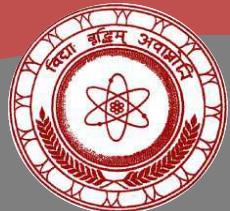


# SLAAS NEWS



Newsletter of the Sri Lanka Association for the Advancement of Science

Vol. 11 No. 1 Jan - April. 2016

## Message from the General President



I am extremely privileged to be inducted as the problem solving. General President of Sri Lanka Association for the Advancement of Science. I am attracted to SLAAS for its multi-disciplinarity. I have met wonderful people at SLAAS. I experience SLAAS as a nurturing ground for professionals and my plea to all academics is to join SLAAS to work towards advancement of science and for the development of our country.

Across the world many of the disciplinary and institutional barriers are presently addressed through increased recognition of interdisciplinary research, coupled with improved science training and education. Recent research suggests that the most successful innovation occurs at the boundaries/interfaces of disciplines. To develop a perspective of interdisciplinarity, one must be able to: operate across disciplinary boundaries using principles drawn from different disciplines.

This approach will not work if one discipline is perceived as superior to another.

Interdisciplinarity needs to be developed through education. It is recommended to weave 21st century interdisciplinary themes into general education. It is common nowadays for people to get a pseudo-education that is broad without having a depth related to any aspect. Broadening of knowledge across several disciplines with an in-depth knowledge of one or two, plus the capability and motivation to gain depth in other areas of knowledge is very different from having a pseudo-knowledge.

Interdisciplinarity in education and research should result in innovations to arrive at solutions that are beyond the scope of a single discipline or area of research and practice. SLAAS has the resourcefulness to develop interdisciplinarity in practice, while maintaining the identity and depth of the different sectional disciplines. Collaborations combined with discipline-specific vertical depth, the eight sections of SLAAS can be used as a good formula for pushing the frontiers of science in all directions.

*Professor Manjula Vithanapathirana*

## Induction Ceremony 2016



Prof Manjula Vithanapathirana (Dept. of Educational Psychology, Faculty of Education, University of Colombo) was inducted as the 75th General President of the Sri Lanka Association for the Advancement of Science on the evening of 11 January 2016 at a ceremony held at the Auditorium of Sri Lanka Association for the Advancement of Science, Wijerama Mw, Colombo 07. Dr Ariyadasa de Silva, Former Senior Professor in Humanities Education, University of Colombo was the Guest of Honour at the event.

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## SLAAS Council 2016

Name	Position	Name	Position
Prof Manjula Vithanapathirana	General President	Archt L T Kiringoda	Elected Member
Eng V Regunathan	General President - Elect	Prof J K D S Jayanetti	Elected Member
Prof C Deepal Mathew	Immediate Past General President	Mr Raja B M Korale	Elected Member
Prof P R T Cumaranatunga	Chairperson, BOT	Prof Janitha Liyanage	Elected Member
Dr B C L Athapattu	General Secretary	Dr Suresh Shanmuganathan	President, Section A
Dr Theshini Perera	General Secretary	Dr Buddika Aruggoda	President, Section B
Dr Nilwala Kottegoda	Treasurer	Dr Kamal Karunananda	President, Section C
Dr M C Weerasinghe	Assistant Treasurer	Dr Hemali Munasinghe	President, Section D
Prof Preethi Udagama	Editor	Dr Naleen Ganegoda	President, Section E1
Prof Sagarika Ekanayake	Assistant Editor	Dr W A P J Premaratne	President, Section E2
Dr R D Guneratne	Secretary, Int. Relations	Dr Gamini Wijayarathna	President, Section E3
Prof Sudantha Liyanage	Elected Member	Dr M G Kularatne	President, Section F
Prof R D Wijesekera	Elected Member	Dr Hema Goonatilake	Chairman , GRC
Dr Udeni Nawagamuwa	Elected Member	Dr Deepa Gunasekera	Chairperson, EC
Prof M J S Wijeyaratne	Elected Member	Dr Pahan Godakumbura	Chairman , CPS
Prof Chandana Jayaratne	Elected Member		

### 71<sup>st</sup> Annual Sessions: Immediate Past General President's Report



The 71st Annual Sessions of the Sri Lanka Association for the Advancement of Science was inaugurated in the afternoon of 30 November 2015 at the Committee Room B of the BMICH with Hon Minister Susil Premajayatha, Minister of Science, Technology and Research as the Chief Guest. The Inaugural session was given prominence by the presence of eminent Keynote speakers of the Theme Seminar from Dublin and Singapore. The Ceremonial Inauguration was well attended by past General Presidents of SLAAS, Heads of Institutions and Universities, Recipients of SLAAS Awards, school children, their parents, teachers, and media personnel. Over 250 attended the Inaugural Session.

Minister Susil Premajayatha delivered an appropriate and engaging opening speech highlighting the importance of

the theme selected for the year and also of the importance of science education. He congratulated SLAAS on its achievements.

General President of SLAAS, Prof C Deepal Mathew ,during his Presidential Address highlighted the immense contribution made by SLAAS during the past 70 years for the promotion of science in the country. He cited specific contributions made by SLAAS in science policy related matters, science education and popularisation of science among the younger generation. He noted that a proposal for a Science Centre was first submitted to the Government by the Ceylon Association of Science way back in 1944. He also stressed that SLAAS could perform much better if the Government would restore the annual grant given to SLAAS in the past.

The Theme Seminar entitled "Wealth Creation through Science" was held at the Auditorium of the Ministry of Disaster Management on 1 December 2015, and about 150 scientists from all parts of the country attended the seminar. Due to the generous support received from the National Science Foundation

and other sponsors, the registration cost for the theme seminar for post-graduate and undergraduate students was subsidized this year. Mr Ravi Fernando, Operations Director, Blue Ocean Strategy Institute, Malaysia, Hon Patali Champika Ranawaka, Minister of Megapolis and Western Development, Prof Suranga Nanayakkara, Assistant Professor of Singapore University of Technology and Design, Mr Ranil Vitharana, Director, MAS Research and Innovation Centre, Mr Rizvi Zaheed, Managing Director, Hayleys Agriculture Holdings Ltd, Mr Rohan Pallewatta, CEO, Lanka Harness and Prof Paula E Colavita, Associate Professor, Trinity College, Dublin were the resource persons of the Theme Seminar. This provided an opportunity for local scientists to keep abreast of the latest research developments taking place globally. Presidential Addresses delivered by Sectional Presidents during the technical sessions held at the Faculty of Applied Sciences, University of Sri Jayewardenepura were well attended.

A total of 136 oral and poster presentations were held at the Faculty of Applied Science premises. Prof M A K Lakshman Dissanayake, the winner of the GRC "Biotechnology for human well-being", delivered a special oration "The ethics of data science", "Human University of Sri Jayawardenepura for on "Development of technologically important novel materials" during the scientific sessions.

Several popular lectures, Seminars and panel discussions by eminent speakers in support of activities of the Annual Sessions this year. SLAAS extends its gratitude to the Vice Chancellor and the Dean, Faculty of Applied Sciences, of the University of Sri Jayawardenepura for granting permission to hold the Technical Sessions at their University and to the academic staff of the Faculty of Applied Sciences for their whole hearted support.

A large number of school children actively took part in the Young Inventors Exhibition this year where over 250 exhibits were displayed. The Awards Ceremony was held on 3 December with Prof Chandana Jayaratne.

Thanks are also due to Office Bearers, Council Members, Sectional Presidents, Chairpersons of statutory committees, members of various committees, and the general membership of SLAAS for their dedication and commitment in meticulously organizing the events, including the School Inventor's Exhibition and for carrying out various activities effectively during the year. The SLAAS office staff must be thanked for their hard work and wholehearted support given at all times.

Sudantha Liyanage, Dean, Faculty of Applied Sciences, University of Sri Jayewardenepura as the Chief Guest. Prof Chandana Jayaratne as in previous years, effectively functioned as the Chairperson of the School Inventors' Competition. Gold, Silver and Bronze Medals and Merit certificates were awarded to the winners.

The SLAAS Annual Dinner held at Hotel Taj Samudra on 2 December, and the Annual General Meeting held on 4 December were well attended.

A special word of appreciation is due to the NSF for being the co-organizer and for providing financial support for the Annual Sessions. Thanks are also due to all other sponsors for their contributions

## SLAAS GRC Award

The winner of the life time **SLAAS General Research Committee Award for excellence in research carried out in Sri Lanka in 2015** is **Professor M A K Lakshman Dissanayake**, Professor Emeritus at the Department of Physics, University of Peradeniya

and currently, a Research Professor at the National Institute of Fundamental Studies, Kandy. He is a graduate of the University of Peradeniya and obtained his PhD in 1974 from Indiana University, USA. His research base since 1985 was the Department of Physics, University of Peradeniya where he has developed from scratch research laboratories for solid state ionics research, covering technologically important novel materials including novel polymer electrolytes for lithium batteries, dye sensitized solar cells and superconductors. After retirement from the University, Prof Dissanayake now works as a Research Professor at the National Institute of Fundamental Studies, where he continues his research work on novel materials for solar cells, rechargeable batteries and nano water filters for removing bacteria and arsenic from contaminated drinking water. His work has led to a number of high quality publications in the relevant areas and produced several PhD and MPhil degree holders. His work has been recognized with several prestigious awards. These include a Honorary DSc awarded by the Wayamba University of Sri Lanka, CVCD Award for the Most Outstanding Researcher, Sri Lanka National Award "Vidya Nidhi" and two NSF Merit Awards for Scientific Research. He has earned an *h*-index of 23 in the Google Scholar Citation Index. Prof Dissanayake delivered his Award Lecture entitled "Development of Technologically important novel materials" on 4 December 2015.



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## SLAAS New Building Project



The ceremony for laying of the foundation stone of the proposed SLAAS building was held on 10 March 2016 at the site, next to SLAAS Headquarters. The long anticipated construction of the new building was initiated amidst multi religious blessings. General President, Prof Manjula Vithanapathirana, Past General Presidents, BOT Chairpersons, General Secretaries, past and present Council members, SLAAS office staff, other invitees and many well wishers were present at this ceremony.

## Sectional Activities

### Section A



- A lecture / discussion was conducted on “**Oral health**” at Rahula Vidyalaya, Maduwela on 22 January. Booklets on oral health and toothpaste were distributed among approximately 50 primary students who participated. The resource persons were Drs Vasantha Sivaguru (Consultant in Restorative Dentistry, Restorative dentistry Unit, Dental Institute), Chandi Godage (Registrar, Restorative dentistry Unit, Dental Institute) and Pushpa Samarasena (Senior House Officer, Restorative dentistry Unit, Dental Institute).
- SLAAS Section A collaborated with Sri Lanka Association of Maxillo-Facial Surgeons in organizing the national parade and social event to raise public awareness on “**Prevent accidents and save your face**”. Approximately 2,200 persons participated in this activity held on 13 February. The walk was followed by other activities such as art competitions and blood donation campaigns.

- A lecture / discussion on “**Diabetic foot care**” was held at the District General hospital Kalutara on 29 February. About 150 Medical Officers and Nurses participated in this activity. Drs K Thusitha Kahaduwa and Amila Weerasekera were the resource persons.
- A lecture / discussion on “**Responsible pet ownership**” was held on 8 March for students of Kolonnawa Balika Vidyalaya (upper school) by Dr Mayuri Thammitiyagoda.
- A lecture on “**Awareness on communicable diseases**” was held for interns and Ayurveda physicians at Institute of Indigenous Medicine, Rajagiriya on 10 March by Drs Kamal Perera and Hemali Jayakody.



### Upcoming events:

- A workshop on “**Prevention of HIV**” for factory workers in Nugegoda (in April).
- Lecture discussion on “**Awareness on non-communicable diseases**” for professionals in private companies (AAT/ Hayleys in April).
- Lecture discussion on “**Prevention of injuries and basic first Aid**” for school children (April/May)
- Lecture discussion on “**Stress Management & Mental Health**” for professionals (institute of Oral Health, Dental Institute, National Science Foundation) (April/May)
- Lecture discussion on “**Pharmacovigilance for traditional medicine**” for Ayurveda students (April/May).

### Section B

- A one day training programme on “**Dairy processing and livestock activities**” for 20 school leavers from Balangoda area, was conducted on 05 February 2016 at the Livestock laboratory, Faculty of Agricultural Sciences, Sabaragamuwa University. Resource persons were Dr T Sanjeeva Prasad Jayaweera and Mrs G D Yasawathie.



### Upcoming events:

- The e - newsletter of Section B will be published in April.

## Section D



- A workshop on "**Animal Diversity**" was conducted by Dr Dinithi Peiris (Department of Zoology, University of Sri Jayewardenepura) on 17 February for GCE A/L Biology students of Kolonnawa Balika Vidyalaya with the participation of 24 students and 2 teachers. Study of external features for taxonomic identification and dissecting specimens to get hands-on experience on internal anatomy of animals were the focus of this workshop.
- A seminar for A/L Biology students on "**What to do and what not to do at examinations**" was held at Anula Vidyalaya, Nugegoda on 11 March, with the participation of about 100 students. This was conducted by Dr Chamari Hettiarachchi of the Department of Chemistry, University of Colombo.
- A talk on "Fresh water fishes" delivered by Dr U P K Yapa was broadcasted on the radio channel "*Swadeeshiya Seva*" on 10 March.
- A seminar titled "How to face the A/L examination" for A/L students from Kandy, Matale and Hatton districts was conducted by Dr Dinithi Pieris in Kandy on 12 March.
- An article on infectious diseases of ferns was published by Dr Chamari Hettiarachchi on March 23 in the *Vidusara* newspaper.

## Section E1

- A seminar on "**Modeling population dynamics with differential equations: Trends, Parsimony & Model Adequacy**" was conducted by Dr N C Ganegoda on 27<sup>th</sup> January, at the University of Sri Jayewardenepura. A total of 80 academics and final year undergraduates from different science disciplines participated.



- A guest lecture on "**Asteroids, Comets, and Near Earth Objects**" was conducted on 10 February at the Department of Physics, University of Colombo jointly with the Institute of Physics Sri Lanka. Dr Nalin Samarasinha, Senior Scientist at the Planetary Science Institute in Tucson, Arizona, USA conducted the lecture.
- A "**Scientific Writing Workshop**" was conducted by Dr G H J Lanel on 28 February at the Department of Mathematics, University of Sri Jayewardenepura. The audience comprised about 30 participants including final year undergraduates. Participants were able to gain hands-on experience in writing scientific reports, theses, papers etc. using the popular 'Latex' software.



### Upcoming events:

- A programme on "**Measurement in dynamic world**" will be held at the University of Ruhuna in May 2016.

## Section E2

- A guest lecture entitled "**Nanomaterials: Applications and Health Effects**" was conducted by Dr W A P J Premaratne, Senior Lecturer, Department of Chemistry, University of Kelaniya, on the 28 January at the University of Sri Jayewardenepura. Dr Premaratne highlighted the various applications and the health concerns regarding the use of nanomaterials.



- A "**Chemistry seminar**" for the GCE A/L students of the Viharamahadevi Balika Vidyalaya, Kiribathgoda, was held on 08 February, with the participa-

tion of 170 students, teachers, and the Deputy Principal of the school. The seminar was conducted by Drs W A P J Premaratne, Dinesh Pandithavida and Shashikala Rajapakse. Following the seminar, periodic tables and posters on first-aid were distributed to the students.

- A workshop on "**How to do a project in a scientific way**" was organized for GCE A/L students of D S Senanayake College, Colombo, on 15 February. The workshop was conducted by Prof Janitha Liyanage and Dr W A P J Premaratne.



Students acquired knowledge on planning and carrying out a project according to the scientific method.

- A guest lecture on "Investigations of ligand tunable gold catalysis and novel carbene ligands for Olefin polymerization catalysis" was conducted by Dr M A Y L Nadeesha,



Department of Chemistry, University of Kelaniya, on 25 February. About 100 undergraduates and academic staff members participated in this event which was held at the University of Colombo.

- A workshop was conducted at the University of Sri Jayewardenepura on "Free Software and Effective Presentation Skills" on 14 March. About 70 undergraduates and

postgraduates participated in this event which was conducted by Drs M N Kaumal, Nilwala Kotegoda and M S S Weerasinghe. A number of free software that can be used for scientific writing and document preparation were introduced to the students at this workshop.

- A guest lecture was organized at the Department of Chemistry, University of Kelaniya, for undergraduates on 16 March, to explain the entry procedure to American universities. This lecture entitled "**Graduate study opportunities in the USA**" was conducted by Ms Edna Selvanayagam, the student advisor of the US-Sri Lanka Fulbright Commission. Ms Selvanayagam explained the application procedure, how to narrow down the selection of universities and how to apply for scholarships. About 300 undergraduate students, teaching assistants and academic staff members participated in the event.

## Section F

- A Panel Discussion on "Strategic Perspective of Economic and Technological Cooperation Agreement (ETCA)" was held on 23 March at the Auditorium of SLAAS. Professor Sumanasiri Liyanage, Dr Lalithasiri Gunaruan, Dr Anuruddha Padeniya, Archt Nalaka Jayaweera, Mr Lasantha Wickramasinghe were the distinguished panel. The panel was chaired by Dr M G Kularathne, President of SLAAS Section F. Over 70 participants comprising representatives of different professions, social activists and media personnel were present. As the discussion was on a timely topic, the interest among participants was high and participation was lively.

## Committee for the Popularization of Science



### Nature Diaries Program

- The initial teacher awareness program of the Nature Diaries Program was conducted in four districts; At Anuradhapura Central College, Anuradhapura, Maliyadewa Balika Maha Vidyalaya, Kurunegala, Pushpadana Balika Maha Vidyalaya, Kandy and Rahula Maha Vidyalaya, Matara, respectively on the 18, 19, 20 and 21 February, by Professors Deepal Mathew and M J S Wijeyaratne. The total number of schools participating in the program from each district will be, 14 - Anuradhapura, 24 - Kurunegala, 25 - Kandy and 6 - Matara. Prof Mathew sponsored the transportation cost of participants and accommodation/other costs for the resource persons.

### Science Day Programs

- Two Science Day Programmes (SDP) for grade 8 and 9 students, were conducted in Vauniya and Galle. The program at Vauniya, conducted in the Tamil medium, was an additional program under the sponsorship of John Keels Foundation (JKF), Sri Lanka.



- First program was successfully held on 19 February, at the host school, Saivapiragasa Tamil Maha Vidyalaya, Vauniya, for 315 students from 19 schools. The program was conducted by Mr S Perasirian, Dr A K Chandana, Mr P Sivashankar with the assistance of other resource persons, Mr Uthayakumar, Mr Krishanthy and Ms Yuga.

- Second SDP was held on 15 March at the Manavila Upananda Maha Vidyalaya, Galle and was sponsored by DSI Samson Group and the Royal Society of Chemistry, Sri Lanka. The resource persons were Drs Pahan Godakumbura, Bandunee Atapattu, A K Chandana, M N Kaumal and C L Goonasekara. 275 students from 18 schools participated in this event.



## Environment Committee

### Green Your school Programme



- More than 40 students from schools in the Gampaha District took part in the first phase of the 'Green Your School' programme held in collaboration with the Organizing Committee of the National Conference on Green Practices 2016 on 24 March. The focus of the programme was to promote awareness of the green concept amongst schools, mainly on environmental conservation, water conservation, energy/waste management, and recycling, reusing and reducing wastage. The competition focuses on planning and initiating a sustainable green project by students by participating in the workshop. The second phase of the competition will take place on 5 April 2016.

### Annual Sessions 2016

Venue: Faculty of Education, University of Colombo  
 Inauguration: BMICH Committee Room A on 5 December 2016  
 Theme Seminar: 6 December 2016  
 Scientific Sessions: 7, 8 & 9 December 2016  
 Abstracts Submission Deadline: 3 June 2016

### For Hire

Air conditioned room with seating capacity of 40 at Rs. 3,500/ hour.

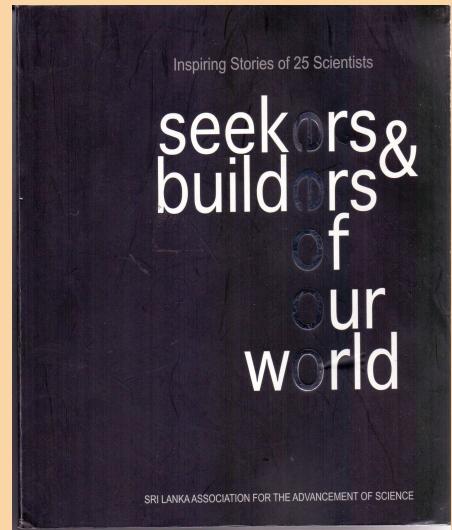
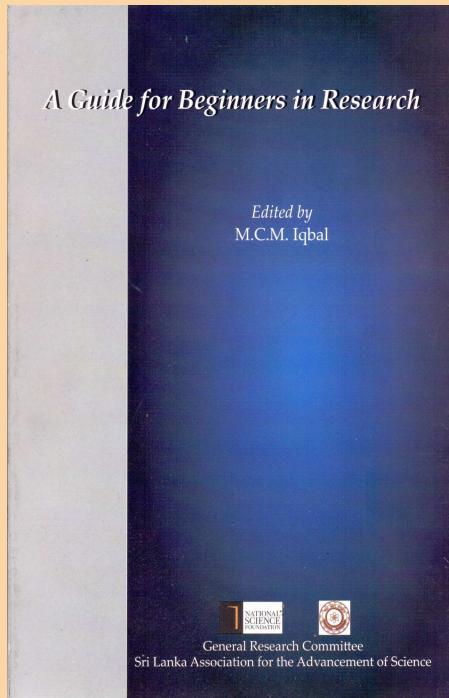
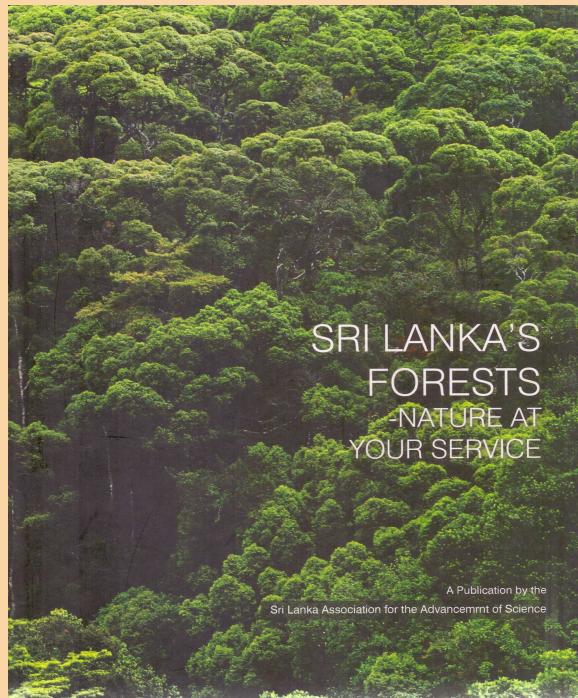
Air conditioned SLAAS auditorium with a seating capacity of 200, from 5 pm – 8 pm on all seven days of the week for Rs. 12,000/- and Rs. 2000/- per hour thereafter.

SLAAS van: For SLAAS activities, Rs. 20/- per km. Other activities, Rs. 30/- per km

### FYI

- The members can now connect to SLAAS Facebook page via [facebook.com/slaas.lk](https://facebook.com/slaas.lk) and learn about the upcoming activities and participate.
- If you would like to receive the e-Newsletter instead of the printed version kindly send your email to [hqslaas@gmail.com](mailto:hqslaas@gmail.com). This is an initiative taken by SLAAS to Think Green and reduce the print copies.
- Send your email and name to [hqslaas@gmail.com](mailto:hqslaas@gmail.com) to update you with the future programs/ activities of SLAAS.
- **Membership concession:** Renew your lapsed SLAAS membership by paying 2 years of arrears together with the Life Membership fee.

# Publications of SLAAS



Seekers & Builders of  
our World (Rs.500/-)

Sri Lanka's Forests-Nature at  
Your Service (1000/-)

Guide for Beginners in  
Research (Rs.500/-)

Available at the  
SLAAS Office

If undelivered, return to:

Sri Lanka Association for the Advancement of Science  
120/10, Wijerama Mawatha,  
Colombo 07

to