

NewsFoS@UoJ

Faculty of Science, University of Jaffna

December 2022



Opening of
the DCS
new building

Cover Story

The construction work of the first three floors of the four-storeyed building of the Department of Computer Science has now been completed at a cost of around 250 million rupees with the financial assistance obtained from the World Bank funded AHEAD Operations. The design, construction and commissioning of the building and other related structures was done by M/S Sanken Construction (Pvt) Ltd. The building can cater about 400 students, houses two laboratories with 100 computers each, a lecture hall cum auditorium with 160 seating capacity, a dedicated IoT laboratory for about 40 students, a seminar room, a discussion room, open study hall and many other facilities such as access for differently abled persons, lift, RO water plant, sewage treatment plant, basement vehicle park, that are required for the department's activities. The excavation work officially commenced on 29th of May 2019, and the building was opened by the Vice Chancellor, Prof. S. Srisatkunarajah on 1st of July 2022. This is the first building constructed solely for the housing of the Department of Computer Science since its inception in 1991. The building has been brought into its full operation with the equipment and amenities worth over 3.3 million rupees donated by the alumni of the department. As their contribution still continues, a list of items provided by the alumni of the DCS in the year 2022 can be viewed at www.csc.jfn.ac.lk/index.php/donation-for-the-new-building.



Message from the Dean



This third issue of the newsletter is made special as it reports significant events of the faculty, amid the economic crisis, such as opening of the new building for the Department of Computer Science after a long wait of three decades and revamping the curriculum of the BSc and BScHons along with the BScHons(ScienceEdu) study programmes. The study programme review for BSc Hons (Computer Science) and BSc study programmes were completed. The VINGNANAM Research Conference (VRC) - 2022 and Undergraduate Research Symposiums were successfully conducted by the Faculty and the Departments of Physics and Zoology, respectively. The Centre for Science Education in collaboration with Jaffna Science Association conducted a series of preparatory sessions for over 1300 Science and Technology stream students who sat the G.C.E. (A/L) examinations in 2022 in the Northern and Eastern Provinces. A competition on clean energy technologies based on innovative prototype model development was conducted among the school students in the Northern province. Both outreach activities were financially supported by the Royal Norwegian Embassy in Colombo. The World Bank funded AHEAD Operation grants (ELTA-ELSE and DOR) made excellent progress and helped in the development of the faculty through the establishments of seminar halls, well-equipped laboratories and centers. The scholarly achievements of our faculty staff and students were highlighted by quality publications, patents, schoolships and awards. Overall, the Faculty continuously strives to achieve the vision of the faculty with the support of the stakeholders.

Prof. P. Ravirajan
Dean/Faculty of Science.

Statistics of Students & Staff

a. Data Statistics of Student Population.

Table 1: Ethnicity-wise breakdown of the students enrolled in 2020/2021

Level \ Ethnicity	1G/1S	2G/2S	3G/3M/3S	4M/4S/4X	Total
Sinhalese	234	190	214	52	690
Tamils	135	122	135	53	445
Muslims	41	36	45	12	134
Total	410	348	394	117	1269

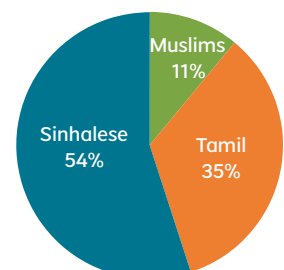
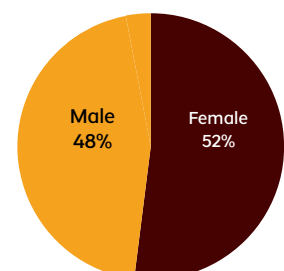


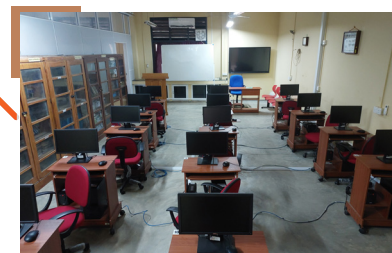
Table 2: Gender-wise breakdown of the students enrolled in 2020/2021

Level \ Gender	1	2	3	4	Total
Male	217	166	196	36	615
Female	193	182	198	81	654
Total	410	348	394	117	1269



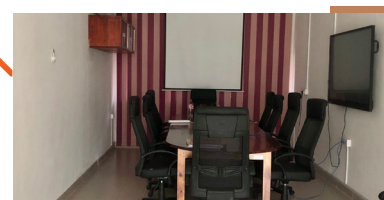
Infrastructure Development

A Bioinformatics Laboratory was developed at the Natural Science Block (NSB-II) with the financial assistance obtained from the World Bank funded ELTA ELSE AHEAD Operations awarded to the Department of Zoology.



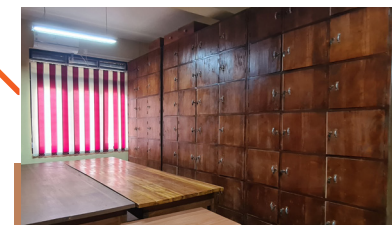
The Seminar Hall of the Department of Zoology was renovated with the support of the World Bank funded ELTA ELSE AHEAD Operations implemented at the Faculty of Science. The seminar hall was declared open on 3rd of January 2022.

The Incubation cell has been declared open in 2022. The cell was opened for the budding entrepreneurs to work on their ideas. The cell has been developed under the World Bank funded ELTA ELSE AHEAD Operations implemented at the Faculty of Science. A strong collaboration was made with the "Yarl-IT hub" to run this cell.



As part of the ongoing AHEAD-DOR (Development Oriented Research) project funded by the World Bank and administered by the Ministry of Higher Education, a Laboratory for Energy Conversion and Storage (LECS) at the Department of Physics is going to be extended at an estimated cost of about 8 million rupees. The foundation stone was laid by the Vice-Chancellor Prof. S. Srisatkunarajah on 9th of June 2022 for the construction of the two-storeyed building. M/S Double 'S' Construction commenced the building excavation work.

Under the World Bank funded ELTA ELSE AHEAD Operations implemented at the Faculty of Science, a Herbarium Room was furnished and handed over to the Department of Botany.



Scholarly Achievements

Departments	Book Chapter/ Book	Journal publications	Conference Papers	Conference Abstracts	Articles
Botany	02	09	02	19	-
Chemistry	03	10	-	09	-
Computer Science	-	07	10	01	06
Fisheries	-	03	03	09	07
Mathematics & Statistics	02	16	-	19	-
Physics	-	13	-	21	-
Zoology	02	08	-	14	-

Research articles published by the academics of the Faculty of Science had been cited in well recognized journals in the year 2022. Prof. K. Vignarooban (Professor in Physics), Prof. P. Ravirajan (Chair and Senior Professor of Physics) and Prof. S.N. Surendran (Chair Professor of Zoology) are the highly cited scholars being in the top 10 rank of the University of Jaffna as per Google Scholar citation matrix.

Site-visit for the Study Programme Reviews

The faculty prepared comprehensive self-evaluation reports (SERs) in order to promote a culture of analysis and evidenced-based programme improvement. The SERs were submitted in 2020 to the QAC of the UGC for evaluation. Subsequently, a team of external reviewers appointed by the UGC started to evaluate the SERs from a broader perspective. Due to the prolonged pandemic situation in the country, the evaluation process was suspended and then resumed by mid-2022. As a part of the programme review, a team of external reviewers visited the faculty for assessing the BSc Hons (Computer Science) and BSc degree programmes. As the first event, the reviewers met the Vice-Chancellor and top administrators. Thereafter, the reviewers had an extensive discussion with Directors of University-level centers such as CQA, SDC, UBL, CGU, CGEE, SMP-MIS unit and PEU. After that, they visited the departments to observe the facilities. The reviewers had conversations with the SER writing team, academic, non-academic and academic support staff, students, representative of students' societies and stakeholders. They also attended lectures and practical sessions to observe the teaching-learning methods and the students' involvement. The reviewers also visited the common facilities of the university. In the final debriefing and wrap-up session, the reviewers discussed the strengths and weaknesses of the degree programmes with the Dean/Science, Director/CQA, Coordinator/IQAC, Heads and all other staff of the faculty.

Site-visit of the Review Team: BSc Hons (Computer Science) Study Programme Offered by the Dept. of Computer Science

A team of UGC appointed external reviewers consisting of Professor Prasad M. Jayaweera (SJP), Professor Sriyani Wickramasinghe (RUSL) and Dr. M.B.M. Irshad (SEUSL) visited the University of Jaffna on 8th and 9th of November, 2022. In the first meeting, Mr. S. Suthakar (HoD/DCS) presented the details of the submitted SER and thereafter the review team had discussion with staff of the DCS and inspected the facilities provided by the university to support the study programme. At the end of the second day, the reviewers highly praised the staff for their united hard work, dedicated services and camaraderie with the students, and also discussed the future developments of the department.



Site-visit of the Review Team: BSc Study Programme Offered by the Faculty of Science

A team of UGC appointed external reviewers consisting of Professor Prasad Sethunga (UoP), Professor S. Aarasaretnam (EUSL) and Dr. T. Mathiventhan (EUSL) visited the University of Jaffna on 19th of December 2022. Prof. P. Ravirajan (Dean/Science) made a comprehensive presentation on the SER for the BSc degree programme. Coordinator from DELT and Proctor/UoJ, the Librarian, Head/Computer Unit and University Medical Officer, University Health Centre were also participated in the discussion. In the final debriefing and wrap-up session, the reviewers discussed the strengths and weaknesses of the study programme with the Dean/Science, Director/CQA, Coordinator/IQAC, HoDs and all other staff of the Faculty.



Revamping the Curriculum of the BSc Hons (ScienceEdu) Study Programme

A one-day stakeholders' discussion in relation to revamp the Bachelor of Science Honours in Science and Education [BScHons (ScienceEdu)] was held on 31st of October 2022. The Centre for Science Education (CSE) in collaboration with Department of Education, Faculty of Arts conducted the workshop with the financial assistance from the Norwegian Embassy. About one hundred and thirty participants representing in the form of Educational Administrator (25), Teachers and Principals (66) and Academics (40) from the Departments of the faculty actively participated in the discussion.



Fellowships

Dr. T. Pathmathas (Head & Senior Lecturer, Department of Physics) has been selected as a Senior Associate of the International Centre for Theoretical Physics (ICTP) from January 2023 to December 2028. The Associateship scheme is one of ICTP's oldest programmes that provides support for active scientists from developing countries to maintain long-term, formal contact with the Centre. The programme supports visits of scientists to ICTP, exposing them to the most modern aspects of their scientific fields. In return, the Associates are expected to play a major role in building their scientific communities, enhancing physics and mathematics education at all levels, and planning research projects related to the specific needs of their home regions.



Dr. M. Thanihaichelvan (Senior Lecturer in Physics) received the UNESCO-CSIR-TWAS Fellowship for Postdoctoral Research from The World Academy of Science (TWAS) to carry out his research on "Molecularly imprinted extended-gate all-solid-state organic electrochemical transistors for biosensing applications" at the Council of Scientific and Industrial Research, India in 2022.

Dr. P.A. Amalraj (Senior Lecturer in Physics) received a Research Fellowship at the Centre for Advanced Photovoltaics, Czech Technical University in Prague, from August 2022 to October 2022 funded by Czech Ministry of Education, Youth and Sports. During his stay, he was actively involved in materials physics research with hybrid perovskites.



Mrs. S. Sathyaruban (Senior Lecturer in Fisheries) received the PhD Mobility Training Fellowship under the NORPART, Norway project to carry out her research on "Ornamental Fish Feed Formulation" at the UiT The Arctic University of Norway in 2022.

Scholarships



Ms. K.H.D.D. Kumari (Lecturer in Physics) received an MSc leading to PhD studentship from the School of Physics and Applied Physics, Southern Illinois University Carbondale, USA in 2022.



Ms. S. Praveena (Lecturer in Physics) received an MSc leading to PhD studentship from the School of Physics and Applied Physics, Southern Illinois University Carbondale, USA in 2022.

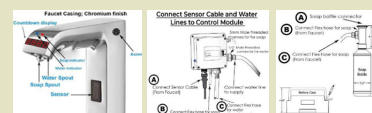


Mr. S. Arthiyan (Lecturer in Zoology) received a split-site PhD studentship from the National Science Foundation, Switzerland to continue his research for three months at the University of Bern, Switzerland in 2022.

Patentship



Mr. K. Harichandra (Technical Officer in Fisheries) received a patent for the invention titled "An automated faucet with an integral liquid washing dispenser for regulated handwashing". His invention has obtained an International Patent Classification (IPC): E 03C1/05, F16K 31/02 with National Patent No. 21588 from the National Intellectual Property Office of Sri Lanka on 21st of June 2022.



Staff Achievements

- Dr. A. Ramanan (Senior Lecturer in Computer Science) the then Counselor of the IEEE Student Branch of the University of Jaffna received the Outstanding Branch Counsellor Award at the IEEE Sri Lanka Section Awards - The Annual Awards ceremony of IEEE Sri Lanka Section held on 27 January 2022.
- Dr. T. Kokul and Dr. A. Ramanan (Senior Lecturers in Computer Science) won the Best Paper Award for the paper "Underwater Image Enhancement Using Dual Convolutional Neural Network with Skip Connections" in the track of Human-Computer Interaction and Computer Vision at the IEEE International Conference on Advanced Research in Computing held on 24 February 2022.
- Prof. M. Siyamalan (Professor in Computer Science) received the Computer Society of Sri Lanka ICT Researcher of the Year 2021 Award from His Excellency Mr. Michael Appleton the New Zealand High Commissioner of Sri Lanka and Maldives at the 40th National IT Conference held at Shangri-La, Colombo on 12 October 2022. He is also the winner of Vidya E-News article contest 2021 in the field of Artificial Intelligence under the academic category which was organised by the Research and Innovation Division, Ministry of Education, Sri Lanka. The winning article "Deep Fakes - Fakes Become Real" has been published in November 2022.
- Mrs. S. Sathiyaruban (Senior Lecturer in Fisheries) won the Best Oral Presentation Award for her paper titled "Extraction of carotenoids from palmyrah fruit pulp, shrimp shells, and red seaweed: A characteristic analysis using LC-MS" which was presented at the virtual 13th Asian Fisheries and Aquaculture Forum, held in Taiwan on 02 June 2022.

Student Achievements

- The IEEE Student Branch of the University of Jaffna received an award as a "Special Recognition for Membership Recruitment and Retention" at the IEEE Sri Lanka Section Awards - The Annual Awards ceremony of IEEE Sri Lanka Section held on 27 January 2022.
- The IEEE Student Branch of the University of Jaffna received the "Special Recognition IEEE R10 Outstanding Student Branch Award" at Student, Young Professionals, Women-In-Engineering and Life Member (SYWL) Congress 2022 held on 11-14 August 2022 in South Korea.
- A team from the Department of Chemistry won the Championship in the Inter-University Quiz Competition which was organized by the Sri Lanka Association for the Advancement of Science (SLAAS).



The following students participated in the competitions: Sathiyamoorthy Mathushan (Captain), Sudesh Lasantha Bandara, Thilini Madhushanika, Pirunthini Maheswaran and M.A.I.P. Wijayawardhana.

- Ms. M. Pirunthini (Level 2G Student in Biology) was adjudged the First Runner - Up at the Inter-University Biology (IOBSL) Quiz Competition - 2022. IOBSL conducts the annual Inter-University Biology Quiz Competition for undergraduates of biology and biology related streams of the state universities.
- Ms. Dhanushka Dilini Jayaweera (Fresh Fisheries Science Honours Graduate) has been awarded with UNESCO GRÓ-FTP 2022-2023 six-month fellowship programme in Iceland from October 2022 to April 2023. She is getting training in the field of Quality Management of Fish Handling and Processing.
- The following Physics Honours graduates have obtained scholarships to pursue MSc (leading to PhD) studies in 2022;
 - Mr. S. Paranthaman (Cleveland State University, USA)
 - Ms. Hansima Keppetiyawa (Brock University, Canada)
- Ms. K. Sivagini and Ms. S. Uventhikka (Fresh Fisheries Science Honours graduates) were nominated to register for MPhil degree at University of Jaffna and 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. These two students are following master degree course modules for 30 European credits at the UiT Norwegian College of Fisheries.

International Collaborative Research

- Professor (Mrs.) S. Kuganathan (Work-package Leader/NOR-LANKA BLUE Project and (Chair Professor in Fisheries) visited the UiT, Norway from October to November 2022 and was involved in meetings with the SL exchange Master students who are currently spending the autumn semester at UiT under the NOR-LANKA BLUE project. She also participated in meetings with UiT researchers, optional guest lecturing, joint development of courses, research/academic networking and preparation of activities for the coming calendar year.



Inauguration of second phase of the 'Higher Education and Research in Nanomaterials for Clean Energy Technologies (HRNCET 2.0)' Project

The launching of the Higher education and Research in Nanomaterials for Clean Energy Technologies (HRNCET) 2.0 for an amount of 200 Million rupees, is a new collaborative project between the University of Jaffna and the Western Norway University of Applied Sciences, took place at the University Library Auditorium on 06 April 2022. The HRNCET 2.0 is the second phase/extension of the HRNCET project (<http://project.jfn.ac.lk/hrncet/>) that was originally awarded in 2017 by the Norwegian Partnership Programme for Global Academic Cooperation (NORPART) by extending the collaboration with University of Bergen. The main objective of the HRNCET 2.0 is to enhance the existing collaboration on research for a PhD programme and to increase the engagement of the private sector industry partners in both countries in clean energy technologies.



MoUs

IoT Innovation Laboratory

The Department of Computer Science signed a Memorandum of Understanding (MoU) on 24 August 2022, with the Information and Communication Technology Agency of Sri Lanka (ICTA), Dialog Axiata PLC, and Computer Society of Sri Lanka (CSSL) to establish an IoT Innovation Laboratory in its new building. Necessary equipment and microcontroller kits worth more than 12 Million rupees for the laboratory have been handed over by Dialog Axiata to the Department on 13 December 2022.



Sivananthan Laboratories Inc. collaborates for R&D

An MoU between the Sivananthan Laboratories Inc. (<http://sivananthanlabs.us/research-development>) and the University of Jaffna was signed on 19 August 2022 by Prof. S. Srisatkunarajah, Vice-Chancellor, University of Jaffna and Prof. Siva Sivananthan, Chairman of the Board of Directors of Sivananthan Laboratories Inc., for the establishment of a collaborative relationship in areas of research and consultancy. Dr. Susil Pramajeyatha, the Hon. Minister of Education, Prof. Sampath Amaratunge, Chairman/UGC and Prof. (Ms.) Vasanthy Arasaratnam, Member/UGC witnessed the MOU signing event.



Going Global Partnerships Grant

Going Global Partnership (GGP) is a British Council programme that aims to improve university students' capacity by developing intercultural conversations and connecting them with national and international universities. Sri Lankan universities that run active citizens programmes were asked to submit a grant proposal. The facilitators from the Arts, Agriculture, and Science faculties have chosen to apply for this 1.4 million LKR grant. The University of Jaffna was awarded the grant, and the programme began at the end of January 2022. The aim of the programme is to train 50 students from the University of Jaffna and enable them to collaborate on social action projects with two other national institutions and one University in the UK.



National-level Conference/Symposium

Vingnanam Research Conference (VRC) - 2022

The Vingnanam Research Conference - 2022 (VRC 2022) was conducted in hybrid mode on 21 July 2022 at the Faculty of Science, University of Jaffna as one of the satellite conferences of Jaffna University International Research Conference (JUICE) - 2022. Over 200 participants attended the inaugural session. This second VRC was organised in collaboration with Western Norway University of Applied Sciences, Norway under the theme of 'Bringing Research and Innovation to the Forefront in the New Normal' and was sponsored by Norwegian Directorate for Higher Education and Skills and Norwegian Embassy Colombo through the collaborative research grant of Prof. V. Dhayalan and Prof. P. Ravirajan. The Vice-Chancellor, former Vice-Chancellors, Deans of the Faculties, Acting Librarian, Bursar, Heads of the Departments, Professors, Senior Lecturers, Lecturers, Academic supportive staff and few students of the University attended the inaugural session physically and the keynote speakers; Prof. S. Bragadeeswaran (Annamalai University, India), Dr. Pratheepan Yogarajah, (Ulster University, UK), and Dr. Sabesan Yoganathan (St. John's University, USA), and organising partner Prof. Dhayalan Velauthapillai (HVL, Norway) attended via online. Among the 59 submitted abstracts, 43 were accepted for publication based on double-blind review process.



Symposium for Biological Science Students

The second student symposium for the Biological Science students was held on 17 March 2022 at the Social Welfare Center of the Faculty of Science. The event was organised by the Zoological Students' Association (ZSA) with the financial assistance obtained from the World Bank funded AHEAD ELTA ELSE grant of the Faculty of Science and the Department of Zoology. The event was graced by the Vice Chancellor, Dean of the Faculty of Science, staff and students from the Faculty of Science. Dr. Umasuthan Navaneethaiyer (Research Scientist, AquaBounty Canada) served as the keynote speaker. A proceeding of the abstracts and the department newsletter were released to mark the occasion.



Research Symposium in Physics - 2022

The second annual Undergraduate Research Symposium (URS) 2022 was conducted on 17 February 2023 by the Department of Physics. The event was organised by the Physics Society, University of Jaffna. Total of 24 undergraduate research papers were presented. The Proceedings of the Physics Society University of Jaffna (Vol. 02) was released by Emeritus Professor K. Kandasamy.



TechTalks/Webinars/Workshops

The AHEAD ELTA ELSE Faculty DP at the Faculty of Science organised a workshop on organic farming at Thayakam, Urumpirai north, Urumpirai on 03 September 2022. There were around 35 participants participated in this event including home garden growers, students, agricultural instructors, and workshop assistants.



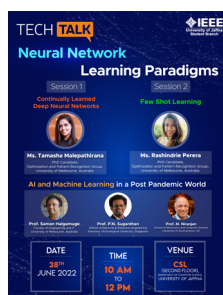
Department of Computer Science

The Department of Computer Science in collaboration with the Computer Society (CompSoc) of the University of Jaffna organised the following techTalks, webinars and workshops:

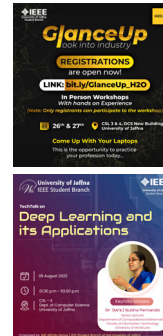
- [Webinar] "Supporting Professional Career Training with CISCO Education" by Mr. Ananda J. Goonewardene (Senior Project Manager at GSK) held on 12/01/2022.
- [Webinar] "Startup Journey with Teamwork" by Mr. Mano Kulasingam (Founder & Managing Partner of Flair Venture, Co-founder & CEO at Digiflare) held on 18/01/2022. This session was organised in collaboration with the Jaffna University Alumni Association, Canada and Aravanai, Canada.
- [Seminar] "Practical Approach to Innovation Agility with DevSecOps" by Mr. Thulaseetharan Shanmugaratnam (Solutions Specialist for Large Enterprises at Microsoft, USA) held on 09/08/2022 at the Department of Computer Science, University of Jaffna.
- [Seminar] "IT global Demands/Trends and the Skill-sets Required" by Mr. Shantha Ruban (Group CEO at Programus Ltd., UK) held on 29/11/2022 at the Department of Computer Science, University of Jaffna.

The Department of Computer Science in collaboration with the IEEE Student Branch and IEEE Women in Engineering Student Branch Affinity Group of the University of Jaffna organised the following techTalks, webinars and workshops:

- [Webinar] "Inception for Google Cloud Platform" by Mr. Chaminda Bandara (Software Engineer at WaveNet International) held on 16/01/2022.
- [Webinar] "Google Code Jam Awareness Session" by Mr. Indrajith Ekanayake (Lecturer, Department of Electrical and Computer Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka) held on 28/03/2022.
- [Webinar] The IEEE-SB-UoJ in collaboration with the Sri Lanka Association for Software Services Companies (SLASSCOM) organised a series of industry orientation programmes with the theme of "Software Quality Assurance to Quality Engineering". The speakers for this event were Ms. S. Thuvvareka (Lead-Quality Assurance Engineer at IFS), Mr. Kishan Navaratne (Manager-Quality Engineering at SyscoLABS), Mr. V. Siva (Lead-Quality Engineering at Wiley Global Technology), Ms. A. Sugandhika (Lead-Quality Assurance at 99x) and Mr. Tharinda Liyanage (Senior Quality Assurance Lead at 99x) held from 21/06/2022 to 02/07/2022.
- [Webinar] "AI and Machine Learning in a Post Pandemic World" by Prof. Saman Halgamuge (University of Melbourne, Australia), Prof. P.N. Suganthan (Nanyang Technological University, Singapore) and Prof. M. Niranjana (University of Southampton, UK) held on 28/06/2022.
- [Seminar] "Neural Network Learning Paradigms" by Ms. Tamasha Malepathirana and Ms. Rashindrie Perera (PhD Candidates, University of Melbourne, Australia) held on 28/06/2022 at the Department of Computer Science, University of Jaffna.
- [Seminar] "Deep Learning and its Applications" by Dr. (Mrs.) Subha Fernando (Senior Lecturer, Department of Computational Mathematics, University of Moratuwa) held on 09/08/2022 at the Department of Computer Science, University of Jaffna.
- [Seminar] "Enterprise AI using IBM POWER Systems" by Mr. Ganesan Narayanasamy (IBM Global Leader for AI and Cloud Enablement and Ecosystem), Mr. Madan Katheesan (Technical Leader for Object Automation Systems Solutions, India), and Mrs. Bragathalakshmi Bharani (Operational Director, OAS Solutions, India) held on 19/08/2022 at the Department of Computer Science, University of Jaffna.



- [Workshop] "GlanceUp - Look into Industry" by Mr. Ahsan Shamsudeen (Senior Solutions Architect, H2O.ai), Mr. Sajith Ariyaratne (Lead Software Engineer, H2O.ai), Mr. Vijitha Ekanayaka (Senior Software Engineer, H2O.ai), Mr. Mathanraj Sharma (Machine Learning Engineer, H2O.ai) and Mr. Nayananga Muhandiram (Full Stack Engineer, H2O.ai) held on 26/08/2022 and 27/08/2022 at the Department of Computer Science, University of Jaffna.



- [Webinar] "Personal Development - a mentoring session to support our young generation to develop themselves to be a better version of themselves and achieve a bright future" by Mr. Samisa Abeyasinghe (COO and Co-Founder of Virtuan (Pvt) Ltd) held on 17/01/2022.
- [Workshop] "IoT and Robotics" by Professors Rohan Munasinghe, Ruwan Gopura and Buddhika Jayasekara (University of Moratuwa) held on 26/02/2022 at the Department of Computer Science, University of Jaffna.
- [Workshop] "Personality Development" by Mrs. Mithulan Renusha and Ms. Thasika Yogeshwaran (Lecturers in Human Resource Management, Faculty of Management Studies and Commerce, University of Jaffna) held on 14/08/2022 at the Department of Computer Science, University of Jaffna.
- [Webinar] "Coverage Path Planning for Reconfigurable Floor Cleaning Robots" by Ms. Bhagya Samarakoon (Secretary of the IEEE WIE Singapore Section; PhD Candidate in SUTD, Singapore) held on 16/08/2022.

The Biosafety committee of the Faculty of Science and the AHEAD ELTA ELSE faculty DP (activity -5) of the Faculty of Science jointly organized a workshop for laboratory staff and demonstrators of the Faculty of Science on 10/06/2022 at the Seminar hall of the Department of Botany, University of Jaffna. Prof. A. S. Kantharajah of University of Western Sydney, Australia served as a resource person in this workshop. Welcome address was delivered by Dr. (Ms.) N. Krishnapillai, (Chairperson, Biosafety committee) followed by an address by Prof. P. Ravirajan (Dean, Faculty of Science) emphasizing the importance of biosafety and follow up actions.

Department of Fisheries

- [Webinar] "Marine data acquisition and management" by Ms. Akila Harishchandra (PhD Candidate at University of Maine, USA and a Visiting Scholar at Duke University, USA) held on 22/01/2022.
- [Webinar] "Modern open sea cage fish farming" by Mr. Irshan Sareef (Offshore Cage Fish Farm Specialist, Private Department of President of United Arab Emirates) held on 06/03/2022.
- [Webinar] "Sri Lankan shark and ray fishery - current status and concerns" by Mr. R. Gobiraj (Senior Researcher / Blue Resources Trust) held on 08/06/2022.
- "Dispersal and distribution ranges of marine organisms in the Western Indian Ocean" by Dr. Johan Groeneveld (Professor, University of KwaZulu-Natal, South Africa) held on 28/03/2022 at the Physics mini auditorium of the University of Jaffna. In addition, Professor Jorge Santos (Project Coordinator/NORLANKA BLUE) shared his past experience with the participants. This seminar was conducted under the NOR-LANKA BLUE (NORPART) project.

The following competitions were conducted by the **Fisheries Science Society**:

- An essay competition was conducted both in Tamil and Sinhala medium on 25/05/2022.
- A poster competition was conducted as a group activity on the topic "Innovation for a Sustainable Ocean" on 28/03/2022.
- A photography competition was conducted among photos related to Oceans and Fisheries on 30/03/2022.
- A debate competition was conducted to commemorate the World Ocean Day 2022. Three rounds of competition were conducted among the undergraduate students in fisheries related topics on 08/06/2022.

Department of Zoology

- A workshop on 'Empowering Youth for Conservation' was held for the Undergraduates and staff on 06/04/2022. The workshop was jointly organized by the ZSA, and World Bank funded AHEAD operations of the Faculty of Science.
- [Webinar] "Molecular diagnosis- COVID19 Sri Lankan perspectives" by Mr. P.J. Tibutius Thanesh (Research Scientist at the University of Sri Jayawardenepura) held on 20/01/2022
- "Generating Transgenic Insects: Workflow, Challenges and Solutions" by Channa Aluvihara (Staff Technical Officer, IBBR, University of Maryland) held on 22/11/2022. The Center for Research in Entomology (CRE) has organized this event.

Competitions

Promoting STEM Education: Competition on Innovative Prototype Model Development

Centre for Science Education of the Faculty of Science conducted a competition on Clean Energy Technologies based Innovative Prototype Development in November 2022 under the Capacity Building and Establishment of a Research Consortium (CBERC) project to enrich innovative ideas and creativity among the school children from Northern Province, Sri Lanka.



Release of Newsletters/Magazines

The annual newsletter of the Department of Chemistry, the "CHEMSOC News" for the year 2021/2022 was released by the Chemical Society on 05 January 2023 in the presence of Prof. S. Kannathasan (Acting Vice-Chancellor and Dean, Faculty of Graduate Studies, UoJ) and Prof. P. Ravirajan (Dean - Faculty of Science).



The Fisheries Science Society released the volume 8 of "Kadal Osai" magazine in conjunction with the Ocean Day Celebrations held on 08 June 2022.



The Zoological Students' Association (ZSA) released their volume 6 newsletter during the Undergraduate Research Symposium in Zoology held on 17 March 2022.



The Chemical Society (ChemSoc) of the University of Jaffna sold eco-friendly tote bags as a fund-raising activity for the society. Limited stock of canvas bags with chemistry phrases were printed and sold.



CS-Career Fair'22

The fourth CS-Career Fair was conducted on 01 March 2022 by the Department of Computer Science in hybrid mode. The career fair is intended to facilitate the final year honours degree students in securing placements for industrial training and to improve their employability. The following IT companies : 99x, Calcey, CodeGen, Creative Software, David Pieris Infotech, H2O.ai, HCL Technologies, iDyam Solutions, IFS R&D International, Sysco LABS, Unicom SD, and Yarl IT Hub have participated in the career fair.



Northern Information Technology and Business Process Management Career Fair - 2022

In order to build regional capacity to support the growth of the industry in the northern province, and to help the students to improve their employability in the leading IT industries, the SLASSCOM in collaboration with the Department of Computer Science, jointly organised a career fair titled "Northern Information Technology (IT) and Business Process Management (BPM) Career Fair on 18 November 2022 at the University of Jaffna.

The morning event was conducted at the Kailasapathi Auditorium. Mr. Ashique M Ali, Chairman of SLASSCOM, delivered the welcome speech on behalf of the organisers of the event. After that, an intro video about the IT/ BPM Career Fair was played, and the Vice Chancellor of the University of Jaffna Professor S. Srisatkunarajah delivered the chief guest's address. After those introductory speeches, discussion sessions were held by the IT companies. In the afternoon, the career fair started in the premises of the Faculty of Science in which students met and discussed with IT companies at the stalls allotted to each company separately. About 500 students benefited from this career fair in which 11 leading IT companies of Sri Lanka participated. In addition, a Business Process Management (BPM) session was also held in the afternoon.



After 30 years, the Department of Mathematics and Statistics received the entire ground floor of its Mathematics block, which was initially occupied by the Dean's Office and Computer Unit (1985-1987). Thereafter, it was occupied by the Department of Computer Science (DCS) and Computer Unit (1991-2005). Finally the Department received the ground floor on 19 May 2022 from the DCS (2005-2022).

Preparatory Sessions to the G.C.E. (A/L) 2022 Science Stream and Technology Students

Centre for Science Education (CSE) of the Faculty of Science and Jaffna Science Association (JSA) jointly organised a series of preparation sessions to the G.C.E. (A/L) 2022 Science stream students from Northern, Eastern and Central Provinces with the assistance of the respective Provincial Departments of Education under the financial aid of the Royal Norwegian Embassy, Sri Lanka through CBERC Project (<https://project.jfn.ac.lk/hrncet>) in October to December, 2022 as follows:

Date	District	No. of Beneficiaries
17.10.2022	Kilinochchi	110
17.10.2022	Mullaitivu	136
21.11.2022	Mannar	133
29.11.2022	Nuwara Eliya	200
23.12.2022	Jaffna	650
29.12.2022	Batticaloa	150

The following pool of academics from the Faculty of Science served as resource persons in these series of the preparatory sessions: Prof. (Mrs.) M. Senthilnathanan, Prof. G. Sashikesh, Prof. R. Srikanan, Dr. T. Manoranjan, Dr. P. Iyngaran, Dr. (Mrs.) J. Prabagar, Dr. (Mrs.) S. Yohi, Dr. A. Manjeevan, Dr. R. Prashanthan, Mr. M. Khokulan, Prof. P. Ravirajan, Prof. K. Vignarooban, Dr. T. Pathamathas, Dr. M. Thanihaichelvan, Prof. T. Eswaramohan. Two senior school teachers Mr. A. Thayaparan and Mr. R. Kuganathan have also served as resource persons.



In the final phase of this programme which was conducted in Batticaloa, the following senior academics from Eastern University of Sri Lanka served as resource persons. Prof. S. Arasaretnam, Dr. P. Ilango, and Dr. T. Mathiventhan. These activities were coordinated by Dr. (Mrs.) T.W. Shanthakumar as the President of the Pure Science Section of the JSA.



Dr. E.Y.A. Charles (Senior Lecturer in Computer Science) conducted a preparatory session to the Technology stream G.C.E. (A/L) 2022 students. More than 150 students participated in the programme. This activity was coordinated by Dr. K. Sarveswaran as the President of the Applied Science Section of the JSA.

The Royal Society of Chemistry (RSC) and the CSE jointly conducted RSC's annual popularisation of chemistry programme for the school students from Nuwara Eliya Educational Zone on 12 November 2022.



Workshop on IoT for School Students

The IEEE Student Branch of the University of Jaffna (IEEE-SB-UoJ) received a competitive funding of USD 1,968.65 (LKR 706,596.53/=) under the IEEE Pre-University STEM Portal Grant programme to promote IT skills to the school students. The IEEE-SB-UoJ was selected to receive this competitive funding from among 143 other applications around the world and it is one of the only two projects to be selected for funding from Sri Lanka. Through this funding, the IEEE-SB-UoJ initially conducted a two-day workshop on Internet of Things (IoT) with hands-on training for the Grade 9 school students from the Jaffna Zonal Division on the 23 & 24 of December 2022 at the Department of Computer Science, University of Jaffna. 85 school students and six teachers from the following schools were benefited from this session: St. John's College, Jaffna Central College, Vembadi Girls' High School, Jaffna Hindu College, Jaffna Hindu Ladies College, and Kokuvil Hindu College. The following resource persons delivered talks and provided hands-on training: Eng. N. Pathmapiriyar (Lecturer, Department of Computer Engineering), Mr. S. Suthakar (Head, Department of Computer Science) and Mr. T. Kalaineethan (Founder and Software Engineer at AIRIIS).

Prof. (Mrs.) S. Kuganathan (Chair Professor in Fisheries) participated in the experts' visit for outcome-based research including the public discussions, community consultations, and finding some critical information for the mega-project titled "Mannar Wind Power Project". She analysed the possibilities of fishing yield reduction due to wind power development and submitted a report to the Sri Lanka Sustainable Energy Authority (SLSEA). She investigated the cause for massive fish death at Thondaimanaru Lagoon, Jaffna on 30 July 2022 along with other staff members from the Department of Fisheries and submitted a detailed report to the Chairman of NARA.

The ZSA of the University of Jaffna distributed vegetable plants (brinjal, chili etc.) on 31 January, 2022 to the Kowtharimunai, Pooneryn people to promote organic home gardening thereby improving their livelihood under the UNDP GEF/small grant project. The project has been completed by the ZSA successfully and submitted the report to the UNDP.

Appointments



Dr. A. Vengadaramana
Proctor
University of Jaffna
With effect from 01 October 2022



Mrs. R. Praveena
Lecturer (Probationary)
Department of Chemistry
with effect from 07 February 2022



Dr. T. Kokul
Senior Lecturer (Grade II)
Department of Computer Science
With effect from 25 March 2022



Ms. S. Raveena
Lecturer (Probationary)
Department of Chemistry
with effect from 01 February 2022

Promotions



Prof. P. Sevel
Professor in Botany
With effect from 12 December 2019



Prof. M. Siyamalan
Professor in Computer Science
With effect from 07 March 2022



Dr. E.C. Jeyaseelan
Head / Department of Botany
Senior Lecturer Gr. I (w.e.f. 2021)
With effect from 03 October 2022



Dr. S. Shriparen
Senior Lecturer (Grade II)
in Computer Science
With effect from 10 December 2021



Prof. (Mrs.) M. Senthilnathanan
Chair Professor of Chemistry
With effect from 03 October 2022



Prof. R. Vigneswaran
Professor in Mathematics
With effect from 12 February 2021



Prof. P. Abiman
Professor in Chemistry
With effect from 07 November 2019



Prof. P. Ravirajan
Chair & Senior Professor of Physics
With effect from 25 October 2022



Prof. A. Ramanan
Professor in Computer Science
With effect from 07 March 2022



Prof. T. Eswaramohan
Professor in Zoology
With effect from 13 December 2019



Dr. (Mrs.) G. Parththuran
Senior Lecturer (Grade II)
in Zoology
With effect from 01 November 2021

Retirements



Dr. N. Sivapalan
Senior Lecturer
Department of Chemistry
on 30 September 2022



Mr. V. Jegathampikaipakan
Staff Technical Officer
Department of Zoology
on 31 December 2022

Demises



Emeritus Professor (Mrs.) Rajeswary Mageswaran is one of the co-founders of the Department of Chemistry of University of Jaffna. Along with her husband Late Professor S. Mageswaran, she laid a strong foundation and built-up the Department of Chemistry as a resourceful place for present and future undergraduates. She launched her distinguished career with a BSc Honours Degree in Chemistry from the then University of Ceylon in 1968 followed by a PhD in Organometallic Chemistry from the University of Sheffield, UK in 1972. She joined the University of Jaffna as a Lecturer in Inorganic Chemistry on 1 st of April 1976, became the Senior Professor of Inorganic Chemistry in 1993 and retired in 2010. She served as the Head of the Department of Chemistry for more than a decade and the Rector of the then Vavuniya Campus from 2003 to 2006. Recognizing her relentless contributions to teaching-learning, research and academic administration, the University of Jaffna honoured her with Emeritus Professorship in 2011. Professor (Mrs.) R. Mageswaran passed away at the age of 77 on 17 th of April 2022 in London.

May her soul rest in peace



Mr. N. Selvasingam joined the Department of Chemistry on 01 March 1983 and retired on 23 March 2017 as a laboratory attendant (special grade). He was a beloved staff member of the department for his dedication and artistic talents such as singing, painting and sculpting. He has participated in many radio and TV programmes won accolades for his artistic talents with a honorary special mention in 'Kalaithirattu'; a magazine released by the DS Office, Jaffna.

May his soul rest in peace

36th General Convocation

The 36th General Convocation was held in October 2022. Graduands were conferred with BSc, BSc Honours, BSc in Computer Science, BSc Honours in Computer Science Degrees.



42nd Batch of the Faculty of Science

Alumni Association, Faculty of Science (FoSAA)

Inaugural General Meeting

The Inaugural meeting of the Alumni Association, Faculty of Science (FoSAA) was arranged by Dr. K. Thabotharan (Alumni Officer of the University of Jaffna) in the Faculty of Science on 11th of June 2022 and participants who are away from the university were facilitated to join the meeting via Zoom. The FoSAA was established with the following objectives and office bearers:

Objectives

- ☐ To encourage, foster and promote close relationship between the Faculty of Science and its alumni
- ☐ To develop networking among the alumni and Faculty of Science
- ☐ To promote the interest of the alumni in the affairs of the University
- ☐ To conduct the survey of the graduate employability
- ☐ To assist and support the efforts of the Faculty of Science in its development and to fulfil its mission
- ☐ To make recommendations to the Faculty about curriculum development, revision and monitoring committee of the faculty on the need for any changes in the curriculum
- ☐ To promote the general interest and wellbeing of the Faculty of Science
- ☐ To report the survey results to the Alumni.
- ☐ To update information about the Faculty of Science, its graduates, alumni and students

Executive Committee of the FoSAA



Prof. T. Eswaramohan
President



Prof. P. Thayaparan
Honorary Secretary



Dr. P. A. Amalraj
Honorary Treasurer



Prof. P. Ravirajan
Dean/Science



Mr. S. Suthakar
Vice President



Prof. V. Thiviyanathan
Chairperson
Fund - Raising Committee



Prof. S. Geethanjali
Chairperson
Outreach Committee



Prof. A. Ramanan
Member



Dr. A. Thevakaran
Member

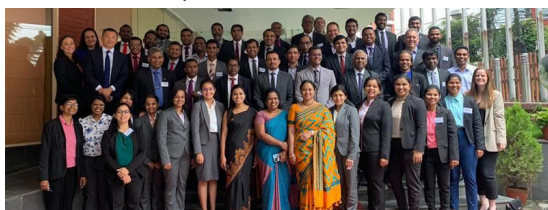


Dr. (Mrs.) S. Yohi
Member



Ms. Pipuni Randima
Member

- Prof. (Mrs.) S. Kuganathan (Chair Professor in Fisheries) delivered a talk on "Current status of marine resources" for the graduates who participated in the third workshop on "Perspectives in Blue Environment and Socioeconomics" which was organized by the University of Ruhuna on 08th of April 2022. She also served as a member of the steering committee on research and development of fisheries and aquaculture of the National Science Foundation (NSF), Sri Lanka and as a member of the NARA governing board in 2022.
- Mrs. S. Sathyaruban (Senior Lecturer in Fisheries) served as the Chairman of the Executive Committee of the National Field Work Center Thondamanaru in 2022.
- Prof. T. Eswaramohan (Professor in Zoology) participated in "Technology Transfer Series: Value-Sharing through Licensing" which was organized under the Commercial Law Development Programme (CLDP) by USPTO in Kathmandu, Nepal from 26 to 28 September 2022.



- Dr. K. Sarveswaran (Lecturer in Computer Science) completed his PhD degree in Computer Science from the University of Moratuwa with effect from 30 September 2022.
- Dr. (Mrs.) K. Gajavathani (Senior Lecturer in Zoology) received her PhD degree in Ornithology from the University of Colombo with effect from 01 November 2021 and she served as the center Coordinator of the University of Jaffna for the Inter-University Biology (IOBSL) Quiz Competition - 2022.

Joint - Editors' Message

The newsletter in your hands marks three years of the inception of "NewsFoS@UoJ". We are excited to present the third edition of the official newsletter of the Faculty of Science, University of Jaffna. We have been through a learning process, and all of the staff members—especially the newsletter committee members, the Dean, and the HoDs should be commended for their dedication and contributions. The immense work done by Mr. N. Thileepan (MA/DCS) should be acknowledged at this juncture. Despite all the challenges of COVID-19 and the economic crisis, we are proud to continue the publication because of all your contributions. We would like to thank everyone once again and bid a fond farewell to this commitment as joint editors. Please have a happy and a healthy New Year, work peacefully as ever.

Prof. A. Ramanan & Prof. K. Gajapathy
Joint Editors / NewsFoS@UoJ'22



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Message from Coordinator of the HRNCET & CBERC projects



As an international collaborator of University of Jaffna (UoJ), I am pleased to recall the activities, we Western Norway University of Applied Sciences (HVL) were engaged in the year 2022. Year 2022 is another productive year for the Higher education and Research collaboration on Nanomaterials for Clean Energy Technologies (HRNCET) and Capacity Building and Establishment of a Research Consortium (CBERC) projects (<http://project.jfn.ac.lk/hrncet>) under funds from Directorate for Higher Education and Skills (HK-Dir) formerly known as DIKU and the Royal Norwegian Embassy in Sri Lanka, respectively. The projects have developed a broad network of students, researchers and academics in the field of nanomaterials for clean energy and health applications, and are heavily involved in both higher education, research and community outreach activities. The projects have also been successful in setting a platform for a research consortium that consists of HEIs and the private sector from Norway and Sri Lanka to work on joint research and business ventures in the field of clean energy technologies. In the year of 2022, four MPhil candidates and nine Master degree candidates successfully completed their degrees. All the MPhil degree holders connected to the two projects have undergone at least 12 to 18 months research stays at HVL, Norway. They have had access to high end equipment facilities at HVL and University of Bergen and they have published 20 papers in Science Citation Indexed journals. In addition to human resource capacity development, these projects have also helped the university to upgrade the infrastructure facilities with highly sophisticated equipment for research studies.



Successful implementation and the positive impact of these projects during the past five years have helped to win another five-year funding Directorate for Higher Education and Skills (HK-Dir), Norway for the second phase of the main objective of the HRNCET 2.0 is to enhance the existing collaboration on research for a PhD programme and to increase the engagement of the private sector industry partners in both countries in clean energy technologies. In this regard, a new partner from Norway, University of Bergen (UiB) is included in the project and a new MoU with UiB and an extension of the MoU with HVL were signed with top academic administrators from these Norwegian Universities.

Prof. Dhayalan Velauthapillai

Professor in Physics and Technology, Western Norway Applied Sciences and coordinator, HRNCET & CBERC Projects

<https://www.anceha.no>, <https://project.jfn.ac.lk/hrncet>



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