

PROGRAMME

2nd December 2022



“Independence and Interdependence of
SUSTAINABLE SPACES”

FARU 2022

15th International Research Conference

2 December 2022
University of Moratuwa,
Sri Lanka & Online



ORGANIZED BY

FARU FACULTY OF ARCHITECTURE
RESEARCH UNIT
UNIVERSITY OF MORATUWA, SRI LANKA

9-00 – 10.30am – 2nd December 2022.

Inauguration – Auditorium, TCP

9.00am Registration

9.15- 9.30am Lighting of the lamp
National Anthem

Welcome Address by
Prof. Yasangika Sandanayake,
Dean, Faculty of Architecture
Conference Chair, FARU 2022

Theme Address by
Dr. Sumanthri Samarawickrama
Director- FARU, Conference Co-Chair

9.30- 10.15am **Keynote Address**

Dr. Ajanta Sen

IIT Bombay, Industrial Design Centre, IIT Visiting staff
International Director of Solar Project, NUS, Singapore
Advisor, Indian Architect and Builder (IA&B), India.

10.30 - 11.00am **Tea**

2nd December 2022

11.00–12.30pm

Session 01 – Auditorium, TCP

Making places for people

Session Chair : Prof. Indrika Rajapaksha

Session Co-chair : Dr. Chethika Abenayake

- PA_39 Evaluation of the Impact of Multiple Factors, Elements and Neighbourhood Patterns on the Spread of Dengue and Covid-19: Special Reference to Colombo 15.
Ranasinghe R. A. D. M. & Ranasinghe T. K. G. P.

- PA_67 Visual Landscape Characteristics and Tourists' Satisfaction: A Study with Reference to Nuwara-Eliya, Sri Lanka
H.H.S.P. Sewwandi

- PA_72 Architectural Attributes for Social Sustainability A Framework for Analysing Housing Projects with Special Reference to the Maldives
Mohamed, A.N. & Coorey, S.B.A

- PA_80 Spatial Configuration and Neighbourhood Characteristics' Impact on Activities in Informal Spaces: A Case Study Of Badulupitiya Informal Settlements in Badulla
Perera, M.K.S. & Coorey S.B.A

- PA_94 Impacts of Covid-19 on Individuals' Behaviour & Perception in Public Space: A Case Study of Colombo, Sri Lanka
Udeni Nelum Kumari, Amila Buddhika Jayasinghe & P.K.S Mahanama

12.30– 1.30pm LUNCH

11.00–12.30pm

Session 02 – Mini Auditorium, TCP

Green products, buildings and cities

Session Chair : Dr. Shaleeni Coorey

Session Co-chair : Dr. Nadeeka Jayaweera

- PA_41 Applicability of Circular Economy for the Electronic Waste Minimization in Sri Lankan Office Buildings
Mafra. M.T.F, Gowsiga. M, Asmone. A. S & Dilogini R. A. A

- PA_63 Applicability of Green Certification System for Domestic Construction Projects in Sri Lanka
Perera. B. L. S. H., Ranathunga. R. A. A. S, Madhuwanthi. L. P. T. P. & Coomasaru. P.

- PA_52 Integration of Formal and Informal Sector in Waste Management System in Sri Lankan Cities, Special Reference to Homagama
Perera L.H.R. & Ranasinghe T.K.G.P

- PA_92 Prospect of Establishing Smart Car Park System for Commercial Buildings In Sri Lanka.
Abeynayake M.D.T.E. & Menoli Kaushalya P.L.

- PA_96 Occupational Health and Safety of Municipal Solid Waste Handlers in Sri Lanka
Thisakya P.G & Dissanayake D.M.P.P.

12.30– 1.30pm LUNCH

2nd December 2022

11.00–12.30pm

Session 03– Studio 3– 4th Floor, TCP

Integrated systems, policy and governance

Session Chair : Prof. Jagath Munasignhe

Session Co-chair : Dr. Rizvi Noordeen

PA_45 City as a System of Systems; And Evaluation of “Urbanity” in Post-Pandemic Space
Logapawan J. & Pathiraja M.

PA_48 A Methodological Approach to Re-Image the City the Case of Galle City, Sri Lanka
Tharaka M. H. H. S. & Rathnayake R. M. S. R.

PA_50 Street as a Place: A Study of Sense of Place in Commercial Streets of Jaffna, Sri Lanka
Kethusha K. & Sooriyagoda K.G.

PA_22 Role of Urban Planning & Design Interventions in Strengthening the Sense of Place of Historic Sites in Kurunegala, Sri Lanka
Subasingha S.M.V.U., Rathnayake R. M. S. R.

12.30– 1.30pm LUNCH

11.00–12.30pm

Session 04– Studio 4– 4th Floor, TCP

Methods, tools and practices in delivering sustainable solutions

Session Chair : Dr. Anuradha Waidyasekera

Session Co-chair : Dr. Pournima Shridarran

PA_54 Estimate the pass-by and Diverted Trip Impact Generated by a Supermarket in Colombo, Sri Lanka
A.L.A.C. Pathiraja, P.C.P. De Silva & A.B. Jayasinghe

PA_81 Impact of Vernacular Architecture Elements on Patient Waiting Experience in Rural Government Hospitals in Sri Lanka
Rathnayake S.D. & Gamage W. O.

PA_55 The Visual Characteristics of Railside Landscape for Tourists' Satisfaction
Guruge. S.P.P.G.D.K & De Silva. W

PA_56 Mamoty as a Manual Handling Traditional Agriculture Tool; Impact of Its Form and Structure for User Experience
Perera. W.P.S.G & Dissanayake. M.K

PA_166 An Investigation of the Process of Commercial Gentrification & Optimum Utilization of Land at Neighbourhood Levels
Dinithi Hansika Lakprasadini & Noordeen Mohamed Rizvi

12.30– 1.30pm LUNCH

2nd December 2022

1.30 – 3.30pm

Session 05 – Auditorium, TCP

Making places for people

Session Chair : Prof. Samitha Manawadu

Session Co-chair : Dr. Nadeeka Jayaweera

PA_70 Apartment Design for Sense of Wellbeing
A Case Study of Apartment Dwellers During the
Pandemic in Sri Lanka
Seneviratne, T.T.A. & Coorey, S.B.A

PA_76 Inclusive Schools for Children with Autistic Spectrum
Disorder: An Appraisal on Built Environmental
Challenges of Existing Schools
Jayaneththi. D.N.D. & Rajapaksha. I.G.P.

PA_35 Rehabilitation of Destitute Children and Role of
Architecture: A Case Study of Chattogram, Bangladesh
Madhury. Murchana

PA_40 Environmental Psychological Considerations for
People Working in Shared Spaces; A Study of
Co-Working Spaces Concerning Colombo, Sri Lanka
Thilakarathne. T.M.S.K & Hettiarachchi. A.A.

PA_57 Impact of Colours in Classroom Interiors on Mental
Health of Undergraduates with Reference to Depres-
sion, Anxiety and Stress Levels Insights from a
Selected University in Western Province, Sri Lanka
Bandara.K.M.S. & Hettiarachchi. A. A.

PA_62 User Experience in Traditional Domestic Preparation
Products in Different Cultures of Sri Lanka
Special Reference to String Hopper Press (“Idiappa
Wangediya”)
Hettiarachchi. A.D. & Ranasinghe. W.M.N.D

3.30– 4.00pm

Tea

4.00– 5.00pm

FARU Awards and Closing

1.30 – 3.30pm

Session 06– Mini Auditorium, TCP

Green products, buildings and cities

Session Chair : Prof. Kanchana Perera

Session Co-chair : Dr. Menaha Thiyaparan

PA_71 Impact of Nature Connectedness in Reducing
Depression, Anxiety and Stress of Working Communi-
ty During Covid - 19 Pandemic - Insights from it
Sector in Colombo, Sri Lanka
Hettiarachchi. A. A. & Wijethunge W.M.D.L.

PA_89 Street Tree Planting Patterns to Modify the Sky View
Factor for Outdoor Thermal Comfort Enhancement
Ratnayake. C. W, Perera. N. G. R & Emmanuel R

PA_90 The Role of Biophilic Design in Hotel Architecture
A Case Study Of Heritage Kandalama, Sri Lanka
Ariyawansa. D. N & Perera. N. G. R

PA_69 Patch Isolation Analysis of Peri-Urban Natural
Ecosystem; The Case of Bahirawakanda Terrain,
Kandy, Sri Lanka.
Sirimewan K.Y.M. & Dharmasena J.H.

PA_93 Investigation of Application of Green Infrastructure
Practices for Storm Water Management in Urban
Areas: A Case Study of Diyatha Uyana
I.D.M.P. Iddamalgodha & Emeshi Warusavitharana

PA_145 Factors Effecting Energy Consumption of Commercial
Buildings in Sri Lanka
*Shashika Satharani Alahakoon, Amasha Lakna Silva &
Udayangani Kulathunga*

3.30– 4.00pm

Tea

4.00– 5.00pm

FARU Awards and Closing

2nd December 2022

1.30 – 3.30pm

Session 07– Studio 3– 4th Floor, TCP

Technology for simulating built form

Session Chair : Prof. P.K.S Mahanama

Session Co-chair : Dr. Chathura De Silva

PA_37 Implementing at-Scale Adaptive Thermal Comfort Controls for Mixed Mode Building Using Machine Learning

De. A, Thounaojam. A, Vaidya. P, Sinha. D, Raveendran. M.S, Gopikrishna & Uthej. D

PA_47 Examination of the Spatio-Temporal Urban Growth Patterns Using DMSP- OLS Night-Time Lights Data: An Experiment in Urban Area, Sri Lanka

R.D.W.S. Yapa. & W. Gunawardena

PA_49 Luminance Measurements Using Smartphone Cameras

Thounaojam A., Vaidya P., Mundhe P. & Maskarenj M.

PA_51 Adoption of 3D Printing Technology in Sri Lanka's Construction Industry

Cooray. N. K. V. & Coomasaru. P.

PA_87 A Property Valuation Model to Identify Thriving Real Estate Opportunities, Based on Spatial Factors

Senadheera. S & Warusavitharana. E

3.30– 4.00pm

Tea

4.00– 5.00pm

FARU Awards and Closing

1.30 – 3.30pm

Session 08– Studio 4– 4th Floor, TCP

Sustainable construction management

Session Chair : Prof. Nayanthara De Silva

Session Co-chair : Dr. Pournima Shridarran

PA_60 Effective Methods in Collaborative Procurement System for Energy Sector Projects in Sri Lanka

Perera P. N. R., Wijesinghe T. & Perera B. K. C.

PA_74 Forecasting Labour Cost of Construction Trades for Two-Storey Houses: A Single Rate-Based Approach

Ramachandra. T, Madushika. U, G, D. & Nirasha. K, C

PA_77 Strategies to Successfully Implement Industry 4.0 Concept for Predictive Maintenance in Facilities Management

T. Sivanuja & Y.G. Sandanayake

PA_43 Suitability of Alternative Dispute Resolution Methods Based on Risk Factors to the Sri Lankan Construction Industry

Hapuarachchi.H.N.M & Udayangani.K

PA_85 An Assessment of Skill and Competency Gaps in the Construction Industry: The Case of Mechanical, Electrical, and Plumbing Workers

Prabhashwara. K.M.B.C., Waidyasekara. K.G.A.S. & Jayathilaka. R.D.W.W.

PA_88 Challenges for Last Planner System Implementation; Sri Lankan Construction Industry Perspective

Madushanka T.H. & Ranadewa K.A.T.O.

3.30– 4.00pm

Tea

4.00– 5.00pm

FARU Awards and Closing