

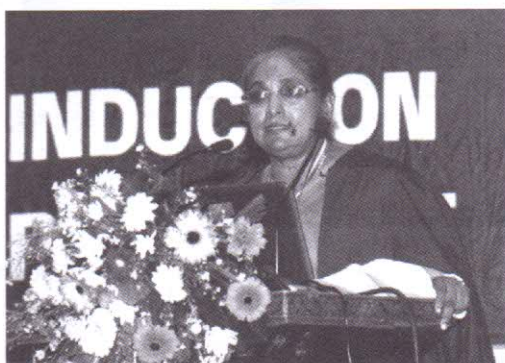
# SLAAS



Newsletter of the Sri Lanka Association for the Advancement of Science

Vol. 8 No. 1 Jan - April 2013

## Message from the General President



I would like to express my sincere gratitude to the past General Presidents, Council and the membership of the Sri Lanka Association for the Advancement of Science (SLAAS) for the confidence and trust placed in me by electing me as its General President. I am proud and honoured to be the 69<sup>th</sup> General President and the 6<sup>th</sup> female to hold this prestigious position. I am well aware of the responsibilities I have to shoulder during this year. I assure you that I will carry them all out with dedication and confidence and to the best of my ability, to uplift the capacity of SLAAS to play a major role in providing scientific guidance to the Government of Sri Lanka for the country's sustainable socioeconomic development.

SLAAS being the premier scientific organisation of Sri Lanka, we as its members have an important role to play in preparing the nation to adapt to

possible impacts of 'Climate Change' and to develop strategies for mitigation against them, if Sri Lanka is to be the 'Glory of Asia'. We have to serve as an advisory body to the Government of Sri Lanka, for science & technology development in order to achieve sustainable socioeconomic development of the country. The current trends in natural disasters and recently experienced frequent unusual weather patterns, could be the indicators of the impacts of climate change. In the 'Initial National Communication, under the United Nations Framework for Climate Change Convention (UNFCCC), Sri Lanka' (2000), it is mentioned that Sri Lanka being an island nation, will face serious impacts of climate change. Possible impacts are, a rise in sea level, high temperatures, more frequent and prolonged droughts, high intensity of rainfall, increased thunder activity and land losses due to shoreline retreat, coastal erosion, inundation, landslides, etc. They may cause significant threats to the biodiversity (forests, fish, coral reefs, sea grass beds, mangroves, sand dunes, etc.), a loss of infrastructure & human dwellings and negative impacts on human health. Different sectors such as water, agriculture, fisheries, and tourism that make a major contribution to the country's GDP may also be affected. In order to maintain sustainable socioeconomic development of the country, there is a need for adoption and adaptation of mitigating strategies, as proactive measures with respect to climate change. The major role of SLAAS is to assist the government of Sri Lanka to meet the challenges of climate change. Considering this responsibility of SLAAS, the theme proposed for its activities for 2013 is **'Adaptation & Mitigation Strategies for Climate Change Ensuring Sustainable Socioeconomic Development'**.

Proposed adaptations against Climate Change are, the sustainable management of water resources (surface, ground & rain water), the conservation and/or sustainable management of living and non-living natural resources, the development of temperature tolerant and/or adaptive agriculture & aquaculture, the conservation and management of natural biodiversity, the rehabilitation or restoration of natural ecosystems (e.g. mangroves, sand dunes, coral reefs) degraded due to anthropogenic activities and the improvement of health sector services. Mitigations proposed against climate change are, strengthening disaster management activities, use of green (renewable) energy, use of green technology for industry, transport, etc. and pollution prevention & control. Considering the above, the activities planned/proposed to be conducted by SLAAS for 2013 are, the improvement of awareness on climate change and its impacts among policy makers, the general public and within educational institutions. Also to popularise activities related to climate change adaptations and mitigation among the general public and encourage projects related to climate change adaptations and mitigation, among researchers, school children undergraduate and postgraduate students, industries and the general public.

I humbly request the past General Presidents, Council and the general membership of SLAAS to be collaborative and cooperative to reach the short-term & long-term goals of SLAAS, in order to successfully accomplish the activities planned for the current year and for the future, to help our Mother Lanka to achieve sustainable socioeconomic development, while successfully facing the challenges of climate change.

Professor P.R.T. Cumaranatunga

SLAAS "Vidya Mandiraya" 120/10, Wijerama Mawatha, Colombo 07 Tel: 2688740/2691681 Fax: (+94) 0112691681

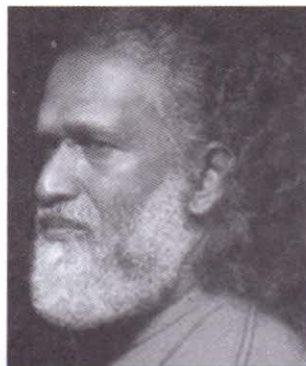
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## SLAAS Council 2013

Name	Position
Prof. P. R. T. Cumararatunga	General President
Dr. A.M. Mubarak	General President - Elect
Prof. S.W. Kotagama	Immediate Past General President
Dr. M.M.M. Najim	General Secretary
Dr. Udeni P Nawagamuwa	General Secretary
Prof. Janitha Liyanage	Treasurer
Dr. Deepthi Wickramasinghe	Asst. Treasurer
Prof. R.D. Wijesekera	Editor
Prof. Sagarika Ekanayake	Asst. Editor
Dr. Mayuri Wijesinghe	Secretary, Int. Relations
Dr. Jaanaki Gooneratne	Elected Member
Prof. Nilanthi Bandara	Elected Member
Ms. Asha Pitadeniya	Elected Member
Dr. R. D. Guneratne	Elected Member
Dr. I.M.K. Fernando	Elected Member
Prof. Carlo Fonseka	Elected Member
Prof. Chandana Jayaratne	Elected Member
Prof. Deepal Mathew	Elected Member
Mr. Raja B M Korale	Elected Member
Dr. Chrishantha Weerasinghe	President, Section A
Dr. J.M.J.K. Jayasinghe	President, Section B
Dr. B.C.L. Athapattu	President, Section C
Dr. Kamal Ranatunga	President, Section D
Dr. C.D. Tilakaratne	President, Section E1
Prof. Preethi Soysa	President, Section E2
Dr. D. D. Karunaratna	President, Section E3
Mr. Ravi Bamunusinghe	President, Section F
Prof. Hema Pathirana	Chairperson , GRC
Dr. R.M. Dharmadasa	Chairman , CPS
Prof. Jayantha Wijeyaratne	Chairman, BOT

## 68<sup>th</sup> Annual Sessions: Immediate Past General President's Report



### 'A Pathway to a New Chapter'

When taking over as President, at the induction I had to start with an apology to the general membership for 'not having invited the membership'. I wanted 'all of you to be part of SLAAS in every way'. This was my main intention during my tenure. As I step down from the Presidency, I feel that I was only able to achieve a little of my desires to make SLAAS a self-sustaining vibrant organization of its members. As I change hands it thus forces me to say 'sorry, I tried but was not very successful'. I earnestly request that the new President be supported by the membership to achieve her targets and that of SLAAS.

We were able to change something in the system, which however could not materialize at the end. Our intentions to take SLAAS to Jaffna did not happen due to an unavoidable sad situation. Yet, our attempts forged new relationships that are needed very much for the Nation's Reconciliation and Growth of Science in a single country. We must continue as agreed to finish the planned activities in Jaffna by the sections. That would mean to me the commitment of SLAAS for Science and Reconciliation. I will watch!!

The Council and the 'handful' of active members kept SLAAS alive once more. But we need to be 'seen - heard - and talked about'. We need to go out there and hope that the SLAAS members will commit themselves more to help achieve the objectives.

Thank you for all the support you provided SLAAS. It is you who can make a difference and SLAAS needs you more than ever before. I still believe it should be 'Together for a better tomorrow'.

Professor S.W. Kotagama

## Commendations in recognition of services to SLAAS in 2012

Prof. D.A. Tantrigoda

Prof. M.M. Padmalal

Dr. Ananda Mallawatantri

Dr. Seetha I Wicremasinghe

Dr. S.S.N. Perera

Prof. Manjula Vithanapathirana

Prof. Chandrani Wijeyaratne

Prof. Nadeera Karunaweera

Dr. Sagarika Kannangara

Dr. V.H.L. Rodrigo

Archd. Shereen Amendra

Dr. Priyani Hettiarachchi

Dr. Mahesh Edirisinghe

Dr. N.A.K.P.J. Seneviratne

Dr. Parakrama Weligamage



## Induction Ceremony 2013

### Induction of the 69<sup>th</sup> General President of the Sri Lanka Association for the Advancement of Science

Professor Ruchira Cumaranatunga, Senior Professor of Fisheries Biology in the Department of Fisheries & Aquaculture and the founder Dean of the Faculty of Fisheries and Marine Sciences & Technology, at the University of Ruhuna was inducted as the 69<sup>th</sup> General President of the Sri Lanka Association for the Advancement of Science at a ceremony held at the Auditorium of the Sri Lanka Foundation Institute on the evening of 17<sup>th</sup> January 2013, in the presence of a distinguished gathering. Prof. Ranjith Senarathne, Vice-Chairman of the University Grants Commission, Chairman of the National Institute for Fisheries & Nautical Engineering and the former Vice-Chancellor of the University of Ruhuna was the Chief Guest.





## Sectional Activities

### SECTION A

Section A has drawn up an activity plan for 2013 with two main objectives. The first objective focuses on enhancement of the knowledge base of Section A and other professionals. This objective will be addressed by several workshops, seminars and lectures planned under different strategies. A workshop on 'Quality use of medicines' will be conducted for the pre interns and two workshops on 'Research methodology' will be conducted for post graduate students, academics and medical & allied health science personnel. All three workshops will be funded by the State Pharmaceuticals Corporation (SPC) and will be held during the period February - July 2013.

Some of the Section A activities will be conducted at outstation institutions. The Vocational Training Authority (VTA) has agreed to fund 5-6 programmes on 'Stress, Nutrition & Life Skills' for their trainees. A majority of the workshops will be held at station centers. The first programme is scheduled on 21<sup>st</sup> February at the Colombo training center. A programme to promote 'Traditional Sri Lankan foods at food outlets' will be conducted with the collaboration of SLMA. This programme will be aimed at the working population, school children and people involved in physical exercise.

The second objective focuses on the dissemination of scientific knowledge and promotion of science enquiry among the general public. This will be addressed through health science/ nutrition related newspaper articles and lectures on 'Health education related to preschool children' aimed at parents of preschool children.

Section A will continue to publish the newsletter during the year on current topics of interest. The three issues planned for this year will address topics on rational use of medicine, dental hygiene, responsible ownership of pets and importance of indigenous medical systems. All three issues will be funded by the SPC. Several public lectures on health related topics are also planned during the year.

### SECTION B

A one day training program was conducted for 33 Advanced Level (Agriculture) students of Balangoda Ananda Maythree National School on 'Plant propagation techniques of horticultural crops' on 15<sup>th</sup> January, 2013. The objective of the program was to assist students from less-privileged schools in the region to improve their practical skills on propagation techniques of horticulture crops, utilizing human resources and physical resources of the Sabaragamuwa University. The participants practiced various conventional and advanced propagation techniques including micro-propagation.

A workshop on 'Bonsai culture' was held on 9<sup>th</sup> January, 2013 as per the long-standing request of the community at the Sabaragamuwa University of Sri Lanka. Mr. Huang Chunhe (Deputy Secretary of the Fuzhou Association of Flower and Bonsai, P.R. China) who provided his expertise free of charge was the resource person. Mr. Chunhe demonstrated the basic techniques of bonsai culture by preparing and styling more than 10 plants and trees. The number of participants was limited to 50.

Upcoming events:

- In collaboration with the Faculty of Agriculture, University of Ruhuna a seminar will be conducted on International Water Day for the benefits of school children in Kamburupitiya, Matara. The activity is sponsored by Sri Lanka Water Partnership.
- Together with the Gemidiriya Foundation at Monaragala, a seminar will be conducted for small scale maize farmers in the Monaragala area. Post harvest management aspects of maize cultivation will be addressed at this seminar. Technical guidance on improvement of productivity will also be provided.
- A workshop on 'Dairy production and processing of cow's milk', will be conducted in the Balangoda area for the benefit of small scale dairy farmers. This is a collaborative program with the Faculty of Agriculture, University of Sabaragamuwa.

### SECTION C

SLAAS Section C is currently involved in collaborative activities for the advancement of science and national development. A preliminary discussion for developing 'National guidelines on Sanitary Waste Management for schools' was held at the Ministry of Education in collaboration with the Ministry of Health, Central Environmental Authority, University of Kelaniya and Open University of Sri Lanka on 8<sup>th</sup> February 2013. The SLAAS was represented by Dr. (Ms) Bandunee C Liyanage Athapattu (President, Section C). Further discussions are to be conducted to initiate a pilot project for the implementation of guidelines at a school in the Kalutara District.

Forthcoming Collaborative Activities of Section C (The details for registration will be announced soon).



- (a) A discussion on 'Ancient buildings and technologies: Construction methodologies of Ruwanwelisaya as recorded in the chronicles' is scheduled to be held in April 2013, in collaboration with the National Building Research Organization.
- (b) A symposium on 'Impacts of climate change on the coastal zone of Sri Lanka' is scheduled to be conducted in May 2013, in collaboration with the Coast Conservation and Coastal Resource Management Department.
- (c) A research seminar on 'Climate change adaptation: A pilot study on drought impacts, perceptions, and behavior in the Mahaweli watershed' is scheduled to be held in June 2013, in collaboration with the National Building Research Organization.
- (d) A visit to the Institute of Surveying and Mapping Diyatalawa is scheduled for July 2013. This will provide an opportunity to study the facilities at the Institute and to obtain hands on experience in using modern survey instruments. For further details, please contact Mr. Janaka Bamunawala by e mail: [bamunawala@gmail.com](mailto:bamunawala@gmail.com)

#### Call for applications for the MANAMPERI (ENGINEERING) AWARD – 2012

This is awarded for the best **Engineering Undergraduate Research Project** carried out at a Faculty of Engineering in a Sri Lankan University during the **academic year 2011/2012**.

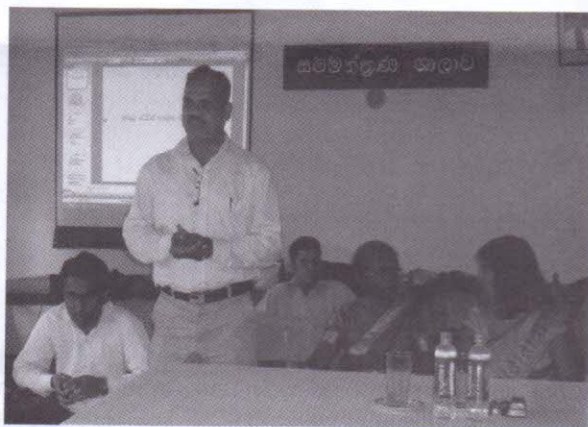
The details and application form can be obtained from the Headquarters of the Sri Lanka Association for the Advancement of Science at 120/10, Wijerama Mawatha, Colombo 7 or by request through email: [hqslaas@gmail.com](mailto:hqslaas@gmail.com)

The closing date for applications is 1<sup>st</sup> April 2013.

### SECTION D

#### Workshop on technology transfer

A workshop on 'Mushroom cultivation and its novel approaches, Pest and disease management, marketing and its nutritional and medicinal values' was conducted at the Thawalama Divisional Secretaries' office on 14<sup>th</sup> February, 2013. In addition to the above aspects, available avenues for obtaining financial support from the Bank of Ceylon to commence a project / uplift this cottage industry were also discussed. Dr. R.M. Dharmadasa, (Section D), Prof. Chandrani Wijeyaratne (Committee for Popularization of Science), Mrs. Janaki Rajapaksa (Agriculture Research Institute, Theliggawila), Mr. Harsha Tissera (University of Sri Jayewardenepura) and Miss Nadika Liyanage (Bank of Ceylon, Thawalama Branch) served as resource persons. Around 50 mushroom growers and Science and Technology officers in Thawalama participated in the program. The program was organized in collaboration with the Ministry of Technology, Research and Atomic Energy.



### SECTION E1

**Statistic Seminar Series:** The first seminar of the 'Statistics seminar series' organized to commemorate the International Year of Statistics was held on 21<sup>st</sup> January 2013 at the Industrial Statistics Laboratory (IS Lab) of the University of Colombo. It was organized in collaboration with the Department of Statistics, University of Colombo. The topic of the seminar 'Rise of data mining: Current and future applications and robust alternatives for intrusion detection' covers an area which is in demand. This seminar at which there were about 60 participants, was conducted by Dr. Thayasivam Umashanger, of the Department of Mathematics, Rowan University, USA.





Prof. Shelton Peiris of the School of Mathematics and Statistics, University of Sydney, Australia will conduct a seminar entitled 'On the analysis of short panel time series: Another look at hypothesis testing for serial correlation' on 13<sup>th</sup> March 2013.

#### Maths Quiz 2013

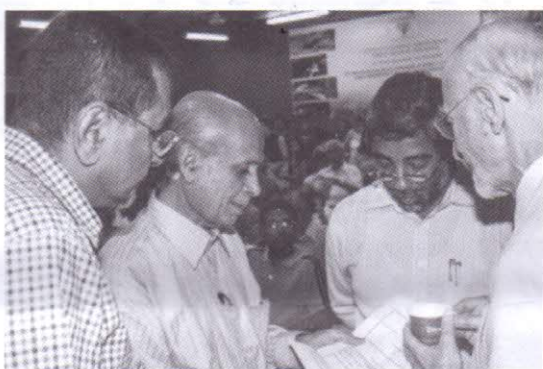
The application form for 'Maths Quiz 2013' will be published in the Vidusara newspaper in February. This event is organized in collaboration with the Department of Mathematics, University of Colombo.

### SECTION E2

Section E2 has planned to conduct a workshop on 'Introduction to animal cell culture' on 5<sup>th</sup> and 6<sup>th</sup> April 2013 at the Medical Faculty, University of Colombo. In collaboration with the Ministry of Science and Technology, we plan to contribute our expertise for a 'Mobile exhibition train' to popularize science in different areas of the country.

### SECTION F

A guest lecture entitled 'The rationality of Buddhism and the future of secularism' was delivered by Professor Nur Yalman on 9<sup>th</sup> February 2013 at the SLAAS Headquarters. In his lecture he highlighted the rationality of the Buddhist doctrine and common practices of Buddhist lay people with special focus on secular life in modern times.



Prof. Nur Yalman is a leading Turkish social anthropologist and a Faculty member at Harvard University. For his BA and PhD, he studied Social Anthropology at Cambridge University and carried out fieldwork in Sri Lanka. Although his first book, 'Under the Bo Tree', was on Sri Lankan kinship and marriage, he has since expanded his research to include religion and politics in Middle Eastern and Muslim cultures. Not only has he written about many countries of the world, he has also conducted ethnographic fieldwork in Sri Lanka, India, Iran and Turkey.

## Environment Committee

The Environment Committee plans to conduct its activities based on the SLAAS theme for 2013 and the theme of the Convention on Biodiversity which is 'Water & Biodiversity'. In this context, we hope to carry out awareness programmes on the 'National Red List' & 'Sri Lanka's palaeobiodiversity'; and a debate on biodiversity related issues for school children. In order to initiate mitigation of climate change we hope to conduct workshops on 'Simple hydroponics' and 'Biodiversity and landscaping for urban environments'. Many more activities will be carried out by the EC during the course of the year and we anticipate the participation of SLAAS members in these programmes.

## General Research Committee

**Hon. Bernard Soysa Memorial Oration** will be delivered by Professor Emeritus Ira Thabrew.

**Topic:** Experimental evaluation of the antihepatocarcinogenic potential of a Sri Lankan herbal remedy

**Date:** March 22<sup>nd</sup>, 2013

**Venu:** SLAAS Auditorium

**Time:** 5 p.m.

**All are welcome**

## **The 69<sup>th</sup> Annual Scientific Sessions**

**2<sup>nd</sup> – 6<sup>th</sup> December 2013 at the University of Ruhuna**

**Theme: 'Adaptation & Mitigation Strategies for Climate Change, Ensuring Sustainable Socioeconomic Development'**  
**Submission of Papers for Presentation at Annual Sessions 2013**

The deadline for submission of Friday, 7<sup>th</sup> June, 2013, 16.00 h will be adhered to very strictly, and documents received after the given date and time due to any reasons, including postal delays, will not be accepted.

Three hard copies of both the Abstract and the Extended Abstract must be submitted under registered post, or sent by courier or delivered in person, before the closing date, together with one copy each of the title page and duly completed Original Declaration Form. **Electronic Versions, E-Mail, Fax etc. are not acceptable in the first submission of abstracts.**

If the submission is hand delivered, please obtain a slip with a date stamp on it, at the time of handing over the documents to the SLAAS office.

All submissions should be addressed to the General Secretary, Sri Lanka Association for the Advancement of Science, 120/10, Wijerama Mawatha, Colombo 7.