

# **SLAAS NEWS**

# Newsletter of the Sri Lanka Association for the Advancement of Science

Teacher Enrichment Programme Continues to Strengthen Mathematics Education in Sri Lanka

The Teacher Enrichment Programme, an initiative that began in 2022 to enhance Mathematics Education in the country, is set to continue its efforts by conducting workshops in the remaining 7 provinces. The gramme, which has already been successfully completed in the North Central and Southern provinces, is specifically tailored for G.C.E. (Advanced Level) Combined Mathematics teachers.



On the 18th of April, the 3rd Teacher Enrichment Programme for Combined Math Teachers was held in the Western Province, attracting 180 participants from schools across the region. The event took place at the venue of Maharagama Central College Auditorium and was organized by MetaHub in collaboration with the Committee for the Popularization of Science (CPS) and Section E1 of the Sri Lanka Association for the Advancement of Science (SLAAS).

The fourth Teacher Enrichment Programme for Combined Mathematics Teachers in the Western Province was held on the  $31^{\rm st}$  of May, again from 8.30 am to 4.00 pm. This time, the venue was the



Ministry of Education's 7th-floor Auditorium. The event saw the participation of 50 Combined Mathematics Teachers from various schools within the Western Province.

The workshop was led by two resource persons, Dr. Shelton Perera, a renowned Consultant from SLTC Research University, and Dr. Gaya Jayakody, a Senior Lecturer at USJ. Dr. Rajitha Silva, representing CPS, and Dr. Sujeewa Wijesiri, representing Section E1, served as coordinators for the event.

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#### Special points of interest

- Little Forester Programme
- Create Our Own Lab (COOL):
   A teacher training programme
   on Interactive Teaching
- Little Alchemist
- Interventions to accelerate the recovery process of Sri Lanka
- Chemical Watch Magazine

#### S. R Kottegoda Memorial Oration

The 26<sup>th</sup> Kottegoda Oration will be held on 14<sup>th</sup> September 2023 at the SLAAS auditorium. This year's orator Prof. Buddhi Marambe, Professor in Crop Science, Faculty of Agriculture, University of Peradeniya will be delivering his speech on a timely topic "Revival of the Agriculture Sector in Sri Lanka"



# **Section A**

#### **Workshops & Lecture Series**

A workshop on "Science behind health - Be your own Physician and invest on Health" was conducted for several categories of staff of the Ministry of Health including medical officers on 20<sup>th</sup> April 2023, at the Main Auditorium, Ministry of Health. Nearly 60 Health Ministry employees were participated and this activity was coordinated by Dr. Thilina Wanigasekera.

An interactive Lecture-discussion was conducted on "How to reduce the cost of medicines to the people with upgrading the traditional primary care practices" for the employees of the Ministry of Health on 20<sup>th</sup> of April 2023. Dr. Himali De Silva of Faculty of Indigenous Medicine (FIM), UOC was the resource person and there were 80 participants. This activity was organized and coordinated by Dr. Thilina Wanigasekera with the collaboration of SLAAS section A.





A Lecture series on 'Research methodology for undergraduates' was organized by the Faculty of Indigenous Medicine (FIM), University of Colombo with collaboration of SLAAS section A. Dr. Thilina Wanigasekera conducted the first lecture as the resource person on 08th May 2023 from 1.00–2.00 pm at FIM, UOC. About 150 students participated at the lecture and this activity was coordinated by Dr. Jeevani Dahanayake and Dr. Kaumadi Karunagoda.



The second and third lectures of the Lecture series on 'Research methodology for undergraduates', organized by the Faculty of Indigenous Medicine (FIM), UOC in collaboration with SLAAS Section A, was conducted by Prof. Pathirage Kamal Perera and Assoc. Prof. S. D. Hapuarachchi as the resource persons on 12th June 2023 from 1.00–3.00 pm at Faculty of Indigenous Medicine, Univer-



sity of Colombo. This activity was coordinated by Dr. Jeevani Dahanayake and Dr. Kaumadi Karunagoda and 160 students participated.

An interactive dialogue on the Legislative issues of the Medical Ethics and Governance mechanisms of the medical services was conducted for all categories of employees at the Main Auditorium of the Ministry of Health on 21<sup>st</sup> of June 2023. There were 60 participants for this activity and the activity was coordinated by Dr. Thilina Wanigasekera.

A Lecture titled "Management of protrusive teeth - Achieving facial harmony" was conducted at the 90<sup>th</sup> year International Dental Conference organized by the Sri Lanka Dental Association held from 28<sup>th</sup> June to 1<sup>st</sup> of July at the BMICH and the activity coordinator was Dr. Amirthavarshini Srikanthan

A series of workshops on Qualitative research Methodology for health promotion officers was conducted at the

Department of Community Medicine, Faculty of Medicine, University of Colombo on 30<sup>th</sup> June 2023. This activity was coordinated by Dr. Dushyanthi Jayawardane and 80 employees were participated.

#### Collaborative activities with SLAAS - EC

A Collaborative activity was carried out with the Ayu Osu Diriya Programme in National Ayurveda Teaching Hospital (NATH), organized by the Environment Committee of SLAAS. Medicinal plants were planted in the garden of the NATH which used for the preparation of herbal medicines. 25 workers participated this event. This activity was coordinated by Prof. Swarna Hapuarachchi (EC) and Dr. Jeevani Dahanayake (Section A)

#### **Awareness Programmes**

A Nutrition Awareness Programme for school children and their parents of Labbala Maha Vidyalaya, Labbala in Griulla Zonal Education, Kurunegala was conducted by the Department of Applied Nutrition, Wayamba University of Sri Lanka with the collaboration of SLAAS section A. The Department of Applied Nutrition conducted the awareness session with demonstrations of nutritious menu preparation on 14th of June 2023 from 9.00 am to 12.00 pm at Labbala Maha Vidyalaya. Nearly 150 participants (school children and their parents) were there for the activity and it was coordinated by Mrs. Thakshila Adikari.

#### Newsletter

One article was submitted for the April issue of the Section A newsletter. The article on "Medical tourism" was written by Dr RHSK De Silva from the Faculty of Indigenous Medicine, University of Colombo.

#### **Radio and TV Programmes**

A Live TV programme on "Ayurveda treatments for gynecology diseases" was conducted on the 21stApril 2023 from 8.30–9.00 am with Dr. Kaumadi Karunagoda as the resource person and telecast  $\emph{via}$  the Siytha TV .

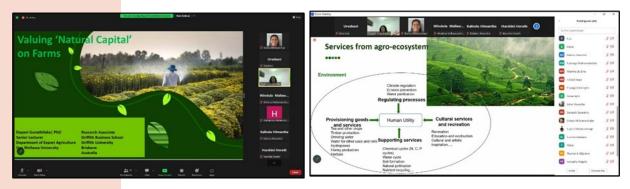


A Live TV program on "Ayurveda treatments for excessive menstrual bleeding" was conducted on the 19<sup>th</sup> June 2023 from 8.00–8.30 am with Dr. Kaumadi Karunagoda as the resource person and telecast *via* the Siytha TV.

# **Section B**

#### Webinars

A webinar titled "Valuing" natural capital of farms" was conducted on 20<sup>th</sup> April 2023 by Dr. Dayani Gunathilaka, Senior Lecturer, Department of Export Agriculture, Uva Wellassa University of Sri Lanka. The webinar emphasized the concept of natural capital, invisible natural capital in Nature, and services provided by them, and the natural capital accounting framework. The webinar was followed by a question-and-answer session with the active participation of many participants. The event was coordinated by Dr. R.P. Wanigatunge and Dr. H.M. Herath.



A webinar on "Diagnostics, Disease Management Research, and Outreach - Three Integral Parts of the \$50 Billion California Agriculture Industry and Lessons for Sri Lanka" by Prof. Shashika Hewavitharana, Plant Sciences Department, Plant Pathology Program Leader - Cal Poly Strawberry Center, California Polytechnic State University, San Luis Obispo, California, was held on 26<sup>th</sup> June 2023. The webinar gave an overview of how diagnostics, disease management research, and outreach have contributed to California becoming the nation's largest strawberry producer. She further highlighted how those three integral parts can be adopted in the Sri Lankan Agriculture sector to enhance crop production. The webinar was followed by a question-and-answer session with the active participation of the audience. The event was coordinated by Dr. H.M. Herath and Dr. R.P. Wanigatunge.



#### The Little Agriculturist Programme

The "Little Agriculturist" programme was introduced by Prof. R.M. Dharmadasa in the year 2021 with the view of enhancing the learning of science through engagement with the environment using Agriculture as a catalyst, in collaboration with the Ministry of Education (MoE). The programme was conducted from the 1<sup>st</sup> of April 2023 to the 31<sup>st</sup> of July 2023. More than 800 students were selected for the programme. During the programme, all students and teachers were made aware of agronomic practices such as weed management, pest and disease management, supply of water (irrigation), as well as other cultivation practices. After completion of the programme, record books will be submitted for evaluation.

# The Little Forester Programme

The "Little Forester Programme" launched at Weerasuriyakanda Kanishta Vidyalaya, Wewaldeniya last year was completed, and the evaluation of field books is in progress. Further, this programme was implemented for the year 2023 in Mathalana Kanishta Vidyala and Yatiyana Kanishta Vidyalaya, Nittambuwa. Fifty students are currently contributing to this programme. The programme is implemented by the State Timber Corporation in collaboration with SLAAS Section B. The event is coordinated by Mr. W.V.T.D. Amarasinghe.

#### **Training programmes**

Training programmes on the value addition of fresh king coconut for export and dehydration technology were conducted on the 9<sup>th</sup> and 10<sup>th</sup> of May, respectively, at the National Institute of Post-harvest Management, Anuradhapura, to encourage export-oriented entrepreneurs. The event was jointly organized by SLAAS Section B and the National Institute of Post-harvest Management. The event was coordinated by Dr. R.M.N.A. Wijewardane.

#### **Undergraduate Video Contest 2023**

Undergraduate video competition on "Rising food insecurity in Sri Lanka: Causes and the way out" jointly organized by the SLAAS Section B and the Environment Committee has been completed and the evaluation of videos is in progress. The contest is coordinated by Dr. R.P. Wanigatunge and Dr. H.M. Herath.

#### **Undergraduate Research Award**

Undergraduate Research Award was commenced for the first time in this year. It was opened for graduates who have completed the Bachelor of Science degree in Agriculture or Forestry or Biological Science related programmes during the year 2022. The evaluation is based on an abstract submitted by the applicant written based on the entire research project carried out as partial fulfillment of the degree. Fifteen applications were received, and evaluation is in progress. The contest is coordinated by Dr. A.G.B. Aruggoda, Dr. R.P. Wanigatunge and Dr. H.M. Herath.

#### **Round Table Discussion**

The round table discussion on the "Overview of the US agricultural statistical system and its applications to the local agricultural sector" was successfully conducted on the 21st of June 2023 at the Boardroom, University of Colombo School of Computing, Sri Lanka. This round table discussion was organized by the Sri Lanka Association for the Advancement of Science Section B in collaboration with the University of Colombo School of Computing, Sri Lanka with the aim of providing an avenue for local researchers to gain insights into effective data analysis techniques and explore practical applications of data-driven decisions in agriculture. This session was chaired by Ms. Sulari Rajapaksha, Statistician, United State Department of Agriculture, National Agricultural Statistics Service, and moderated by Dr. Rasika Dayarathna, Senior Lecturer, University of Colombo School of Computing. This event was coordinated by Dr. R.P. Wanigatunge and Dr. H.M. Herath.

# **Section D**

#### Webinar on "Nature: Is it an intelligent creature?"

Webinar entitled "Nature: Is it an intelligent creature?" was conducted by Prof. Gamini Senevirathne from National Institute of Fundamental Studies on 20<sup>th</sup> April 2023. The webinar was organized and moderated by Dr. Rinukshi Wimalasekara, President/ Section D, SLAAS.

#### Panel Discussion to commemorate the World Environment Day

To acknowledge the World Environment Day, a panel discussion was held on

05th June 2023 with the participation of two eminent scientists as resource persons. Prof. Meththika Vitanage from University of Sri Jayewardenepura delivered a talk on microplastic pollution from the "Express Pearl" disaster and Dr. Sajith Edirisingha from University of Sri Jayewardenepura elaborated on how microplastics damage microscopic anatomy of the tissue and lead to illnesses. Dr. Gihani Jayaweera served as the moderator. Dr. Ureshani Karunarthna and Dr. Pathmakumara Jayasinghe organized the event in collaboration with Environment Committee.



#### **Quiz Competition**

A Quiz programme to commemorate 'International Day for Biological Diversity' was held on 25th May 2023, at the Department of Botany, University of Sri Jayewardenepura. This programme was organized by Section D (SLAAS) in collaboration with the Botany and Plant Biotechnology Society (BotSoc), University of Sri Jayewardenepura. About 50 students participated in the quiz and the winners were awarded with prizes.

The participants were introduced to the SLAAS & its activities and were encouraged to be a part of SLAAS by becoming a member of section D.





# **Section E1**

**Introduction to Machine Learning and Data Science** – a fund raising activity

A two-day workshop was conducted on 8th and 9th June 2023 by Section E1 with the collaboration of the Physics Society, University of Colombo on the basics of machine learning and data science with hands on programming. A participation certificate was awarded to all the participants. The workshop is coordinated by Dr. Lakmal Weerawarna.

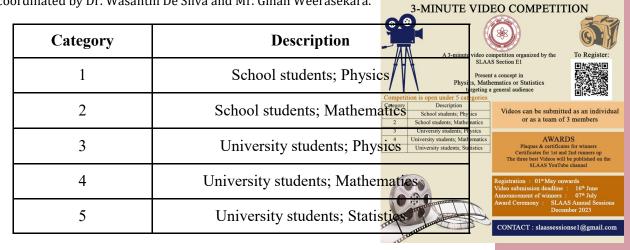




#### 3 - Minute Video Competition

A 3-minute video competition is being organized by the Section E1 of Sri Lanka Association for the Advancement of Science (SLAAS). The purpose of the program is to disseminate knowledge, promote scientific thinking and enhance creativity of students to better understand concepts and stimulate their love and passion for science.

The competition will be opened for school students from government, private & international schools, and undergraduate students from state & private universities under several categories. The winners in each category would receive medals & certificates at the SLAAS Annual Sessions 2023. This programme is coordinated by Dr. Wasanthi De Silva and Mr. Gihan Weerasekara.



## **Paper Articles**

3 paper articles were published on "Mawbima" News Paper by Section E1 committee member Mr. Gihan Weerasekara.

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#### Create Our Own Lab (COOL) - A teacher training programme on Interactive Teaching

The Section E1, SLAAS, is organizing a teacher training workshop to give teachers hands-on experience in creating their own active teaching/learning environment by producing simple instruments from the available resources. Furthermore, the workshop focuses on interactive teaching methods using the software and web resources.

This programme is primarily focused on the ordinary level (O/L) science and mathematics teachers in schools and teacher training schools and thereby disseminating knowledge and hands-on experience to the students. The programme has the following three objectives:

- 1. Producing creative minds by giving hands-on experience in producing their own instruments needed for lessons.
- 2. Fulfill needs of laboratory equipment in the school.
- 3. Introduce interactive teaching methods.

The Section E1 (SLAAS) conducted the first teacher training programme with the collaboration of CPS (SLAAS) on 28th July 2023 at the Center for Education Development Research & Training, Gurudeniya, Kandy. More than 180 teacher trainers and science and mathematics teachers participated in the workshop. A certificate of participation is was also awarded. The programme was coordinated by Dr. Janaka Adassuriya.



# **Section E2**

#### Little Scientist Kits

An umbrella stall was put up at the annual Visakha Avurudu pola on the 1st of April as a fund-raising project with the assistance of Dr. Thelma Abeysinghe, Dr. Dinusha Udukala, Dr. Laksiri P. Weerasinghe and Dr. Lahiru Wijenayake.







Little Alchemist

#### Little Alchemist

Little Alchemist programme was conducted for 5-10 years-old schoolchildren to inspire and enthuse small children about science. The programme was conducted via Zoom platform in Sinhala, Tamil, and English languages.

The first session was held in English and Sinhala on the 11th of April by Dr. Thelma Abeysinghe and Dr. Lahiru Wijenayake. The second session took place on the 28th of April in Tamil by Dr. Ramachandran Dushanan. Dr. Thelma Abeysinghe and Dr. Lahiru Wijenayake coordinated the Little Alchemist programme.

#### Workshop on advanced scientific instruments

Two workshops on advanced scientific instruments were conducted. They were held to bridge the gap between fundamental knowledge, practical experience, and various applications in selected advanced instruments. These interactive workshops allow networking and collaboration among the participants.

The first workshop was conducted on the 13th of May 2023, at the Instrument Center, Faculty of Applied Sciences, University of Sri Jayewardenepura. The resource persons discussed sample preparation, analysis, and characteriza-

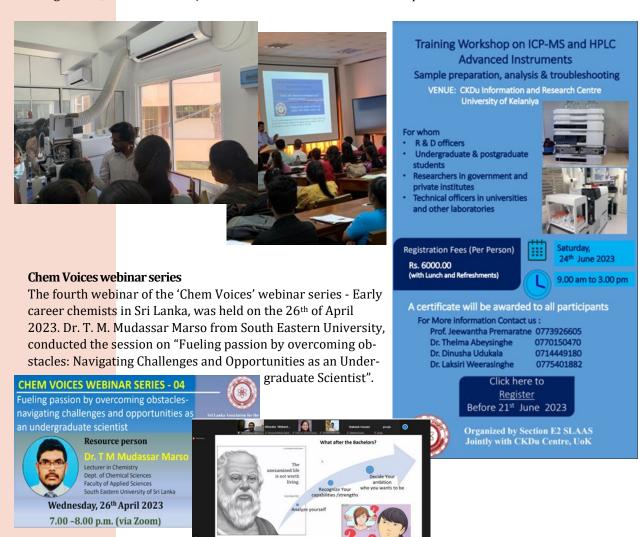
tion with FTIR, TGA-DSC, and Fluorescence Spectrophotometer: Dr. Asitha Cooray, Dr. Saranga Diyaba-

lanage, and Dr. Janitha Walpita.

Dr. Laksiri. P. Weerasinghe, Dr. Imalka Munaweera, Dr. Dinusha Udukala, and Dr. Thelma Abeysinghe coordinated the workshop.



The second workshop was conducted on the 24th of June 2023, at the CKDu Information and Research Centre, University of Kelaniya. Sample preparation, analysis, and characterization with ICP-MS and HPLC were discussed by the resource person, Prof. Jeewantha Premaratne, Dr. Thelma Abeysinghe, Dr. Chamila C. Kadigamuwa, and Dr. A. G. M. J. Gunaratna. Dr. D.T. Abeysinghe, Dr. Dinusha Udukala, Dr. Chamila C. Kadigamuwa, and Dr. A. G. M. J. Gunaratna coordinated the workshop.



The fifth webinar of the series took place on the 7th of May by Dr. Udayana Ranathunga, Department of Chemistry, University of Peradeniya, on "Probing soft matter systems through multiscaled computational tools".



The sixth webinar of the series was held on the 27<sup>th</sup> of June 2023. Dr. Amila Abeysekera from General Sir John Kotelawala Defence University conducted the session entitled "Role of non-covalent interactions in solid-state assembly and function".





All above Chem Voices webinars were conducted *via* Zoom platform and coordinated by Dr. A. G. M. J. Gunaratna and Dr. Amila Jeewandara. Chem Voices webinars targeted academics, undergraduate and post-graduate students, researchers, industry personnel, and the general public to promote and inspire individuals on Science; especially, local undergraduate students, by showcasing cutting edge contemporary research in chemistry conducted by early career researchers in Sri Lanka.

## **Section F**

#### Section F Google group

The number of members in the Section F Google group has increased up to 325 with the addition of members who obtained membership of Section F during the past few years. The group is used to communicate section events as well as other related activities. Mr. Dhanesh Wisumperuma contributed to this activity.

#### A Session on Teaching as Research

This event (session on Integrating Teaching, Learning and Research in Higher Education) was organized in collaboration with the staff Development Unit of the Faculty of Commerce and Management Studies, University of Kelaniya. The objective of this session is to encourage university academics to undertake research on teaching, learning, and assessment. The event was conducted by Dr Thilini Rupasinghe, Senior Lecturer, Faculty of Computing and Technology, University of Kelaniya on Wednesday 10<sup>th</sup> May from 3.00–4.00 pm *via* Zoom.The event was Coordinated by Dr Ishanka Karunarathna and Prof. Susima Weligamage.



#### A Policy Workshop

A policy workshop was held on the 30<sup>th</sup> of May on "Dried fish Value chains" – organized by Dr Dilanthi Koralagama.

#### A panel discussion

A panel discussion on the topic "Interventions to accelerate the recovery process of Sri Lanka" took place on the 27th of July 2023. Emeritus Prof. Ranjith Senarathne, Dr. Anura Ekanayake, Retired Prof. Sirimal Abeyrathne and Ms. Dulani Guruge contributed as resource persons and Dr. Menuka Udagama moderated the session. Dr. Menuka Udugama, Dr. Dilanthi Koralagama, Ms. Sadeesha and Ms. Nethini Ganepola organized the event.



THE RECOVERY PROCESS OF THE ECONOMY IN SRI LANKA

Thursday 27th July | 1:00 PM to 3:00 PM SLAAS Auditorium





# **Environment Committee**

#### "Chemical Watch" Magazine

Launching of the magazine "Chemical Watch" was held on 10<sup>th</sup> April 2023 at the auditorium of SLAAS from 9.00 am to 1.00 pm.

In parallel to that, a Panel Discussion was held and Dr. Sajith Edirisinghe (University of Sri Jayewardenepura), Dr. Jayantha Wattevidanage (The Open University of Sri Lanka) and Mr. Hemantha Withanage (Centre for Environmental Justice (CEJ)) were contributed as the panelists. Dr Gihani Jayaweera, (General Sir John Kotelawala Defence University) moderated the panel discussion.

The second volume of the magazine was issued on 10<sup>th</sup> July 2023. This volume was mainly focused on the articles based on research findings in plastics and associated toxic materials.







### Workshops

A Workshop on Nature Photography was held on 28th April 2023 at the National Zoological Gardens, Dehiwala. It was organized by the environment committee of SLAAS in collaboration with the Young Zool-

ogists' Association (YZA), Sri Lanka.

A Workshop on Toxicity Assessments was held from 19th to 24th June 2023. It was organized by the environment committee of SLAAS in collaboration with the Medical Research Institute (MRI).





There were 46 registered participants for the workshop. The practical sessions of the workshop were conducted at the department of Basic Sciences, Faculty of Allied Health Sciences and at the Animal Centre, MRI.

#### **Awareness Programmes**

The awareness programme on 'Moving towards A Green Hospital Concept through Waste Management' was held on 14th July at Ayurveda National Hospital, Borella. The key resource personnels of this programme were Prof. S.D Hapuarachchi and Dr. J. M. Dahanayake. The Hospital Director, work supervisor, and minor staff (20 participants), participated. This event was organized by the environment committee in collaboration with Section A -SLAAS and it was coordinated by Prof. S. D. Hapuarachchi.



# **Committee for Popularization of Science**

#### The Mobile App Development Competition Opens Doors for Sri Lankan Students

The Mobile App Development Competition, an event mainly targeting G. C. E. (Advanced Level) students specializing in Information and Communication Technology (ICT), has been unveiled, giving students the chance to showcase their creativity and technical skills. This competition welcomes students from all age groups, making it a truly inclusive platform for budding app developers.

Organized by the Section E3 (Computer Science) and the Committee for Popularization of Science (CPS) of the Sri Lanka Association for the Advancement of Science (SLAAS), the competition aims to promote innovation and technological advancement in the country's vibrant IT industry. Students participating in the competition are required to form groups and propose an idea for a mobile app.

As the registration process opens, students from across the nation are encouraged to seize this exciting opportunity, collaborate with their peers, and unleash their creativity to craft revolutionary mobile apps that could potentially shape the digital landscape of the country.

#### "Vidu-Jaya" Quiz Competition Inspires Young Minds Nationwide to Embrace Science

The "Vidu-Jaya" Quiz Competition, a collaborative effort between the Committee for Popularization of Science (CPS) under the guidance of Dr. Jayangika Dahanayake and the Vidusara Science Magazine, continues to captivate and engage young minds across the country. The competition, which began in March 2023, has successfully held subsequent rounds in April, May, June, and July, garnering widespread participation and support.



# Recognizing Excellence in Science Communication: Call for Science Popularization & Promotion Award Nominations in Sri Lanka

The Science Popularization & Promotion Award, an esteemed recognition for individuals who have played a pivotal role in promoting and popularizing science within Sri Lanka, is now accepting nominations for contributions made from 1<sup>st</sup> May 2022 to 30<sup>th</sup> April 2023. This prestigious award aims to honour outstanding science communicators, be they journalists, scientists, or others, who have excelled in disseminating scientific knowledge through various media channels. Contributions in Sinhala, Tamil, and English media will be considered, ensuring that a diverse range of voices and languages are recognized for their impact.

Nominations are open under two categories:

Professional Category: This category is open to individuals who are professionally employed as journalists or working in science communication.

Non-Professional Category: In this category, nominations are invited for individuals who may not be employed as journalists but have made significant contributions to science communication.

For further details on the application process and guidelines, interested individuals are encouraged to visit the SLAAS official website.

An effort to instil in young minds, an unparalleled curiosity about science!

Formulated by Section E2 of SLAAS and available for purchase at the SLAAS office..



For more details please visit: <a href="https://www.slaas.lk/Science Kit.php">https://www.slaas.lk/Science Kit.php</a>

Or contact Dr Laksiri Weerasinghe (mobile: 0775401882)

to			

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