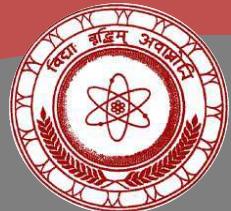


# SLAAS NEWS



Newsletter of the Sri Lanka Association for the Advancement of Science

(www.slaas.lk)

Vol. 11 No. 3 Sept. - Dec. 2016

## 72<sup>nd</sup> Annual Sessions

05 December 2016

### Ceremonial Inauguration

Date: Monday 5 December 2016 (From 1:30 pm to 4:30 pm)

Venue: BMICH (Committee Room A)

### Scientific Sessions

Date: 7 to 9 December 2016

Venue: Faculty of Education, University of Colombo

## School Inventors' Competition & Exhibition

Date: 7 to 8 December 2016

Venue: Faculty of Education, University of Colombo

## Night Sky Observation Camp

Date: 8 December 2016

Venue: University Playground, University of Colombo

**Theme: "Interdisciplinarity in research, education and practice  
for advancing science and society"**

**06 December 2016**

**ICTAD Auditorium , "Sausiripaya" Wijerama Mawatha, Colombo 07.**

**"Interdisciplinary Research across Life Sciences and Social Sciences: The Whys, Hows, Highs and Lows of Collaboration"**

Prof. Felicity Callard, Reader in Social Science for Medical Humanities, Faculty of Social Sciences and

Health; Principal Investigator and Director of Hubbub, the first Inter disciplinary residency of 'The Hub at Welcome Collection", Durham University, UK

**"Advancing Science and Society through Interdisciplinarity: The Role of Systems Science"** Prof. Saroj Jayasinghe, Professor of Medicine, Faculty of Medicine, University of Colombo

**"Interdisciplinary Journeys: A Few Illustrations from History of Ideas"**

Prof. Moti Nissani, Professor Emeritus, Department of Biology, Wayne State University, USA

**"Researcher: Establish or Perish! – An Imperative for Advancing our Society"**

Prof. Ajith de Alwis, Project Director, Coordinating Secretariat for Science, Technology & Innovations (COSTI);  
Professor, Chemical Process Engineering, University of Moratuwa

**"The Need for Interdisciplinary Approaches in Health Research"**

Prof. Kalinga Tudor Silva, Professor Emeritus, University of Peradeniya; Director, International Centre for Ethnic Studies, Kandy

**"From Cross-disciplinarity to Interdisciplinarity:Some Experiences from Trying to Bridge the Chasm between Computing and Two Other Disciplines"**

Dr. Ruwan Weerasinghe, Dean, Informatics Institute of Technology, Colombo 6; Senior Lecturer, University of Colombo School of Computing

**"Interdisciplinary Procedures: Histories, Anxieties and Profits – Lessons from English Studies"**

Prof. Neloufer de Mel, Senior Professor and Head, Department of English, University of Colombo

### Early bird registration

**Members 2500/- Non Members, 3000/- (on or before 23 November 2016)**

### Late registration

**Members 3000/- Non Members, 3500/- (after 23 November 2016)**

Students (Undergraduate/Post Graduate)

Maximum 50 seats available (First come first served basis)

### Early bird registration

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### Late registration

**Members 3000/- Non Members, 3500/- (After 23 November 2016)**

### To register please contact:

Administrative Officer, Sri Lanka Association for the  
Advancement of Science, "Vidya Mandiraya" Vidya  
Mawatha, Wijerama Mawatha, Colombo 07.

Phone: (011) 2688740/2691681

Visit: [www.slaas.lk](http://www.slaas.lk) for latest updates and  
programme details.

# Sectional Activities

## Section A

- **A lecture discussion** on “Pharmacovigilance for traditional medicine” was conducted for undergraduate students at IIM, Borella on 21 July 2016. The resource persons were Prof Shalini Sri Ranganathan and Dr Kamal Perera. This event was organized by Dr Kamal Perera.
- **Two articles** were received for the newsletter, one from Dr Piyusha Atapattu titled “War against the new terror-Diabetes!” and the other from Dr V T Rajendiran titled “Preventing stroke”.
- **A lecture discussion** on 'Nutritional value of foods', held at the Bemulla Agrarian Services Center for Agriculture instructors of the Gampaha District on 22 August 2016. Activity included two lecture/ discussions; 'Glycaemic index of foods' by Prof. Sagarika Ekanayake and 'Health effects of coconut' by Dr Sureka Chackrewarthy; 50-60 instructors participated and had a positive feedback on the activity. There was a request for another programme of this activity for developmental officers at Gampaha.
- **A radio programme** on SLBC was conducted through a live programme on *Suwa Setha* on the theme “Arthritis and management” on 1 September 2016. This was conducted by Dr Kamal Perera.
- **An article** on “Nutritional and medicinal aspects of coconut oil” was published in Divaina on 10 September 2016. The article was written by Dr Sureka Chackrewarthy.



- **A lecture discussion** on “Milk and egg production” and on “Nutritional value of foods” was conducted at the Awissawella, Hathagoda Buddhist Primary school for the general public on 14 September 2016. The resource persons were Drs Tharanga Thoradeniya, Sureka Chackrewarthy and Mayuri Thammitiyagoda. This was organized by Drs Sureka Chackrewarthy and Mayuri Thammitiyagodage.
- **A workshop** on “Awareness on rabies control” was conducted for the veterinary surgeons attached to the Department of Animal Production and Health on 28 September 2016. Drs Kanthi Nanayakkare, Tikiri Wijethilake, Panduka Gunewardene and Prof Sunil Chandra were the resource persons. Around 140 participated in this workshop, organized by Dr Mayuri Thammitiyagodage.

- **A half - day seminar** was held at the District General Hospital with participation of around 80 nursing officers on 30 September 2016. Dr Srilal Liyanarachchi, spoke about “Salt and health”, Dr. Budhika Mahesh, delivered a talk on “Lifestyle modifications” while Dr. V T Rajendran’s presentation was on “Management of stroke”. Drs Suresh Shanmuganathan and Shreenika Welange organized this workshop.

## Section B

- **A one - day awareness workshop** on “Innovations, inventions and patenting process” was successfully held on 2 September 2016 at the SLAAS Auditorium. Mr Shantha Yapa, Chief Operating Officer of Epics Research and Innovations (Pvt.) Ltd, Ms Dilini Rathnayake and Ms Nissansala Abhayaruwana from Patents and Industrial Designs Division, National Intellectual Property Office of Sri Lanka, participated as resource persons. The program included sessions on “Innovations, inventions and introduction to patenting process”, “Patent information and data search”, “National patent system and international filling” and “Preparing for patent drafting”. Forty eight participants including undergraduate and postgraduate students, researchers from various private and public sector organizations and members of the academic staff participated.
- **A one day round table discussion** to address the “Role of agrochemicals and fertilizers: Their benefits, risks and social impacts” organized with the Science and Technology Advisory Committee (STAC) was held successfully on 15 September 2016. A panel of senior personnel proficient on the subject from relevant government institutes including Department of Agriculture participated in the discussion. Dr. Buddhika Aruggoda and committee members actively participated in organizing this event.



- The second round table discussion on “Role of agrochemicals and fertilizers: Their benefits, risks and social impacts”** was held on 31 October 2016. The focus of the discussion was on agrochemicals. The third round table discussion will be held in mid of November 2016 with the focus on health and social im-

pacts and participants from all the relevant sectors will be invited. A report with outcomes of all three discussions will be submitted to the policy decision makers.

#### **Upcoming event:**

- The second one day awareness workshop on “Innovations, inventions and patenting process”** is

scheduled to be held on 6 November 2016 from 9:00 am at University of Kelaniya. Mr. Shantha Yapa, Chief Operating Officer of Epics Research and Innovations (Pvt.) Ltd, Ms. Dilini Rathnayake and Ms. Nissansala Abhayaruan from Patents and Industrial Designs Division, National Intellectual Property Office of Sri Lanka, will be the resource persons.

## **Section D**



organized for B.M.S (Bachelor of Ayurveda Medical and Surgery) students on “Biotechnological applications for Ayurvedic medicine” on 2 September 2016. Ms. Chameera Rajapaksha organized this event and 40 participants attended the seminar.

- Dr. U P K Epa published an article on “ප්‍රමාදේ වෙශයන ආගත්තක විශේෂ: අපගේ අවධානය ප්‍රමාණවත්ද?” in the *Vidusara* science magazine on 28 September 2016.
- A mini symposium** on “Dengue Research in Sri Lanka: Current & Emerging Trends” was held at the SLAAS auditorium on October 28, 2016 from 9:00 am to 1:00 pm. A brief overview of the symposium which showcased the SLAAS theme for 2016 on interdisciplinarity presented by the SLAAS General President, Prof Manjula Vithanapathirana, was followed by five presentations on dengue research from resource persons drawn from diverse fields. Professor Neelika Malavige, Director, Center for Dengue Research, University of Sri Jayawardenepura presented her work on “Rupatadine for the treatment of acute dengue infection: a phase 2 randomized controlled trial” while Chartered Architect Upendra Randeniya of *Design Cues*, Nawala talked on “Sustainable urban development as environmental control for dengue”. Dr Sanjeewa Perera of the Department of mathematics, Faculty of Science, University of Colombo presented his collaborative research work on “Mathematical modeling approach to capture dengue severity”. “Use of psychological models in dengue health education” was the title on a prospective area for research delivered by Dr Gayani Gamage of the Department of Psychology & Counseling, Faculty of Health Sciences, The Open University of Sri Lanka. The final presentation by Dr Nayana Gunathilaka of the Department of Parasitology, Faculty of Medicine, University of Kelaniya summarized the results of their mega project headed by Prof. W Abeyewickreme on “Entomological & environmental operational model for dengue vector control in Sri Lanka”. A lively panel discussion followed. About 60 participants attended the mini symposium, organized by Dr Chamari Hettiarachchi and Prof. Preethi Udagama. This event was sponsored by Analytical Instruments (Pvt.) Ltd. and Avon Pharmo Chem (Pvt.) Ltd.



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## **Section E1**



Prof. Masafumi Harada conducting the lecture

- A guest lecture on “Photoreduction synthesis of metal nanoparticles: Synthesis and structural characterization”** was conducted on 25 July 2016 at the Department of Physics, University of Kalaniya. Professor Masafumi Harada, (Nara Women’s University, Japan) conducted the lecture. Around 50 participants including academics and final year university students participated. The program was coordinated on behalf of Section E1 by Dr K M D C Jayathilaka jointly with Institute of Physics Sri Lanka.



- A newspaper article on the requirement of a discussion in society on the subject "Mathematics" was published in *Rivira* on 24 July 2016. It was written in Sinhala by Dr. Naleen Ganegoda. (Available online: <http://www.rivira.lk/epaper/sunday/2016/07/24/files/assets/basic-html/index.html#72>)
- A workshop on "Microcontroller programming and embedded system design" was conducted by Dr. Indika Wanniarachchi, Department of Physics, University of Sri Jayewardenepura on 13 September 2016 at the Department of Physics, University of Sri Jayewardenepura. Around 50 university students participated in the work-

## Section E2



- A workshop on "Process safety management of laboratory hazardous & chemicals" was held on 23 August 2016 at the Faculty of Science, University of Kelaniya with the participation of about 60 teaching assistants, research assistants and postgraduate students. The resource person was Dr Jeewantha Premaratne and the event was coordinated by Dr Shashikala Rajapakse.

• The Inter-University Quiz for Chemical Sciences and Poster Competition - 2016 organized by Section E2 in collaboration with the Chemical Society of the Department of Chemistry, University of Kelaniya was held on 8 October 2016 at the Faculty of Science, University of Kelaniya. More than 150 participants representing nine universities took part in the quiz and the poster competition. Dr Russell de Silva was the Quiz Master while Prof. Sujatha Hewage, Prof W M C Sameera, Dr Positha Premarathne, Dr S Skandaraja, Dr A R Kumarasinghe and Mr R Watawala served as the judges.

The Quiz competition was won by the University of Sri

Jayewardenepura, while University of Colombo secured the second place with University of Kelaniya being placed third. The poster competition was held under three themes; Environmental Chemistry, Chemical Technology and Chemical Safety & Health. Under the theme of Environmental Chemistry, Uva-Wellassa University, University of Colombo and University of Ruhuna won first, second and third places, respectively. The first, second and third places were won by



the University of Colombo, University of Ruhuna and the Rajarata University of Sri Lanka, respectively, Under the theme of Chemical Technology . Under the theme of Chemical Safety and Health, the first three places were secured by the Uva-Wellassa University, South Eastern University of Sri Lanka and the University of Ruhuna. The event was organized by Drs Aashani Thilakeratne and Shashikala Rajapakse.

## Section E3

- A very successful public lecture on "Introduction to cloud computing" by

Mr Lakmal Warusawithana, Director, Cloud Architecture, WSO2, was conducted on 20 September at 10:00 am at the University of Sri Jayewardenepura. About 100 University students attended the lecture.

- **SLAAS Abstract submission goes online:** This year Section E3 took the responsibility for implementing the Microsoft Conference Management tool (MS-CMT) for abstract submission for the SLAAS Annual Sessions 2016. The CMT system greatly increased the submissions and enabled reviewers to review papers online.

## Section F

- A guest lecture on "Impact of water pollution on human health" was held



on 23 June 2016 at the University of Kelaniya. The resource person was Dr Jeewantha Premaratne. The audience of about 100 included academics and students from various disciplines.

This lecture was a collaborative activity between Sections E2 and F. As an outcome of this event, the key stake holders (public and private) for the formulation of a National policy for enhancing efficient use of water were indentified.

- A guest lecture on “How to write a research article” was successfully held on 30 June 2016 with the collaboration of the Research Centre for Social Sciences, University of Kelaniya as part of a one day Junior research training programme for final year students. Dr Hema Gunathilaka was the resource person and over 200 students participated.



The school was directed on how to recycle and reuse waste. Garbage bins were donated by the Arpico Super Center, Colombo 02.

- A workshop on “Degradable polymers; environmental pollution control for a greener Sri Lanka” was held at the Department of Chemistry, University of Sri Jayewardenepura on 29 September, 2016 in collaboration with the Department of Chemistry, University of Sri Jayewardenepura. The aim of this workshop was to increase the awareness of the necessity of polymer degradation and to educate the current trends in degradable polymers. About 150 undergraduates and post-graduate students as well as industrial representatives participated in the event. The workshop was conducted by reputed university professors and lecturers. The main sponsor of the event was POLYTRAD Industries.



## Environment Committee

- An e-waste collection program was carried out successfully at the Faculty of Science, University of Colombo on 31 August 2016. A wide range of e-waste was collected and handed over to the Ceylon Waste Management (Pvt) Ltd. for recycling. This programme enabled to generate attention and awareness regarding e-waste, and how to manage e-waste among the university community.



- A garbage disposal awareness programme was carried out on 7 September 2016 at the Dudley Senanayake Maha Vidyalaya, Colombo 05. A seminar was conducted to educate school children regarding the importance of proper waste management and its advantages. Four colour coded garbage bins were donated to the school to enable them to properly segregate wet, plastic, paper and other degradable waste.



- The following **Newspaper articles** were published.  
“Timber identification: Its importance to the Sri Lankan timber industry” in “The Nation Sunday” Print Edition on 26 June 2016 by C K Muthumala, Manager –Research & Training of the Timber Cooperation.  
“Noise Pollution” in the Rivira Sunday e-Paper on 21 August 2016 by Channa Kalansooriya Senior Scientist, Industrial Technology Institute (ITI).  
• A coastal cleanup event was conducted on 17 September 2016 at the Kadolkele mangrove area in Negombo in collaboration with the Aquatic Student Association of the University of Sri Jayewardenepura and the Marine Environmental Protection Authority in line with the International Coastal Cleanup Day.

The purpose of the cleanup was to engage people around the area to remove trash and debris from beaches and waterways, to identify the sources of the litter, and to change their behaviors that cause pollution. Approximately 50 volunteers participated in the event.

In parallel with the National plantation month, a tree plantation project was held during the month of October in collaboration with the State Timber Corporation (STC). 1000 timber trees were planted in Rathnapura, Galle and Kurunagala in mid-October, and in Polonnaruwa and Anuradhapura by end of October. Trees will be tended by the STC and the progress will be informed to the environmental committee after one year.

## General Research Committee

- A half day workshop on “Manuscript writing in Social Sciences and Humanities” was conducted by Dr Hema Goonatilake on 23 June 2016 at the SLASS auditorium. This workshop was organized with the objective of enhancing manuscript writing skills in Social Sciences and Humanities by broadening their understanding. There were participants from non Social Sciences background including senior academics and researchers. It was conducted free of charge for undergraduates while a nominal fee of LKR 500.00 was charged from other participants.
- A seminar to promote research culture in different disciplines was conducted at the University of Kelaniya on the 30 June 2016 from 11:00 am to 4:00 pm. This was the first of a series of seminars planned to be conducted in several universities. There were about 420 participants, mainly final year undergraduates. Dr M G Kularatne, President Section F, SLAAS and the Director of the Research Services Centre of the Faculty of Social Sciences, University of Kelaniya organized the event.
- Two workshops on “Research Methodology, Publication and Ethics” were conducted on 21 and 22 September 2016 in Eastern and South Eastern Universities, respectively.



There were 40 participants at the Eastern University while a larger audience of over 150 participated from South Eastern University. Prof G C N Rajendra, Prof Eugene Wikramanayake, and Prof S S Iqbal participated as resource persons.

## Science and Technology Advisory Committee (STAC)

- A series of panel discussions were held on the broad theme “Chemical use in agriculture: Scientific basis and social and economic consequences”. The first of this series was held on 15 September 2016 on the topic “Role of Fertilizer: Current Status, Benefits and Risk”. Three speakers, Dr Priyantha Weerasinghe, Additional Director, Horticultural Crop Research and Development Institute, Department of Agriculture, Mr D Sirisena, Additional Director, Rice Research & Development Institute, Department of Agriculture and Prof. Buddhi Marambe, Professor in Crop Science, University of Peradeniya set the background to the discussion. Their presentation topics ,respectively, were “Current practices of fertilizer, their misuse and related adverse impacts on farming community in Sri Lanka”, “Judicious fertilizer use without compromising the productivity” and “Existing regulatory framework on use, distribution, quality control and importation of fertilizers”. Participants comprising of senior scientists and administrators from research and development institutes, SLAAS members and representatives of the farming community actively participated in the discussion. STAC appreciates the contribution of Section B President, Dr Buddhika Aruggoda and Dr Nilwala Kotegoda in organising this activity.

## Ethics Committee

- The Ethics Committee complained to the Ministry of Mass Media, Ministry of Health & the Vice Chancellor, University of Colombo, regarding a regular advertisement appearing in news papers advertising a permanent cure for diabetes mellitus.
- The annual Kottegaoda Memorial lecture will be held on 04 November 2016. The orator was Prof. Sunethra Athukorala, Emeritus Professor, University of Colombo. Her oration was titled “Unethical advertising in the food industry”.

# Committee for the Popularization of Science

## Establishment of Medicinal Plant Gardens (MPG):



- The third program on MPG was conducted at Thakshila College, Horana on 14 July 2016, and coordinated by Drs Pahan Godakumbura and Manuja Hansini, and Ms. Chameera Rajapakse. Dr Godakumbura and the Bandaranaike Memorial Ayurvedic Research Institute (BMARI), sponsored the program.
- The fourth MPG was established at the Open University of Sri Lanka, self-funded and with the generous supply of plants by BMARI, on 14 September 2016. The resource persons were Professors Chandrani Wijerathne & Eugene Wickramanayake, and Drs Bandunee Athapattu and Pahan Godakumbura.

## Science Day Programs (SDP):

• Science Day Programs for grade 9 and 10 students were conducted in Ratnapura, Jaffna, Ampara and Monaragala. All four SDPs were sponsored by John Keels Foundation, Sri Lanka.



• SDP in Ratnapura was held on the 28 July 2016 at the Ehaliyagoda Central Collage. The resource persons were Drs Pahan Godakumbura, Prasanna Galhena, M N Kaumal, Charitha Goonasekara, Chamari Hettiarachchi, Mr P Sivashankar, Mr Rushan Abeygunawardana and Ms Sharmala Corea.

• SDP in Jaffna was held at Vembadi Girls' High School on the 30 September 2016. Drs A K Chandana, K Kandeepan, Shivatharsiny Rasalingam, G Kajapathy and Mr P Shivasankar were the resource persons for the program.



• The other two SDPs were conducted at D. S. Senanayake Maha Vidyalaya, Ampara and Mahanama College, Monaragala on 13 and 14 October 2016, respectively. Drs Pahan Godakumbura, Prasanna Galhena, M N Kaumal, Charitha Goonasekara, A K Chandana, Mr Dilum Perera and Mr Trishan Perera were the resource persons for both programs.



## Astronomy program (AP):

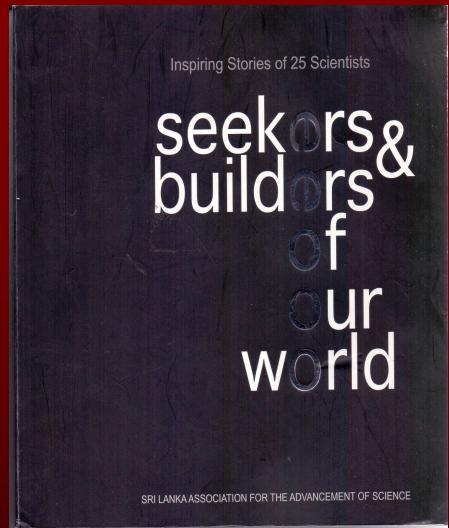
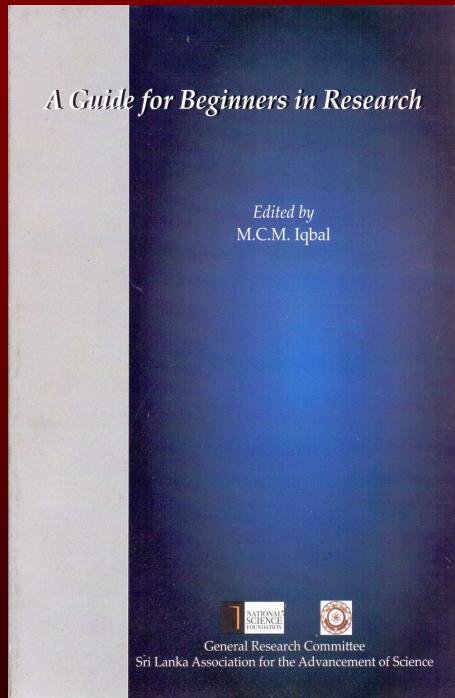
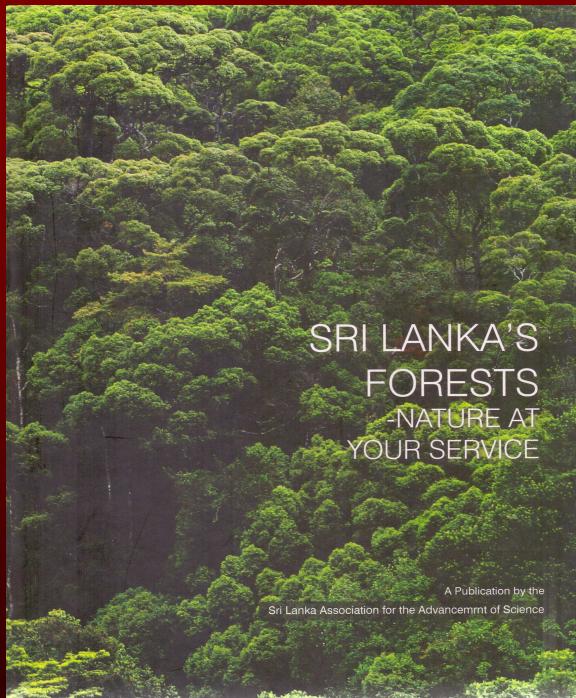


- An astronomy camp was conducted at Jayanthi Navodya M M Vidyalaya, Nikaweratiya, on 28 July 2016. Prof Chandana Jayaratne and his team at the University of Colombo Astronomy Society sponsored and conducted the program.
- Another AP was organized in collaboration with the Zonal Educational Department of Ratnapura for ~ 400 students on 14 October 2016. This camp was jointly funded by John Keels Foundation, Sri Lanka and the Ministry of Education, Sri Lanka.



A workshop on "Effective writing of research proposals" was conducted at the University of Sri Jayewardenepura (USJ) on the 2 September 2016. The resource person was Prof Preethi Udagama. This event was organized by Dr Pahan Godakumbura and the USJ Society of Industrial Scholars.

# Publications of SLAAS



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