**FACULTY OF SCIENCE** 

# NewsFoS@UoJ

Volume - 04

**University of Jaffna** 



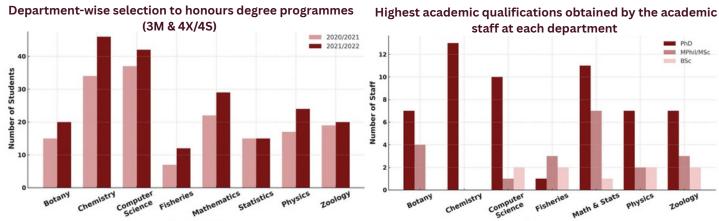
#### Cover Story ...

The Faculty of Science continues to strengthen student preparedness through pre-semester courses in English proficiency, computer literacy, information literacy, and mathematics for biological science students. In 2023, the Faculty introduced a Life Skills Programme based on the British Council's Active Citizenship framework to promote personal development and social responsibility among new entrants. Following a week-long training programme, students undertake ten-week social action projects in their communities, addressing local issues and presenting their outcomes at the Faculty. The results and impacts of these projects are compiled in an annual booklet. The course, designed by Prof. K. Gajapathy, covers key topics including gender, identity, culture, social responsibility, and community project management. The initiative is financially supported by the Jaffna University Graduates Association (JUGA), Australia, which funded the 48th batch and continues to support the 49<sup>th</sup> batch.

### Message from the Dean of the Faculty ...

It gives me great pleasure to contribute a message to the fourth newsletter of the Faculty of Science, which highlights the key events and achievements of the faculty during 2023. Since the establishment of the Faculty of Science Alumni Association (FoSAA) in 2022, collaboration between the Faculty and its alumni has flourished. Our distinguished alumni have made generous contributions towards the Faculty's development, including the renovation of lecture halls, the purchase of sports equipment and furniture, and financial support for the Life Skills Training Programme and Social Action Projects for the 48<sup>th</sup> and 49<sup>th</sup> student batches. The Life Skills Programme, launched in 2023, has been a resounding success, enhancing students' interpersonal, organizational, and leadership skills while fostering social responsibility. During the year, admissions to Honours

degree programmes increased by 20%, reflecting improved academic performance. International collaborations were also strengthened through postgraduate exchanges with European universities. The establishment of a new research laboratory in the Department of Physics further underscores our commitment to research excellence and academic advancement. I wish to express my sincere appreciation to the editors, including Prof. Ramanan, and the designer for their dedicated efforts.



 43 more students were selected to pursue honours degree programmes in the academic year 2021 / 2022 88% of the faculty staff hold postgraduate qualifications.

Strea	Streamwise Graduation in the Last Four Years (4 academic years)							
Year	Convocation	Degree	Academic Year	Biological Science	Computer Science	Physical Science	Sub-Total	Total
2023	No. 37 July, 2023	BSc	2019/2020	18	20	101	139	286
		BScHons	2019/2020	59	27	61	147	
Sub-Total			77	47	162	286		
2022	No. 36 Oct., 2022	BSc	2018/2019	28	21	115	164	339
2022		BScHons	2018/2019	45	38	92	175	
Sub-Total			73	59	207	339		
2022	No. 35 (II) March, 2022	BSc	2017/2018	31		143	174	324
2022		BScHons	2017/2018	52	26	72	150	
Sub-Total			83	26	215	324		
2021	No. 35 (I) Oct., 2021	BSc	2016/2017	18	3	80	101	226
		BScHons	2016/2017	43	21	71	135	236
Sub-Total			61	24	151	236		
	Grand Total			294	156	735	1185	

1185 students graduated in the last four academic years on average of about 295.

### Research and Development: Conference / Symposium / Workshop

#### Third Undergraduate Research Symposium

The Physics Society, organized the third Research Symposium on February 10, 2023. The event saw the release of the Proceedings of the Physics Society, University of Jaffna (Vol. 03), which was officially launched by Prof. S. Srisatkunarajah, the Vice-Chancellor of the University of Jaffna. Prof. K. Vignarooban chaired the technical committee for the symposium, and Dr. M. Thanihaichelvan served as the editor of the proceedings. The successful organization of the symposium was made possible by the guidance of the department's staff, including Dr. U. Sutharshini, who served as the Senior Treasurer for the Physics Society.



#### Sri Lanka Student Workshop on Computer Science

The seventh national workshop "Sri Lanka Student Workshop on Computer Science (SL-SWCS'23)", was hosted by the University of Jaffna's Department of Computer Science (DCS) on December 9, 2023, proved highly successful. This edition of SL-SWCS was held in a hybrid format at the DCS Auditorium, University of Jaffna, witnessing the physical presence of esteemed personalities including the Vice-Chancellor, the Dean/Faculty of Science, department staff, students, and invited guests. Simultaneously, keynote speakers and a few student participants joined virtually.

Dr. (Mrs.) B. Mayurathan, General Chair of SL-SWCS'23, inaugurated the workshop and delivered the welcome address. Subsequently, Prof. S. Srisatkunarajah, the Vice-Chancellor, lauded DCS's continuous effort in hosting the workshop. Senior Prof. P. Ravirajan, the Dean / Faculty of Science, acknowledged the SL-SWCS'23 organizing committee, underscoring its importance as a platform for students to showcase their skills.



### Third Research Symposium for Biological Science Students



The third research symposium for Biological Science students was held on May 20, 2023 at the B1 Lecture Hall, Natural Science Block I. The symposium was organized by the Zoological Students Association (ZSA) with the financial assistance of the World Bank funded AHEAD ELTA ELSE grant – Activity - 4 of the Faculty of Science. A total of 60 participants including the Vice-Chancellor, Dean, Academic staff and students graced the event. Dr. S. Wijayamohan, Head / Department of Bio-Science, University of Vavuniya delivered a keynote address on "Future of Biodiversity Conservation in the Northern Province" and ten undergraduate research papers were presented. The Symposium proceeding was released by the Vice-Chancellor.



### Visit of the Research Collaborators from the University of Bern, Switzerland



LoResearch collaborators of Prof. S. N. Surendran under the research grant of Switzerland National Science Foundation-SPIRIT visited the Department of Zoology, and interacted with the research team

Prof. S.N. Surendran, Ms. S. Kokila and Mr. A. Arthiyan in the Department of Zoology on April 17 - 18, 2023. Also Prof. Isabel Roditi and Prof. Andrew Hemphil delivered a guest lecture on "The biology of African trypanosomes:

from basic to applied research and back again" and "Novel drugs and drug targets for diseases caused by apicomplexan parasites", respectively at the Faculty of graduate studies on April 18, 2023. Mr. S. Arthiyan and Ms. S. Kokila visited the University of Bern for research stay from February to April 2022 and January to March 2023, respectively.





### Training Programme on Handling of Equipment and Laboratory Safety

The Biosafety committee and the Activity 5 of the AHEAD ELTA ELSE grant of the Faculty jointly organized a training programme for the laboratory staff at the Palmyrah Research Institute (PRI), Kaithady on June 1 - 2, 2023. Staff of the PRI served as the resource persons and nine laboratory staff from Department of Botany, Fisheries, Physics Zoology participated and Dr. (Ms.) N. Kishnapillai coordinated the event.

### The Discussion Series-01: "Green Chemistry & Sustainable Development Goals (SDGs)



The Discussion Series-01 on "Green Chemistry & Sustainable Development Goals (SDGs)" was successfully conducted on Monday, July 24, 2023, from 10.00 AM to 11.00 AM at the Department of Chemistry, University of Jaffna. The event was organized by the Chemical Society and it aimed to enlighten the participants about the crucial connection between green chemistry and sustainable development goals. The speaker for the session was

Prof. Nirusha Thavarajah, an esteemed Associate Professor, Department of Physical and Environmental Sciences, University of Toronto Scarborough.



### The Discussion Series -02: "How to Save the World Using Chemistry"



The Discussion Series-02 titled "How to Save the World Using Chemistry" was successfully held on Wednesday, July 26, 2023, at the Department of Chemistry, University of Jaffna. The event aimed to raise awareness and provide insights into the vital role that chemistry plays in achieving a net-zero carbon emissions future. Mr. Sean McQuaid, a distinguished expert in geophysics and a specialist in Net Zero Carbon Emissions from the UK, was invited as the distinguished speaker.

Mr. Sean McQuaid, in his thought-provoking presentation, shed light on the pressing global challenges posed by carbon emissions and the urgent need to address them through chemistry-based solutions. He outlined innovative approaches, ground breaking research, and the practical applications of chemistry to achieve the ambitious goal of net-zero carbon emissions.

### **Interaction with Foreign Universities and Private Sectors**

#### MoU with University of Konstanz, Germany





The University of Jaffna, Sri Lanka and the University of Konstanz, Germany have entered into a Memorandum of Understanding (MoU) on March 28, 2023, to facilitate research and collaboration in the areas of Natural Language Processing (NLP) and Computational Linguistics. The agreement was signed by the Department of Computer Science(DCS) at the University of Jaffna and the Department of Linguistics at the University of Konstanz to promote mutual cooperation and support in these fields. The MoU will facilitate joint research initiatives, faculty and student exchanges, and collaborative seminars and workshops.



#### First Business License Agreement Signed for a Product of DCS

The DCS at the University of Jaffna has reached a significant milestone with the commercialisation of their web-based software application, the "Agriculture Products Management System," developed by undergraduate student Mr. Ramanaruban under the supervision of Dr. K. Thabotharan (Senior Lecturer in Computer Science). This innovative solution addresses key challenges in the agricultural industry, aiming to reduce wastage,





streamline product delivery, and ensure fair pricing for farmers' product. On April 18, 2023, a license signing ceremony was held in the university's boardroom, marking the official agreement between the University of Jaffna and Inthira Group (Pvt.) Ltd., Kilinochchi. The agreement was signed by Prof. S. Srisatkunarajah, Vice Chancellor of the University of Jaffna, and Mr. Rajethan Makeswaran, Founder and Chief Executive Officer(CEO) of Inthira Group (Pvt.) Ltd. The system was launched on December 6, 2023, at the Auditorium, Faculty of Agriculture, University of Jaffna.

# Achievement of the students

A Fisheries Science Honours graduate won a six-month fellowship on UNESCO GRO -Fisheries Training Programme in Iceland at the Marine and Freshwater Research Institute, Reykjavik, Iceland.



**Miss Dhanushka Dilini Jayaweera**, has been awarded a six-month fellowship from 2022 - 2023 on hands-on training in the specialized field of Quality management of fish handling and processing.

**Miss Moksha Shashiprabha** has been awarded a six-month fellowship from November 2023 to May 2024 on hands-on training in the specialized field of 'Quality management of fish handling and processing'



Mr. Ramajeyam Gobiraj has been awarded a six-month fellowship from November 2023 to May 2024 on hands-on training in the field of 'Aquatic Resource Assessment and Monitoring'.







# Two Fisheries Science Honours graduates won a Five - month graduate mobility fellowship in Norway

Ms. N. M. I. Anjalie and Ms C. N. S. Wijesundara (Fresh Fisheries Science Honours graduates) have been awarded to undergo one-semester exchange study programme at UiT, Norway, Tromsø under the NOR-LANKA BLUE project which has been established by the UiT in partnership with University of Ruhuna, University of Jaffna and NARA (National Aquatic Resources Research) . These two students are followed master degree course modules for 30 European credits at the UiT Norwegian College of Fisheries.

Abirami Ravitharan presented a paper titled "Species Composition and Diversity of Marine Plankton Related to Water Quality along Karainagar Coastal Waters, Sri Lanka" at the 26th Annual TASME Conference in Toronto, Canada, on July 1 - 2, 2023, and awarded first place!



### mSpace 'Code Blast' National Hackathon

Two of Level 3S students in Computer Science, Mr. K. M. Ravindu Lasantha Senadeera and Ms. M. K. T. Sammani Fernando participated in the mSpace 'Code Blast' National Hackathon held on September 30, 2023 at the Trace Expert City, Colombo 10 and became the 1<sup>st</sup> Runner Up and won a cash prize of LKR 200,000.00.

#### Seeds for the Future – 2023

Ms. T. Thanushika, a participant from Level 3M in Computer Science, was competitively chosen for a week-long programme in China known as "Seeds for the Future." This opportunity allowed her to experience a fascinating fusion of technological advancements and the vibrant Chinese culture. During her visit, Ms. Thanushika had the privilege of exploring the Huawei Cyber Security Center in Shenzen, gaining insights into the technological landscape, and witnessing China's remarkable technological advancements. Additionally, she immersed herself in the cultural richness of the Splendid China Folk Culture Village and traveled to Shanghai to participate in the "Seeds Summit" event.



The entire trip to China from September 14 to 22, 2023, including airfare and accommodation expenses, was generously sponsored by Huawei.



### CodeStorm coding challenge

The CS\_Heynas team, including the following third year students in Computer Science, participated in the CodeStorm coding challenge during the Yarl IT Hub Innovation Festival 2023 held on November 04, 2023, and secured the 2nd runner-up position.

- Roy Nesarajah Viththagan 2020/CSC/051
- Sivakumar Vithurshan 2020/CSC/057
- Vijayarajah Sayanishan 2020/CSC/066

#### **ICTer International Conference 2023**

Level 4 students in Computer Science participated in the ICTer International Conference 2023 held at the University of Colombo School of Computing Auditorium on November 8 - 9, 2023. The following students received a registration fee waiver in participating at the conference.

- R. Ramanaruban (2018/SP/151)
- M. Rupeekshan (2018/CSC/030)
- K. Pavithra (2018/CSC/026)
- R.M.L.V. Karunarathna (2018/CSC/017)
- N.M.S.C. Nawarathna (2018/CSC/023)



#### Achievement of the Academic Staff

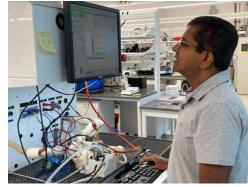


#### Stanford-Elsevier - world's top 2 % of Scientists in the year 2023

In the list of the top 2% scientists for the year 2023, Dr. T. Mathanarajan, Senior Lecturer (Grade I) in Mathematics, Dept. of Mathematics and Statistics, Faculty of Science, was included. The faculty congratulates him on his outstanding research record in the year 2023.

#### **Assistant Research Scientist at Arizona State University**

Prof Kandasamy Vignarooban has been appointed as an Assistant Research Scientist at the Ira A. Fulton Schools of Engineering, Arizona State University, USA for the period July 01, 2023 through June 30, 2024. Subsequent one-year appointments may be offered at the discretion of the university under the same terms and conditions. After more than 10 years of gap in getting foreign sabbatical placements from the Department of Physics, Prof Vignarooban got it in 2023. This is the first time in the past 50 years' history of the Faculty of Science, an academic staff has been appointed with a 'Scientist' title in a well-recognized foreign university for his sabbatical placement. During this period, he will be working in the field of hydrogen energy under a research project funded by the global high-tech industry Honeywell Aerospace. His main task is to optimize the power output and the performance level of proton exchange



membrane fuel cell (PEMFC) stack; both experimentally as well as by simulation using ANSYS Fluent. Arizona State University's supercomputer facilities will be utilized to simulate the PEMFC model.

#### Senior Associateship at ICTP, Italy



The International Centre for Theoretical Physics(ICTP), Italy, awarded Dr. Thirunavukkarasu Pathmathas, senior lecturer in physics, a six-year Senior Associateship, which isa great opportunity for him to learn about the latest developments with a focus on radiation dosimetry and physics of radiation oncology. In researches based on physics of radiation oncology the following technologies have been considered: Elekta Volumetric Modulated Radiotherapy (IMRT) (Elekta), Dynamic Conformal Arc Therapy, Static Field Conformal Radiotherapy, Tomotherapy, and CyberKnife.

#### Fellows of the National Academy of Sciences of Sri Lanka

Professor P. Ravirajan was honoured with induction as a **Fellow** of the prestigious National Academy of Sciences of Sri Lanka (NASSL) on 9 September 2023, in recognition of his distinguished contributions to science, and to provide invaluable guidance and insight on matters of national significance.





Dr. K. Sarveswaran has been selected as one of the 2023 Herz Fellows by Zukunftskolleg at the University of Konstanz, Germany. This esteemed fellowship recognizes Dr. K. Sarveswaran's exceptional qualifications and significant contributions in his field. As a Herz Fellow, he has been granted a 12-month digital Herz affiliation, commencing in July 2023, along with a 4-month oncampus stay from September/October 2023 onwards.

The FiTEN (FeTNA International Tamil Entrepreneur Network) conference, which was co-located with the 36th FeTNA (Federation of Tamil Sangams of North America) convention held from June 30 to July 2, 2023, in Sacramento, California, invited **Dr. K. Sarveswaran** as a guest speaker. He spoke on the topic of 'Incubation: The Intersection of Academia and Entrepreneurship'. The conference was well attended by top professionals and people from around the world.



#### **President's Award for Scientific Publication**

Dr. T. Kokul and Prof A. Ramanan are chosen as recipients of the President's Award for Scientific Research publication for the year 2019 for their joint publication: Kokul, T. Fookes, C., Sridharan, S., Ramanan, A. Pinidiyaarachchi, U.A.J.: "Target-Specific Siamese Attention Network for Real-time Object Tracking", In IEEE Transactions on Information Forensics & Security, 2019.



#### CSSL ICT Researcher of the Year Award - 2022

Prof A. Ramanan was awarded the Computer Society of Sri Lanka (CSSL) ICT Researcher of the Year Award for 2022 by His Excellency Mr. Ranil Wickremesinghe, the President of Sri Lanka at the National ICT Awards ceremony held on October 11, 2023, at the Shangri-La Hotel in Colombo.



#### **Outstanding Branch Advisor Award**

Dr. M. Thanihaichelvan (Senior Lecturer, Dept. of Physics) was awarded an Outstanding Branch Advisor Award by IEEE Sri Lanka Section for his outstanding contribution to IEEE as an advisor of EDS and the ENTC of IEEE Student Branch of the University of Jaffna at the IEEE Sri Lanka Section Awards 2023 held on November 4, 2023 at Carolina Beach Resort, Chilaw.

The following awards were received from the IEEE Sri Lanka Section at the awarding ceremony held on February 7, 2023 at Hilton, Colombo.



Emerging Affinity Group (Student Branch Category) Award" by the IEEE Women in Engineering Student Branch Affinity Group University of Jaffna.









**♦IEEE** 

Prof M. Siyamalan was honoured to be a keynote speaker at the Faculty Annual Research Session (FARS-2023) hosted by the Faculty of Applied Science at the University of Vavuniya on October 25, 2023. During this event, he delivered an insightful presentation titled "Unlocking the Power of Deep Learning: Exploring Active Learning, Semi-Supervised Strategies, and Beyond."

**Prof M. Siyamalan** served as one of the **plenary speakers** during the 16th International Research Conference (Computing), which took place at the General Sir John Kotelawala Defence University (KDU) on September 7, 2023. His captivating presentation delved into the topic of "**Deep Learning with Insufficient Labels**".



Prof. S. Srisatkunarajah, the Vice-Chancellor / University of Jaffna and Professor in Mathematics, has been appointed as one of the members of the Board of Governors, Arthur C Clarke Institute for Modern Technologies for three years.



Prof. P. Ravirajan, Dean / Faculty of Science and Senior Professor of Physics, has been appointed as one of the members of the National Research Council for three years.

Mrs. Shobiya Gobiraj, Lecturer of the Department of Fisheries won the **best presenter award** at the Annual Research sessions 2023, Faculty of Science, Eastern University, Sri Lanka on October 4, 2023 for the presentation on "Microplastic abundance and its relationship with environmental factors at beach along Northern Sri Lanka".

#### Research Fellowship at Czech Technical University in Prague

Dr. Amalraj Peter Amalathas (Senior Lecturer, Dept. of Physics) was awarded a Research Fellowship by the Czech Ministry of Education, Youth and Sports and Czech National Foundation to conduct research at the Centre for Advanced Photovoltaics, Czech Technical University in Prague, between February 20 and April 30, 2023. Photoinduced phase segregation in mixed halide perovskites and surface passivation for highly efficient wide-bandgap perovskite solar cells have been the focus of his research throughout his stay at the Centre for Advanced Photovoltaics, Czech Technical University in Prague.



### Award for Excellence in Postgraduate Supervision - SUSRED Award 2023

The Support Scheme for Supervision of Research Degrees (**SUSRED**) is a prestigious national award that honors excellence in postgraduate supervision, with eligibility based on research conducted mainly in Sri Lanka, leading to an indexed journal publication (SCI Expanded/SSCI) or a patent, completed within five years.

In 2023, 42 MPhil/PhD theses from 17 state universities were recognised by the National Science Foundation. The University of Jaffna received awards for **seven** theses, with Faculty of Science academics earning supervision awards for **six**. The following academics of the Faculty of Science received **SUSRED Awards - 2023** from the National Science Foundation (NSF), Sri Lanka, in recognition of their supervision of postgraduate research degrees (MPhil/PhD).

Supervisors	Name of the Student, MPhil / PhD thesis	Title of the thesis		
Prof. A. Ramanan (S)	Mrs. M. Shajini <b>PhD</b>	A Semi-Supervised Deep Learning Approach based on Attentive Visual Features for Fashion Clothing Classification.		
Prof. M. Siyamalan (S) Prof. A. Ramanan	Ms. R. Nirthika <b>PhD</b>	Deep Learning Based Fine-Grained Diabetic Retinopathy Ima Grading.		
Prof. M. Senthilnanthanan (S) Prof. P. Ravirajan	Mr. T. Rajaramanan <b>MPhil</b>	Enhancing the Performance of Dye-Sensitised Solar Cells through Doping/Co-doping TiO2 Electrodes.		
Prof. M. Senthilnanthanan (S) Prof. P. Ravirajan	Ms. T. Kajana <b>MPhil</b>	Storage of solar energy by Heterostructured Carbon/Silver- N Oxides/Tin Sulphide Photocapacitors.		
Prof. P. Ravirajan (S)	Mr.A.Prashanthan <b>MPhil</b>	Role of Quarterthiophene and Ruthenium-based dyes in enhancing the performance of hybrid Titanium dioxide/polymer solar Cells.		
Prof. S. N. Surendran (S) Prof. V. Arasaratnam Prof. T. Kumanan Prof. K. Gajapathy Prof. K. Suthakar	Mr. T. T. P. Jayadas <b>PhD</b>	Aedes Larval bionomics, Circulating Serotypes and a risk map in relation to dengue transmission in Jaffna district.		









### Google's exploreCSR Award 2023/2024



The inaugural research session under the Google's exploreCSR award 2023/2024 on "Research Methods in Computer Science: Theory and Ethics" held at the auditorium of the DCS on November 25, 2023, employing a hybrid format from 8:30 a.m. to 5:30 p.m.





Prof A. Ramanan and Prof Saman Halgamuge (University of Melbourne), along with Dr. Rashindrie Divanka Perera (University of Melbourne) and Dr. Tamasha Malepathirana (University of Melbourne), collaborated to develop the above mentioned competitive research grant proposal and were successful in securing an amount of USD 24,000. The secured grant is available from November 2023 to December 2024.







#### **Grants**

Principal Investigator /co-investigators / PI (period)	Funding Agency	Amount (LKR in Mil)	Name and aim of the projects
Prof. P. Ravirajan Prof. V. Dhayalan (HVL) (2022-2027)	Norwegian Directorate for Higher Education and Skills	200.00	PhD research primarily conducted at HVL and the University of Bergen, involving five MPhil graduates in a higher education and research collaboration on nanomaterials for clean energy technologies.
Prof. S.N. Surendran Prof. Andre Hemphil (2021-2023)	Swiss National Science Foundation	34.00	Molecular and structural studies on brackish water dengue vectors

Prof. A. Ramanan Prof. S. Halgamuge (Nov 2023 to Dec 2024)	Google exploreCSR	7.80	Aims to help students understand the research process, receive mentorship from experts at Google, top universities, and leading software companies, and explore postgraduate opportunities.
Dr. M. Thanihaichelvan	IEEE	2.30	To conduct the IEEE Summer School on Emerging Photovoltaic Technologies – 2023
Prof. A. Ramanan	IEEE	1.20	To conduct IEEE Summer School on Computational Intelligence: Theory and Applications.
Mr. S. Suthakar (Oct 2 to Dec 31, 2023)	UBL of the University of Jaffna	0.84	Commercializing Software Solutions
Prof. A. Ramanan Dr. (Mrs.) T. Suvanthini Dr. T. Kokul (Nov 01 to Dec 31, 2023)	University Business Linkage (UBL) of the University of Jaffna	0.51	Sri Lankan Paddy Leaf Disease Detection Using Deep Learning Techniques
Prof. Mrs. S. Kuganathan, Prof. Jorge Santos , Prof. Mrs.G.Suneetha (2019-2024)	Norwegian Agency for International Cooperation and Quality enhancement in Higher Education	0.50	NOR-LANKA BLUE: Innovative research and education network in fisheries, aquaculture and aquatic sciences.
Dr. K. Sarveswaran (Oct 15 to Dec 31, 2023)	UBL of the University of Jaffna	0.40	Conversational Engine for the Tamil Language project.
Dr. M. Thanihaichelvan	IEEE	0.34	To Establish the IEEE Electron Devices Society, and Nanotechnology Council Student Branch Chapter, University of Jaffna

### Webinars / Workshop / Tech-Talks

### Training workshop on 'Bioinformatics'

The training workshop on "Bioinformatics: Transcriptome Analysis and Data mining" was organized by Department of Zoology on April 21, 24 and 25, 2024 under the research grant of Swiss National Science Foundation-SPIRIT Programme in collaboration with University of Bern, Switzerland at the Computer Unit of the University of Jaffna. Dr. A. Naguleswaran, Staff Scientist of University of Bern, Switzerland served as the resource person. A total number of 50 participants such as honours degree students, demonstrators, postgraduate students of the Department of Zoology, temporary and permanent academic staff of the relevant fields benefited in this training programme.



### Fourth Residential Workshop in Fisheries, Aquaculture and Aquatic Sciences



The fourth residential workshop under the NORPART project at the University of Ruhuna (Midigama fruit farm) held from March 7th to April 15, 2023. In this workshop, Professors from Tromso University, Norway, University of Ruhuna, University of Jaffna and NARA served as the resource persons and five demonstrators from Department of Fisheries attended.



### International Ocean Day - June 8, 2023

Fisheries Science Society (FSS) of the Department of Fisheries celebrated: 'World Ocean Day' on June 8, 2023 at the Library auditorium of the University under the theme of "Planet ocean: Tides are changing". In this programme, Prof. (Mrs.) S. Kuganathan (Head / Dept. of Fisheries)

At the event IX th volume of 'Kadal osai' was launched. Further, prizes and awards for the winners of poster competition and debate competition have been issued. A total number of 115 students and 17 academics benefitted from this programme. The programme is financially supported by AHEAD ELTA ELSE Faculty DP grant of the Faculty of Science.





and Dr.(Ms.) N. Krishnapillai (AHEAD:ELTA ELSE Activity coordinator) delivered the introductory address and Mrs. P. Sivakumar (Senior Lecturer, Department of Zoology) delivered the invited talk on "Marine Resources".





#### **Less Plastic Movement: National Campaign**

A collaboration between the Chemical Society of the University of Jaffna, the Centre for Environmental Studies and Sustainable Development of the Open University of Sri

Lanka, the Zero Plastic Movement forum of the University of Jaffna, and World Visions from Chavakachcheri has led to a successful volunteering project called the "Less Plastic Movement: National Campaign". Around 60 passionate volunteers from the University of Jaffna participated in the project in Pannai (Fort), Jaffna, intending to collect plastics, polythenes, and PET bottles that contribute to environmental pollution. Their hard work resulted in the collection of over 20 garbage bags filled with plastic waste, demonstrating their dedication to creating a positive impact and addressing the issue of plastic pollution in the community.





### Volunteer workshop for school students:

Chemistry in everyday life

The chemical society volunteered with a student empowering "YGC **Innovation** programme Festival 2023" organized by Yarl IT Hub in the Jaffna district. There was a demonstration based on how Chemistry is blended with our dayto-day life which was presented by the Committee of Chemical Society. Chemistry-related magic experiments for students were conducted during the session.



## Workshop on Environmental friendly waste management: Biodegradable and non-biodegradable waste management



Dr. (Ms). N. Krishnapillai, Prof. (Mrs.) Meena Senthilnanathanan and Mrs. Anchana Sriranganathan, Deputy Provincial Director of Agriculture, Department of Agriculture, Thirunelvely served as resource persons. About 75 participants including students, academic staff of the Faculty, and staff of the Department of Agriculture benefited from this workshop.

The workshop on 'Environmental friendly waste management' was organized by The Biological Society of the Department of Botany (BIOSOC) on May 27, 2023, under the World Bank-funded grant AHEAD ELTA ELSE Faculty DP of the Faculty of Science.

The first session was conducted at the Faculty of Science, followed by the second session at the Department of Agriculture, Thirunelvely.



#### **JamborIEEE**

The IEEE-SB-UoJ in collaboration with the IEEE Student Branches of the University of Vavuniya and the Rajarata University of Sri Lanka organized the event "JamborIEEE" at the University of Jaffna premises on January 28, 2023 from 10.30 AM to 6.00 PM.

The main objectives of the event was to raise awareness about IEEE and its benefits among undergraduates, and to improve their soft skills, expand their professional network, and to increase the number of IEEE student

membership. Around 170 participants participated in this event. The speakers, Mr. Lakshan Madushanka, Mr. Heshan Mallawaarachchi and Mr. Dimuthu Anuraj, shared their IEEE-related experiences and benefits of joining IEEE. The event was colorful with amazing dances and fun activities.

# IEEEXtreme 17.0 Coding Competition

The IEEEXtreme 17.0 competition which is a global challenge, hosted by the IEEE Student Branch of the University of Jaffna (IEEE-SB-UoJ), featured participants from both the

Department of Computer Science, Faculty of Science, and the Faculty Engineering. Some teams connected virtually, while others were physically present and the competition commenced at 5:30 am on October 28, 2023, and prolonged until 5.30 am on the next day. Teams of this event were proctored by IEEE Professional members: Dr. S. Mahesan, Dr. E. Y. A. Charles, Dr. (Mrs.) B. Mayurathan, Dr. T. Kokul, and Dr. (Ms.) R. Nirthika. A total of 31 teams from the Department of Computer Science and the Faculty of Engineering registered for the competition.

### IEEE Day 2023

The IEEE Student Branch of the University of Jaffna (IEEE-SB-UoJ) celebrated IEEE Day on November 11, 2023, at the Department of Computer Science. The event featured two keynote speeches, with Ms. Mrinal Karvir (Senior Cloud Software Engineering Manager, Intel Corporation, USA) presented on & Practical Approaches to Responsible AI" and Mr. S. P. D Anuraj titled on "IEEE Journey and the Capacity of Humanitarian works with IEEE". Approximately 45 students participated in the event, which concluded around 2:30 pm.

#### **CS-Career Fair 2023**

The Department of Computer Science (DCS) at the Faculty of Science, University of Jaffna, recently concluded its fifth career fair, CS-Career Fair 2023, on Friday, March 10, 2023. The event was aimed at helping Level 4M, Level 4S, and Level 4X students secure industrial training placements, as well as providing recent graduates and general degree students with better job opportunities.

#### Documentary workshop:3D Printer and its application

The event aimed to introduce and demonstrate the applications of a newly donated 3D printer to the Department of Chemistry. The demonstration was done by Mr. Basil Romesh, Software Architect on Tuesday, August 15, from 3.00 PM to 4.00 PM at the Department of Chemistry.











# IEEE Summer School on Computational Intelligence: Theory and Application

The IEEE Computational Intelligence Society Student Branch Chapter of the University of Jaffna (IEEE-CIS-SBC-UoJ) successfully organized the prestigious 2023 IEEE Summer School on Computational Intelligence: Theory and Applications from July 12 - 14 2023 at the Department of Computer Science, University of Jaffna. The IEEE-CIS-SBC-UoJ was awarded a highly competitive grant of USD 3,900.00 (≈LKR 1.2 Million) from IEEE to conduct this prestigious summer school. The success of this endeavour is largely attributed to the efforts of Professor A. Ramanan, who serves as the Advisor of the IEEE-CIS-SBC-UoJ. He played a pivotal role in preparing and submitting the grant proposal to IEEE and also served as the General Chair for the 2023 IEEE Summer School on Computational Intelligence.







A three-hour hands-on IoT training sessions titled 'Internet of Things and Robotics' was conducted on July 14, 2023 for students from various universities, as a part of '2023 IEEE Summer School on Computational Intelligence: Theory and Applications; hosted by the IEEE Computational Intelligence Society Student Branch Chapter of the University of Jaffna.

The IEEE WIE Student Branch Affinity Group of the University of Jaffna organized a talk on "From Strength to Success." It was conducted by Miss Abarnah Kirupananda, Chair, IEEE WIE Sri Lanka Section, and Senior Lecturer, Informatics Institute of Technology. The talk was held on July 10, 2023 via Zoom.

### IEEE Summer School on Emerging Photovoltaic Technologies - 2023











The Summer School was jointly organized by the Department of Physics, Department of Electrical and Electronics Engineering, and IEEE Electron Devices Society, and Nanotechnology Council Student Branch Chapter, University of Jaffna (IEEE EDS & NCT SB, UoJ) at the Dept of Physics. The IEEE Summer School on Emerging Photovoltaic Technologies 2023 was one of only three summer school programs funded by the IEEE Electron Devices Society in 2023. It is also noteworthy that this was the first such program funded by the IEEE in Sri Lanka. The programme was fully funded by the IEEE Electron Devices Society. The Department of Physics provided the lab facilities, necessary consumables for demonstrations and solar cell making competition and other human resources. Dr. M. Thanihaichelvan (Advisor, IEEE EDS & NCT SB, UoJ) served as the general chair of the program. Dr. (Ms.) U. Sutharsini and Dr. P. A. Amalraj from the Department of Physics coordinated the first three days of the event. Events on Day 4 were coordinated by Prof. A. Atputharajah at the Faculty of Engineering premises in Kilinochchi.

The IEEE WIE Student Branch Affinity Group of the University of Jaffna organized a talk on "From Strength to Success." It was conducted by Miss Abarnah Kirupananda, Chair, IEEE WIE Sri Lanka Section, and Senior Lecturer, Informatics Institute of Technology. The talk was held on July 10, 2023 via Zoom.

A seminar on "Importance of Fisheries in Sri Lanka and Postgraduate Opportunities internationally" was organized by the Fisheries Science Society on January 25, 2023. Mr. Akila Harischandra (Ph.D. candidate at the University of Maine, USA) and Mr. Gunaalan, Kuddithamby (Lecturer, Dept. of Fisheries) served as the resource persons.



A webinar on "Ecological Engineering to Restore Estuarine Dynamics and Ecosystem Management" was organized by Fisheries Science Society on February 24, 2023. Dr. K. Arulananthan, Head of the National Institute of Oceanography Marine Sciences served as the resource person. The session highlighted the importance of ecological engineering in mitigating the environmental degradation and enhancing ecosystem resilience.

In collaboration with the Centre for Science Education of the Faculty of Science and Jaffna Science Association (JSA), CompSoc organized a webinar on January 5, 2023 entitled "The topics that students need to pay attention to in the G.C.E. A/L examination in the subject Information and Communication Technology " for G.C.E. A/L ICT students. Dr. E. Y. A. Charles, Senior Lecturer, DCS, was the webinar's resource person.

"Data Science and its Applications" by Dr. Alma Rahat (Senior Lecturer in Data Science, Swansea University, UK) held on January 31, 2023 at the Auditorium of the DCS. Though the speaker delivered his talk via ZOOM, the participants attended the talk from the auditorium.

The CompSoc and IEEE-CIS-SBC-UOJ organised a tech-talk with the title "Fairness to All While Downsizing" in the Auditorium of the DCS on February 10, 2023 for the Computer Science students, in which **Dr. Mahendran Velayuthapillai** Professor, Computer Department, Georgetown University, Washington, USA) served as a resource person.

How Can UBL-Jaffna Support You? by Mr. Anu Rakavan (Manager-University Business Linkage, University of Jaffna) held on 14th February 2023 from 2.00 p.m. to 2:30 p.m. at the Auditorium of the Department of Computer Science, University of Jaffna.

"Multi-Modal Sensor Data Processing Autonomous Vehicles" by Prof Thia Kirubarajan (Department of Electrical & Computer Engineering, McMaster University, Canada) held on March 23, 2023 at the Auditorium of the DCS.

Language Comparison nalusis AUDITORIUM

"Building Resources: Language Comparison and Analysis" by Prof. Miriam Butt (Computational

Linguist, University of Konstanz, Germany) held on March 28, 2023 from 9.30 a.m. to

10.15 a.m. at the Auditorium of the DCS. Her talk was attended by students and staff from both the Department of Computer Science and the Department of Linguistics and English Language, University of Jaffna.

The IEEE Computer Society Student Branch Chapter of the University of Jaffna (IEEE-CS-SBC-UoJ) organized a Techtalk on "Introduction to ChatGPT and the Art of Prompt Engineering." It was conducted by Mr. Nisal Mihiranga

(Architect- Data Science and Al, Zone24x7 ) and Mrs. DiliniImiarachchi (Co-Founder / CEO, Contech Global). The Techtalk was held on June 13, 2023 at the auditorium of the DCS.



The Computer Society of the University of Jaffna organized a talk on "Sharpen the Saw," which highlighted the importance of academic counseling. It was conducted by **Ms. Panthea** Goonetillake, the Founder of CLEON Academy of Speech, Drama, and Leadership. The talk was held on June 6, 2023 at the auditorium of the DCS.

**♦IEEE** 

Education

Google Workspace for

A Graph-Based Visualisation and Analysis for Blockchain Transactions by Ms. J. Samantha Tharani (PhD Candidate, Griffith University, Australia) held on 20 June 2023 from 01.00 p.m. to 2:00 p.m. at the Auditorium of the Department of Computer Science, University of Jaffna.

Google Workspace for Education by Ms. Shihara Mohamed (Asst. Vice President SMB, EDU and Gov. Business - Sri Lanka and Maldives) held on 26 June 2023 from 2.00 p.m. to 3:00 p.m. at the Auditorium of the Department of Computer Science, University of Jaffna.



Unleashing the Power Keact CSL 3 n 4 1.00 p.m. - 3.00 p.m. 25 July 2023

COMPUTER UI/UX DESIGNING

Unleashing the Power of React: A Practical Session by Mr. Rangitha Kuruppu (Technical Lead at Calcey held on 25th July 2023 at the Laboratory of the Department of Computer Science, University of Jaffna.

IEEE Computer Society Student Branch Chapter of the University of Jaffna "UI/UX Designing: A Comprehensive guide with React Native Implementation" by **Mr.** Thayaparan Kalaineethan (Software Engineer, Ceymplon (Pvt) Ltd) held on the August 8, 2023 from 1:00 p.m. to 3:00 p.m. at the computer laboratory of the Department of Computer Science, University of Jaffna. A total of 60 students participated in this Techtalk.

Coding Practice for Competitions by Dr. E.Y.A. Charles (Senior Lecturer in Computer Science, University of Jaffna) held on 22nd August 2023 from 1.00 p.m. to 3:00 p.m. at the Laboratory of the Department of Computer Science, University of Jaffna.

IEEE Computational Intelligence Society Student Branch Chapter of the University "Dynamics of TechOps in the IT Industry" by Mr. Ishanka Thilakaratne (Senior Manager Operations, Sysco LABS), Halaldeen Mr. Roslan (Associate Site Reliability



Engineering Lead, Sysco LABS), and **Mr. Dasun Peiris** (Senior Site Reliability Engineer, Sysco LABS) held on August 29, 2023 at the Auditorium of the DCS, University of Jaffna.

The IEEE Student Branch of the University of Jaffna organized "Let's be secure online: Red is the new Blue" by Dr. K. Maiyuran (Lead Consultant, Cyber Risks & audits) and Mr. K. Jude Myuran (Vendor Technology Architect, Cube Networks Lanka) held on November 14, 2023 at the auditorium of the DCS.



**Practical** laravel Session by Mr. Yogarajah Achchuthan (Instructor in Computer Technology, University of Jaffna) held on 5th and 12th December 2023 at the Laboratory of the Department of Computer Science University of Jaffna.

Embarking into Game
Development by Mr.
Sivakumar Prasanth (CoFounder and CEO of
Techserw) held on 19th
December 2023 at the
Auditorium of the
Department of Computer
Science, University of
Jaffna.



Fault Tolerance and Reliability in Cloud Computing by Mr. Rajan Bala (Founder | Cubera Investments & Former Head of Engineering, AWS Billing Consoles and

Applications at Amazon Web Services) held on 20th of December 2023 from 1.30 p.m. to 2:30 p.m. at the Department of Computer Science Auditorium, University of Jaffna.

The IEEE WIE Student Branch Affinity Group of the University of Jaffna organized a talk on "Career in Engineering: Different options after your Bachelors - Masters (GRE, GATE), MBA, Work Studying Abroad: How to pursue M.S. or Ph.D. in the US or elsewhere." It was conducted by Ms. Anu Mercian, Software Engineer at Google, and Computer Networking Technologist. The talk was held on July 22, 2023 via Zoom.

# Guest Lecture on Empowering communities through seaweed farming and thriving seaweed industry



This lecture was organized by the Faculty of Science in collaboration with National Aquaculture Development Authority (NAQDA) under the joint project of University of Peradeniya, Japan International Cooper-

-ation Agency (JICA) and Suriya Company Limited, Japan on June 17, 2023. Dr. (Mrs.) Thulasitha W. Shanthakumar, Senior Lecturer, Department of Zoology and Mr. B. Niruparaj, Assistant Director, Coastal Aquaculture Development, AQDA coordinated the event. Prof. Msao Ohno, Professor Emeritus, Kochi University, Japan delivered an interactive guest lecture which was facilitated by Mr. S. Suharnan (Director, Suriya Company Limited, Japan). Nearly 50 participants including undergraduate students and academic staff of the faculty, Officials from NAQDA, staff and students of University of Peradeniya those who involved in this project and Aquaculture industrialist and farmers of the region benefited from this programme. The programme is sponsored by JICA, Japan.





#### **Outreach Activities**

### Entomology Day 2023 and inauguration of "Jaffna Entomological Society"



The first ever Entomology Day 2023 was organized by the Zoological Students' Association (ZSA) and the Centre for Research in Entomology of the Department of Zoology to commemorate the late Emeritus Prof V. K. Ganeshalingam on May 26 2023 at the Library Auditorium under the theme of 'Illuminating the

Ecosystem with Insects'. Prof. S. Srisatkunarajah, Vice-Chancellor, University of Jaffna and Prof. P. Ravirajan, Dean, Faculty of Science graced the event as Chief Guest and special guests respectively. Prof. Kazuo Ogata, Kyushu University, Japan and Chief Advisor, PRECIDA, University of Jaffna

delivered the Guest Lecture on 'Myrmecology: A study of Ants'. 27 students of Faculty of Science and Arts participated the photographic and poster competitions and the winners received certificates. A debate competition also conducted during the event under the title of "Ecosystem can be illuminated by the insects/ can't be".



Over 100 participants, including the Department of Agriculture, school students from Nature Club and Environmental Club, Academic staff and students participated. At the end, "Jaffna Entomological Society' was inaugurated and the founder members and office bearers were elected among the participants. Prof. (Mrs.) R. Gnaneswaran was elected as the founder President of the society.

#### Awareness Programmes on "Environmental Conservation"

Prof. (Mrs.) R. Gnaneswaran contributed as resource person at Training Programme on Landscape Strategy Findings and Proposal Development under the title of 'Project Proposal Writing & Project Management' Organized by 'Save a life' - Jaffna to the field staff. The program was conducted at Mannar on April 26 - 27 2023 and at Pachilaipalai Divisional Secretariat on 2<sup>nd</sup> May 2023.



Prof.(Mrs) R. Gnaneswaran served as the resource person for the workshop on 'Stepping stone to safeguarding Sri Lanka's Natural Environment Project (SSEP)' for youths on August 19, 2023 organized by Caritas-HUDEC Jaffna at Pandatharippu village.

Jaffna on "Environmental Issues and their

Management", on September 20, 2023, at

Jaffna, Organized by Caritas -HUDEC

Jaffna.

Pandatharippu village.

Prof. (Mrs.) R. Gnaneswaran served as resource person to facilitate the open discussion forum among the administrative officers of selected Divisional secretariat,

Dr. (Mrs.) Thulasitha W. Shanthakumar served a resource person for the interactive workshop on 'Environmental Issues, Conservation and Management project' organized by Caritas-HUDEC Jaffna on November 2, 2023. Members of the Zoological Students' Association

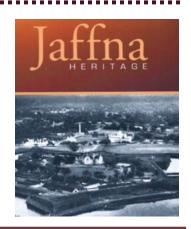
(ZSA) of the Department of Zoology, University of Jaffna, Central Environmental Authority officers, Village Environmental youth groups, media personals and women society members participated.



Prof. (Mrs) R. Gnaneswaran served as resource person at the Capacity developmental training for women on "Environmental regulations" on August 25, 2023 ,at Jaffna Organized by Caritas HUDEC Jaffna.

**Jaffna Heritage**: Book Chapter by academics of the Faculty of Science, published by The National Trust of Sri Lanka. ISBN 978-624-6174-02-6.

- n Prof. (Mrs.) R. Gnaneswaran: Mangroves in Jaffna
- 2. Dr. (Mrs.). T. W. Shanthakumar: Marine Biodiversity- with special emphasis on Jaffna Lagoon and associated Islands
- 3 Mrs. Piratheepa Sivakumar: The fisheries in the Jaffna Peninsula
- 4. Dr. (Ms.) Nahmagal Krishnapillai: Palmyra Katpahatharu in the Northern Province
- **5.** Dr. (Ms.) Nahmagal Krishnapillai: The Fruits of Jaffna with special reference to the luscious mango



#### Co-curricular activities of the students

#### **Dengue Prevention Shramadana Activities**

A significant number of dengue cases have been reported across the island, with the highest incidence recorded in the Western, Eastern, and Central Provinces. Several cases have also been identified in the Jaffna District. At the request of the Faculty, the Medical Officer of Health (MOH) and the University Medical Officer (UMO) arranged for fogging of the Faculty premises. In addition, the Science Faculty Students' Union organised a cleaning campaign on Saturday, 9 December 2023, within the Faculty premises.



#### **Annual Science Weeks**

The Annual Science Weeks programmes, held in our Faculty from 22 May to 4 June 2023, were among the most eagerly anticipated events for students. These activities were designed to promote physical fitness, sportsmanship, and cultural exchange among students, while also fostering engagement and networking between staff and students beyond the boundaries of the academic curriculum.



### Infrastructure Development

### Opening of the Laboratory for Energy Conversion and Storage Department of Physics

As part of the ongoing AHEAD-DOR (Development Oriented Research) project funded by World Bank administered by the Ministry of Higher Education, Laboratory for Energy Conversion and Storage (LECS) Department of Physics was extended and this two-story wing was ceremonially opened by the Vice-Chancellor Prof S. Srisatkunarajah on July 05, 2023.





Dean, Faculty of Science, Prof P. Ravirajan, Head of the Department of Physics, Dr. A. Thevakaran, DOR Project Coordinator and the Principal investigator, Prof K. Vignarooban, other DOR research team members, Heads of Departments, staff and students of the Department of Physics joined with the Vice-Chancellor and graced the opening ceremony. This DOR project is ongoing for the past 4 years and the major theme of research is the synthesis and the characterization of novel electrolyte and electrode materials for batteries beyond lithium-ion, such as sodium-ion and magnesium-ion batteries.

#### **Alumni's Contribution**

1982/83 batch (Physical Science) of the Faculty of Science visited the Faculty on May 25, 2023 and donated indoor sports items such as TT table with bats, carom and chess boards to the Science Students Union (SSU).





Jaffna University Graduate Association Australia (JUGA) financially supported the Life Skills for personality development of the Freshers (new entrants) through Social Action Projects.

Mrs. Shanthy Rahulotchanan, a former lecturer in Mathematics and a distinguished alumnus from the Faculty's 11<sup>th</sup> batch (1984/85), generously funded the renovation of the lobby area in the Department of Mathematics and Statistics.

Mr A. Ganamohan, Deputy Director of Customs at Sri Lanka Customs and a distinguished alumnus from the Faculty's 15<sup>th</sup> batch (1988/89), generously funded the installation of curtains in the lecture halls (1M, 2M, 3M, and 4M), office, and lobby area of the Department of Mathematics and Statistics.







### **Appointments in 2023**

### Vice-Chancellor of the University of Jaffna



Prof. S. Srisatkunarajah has been reappointed as the Vice-Chancellor by his Excellency, the president of Sri Lanka, with effect from August 2023

#### **Dean of the Faculty of Science**

Prof. P. Ravirajan, has been re-elected as the Dean of the Faculty of Science by the Faculty Board of Science, with effect from May 2023.



#### **Heads of the Departments**



Prof. K. Velauthamurty was appointed as the Head of the Department of Chemistry.



Dr. A. Thevakaran was appointed as the Head of the Department of Physics.



Dr. (Mrs.) M. Barathy was appointed as the Head of the Department of Computer Science.



Dr. N. Varathan was appointed as the Head of the Department of Mathematics and Statistics.

### **Professorship**



Prof. (Mrs.) Sivashanthini Kuganathan was promoted as a Senior Professor in Fisheries.



Dr. K. Kannan was promoted as a Professor in Mathematics.



Dr. R. Srikaran was promoted as a Professor in Chemistry.



Dr. P. lyngaran was promoted as a Professor in Chemistry.

#### Retirements



Dr. S. Mahesan of the Department of Computer Science (DCS) retired after four decades of outstanding service to the University of Jaffna including a remarkable and 33+ years of service at the DCS. We wish him all the best for his retired life.

#### **Endowments**

### Prof. V. K. Ganesalingam Memorial Gold Medal for the Best Performance in Bachelor of Science Honours in Zoology

Founded in 2024 by the family members of Late Professor V. K. Ganesalingam, founder Head and Professor of Zoology, Dean of the Faculty of Science and Acting Vice Chancellor of the University of Jaffna for the grateful remembrance of his services.

This gold medal is awarded to a student attaining the best performance in the Honours Degree Examination in Zoology with at least Upper Second Class during the Convocation along with a certificate. In case of tie, the GPA in the final year shall be considered.

## Prof. Rajeswary Mageswaran Award for Best Performance in Chemistry (Level 3 M)

Founded by a group of former students of Late Professor Rajeswary Mageswaran, former Professor of Inorganic Chemistry and Head of the Department of Chemistry, University of Jaffna and Rector of the Vavuniya Campus, Sri Lanka for the grateful remembrance of her services. This scholarship is awarded to the student for the best performance in Level 3 Chemistry courses, based on the GPA of the courses aggregating to 30 credits. The minimum GPA shall be 3.30. In case of a tie, the final OGPA up to the end of third year shall be considered.

#### **Scopus Indexed Journal Publications - 2023**

Departments	Number
Botany	3
Chemistry	8
Computer Science	7
Fisheries	2
Mathematics & Statistics	8
Physics	19
Zoology	2

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

Following the resounding success of the inaugural International Conference on Advanced Materials for Clean Energy and Health Applications (AMCEHA 2019) https://conf.jfn.ac.lk/amceha2019/, held at the University of Jaffna, the second edition of the conference was successfully organised on 19–20 September 2023 at the Coimbatore Institute of Technology (CIT), India. The event was jointly hosted by the University of Jaffna, Western Norway University



Applied Sciences (HVL, Norway), and CIT (India), in collaboration with several esteemed partner institutions including Alagappa University, PSG College of Technology, University of Bergen, University of Oslo, NORCE, Institute of Energy Technology (IFE, Norway), University of Peradeniya, and the National Institute of Fundamental Studies.

















The conference brought together over **400 delegates from around the world**, including four Vice-Chancellors/Rectors representing all three organising universities and the Vice-Chancellor of Alagappa University, who delivered inspiring addresses to the participants. More than 100 international researchers, including **25 Sri Lankan scientists**, presented their latest findings through oral and poster presentations. With a strong focus on emerging themes such as Solar Energy, Hydrogen Technologies, Energy Storage Systems, Health Materials, and Advanced Functional Materials, AMCEHA 2023 received an impressive **280 research submissions, out of which 265 papers** were presented during the two-day programme. This prestigious research conference provided a dynamic platform for knowledge exchange, fostering international partnerships, and advancing cutting-edge research in sustainable energy and health-related materials. AMCEHA 2023 further strengthened the long-standing collaboration between the University of Jaffna and its global partners, reaffirming their shared commitment to research excellence and innovation for a sustainable future, https://amceha2023.in/.

#### Editorial Note...

We are delighted to present the fourth edition of the newsletter of the Faculty of Science, University of Jaffna 'NewsFoS@UoJ'. The newsletter bears the achievements, activities, appreciations, services, and donations of students, staff, and alumni in the year 2023. As the editorial team, we are grateful to our Dean for his immense support in the process of newsletter designing and printing. Also, we extend our gratitude to Prof. A. Ramanan for giving us valuable inputs in the process, and HoDs and the newsletter committee members for their support in data collection. Further, we thank Mr. T. Jeevathuvarakan for designing this newsletter beautifully. We believe this volume will be an additional input that showcases the Faculty in a wider community and motivates us to move forward.

Prof. Thulasitha W. Shanthakumar & Prof. M. Thanihaichelvan Joint editors / NewsFos@UoJ



www.sci.jfn.ac.lk/news-letters

