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SLAAS NEWS

Newsletter of the Sri Lanka Association for the Advancement of Science

General President's Message

Global challenges such as climate change, loss of biodiversity, pandemics, natural hazards, drug trafficking, arms trafficking, cybercrime, air pollution and marine pollution are complex, multi-faceted, and multi-dimensional. These challenges demand a transdisciplinary and transnational approach where cooperation, regardless of territorial boundaries, among specialists with diverse backgrounds in both the natural and social sciences is essential. Moreover, the world has become borderless and globalized, facilitating free diffusion of ideas, talents, capital, and resources across territorial boundaries. This has opened immense opportunities for growth and development. Besides, there is growing recognition that new approaches and different types of expertise are needed to renew science. Therefore, I propose to introduce a session on "Interdisciplinary and Transdisciplinary Studies" at the Annual Sessions and wish to see more and more people working in a multi-disciplinary setting, and even engaging in fields such as Music Therapy where the Humanities and Medicine are brought together. This would add a new dimension to the SLAAS.

S&T has contributed immensely to human civilization and development of the world, and we cannot think of any sphere that has not been impacted and benefitted by it. However, it is disconcerting that despite phenomenal advances and remarkable accomplishments in S&T today, conflicts, terror, violence, disquiet and unrest are mounting, and the world is becoming increasingly more chaotic, more insecure and more dangerous by the day. Hence, it is imperative to come to grips with a myriad of formidable man-made challenges and threats. We have thus far neither recognized nor harnessed the profound unifying, bonding and healing power of S&T to bring about unity, harmony and friendship among communities and nations. This powerful force hitherto remains almost untapped and underexploited, whether for the benefit of humanity or in order to make this planet a more pleasant place to live in.

Therefore, I wish to propose "Science Diplomacy as a powerful force for national unity and friendship among nations" as the theme for 2023. This theme is of great topical relevance and significance, and if pursued prudently and diligently, it could make a huge difference to ethnic harmony in Sri Lanka and international relations with other nations.

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- Little Forester Programme
- E-waste collection programme
- Quiz and Essay Competitions by CPS



Professor Ranjith Senaratne General President of SLAAS

Professor Emeritus
Department of Crop Science
Faculty of Agriculture
University of Ruhuna

Chairman National Science Foundation

Annual Sessions of SLAAS 2022

The 78th Annual Sessions of SLAAS was inaugurated on 11th December 2022 amidst a distinguished gathering and continued till 16th December at the University of Colombo. Prof. Nimal Gunathilleke, Emeritus Professor, University of Peradeniya served as the Chief Guest, Mr. Anura Siriwardena, Founder Editor, Vidusara Science Magazine served as the Guest of Honour for the occasion.











Council 2023

Name	Position	Name	Position
Prof. Ranjith Senaratne	General President	Dr. Rushan Abeygunawardana	Elected Member
Prof. R D Wijesekera	General President - Elect	Prof. Udeni Nawagamuwa	Elected Member
Prof. Manuj Weerasinghe	Immediate Past General President	Prof. R M Dharmadasa	Elected Member
Dr. A M Mubarak	Chairman, BOT	Prof. Sumedha Jayanetti	Elected Member
Dr. N Karthikeyan	General Secretary	Dr. Thilina Wanigasekara	President, Section A
Dr. Prasad Senadheera	General Secretary	Dr. R P Wanigatunge	President, Section B
Prof. W A P J Premaratne	Treasurer	Prof. Ayantha Gomes	President, Section C
Prof. Dilrukshi Wijayarathna	Asst. Treasurer	Dr. Rinukshi Wimalasekara	President, Section D
Dr. S M Vithanarachchi	Editor	Dr. Janaka Adassuriya	President, Section E1
Dr. R D Guneratne	Asst. Editor	Dr. D T Abeysinghe	President, Section E2
Prof. Prasad Jayaweera	Secretary, Int. Relations	Prof. S. Vasanthapriyan	President, Section E3
Prof. K P S Chandana Jayaratne	Elected Member	Dr. Dilanthi Koralagama	President, Section F
Dr. Lochandaka Ranathunga	Elected Member	Prof. M N Kaumal	Chairperson, GRC
Dr. Lahiru A Wijenayaka	Elected Member	Dr. Ureshani Karunarathna	Chairperson, EC
Dr. R Chinthaka L De Silva	Elected Member	Dr. Gaya Jayakody	Chairperson, CPS
Prof. Chamari Hettiarachchi	Elected Member		

Induction of General President 2023

Professor Ranjith Senaratne, Professor Emeritus, Faculty of Agriculture, University of Ruhuna and the Chairman of National Science Foundationwas inducted as the 82^{nd} General President of the Sri Lanka Association for the Advancement of Science at an elaborate ceremony held on 12^{th} January 2023 at the Ariana Reach Hotel, Maharagama.









Section B

Webinar on "Cactus farming: Is it a profitable business?"

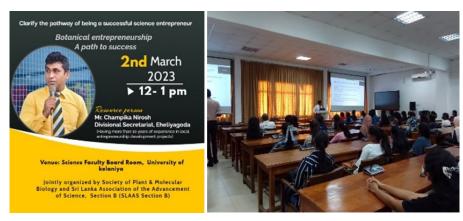
A webinar entitled "Cactus farming: Is it a profitable business?" was conducted on 9th February 2023 by Ms. Gayathri Senanayake, entrepreneur (CactiGayi, Kurunegala) and graduate student, North Dakota State University, USA. The webinar explained the propagation techniques of cacti, how to maintain a cactus farm, and applications of cacti available in Sri Lanka. The event was jointly organized by Section B and the Environment Committee of SLAAS; Dr. H.M. Herath and Dr. R.P. Wanigatunge coordinated this activity.



Guest lecture on "Botanical Entrepreneurship: A path to success"

A guest lecture entitled "Botan ical Entrepreneurship: A path to success" was conducted on 2nd March 2023 at the Faculty of Science, University of Kelaniya, by Mr. Champika Nirosh, Divisional Secretary of Eheliyagoda, who has more than 10 years of experience in local entrepreneurship

development projects. The lecture emphasized business ideas based on plant resources such as vanilla cultivation, mushroom cultivation, coconut-based products, etc. The event was jointly organized by the SLAAS Section B and the Plant and Molecular Biology Student Society of the University of Kelaniya. The event was successfully completed with more than 130 participants; Dr. R.P. Wanigatunge and Dr. H.M. Herath coordinated this activity.



The Little Forester Programme

The "Little Forester Programme" was launched at Weerasuriyakanda Kanishta Vidyalaya, Wewaldeniya last year and is being continued under the supervision of school teachers. The objective of this programme is to obtain the active contribution of schoolchildren in forest tree planting and maintenance, to inculcate "Sustainability" and "Forester" concepts. Thirty students have joined the programme and are maintaining a field book, which is used to record the weekly observations and other planted sapling-related data. The evaluation committee was appointed to evaluate the progress of the programme and after the evaluation, a certificate will be awarded to each participant who has successfully completed the programme. Further this programme will be implemented for the year 2023 in another two schools; Mathalana Kanishta Vidyala and Yatiyana Kanishta Vidya-



laya, Nittambuwa; 50 students are expected to contribute to this programme. Mr. W.V.T.D. Amarasinghe is the coordinator of the programme. The programme is implemented by the State Timber Corporation in collaboration with SLAAS Section B.

Post-harvest technology awareness programme

The National Institute of Post-harvest Management, in collaboration with SLAAS Section B, and GRC, conducted a programme to commercialize recent research outcomes, on 9th February 2023. The aim of the programme was to encourage people to initiate small and medium enterprises. The programme provided technology awareness, practical and poster demonstrations, and included an exhibition.

Undergraduate Video Contest 2023

An undergraduate video competition has been organized by the SLAAS Section B in collaboration with the Environmental Committee. The theme of this competition is "Rising food insecurity in Sri Lanka: Causes and the way out". The contest is open to all current undergraduates from state and non-state universities/degree-granting institutes in Sri Lanka. The programme is coordinated by Dr. R.P. Wanigatunge and Dr. H.M. Herath.

Section C

Webinar 1

A webinar titled "Conflict Handling Styles used by Professionals during the Pre-Contract Stage of Building Construction Projects in Sri Lanka" was conducted on 28th January 2023 by Ms. Priyanwada De Silva from Sri Lanka Institute of Information Technology (SLIIT) as the presenter and Eng. Hemantha Bandara, the Honorary Secretary of the Royal Institute of Charted Surveyors (RICS), Sri Lankan council, as the moderator. The results of a study conducted in Sri Lanka were presented. The event was jointly organized by SLAAS- Section C and the Department of Quantity Surveyors at the Faculty of Engineering at SLIIT.

Webinar 2

A webinar entitled "Building Information Modeling (BIM) for Architecture, Engineering and Construction (AEC)" was conducted on 15th March, 2023. by Eng. Siva Jayanthan from Singapore and Mr. Udara Sachinthana, Assistant Lecturer at the Sri Lanka Institute of Information Technology (SLIIT).

Webin
Highly relevant information was shared with insightful discussions.

ment of Civil Engineering, Faculty of Engineering, SLIIT.

The event was jointly organized by SLAAS Section C and the Depart-





Section D

Awareness Programme to Celebrate the World Water Day

An Awareness Programme entitled "Accelerating change to solve the water and sanitation crisis" was conducted on 20th March 2023 to commemorate the World Water Day. There were three resource persons: Prof. Deepthi Wickramasingha, Dr. Vindhya Kulasena, and Dr. Devanmini Halwatura. The programme was conducted for Girl Guides, who are in Grade 1 to 5. Further, this activity was free of charge for the participants and funded by the Sri Lanka Water Partnership.







Article to "Vidusara" Science Magazine

A scientific article will be submitted to "Vidusara" Science Weekly Magazine by Dr. Prasad Premarathne during the month of March 2023.

Webinar on "Microplastic, Human Anatomy and Our Future"

The webinar was organized by SLAAS Section D in collaboration with SLAAS EC. It was held on 21st March 2023 from 6 pm to 7 pm. The Resource Person was Dr. Sajith Edirisinghe, Honorary Secretary, Sri Lanka Medical Association and Senior Lecturer, University of Sri Jayewardenepura. Further, this activity was free of charge for the participants, of whom there were approximately 30.





Section E1

Invited Talk

Dr. Dilushan Jayasundara, Department of Physics, University of Colombo delivered a presentation on "Moving into formal research – a guide for undergraduate students" on 22nd February 2023 at the Department of Physics. More than 70 undergraduates were participated in this event. The importance of undergraduate project and the key factors of selecting a topic and a supervisor were clearly explained in his talk. Dr. Lakmal Weerawarna coordinated this event.





Webinar 1

A webinar was conducted on 11th February 2023 under the title of "Small Bodies of the Solar System" by Prof. Shashikiran Ganesh, Astronomy and Astrophysics Division, Physical Research Laboratory, India. More than 100 participants were joined online for the

presentation. The event was coordinated.







Webinar 2

With the collaboration of Physics Society of University of Sri Jayewardenepura, a webinar was conducted on "Advance Mathematics in Entrepreneurship" by Mr. Sidath Gajanayaka. The event was held on 2nd March 2023 via zoom platform. Specially selected 40 undergraduates were took part in the session. The session was coordinated by Dr. Wasanthi P De Silva. by Dr. Janaka Adassuriya.

Webinar 3

This webinar was design for undergraduates who are looking for a productive and publishable research and a way of enhancing their personal and professional development. Two resources persons, Dr. Dimitri Volchenkov from Department of Mathematics and Statistics, Texas Tech University, USA and Dr. Pushpi Paranamana from Department of Mathematics and Computer Science, Saint Mary's College Notre Dame, USA talked under the title of "Promoting Research among Undergraduates". The webinar was held on 22nd March 2023 with participation of more than 100 students. The event was coordinated by Dr. Sujeewa Wijesiri.

Web Articles

Three articles were published By Dr. R Chinthaka L De Silva on Newswave.lk. The articles were based on the timely important topics and written in Sinhala medium. The topics are;

- # භූ කම්පන වල නෙදුටු පත්ත.
- # ව්දායවට තවමත් අබ්රහසක් වූ මිනිස් මෙළයේ සබුශක්තිය.
- # ලෙක්යේ එහාකෙලවරටත් උපකරණ නතිව පණිවිඩ යවන ටෙලිපති.



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Promoting

Undergraduates

Research

Among



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Section E2

'Chem Voices' webinar series

A monthly webinar series was organized to showcase cutting-edge contemporary research in chemistry conducted by early-career chemists in Sri Lanka.

Dr. Jayangika N. Dahanayake conducted the first webinar of the series from the Department of Chemistry, University of Kelaniya, on the 25th of January 2023 on the topic of "Applications of Molecular Dynamics Simulations in Protein Studies" Via Zoom Platform.

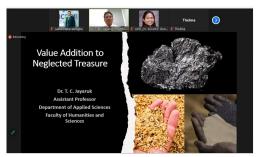


The second webinar was held via Zoom on the 8th of February 2023, "Finding Novel Remedies from Nature" by Dr. Vajira Asela Agampodi, a senior research scientist at Industrial Technology Institute, Sri Lanka. Affordable drug alternatives and characterization and profiling of novel pharmacologically active compounds were discussed. Furthermore, future research directions and potential areas of collaboration were discussed.



Dr. Charitha Jayaruk, Assistant Professor in the Department of Applied Sciences at the Sri Lanka Institute of Information Technology, conducted the third webinar of the series. The webinar, titled "Value Addition to Neglect Treasure" took place on the 3rd of March, and the importance of naturally available resources, such as Graphite and Ilmenite, was discussed during the webinar. The webinar was held via Zoom platform.





The webinar series was organized and coordinated by Dr. Medha Gunaratna and Dr. Amila Jeewandara.

E-waste collection programme

The e-waste collection programme, initiated to mark Global Recycling Day, addressed the discarding of electronic waste at an alarming rate with the rapid development of technology. The programme was organized by the Environmental Committee and the Section E2 of the Sri Lanka Association for the Advancement of Science in Collaboration with the Centre for Sustainability Solutions, University of Kelaniya. The programme lasted from the 3rd to the 20th of March and centered around the theme "Think Green- Recycle Waste." The project was focused on collecting ICT and telecommunication equipment, office electronics and photocopying equipment, household electronic appliances, electronic toys and sports equipment and batteries, wires, etc., where the University of Kelaniya, University of Colombo, University of Sri Jayewardenepura, The Open University of Sri Lanka and Institute of Chemistry Ceylon were appointed as the e-waste rop off centers. The programme succeeded in aiding the community to eliminate redundant and obsolete electronic equipment and reduce the impact caused by e-waste.

Practical session for A/L students from Sapugaskanda Maha Vidyalaya

A laboratory practical session was organized in collaboration with the Alumni Association of the Faculty of Science, University of Kelaniya on the 24th of February. The session was conducted for Advanced Level (A/L) students of Sapugaskanda Maha Vidyalaya, Makola.

Dr. Chamila Kadigamuwa, Dr. Jayangika Dahanayake, Dr. Medha Gunaratne, and Prof. Jeewantha Premaratne contributed to the event as resource personnel.



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We collect

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- Lighting equipment
- Wires and cables

Electronic waste drop off locations

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- nt of Chemistry, University of Sri Jay aksiri Weerasinghe : 077 540 1882
- rtment of Chemistry, The Open Universi Dr. Thelma Abeysinghe : 077 015 0470

Centre for Sustainability Solutions (CSS)



Section E3

Workshop on "Towards a Sustainable Future with Green Cloud Computing"

On 20th January 2023, SLAAS Section E3 organized an online workshop entitles "Towards a Sustainable Future with Green Cloud Computing." This workshop focused students and researchers, who intend to obtain more knowledge on cloud and fog computing with a different perspective, on the IoT and Big data concepts. This workshop discussed the cloud computing fundamentals and how they are applied for Big data and IoT applications. The workshop was conducted by Dr K.P.N Jayasena, a Senior Lecturer at the Department of Computing and Information Systems, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka and Mr. S. U. Bandaranayake, a Software Engineer at SWAT Mobility.



Workshop on Identification of Hate Speech in Social Media

A one-day workshop for university students and researchers was held on 23rd February 2023, from 9 am to 2.30 pm, at the Faculty of Computing, Sabaragamuwa University of Sri Lanka, in conjunction with the International Conference on Advanced Research in Computing (ICARC) 2023. This was organized to raise awareness about Social Media Analytics and Hate Speech Identification by providing participants with hands-on experience using state-of-the-art technology.

The Resource persons of this workshop were Dr. Lochandaka Ranathunga, Dr. Supunmali Ahangama, Ms. Nirupama Rajapaksha, Mr. Maneesha Caldera, Ms. Sandunika Hathnapitiya, and Ms. Suresha Perera from the Department of Information Technology, Faculty of Information Technology, University of Moratuwa.

Crossword-Puzzle Competition for School Students

Researchers have discovered the positive effects of solving cross-word puzzles on one's brain. Considering this, the SLAAS Section E3 committee proposes to introduce a crossword puzzle competition for school students of Grades 6 - 9. Vijaya Newspapers have agreed to publish a puzzle at regular intervals, starting on 22nd March, 2023.



ICARC

Section F

Project on Sustainable Green Model Village

A project entitled "Sustainable Green Model Village" was held on 15th February 2023 at Witharandeniya. Two workshops were organized in collaboration with the Faculty of Agriculture, University of Ruhuna, and the Southern Provincial Council. The aims of these two workshops was to enhance knowledge on Good Agricultural Practices (GAP) and Product Branding, and the following areas were covered.

How to use 'Good Agricultural Practices' for a better income - by Dr. Dilanthi Koralagama

Importance of Product Branding - by Dr. Aruni Wickramaratne This activity was coordinated by Dr. Dilanthi Koralagama.

Project on Beach Cleaning and Mangrove Replanting

A project on "Beach Cleaning and Mangrove Replanting" was held on 16th February 2023 with the participation of 60 undergraduates from the University of Ruhuna and Wayamba University of Sri Lanka. This was a full day supported by the Leo club, University of Ruhuna, and Accordingly, 1000 mangrove plants were replanted in Chilaw, and handed over to the community for monitor-

event, which was some other projects.

Ambakandawila, ing and care. The

villagers also attended the beach cleaning programme conducted in the dried fish producing areas in Chilaw. This activity was coordinated by Dr. Dilanthi Koralagama and Dr. Menuka Udagama.

Radio Programme at Swedeshiya sevaya

Prof. Wasantha Rathnayake participated as a resource person in a radio programme conducted by "Swedeshiya sevaya." The discussion was on "සංචාරක කටයුතු විවිධාංගිකරණය කලයුතුද?" This programme was held on 23rd March 2023.



Environment Committee

Seminar on Green Skill: Zero Plastic

A guest lecture was organized by the Environment Committee on the 31st of January, 2023, on "Green Skill: Zero Plastic" by Mr. Nishshanka de Silva, CEO/Founder Zero Plastic National Movement, at Faculty of Graduate Studies, University of Sri Jayawardenepura. This was coordinated by Dr. Ureshani Karunarathna. About 50 participants of the University of Sri Jayawar-

denepura including students, academic staff members, and SLAAS mem-

bers attended this event.



Webinar on "Safe Breath"

The webinar on "Safe Breath" was held on 28th January, 2023, targeting the general public. The resources persons for this webinar were Dr Lakmali Amarasiri and Dr Yamuna Rajapakse from Faculty of Medicine, University of Colombo, Dr Inoka Suraweera, Head, Occupational Health Unit, Ministry of Health, and Dr Gihani Jayaweera from Faculty of Allied Health Science, General Sir John Kotelawala Defence University. There were 20 participants. The activity coordinator for this event was Dr. Gihani Jayaweera.

A beach clean up programme

A beach clean up activity was successfully held on 12th February 2023, coordinated by by Dr. Ureshani Karunarathna. The beach area near the Wellawatte railway station was chosen for this event. This activity was sponsored by Hemas Holdings Pvt Ltd providing the refreshments and lunch for the participants and other essential cleaning items. Around participants including staff members of the Hemas Holdings, university students, and SLAAS members attended this event.





General Research Committee

GRC Research and Writing development programme

General Research Committee of SLAAS is now offering workshops and awareness programmes on R&D skill development, grant writing, scientific writing, data analysis, IP protection, and IP management. An experienced team of experts is available to provide guidance and resources to help early career researchers and seasoned professionals to develop the skills they need for success. These tailored programmes offer practical knowledge and hands-on experience that would help one to stay competitive in their industry. Contact SLAAS or the GRC Chairperson (e-mail: mnkaumal@sci.cmb.ac.lk) to learn more about this opportunity to enhance your professional development.

Committee for the Popularization of Science

Radio Programmes

Representing the CPS, Mr. Sisira Kumara appeared in the "Vidu Asin" radio programme on SLBC on two occasions and spoke on the following topics:

- Recent scientific developments and their changes (19th of January)
- Agriculture and scientific developments (2nd of February)

Webinar

A live Webinar on "සංඛාාවක අසිරිය: [#] ගැන කතා බහක්" was conducted successfully in collaboration with the MetaHub for Mathematics teachers, students and the general public in celebration of the International Pi-Day, on the 14th of March. The resource persons were Dr. Shelton Perera, Senior Consult-

ant, SLTC Research University, and Dr. Gaya Jayakody, University of Sri Jayewardenepura. About 150 participants participated in this webinar. Teachers expressed their great appreciation about the talk and requested to have similar programmes in the future.





Competition

The "Vidu-Jaya" Quiz Competition, which is organized in collaboration with the Vidusara Science Magazine, commenced successfully with its first quiz being published on the 8th of March. The aim of the programme is to raise enthusiasm on science among school children nationwide in a competitive way and recognize them for their talent. It is expected that a student will read science articles, books, and other resources, looking for the answers to these quizzes so that they improve their interest in science.

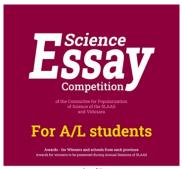
A Science Essay Competition has been organized with the purpose of popularizing Science among school children, honing their science writing skills, and stimulating children to think. This year's topic is as follows:

English: Is teaching via online platforms a suitable mode of teaching for Sri Lankan students?

Sinhala: මාර්ගගත කුම ඔස්සේ ඉගැන්වීම ශුී ලංකාවේ සිසුන්ට ගැලපෙන ඉගැන්වීමේ කුමයක් ද?

Tamil: சூம் ஊடாக கற்பிப்பது இலங்கை மாணவர்களுக்குப் பொருத்தமான கற்பித்தல் முறையாகுமா?





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Sri Lanka Association for the Advancement of Science "Vidya Mandiraya" 120/10 Wijerama Mawatha Colombo 07

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