procedure (SOP) governing the committee's operation was later approved by the Senate at its 442<sup>nd</sup> meeting on 28 January 2020.

**Scope and Objectives:** The CDRMC serves as the central body within the Faculty of Science responsible for guiding, coordinating, and monitoring all matters related to programme and curriculum development, revision, and evaluation. Its primary objective is to promote good practices in curriculum design and revision, ensuring that all academic programmes comply with the standards of the Sri Lanka Qualifications Framework (SLQF) and the Subject Benchmark Statements (SBS).

#### The Committee's functions include:

- Evaluating the need for revisions to existing curricula under the Faculty's purview.
- Reviewing and recommending changes or improvements to current curricula.
- Assessing and proposing new courses or degree programmes for consideration by the Faculty Board.
- Ensuring alignment of all curricula with SLQF and SBS requirements.
- Developing and recommending long-term plans and policies for curriculum development and revision.
- Identifying and addressing overlapping content across disciplines.
- Encouraging interdisciplinary collaboration and innovation in curriculum design.

**Operation and Process**: Curriculum development and revision within the Faculty of Science is a collaborative and evidence-based process involving multiple stakeholders, including academic staff, students, alumni, employers, and subject experts both within and outside the university.

Curriculum revisions may be initiated for several reasons, such as:

- Shifts in academic, industry, or community needs;
- Advancements in pedagogy and instructional methodologies;
- Emerging national or professional standards; or
- New directives from the Ministry of Higher Education or the University Grants Commission.

Proposals for new or revised curricula originate at the departmental level. When multiple departments are involved, joint discussions are held to ensure coherence and integration across disciplines. Minutes of such meetings, along with stakeholder feedback and a detailed needs analysis (involving at least 50 respondents), must accompany all curriculum proposals.

Once submitted through the Dean, the CDRMC conducts a comprehensive review within one month of receipt. The Committee's review report is then communicated to the proposing department, which must address any recommendations before resubmission to the Faculty Board for approval. Following the Faculty Board approval, the proposal proceeds to the University Curriculum Evaluation Committee (CEC) and, subsequently, the Senate for final endorsement. Any revisions recommended at these higher levels must be duly incorporated before implementation.

Through its systematic structure and rigorous operational framework, the CDRMC plays a pivotal role in ensuring that the academic programmes of the Faculty of Science remain relevant, outcome-oriented, and aligned with national and global educational standards. Its establishment has significantly strengthened the Faculty's commitment to continuous improvement, academic excellence, and quality assurance in science education.

# 2.4 Subject and Programme Review, Curriculum Development, and Academic Quality Enhancement

#### 2.4.1 Subject and Programme Reviews

The degree programmes offered by the Faculty have undergone periodic subject and programme reviews in full compliance with national quality assurance requirements. These reviews are conducted by panels of independent external experts appointed by the University Grants Commission (UGC) on the recommendation of the Quality Assurance Council (QAC). This externally driven review mechanism ensures transparency, objectivity, academic rigour, and alignment with nationally accepted standards of higher education.

During the most recent programme review cycle, the following study programmes were evaluated by UGC-appointed reviewers: the Bachelor of Science (General) Degree Programme; Bachelor of Science Honours Degree programmes in the Computer Science stream; the Physical Science stream (Applied Science, Computer Science, Physics, Mathematics and Statistics); and the Biological Science stream (Botany, Chemistry, Fisheries, and Zoology). Notably, the Bachelor of Science Honours Degree in Computer Science and the Bachelor of Science Honours Degree in the Biological Science stream were awarded **Grade A**, signifying a high level of accomplishment of the quality expected of a programme of study, with clear potential for progression towards excellence. Final reports from the review teams for the remaining study programmes are awaited.

#### 2.4.2 Curriculum Development and Revision

Building on the recommendations of programme review panels and feedback obtained from key stakeholders—including students, alumni, employers, and academic staff—the Faculty has adopted a proactive, systematic, and evidence-based approach to curriculum enhancement. Accordingly, the Faculty Board of Science has resolved to initiate a comprehensive curriculum revision process covering all three-year and four-year degree programmes, with the intention of implementing the revised curricula for students enrolling in the next academic year.

The curriculum revision process is guided by the principles of outcome-based education, constructive alignment, relevance to national and global labour market needs, and the integration of research, innovation, and transferable skills. Through this structured approach, the Faculty aims to enhance graduate employability, strengthen academic depth, and ensure continued alignment with national quality assurance benchmarks.

In parallel, curriculum development activities are underway for two new Honours degree programmes. The Faculty Board of Science has approved the titles of course units and the roster of resource persons for the Bachelor of Science Honours Degree Programme in Science Education, based on the recommendations of the committee appointed to revise this programme. This initiative reflects the Faculty's strategic commitment to strengthening science education and teacher preparation through a contemporary, research-informed curriculum responsive to national educational priorities.

#### 2.4.3 Introduction of New Undergraduate Degree Programmes

Faculty members have been actively engaged in the development of curricula for new and high-demand undergraduate programmes, informed by stakeholder surveys, student demand, and emerging disciplinary and industry trends. In particular, the Biological Science stream has developed the curriculum for the Bachelor of Science Honours Degree Programme in Molecular Biology, which has received endorsement from the Faculty Board of Science on the recommendation of the Faculty-level Curriculum Development, Revision, and Monitoring

Committee. This programme is designed to address advances in molecular and life sciences and to prepare graduates for careers in research, biotechnology, and related fields.

Similarly, the Department of Computer Science has initiated the curriculum development process for two new undergraduate degree programmes, BScHons in Artificial Intelligence and BScHons in Cybersecurity, through the preparation of comprehensive concept notes. These concept notes were reviewed and approved by the University Council, and the Department is currently engaged in the systematic development of detailed curricula, ensuring alignment with international standards and emerging technological developments.

In addition, the Faculty of Science, University of Jaffna, has decided to introduce a Bachelor of Science (BSc) Degree Programme under a self-financing model and has submitted a concept note to the Senate for consideration. This initiative aims to respond proactively to the evolving needs of students and the changing landscape of higher education in the sciences. It seeks to provide students with a strong interest in scientific inquiry and an opportunity to pursue a rigorous and comprehensive science education, while expanding access for those who have completed the Mathematics or Biology streams at the GCE Advanced Level but were unable to secure admission to a state-funded university due to constraints such as lower Z-scores or personal commitments. The programme, therefore, offers an inclusive and flexible pathway to obtain a quality science education from a reputed institution in the region.

#### 2.4.4 Postgraduate Degree Programmes

Faculty members from the Biological and Physical Science streams have made significant contributions to the development and coordination of multidisciplinary postgraduate degree programmes, reflecting the Faculty's commitment to addressing contemporary national and global challenges through advanced education and research. These include the one-year Master of Environmental Science, the two-year Master of Science in Environmental Science, the one-year Master of Clean Energy Technologies (MCET), and the two-year Master of Science in Clean Energy Technologies (MSC (CET)).

As part of its efforts to further strengthen advanced training and research capacity, faculty members from the Computer Science stream have also obtained University Council approval for the programme structures and syllabi of two postgraduate degree programmes: the Master of Computer Science (MCS) and the MSc in Computer Science. The Department is currently undertaking the necessary academic and administrative processes to operationalise these programmes, intending to produce highly skilled graduates equipped for advanced professional practice and research.

#### 2.4.5 Pre-semester Courses New Entrants

The Faculty of Science places strong emphasis not only on imparting core disciplinary knowledge but also on holistically preparing new entrants for university education. In addition to subject-

based learning, the Faculty gives special attention to developing students' skills, attributes, and mindsets through a range of structured pre-semester programmes conducted prior to the commencement of core academic courses. These programmes include: Life Skills for Personality Development, English Language Proficiency, Computer Literacy, Information Literacy, Gender Awareness and Learning Gender, Mathematics for Biological Science Students These initiatives are designed to equip students with essential academic, professional, and personal competencies, thereby ensuring a smooth and confident transition into undergraduate studies.

**Life Skills Programme and Social Action Projects**: Over the past three years, the Faculty of Science has consistently conducted a comprehensive Life Skills Programme for new entrants, followed by Social Action Projects. Since 2023, these initiatives have been further strengthened by extending the Social Action Projects to a ten-week duration, implemented after a week-long intensive Life Skills training programme held on the Faculty premises.

The Faculty takes great pride in its new students, who have successfully undertaken impactful Social Action Projects across the country even before formally commencing their academic studies. These projects reflect a high level of initiative, creativity, and social responsibility among students. Moreover, they have played a pivotal role in nurturing essential life skills, enhancing leadership capabilities, and promoting personal growth as well as social engagement, thereby contributing meaningfully to students' overall development.

#### 2.4.6 Certificate Courses

The Department of Zoology has been offering a Certificate Course in Molecular Biology Laboratory Techniques since 2017. The Department of Computer Science commenced four certificate courses in Computing in 2024 and has expanded them to six courses in 2025. These certificate courses are: Python Essentials for Problem Solvers, Responsive Web Development, Smart Devices and Internet of Things, Web Development with MERN Stack, Mobile App Development, and Artificial Intelligence and Applications. The faculty is also in the process of commencing a new certificate course in laboratory techniques.

#### 2.4.7 Summary

Overall, the Faculty demonstrates a strong and sustained commitment to maintaining academic excellence through structured subject and programme reviews, systematic curriculum development and revision, and the consistent adoption of best practices. These efforts ensure the continued relevance, quality, inclusiveness, and sustainability of the Faculty's academic programmes in a rapidly evolving higher education environment.

#### 3 Major Research and Development projects

This chapter highlights major Research and Development (R&D) projects that have significantly strengthened the Faculty's academic, research, and physical infrastructure. It details the support received from national and international funding agencies, including the Sri Lankan National Research Council, the Sri Lankan National Science Foundation, the Swiss National Science Foundation, the Norwegian Research Council, the Asian Development Bank, the World Bank (IRQUE, HETC, and AHEAD projects), the Norwegian Directorate for Higher Education and Skills (HRNCET & CBERC project), and the Swedish International Development Cooperation Agency (SIDA). These initiatives, undertaken through R&D proposals submitted by the academic staff, have played a vital role in enhancing the Faculty's higher education and research capacity, and thereby that of the University. The chapter further underscores advancements in teaching and learning environments, research capacity building, human resource development, and the establishment of new buildings and facilities, including those for Computer Science and Fisheries.

#### 3.1 ADB grant

The Asian Development Bank (ADB grant) awarded a US\$ 150,000 grant to the Faculty during 2002 - 2004 to purchase laboratory equipment. Using this grant, HPLC, NMR, FTIR, UV-VIS-NIR and Flame spectrometry were equipped at the laboratory of the Department of Chemistry.

#### 3.2 SIDA grant

The University of Jaffna's Campus Wide LAN/WAN Project, funded by a SIDA grant of approximately LKR 100 million in 2003/2004, established a fiber optic network connecting various academic and administrative departments across the University. The project was implemented with the technical support of the University of Colombo, School of Computing, significantly enhancing ICT infrastructure for teaching, research, and administration at the university. This project marked a pivotal step in the digital transformation of the University of Jaffna, fostering improved academic collaboration and connectivity within the institution.

#### 3.3 IRQUE Project

Improving Relevance and Quality of Undergraduate Education

#### 3.3.1 IRQUE Project – Physical Science study programme

A competitive Quality Enhancement Fund (QEF) worth of LKR 87 million was awarded to the BSc General Degree programme in Physical sciences stream under this project in 2005 - 2010.

The sub activities include:

- ✓ Improving teaching learning processes.
- ✓ Improving laboratory-based programmes.
- ✓ Improving English language proficiency among students/junior staff.

- ✓ Revising the curriculum to meet the emerging challenges from the job market.
- ✓ Improving Social and Intercultural Harmony.
- ✓ Fostering and promoting Social Harmony.
- ✓ Improving internal management and quality assurance.
- ✓ Improving students-staff research activities.

All the departments under the Physical Science stream such as Department of Chemistry, Computer Science, Mathematics and Statistics, and Physics benefitted from this grant.

Major development includes, curriculum revision carried out for Chemistry, Mathematics, Physics and Statistics; redesigning of Social Harmony into the curriculum, workshops and training programmes for academics in research, curriculum revision and design; IT training for technical officers; overseas training for a technical officer from the Department of Chemistry in UK, purchase of laboratory equipment and teaching equipment; renovation of lecture halls and laboratories, computer laboratories; construction of fume hoods and exhaust fans; and installation of water filters and coolers.

#### 3.3.2 PhD Degree Programmes

Three academics of the Faculty received scholarships under the IRQUE Project to pursue their postgraduate degree (MPhil/ PhD) programmes in collaboration with the national and foreign universities.

Name of the academic staff	Universities	Degree program	Period
Mr. A. Ramanan	University Sheffield, UK University of Jaffna	Split MPhil/PhD	Sep 2006 – Jan 2008
	University of Southampton, UK	PhD	Jan 2008 – June 2010
Mr. K. Velauthamurty	University of Peradeniya University of Liverpool, UK	Split PhD	Aug 2006 – Dec 2009
Mr. K. Kannan	University of Southampton, UK University of Jaffna	Split PhD	Sep 2007 – Oct 2011

#### 3.4 HETC project

#### Higher Education for Twenty-first Century - World Bank funded Project.

The HETC Project is a credit given to the Government of Sri Lanka by the International Development Association (World Bank) for the period of 5 years from 2011 to 2016 to enhance the capacity of higher education system and to deliver quality higher education services in line with equitable, social and economic development needs of the country.

#### 3.4.1 Quality & Innovation Grants (QIGs)

The objective of this sub-component is to make additional resources available to support strategic and innovative plans to enhance the quality of teaching and research. Both Physical Science study programme and Biological Science study programmes awarded separate competitive grants under this project.

#### 3.4.1.(a) Physical Science study programme

The grant worth of LKR 50 million rupees was awarded to the Physical Science study programme for a period of 36 months starting from 2012 to 2014.

The sub-activities include:

- ✓ Revamping the curricula to improve employability
- √ Facilitating interactive Teaching learning Processes
- ✓ Improving Career Prospects in Physical Science Study Programme.

All the departments in the Physical Science stream such as Chemistry, Computer Science, Mathematics and statistics and Physics benefitted from this grant.

Major activities conducted using this grant includes, infrastructure developments include establishment of Student-hot spot/study hall with wireless access points, refurbishment of lecture halls, renovation of laboratories at the Department of Physics and Chemistry and computer laboratories at the Department of Computer Science, refurbishment of Statistical laboratory of the Department of Mathematics and Statistics with networking facility, installation of water purifiers and stone seats in the Faculty premises, installation of teaching aids such as LMS and e-learning facilities, video conference kits, internet server and the skill development programmes via training workshops in career guidance, Industrial visits and training programs, tech-talks and career fairs. The first ever career fair for students at the Faculty level was conducted under the HETC grant in 2014.

#### 3.4.1.(b) Biological Science Study Programme

A total of LKR 25 million was awarded to the Biological Science study programme for a period of 36 months starting from January 2013. The major objective of the project aimed to produce marketable graduates with strong practical and analytical skills.

The sub-activities include:

- ✓ Modernizing the curricula through tracer studies and curriculum revision workshops.
- ✓ Introducing innovative teaching, learning, and assessment methods to enhance the quality of education.
- ✓ Building University-Industry links to facilitate internships and research collaborations.

All the Departments in Biological Sciences such as Botany, Zoology and Fisheries benefitted from this project. Major activities include revising the curricula, integrating e-resources in teaching

and learning, developing university-industrial links and by refurbishing the laboratories and lecture halls.

#### 3.4.1.(c) Human Resource Development

This sub-component has been developed to support human resource development in the higher education sector by assisting the higher education institutes to strengthen the quality of their academic-staff through suitable postgraduate programmes, and all staff through short term training programmes. A total number of 18 academic staff members of the University of Jaffna received the HRD grant in 2012 to pursue postgraduate courses at various universities which include 2 academics from the Faculty of Science.

Academic Staff	Universities	Degree	Period
Mr. A. Thevakaran	University Colombo, Sri Lanka & CSIRO, Australia	Split PhD	2012 - 2015
Ms. G. Barathy	University of Peradeniya, Sri Lanka & University of Southampton, UK	Split PhD	2011 - 2014

#### 3.5 AHEAD project

The Accelerating Higher Education Expansion and Development (AHEAD) Operation is a World Bank funded Project, focused on expanding, diversifying, and developing the higher education sector in Sri Lanka to drive economic growth through knowledge-based industrial and service sector activity and on producing graduates of global quality.

The Faculty of Science was awarded with three grants under the Enriching Learning, Teaching & Assessment and English Language Skills Enhancement (ELTA-ELSE) Development Projects category, and one research grant under the Development Oriented Research (DOR) grant category.

Major activities under these grants included the following: revamping the existing curriculum to best fit the modern job market, procuring modern teaching equipment and software, improving infrastructure facilities to enhance socio emotional skills and English language skills, renovating laboratories, and conducting workshops to staff and students for capacity developments.

#### 3.5.1 AHEAD ELTA ELSE Faculty Development Grant

This competitive grant worth of LKR 120 million was awarded to the Faculty of Science in 2019 and completed in 2023. Major activities of this grant include:

- ✓ Uplifting the English Language skills among the students
- ✓ Enriching student-centered learning activities
- ✓ Re-strengthening industrial academic linkage
- ✓ Developing Socio-emotional skills among staff and students
- ✓ Enriching laboratory and research skills for students and staff

Faculty achieved several significant milestones by expanding infrastructure facilities and improving students' English language skills and socio-emotional skills among staff and students, enriching teaching methodologies and learning environments, and promoting research and innovation of undergraduate students.

High-profile research equipment enabled undergraduate students to get involved in quality learning and research work. This research equipment helped departments introduce newer practical classes on current exciting research topics and motivated students to carry out quality research work ultimately publishing conference and journal papers and research theses. Undergraduate research symposium and training workshops conducted highlight the success of this project.

The newly established state-of-the-art English language laboratory introduced interactive English language classes, enabling students to significantly enhance their language skills. Several students sat the IELTS examination as a byproduct of these English classes, scored high, and secured scholarships in foreign universities such as Griffith University Australia, Southern Illinois University in Carbondale, USA, Cleveland State University, Brock University, Canada, etc., to pursue further research studies.

Further, the Social Welfare Centre, Faculty Research Centre of Excellence, and Faculty Incubation Cell were established within the premises. The student hot-spot of the faculty, seminar rooms of the departments and laboratories were also refurbished.

Introducing modern teaching practices such as small group discussions and LMS-based teaching to complement in-person classes and using open and online educational resources to enhance the learning experience further, was another target to improve the teaching and learning activities in the faculty. The faculty curriculum was revamped to include these newer techniques, and during the COVID-19 outbreak, the stakeholders greatly appreciated these unique teaching techniques.

Notably, AHEAD project of the faculty was able to procure equipment such as interactive white screens, video conferencing equipment, interactive writing pads, noise cancelling head phones etc., that immensely helped to conduct the teaching and learning activities during the lockdown periods without interruption. The project was successfully completed in 2023.

#### 3.5.2 AHEAD ELTA ELSE Department Development Grant - Chemistry

The Department of Chemistry secured LKR 15 million funding through this competitive grant in the year 2019. The project focused on improving the intellectual and professional capabilities of graduates. Sub-activities include:

- ✓ English language proficiency
- ✓ Digital based teaching learning strategies

✓ Laboratory based research and socio-emotional skills development and graduate employability

Notable achievements include the establishment of UoJ English Speakers Club, Computer laboratory, upgrading of learning environments, training on advanced analytical techniques in research, and introduction of Action projects into the curriculum of BScHons (Chemistry).

#### 3.5.3 AHEAD ELTA ELSE Department Development Grant - Zoology

The Department of Zoology awarded a competitive grant worth of 18 million under this project during 2019 -2023. The project involved improving the curricula, language skills and research through various activities.

#### Major activities include:

- ✓ Enriching the teaching and learning environment for students and staff
- ✓ Introducing new courses and upgrading facilities of the lab and museum to support learning activities for these courses.
- ✓ Enriching the curricula in line with strengthening research.
- ✓ Developing English language for the special degree students
- ✓ Development of socio-emotional skill among students

The prominent achievements include the establishment of bioinformatics laboratory, museum, and ZSA – student interactive space; refurbishment of laboratories, particularly installation of glass fronted doors and safety facilities, refurbishment of seminar room, introduction of new course – scientific communication, and purchase of equipment and tools for laboratory and field studies. Further, skill development programmes through Zoological Students' Association (ZSA) activities such as research symposia, training on wildlife and Nature photography, workshop on wildlife conservation, industrial visits and training, short-term training for laboratory staff also conducted. The project was successfully completed in 2023.

#### 3.5.4 AHEAD Development Oriented Research (DOR) Project

With the leadership of Prof. K. Vignarooban, Departments of Physics and Chemistry won an amount of LKR 40 million to carryout collaborative research activities under the AHEAD Development Oriented Research (DOR) Grants. Laboratory for Energy Conversion and Storage (LECS) was established as an extension of the Department of Physics and ceremonially opened on July 5, 2023. Further, a Chemistry Research Laboratory (CRL) was refurbished at the Department of Chemistry under this grant. The major theme of the research project was the synthesis and characterization of novel electrolyte and electrode materials for batteries beyond lithium-ion, such as sodium-ion and magnesium-ion batteries.

#### 3.5.5 Split-Site Research Degree Programme

Ms. J. Samantha Tharani (Lecturer in Computer Science) obtained a Griffith University Postgraduate Research Scholarship (GUPRS), Griffith University International Postgraduate Research Scholarship (GUIPRS), and a scholarship under the World Bank funded AHEAD Operations to pursue a PhD degree programme at the Griffith University, Australia from December 2020.

#### 3.5.6 AHEAD Project – Building for the Department of Computer Science

The Department of Computer Science secured LKR 240 million to construct a new building from the World Bank-funded AHEAD Project in 2018. The foundation was laid in 2019 and the additional LKR 7.7 million was awarded to complete the roof top. The building can cater to about 450 students and houses two laboratories with 100 computers each, a lecture hall—cum—auditorium with a seating capacity of 160, another lecture hall with a seating capacity of 160, a dedicated IoT laboratory for about 40 students, a seminar room, a discussion room, and a study hall. It also includes several essential facilities such as access for differently abled persons, a lift, an RO water plant, a sewage treatment plant, and a basement vehicle parking area, all of which are required for the department's activities. The building has been brought into its full operation with the equipment and amenities worth over 4.5 million rupees donated by the alumni of the department.

# 3.6 Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies (HRNCET) Project

The faculty staff made a significant contribution to the Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies (HRNCET), a major initiative undertaken with the Western Norway University of Applied Sciences (HVL). This collaboration secured a Norwegian Partnership Programme for Global Academic Cooperation (NORPART) grant of NOK 4.7 million (~LKR 85 million) for the period 2017–2021, one of only 21 projects funded out of 114 applications evaluated by the Norwegian Centre for International Cooperation in Education (SIU). In addition, the Royal Norwegian Embassy in Sri Lanka awarded HVL a further NOK 6.2 million (~LKR 112 million) from 2017 to 2019 to support capacity building and the establishment of a research consortium in nanomaterials for clean energy technologies.

These combined initiatives, implemented between 2017 and 2022, strengthened higher education and research collaboration, built institutional capacity, and established a vibrant research consortium. The first phase concluded in 2022, having surpassed expectations despite the disruptions caused by the COVID-19 pandemic. Building on this foundation, HRNCET 2.0 was launched under the NORPART programme in 2022 to further enhance education and research in nanomaterials for Clean Energy Technologies (CET) in Norway and Sri Lanka. The second phase focuses on two key components: establishing a new sandwich PhD programme and expanding master-level collaboration, particularly through stronger partnerships with industry.

HRNCET 2.0 has deepened cooperation among its partner institutions—HVL and the University of Bergen in Norway; the Coimbatore Institute of Technology in India; and the Universities of Peradeniya and Jaffna, together with the National Institute of Fundamental Studies. Student and staff mobility continues to be a central element, providing enriched academic and research exposure across partner universities. Through these coordinated efforts, HRNCET—NORPART 2.0 has improved academic quality, expanded research output, and strengthened institutional capacity in CET.

A major achievement of the collaboration has been its support for advanced academic training. Several Sri Lankan students completed PhD and Master's degrees at HVL and UiB, producing impactful scientific contributions. Jointly supervised PhD candidates published between five and nine SCI-indexed papers each, reflecting the strong research culture fostered through the partnership and the steady improvement in postgraduate research capability. International academic mobility further enriched this progress. The first cohort of full-degree Master's students graduated in 2024, benefiting from access to state-of-the-art facilities, global research networks, and diverse academic environments.

A landmark event under HRNCET 2.0 was the Third International Conference on Advanced Nanomaterials for Clean Energy and Health Applications (AMCEHA 2025), held at the University of Jaffna in March 2025. The conference brought together over 400 participants, including 140 international researchers and experts, significantly strengthening global partnerships in nanomaterials, clean energy, and health technologies. It showcased the research capacity of HVL, the University of Jaffna, and partner institutions, while facilitating high-level knowledge exchange, joint project discussions, and the development of new research networks. AMCEHA 2025 also enhanced Sri Lanka's visibility as an emerging hub for advanced materials research.

Research capacity building remains a core pillar of HRNCET 2.0. Seminars, workshops, laboratory training, and collaborative research activities have supported sustained knowledge exchange, enhanced research skills, and introduced international best practices to Sri Lankan institutions. Outreach and community engagement have also been strengthened through STEM-based competitions, school programmes, and educational initiatives that have benefited hundreds of students in the Northern Province, fostering early interest in clean energy technologies.

Overall, HRNCET—NORPART 2.0 has deepened international partnerships, broadened national research capacity, and delivered high-quality academic outputs. Its achievements demonstrate the transformative potential of sustained global collaboration in advancing clean energy research and higher education in Sri Lanka.

#### 3.7 New Building for the Department of Fisheries

The Department of Fisheries at the University of Jaffna was established in June 2009 by Gazette notification dated 5 June 2009, with administrative operations commencing on 1 August 2009. Recognising the vast potential of Northern Sri Lanka—endowed with rich coastal and inland

aquatic resources—and the growing demand for trained professionals in fisheries science, a proposal for a dedicated academic programme was developed in 2007. This initiative led to the approval of a four-year BScHons degree programme in Fisheries Science by the University Grants Commission (UGC) and the formal establishment of the Department in 2009.

Since its inception, the Department has offered the BSc Hons (Fisheries Science) programme, producing graduates who contribute meaningfully to fisheries management, aquaculture, marine conservation, and the sustainable development of the country's aquatic resources. Despite its steady progress, the Department has operated without a dedicated permanent building. Addressing this long-standing need, a new 3,600-square-foot Fisheries Science Building is currently under construction within the University premises. The project is being completed in three phases and is scheduled to be inaugurated during the Faculty's Golden Jubilee celebration on 30 December 2025.

This milestone marks a significant step in the Department's development and reflects the Faculty's strong commitment to advancing fisheries science education, research, and innovation—areas essential to the sustainable management of Sri Lanka's aquatic resources and to the broader national economy.

#### 3.8 Boardroom for the Faculty of Science

For many years, the Faculty of Science relied on the main boardroom of the University's central administration for conducting Faculty Board meetings and a range of other official discussions. While this arrangement allowed essential academic and administrative functions to continue, it also highlighted a long-standing need for a dedicated space that could more effectively support the Faculty's growing responsibilities, academic planning, and strategic decision-making. As the Faculty expanded in size, academic breadth, and administrative complexity, the absence of an exclusive boardroom became increasingly evident, prompting sustained efforts to identify a suitable solution.

In response to this need, and with the support of the University's rehabilitation vote, a purpose-built boardroom for the Faculty of Science was established on the upper floor of the Faculty office. This new facility provides a professional and well-equipped environment for Faculty Board meetings, committee sessions, academic reviews, and collaborative engagements with internal and external stakeholders. Its design reflects both functionality and institutional identity, offering an improved setting that enhances the quality and efficiency of administrative deliberations.

The new Faculty Boardroom was ceremonially opened on 30 December 2025 as part of the Golden Jubilee celebrations of the Faculty of Science. This milestone not only marks the resolution of a long-standing infrastructural challenge but also symbolises the Faculty's continued commitment to strengthening governance, fostering academic excellence, and building a modern institutional environment that supports its vision for the future.

#### 4. Research and Development

The faculty has been instrumental in cultivating a vibrant culture of scientific inquiry and creativity among the academics and students. Faculty members secure research grants, maintain research collaborations with national and international institutions across the globe and maintain the standards.

In order to provide a platform for the undergraduates, postgraduates, academics and researchers of the University and the region, faculty organizes international and national conferences and symposia at the University. It facilitates the researchers to share their ideas and findings, make fruitful discussions and collaborations nationally and internationally.

#### 4.1 Research Conferences and Symposia

#### 4.1.1 VINGNANAM Research Conference (VRC)



The Faculty of Science has organized an international conference under the name of Faculty magazine 'VINGNANAM', the VINGNANAM Research Conference (VRC) since 2018. The aim of the conference is to provide an intellectual platform for the scientific community to share their findings, make healthy discussions and collaborations with the other researchers and academics of Sri Lanka and other foreign countries. The VRC is held on a biennial basis. The first conference (VRC2018) was organized by the

Faculty of Science in 2018 with the financial support of the ministry of Science, Technology, Research, Skills Development & Vocational Training and Kandyan Heritage with the theme of 'Exploring Science for Smart Future on 4 July 2018. Then VRC2022 was jointly organized by the Faculty of Science and Western Norway University of Applied Sciences, Norway on 20 July 2022. This was held in hybrid mode due to the post COVID19 pandemic situation. VRC2024 was held on 6 September 2024, sponsored by National Science Foundation of Sri Lanka and Norwegian Directorate for Higher Education and Skills under the HRNCET 2.0 project. From 2022 onwards, the VRC has been organized as a satellite conference under the umbrella of the Jaffna University International Conferences (JUICe).

# 4.1.2 International Conference on Advanced Materials for Clean Energy and Health Applications



The growing world population and the environmental challenges demand more focus on clean energy and health technologies. Advanced nanomaterials have paved the way for innovation and new applications in the field of clean energy and

health sector. As the demand for clean energy is going to be immense in the future and many countries consider transforming themselves into clean energy economies, it is of utmost interest for the research community to work on novel ideas and find solutions for the challenges facing

the clean energy sector. Rapid progress in nanotechnology in the past decade has provided significant breakthroughs in the area of energy sector and health applications.

In this regard 'The International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA)' had been conducted three times by the Faculty of Science under the research project collaboration with that of Western Norway University of Applied Sciences, Norway.

The first conference (AMCHEHA 2019) in this series was organized as 3-day conference at the University of Jaffna jointly organized by Faculty of Science and Western Norway University of Applied Sciences, Norway; co-organized by Ministry of Science, Technology, Research, Skills Development and Vocational Training and Kandyan Heritage, Sri Lanka on 6 – 8 February 2019.

AMCEHA 2025, the third conference in series was jointly organized by Faculty of Science and Western Norway University of Applied Sciences, Norway with the participation of Coimbatore Institute of Technology - India, Alagappa University - India, PSG College of Technology, University of Bergen- Norway, University of Oslo – Norway, Eastern University of Sri Lanka, and National Institute of Fundamental Studies, Sri Lanka. The Norwegian Directorate for Higher Education and Skills sponsored the conference.

#### 4.1.3 National Conference on Insect Vector Biology

The National Conference on Insect Vector Biology was organized by the Department of Zoology on 10 February 2017 at the Faculty of Science. Postgraduate students, academics and researchers from various institutes of Sri Lanka working in the field of insect vector biology presented their findings and had fruitful discussions.

#### 4.1.4 Undergraduate Research Symposia

Faculty organizes undergraduate research symposia for the Biological Sciences, Physical Sciences and Computer Sciences undergraduate for the past several years. These symposia enable the students to showcase their research findings, get involved into the research culture and develop communication and organizational skills.

#### 4.1.4.(a) Undergraduate Research Symposium for Biological Science students

#### - Organized by Zoological Students' Association (ZSA)

The undergraduate research symposium for Biological Science students has been organized annually by the ZSA since 2020. The first conference was organized in 2020 followed by 2021, 2023 and 2024. The undergraduate organizes the event with the guidance of the senior treasurer of the ZSA. The symposium proceedings were published and issued as hard copy and uploaded in the Departmental website. Best Presenter and Paper awarded at the symposium. The past conferences were financially supported by the AHEAD Project of the Faculty of Science, International Medical Health Organization (IMHO) and the academic staff of the Department of

Zoology. Undergraduates from the Department of Zoology, Botany, Fisheries and Chemistry presented their work in these series of symposia.

#### 4.1.4.(b) Undergraduate Research Symposium

#### Organized by the Physics Society

The annual undergraduate research symposium (URS) has been organized by the Physics Society of the Department of Physics since 2020 to provide a platform for the undergraduates to design, conduct, and present their research findings. The Society successfully conducted three such symposiums between 2020 and 2022, and for each symposium, the Physics Society released the Proceedings of the URS, formally documenting the research presented.

#### 4.1.4.(c) Sri Lanka Student Workshop on Computer Science

#### - Organized by the Department of Computer Science



The Sri Lanka Student Workshop on Computer Science (SL-SWCS) is a proud initiative of the Department of Computer Science and stands as the first student-focused national workshop in the field of Computer Science in Sri Lanka. Designed to inspire and empower young researchers, SL-SWCS creates a stimulating platform where

undergraduate and postgraduate students from across the country can engage with leading academics from both local and international universities.

The workshop provides students an invaluable opportunity to present the outcomes of their research through poster sessions in a friendly, constructive, and intellectually vibrant environment. The inaugural workshop, SL-SWCS 2011, was held on 8 December 2011 in Jaffna. Since then, it has been conducted biennially, consistently attracting around 150 enthusiastic participants. Over the years, SL-SWCS has grown into a highly regarded national event, reflecting the DCS's unwavering commitment to nurturing the next generation of Sri Lankan computer scientists.

#### 4.2 VINGNANAM Journal of Science

VINGNANAM – Journal of Science (VJSc) is a peer-reviewed scholarly journal published by the Faculty of Science, University of Jaffna, Sri Lanka. It serves as a multidisciplinary platform for disseminating high-quality research and review articles across all branches of science and technology. The journal embodies the academic spirit and scientific aspirations of the University and contributes to the advancement of knowledge in Sri Lanka and beyond. Importantly, VJSc serves as a primary platform for showcasing regional and national scientific discoveries to international research communities, thereby amplifying the visibility of Sri Lankan science. Hosted and indexed on the Sri Lanka Journals Online (SLJOL) platform, VJSc ensures open and free access to all readers, enhancing both the visibility and global reach of published research.

The journal has a long and inspiring history. It was first launched in 1986 as part of the University's mission to promote scientific communication and innovation. However, due to the civil conflict that affected the Northern Province, publication was suspended between 1995 and 2010. Following the restoration of stability and normalcy, VJSc was revived in 2011, marking a significant milestone in the University's academic recovery. Since then, it has evolved into a vibrant platform for Sri Lankan scientists, educators, and students to share their work with a global audience. Its continued growth reflects the University's long-term vision to nurture a culture of scientific inquiry and innovation, positioning VJSc as a cornerstone of academic excellence in the country.

VJSc is published twice a year and maintains a rigorous peer-review process to ensure the quality and originality of manuscripts. It welcomes original research articles, short communications, and comprehensive reviews that advance scientific knowledge and innovation. The journal follows an open-access publishing policy, allowing readers to download, share, and cite articles freely without subscription or access fees. A distinctive feature of VJSc is that it charges no article processing or publication fees, as all expenses are borne by the Faculty of Science. This inclusive and non-commercial model encourages participation from researchers with limited financial resources and aligns with the principles of equitable knowledge dissemination. All articles are published under a Creative Commons Attribution (CC BY) license, allowing authors to retain copyright while permitting reuse with appropriate acknowledgment. Each article is assigned a Digital Object Identifier (DOI) to ensure global discoverability and long-term archiving. Continuous efforts are underway to enhance the journal's quality, visibility, and indexing in major citation databases, including SCOPUS and DOAJ.

In an era when science increasingly drives societal and technological transformation, journals like VINGNANAM Journal of Science are indispensable for bridging local research and global knowledge networks. It continues to amplify the voices of Sri Lankan scientists and serve as a gateway to international collaboration. By upholding high editorial standards, embracing openaccess principles, and encouraging original, interdisciplinary research, VJSc strengthens Sri Lanka's scientific community and contributes to global scientific progress. Its enduring commitment to academic integrity, inclusivity, and innovation makes it a symbol of intellectual resilience and a lasting legacy of the University of Jaffna.

#### 4.3 MoUs

The faculty has been pursuing research work by collaborating with a few reputed institutions nationally and internationally. These collaborations enable undergraduate, postgraduate and academics to complete their research and training in those institutes. Meanwhile, a number of foreign students are also admitted to the faculty under these programmes. Complete details of the Mou are included in the annexure.

#### 5. Centres

#### 5.1 Centre for Research in Entomology

In 2020, marking a significant milestone in its 50-year history, the university established its first research centre, the Centre for Research in Entomology (CRE), within the Department. This centre was created to consolidate and coordinate entomological research and outreach activities, serving as a focal point for advancements in the field of entomology. The Centre is currently hosting two PhD students and two MPhil students who are investigating the cellular and molecular mechanisms underlying the adaptation of major dengue vectors, particularly *Aedes aegypti*. This research, led by Prof. S.N. Surendran, aims to deepen understanding of how these mosquitoes adapt to salt environments, which is crucial for developing more effective vector control strategies.

The research is supported by the Swiss National Science Foundation, highlighting the global recognition and importance of the work being conducted. Additionally, the Centre is collaborating with the University of Bern, leveraging their expertise and resources to advance research goals. The establishment of the Centre for Research in Entomology represents a significant advancement in the university's commitment to entomological research and its impact on public health.

#### 5.2 Centre for Science Education

Being the regional academic entity for Science Education in the Northern Province, the faculty of science has been actively engaged in science-related outreach activities since its inception. It has been realised that there is a need for a centre to be established in the faculty to coordinate and streamline activities for promoting science education, and eventually, it could be established as a Department of Science Education at the faculty. In alignment with the vision of the faculty, the Centre for Science Education (CSE) has been established in 2022.

Since then, CSE organizes programmes and outreach activities to improve the science education in the region. Particularly it collaborated with student societies of the department of Faculty of Science, Jaffna Science Association, and the Royal Society of Chemistry – Sri Lanka section. The key activities conducted include exhibition and innovative competitions among school students, preparatory seminar for G.C.E (A/L) students in Science and Technology stream, popularization of Chemistry in Nuwara Eliya and Badulla in collaboration with Royal Chemical Society- Sri Lankan section and outreach activities to mark the fifty years of excellence in Science Education and Research among school students in the northern province in collaboration with student societies of the faculties.

#### 6. Students' Union and Societies

The Faculty of Science encourages the Science Student Union (SSU) and the student societies of the Departments to conduct extra-curricular and outreach activities which enable the students to develop soft skills and inspire them to serve for the community.

### 6.1 Science Students' Union (SSU)

The Science Students' Union (SSU), established in 1975, is the apex student body of the Faculty of Science, representing all undergraduates across its academic departments. At its inception, Prof. P. Kanagasabapathy served as the first Patron, while Dr. J. B. Selliah served as the first Senior Treasurer, laying a strong foundation for student representation and academic collaboration within the faculty.

SSU plays a central role in coordinating academic, co-curricular, and welfare activities that enrich the overall student experience. It provides an essential platform for student advocacy, facilitating dialogue between the student community and the faculty administration, while strengthening leadership, teamwork, and constructive engagement.

Each year, the SSU organizes major faculty events such as sports tournaments, cultural festivals, environmental campaigns, and science exhibitions, enabling holistic student growth. Beyond its internal functions, SSU works collaboratively with departmental societies and other university bodies to implement outreach programs, promote scientific literacy, and support school-level science activities across the region.

These initiatives extend the Union's impact beyond the university, contributing to community development and educational advancement.

Through its dynamic initiatives and strong commitment to student welfare, the Science Students' Union continues to be a driving force in student life, empowering undergraduates and cultivating a culture of scientific excellence, leadership, and service within the Faculty of Science.

### 6.2 Biological Society (BIOSOC) - Department of Botany



The Biological Society (BIOSOC) was founded in 1989 under the visionary guidance of its first Senior Treasurer, Prof. K. Theivendirarajah, of the Department of Botany, University of Jaffna. After a period of dormancy, the society was reactivated in 2013, with the leadership of then patron Mrs. K. Niranjan and the Senior Treasurer Prof. P. Sevvel. At present, BIOSOC is actively conducting a range of academic and co-curricular activities that enrich the learning experience of students.

BIOSOC's signature initiatives are the Biology Education Programs, which are being organized for school students in under-privileged areas. Some of the key activities include practical demonstration for A/L students in plant science, microbiology and molecular biology; invited

talkies by subject experts; workshops on career development and skill development for undergraduates; awareness programmes on environmental conservation such as protection of mangroves to the school students; maintenance of Department's Herbal Garden, etc.

Further, to foster communication and involvement, BIOSOC is publishing a student-led newsletter, which features updates on events, academic reflections, and research-related content. This ongoing publication is giving students a voice and strengthening the academic community within the university.

Through all these continuing and evolving efforts, BIOSOC is actively inspiring, educating, and empowering students, both within and beyond the university, while nurturing a strong culture of scientific excellence, environmental stewardship, and leadership development.

### 6.3 Chemical Society (CHEMSOC) - Department of Chemistry



The Chemical Society of the University of Jaffna, under the Department of Chemistry, plays a key role in nurturing the academic, professional, and social development of chemistry students. It provides an interactive platform where students and staff collaborate to foster scientific curiosity, leadership, and community engagement, connecting theoretical knowledge with practical applications.

The Society regularly organizes academic and outreach programs to inspire exploration in science and technology. Highlights include the discussion series on Green Chemistry and Sustainable Development Goals (SDGs) led by Prof. Nirusha Thavarajah from the University of Toronto Scarborough, which broadened students' understanding of sustainability and encouraged environmentally conscious research practices. Demonstrating its commitment to social responsibility, the Society participated in the "Less Plastic Movement", mobilizing over sixty student volunteers to collect plastic and polythene waste in the Pannai area of Jaffna.

Emphasizing the integration of modern technology, the Society conducted a workshop on Artificial Intelligence, introducing students to AI tools. These tools support literature review, data analysis, and research communication, equipping students with skills relevant to contemporary scientific work.

To promote creativity and scientific communication, the Society hosts annual poster competitions and inter-faculty debates, helping students present research ideas, develop critical thinking, teamwork, and public speaking skills. In collaboration with the Jaffna Science Association, the Society organized practical laboratory sessions for G.C.E. (O/L) students, providing hands-on experience and bridging the gap between school and university science education.

Recognizing emerging interdisciplinary trends, a workshop on Artificial Intelligence for Honours Degree students highlighted AI applications in chemistry, including reaction modeling, material

property prediction, and process optimization. In the area of environmental sustainability, the Society partnered with Coca-Cola Beverages Sri Lanka in the "Give Back Life" PET upcycling program and conducted awareness campaigns on plastic waste reduction, reflecting ongoing civic engagement.

Through its diverse initiatives, the Chemical Society nurtures leadership, teamwork, creativity, and social responsibility among students. By combining scientific knowledge with digital innovation and community service, the Society prepares a new generation of chemists who are academically competent, socially conscious, and technologically adept. Its consistent dedication and collaborative spirit exemplify how an academic society can meaningfully contribute to both education and society.

### 6.4 Computer Society (CompSoc)- Department of Computer Science



The Computer Society of the University of Jaffna (CompSoc), established in 1993, is a vibrant community of students united by a shared passion for computing and technology. The society has been instrumental in fostering technical skills, innovation, and collaboration among Computer Science students. Prof. S. Mageswaran served as the first Patron of the society, while Dr. S. Kanaganathan served as the first Senior Treasurer, laying a strong foundation for CompSoc's enduring success.

CompSoc organises a range of activities including workshops, coding bootcamps, and cultural events to enhance both the technical and soft skills of students. One of its notable initiatives is the annual publication of the technical newsletter "Kananiyam", which showcases student articles, research, and creative contributions.

The society also conducts seminars to revise ICT subjects and past examination papers for students preparing for the G.C.E. (O/L) and G.C.E. (A/L) examinations, thereby extending its impact beyond the university. Since 2019, CompSoc has proudly organises "UoJCoders", a 12-hour inter-university coding competition designed to cultivate problem-solving and programming skills among undergraduate students across Sri Lanka. Through this event and its many initiatives, CompSoc continues to inspire innovation, teamwork, and academic excellence.

### 6.5 Fisheries Science Society (FSS) - Department of Fisheries



The Fisheries Science Society, established in 2014 at the University of Jaffna under the patronage of Senior Professor Ms. S. Kuganathan. The society's mission is to empower students in the field of marine and fisheries science by improving their academic, technical, and leadership skills while contributing to the sustainability of aquatic ecosystems and the well-being of coastal

communities through innovative and responsible practices.

It organizes a variety of academic and outreach activities, including webinars, guest lectures, and the annual publication of "Kadalosai," a magazine showcasing student research, insights, and creative writing related to fisheries and marine sciences. The celebration of World Ocean Day serves as a flagship event, promoting awareness of marine conservation through competitions and discussions.

Beyond academics, the society promotes teamwork and gender equality through activities such as "Aqua Crick," a friendly cricket tournament that fosters stronger relationships among staff and students. Committed to community service, the Fisheries Science Society actively collaborates with local communities to address emerging challenges in the fisheries sector and promote sustainable, science-based solutions.

## 6.6 IEEE Student Branch of the University of Jaffna



The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. In September 2018, the Department of Computer Science established the IEEE Student Branch at the University of Jaffna (IEEE-SB-UoJ) to foster professional and

technical growth among students and promote both the theoretical and practical aspects of Computer Science, Computer Engineering, Information and Communication Technology, Electrical, and Electronics.

Dr. (Ms.) B. Mayurathan served as the founding Counsellor, providing visionary leadership during its formative years, while Prof. M. Siyamalan served as the Senior Treasurer at the time. Over time, the Student Branch has expanded to include several active chapters and an affinity group, creating a dynamic platform for knowledge sharing, research, and innovation. These include the IEEE Computer Society (CS) Student Branch Chapter, IEEE Computational Intelligence Society (CIS) Student Branch Chapter, IEEE Robotics and Automation Society (RAS) Student Branch Chapter, IEEE Power & Energy Society (PES) Student Branch Chapter, IEEE Signal Processing Society (SPS) Student Branch Chapter, IEEE Electron Device Society (EDS) and the IEEE Nanotechnology Council (NTC), and the IEEE Women in Engineering (WIE) Student Branch Affinity Group.

IEEE-SB-UoJ has achieved remarkable recognition at international, national, and regional levels, securing prestigious honours such as the IEEE Region 10 Outstanding Student Branch Award (2022), IEEE Sri Lanka Section Emerging Affinity Group Award (2022), IEEE Sri Lanka Section Outstanding Student Branch Award (2023), IEEE Regional Exemplary Student Branch Award (2024), IEEE Region 10 Outstanding Affinity Group Award (2025), IEEE Sri Lanka Section Outstanding Affinity Group Award (2025), and IEEE Sri Lanka Section Emerging Chapter Awards (Student Branch category) for the Computational Intelligence Society (2023 & 2025).

### 6.7 Mathematical Society (MathSoc) - Department of Mathematics and Statistics

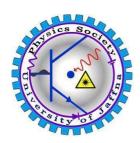


The Mathematical Society (MathSoc) of the Faculty of Science continues to play a vital role in enhancing the academic environment and supporting the outreach initiatives of the Department of Mathematics and Statistics. Established in 1989, the society has consistently promoted mathematical understanding through a range of well-planned activities. It encourages collaborative learning and provides students with valuable opportunities to engage with both the theoretical and applied dimensions of mathematics.

MathSoc organizes weekly presentation series for honours degree students specializing in Mathematics and Statistics which provides a platform for students to explore advanced topics, share knowledge, and strengthen essential academic skills. It also organizes high-impact scholarly events to expose students to current research applications. Both students and staff participate actively in discussions, acquiring valuable insights into interdisciplinary research.

Recent outreach activities of MathSoc include teaching geometry for grade 10 students of Valikamam zone schools. This initiative not only improved conceptual understanding but also encouraged the students to view geometry as an enjoyable, meaningful, and accessible subject. Through these academic, outreach, and research-focused activities, the MathSoc continues to inspire students, promote analytical thinking, and strengthen the culture of scientific excellence within the Faculty of Science.

### 6.8 Physics Society (PhySoc) - Department of Physics



The Physics Society (PhySoc) of the University of Jaffna stands as one of the prominent student's entities within the Department of Physics, acting as the primary platform for fostering academic curiosity, promoting scientific discourse, and enhancing the professional and personal development of its undergraduates. The Physics Society was formally inaugurated in 1988 in which Prof. K. Kunaratnam and Prof. R. Kumaravadivel served as the first Patron and Senior Treasurer, respectively. The Society's initial aim centered on promoting education,

organizing extracurricular events, study support, opportunities for networking, and building a supportive environment for the undergraduate community.

The Physics society successfully maintained its activities, including seminars, student forums and field visits, without interruption until 1996, when the escalation of the civil war necessitated a temporary halt to official functions.

Demonstrating remarkable resilience, the Society swiftly resumed its operations in April 1998, initiating a second period of vibrant engagement that continued until 2006. A major financial

milestone was achieved in March 2003, when the Physics Society received its first significant endowment of Rs. 355,000.00 from the Prof. Kanthia Kunaratnam Fund Committee. This endowment underscored the foundational support from the department's pioneering figures and provided crucial financial stability for the Society's future activities, even amidst challenging times.

The Society continued its resilient operations until the subsequent intensification of the conflict forced a temporary cessation of activities once more in 2006. The Physics Department experienced a significant resurgence after 2009. The Society's return to full functionality was formally marked by a complete revamp in May 2013. This critical restructuring received initial financial backing through a Rs. 50,000.00 grant from the HETC project.

Currently, Physics society actively engaged in several activities such as organizing popular talks in Physics featuring distinguished physicists from around the world; conducting annual undergraduate research symposiums (URS) and several outreach activities to serve the community. These activities include organizing workshops, exhibitions, practical sessions for G.C.E (O/L) students and seminars for G.C.E (A/L) students across the Northern Province. Remarkably, significant public events, such as the solar eclipse observation camp in December 2019 and planetary observation camps also organized by Physics society

### 6.9 Zoological Students' Association (ZSA) - Department of Zoology



The Zoological Students' Association (ZSA), established in 2013 by the Department of Zoology, aims to provide students with valuable extracurricular opportunities and enhance their leadership skills. ZSA's successful journey was founded by Prof. Ms. R. Gnaneswaran, who served as its first Patron, and Prof. S. N. Surendran, who served as its first Senior Treasurer.

The ZSA is registered under the National Science Foundation of Sri Lanka (NSF/USS/JFN/043).

From its inception, ZSA actively involved in academic, extracurricular and outreach activities with the support of academic staff of the department. ZSA has organized an annual undergraduate research symposium for Biological Science students and a 3-minute Research Challenge since 2020. Some key activities of the Zoological Students' Association include erecting a stone plaque at the department entrance and hosting a felicitation for retired academics in 2015, first aid workshop in collaboration with Sri Lanka Red Cross. One of the main focus areas of ZSA is to serve the environment. As such ZSA organized a tree-planting campaign in collaboration with University of Colombo, workshop on 'Empowering Youth for Conservation' and 'wildlife photography', awareness sessions on sloth bears of Sri Lanka and participating in Agricultural Exhibition conducted by Northern Provincial Department of Agriculture since 2017. In addition, ZSA organizes training programmes, seminars and small projects to the school students and

community in the topics of biodiversity conservation, plastic pollution, coastal cleaning, mangrove restoration, home gardening, etc.

Notably, ZSA won a competitive grant (SGP/OP6/STAR/BD/2018/04) from the UNDP and successfully completed a project on a model for livelihood development through landscaping and conservation in Kavutharimunai, Pooneryn. This project was coordinated by Mr. S. Arthiyan, with funding of \$35,000.00 from UNDP and Rs. 2 Million (SLR) from MAS Intimates. In addition, ZSA is collaborating with Centre for Children Happiness (CCH), Save a Life, Jaffna Entomological Society (JES), Jaffna Science Association (JSA), Nature Appreciation club (NAC) and other local governmental agencies in Northern Province to serve the nature and environment. This engagement provides students with valuable hands-on experience and a deeper understanding of the impact of their work on local communities. By participating in these outreach programs, students contribute to the Department's mission of educating and inspiring future generations about the importance of biodiversity and ecosystem conservation.

### 6.10 The GenZ Chapter of the Computer Society of Sri Lanka



The GenZ chapter of the Computer Society of Sri Lanka was established at the University of Jaffna in 2021 in order to facilitate students participation in activities related to information and communication technology at the University level and at the national level level. With the establishment of the GenZ chapter of the Computer Society of Sri Lanka, in the Faculty of Science, the Department of

Computer Science was able to secure a large amount of laboratory equipment to conduct practical classes related to Internet of Things. This was enabled by the signing of a four party MoU that includes University of Jaffna, The Computer Society of Sri Lanka (CSSL), The Information and Communication Technology Agency of Sri Lanka (ICTA) and the Dialog Axiata PLC. Dr. K. Thabotharan played a major role in the signing of this MoU and the equipment obtained under this MoU are very well utilised in the department of Computer Science for conducting practical classes for students. In addition, a number of student knowledge sharing sessions were also conducted for the students of the Faculty of Science.

### 7. Future Development Plans

The Faculty, renowned for producing highly competent graduates and postgraduates, is on a continuous path of growth and advancement. Guided by a clear vision and strategic initiatives aligned with its mission and goals, the Faculty is committed to enhancing its infrastructure, academic programmes, research capabilities, and partnerships to ensure sustainable development.

A key priority is developing infrastructure for the Department of Fisheries, which currently lacks a dedicated building. Unlike other departments, Fisheries is scattered across five different locations, both within and outside the Faculty premises, limiting its efficiency in teaching, research, and outreach activities. The lack of centralized infrastructure, limited lecture halls, and inadequate laboratory space have constrained student intake to a maximum of 40 students per batch. To address this need partially, a two-story building, with a total floor area of 3,000 square feet, is currently under construction as an extension to the existing semi-permanent departmental building located near the entrance of the Faculty of Science.

For over fifty years, the Faculty of Science has lacked a dedicated boardroom for its meetings involving a large number of participants, including Faculty Board meetings. Instead, it has had to share the university's main boardroom, often encountering difficulties in securing suitable time slots. To address this long-standing need, a new boardroom of approximately 1,200 square feet is currently being established above the Dean's office. The faculty is now seeking funds to procure a boardroom table, chairs, and an audiovisual unit to furnish the space appropriately.

Enhancing teaching and learning is another major focus. The Faculty is dedicated to adopting innovative teaching methods and curriculum designs to create dynamic, student-centered learning environments. By integrating advanced educational technologies, the Faculty aims to equip students with the skills necessary for future career challenges. To enhance its international recognition, the Faculty of Science Alumni Association has initiated efforts to secure accreditation from the Royal Society of Biology for its Biological Science degree programmes. Achieving this accreditation will ensure that the programmes meet global standards of excellence, strengthening the Faculty's international reputation and increasing employment opportunities for graduates.

The Faculty is also committed to expanding research capabilities by securing additional funding to modernize laboratory facilities and support cutting-edge research. Key areas of focus include modeling, biophysics, quantum optics, artificial intelligence, bionics, and the application of omics technologies to solve complex biological problems. These advancements will foster innovation and elevate the Faculty's research standing at both national and international levels.

Strengthening partnerships with academic institutions, industries, and community organizations is another crucial initiative. The Faculty aims to establish new collaborations and reinforce existing ones to expand research opportunities, enhance public engagement, and facilitate

interdisciplinary studies. These partnerships will contribute to the Faculty's goal of fostering a robust and sustainable research network.

To cater to the evolving academic landscape, the Faculty is introducing new BScHons degree programmes. The BScHons (Science Education) programme is being restructured, while the Department of Computer Science is preparing to launch BScHons in Artificial Intelligence and BScHons in Cybersecurity degree programmes. Additionally, a BScHons in Molecular Biology is in development, catering to the growing demand for expertise in this field.

At the postgraduate level, the Faculty is set to commence new master's degree programmes. Faculty currently coordinates MSc programmes in Environmental Management and Clean Energy Technologies. Meanwhile, the Department of Computer Science has obtained the University Council's approval for the structure and syllabi for the Master of Computer Science (MCS) and MSc in Computer Science (MSc (CS)). The Department of Zoology is also preparing to launch an MSc in Applied Entomology, broadening opportunities for specialization in this field.

Recognising the importance of faculty and student development, the Faculty is committed to supporting its academic staff and students through professional development initiatives, research funding, and mentorship programmes. Increased support for student research and career development remains a top priority, ensuring a research-intensive environment that nurtures academic excellence.

The Faculty acknowledges the unwavering dedication of its staff, whose commitment has driven its success over the past five decades, despite numerous challenges. Moving forward, these ambitious development plans will strengthen the Faculty's position as a leading institution in higher education, research, and innovation

## **Annexures**

# 8.1 National / International Research & Development grants (> 1 LKR Mn)

Project	Investigator(s) / Coordinators	Outcomes (Human Resource Development and Physical Resources acquired)
	Faculty / Department I	
Science and Technology Human Resource Development Project (STHRDP- 2024)  2024 - 2025 Asian Development Bank LKR 24.5 million	Prof. P. Ravirajan Prof. G. Sashikesh Mr. S. Suthakar Prof. M. Thanihaichelvan	<ul> <li>All the departments such as the Department of Botany, Chemistry, Computer Science, Fisheries, Mathematics and Statistics, Physics and Zoology; and the Office of the Dean benefitted from this grant.</li> <li>Laboratory equipment and office equipment were purchased to improve the facilities.</li> </ul>
AHEAD ELTA- ELSE Faculty- Development Project  2019 – 2023 World Bank LKR 120 million	Dr. K. Thabotharan (Project Coordinator) Prof. K. Velauthamurty Dr. T. Pathmathas Dr. Ms. N. Krishnapillai Prof. Ms. Thulasitha W. Shanthakumar	<ul> <li>Establishment of English Language laboratory, Social Welfare Centre, Incubation Cell, Faculty Research Centre of Excellence;</li> <li>Refurbishment of Student Hot-spot, laboratories, museum, herbarium, lecture halls and seminar rooms;</li> <li>Revamping the curricula with skill based teaching, learning and assessment methods, conducted training workshops, seminars, and student symposia;</li> <li>Procurement of interactive smart boards, computers, digital writing pads, and laboratory equipment.</li> <li>Improved the facilities for online teaching and learning, LMS facility and utilization.</li> <li>All seven departments of the faculty benefited from this competitive grant.</li> </ul>

AHEAD ELTA- ELSE Department	Prof. Ms. M. Senthilnanthanan	- Establishment of UoJ English Speakers Club;
Development Project: Department	(Project Coordinator)	- Establishment of a Computer laboratory for the department;
of Chemistry	Prof. G. Sashikesh	- Upgraded the facilities of learning environments;
or enemotry	Dr. Ms. S. Yohi (until 2021)	- Conducted training programmes on advanced analytical techniques
2019 – 2023	Dr. Ms. J. Prabagar (from 2022)	in research;
World Bank	bi. Wis. 3. Frabagai (Holli 2022)	- Introduction of Action projects and Industrial training into the
LKR 18 million		curriculum of BScHons (Chemistry).
AHEAD ELTA- ELSE Department	Dr. Ms. A. Sivaruban	- Establishment of bioinformatics laboratory, museum, and ZSA –
Development Project: Department	(Project Coordinator)	student interactive space;
of Zoology	Prof. K. Gajapathy	- Refurbishment of laboratories, particularly installation of glass
	Ms. P. Sivakumar	fronted doors and safety facilities and purchase of laboratory
2019 – 2023		equipment;
World Bank	Dr. Ms. A. Sivaruban &	- Refurbishment of seminar room;
LKR 18 million	Prof. Ms. Thulasitha. W.	- Introduction of new course – scientific communication
	Shanthakumar	- Conducted skill development programmes such as research
	(Proposal writers)	symposia, training workshops; industrial visits and training for
	,	students and laboratory staff.
HETC Project-QIG -	Dr. K. Thabotharan	- Establishment of Student-hot spot/ study hall;
<b>Physical Science Study Programme</b>	(Project Coordinator)	- Refurbishment of lecture halls and laboratories at the Departments
	Prof. R. Vigneswaran	of Mathematics and Statistics, Physics and Chemistry
2013- 2016	Prof. A. Ramanan	- Conducted training workshops in career guidance, tech-talks and
World Bank	Prof. P. lyngaran	career fairs;
LKR 25 million	Dr. S. Arivalzahan	- Arranged industrial visits and training for students.
	Prof. G. Sashikesh	
HETC Project- QIG -	Dr. T. Eswaramohan	- The Project Objective was to produce marketable Biological Science
Biological Science Study	(Project Coordinator)	Graduates with high skills and practical knowledge.
Programme		- The curriculum in Botany, Fisheries and Zoology was completely
	Prof. P. Sevvel	revised for all levels, including the special degree programme.
2013 - 2016	Prof. K. Gajapathy	- The Biology Lecture hall (1B) and the laboratories of all three
World Bank	Dr. Ms. A. Sivaruban	departments were renovated.

LKR 25 million	Ms. K. Niranjan  Prof. S. N. Surendran (Proposal Writer)	<ul> <li>Office and laboratory equipment were installed in all three departments.</li> <li>Learning Management System (LMS) introduced.</li> <li>University-Industrial link was established</li> <li>Applied Science degree programme introduced since 2016.</li> </ul>
IRQUE Project Physical Science study programme  2006 – 2010 World Bank LKR 87 million	Dr. R. Vigneswaran Dr. Ms. M. Senthilnanthanan (Joint Project Coordinators)  Prof. R. Kumaravadivel Prof. K. Kandasamy Dr. S. Srisatkunarajah Dr. R. Vigneswaran Dr. S. Mahesan Dr. Ms. M. Senthilnanthanan Dr. P. Ravirajan Dr. S. N. Surendran Dr. R. Srikaran Dr. J. P. Jeyadevan Dr. K. Pathmanathan Dr. S. Sivaraya Dr. N. Sivayogan Dr. K. Thabotharan Mr. S. Srikathirgamanathan, ELTU	<ul> <li>Curriculum revision for Chemistry, Mathematics, Physics and Statistics;</li> <li>Redesigning of Social Harmony course in the curriculum;</li> <li>Workshops and training programmes for academics in research, curriculum revision and design;</li> <li>IT training for technical officers;</li> <li>Overseas training for a technical officer from the Department of Chemistry in UK;</li> <li>Purchase of laboratory equipment and teaching equipment;</li> <li>Renovation of lecture halls and laboratories including computer laboratories;</li> <li>Construction of fume hoods and exhaust fans;</li> <li>Installation of water filters and coolers.</li> </ul>
ADB Grant  2002 – 2004 Asian Development Bank \$150 000	(Persons In-Charge) Prof. R. Kumaravadivel Prof. Ms. R. Mageswaran	- Laboratory equipment such as HPLC, NMR, FTIR spectroscopy, Flame photometry and pH meter were purchased and installed at the Department of Chemistry.

SIDA Grant	Dr. E. Y. A. Charles	- Fiber optic network connecting various academic and administrative
	(Project Coordinator)	departments across the University.
2003 – 2004	Prof. R. Kumaravadivel	
SIDA	Dr. S. Mahesan	
LKR 100 million	Dr. S. Shriparen	
	Research	Grants
Suppressing the light induced phase	Dr. P. A. Amalraj	- On going
segregation for highly efficient and	(Principal Investigator)	
photostable wide-bandgap mixed	Prof. P. Ravirajan	
halide perovskite solar cells		
2025 – 2028		
National Research Council		
LKR 3 million		
Development of a Sri Lankan Tamil	Dr. K. Sarveswaran	- On going
Corpus		
2024-2025		
Google's Research Scholar		
Programme		
LKR 10.8 million		
<b>Developing Computational</b>	Prof. Miriam Butt (Konstanz) (PI)	- On going
<b>Language Resources for South Asian</b>	Dr. K. Sarveswaran	
Languages	Prof. Gihan Dias (Moratuwa)	
2024-2027	Prof. Sarmad Hussain (Pakistan)	
DAAD-SDG grant		
LKR 127.2 million		
Google exploreCSR	Prof. Saman Halgamuge	- Trained over 100 students through a series of 10 research sessions.
Nov. 2023- Dec. 2024	(Melbourne)	- Conducted the Google Explore CSR Summer School on Machine
Google Research	Prof. A. Ramanan	Intelligence.
LKR 7.8 million	Dr. Rashindrie Divanka Perera (Melbourne)	- Organised a one-week study tour at the University of Melbourne.

AHEAD - DOR (Development	Dr. Tamasha Malepathirana (Melbourne)  Prof. K. Vignarooban	<ul> <li>Two national-level awards were secured by an undergraduate student at the SLASSOM National Ingenuity Awards and the National ICT NBQSA Awards 2025.</li> <li>Procured an HPC system worth LKR 2.2 million.</li> <li>Establishment of a Research Laboratory for Energy Storage at the</li> </ul>
Oriented Research) - Department of	(Project Coordinator)	Department of Physics.
Physics & Department of Chemistry	Prof. K. Velauthamurty Prof. G. Sashikesh	- New building extension at the Department of Physics to enlarge the laboratory space.
2019 – 2023	Mr. S. Senthuran	- Refurbishment of the Research Laboratory at the Department of
World Bank	Dr. H.W.M.A.C. Wijayasinghe	Chemistry.
LKR 40 million	(NIFS, Kandy)	<ul> <li>Procurement of Differential Scanning Calorimetry (DSC), Fourier Transform Infrared Spectroscopy (FTIR) and a high temperature furnace.</li> <li>MPhil projects (MPhil in Physics) of 3 students.</li> <li>Published more than 10 papers in indexed journals and conference proceedings.</li> </ul>
Higher Education and Research	Coordinators	- 90+ research publications and conference abstracts, including 44
collaboration on Nanomaterials for	Prof. P. Ravirajan	Q1/Q2 indexed journal articles in Scopus and Web of Science.
Clean Energy Technologies	Prof.V.Dhayalan	- Establishment of a state-of-the-art Clean Energy Research
(HRNCET 1.0)	(Western Norway University of	Laboratory, enabling sustained and advanced research in
2022 - 2027	Applied Sciences)	nanomaterials and renewable energy.
Norwegian Centre for International Cooperation in Education  LKR 200 million		<ul> <li>Procured XRD, Solar Simulator, Workbench, multifunctional printers, gas purification system to the glove box, computers, multimedia projector, conference tables and chairs</li> <li>Development of nationally and internationally relevant research</li> </ul>
Higher Education and Research collaboration on Nanomaterials for	Co-invetsigators Prof. Ms. M. Senthilnanthanan Prof. M. Thanihaichelvan	themes in nanomaterials for clean energy, floating solar systems, and biomass-based energy.  - Production of 3 PhD, 8 MPhil, and 9 MSc graduates under the project,
Clean Energy Technologies (HRNCET 1.0)	Dr. Ms. S. Yohi Dr. A. Thevakaran Dr. T. Pathmathas	with 3 MPhil and 4 PhD candidates presently in progress.

2017 - 2021	Prof. M. K. Ahlan	- Joint supervision of postgraduate students by academics from the
	Prof. Ms. S. Ubenthiran	University of Jaffna (UoJ), Western Norway University of Applied
Norwegian Centre for International	Prof. A. Atputharajah	Sciences (HVL), and the University of Bergen (UoB).
Cooperation in Education	Dr. B. Ketheesan	- Provision of advanced hands-on training in nanomaterials synthesis
·	Prof. T. Thiruvaran	and characterisation for undergraduate, MSc, and PhD students.
LKR 97 million		- Design and implementation of Sri Lanka's first internationally
		benchmarked MSc programmes in Clean Energy Technologies,
Capacity Building and		approved by the UGC Quality Assurance Council.
Establishment of a Research		- Integration of research-led teaching and modern laboratory-based
Consortium in Nanomaterials for		learning approaches.
Clean Energy Technologies' -		- Enhancement of postgraduate education aligned with global clean
(CBERC)		energy and sustainability standards.
(CDLNC)		- Facilitation of over 20 staff exchanges and over 20 student exchanges
2040 2024		between Sri Lanka and Norway.
2018 - 2021		- Establishment of long-term institutional partnerships with HVL, UoB,
		and Coimbatore Institute of Technology (CIT).
Royal Norwegian Embassy		- Strengthening of international co-authorships and joint research
		supervision frameworks.
LKR 127 million		- Successful organisation of three major international conferences
		under the AMCEHA series in 2019, 2023 and 2025 over 120
		international participants from 35 institutions.

Davidamment of an apply warring	Prof. S. N. Surendran	DhD: 01
Development of an early warning		- PhD: 01
system, a risk map and a predication	(Principal Investigator)	- No. of Publications: 05
model for dengue, and	Prof. A. Ramanan	- Procured an HPC worth of LKR 0.8 million
establishment of the roles of	Dr. K. Sarveswaran	- High performance computer
asymptomatic carriers and brackish	Prof. K. Gajapathy	
water derived mosquitoes in dengue	Mr. A. Laheetharan	
transmission in Jaffna district.	Dr. R. Prashanthan	
	Prof. T. Kumanan	
2017-2022	(Faculty of Medicine)	
	Prof. K. Suthakar	
National Science Foundation	(Faculty of Arts)	
	Dr. P. Kathirgamanathan	
LKR 9.9 million	(Faculty of Engineering)	
Dengue transmission intervention	Prof. S.N. Surendran	- No. of Publications: 02
using lure-based gravid female traps	rioi. 3.iv. Surendran	- No. of Fublications. 02
(GFT): A cluster randomized trial		
approach in Jaffna municipal area.		
approach in Janna municipai area.		
2021-2023		
National Science Foundation		
LKR 3 million		
Efficiency of skin Colouration,	Dr. Ms. S. Sathyaruban	-PhD: 01
immune response and growth in	Di. 1413. 3. Satifyal ubali	-No. of Publications: 07
ornamental fish fed with locally		- TVO. OF F GOTTLES OF
formulated diet		
Ioi iiiuiateu uiet		
2021- 2023		
UGC		
LKR 2.8 million		
LINIX 2.0 HIHIIIUH		

The molecular basis of adaptation	Prof. S.N. Surendran	- PhD: 02
of Aedes mosquitoes to salt	Prof. Andrew Hemphill	- No. of Publications: 04
environment	(University of Bern, Switzerland)	
2019-2023		
Swiss NSF (SPIRIT)		
LKR 32 million		
Thin Film Solar Cells towards the	Prof. P. Ravirajan	- Acquired Atomic Force Microscopy (AFM), Tube Furnace (up to
manufacturing of Prototype Solar	Prof. Lakshman Dissanayake (NIFS)	1200 °C), Water bath and DI water system.
Panels	Prof. Sujeewa de Silva (UoK)	- Successfully fabricated prototype solar modules at the University of
	Dr. B. Dissanayake (UoP)	Peradeniya.
2017- 2023	(Deputy Directors)	- Trained five MPhil students. Published 18 papers in indexed
MSTR		journals, trained up to two hundred solar technicians.
LKR 68 million		- Conducted solar awareness programs for several thousand school
(out of 240 million)		students nationwide.
Novel materials for secondary	Prof. K. Vignarooban	- Purchased Fume Hood and a Box Oven
sodium-ion batteries and proton	(Principal Investigator)	- Short-term training of an MPhil student at the National University
exchange membrane fuel cells	Mr. S. Senthuran	of Science and Technology, Pakistan
		- Published three indexed international Journal papers
2018 - 2022		
NSF - PSF		
LKR 6.1 million		
Novel electrolytes based on	Prof. K. Vignarooban	- Purchased a vacuum oven
polymer-ceramic nano-composites	(Principal Investigator)	- Purchased several chemicals
for sodium-ion secondary batteries		- Principal investigator attended a training workshop in Nepal
2018 - 2020		
TWAS (The World Academy of		
Sciences, Italy)		
LKR 1.7 million		

Gel - polymer Electrolytes for	Prof. P. Ravirajan	- Purchased Electrochemical Impedance spectroscopy (EIS) system
Sodium Batteries	(Principal Investigator)	- Graduation of one MPhil student
	Prof. K. Vignarooban	- Published one indexed international journal paper
2015 - 2019	Mr. S. Senthuran	
NRC		
LKR 5.0 million		
Development of an Electronic	Prof. M. Thanihaichelvan	- No. of Publications: 01
<b>Detection System for Rapid</b>	(Principal Investigator)	
Diagnosis of COVID-19 caused by	Prof. N. Surendran	
SARS-CoV-2	Prof. P. Ravirajan	
	Prof. Ms. U. Sutharsini	
2020	Prof. T. Kumanan	
NSF	(Faculty of Medicine),	
LKR 1.5 million	Dr. R. Valluvan	
	(Faculty of Engineering)	
Fundamental Studies on Y-TZP	Prof. Ms. U. Sutharsini	- Establishment of the Materials Science Laboratory
ceramics and mechanisms for		
enhancing the hydrothermal ageing		
resistance		
2017-2018		
NSF		
LKR 1.49 million		
Improving the performance of	Prof. P. Ravirajan	- MPhil: 03
Hybrid TIO / polymer solar cells	(Project Coordinator)	- No. of Publications: 11
using interface modifiers		- Procurment of UV-VIS spectrometer, nanoenclosure, thermal
		evaporator, spin coater, monochromator, pulse laser, fume hood
2011- 2015		
NRC		
LKR 8.0 million		

Fabrication and characterization		
of organic / metal oxides		
Nanostructured PV devices		
2006 - 2009		
NRC		
LKR 8.4 million		
Development of DNA probes to	Prof. S.N. Surendran	- M.Phil: 01
distinguish members of the		- No. of Publications: 02
Anopheles subpictus complex from		- No. of Communications: 01
An. sundaicus complex and species		
E from species B of the An.		
culicifacies complex in Sri Lanka.		
2011 –2016		
National Science Foundation		
LKR 3.2 million		
Molecular characterization of	Prof. S.N. Surendran	- M.Phil: 01
Sergentomiya sand fly species in		- No. of Publications: 02
relation to Leishmania transmission		- No. of Communications: 02
in Sri Lanka		
2012 –2015		
National Research Council		
LKR 2.2 million		
Characterization of Nanostructured	Prof. P. Ravirajan	- Acquired Polymer glove box
polymer/ Fullerene solar cells	(Project Coordinator)	- MPhil: 01
2007- 2011		
NSF		
LKR 1.9 million		

Low-cost solar cells based on Nanocrystalline titanium dioxide and vegetable dyes	Prof. P. Ravirajan	<ul><li>Solar simulator (ScienceTech, Canada)</li><li>Travel grant to present a paper in Australia</li></ul>
2006- 2009 International Foundation for Science (IFS), Sweden LKR 2.0 million		
Photoluminescence of defects in diamond Optoelectronic properties of hybrid Metal oxide/ Polymer Nanocomposites	Dr. L. Jeyanathan (Principal Investigator) Dr. S. Sivarasa Prof. P. Ravirajan (PI: 2005-2008)	- Closed Cycled Croyostat - Tubo Molecular pump - Monochromator
2000- 2008 NRC LKR 11.0 million		
Identification and characterization of major pathogens in grape cultivation and improving grape production by managing major diseases through eco-friendly control measures	Prof. E.C. Jeyaseelan Prof. Devika De Costa (UOP)	<ul> <li>M. Phil: 01</li> <li>No. of Publications: 02</li> <li>Thermal Cycler (PCR),</li> <li>Trinocular dissecting microscope fitted with a camera</li> </ul>
2021 - 2024 NRC LKR 5.0 million		
Baseline analysis of Development opportunities for the Thondaimanaru lagoon	Prof. T. Eswaramohan (Principal Investigator) Prof. Ms. R. Gnaneswaran Ms. P. Sivakumar	- Book: 01 - Communications: 03 - Workshops: 04 - Certificate programme: 01

IUCN - MFF		
LKR 3.54 million		
Bioethanol production from marine	Dr. A. Vengadaramana	- MPhil student – 01
algae	(Principal Investigator)	- Rotary evaporator – 01 - Autoclave - 01
NRC 2019-2022	Prof. R. Kapilan	- Water bath - 01
LKR 3.66 million		
Lipid deposition and depletion in relation to sexual maturity and spawning in Scomberoids lysan (Carangidae) 2008-2010 NRC, Sri Lanka LKR 2.3 million	Prof. Ms. S. Kuganathan	<ul> <li>2 MPhil</li> <li>No of Publications- 05</li> <li>Spectrophotometer,</li> <li>Soxlet apparatus</li> </ul>
Systematics and population dynamics of squids from the northern coastal waters of Sri Lanka 2006-2009 NSF LKR 1.5 million	Prof. Ms. S. Kuganathan	<ul> <li>1 MPhil</li> <li>No of Publications – 04</li> <li>Soxlet apparatus</li> </ul>
Potential for sea cucumber culture from the Jaffna lagoon 2013 IUCN-MFF LKR 1.4 million	Prof. Ms. S. Kuganathan	- 01 Book
Mapping of ponds / waterholes and restoration of a selected pond at the Delft Island 2016 IUCN- MFF LKR 2.4 million	Prof. Ms. S. Kuganathan	- Pond renovation in Delft

A study and establishing a seafood supply chain for Fairtrade systems in the Jaffna and Mannar regions 2024 FNAP, Singapore Euro 5,000 LKR 1.3 million	Dr. Ms. S. Sathyaruban	- 01 Book (Fairtrade Network of Asia and Pacific Producers (FNAP) in Singapore, Center for Maritime Economy and Oceanography (CMEO) of the RockPillar Foundation, India and UBL, University of Jaffna.)
Exploring sustainability and socio- economic dynamics in sea cucumber and seaweed aquaculture in Manthai West and Poonakary, Sri Lanka 2025 Organisation of People for Engagement and Enterprise (OPEnE), Sri Lanka 1 million	Dr. Ms. S. Sathyaruban	- 01 Publication
Sustaining Fisheries Ecosystem in the Palk Bay Region: Assessing Management Options, Livelihoods, and Fishers' Perspectives 2025 BOBP-IGO INR 5 million (LKR 17.5 million)	Prof. Ms. S. Kuganathan Dr. K. Gunaalan Dr. N. Ragavan Mr. Kapila Chinthaka Premarathne Dr. Lloyd Crispin Th. Kalaiyarasan Dr. P.S. Ananthan	- Ongoing
Preparation of Scoping Report and Plan towards the Implementation of the Ecosystem Approach to Fisheries Management of the Sea	Prof. Ms. S. Kuganathan Dr. N. Ragavan	To develop a regional Ecosystem fisheries management plan for the sea cucumber fishery in northern Sri Lanka

Cucumber Fishery in the Mannar– Kilinochchi–Jaffna Stretch, Sri Lanka BOBP-IGO INR 500,000 (LKR 1.75 million)		
Development of the Socio - ecological profile of Jaffna lagoon IUCN- Mangrove for future grant 2014 IUCN LKR 2 million	Prof. Ms. M. Senthilnanthanan Dr. Ms. A. Sivaruban	<ul> <li>Ecological profile of Jaffna lagoon was developed with the following baseline data:</li> <li>faunal composition (Fin fishes of bony types and shell fishes of crabs, prawns, cones, conches and bivalves types)</li> <li>floral composition (Mangrove vegetations, mangrove associates, salt marshy vegetations, sea weeds and green alga)</li> <li>water quality (pH, EC, TSS, salinity, alkalinity, total hardness, sulphate, phosphate, DO, BOD, total coliforms, <i>E.coli</i>)</li> <li>mud quality (pH, EC, salinity, TOC, alkalinity, total hardness, sulphate, phosphate)</li> <li>Social profile of communities living in the coastal area of Jaffna lagoon was developed with the said community's socio-economic and health status data (age, gender and civil status of chief occupant, employment and monthly income of family members, availability of household facilities and items, food intake pattern, monthly family expenditure, fishing time, site, method, vessel, target fish species, average daily catch and marketing strategy of active fishermen)</li> </ul>
Selected Transition metals and Nitrogen co-doped Titanium dioxide electrode for Dye Sensitized Solar Cells 2021 NRC LKR 5 million	Prof. Ms. M. Senthilnanthanan	<ul> <li>Centrifuge (01), water distillation plant (01), analytical balance (01), hotplate with stirrer (01) and hydrothermal autoclave (01) were procured.</li> <li>O1 student is pursuing MPhil degree programme</li> </ul>

		- Investigating the performance of DSSCs composed of doped (Ag, Fe,
		W, N, and F) and co-doped (Ag/N) Titanium dioxide photoanodes
		- No. of Publications : 01
		- No. of Communications: 05
Identification of active compounds	Dr. Ms. S. Srikokulan	
with antidiabetic and antioxidant	(Principal Investigator)	- 01 student is pursuing MPhil degree programme
properties in the leaf and stem of	Prof. Ms. M. Senthilnanthanan	
Argyreia pomacea		- Identification of active compounds with antidiabetic and
Sivananthan Laboratories Inc., USA		antioxidant properties in the leaf and stem of Argyreia pomacea
2024		
LKR 4.47 million		

MSTR - Ministry of Science, Technology and Research

PSF - Pakistan Science Foundation

NSF - National Science Foundation

IUCN –International Union for Conservation of Nature

# 8.2 Patents

Name of the Inventors	Department	Patent Number with dates	National/ International
Prof M. Thanihaichelvan	Physics	Biosensor Device and Methods (US20210255184A1)	International
Prof. M. Thanihaichelvan	Physics	Sensor Device and Methods (US20190346401A1)	International
Prof. J. P. Jeyadevan	Chemistry	UV decomposable molecules and a photo-patternable monomolecular film formed there from (EU20051228 EP1610176), (US20090120 - 7479362)	International
Prof. Ms. Thulasitha. W. Shanthakumar Jehee Lee, Sukkyoung Lee, S. N. D. K. Bathige, G. I. Godahewa, H. E. Jayasinghe;	Zoology	"Single Nucleotide Polymorphism (SNP) Markers for Detecting Haliotis gigantea and Method for Detecting Haliotis gigantea Using the Same." (KO20170526-10-1743275)	International
Prof. S. N. Surendran	Zoology	"A Novel Self-Contained System for Rearing Black Soldier Fly (Hermetiaillucens) Through All Its Life Stages, (SL20231023 - 21993)	National
Mr. K. Harichandra	Fisheries	An automated faucet with an integral liquid washing dispenser for regulated handwashing (SL 21588-2022.06.21)	National

## 8.3 Fellow of Professional bodies

Name of Staff	Department Professional body	
Prof. S. N. Surendran	Zoology	Royal Entomological Society, London
Prof. Ms. R. Gnaneswaran	Zoology	Royal Entomological Society, London
		Institute of Biology, Sri Lanka
		Institute of Environmental Professionals, Sri Lanka
Prof. P. Ravirajan	Physics	National Academy of Science, Sri Lanka
Prof. G. Sashikesh	Chemistry Institute of Chemistry, Ceylon	
Prof. P. lyngaran	Chemistry	Institute of Chemistry, Ceylon
Prof. K. Velauthamurty	Chemistry	Institute of Chemistry, Ceylon

# 8.4 Other recognition outside the country

Recipient(s)	Department	Remark	Listing body	Year of Recognition
Dr. T. Mathanaranjan	Mathematics & Statistics	The World's Top 2% Scientists	Standford-Elsevier	2023 & 2024
Prof. S.N. Surendran	Zoology	·		2024
Prof. P. Ravirajan	Physics	Top 100 Asian Scientist	Asian Scientist Magazine	2024, 2025

## 8.5 CVCD Excellence Awards

Name of awardee	Department	Year of Award Name of the ward	
Prof. M. Thanihaichelvan	Physics	2023	Outstanding Young Researchers in Natural Sciences
Prof. P. Ravirajan	Physics	2006	Outstanding Young Researcher in Physical Sciences

## 8.6 Presidential Awards for Scientific Publications

Name of awardee	Department	Year of Award	
Prof. S.N. Surendran	Zoology	2002, 2006, 2010- 2013, 2017, 2018, 2021	
Prof. K. Kandasamy	Physics	2000, 2001, 2003	
Prof. P. Ravirajan	Physics	2004, 2005, 2006, 2007, 2008, 2017	
Prof. K. Vignarooban	Physics	2019, 2018, 2017, 2016, 2015	
Prof. A. Ramanan	Computer Science	2019	
Prof. M. Siyamalan	Computer Science	2017, 2018	
Dr. T. Kokul	Computer Science	2019	
Dr. E. Y. A. Charles	Computer Science	2010	
Mr. K. Prashanthan	Physics	2017	
Prof. M. Thanihaichelvan	Physics	2015	
Prof. K. Gajapathy	Zoology	2021	
Mrs. S. Kokila	Zoology	2021	
Dr. S. Arthiyan	Zoology	2021	
Prof. Ms. U. Sutharsini	Physics	2016	
Dr. A. Thevakaran	Physics	2016	
Prof. T. Eswaramohan	Zoology	2014	

# 8.7 NRC Merit awards for scientific publications

Name of awardees	Department	Year of Award
Prof. Ms. M. Senthilnanathanan	Chemistry	2012
Prof. P. Ravirajan	Physics	2013
Prof. P. lyngaran	Chemistry	2018
Prof. G. Sashikesh	Chemistry	2018
Dr. A. Manjceevan	Chemistry	2018
Prof. T. Eswaramohan	Zoology	2017, 2018

# 8.8 NSF Awards for Supervision of Research Degree (SUSRED)

(Support Scheme for Supervision of Research Degrees, SUSRED)

Supervisors	Year of Award	Student and Degree: MPhil/PhD	Title of the thesis
Prof. M. Thanihaichelvan (S) Prof. P. Ravirajan (Prof. D. Velauthapillai)	2024	Mr. G. Abiram MPhil	Fabrication and characterization of perovskite thin film field effect transistors
Prof. S. N. Surendran (S) Prof. V. Arasaratnam Prof. T. Kumanan Prof. K. Gajapathy Prof. K. Suthakar	2023	Mr. T. T. P. Jayadas PhD	Aedes Larval bionomics, Circulating Serotypes, and a risk map in relation to dengue transmission in Jaffna district.

Prof. A. Ramanan (S)	2023	Mrs. M. Shajini PhD	A Semi-Supervised Deep Learning Approach based on Attentive Visual Features for Fashion Clothing Classification.	
Prof. M. Siyamalan (S) Prof. A. Ramanan	2023	Ms. R. Nirthika PhD	Deep Learning Based Fine-Grained Diabetic Retinopathy Image Grading.	
Prof. M. Senthilnanthanan (S) Prof. P. Ravirajan (Prof. D. Velauthapillai)	2023	Mr. T. Rajaramanan <b>MPhil</b>	Enhancing the Performance of Dye-Sensitised Solar Cells through Doping/Co-doping TiO 2 Electrodes.	
Prof. SHPP Karunaratne Prof. S. N. Surendran	2018	Thilini Weerarathne PhD	DNA barcoding, genetic diversity, genetic structure, and age structure of selected mosquito species of Sri Lanka.	
Prof. Ms. S. Kuganathan	2012	Mr. G. A. Charles MPhil	Population dynamics of <i>Sepioteuthislessoniana</i> (Cephalopoda: Loliginidae) from the Jaffna lagoon	
Prof. Ms. S. Kuganathan	2014	Ms. Thulasitha. W. Shanthakumar <b>MPhil</b>	Reproductive characteristics of <i>Scomberoideslysan</i> (Forsskal, 1775) (Pisces: Carangidae) from the waters around Jaffna Peninsula, Sri Lanka	
Prof. Ms. S. Kuganathan	2014	Ms. S. Sathyaruban MPhil	Lipid changes in relation to sexual maturity and spawnin in <i>Scomberoideslysan</i> (Carangidae) from waters aroun the Jaffna peninsula, Sri Lanka	
Prof. Ms. M. Senthilnanthanan(S) Prof. P. Ravirajan (Prof. D. Velauthapillai)	2023	Ms. T. Kajana MPhil	Storage of solar energy by Heterostructured Carbo Silver- Metal Oxides/ Tin Sulphide Photocapacitors.	
<b>Prof. P. Ravirajan (S)</b> (Prof. D. Velauthapillai)	2023	Mr. A. Prashanthan MPhil	Role of Quarterthiophene and Ruthenium-based dyes in enhancing the performance of hybrid Titanium dioxide/polymer solar Cells.	

## 8.9 Other Awards

Awards/prizes and year	Recipient(s)	Department	Awarding body	Remarks
National Award for Excellence in Agricultural Research 2025	Dr. Ms. T. C. Jeyaseelan Prof. E. C. Jeyaseelan	Botany	SLCARP	For Excellence in Agricultural Research
National Educator (Bronze) Award <b>2025</b>	Prof. A. Ramanan	Computer Science	SLIIT	For excellence in teaching, scholarly work, and nations contribution in the discipline of Computing
National ICT NBQSA Gold Award <b>2025</b> under the Tertiary Student Project (Technology) category	Mr. Nimantha Rathnayake (PI)  Prof. A. Ramanan (S)  Dr. T. Kokul (S)  Dr. Prathibha Nellihela (S) (Teaching Hospital Anuradhapura)	Computer Science	British Computer Society (BCS) Sri Lanka Section, endorsed by the Ministry of Digital Economy, Sri Lanka	For the research titled "A Deep Learning-Based Automated Tool for Ki-67 Quantification in Breast Cancer Histopathology" demonstrating an outstanding blend of technology and medical science, offering innovation in cancer diagnostics.

SLASSCOM National Ingenuity Award <b>2025</b>	Dr. Ms. Jayanjana Asanthi ( <b>S</b> ) (Teaching Hospital Anuradhapura)		SLASSCOM	For the best Innovative Project – University Category at the Provincial Level
PhD Gold Medal 2025	Dr. Ms. S. Sathyaruban	Fisheries	University of Sri Jayewardenepur a	Research excellence, achieving the highest international and national research publications and research awards within the stipulated time.
CSSL ICT Educator of the year <b>2024</b> Award	Prof. A. Ramanan	Computer Science	Computer Society of Sri Lanka	In recognition of the national contributions to ICT education and the development of ICT knowledge in Sri Lanka.
IEEE Sri Lanka Section Outstanding Advisor Award <b>2024</b>	Dr. Ms. R. Nirthika	Computer Science	IEEE SL Section	For her invaluable contribution as an Advisor of the IEEE Women in Engineering Student Branch
National Educator (Silver) Award <b>2024</b>	Prof. A. Ramanan	Computer Science	SLIIT	For excellence in teaching, scholarly work, and national contribution in the discipline of Computing
Award for Academic Excellence – <b>2023</b>	Prof. A. Ramanan Prof. M. Siyamalan	Computer Science	Senate, UoJ	For Academic Excellence in the year 2023

CSSL ICT Researcher of the Year <b>2023</b> Award	Dr. T. Kokul	Computer Science	Computer Society of Sri Lanka	For his outstanding contributions and demonstrated excellence in ICT research.	
Outstanding IEEE Chapter Advisor 2023	Prof. M. Thanihaichelvan	Physics	IEEE SL Section	For outstanding contribution as an IEEE Chapter Advisor	
Award for Research Excellence – <b>2022</b>	Dr. T. Mathanaranjan	Mathematics & Statistics	Senate, UoJ	For Research Excellence in the year 2022	
CSSL ICT Researcher of the Year <b>2022</b> Award	Prof. A. Ramanan	Computer Science	Computer Society of Sri Lanka	For his outstanding contributions and demonstrated excellence in ICT research.	
Outstanding Branch Counsellor Award 2022	Prof. A. Ramanan	Computer Science	IEEE SL Section	For exceptional and dedicated efforts as a Student Branch Counsellor - 2021	
CSSL ICT Researcher of the Year <b>2021</b> Award	Prof. M. Siyamalan	Computer Science	Computer Society of Sri Lanka	For his outstanding contributions and demonstrated excellence in ICT research.	
SLASSCOM National Ingenuity Award 2021	Prof. M. Siyamalan ( <b>S</b> )  Ms. M. Mayuravaani	Computer Science	SLASSCOM	For Best Innovative Project (University category) at the Provincial Level	

Professor Balasubramanium Gold Medal <b>2019</b>	Prof. S.N. Surendran	Zoology	JSA	Research contribution to the community
National ICT Awards NBQSA 2016 - Special Recognition Award under the Tertiary Student Project (Business) category  SLASSCOM National Ingenuity Award 2016	Dr. K. Thabotharan <b>(S)</b> and Mr. Robin Roy Peter <b>(PI)</b>	Computer Science	British Computer Society (BCS) Sri Lanka Section, endorsed by the Telecommunicati on and Digital Infrastructure	For the research work and the development of the business prototype model entitled "Accident Free Driving".
University Business Linkage Initiative Program, University of Jaffna, Prize for the best	Dr. K. Thabotharan <b>(S)</b> and Mr. R. Kumaran <b>(PI)</b>	Computer Science	German Cooperation (GIZ), University Grants Commission,	For the solution oriented thesis entitled "A hop count and Time based MANET routing protocol".

Solution Oriented Thesis Award 2016			Chamber of Commerce and Industries Yarlpanam and the Ceylon Chamber of Commerce	
Joseph Andrew Award 2014	Dr. T. Pathmathas	Physics	University of Cape Town	Best PhD thesis
Research Award 2013	Prof. S.N. Surendran	Zoology	NSF	Best research outcome supported by the NSF
Young Scientist Award 2008	Prof. P. Ravirajan	Physics	SCOPUS, Elsevier, and NSF	For attaining a high level of excellence in research working Physics

SLASSCOM - Sri Lanka Association of Software and Services Companies

CSSL - Computer Society of Sri Lanka

NSF - National Science Foundation, Sri Lanka

JSA - Jaffna Science Association

IEEE SL Section - IEEE Sri Lankan Section

SLCARP - Sri Lanka Council for Agricultural Research Policy

SLIIT - Sri Lanka Institute of Information Technology

# 8.10 Sabbatical Positions

Name of the Staff	Position Title	University and the Country	Year	Duration (Months)	Funding Agency
Prof. K. Vignarooban	Assistant Research Scientist	Arizona State University, USA	2023 - 2024	12	Honeywell Aerospace
Dr. S. Mahesan	Academic Fellow	University of Wales UK	1999 - 2000	12	Commonwealth Fellowship

# 8.11 Fellowships

Name of Fellowship	Name of the staff	University and Country	Year	Duration (Months)	Funding agency	
Overseas Training Fellowship	Prof. S.N. Surendran	University of Maryland- College Park, USA	2013	12	National Science Foundation	
Herz Fellowship	Dr. K. Sarveswaran	Zukunftskolleg, University of Konstanz, Germany	2023	12	University of Konstanz, Germany	
UNU-FTP Fellowship	Dr. N. Ragavan	United Nations University,	2018	6	LINILI ETD. Icoland	
ONO-FTP reliowship	Ms. A. Thapeetha	Iceland	2019	6	UNU-FTP, Iceland	
Swiss NSF Scientific Exchange Fellowship	Prof. S.N. Surendran	University of Zurich, Switzerland	2024	6	Swiss National Science Foundation	
Fulbright Fellowship	Prof. K. Vignarooban	Arizona State University, USA	2020	3.5	US Department of State	
Commonwealth Academic Staff Fellowship	Prof. S.N. Surendran	University of Manchester, UK	2012	3	Commonwealth Commission	
Commonwealth Academic Staff Fellowship	Prof D Paviraian	Imperial College London, UK	2014	3	Commonwealth Commission	
Royal Society Fellowship, London	Prof. P. Ravirajan	Imperial College London, UK Edinburgh University, UK	2008	3	Royal Society London	

Postdoctoral Fellowship	Dr.K. Gunaalan	Technical University of Denmark (DTU), Denmark	2024	3	National Institute of Aquatic Resources (DTU-Aqua, Denmark)
	Dr. P. A. Amalraj	Czech Technical University in Prague, Czech Republic	2025	2.5	Technology Agency of the
Research Fellowship			2024	2.5	Czech Republic
·			2023	2.5	•
			2022	2.5	
		International Centre for	2023		International Centre for
ICTP Associate	Dr. T. Pathmathas	Theoretical Physics (ICTP),	-		Theoretical Physics (ICTP),
		Trieste, Italy	2028		Trieste, Italy
Overseas Training Fellowship	Prof. K. Vignarooban	Arizona State University, USA	2016	2	National Science Foundation
DAAD Fellowship	Prof. K. Vignarooban	Helmholtz Institute Ulm, Germany	2017	2	German Academic Exchange Service
Overseas Training Fellowship	Prof. P. Ravirajan	University of Illinois at Chicago	2012	2	National Science Foundation
Overseas Training Fellowship	Prof. S.N. Surendran	Liverpool School of Tropical Medicine, UK	2009	2	Asian Development Bank
		School of Data and Computer	2018	2	Sun Yat-sen University,
Post-doctoral Fellowship	Prof. M. Siyamalan	Science, Sun Yat-sen University, China	2019	2	China
Post-doctoral Training	Prof. Ms. K.	University of Bergen & USN,	2017	1	WaSo Project
Fellowship (WaSo Project)	Sivashanthini	Norway			-
ITEC Fellowship	Dr. Ragavan Nadarajah	INCOIS, India	_	0.75	Govt. of India (ITEC)
Water and Society (WaSo) Fellowship	Dr. K. Gunaalan	NMBU & UNIS, Norway	2017	0.7	WaSo Project
KORDI–UNU International Fellowship	Prof. Ms. Sivashanthini Kuganathan	KORDI, South Korea	2010	0.5	UNU / KORDI

Staff Mobility Fellowship (NORPART)	Prof. Ms. Sivashanthini Kuganathan	UiT, Norway	2022	0.5	DIKU (NORPART)
KIOST – AMETEC Fellowship	Prof. Ms. Thulasitha W. Shanthakumar	Korea Institute of Ocean Science and Technology (KIOST), South Korea	2012	0.5	KIOST & APEC Marine Environmental Training and Education Center (AMETEC)
UNU-UNESCO International	Dr. Ms. S. Sutharshiny	Annamalai University, India	_	0.5	UNU-UNESCO
Fellowship	Prof. Ms.K. Sivashanthini		2001	0.5	UNU-UNESCO
ITEC Training Programme (Solid Waste Management)	Ms. Shobiya Gobiraj	EPTRI, Hy derabad, India	2025	0.5	Govt. of India (ITEC)
ITEC Training Programme (Solid Waste Management)	Prof. G. Sashikesh	EPTRI, Hy derabad, India	2019	0.5	Govt. of India (ITEC)
Postdoctoral training	Prof. G. Sashikesh	Norway	2019	0.75	WaSo Project, Government
programme	Prof. P. lyngaran	Norway	2019	0.75	of Norway for the NORHED
Erasmus+ Capacity Building in Higher Education project "Techno-Economic-Societal Sustainable development	Prof. G. Sashikesh	Portugal	2023	0.5	Erasmus+ Capacity Building in Higher Education project
Training in Sri Lanka" (TESS) fellowship	Prof. P. lyngaran	Portugal	2023	0.5	
MoES–CSIR–TNSCST Fellowship	Prof. Ms. Sivashanthini Kuganathan	Govt. Arts College, Kumbakonam, India	2012	0.1	MoES / CSIR / TNSCST
Endeavour Research Fellowship	Prof. Ms. M. Senthilnanthanan	University of Technology Sydney, Australia	2008 - 2009	6	Australian Government

ACU Titular Fellowship  Prof. Ms. M. Senthilnanthanan	University of Oxford, UK	2008	6	Association of Commonwealth Universities, UK	
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DAAD - German Academic Exchange Service

IPPS - International Programme in Physical Sciences, Uppsala University, Sweden

## 8.12 Endowments

#### 8.12.1 Gold Medals

Name of the Gold medal	Criteria
Professor K. Theivendrarajah	The Student attaining the Best Performance in the BSc Hons Degree Examination in Botany with a First Class
Professor A. Thurairajah	Overall Performance in the Faculty of Science, taking into account academic excellence, achievements in sports, and participation in other extracurricular activities.
Professor S. Mageswaran	Best Performance in Physical Science at the BSc Degree Examination with at least a Second Class Upper Division.
Professor S. Mageswaran	Best Performance in Biological Science at the BSc Degree Examinations with at least a Second Class Upper Division.
Professor S. Mageswaran	Best Performance in the fourth year Advanced Organic Chemistry units(Theory and practical) in the BSc Hons Degree Examinations with minimum GPA of 3.30 in all the fourth year Advanced Organic Chemistry units(Theory and practical) and obtaining at least a Second Class Upper Division
Sivaramani Gold Medal / Prize	Who obtains the Highest Marks among those who obtain an overall band score of a minimum 8.0 out of 9.0 in the English language proficiency course conducted by DELT
Professor K. Kunaratnam	Best Overall Performance in Pure and Applied Sciences, taking into account academic students' activities, Cultural activities, Sports activities, Dissemination of Scientific Knowledge and Social activities
Allen Abraham Ambalavanar	The Student attained the top ranking in the Physics advanced course units (Level 3M and 4M) of the BSc Hons Degree Programme.
Professor Rajeswary Mageswaran	The best Performance in the fourth-year Theory papers in Inorganic Chemistry. The awardee should have obtained at least a Second Class Upper Division in the BScHons Degree Examinations

	and a minimum of 3.70 as the average of the grade point values in the fourth-year theory paper in inorganic chemistry. In case of a tie, the average of the raw marks of those course units shall be considered.
Mr. Sithamparapillai Kandiah	Best Performance in the fourth-year theory papers in Physical Chemistry. The awardee should have obtained at least a Second Class Upper Division in the BScHons Degree Examinations and a minimum of 3.70 as the average of the grade point values in the fourth-year theory paper in physical chemistry. In case of a tie, the average of the raw marks of those course units shall be considered.
Professor Chellappah Suntharalingam	Best Performance in all the BSc Hons Degree Course units in Mathematics at levels 3M and 4M, with a minimum GPA of 3.30 in all Hons Degree course units in Mathematics at levels 3M and 4M
Dr. Karthigesu Chitravadivelu	Best Performance, obtaining the highest OGPA in BSc Hons in Fisheries Science with at least an Upper Second Class. In case of a tie, the OGPA in level 4M shall be considered
Professor V. K. Ganeshalingam	Best performance in the Honours Degree Examination in Zoology with at least Upper second class. In case of tie, the OGPA in the Final Year shall be considered.
Professor Ratnam Vigneswaran	Best Performance in the Honours Degree Examination in Mathematics: The awardee should have obtained the highest overall GPA in the BScHons Degree Examination in Mathematics with a minimum overall GPA of 3.70. In case of a tie in the Overall GPA, the highest raw marks in the Level 4 shall be considered for the award.

## 8.12.2 Memorial Prizes

Name of the Memorial Prize	Criteria
Frank Pinto Memorial Prize	The student who has obtained the Highest OGPA in the BSc Degree Examination
Handy Perinpanayagam Memorial Prize	Best Performance at the BSc Degree Examinations Level 1G and 2G taken together
M. Varatharajah Memorial Prize	Best Performance in Chemistry at the BSc Degree Examination- Level 1G
Sabalingam Memorial Prize	Highest GPA in BSc Degree Examinations- Level 1G. The GPA should not be less than 3.30
University Prize (Thambiah Mudaliyar	Scoring the highest GPA, but not less than 3.30 at the Levels 1G, 2G, 3G, 3M, 4M
Chatram Trust)	ocorning the highest Gra, but hot less than 5.50 at the Levels 1G, 2G, 3G, 3M, 4M
Dean's List	Academic Excellence (GPA 3.70 or above)

Mootatamby Swaminathan Prize	Best Performance in the BSc Hons Degree Examinations in Botany with First Class or Second-		
Modulating Swammathan Prize	Class Upper Division		
Professor P. Kanagasabapathy Memorial	Highest OGPA at the BSc Degree Examinations (Physical Science and Biological Science		
Prize	considered together) with a First Class or Second-Class Upper Division		
Professor P. Kanagasabapathy Memorial	Best Performance in the BSc Hons Degree Examinations in Statistics with First Class or Second-		
Prize	Class Upper Division		
	Excellence in Theoretical Physics to the best student judged by the examining body of the		
Ramalingam Veerasingham Memorial Prize	University based on the results of the Final examination held by the University for the award of		
	the Degree of BSc		
Sir Arunachalam Mahadeva Memorial Prize	Best Performance in the BSc Hons Degree Examinations in Chemistry with First Class or Second-		
311 Al unacriaiani Manaueva Memoriai Prize	Class Upper Division		
Sir Arunachalam Mahadeva Memorial Prize	Best Performance in the BSc Hons Degree Examinations in Mathematics with First Class or		
Sir Arunachalam Manadeva Memoriai Prize	Second-Class Upper Division		
Sir Arunachalam Mahadeva Memorial Prize	Best Performance in the BSc Hons Degree Examinations in Physics with First Class or Second-		
Sii Arunachalam Manadeva Memoriai Prize	Class Upper Division		
Cir Cangaranillai Dararaiasingam Driza	Best Performance in the BSc Hons Degree Examinations in Zoology with First Class or Second-		
Sir Sangarapillai Pararajasingam Prize	Class Upper Division		
Sabalingam Memorial Prize	Best Performance in Computer Science from the Physical Science stream at the BSc Hons		
Saballigati Memoriai Prize	Degree Examinations and who obtains a First Class or Second-Class Upper Division		
S. Jeganathan Memorial Prize	The student who has obtained the highest GPA in the BSc Degree Examinations with Physics as		
3. Jeganathan Memorial Prize	one of the main subjects and obtained First or Second Class (Upper Division) Hons		
	The student who obtains the Highest GPA in Chemistry in the BSc Degree Examinations- Level		
S. Ratnanathar Memorial Prize	3G		
	The student who followed a three-year degree programme and obtained the highest OGPA in		
S. Sriskandarajah Memorial Prize	the BSc Degree Examinations (Physical Science and Biological Science considered together)		
	with First Class or Second-Class Upper Division		
Professor Kanthia Kunaratnam Memorial	The student among the Direct-intake Computer Science students having the best performance,		
Prize	obtaining the highest GPA in BSc Hons Degree Examinations in Computer Science with First		
11120	Class or Second-Class Upper Division		

Ms. Vathsaladevi Ponnuthrurai Memorial Prize	The student who obtained the highest marks in the first (1G) and second years (2G) in Zoology.
Dr. Ms. Padmini Krishnaraja Memorial Prize	The student who obtained the highest cumulative GPA in the courses relevant to physiology and endocrinology in level 2G, 3M and 4M (Comparative Anatomy and Physiology, Endocrinology and Advanced molecular Animal Physiology) in Bachelor of Science Honours in Zoology with at least Upper Second Class. In case of tie, the highest raw marks of the relevant courses shall be considered.
Prof. V. K. Ganeshalingam Memorial Prize	The student who obtained the highest cumulative GPA in the courses relevant to entomology in level 3M and 4M (Pest Management, Insect Taxonomy, Insect Ecology and Insect Structure & Function) in Bachelor of Science Honours in Zoology with at least Upper Second Class. In case of tie, the highest raw marks of the relevant courses shall be considered.
Professor Balan Selliah Memorial Bursary	A student shall be selected for the award on the basis of financial need from among those pursuing an undergraduate degree in Statistics as the main subject. If no such student qualifies, a student pursuing an undergraduate degree with Pure Mathematics as the main subject shall be considered.
Dr. Sinnathamby Mahesan Prize for the Best All Round Performance in Computer Science	The prize will be awarded to a student with the best overall performance in the Bachelor of Science Honours degree in Computer Science, based on their performance in Academic, Sports, and Other activities.
Dr. Sinnathamby Mahesan Prize for the Best Undergraduate Research in Computer Science	The prize will be awarded to a student in the Bachelor of Science Honours degree examination in Computer Science, based on their academic and research performances. A student to apply for this prize should have obtained at least a Second Class and minimum Grade of A- for the individual research project in Level 4.

# 8.13 MoU signed

# 8.13.1 List of MoU signed with foreign institutions

Collaborating Institution	Output
Western Norway Univ. of Applied	- 90+ research publications and conference abstracts, including 44 Q1/Q2 indexed journal articles
Sciences	in Scopus and Web of Science.
(HVL) Norway	- Establishment of a state-of-the-art Clean Energy Research Laboratory, enabling sustained and advanced research in nanomaterials and renewable energy.
Coordinator	- Procured XRD, Solar Simulator, Workbench, multifunctional printers, gas purification system to
Prof. P. Ravirajan	the glove box, computers, multimedia projector, conference tables and chairs
<b>Department</b> Physics	- Development of nationally and internationally relevant research themes in nanomaterials for clean energy, floating solar systems, and biomass-based energy.
	- Production of 3 PhD, 8 MPhil, and 9 MSc graduates under the project, with 3 MPhil candidates presently in progress.
	- Joint supervision of postgraduate students by academics from the University of Jaffna (UoJ),
	Western Norway University of Applied Sciences (HVL), and the University of Bergen (UoB).
	- Provision of advanced hands-on training in nanomaterials synthesis and characterisation for undergraduate, MSc, and PhD students.
	- Design and implementation of Sri Lanka's first internationally benchmarked MSc programmes in Clean Energy Technologies, approved by the UGC Quality Assurance Council.
	- Integration of research-led teaching and modern laboratory-based learning approaches.
	- Enhancement of postgraduate education aligned with global clean energy and sustainability standards.
	- Facilitation of over 20 staff exchanges and over 20 student exchanges between Sri Lanka and Norway.
	- Establishment of long-term institutional partnerships with HVL, UoB, and Coimbatore Institute of Technology (CIT).
	- Strengthening of international co-authorships and joint research supervision frameworks.
	- Successful organization of three major international conferences under the AMCEHA series in
	2019, 2023 and 2025 over 120 international participants from 35 institutions.

University of Tromso, Norway. University of Ruhuna (Local focal point) University of Jaffna (Partner)  Coordinator Prof. Ms. S. Kuganathan Department Fisheries	<ul> <li>One PhD and three MPhil students successfully completed and were awarded their degrees, while two students submitted their thesis for 08 full papers and 12 abstract publications were achieved</li> <li>A residential workshop on Fisheries Science education is organized by partner – UoJ (23-24<sup>th</sup> July 2024).</li> <li>An international conference is organized by all partners of NORLANKA BLUE at Colombo (26 July 2024).</li> <li>An exhibition and workshop living with the oceans was organized by partner-UoR (December 2024)</li> <li>Workshops on Literature Review for Undergraduate and Graduate Students was organized by partner-UoR (December 2024).</li> <li>A book titled 'Water and People' was launched in December 2024.</li> </ul>
University of Bern, Switzerland Coordinator Prof. S. N. Surendran Department Zoology	<ul> <li>Two Ph.D. students have completed their visit to the University of Bern, Switzerland for a short research stay.</li> <li>Bioinformatics training workshop was conducted by research collaborators from the University of Bern, Switzerland to 30 graduate students.</li> <li>Two research publications were published in high-impact factor journals.</li> </ul>
University of Bergen, Norway  Coordinator Prof. P. Ravirajan Department Physics	- Four PhD students who have been pursuing research work under the joint supervision of academics from UoJ, UoB and HVL published eight papers in SCI journals and a couple of submitted to SCI journals
Sivananthan Laboratories Inc., USA Coordinator Prof. Ms. Meena Senthilnanthanan Department Chemistry	- The Vice-Chancellor and Professor Siva Sivanaanthan, CEO of the Sivananthan Laboratories had a meeting along with the team including Dean/Science and the Researchers from the Departments of Physics and Computer Science had a meeting in person to identify the mutual area of Research.

	- Researchers from the Departments of Computer Science and Physics are in the process of developing a proposal to do research in the field of AI.
University of Konstanz, Germany Coordinator Dr. K. Sarveswaran  Department Computer Science	<ul> <li>A grant proposal has been submitted in collaboration with a scholar from the University of Konstanz, and the outcome is expected in 2 months. If successful, there will be continuous staff and student exchanges happening from 2024 for 4 years.</li> <li>A fellowship for staff exchange was offered by the University of Konstanz.</li> <li>Prof. Miriam Butt has agreed to serve as an advisor for the recently formed interdisciplinary research group known as the "Language Technology Group" established by the staff of the University of Jaffna and led by the members of the Department of Computer Science.</li> </ul>
Tamil Nadu Dr. J. Jayalalithaa Fisheries University, India. Coordinator Prof. Ms. S. Kuganathan Department Fisheries	<ul> <li>Project activities continued effectively. Mr. S. Thivviyan submitted his MPhil registration and presented his research proposal.</li> <li>Dr. Lloyd Crispin C from TNFU visited the Department of Fisheries, University of Jaffna, from 4 May to 18 July 2025 as a Visiting Professor under the Grant. During this period, he contributed to teaching, monitored research progress, and facilitated capacity-building programmes.</li> </ul>
Bay of Bengal Programme Inter- Governmental Organisation (BoBP-IGO) Coordinator Prof. Ms. S. Kuganathan Department Fisheries	<ul> <li>Project activities advanced with the visit of BoBP-IGO experts from 14 to 17 May 2025 for the inception phase, during which field assessments and stakeholder discussions were held.</li> <li>Recruitment of a research assistant is in progress. Four staff members completed capacity development programmes on EAFM planning conducted at NARA, Colombo.</li> </ul>

# 8.13.2 List of MoUs signed with the Institutions in Sri Lanka

Collaborating Institution	Output
Information and Communication Technology Agency of Sri Lanka (ICTA), Dialog Axiata PLC, and Computer Society of Sri Lanka (CSSL)  Principal Investigator Mr. S. Suthakar  Coordinator and Proposal Writer	<ul> <li>Establishment of the IoT laboratory, equipped with IoT kits and Laptop computers worth of LKR 12 million in the department of Computer Science.</li> <li>Grade 9 IoT Workshop (April 1-2, 2023): An impactful two-day IoT workshop was organized by IEEE-SB-UoJ for Grade 9 students from the Jaffna zonal division. Held on April 1st and 2nd, 2023, at the Department of Computer Science, University of Jaffna, the session provided hands-on IoT training. A total of 76 students and 5 teachers from local schools gained insights into IoT technologies.</li> <li>IEEE Summer School on Computational Intelligence (July 12-14, 2023): The IEEE-CIS-SBC-UoJ successfully hosted the "2023 IEEE Summer School on Computational Intelligence: Theory and</li> </ul>
Dr. K. Thabotharan	Applications" from July 12th to 14th. As part of this event, a three-hour hands-on IoT training titled "Internet of Things and Robotics" was conducted, emphasizing practical IoT applications.
<b>Department</b> Computer Science	<ul> <li>IoT Lectures and Sessions (2023-2025): Lectures and practical sessions were conducted for the IoT segment of the Emerging Trends in Computer Science (CSC211S2) course unit. Faculty from the University of Jaffna's Engineering Department contributed to these sessions, which occurred on 2023-2025.</li> <li>Google exploreCSR Summer School on Machine Intelligence (GeSSoMI) (June 14-16, 2024). As part of this event, a three-hour hands-on IoT training titled "Internet of Things and Robotics" was conducted, emphasizing practical IoT applications.</li> </ul>
Inthira Group (Pvt.) Ltd., Kilinochchi  Coordinator and Principal Inventor Dr. K. Thabotharan  Inventor 2 Mr. R. Ramanaruban Department Computer Science	<ul> <li>This MoU between the University of Jaffna and Inthira Group (Pvt.) Ltd., Kilinochchi is signed for the sale and the use of the software product entitled "Agriculture Products Management System", developed by the two inventors attached to the department of Computer Science.</li> <li>Since the signing of the Mou with the Inthira Group (Pvt.) Ltd., the researchers have applied for a research grant of LKR 300,000/= for hiring two (02) developers to expedite the process of development of the final software. The researchers were successful in securing the funds from the World Bank funded AHEAD project via the University Business Linkage (UBL) of the University of Jaffna.</li> </ul>

# 8.14 Jubilarian staff

List of staff members who have completed at least 25 years of dedicated service and are to be honoured at the Faculty's Golden Jubilee Commemorative Ceremony.

#### 8.14.1 Academic Staff

No.	Name	Academic Entity
1.	Mrs. Kularajany Niranjan	Botany
2.	Mrs. Nirmala Ravimannan	Botany
3.	Prof. Arulanantham Christie Thavaranjit	Botany
4.	Mrs. J. Nanthakumar	Botany
5.	Dr. (Ms.) Nahmagal Krishnapillai	Botany
6.	Dr. N. Sivapalan	Chemistry
7.	Prof. (Mrs.) Meena Senthilnanthanan	Chemistry
8.	Prof. Ratnasothy Srikaran	Chemistry
9.	Prof. Jeyaratnam Prince Jeyadevan	Chemistry
10.	Dr. Tharmarajah Manoranjan	Chemistry
11.	Dr. S. Mahesan	Computer Science
12.	Dr. Kathiravelu Thabotharan	Computer Science
13.	Prof. (Mrs.) Sivashanthini Kuganathan	Fisheries
14.	Prof. Sivakolundu Srisatkunarajah	Mathematics & Statistics
15.	Mr. Senathirajah Selvarajan	Mathematics & Statistics
16.	Mrs. Nalini Satkunanathan	Mathematics & Statistics

17.	Prof. R. Kumaravadivel	Physics
18.	Prof. K. Kandasamy	Physics
19.	Prof. Puniamoorthy Ravirajan	Physics
20.	Prof. (Mrs.) Rajendramani Gnaneswaran	Zoology
21.	Ms. Nithiyagowry Ratnasabapathy	Zoology
22.	Mr. Wanniasingham Venkatesh Luckshman	Zoology
23.	Prof. Sinnathamby Noble Surendran	Zoology

## 8.14.2 Non-Academic Staff

No.	Name	Academic Entity
1.	Mr. N. Sabananthar	Botany
2.	Mr. Arunagirinathan	Botany
3.	Mr. Krishnasamy	Botany
4.	Mr. R. Selvaratnam	Botany
5.	Mr. S. Kanagasabai	Botany
6.	Mr. K. Pusparadnam	Botany
7.	Mr. B. Rakulan	Botany
8.	Mr. T. K. Jeyakumar	Botany
9.	Mr. K. Vejayakumar	Botany
10.	Mr. Arulanandam Lakshman	Chemistry
11.	Mr. Apputhurai Thaneswaran	Chemistry
12.	Mr. P. Uthayakumar	Chemistry

13.	Mr. M. Yogendran	Chemistry
14.	Mr. S. Nanthakumar	Chemistry
15.	Mr. Vijayaratnam	Chemistry
16.	Mr. S. Santhirasegram	Chemistry
17.	Mr. I. Navaratnarajah	Chemistry
18.	Mr. A. Arulselvaratnam	Chemistry
19.	Mr. S. Selvarajah	Chemistry
20.	Ms. K. Gangadevi	Chemistry
21.	Mr. S. Satheesan	Chemistry
22.	Mr. M. Rajendram	Computer Science
23.	Mr. P. Amirtharajah	Computer Science
24.	Mr. E. S. Thayaparan	Fisheries
25.	Mr. S. Ravikumar	Fisheries
26.	Mr. R. Jeganathan	Mathematics & Statistics
27.	Mr. Karthigesu Kokulabalan	Mathematics & Statistics
28.	Mr. N. Tharmakulasingam	Mathematics & Statistics
29.	Mrs. Gowry Shanmuganathan	Mathematics & Statistics
30.	Mr. K. Kanagalingam	Physics
31.	Mr. Kanagalingam Somasegaram	Physics
32.	Mr. V. Sellathurai	Physics
33.	Mr. N. Jeyachandiran	Physics
34.	Mr. S. Marimuththu	Physics
35.	Mr. A. Sasiruban	Physics
36.	Mr. Kandiah Sribandakaran	Zoology

37.	Mr. Veerasingam Jegathambikaipakan	Zoology
38.	Mr. Sinnathamby Thangarajah	Zoology
39.	Mr. Ponnuthurai Vimalananthan	Zoology
40.	Mr. Nadarajah Bakeerathan	Zoology
41.	Mr. K. Ambikapathy	Zoology
42.	Mr. T. Thillainathan	Zoology
43.	Mr. E. Amirthalingam	Zoology
44.	Mr. S. Gnanasegaram	Zoology
45.	Mr. M. Rajkumar	Zoology
46.	Mrs. R. Mahesan	Computer Unit
47.	Mr. K. Jeyandran	Computer Unit
48.	Mr. M. Kulanthaivel	Computer Unit
49.	Mr. R. Sivakumar	Computer Unit
50.	Mr. M. Khalingarajah	Dean's Office
51.	Mrs. K. Brinthaban	Dean's Office
52.	Mr. B. Narandran	Dean's Office





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