Dilshan R Ossen

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Dilshan R. Ossen is an Associate Professor at the University of Kansas School of Architecture and Design, Kansas, USA. He previously taught at Kingdom University-Bahrain from 2016-2023 and Universiti Teknologi Malaysia (UTM) -Johor Bahru Malaysia from 2006-2016. He obtained his PhD (Architecture) from UTM in 2006 under the Commonwealth Scholarship and Fellowship Plan for Postgraduate Studies, awarded by the Public Service Department Malaysia (JPA). He received the Gold Medal award for best PhD thesis from the Institute of Energy Malaysia, for his contribution towards the practice of sustainable design and the industry. He obtained his professional qualification as a Chartered Architect and Associate membership from the Sri Lanka Institute of Architects in 2000 and completed his Bachelor's and Master's degrees in architecture at the University of Moratuwa, Colombo, Sri Lanka.

He believes that global warming and climate change remain the greatest challenges humanity has faced, and the problems vary depending on the region and the context. Throughout his career as a designer, researcher, and academic, he has focused on finding ways to address global warming challenges. His research interests centered on issues related to energy consumption in buildings, climate responsive design, and the impact of climate change on urban environments, urban ecologies, and urban heritage. Some of these lessons can indeed be found in vernacular traditional buildings and for this reason, he is also interested in how energy is managed in traditional buildings.

As a researcher, he collaborated with several institutions, including Public Workers Department (Malaysia), Institute Sultan Iskandar (Malaysia), Hiroshima University (Japan), Victoria University (Australia) and Kingdom University (Bahrain). During his academic tenure, he participated in international and local research projects worth USD 175,000 and published over 30 high impact journal articles and presented in several international and regional seminars.

As a professional architect, he worked with Ranjith Alahakoon Associates and Kahawita De Silva Associates in Colombo, as well as managing a small architectural practice in Sri Lanka. Among the notable projects he has worked on are ODEL Colombo (1998), which transformed an old building into a modern fashion department store, Standard Chartered Bank interiors (in Colombo Fort, 2000), MONDI fashion outlet interiors in Colombo, and several personalized houses for private clients.

Selected List of Publications.

- Azari Mat Yasir, Syed Ahmad Iskandar Syed Ariffin and Ossen, Dilshan Remaz (2022). "Thesis Supervisory Panels as the New Design Studio Paradigm in UTM Master of Architecture Programme". Journal of Design and Built Environment, Vol22(2) 2022, 48-61.
- Adeb Qaid, Muhammad Farhan Bashir, Ossen, Dilshan Remaz & Khurram Shahzad (2021). "Long-term statistical assessment of meteorological indicators and COVID-19 outbreak in hot and arid climate, Bahrain". Environmental Science and Pollution Research. https://doi.org/10.1007/s11356-021-15433-w.
- Pau Chung Leng, Gabriel Hoh Teck Ling, Mohd Hamdan Ahmad, Ossen, Dilshan Remaz, Eeydzah Aminudin, Weng Howe Chan, Dg Normaswanna Tawasil (2021). "Thermal Performance of Single-Story Air-Welled Terraced House in Malaysia: A Field Measurement Approach". Sustainability, Vol. 13, Issue 01. Multidisciplinary Digital Publishing Institute (MDPI) ISSN: 2071-1050 [https://doi.org/10.3390/su13010201].

ISVS e-journal CVS of Reviewers:2024

- E. Jamei, Ossen, D. R, M. Seyedmahmoudian, M. Sandanayake, A. Stojcevski, B. Horan (2020). "Urban design parameters for heat mitigation in tropics". Renewable and Sustainable Energy Reviews 134. 110362. [https://doi.org/10.1016/j.rser.2020.110362].
- Heng, C. Y. S., Yaik-Wah Lim; Ossen, Dilshan Remaz (2020). "Horizontal light pipe transporter for deep plan high-rise office daylighting in tropical climate". Building and Environment. Volume 171, 106645. [https://doi.org/10.1016/j.buildenv.2020.106645].
- Fatemeh Mozaffari Ghadikolaei; Ossen, Dilshan Remaz & Mohd Farid Mohamed (2020). "Effects of wing wall at the balcony on the natural ventilation performance in medium-rise residential buildings". Journal of Building Engineering Volume 31.
- Abdullah, Ismail B. Said; Ossen, D. R. (2019). "A sustainable bio-inspired cooling unit for hot arid regions: Integrated evaporative cooling system in wind tower". Applied Thermal Engineering, Vol 161. Elsevier Ltd, ISSN: 1359-4311.
- Pau Chung Leng; Mohd Hamdan Ahmad; Ossen, Dilshan Remaz; Gabriel HT Ling, Samsiah Abdullah, Eeydzah Aminudin, Wai Loan Liew, Weng Howe Chan (2019). "The Impact of Air Well Geometry in a Malaysian Single Storey Terraced House". Sustainability, Vol. 11, Issue 20. MultidisciplinaryDigital Publishing Institute (MDPI). ISSN: 2071-1050.
- Lim, Y. W., Majid, H. A., Samah, A. A., Ahmad; M. H., Ossen, Dilshan Remaz; M. F. Harun & F. Shahsavari (2018); "BIM and Genetic Algorithm Optimization for Sustainable Building Envelope Design". International Journal of Sustainable Development and Planning, Vol. 13, No. 1 (2018) 151–159.
- Adeb Qaid & Hasanuddin Bin Lamit; Ossen, Dilshan Remaz & Mohd Hisyam Rasidi (2017). "Effect of the position of the visible sky in determining the sky view factor on micrometeorological and human thermal comfort conditions in urban street canyons". Theoretical and Applied Climatology. ISSN: 0177-798X (Print) 1434-4483 (Online). Springer. 2017.
- Adeb Qaid, Hussanudin Bin Lamit; Ossen, Dilshan Remaz; Raja Nafida Raja Shahminan (2016). "Urban heat island and thermal comfort conditions at micro-climate scale in a tropical planned city". Energy and Buildings, 133 (2016) 577-595. Elsevier B.V. 2016. https://doi.org/10.1016/j.enbuild.2016.10.006.
- Arezou Shafaghat, Golnoosh Manteghi, Ali Keyvanfar, Hasanuddin Bin Lamit, Kei Saito, Ossen, Dilshan Remaz (2016). "Street Geometry Factors Influence Urban Microclimate in Tropical Coastal Cities: A Review". Environmental and Climate Technologies. 17(1), pp. 61-75. Riga Technical University, Sciendo. DOI: https://doi.org/10.1515/rtuect-2016-0006.
- Christopher Heng Yii Sern; Ossen, Dilshan Remaz & Lim Yaik Wah (2016). "Light Pipe Transporter for High-rise Office Building in Tropical Climate". International Journal of Built Environment and Sustainability, IJBES. 3(1)/2016, 36-44. Published by Faculty of Built Environment, Universiti Teknologi Malaysia Website: http://www.ijbes.utm.my.
- Adeb Qaid Ahmed & Ossen, Dilshan Remaz (2015). "Effect of asymmetrical street aspect ratios on microclimates in hot, humid regions". International Journal of Biometeorology June 2015, Volume 59, Issue 6, pp 657-677. Springer-Verlag Wien. 2015.
- Tareq Gaber Farea; Ossen, Dilshan Remaz; Saqaff Alkaff; Hisashi Kotani (2015). "CFD modeling for natural ventilation in a lightwell connected to outdoor through horizontal voids". Energy and Buildings 86 (2015) 502-513.
- Adeb Qaid Ahmed; Ossen, Dilshan Remaz; Elmira Jamei & Norhashima Abd Manaf, Ismail Said, Mohd Hamdan Ahmad (2015); "Urban surface temperature behavior and heat island effect in a tropical planned city". Theoretical and Applied Climatology. Vol 119, Issue 3-4 (493-514) Springer-Verlag Wien.
- Y.W. Lim, F. Shahsavari, N. Fazlenawati1, M. N. Azli; Ossen, D. R. & M. H. Ahmad (2015). "Developing a BIMbased process-driven decision-making framework for sustainable building envelope design in the tropics". Building Information Modelling (BIM) in Design, Construction and Operations. WIT Transactions on The Built Environment, Vol 149, © 2015 WIT Press. www.witpress.com, ISSN 1743-3509 (on-line) (531-542).

ISVS e-journal CVS of Reviewers:2024

- Elmira Jamei, Yashar Jamei, Priyadarsini Rajagopalan; Ossen, Dilshan Remaz; Sasan Roushenas (2015). "Effect of built-up ratio on the variation of air temperature in a heritage city". Sustainable Cities and Society Vol 14 (280-292). Elsevier.
- Tabassom Safikhani, Aminatuzuhariah Megat Abdullah; Ossen, Dilshan Remaz & Mohammad Baharvand (2014), "A Review of Energy Characteristic of Vertical Greenery Systems". Renewable & Sustainable Energy Review 40 (450-462) Elsevier ISSN:1364-0321. https://doi.org/10.1016/j.rser.2014.07.166.
- Mohd Fadhil Md Din, Yee Yong Lee, Mohanadoss Ponraj; Ossen, Dilshan Remaz; Kenzo Iwao, Shreeshivadasan Chelliapan (2014); "Thermal comfort of various building layouts with a proposed Discomfort Index range for tropical climate". Journal of Thermal Biology. Volume 41, [6–15]. Copyright © 2014 Elsevier Ltd.
- Tetsu Kubota, Doris Hooi Chyee Toe & Ossen, Dilshan Remaz (2014); "Field Investigation of Indoor Thermal Environments in Traditional Chinese Shophouses with Courtyards in Malacca". Journal of Asian Architecture and Building Engineering (JAABE) January 2014/8.
- Tabassom Safikhani, Aminatuzuhariah Megat Abdullah; Ossen, Dilshan Remaz & Mohammad Baharvand (2014), "Thermal Impacts of Vertical Greenery Systems". Environmental and Climate Technologies. Volume 14, Issue 1, [5–11], ISSN (Online) 2255-8837, DOI: 10.1515/rtuect-2014-0007.
- Asal Kamani Fard, Mohd Hamdan Ahmad and Ossen, Dilshan Remaz (2013), "Sense of Home Place in Participatory Post-Disaster Reconstruction". Journal of Environmental Assessment Policy and Management- Vol. 15, Issue. Print ISSN: 1464-3332/ Online ISSN: 1757-5605. DOI: 10.1142/S1464333213500051.
- Yaik-Wah Lim, Mohd. Hamdan Ahmad and Ossen, Dilshan Remaz (2013), "Internal Shading for Efficient Tropical Daylighting in Malaysian Contemporary High-Rise Open Plan Office", Indoor and Built Environment, Volume: 22 issue:6, page(s): 932-951
- [https://doi.org/10.1177/1420326X12463024] [Q2-Q3].
- Yaik-Wah Lim, Mohd Zin Kandar, Mohd Hamdan Ahmad; Ossen, Dilshan Remaz; Aminatuzuhariah Megat Abdullah (2012). "Building façade design for daylighting quality in typical government office building", Building and Environment 57 (2012) 194-204.
- Asal Kamani Fard, Mohd Hamdan Ahmad and Ossen, Dilshan Remaz (2012), "The sense of place in the new homes of post-Bam earthquake reconstruction". International Journal of Disaster Resilience in the Built Environment, Vol. 3 Iss: 3 pp. 220-236. Emerald Group Publishing Limited. ISSN: 1759-5908.
- Elmira Jamei and Ossen, Dilshan Remaz (2012), "Intra Urban Air Temperature Distributions in Historic Urban Center", American Journal of Environmental Science, 8 (5), 503-509. ISSN: 1553-345X ©2012 Science Publication.
- Mohd Zin Kandar, Mohd Sabere Sulaiman, Yong Razidah Rashid; Ossen, Dilshan Remaz; Aminatuzuhariah M Abdullah, Lim Yaik Wah and Mansour Nikpour (2011), "Investigating Daylight Quality in Malaysian Government Office Buildings through Daylight Factor and Surface Luminance", World Academy of Science, Engineering and Technology 59-2011 (1793-1798). 2011
- Asal Kamani Fard, Mohd Hamdan Ahmad and Ossen, Dilshan Remaz (2010), "Cultural Identity Expressions through Visual Analysis in Post-Disaster Housing", American Journal of Applied Sciences - 7 (10): 1412-1419. ISSN 1546-9239-© 2010 Science Publications.
- Yaik-Wah Lim, Mohd. Hamdan Ahmad and Ossen, Dilshan Remaz (2010), "Empirical Validation of Daylight Simulation Tool with Physical Model Measurement", American Journal of Applied Sciences 7 (10): 1426-1431, ISSN 1546-9239 - © 2010 Science Publications.
- Chia Sok Ling, Ahmad, Mohd. Hamdan and Ossen, Dilshan Remaz (2007), "The Effect of Geometric Shape and Building Orientation on Minimizing Solar Insolation on High-Rise Buildings in Hot Humid Climate", Journal of Construction in Developing Countries, Vol. 12, No. 1: 27-38 [Universiti Sains Malaysia].
- Nugroho, Agung Murti; Ahmad, Mohd. Hamdan and Ossen, Dilshan Remaz (2007), "A Preliminary Study of Thermal Comfort in Malaysia's Single Storey Terraced Houses", Journal of Asian Architecture and Building Engineering (JAABE) Vol.6 No.1 (May 2007): 175-182.

ISVS e-journal CVS of Reviewers:2024

 Ossen, Dilshan Remaz; Ahmad, Mohd. Hamdan and Nor Haliza Madros (2005). "Optimum Overhang Geometry for Building Energy Saving in Tropical Climates" Journal of Asian Architecture and Building Engineering (JAABE) Vol:4 (02) 563-570.