



# Sri Lanka Association for the Advancement of Science

## 80<sup>th</sup> Annual Session

*“Harnessing the Power of Sciences for Societal Transformation”*

**From 08<sup>th</sup> – 13<sup>th</sup> December 2024**

EVENT	DATE	TIME	VENUE
<b>Ceremonial Inauguration and Award Ceremony</b>	Sunday - 08 <sup>th</sup>	2.00 pm - 5.00 pm	Jasmin Hall, BMICH Colombo 07
<b>Theme Seminar</b>	Monday - 09 <sup>th</sup>	8.00 am - 4.00 pm	Crystal Ballroom, Taj Samudra, Colombo
<b>Conference Dinner</b>	Monday - 09 <sup>th</sup>	7.30 pm	Anthurium, Taj Samudra, Colombo
<b>Sectional Business Meetings</b>	Tuesday - 10 <sup>th</sup>	10.15 am - 11.15 am	Faculty of Science University of Colombo  Business Meetings <i>A NZSR [04]      B R 111 [17]</i> <i>C PLR 2 [16]      D PLS 2 [05]</i> <i>E1 IFS [16]      E2 NCLT [08]</i> <i>E3 SLT B [18]      F SLT C [18]</i>  Presidential Addresses <i>CLT [07]</i>  Poster Sessions <i>ILC [10]</i>  GRC Mini Symposium <i>ILC [10]</i>  Special Council <i>New Faculty Board Room [12]</i>  All Island School Inventors Competition/Exhibition <i>Dept. of Physics [16]</i>  IDTDS Mini Symposium <i>ILC [10]</i>  Award Ceremony - School Awardees <i>ILC [10]</i>
<b>Scientific Sessions</b>	Tuesday - 10 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Presidential Addresses</b>	Tuesday - 10 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Poster Session</b>	Tuesday - 10 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Scientific Sessions</b>	Wednesday - 11 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Presidential Addresses</b>	Wednesday - 11 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Poster Session</b>	Wednesday - 11 <sup>th</sup>	8.00 am - 5.00 pm	
<b>GRC Mini Symposium</b>	Wednesday - 11 <sup>th</sup>	9.00 pm - 12.00 pm	
<b>Special Council Meeting</b>	Wednesday - 11 <sup>th</sup>	5.00 pm - 7.00 pm	
<b>Astronomical Night Sky Observation Camp</b>	Wednesday - 11 <sup>th</sup>	7.00 pm - 10.00 pm	
<b>All Island School Inventors Competition/Exhibition (Conducted by SLAAS in collaboration with Sri Lanka Inventors Commission)</b>	Wednesday - 11 <sup>th</sup> & Thursday - 12 <sup>th</sup>	8.00 am - 5.00 pm	
<b>Award Ceremony – School Awardees</b>	Thursday - 12 <sup>th</sup>	9.00 am - 12.00 pm	
<b>Departmental Events</b>	Thursday - 12 <sup>th</sup>	1.00 am - 5.00 pm	
<b>IDTDS Mini Symposium</b>	Thursday - 12 <sup>th</sup>	1.00 am - 5.00 pm	
<b>Annual General Meeting (SLAAS members only)</b>	Friday - 13 <sup>th</sup>	10.00 am - 12.30 pm	SLAAS Headquarters Vidya Mawatha, Colombo7

# ***80<sup>th</sup> Annual Session of Sri Lanka Association for the Advancement of Science***

***"Harnessing the Power of Sciences for Societal Transformation"***

## **Ceremonial Inauguration**

*(Invitees Only)*

**Sunday, December 08, 2024 at 2.00 pm**

at the

**Jasmin Hall**

*BMICH, Colombo 07*

### ***Chief Guest***

**Professor Malik Ranasinghe**

Emeritus Professor at the University of Moratuwa,  
Vice President of the National Academy of Sciences, Sri Lanka,  
Former Vice Chancellor of the University of Moratuwa.

### ***Guest of Honour***

**Mr. Ranil Vitarana**

Chief Innovation Officer and Chief Technology Officer of MAS Holdings

2.00 pm	Arrival of Members and Guests
2.20 pm	Arrival of the Chief Guest & Guest of Honour
2.30 pm	Introduction of Members of the Council
2.40 pm	Commencement of the Ceremonial Procession
2.45 pm	Lighting of the Traditional Oil Lamp
2.55 pm	National Anthem
3.00 pm	Welcome Address <i>Professor Ramanee D Wijesekera, General President / SLAAS</i>
3.05 pm	Felicitations from Sister Associations
3.15 pm	Address by the Guest of Honour <i>Mr. Ranil Vitarana</i> <i>Chief Innovation Officer and Chief Technology Officer of MAS Holdings</i>
3.35 pm	Address by the Chief Guest <i>Professor Malik Ranasinghe</i> <i>Emeritus Professor at the University of Moratuwa,</i> <i>Vice President of the National Academy of Sciences, Sri Lanka,</i> <i>Former Vice Chancellor of the University of Moratuwa</i>
3.55 pm	Address by the General President, <i>Professor Ramanee D Wijesekera</i>
4.35 pm	Presentation of Awards
5.20 pm	Vote of Thanks <i>Professor Udeni P Nawagamuwa, General President-Elect, SLAAS</i>
5.25 pm	Refreshments

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## **Theme Seminar**

**Monday, December 09, 2024 from 8.00 am – 4.00 pm**

at the

**Crystal Ballroom**

*Taj Samudra, Colombo*

8.00 am	Registration
8.30 am	Lighting of the Traditional Oil Lamp
8.45 am	National Anthem
8.50 am	Introductory Remarks & Welcome Address <i>Professor Ramanee D Wijesekera, General President Sri Lanka Association for the Advancement of Science</i>
9.00 am	Persistent Organic Chemicals in the Waste Stream: An Obstacle to the Circular Economy? <i>Professor Stuart Harrad</i>
9.40 am	Leveraging Science for Societal Transformation: Challenges of the Anthropocene - The Case of Plastics in Society <i>Dr. Janaka de Silva</i>
10.20 am	Refreshments
10.40 am	Knowledge Co-production and Biodiversity Financing for a Transformational Economy <i>Dr. Beria Leimona</i>
11.20 am	Panel Discussion <i>Moderator: Professor Mahesh Jayaweera</i>
11.45 am	Lunch
12.45 pm	The Huge Implications of the Digital Transformation and Generative AI for Science, Society, and Education <i>Professor Richard M. Hartshorn</i>
1.25 pm	Opportunities and Challenges of Robotics for Societal Transformation <i>Professor Lakmal Seneviratne</i>
2.05 pm	Panel Discussion <i>Moderator: Dr. Ruwan Weerasinghe</i>
2.30 pm	Closing Remarks <i>Dr. R D Guneratne</i>
2.45 pm	Vote of Thanks <i>Dr. Darshana Lakmal Weerawarne</i>
2.55 pm	Refreshments

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**GRC Mini -Symposium on ‘Catalyzing Research for a Resilient Sri Lanka: Challenges  
and Opportunities’**

**Wednesday, December 11<sup>th</sup>, 2024 from 9.00 am – 12.00 pm**

at the

**Faculty of Science  
University of Colombo**

Sri Lanka is at a critical juncture where research and innovation are pivotal in driving the country's economy with a focus on sustainable development. The proposed half-day mini-symposium, will serve as a platform to bring together the policy makers, industry leaders, and academic institutions, top researchers in Sri Lanka, alongside funding agencies, to discuss and strategize on the future of research for the nation's development.

**Keynote address**

***Prof. Ajith Alwis***

Professor of Chemical and Process Engineering at University of Moratuwa and  
Chief Innovation Officer, National Innovation Agency

**Moderator**

***Dr. Shanika Jayasekara***

CEO, National Research Council

**Event Coordinators**

***Prof. Shiromi Karunaratne and Dr. Thelma Abeysinghe***

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**All Island School Inventors Competition/Exhibition**

**Conducted by SLAAS  
in collaboration with  
Sri Lanka Inventors Commission**

**Wednesday, December 11<sup>th</sup>, and Thursday, December 12<sup>th</sup>, 2024  
from 8.00 am – 5.00 pm**

at the  
**Department of Physics  
Faculty of Science  
University of Colombo**

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**Astronomical Night Sky Observation Camp**

**Organized by  
the Astronomical Society, University of Colombo**

**Wednesday, December 11<sup>th</sup>, 2024  
from 7.00 pm - 10.00 pm**

at the  
**University Playground.**

# ***80<sup>th</sup> Annual Session of Sri Lanka Association for the Advancement of Science***

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## **Special Sessions on Interdisciplinary and Transdisciplinary Studies**

**Thursday, 12<sup>th</sup> December 2024 from 1.00 pm - 5.00 pm**

at the

**Faculty of Science  
University of Colombo**

### **Programme**

12.30 pm - 1.00 pm	Registration of presenters and participants
1.00 pm - 1.05 pm	Welcome address and opening remarks <i>Prof. Sumedha Jayanetti,</i> <i>Chairperson, SLAAS Committee on IDTDS</i>
1.05 pm - 1.15 pm	Introductory Speech <i>Prof. Ranjith Senaratne,</i> <i>Immediate Past General President, SLAAS</i>
1.15 pm - 1.45 pm	Keynote speech by <i>Prof. Gamini Rajapakse</i> "Innovative Pathways from Minerals to Market: Interdisciplinary Approaches in High-Impact Nanomaterials and Sustainable Technologies" Senior Professor, Department of Chemistry, Faculty of Science, University of Peradeniya, Sri Lanka
1.45 pm - 2.15 pm	Keynote speech by <i>Dr. David G. Owen</i> "Getting to 360 solutions – a transdisciplinary studies approach" Associate Professor and MSc Business Management Programme Leader, Plymouth Business School, Plymouth University, UK
2.15 pm - 2.30 pm	IDTDS 107: Improving employability of secondary school graduates through learner-centred transdisciplinary andragogy: A collaborative intervention <a href="#">T.A.R. Weerasinghe*</a> and <a href="#">M.V. Vithanapathirana</a>
2.30 pm - 2.45 pm	IDTDS 129: Empowering early childhood education: A cross-sectional study of the Cargills early childhood education programme through public-private partnership <a href="#">L.R. Page Ranabahu*</a> , <a href="#">M.A.A.S. Dias</a> , <a href="#">S.K. Arangallage</a> , <a href="#">K.D.D.L.F. Gunasekara</a> , and <a href="#">H.M.N.S. Harankahawa</a>
2.45 pm - 3.00 pm	IDTDS 135: Balancing act: salinity intrusion dynamics in coastal erosion management <a href="#">H.M.D.S. Wijerathne*</a> , <a href="#">R.S.M. Samarasekara</a> , <a href="#">Niranji Satanarachchi</a> , <a href="#">Meththika Vithanage</a> , and <a href="#">H.M.A. Lakmal</a>
3.00 pm - 3.30 pm	Refreshments

3.30 pm - 3.45 pm	IDTDS 137: An intervention for the integration of introductory AI technologies to enhance academic and professional capacities: A case study of stakeholder experiences in a transdisciplinary context <a href="#">Samadara Amarasinghe*</a> , <a href="#">Manjula Vithanapathirana</a> , and <a href="#">Manjula Savey</a>
3.45 pm - 4.00 pm	IDTDS 82: Formulation of <i>Hygrophila auriculata</i> ( <i>Neeramulliya</i> ) based herbal tea with anti-urolithiatic activity (prevention of kidney stone formation) <a href="#">S.R.G.R. Madushan*</a> , <a href="#">H.R.G. Jayawardhana</a> , <a href="#">T.C. Kananke</a> , <a href="#">R.M.K.T. Rathnayaka</a> , <a href="#">R.M.U.S.K. Rathnayaka</a> , <a href="#">M.N. Wickramaratne</a> , <a href="#">G.P.L. Supulchandra</a> , and <a href="#">M.G.A.N. Perera</a>
4.00 pm - 4.15 pm	IDTDS 142: Genetic affiliations of Ceylonese Combtail ( <i>Belontia signata</i> ) populations in three Sri Lankan river basins <a href="#">N.A. Liyanarachchi</a> , <a href="#">T.S.P. Fernando</a> , and <a href="#">D.K. Weerakoon*</a>
4.15 pm - 4.30 pm	IDTDS 160: A transdisciplinary innovation to introduce a model for children's drama for Sri Lanka: An action research <a href="#">H.M.R.C. Hathlahawatta*</a>
4.30 pm - 4.40 pm	Issuance of certificates to the presenting authors
4.40 pm - 4.50 pm	Concluding remarks and Vote of thanks <i>Dr. Pasan Bandara</i> , <i>Secretary, SLAAS Committee on IDTDS</i>

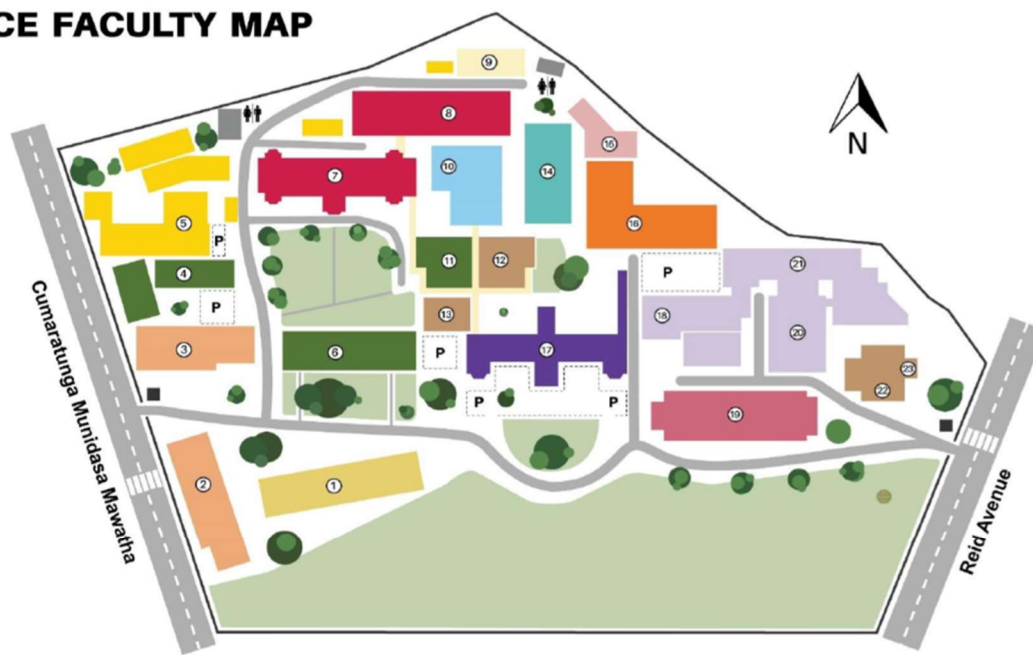
**80<sup>th</sup> Annual Session of Sri Lanka Association for the  
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**Main Session Layout**

	<b>Monday December 09</b>	<b>Tuesday, December 10</b>	<b>Wednesday, December 11</b>	<b>Thursday, December 12</b>	
<b>Session I</b> 08.00-09.15	<b>Theme Seminar</b>	<ul style="list-style-type: none"> <li>• Oral presentations</li> <li>• Poster presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentations</li> <li>• School inventors' exhibition</li> <li>• Poster presentation</li> </ul>	GRC Mini symposium  <ul style="list-style-type: none"> <li>• Award Ceremony – School Awardees</li> <li>• School inventors' exhibition</li> </ul>	
09.15-10.15		<ul style="list-style-type: none"> <li>• Presidential address</li> </ul>	<ul style="list-style-type: none"> <li>• Presidential address</li> </ul>		
10.15-11.15		<ul style="list-style-type: none"> <li>• Business meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Presidential address</li> </ul>		
11.15-11.30					
<b>Session II</b> 11.30-12.30		<ul style="list-style-type: none"> <li>• Presidential address</li> <li>• Poster presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Presidential address</li> <li>• Poster presentation</li> <li>• School inventors' exhibition</li> </ul>		
12.30-01.15					
<b>Session III</b> 01.15-03.15		<ul style="list-style-type: none"> <li>• Presidential address</li> <li>• Poster presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Presidential address</li> <li>• Poster presentation</li> <li>• School inventors' exhibition</li> </ul>		<ul style="list-style-type: none"> <li>• IDTDS symposium</li> <li>• School inventors' exhibition</li> </ul>
03.15-03.30					
<b>Session IV</b> 03.30-05.00		<ul style="list-style-type: none"> <li>• Oral presentations</li> <li>• Poster presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentations</li> <li>• Poster presentation</li> <li>• School inventors' exhibition</li> </ul>		
7.30		<ul style="list-style-type: none"> <li>• Conference Dinner</li> </ul>			<ul style="list-style-type: none"> <li>• Astronomical Night Sky Observation Camp</li> </ul>



## SCIENCE FACULTY MAP



- |   |                                   |   |
|---|-----------------------------------|---|
| 1. Student Service Centre (Upcoming)                    | 9. ITSC / Tissue Culture Building | 16. Department of Physics (PLR I / PLR II / PLR III / NPLT) |
| 2. Department of Nuclear Science                        | 10. Information & Learning Centre | 17. Department of Mathematics (C22)                         |
| 3. Department of Statistics New Building                | 11. Natural History Museum        | 18. Department of Statistics                                |
| 4. Climate Change Research Laboratory                   | 12. Dean's Office                 | 19. New Arts Theatre  |
| 5. Department of Plant Sciences (NBLT)                  | 13. Dean's Office                 | 20. Professor V K Samaranayake Memorial Auditorium          |
| 6. Department of Zoology and Environment Sciences (ZSR) | 14. King George's (KG) Hall       | 21. University of Colombo School of Computing (UCSC)        |
| 7. Chemistry Lecture Theatre (NLT / PLT / CLT)          | 15. New IS & MF Laboratory        | 22. Marshal's Office  |
| 8. Department of Chemistry                              |                                   | 23. Medical Centre  |

## SLAAS Venues

### SLAAS office

Department of Physics lobby (Ground floor) 16

### Session venues and Business meetings

Section A - Dept. of Zoology NZSR (First floor) 04  
 Section B - Dept. of Mathematics R 111 (Ground floor) 17  
 Section C - Dept. of Physics PLR 2 (First floor) 16  
 Section D - Dept. of Plant Science PLS 2 (Ground floor) 05  
 Section E1 - Dept. of Physics IFS (Second floor) 16  
 Section E2 - Dept. of Chemistry NCLT (Ground floor) 08  
 Section E3 - Dept. of Statistics SLT B (Third floor) 18  
 Section F - Dept. of Statistics SLT C (Third floor) 18

### Poster Presentations

Information & Learning Centre (ILC) (Ground floor) 10

### Presidential address

Department of Chemistry - CLT (First floor) 07

### Mini Symposium - GRC

Information & Learning Centre (ILC) 10

### IDTDS Sessions

Information & Learning Centre (ILC) (Auditorium) 10

### School inventors' exhibition

Department of Physics 16

### Rest room for SLAAS guests

Department of Physics (Ground floor) 16

### Parallel activities

Chemical magic show - Department of Chemistry 08  
 Holography - astronomy - Department of Physics 16  
 Museum visit - Department of Zoology 11  
 Herbarium visit - Department Plant Science 05  
 Visit to Nuclear Science Department - 02

### Council Meeting

New Faculty Board Room - 12

### Refreshments

Information & Learning Centre (ILC) (Ground floor)