

SLAAS NEWS



Newsletter of the Sri Lanka Association for the Advancement of Science

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Message from the General President

The theme for this year is "Science for Health, Wealth and long life". This theme was chosen to show that science will provide all our needs. However, science also needs funds and trained personnel to grow and bear fruit. It is sad to see that over the past two decades science has been neglected and funds have been diverted to infrastructure development. This is due to the opinion of Central Bank officials that funds given for science will not give financial returns. I would like to ask them, how did we become self-sufficient in rice? We became self-sufficient in rice due to high yielding rice varieties and improved agro techniques. This would not have been possible without the scientific input. All scientific institutes in the country are unable to perform to their true potential as insufficient funds are allocated to them. The total fund allocated to higher education in 2015 is forty one billion rupees. When we consider the Faculty of Medicine, University of Colombo it trains 1000 medical

students. One year training in the medical field is worth a million rupees by any standard. This means that the Faculty of Medicine of Colombo must be provided with one billion rupees a year to function to its full potential. Low funding will result in falling standards and promote the demand for privatization of university education. It is the need of the hour for all scientists to unite to demand proper funding for science. If we delay this, the quality of science will fall to a level that it may become impossible to bringing it up to international standards. I will end with a quotation from Jawaharlal Nehru, the science graduate from Oxford, who became the first Prime Minister of India. The members of parliament asked him why he has allocated so much funds for science when people in India are suffering due to poverty. He replied, "it is because India is a poor country that we have to spend so much for science".

- Professor C Deepal Mathew -

Induction Ceremony 2015



Prof C Deepal Mathew (Dept. of Biochemistry & Molecular Biology, Faculty of Medicine, University of Colombo) was inducted as the 71st General President of the Sri Lanka Association for the Advancement of Science on the evening of 25 January 2015 at a ceremony held at the New Building Auditorium of the Faculty of Medicine, University of Colombo. Vidyajothi Prof. Colvin Gunaratne (Faculty of Medicine, University of Colombo) was the Guest of Honour at the event.

SLAAS Council 2015

Name	Position
Prof. C Deepal Mathew	General President
Prof. Manjula Vithanapathirana	General President - Elect
Dr. A M Mubarak	Immediate Past General President
Prof. Jayantha Wijeyaratne	Chairman, BOT
Prof. M M M Najim	General Secretary
Dr. Theshini Perera	General Secretary
Dr. Nilwala Kottegoda	Treasurer
Dr. R M Dharmadasa	Asst. Treasurer
Prof. R D Wijesekera	Editor
Prof. Sagarika Ekanayake	Asst. Editor
Dr. B C L Athapattu	Secretary, Int. Relations
Dr. Gamini Wijayarathna	Elected Member
Prof. Hema Pathirana	Elected Member
Dr. Udeni Nawagamuwa	Elected Member
Prof. W L Sumathipala	Elected Member
Prof. P R T Cumaranatunga	Elected Member

Name	Position
Prof. Chandana Jayaratne	Elected Member
Archd. L T Kiringoda	Elected Member
Prof. Preethi Udagama	Elected Member
Mr. Raja B MKorale	Elected Member
Dr. Mayuri Thammitiyagoda	President, Section A
Dr. Priyan Perera	President, Section B
Eng. Harsha Ratnasooriya	President, Section C
Dr. U P K Epa	President, Section D
Dr. G H J Lanel	President, Section E1
Prof. Bimali Jayawardana	President, Section E2
Mr. S T Nandasara	President, Section E3
Dr. S Weligamage	President, Section F
Prof. J K D S Jayanetti	Chairman, GRC
Mrs. A S L E Corea	Chairperson, EC
Dr. J M J K Jayasinghe	Chairman, CPS

70th Annual Sessions: Immediate Past General President's Report



The 70th Annual Sessions of the Sri Lanka Association for the Advancement of Science was inaugurated at the BMICH on 1st December 2014 with Mr. Lalith Weeraratne, Secretary to the President as the Chief Guest and Prof. A P de Silva, Chair, Organic Chemistry, Queens University, Belfast as the Guest of Honor. Prof. Arun Kumar, Secretary, Scientific Affairs of Indian Science Congress Association (ISCA) also attended the Sessions. The Inaugural session was well attended by past General Presidents, Heads of Institutions and Universities, recipients of SLAAS Awards, school children and their parents and teachers, and media personnel. Both the Chief Guest and the Guest of Honour were very appreciative of this year's SLAAS theme "Engage Science Enrich Society", which they said is very appropriate and

timely for the country. Mr. Weeraratne recognized the value of the Science Popularization work of SLAAS and requested SLAAS to expand CPS activities to take science to the rural areas in a big way.

The General President's Address highlighted the immense contribution made by SLAAS during the past 70 years for the promotion of science in the country, citing specific contributions made by SLAAS in science policy related matters, science education and popularization of science among the younger generations. 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 said that SLAAS could do much more if the Government can restore the annual grant that was given to SLAAS in the past.



The Coffee Table Book on "Seekers and Builders of Our World: Inspiring Stories of 25 Scientists" launched at the Inauguration Ceremony was well received by all present at the ceremony. Publications of similar popular science books targeting different segments of the society should be continued as this not only helps promote science among society but will also give wider publicity to SLAAS and enhance its image in the country.

Translation of this book to Sinhala and Tamil should be explored for wider dissemination. SLAAS Awards for 2014 were presented to the winners at the Inaugural Ceremony.

The Theme Seminar was held at the Ministry of Disaster Management on 2nd December while the Technical Sessions were conducted at the Faculty of Science, University of Colombo premises from 3-5 December. These Sessions, in particular the Theme Seminar, provided an opportunity to our local scientists to keep abreast of the latest research that is taking place in the world. Prominent scientists, Prof. Ajit Yoganathan from Georgia Institute of Technology, Prof. S. Homer Vanniasinkam from Bradford University, Prof. Roshan Mayadunne from CSIRO, Victoria, Ms. Heather Joseph, Executive Director of SPARK, Dr. KA Thiagarjan from Sri Ramachandra University, Chennai

and Prof. Maitree Chaudhuri from Jawaharlal Nehru University outlined their work and showed how high quality research can not only satisfy their scientific curiosity but also help improve the quality of life of people. It also gave an opportunity for some of the local Institutions/businesses to meet with these foreign experts and discuss possible future collaborations. SLAAS is grateful to them for their presence and we do hope that this event will provide a platform for the local scientists to network with them for future collaborations.

Presidential Addresses delivered by the Sectional Presidents during the technical sessions held at the University of Colombo, Faculty of Science were well attended. A total of 139 oral and poster presentations were held in the Faculty of Science premises. Prof. Preethi Udagama, the winner of the GRC Award-2014 delivered a special oration during the scientific sessions.

This year a large number of students from the regions actively took part in the Young Inventors Exhibition, and nearly 250 exhibits were displayed during the Sessions. Prof. K R R Mahanama Dean, Faculty of Science, and Prof. S R D Rosa, Head of the Department of Physics graced the Award Ceremony as the Chief Guest and Guest of Honour respectively.

SLAAS should continue to expand this activity in the future and also look into the possibility of giving cash awards to encourage and appreciate grassroot innovations among students in the country.

The NSF, who launched a web-based database of SLAAS proceedings of the last 24 years developed by them during the Annual Sessions, has done an excellent service to the scientific community by providing online access with powerful search tools to all past research work of our members. SLAAS should assist NSF in this endeavor by providing SLAAS proceedings immediately after the sessions in order that the database is current and up to date.

Several popular lectures by eminent speakers on a range of subjects - Open Access, Science of Gardening, Technology in Ancient Monuments and, Science in Sports - catering to the general public were organized during the Scientific sessions. The SLAAS Annual Dinner held at Hotel Mount Berjaya in Mount Lavinia on 4th December was well attended.

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



SLAAS extends its gratitude to the Vice Chancellor, University of Colombo and Dean, Faculty of Science for granting permission to hold the Technical Sessions at the University of Colombo and the academic staff of the Faculty of Science for their wholehearted support. Chairman of the Annual Sessions Organizing Committee Prof. Chandana Jayaratne and his team should be congratulated for meticulously organizing the events, including the School Inventor's Exhibition. Thanks are also due to Office Bearers, Council Members, Presidents and members of various committees, and the general membership of SLAAS for their dedication and commitment in carrying out the activities effectively during the year. The SLAAS office staff should be thanked for their hard work and wholehearted support given at all times.

Dr. A.M. Mubarak

SLAAS GRC Research Award - 2014



Prof. Preethi Vidya Udagama was the recipient of the SLAAS GRC Research Award 2014 for high quality research carried out within Sri Lanka. Prof. Udagama's research base is the Department of Zoology, University of Colombo from where she has conducted research, for the past 20 years. The thrust of her research work is based on the immuno and molecular epidemiology of vivax malaria in Sri Lanka, a journey which commenced in 1985 with her doctoral research at the Faculty of Medicine of the University of Colombo. Her MSc and PhD research training received at the University of Colombo was further strengthened by a postdoctoral stint at the University of New Brunswick in Canada under a NSERC research fellowship. The multifaceted nature of her research interests flit from vivax malaria to parasites of vertebrates of Sri Lanka to screening of natural products

for immuno modulatory activity to reproductive immunology to development of immuno and molecular diagnostics to eco-immunotoxicology to oral & oropharyngeal cancer. Prof. Udagama delivered her 'Award lecture' entitled **Reflections from my research journey at the University of Colombo** on 4th December 2014 at the Faculty of Science, University of Colombo.

Sectional Activities

Section A

- An **antirabies immunization programme** was conducted in collaboration with the Colombo Municipal Council (CMC) on 31 January 2015 followed by a **dogs and cats sterilization programme** on 14 February. These programmes were conducted in order to increase the population of vaccinated dogs and cats & reduce the population density of stray animals in the CMC area. Veterinary surgeons of the Colombo municipality participated in the programme.
- A workshop on the theme **Designing of randomized clinical trials** was conducted on 26 February 2015 at the Bandaranayake Memorial Ayurvedic Research Institute. Topics discussed were, Clinical study designing and randomization, sampling methods and critical aspects of randomized controlled trial design. Resource persons were Drs Carukshi Arambepola (Faculty of Medicine, Colombo), Sampatha Gunawardena (University of Jayewardenepura) and Kamal Perera (Institute of Indigenous Medicine, Rajagiriya).
- Lectures on **Oral health & bullying in schools** were conducted at Polhengoda Maha Vidyalaya, Colombo on 27 February 2015. Drs Vasantha Sivaguru (Dental Institute) and Dr Priyanjali de Zoysa (Faculty of Medicine, Colombo) contributed as resource person. Toothpaste was distributed among the school children at the end of the programme.



Section B



- A training programme was conducted for 30 Advanced Level students of the technology stream of Siri Saman Vidyalaya, Deraniyagala on 30 January 2015 at the Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Belihuloya. The programme included sessions on **animal production technology, tissue culture, weather station activities, hydroponics, testing quality of milk, yoghurt production, and sausage production.**
- The second such programme was conducted for 48 bio-system technology stream students of R/ Sumana Balika Vidyalaya, Ratnapura on 11 February 2015 at the same venue, in the areas of **milk quality testing, insect identification, soil testing, artificial insemination, yoghurt production and sausage production.** Mr T D Dissanayake and G D Yasawathie provided technical assistance. The resource persons for both programme were Dr Sanjeewa Jayaweera and Ms H G P Herath (Dept. of Livestock Production, SUSL).

Section C

- A public lecture on **Energy secure buildings** by Dr Tushitha Sugathapala (Former Director General, Sustainable Energy Authority) was held on 20 March 2015 at the SLAAS Auditorium.
- **Call for applications for the MANAMPERI (ENGINEERING) AWARD - 2015**

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 2014/2015.**

The details and applications can be obtained from the Headquarters of the SLAAS at 120/10, Wijerama Mawatha, Colombo 7 or on request through email: hqslaas@gmail.com. The closing date for applications: 30 June 2015.

Membership drive

Engineers, architects and surveyors are welcome to join in the activities of Section C / SLAAS. Membership applications are available at the SLAAS Headquarters or with President, Section C. Please contact through email: hqslaas@gmail.com

Upcoming events:

A public lecture on **Marine pollution in Sri Lanka** by Dr Mahesh W Jayaweera (Department of Civil Engineering, University of Moratuwa) on 6 April 2015 at the SLAAS Auditorium at 5 pm.

Section D

- In a programme to mark World Wetland Day, Dr Deepthi Wickramasinghe delivered a lecture on **Ecosystem services of urban wetland** on 2 February 2015 at the University of Colombo.
- Drs U P K Epa and Rangika Bandara conducted a seminar for students of G/ Karunarathna Vidyalaya, Mahabage on **Conservation of biodiversity & Management of forest ecosystems of Sri Lanka** respectively on 19 February 2015. Around 150 students and teachers participated in this activity which was organized in collaboration with the AIESEC society North Colombo and the AIESEC members of the International University.



Section E1



A guest lecture on **Malaysia Airlines Flight MH370: A modeling and numerical simulation study of airplane crash and water landing** was conducted on 12 February 2015 at the Faculty of Graduate Studies, University of Sri Jayewardenepura by Prof. Goong Chen (Department of Mathematics and Institute for Quantum Science and Engineering, Texas A & M University, USA).

Section E2

- G C E A/L and O/L Chemistry textbooks, first aid kits, Periodic Tables and posters were donated to students of Kadawatha Central College on 29 January 2015. Profs Bimali Jayawardena and Kapila Seneviratne (University of Kelaniya) addressed the gathering.
- A popular lecture entitled **Relating protein dynamics to catalysis** was delivered by Dr Thelma Abeysinghe on 23 March, 2015 at the Department of Chemistry, University of Kelaniya. This activity was organized by the Chemical Society, University of Kelaniya in collaboration with Section E2/SLAAS.



Section F

- A discussion on **Life of happiness** was conducted on 8 March 2015 (international Women's Day) at Irin Thilakarathne Elderly Home, Kirillawala. The resource person was Mr Wimal Wijesinghe (Retired Principal, Siyane National College of Education, Veyangoda).
- **Promotion of SLAAS, an Academic writing workshop and an Experiences sharing session** were held at University of Kelaniya on 11 March 2015. The target group included young academic staff members in the areas of Social Sciences and Management. The resource person was Prof. Jeevika Weerahewa (University of Peradeniya).

General Research Committee

The Bernard Soyza Memorial Lecture conducted once in two years by the GRC is scheduled to be held in August this year. This also marks the 100th birth anniversary of Hon. Bernard Soyza, a former Minister of Science & Technology, who had very close associations with SLAAS. The lecture will be delivered by Prof Narada Warnasuriya. Date of lecture will be notified in due course.

Committee for the Popularization of Science



- As a continuation to the **medicinal plant garden (MPG) programme**, the steering committee appointed by CPS to evaluate the progress of the established MPGs visited four schools in the Kandy District. It was decided that these schools should be supported by providing scientific knowledge and necessary resources to maintain the MPGs.
- The first in the series of **Science Day Programmes (SDPs)** for the year was conducted on 6 March 2015 at Eheliyagoda Central College for more than 300 students from 21 schools. As in previous years, the programme consisted of lectures, interactive sessions, science quizzes and poster competitions on current issues. The resource persons were Profs E Wikramanayaka and C P D W Mathew & Drs J M J K Jayasinghe, Pahan Godakumbura, A K Chandana, Muditha Senarath-Yapa, Prasanna Galhena, Chamari Hettiarachchi, Bandunee C L Athapattu, Nalindra Silva, and M N Kaumal.

Prof. J N O Fernando Passes Away



Prof Oleap Fernando passed away on 2 March 2015 at the age of 71 years. He was a former General President of the Sri Lanka Association for the Advancement of Science (2001).

He held many other prestigious positions including that of Dean/Science at the Open University of Sri Lanka, President of the Institute of Chemistry Ceylon and Hon. Rector of the College of Chemical Sciences of the Institute of Chemistry Ceylon. He was also a fellow of the National Academy of the Sciences of Sri Lanka.

Update on New SLAAS Building

Plans have been drawn up and sent to the CMC for approval. Work is due to commence in April 2015 and is expected to be completed by June 2015.

Annual Sessions 2015

Date : 30 November - 04 December 2015
Venue : Faculty of Applied Sciences,
University of Sri Jayewardenepura
Annual Dinner : On Golden Pond, Taj Samudra Hotel

For Hire

Air conditioned room with seating capacity of 40 at Rs. 5000/- for the first two hours and Rs. 2000/- per hour thereafter.

Air conditioned SLAAS auditorium with a seating capacity of 200, from 5 pm - 8 pm on all seven days of the week for Rs. 15,000/-.

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

Membership News

Dr. W M T B Wanninayake (Section D) was appointed as Chairman, Ocean University of Sri Lanka
Prof. A R Ariyaratne (Section B) was appointed as Director/Secretary of CARP.