

# R4TLI

## **Research for Transport and Logistics Industry Proceedings of the 6<sup>th</sup> International Conference**

Organized by  
Sri Lanka Society of Transport and Logistics



Sri Lanka Society of  
**Transport and Logistics**

Colombo, Sri Lanka  
*16<sup>th</sup> October, 2021*



## Message from the President

The Sri Lanka Society for Transport & Logistics (SLSTL: [www.slstl.lk](http://www.slstl.lk)) was set up in 2014 to create a professional environment to discuss the issues in Transport and Logistics sector and to recommend sustainable solutions to improve the sector. Furthermore, it aims to promote research and development in collaboration with the industries to develop Sri Lanka as a true logistics hub. On 15th September 2015, the STSTL was admitted to the Eastern Asia Society for Transport Studies (EASTS: [www.easts.info](http://www.easts.info)) as its 19th domestic member. Domestic societies in all ASEAN countries are members of EASTS which is widely held as the most prestigious research society for transport & logistics in Asia. Thus, Sri Lanka now belongs to one of the most well established and renown transport research societies in Asia.



Research for Transport & Logistics Industry (R4TLI: [www.slstl.lk/r4tli-2020](http://www.slstl.lk/r4tli-2020)) is an initiative that endeavours to promote research and development in the transport & logistics sector in Sri Lanka and the region that would help diagnose its current issues and identify potential improvements based on scientific evidence. This annual research conference intends to build a platform where the needs of the industry can be discussed and scientific processes developed for rectification of issues can be showcased through research presentations. The 6<sup>th</sup> annual conference - R4TLI 2021 - was decided to held for the 2<sup>nd</sup> time fully online due to COVID19 pandemic.

I warmly welcome all participants, presenters, speakers, reviewers to witness the R4TLI 2021..

**T Sivakumar**

***B.Sc. (Hons) Eng., M.Eng. (AIT), D.Eng. (YNU), MCILT, AMIE (SL)***

## Message from the Conference Chair

The Sri Lanka Society for Transport & Logistics (SLSTL: [www.slstl.lk](http://www.slstl.lk)) was set up in 2014 to create a professional environment to discuss the issues in the transport and logistics sector and to recommend sustainable solutions to improve the sector. Furthermore, it aims to promote research and development in collaboration with the industries to develop Sri Lanka as a true logistics hub. On September 15th, 2015, the STSTL was admitted to the Eastern Asia Society for Transport Studies (EASTS) (visit [www.easts.info](http://www.easts.info)) as its 19<sup>th</sup> domestic member. Domestic societies in all ASEAN countries are members of EASTS, which is widely held as the most prestigious research society for transport and logistics in Asia. As a result, Sri Lanka is now a member of one of Asia's most well-established and renowned transport research societies.



Research for Transport & Logistics Industry (R4TLI) ([www.slstl.lk/r4tli-2021](http://www.slstl.lk/r4tli-2021)) is an initiative that endeavors to promote research and development in the transport and logistics sector in Sri Lanka and the region that would help to diagnose current issues faced by the industries in the region and to identify potential improvements to increase the efficiency and effectiveness of transport and logistics operations based on scientific evidence. This annual research conference intends to create a platform for both academia and industry to come together to discuss issues in the sector and develop scientific processes and approaches to rectify them. SLSTL has successfully organized the conference annually since 2016. Even during the COVID-19 pandemic, we were able to conduct the conference successfully. Last year, even though it was delivered online, more than 500 participants attended, including international delegates. Since the COVID-19 pandemic continued, we decided to hold the conference (R4TLI 2021) online on October 16th, 2021, to ensure that the series of R4TLI conferences begun in 2016 continues uninterrupted. Over 30 research papers were received, and 18 different research papers were selected to be presented at the R4TLI2021.

On behalf of the conference organizing committee, I warmly welcome all participants, presenters, and speakers to witness our exciting program. along with the speech of chief guest Dr. Priyantha D. C. Wijayatunga, Chief of Energy Sector, Group, Asian Development Bank; a keynote speech by Dr. K Ramamurthy, Ex-Chief Mechanical Engineer, Karnataka State Road Transport Corporation (KSRTC), India; and discussion by Prof Amal S Kumara from the University of Moratuwa. I thank all those who worked hard to organize the conference on this scale.

**Prof. (Dr.) Pradeepa Jayaratne**  
*Conference Chair - R4TLI 2021*

## Message from the Founding President of SLSTL

The Sri Lanka Society of Logistics and Transport (SLSTL) celebrated the publication of its journal – the Journal of South Asian Logistics and Transport (JSALT) in March this year. We have now published two issues <https://jsalt.sljol.info/> and hope that it will improve the profile of SLSTL and position its members in the international plane of research and development in transport and logistics.

Our annual conference the Research for Transport & Logistics Industry (R4TLI) has become a regular annual event that showcases the research efforts of researchers and students in transport & logistics both in Sri Lanka and the region. Even though COVID-19 has posed severe constraints on holding conferences, I am delighted to note that the 6th conference has been successfully held online.

The scope of the R4TLI which brings experienced researchers as well as fresh undergraduates is a welcome mix. The high standard of review undertaken by the Editorial Committee is seen to have safeguarded the quality of research work presented at previous R4TLI.



**Amal S Kumarage**

***B.Sc. Hons Eng. (Moratuwa), Ph.D. (Calgary), FCILT, MIE(SL), CEng***

***Founding President - SLSTL***

**CONFERENCE ON RESEARCH FOR  
TRANSPORT AND LOGISTICS INDUSTRY  
2021**

**6<sup>TH</sup> INTERNATIONAL CONFERENCE ORGANIZED BY  
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