

# **ORAL PRESENTATIONS**

**27<sup>th</sup> September 2024**

# **BUILT ENVIRONMENT AND SPATIAL SCIENCES**

Technical Session I: Architecture

Venue: Main Auditorium, Southern Campus, KDU

<b>Chairperson</b>	<b>Assistant Prof. Jeeva Wijesundara</b> School of Architecture, Sri Lanka Institute of Information Technology
0830 – 0835 Hrs	Introduction of the Chair
0835 – 0840 Hrs	Preliminary Remarks by the Chair
0840 – 0850 Hrs	<b>The Impact of the Built Environment on Psychological Well-being of Battle Casualties in Sri Lankan Rehabilitation Centers</b> BAKU Bangama, KDHJ Premarathna
0850 – 0900 Hrs	<b>Potential to Utilize Digital Twin Technology in Conserving Cultural Heritage within the Built Environment of Sri Lanka</b> KSKNJ Kudasinghe, WDBJ Jeewananda
0900 – 0910 Hrs	<b>Application of Ecotourism Guidelines and Standards in Sri Lankan Resorts with Special Reference to Bolgoda Area</b> M Jayasooriya, WAPS Kumara and KNK Pathirana
0910 – 0920 Hrs	<b>Developing Pre-Cast Partition Wall Panels Using Mud- Concrete (MC) Technology</b> HBGK Nayanjith, FR Arooz
0920 – 0940 Hrs	Question and Answer session
0940 – 0950 Hrs	Summing up by the Session Chair
0950 – 1020 Hrs	Refreshments

# **BUILT ENVIRONMENT AND SPATIAL SCIENCES**

Technical Session II: Quantity Surveying

Venue: Main Auditorium, Southern Campus, KDU

<b>Chairperson</b>	<b>Prof. Anuradha Waidyasekara</b> Faculty of Architecture, Department of Building Economics, University of Moratuwa, Sri Lanka
1020 – 1025 Hrs	Introduction of the Chair
1025 – 1030 Hrs	Preliminary Remarks by the Chair
1030 – 1040 Hrs	<b>Investigating The Challenges of Software Adoption Among Quantity Surveyors in Sri Lanka</b> NVOD Imarshana, WN Kawmudi
1040 – 1050 Hrs	<b>The Impact of Time, Cost, Quality Parameters on Value Engineering Application in Project Management Practices, Referencing to Post-Contract Stage</b> DVH Dodangoda, WN Kawmudi
1050 – 1100 Hrs	<b>Preparedness of Construction Stakeholders for the Adoption of E-Tendering in the Sri Lankan Building Construction Industry for the Public Sector</b> MPY Silva, AARK Amarathunga and AH Lakmal
1100 – 1110 Hrs	<b>A Study on the Applicability of Bim to Reduce Building Services Maintenance Costs of the Hotel Building Projects in Sri Lanka</b> KAPBK Arachchi, IGWR Jayaweera, and AARK Amarathunga
1110 – 1130 Hrs	Question and Answer session
1130 – 1140 Hrs	Summing up by the Session Chair
1140 – 1330 Hrs	Lunch

# BUILT ENVIRONMENT AND SPATIAL SCIENCES

Technical Session III: Spatial Sciences

Venue: Main Auditorium, Southern Campus, KDU

<b>Chairperson</b>	<b>Dr. T.N. Wickramaarachchi</b> Senior Lecturer, Faculty of Engineering, University of Ruhuna
1330 – 1335 Hrs	Introduction of the Chair
1335 – 1340 Hrs	Preliminary Remarks by the Chair
1340 – 1350 Hrs	<b>Assessment of the Accuracy and Precision of Deviations in Control Points through the Three-Point Resection Method</b> PSHP Kumara, DS Munasinghe, R Jenan
1350 – 1400 Hrs	<b>Investigating the Accuracy of Object Detection in UAV Model Utilizing Neural Networks for Military Applications in Sri Lanka</b> HAGVD Perera, KA Dinusha, KP Manuranga, and RKK Dilrukshi
1400 – 1410 Hrs	<b>An Application of Terrestrial Laser Scanning for the Inventory of Archaeological Monuments for the Use of Architectural Aspects</b> KNNB Kalugama, KP Manuranga, HD Asoka, and AR Rupasinghe
1410 – 1420 Hrs	<b>The Analysis of Existing Land Ownership in Urban Development with Special Reference to Meda-Minuwangoda Grama Niladhari Division</b> KAIS Kuruppu, CP Ranawaka, TGUP Perera, and AC Gunathilaka
1420 – 1440 Hrs	Question and Answer session

1440 – 1450 Hrs

Summing up by the Session Chair

1450 – 1520 Hrs

Refreshments

# **BUILT ENVIRONMENT AND SPATIAL SCIENCES**

Technical Session IV: Industrial Quality Management

Venue: Main Auditorium, Southern Campus, KDU

<b>Chairperson</b>	<b>Prof. S. T. W. S. Yapa</b> Professor, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura
1520 – 1525 Hrs	Introduction of the Chair
1525 – 1530 Hrs	Preliminary Remarks by the Chair
1530 – 1540 Hrs	<b>Ensuring the Quality of AI Integrated Smart Contracts in Sri Lankan Construction Industry</b> DMNA Gunawardhana, SH Rodrigo, SD Jayasooriya and DB Karunarathna
1540 – 1550 Hrs	<b>Boosting Sri Lanka’s Tea Exports: Applying Lean Six Sigma for Enhanced Quality</b> MNS Rajapakshe
1550 – 1600 Hrs	<b>Factors Contributing to Delays in Building Permit Issuance in the Colombo Municipal Council Area: An Administrative Perspective</b> WMRT Wijesuriya, NB Sugathadasa, and WANM Weerasinghe
1600 – 1610 Hrs	<b>Lean Six Sigma Practices in Small and Medium Enterprises: A Bibliometric Analysis</b> WKD Ramese, SD Jayasooriya, AH Lakmal, MLNH Premarathna and MNR Wijetunga
1610 – 1630 Hrs	Question and Answer session
1630 – 1640 Hrs	Summing up by the Session Chair
1640 – 1710 Hrs	Refreshments

# **POSTER PRESENTATIONS**

**27<sup>th</sup> September 2024**

## **BUILT ENVIRONMENT AND SPATIAL SCIENCES**

### **Impact of Modern Technology on the Quality of Sustainable Construction in the Sri Lankan Construction Industry**

PA Deemantha, SD Jayasooriya, AH Lakmal, and AGKMWS Atapattu

### **Applicability of Effective Claim Management Framework Under FIDIC 2017 Red Book in Sri Lankan Construction Industry**

WB Kalpani, KPSPK Bandara, NANM Weerasinghe, and WDBJ Jeewananda

### **Interior Design Learners Memory Retention Enhancement through Virtual Reality**

DW Kasun Gayantha, T Chandarasekara, MNR Wijethunge, UI Perera, HDS Asoka, and SD Jayasooriya

### **AI-Driven Innovations in Cost Estimation and Quality Control in Sri Lankan Construction Projects**

LADCN Wijesinghe, SD Jayasooriya, and MKM Nilupulee

### **Analysis of Green Space Recovery of Post Forest Fire: A Case Study in Laggala, Wilgamuwa, Sri Lanka**

DAPS Wasalathilaka, NV Wikramathilaka, CP Ranawaka, and TATP Bandara

### **Investigating the Reliability of Smartphone LiDAR for Outer Boundary Surveys**

AMP Athukorala, WMIU Adikaram, KNNB Kalugama, and KP Manuranga

### **Harnessing Spatial Intelligence in adopting net zero energy building concept to the residential buildings in SL**

GKE Perera, KSPK Bandara, NANM Weerasinghe, and WDBJ Jeewananda



**The Impact of Architecture on the Healing Process of Pediatrics: A Case Study of Lady Ridgeway Hospital in Sri Lanka**

MN Ranagala, KDHJ Premarathna

**Local Climate Zone Mapping Using World Urban Database and Access Portal Tools: A Study of Colombo City**

VGRG Gunasekara, DS Munasinghe

**The Role of Professional Surveyors in the Emerging Trend of Building Information Modelling (BIM)**

WKH Kalpitha, KGES Dias, KP Manuranga, and JMO Jayamanne

**Analysis of Urban Green Spaces and Potential Expansion to Kandy city, Sri Lanka**

TATP Bandara, NV Wickramathilaka, CD Iddagoda, and DAPS Wasalathilaka

**Land Use Change and Its Impact on Urban Flooding: A Case Study on Kandy City Sudden Flood in December 2022**

WMIU Adikaram, OJ Perera, and KP Manuranga

**Spatial Modeling of Two-Dimensional Road Traffic Noise in Urban Zones: Case Study in Ratnapura Municipal Council**

DMAPDissanayaka, NV Wickramathilaka, CP Ranawaka, HHKT Bandulasoma , and IR Shehal

**An Analysis of Harbor Basin Bathymetry Using Satellite Imagery: A Case Study in Kirinda Fishery Harbor, Sri Lanka**

SR Wijewardhane, GP Gunasinghe, KP Manuranga, and H Waligodapitiya

**Examining the Impact of Elevation Mask on Atmospheric Delay Errors in GNSS Static Observations**

PAMT Rupathung, JMO Jayamanne, and PAT Hansamal

**Quality Assurance in Designing based Architectural Education and its Holistic Assessment in Sri Lanka**

SMM Sanjune, H Munasinghe, and FR Arooz