



Curriculum Vitae



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Education and research experience

- 2019 – Present **Associate Professor, Universiti Putra Malaysia**, Department of Landscape Architecture.
- 2011 – 2018 **Senior Lecturer, Universiti Putra Malaysia**, Department of Landscape Architecture.
- 2008 – 2011 **Doctor of Philosophy in Architecture, Cardiff University**. The potential optimum cooling effect of vegetation with ground surface physical properties modification in mitigating the urban heat island effect in Malaysia. Degree awarded October 2011.
- 2005 – 2007 **Master Science in Landscape Studies, Universiti Putra Malaysia**. Effectiveness of 'Penaga Lilin' (*Mesua ferrea L.*) And 'Payung Indonesia' (*Hura crepitans L.*) trees as thermal radiation filters in outdoor environment. Degree awarded June 2008.
- 1999 – 2002 **Bachelor in Landscape Architecture, Universiti Teknologi Malaysia**. Faculty of Built Environment. Graduated with distinction, 2002.
- 1995 – 1999 **Diploma in Architecture, Universiti Teknologi Malaysia**. Faculty of Built Environment. Graduated with distinction, 1999.

Field of specialisation and research interest

- Landscape Energy Efficient Design
- Urban Heat Island Mitigation
- Outdoor Thermal Comfort
- Building Energy Efficiency

Publications

Journals

- Zaki, S. A., Syahidah, S. W., **Shahidan, M. F.**, Ahmad, M. I., Yakub, F., Hassan, M. Z., & Daud, M. Y. M. (2020). Assessment of outdoor air temperature with different shaded area within an urban university campus in hot-humid climate. *Sustainability (Switzerland)*, 12(14), 1-24. doi:10.3390/su12145741.
- Othman, N. F., Yaacob, M. E., Su, A. S. M., Jaafar, J. N., Hizam, H., **Shahidan, M. F.**, . . . Jalaludin, A. (2020). Modeling of stochastic temperature and heat stress directly underneath agrivoltaic conditions with *Orthosiphon stamineus* crop cultivation. *Agronomy*, 10(10) doi:10.3390/agronomy10101472.
- Zaki, S. A., Azid, N. S., **Shahidan, M. F.**, Hassan, M. Z., Md Daud, M. Y., Abu Bakar, N. A., . . . Yakub, F. (2020). Analysis of urban morphological effect on the microclimate of the urban residential area of Kampung Baru in Kuala Lumpur using a geospatial approach. *Sustainability (Switzerland)*, 12(18) doi:10.3390/SU12187301.

- Zaki, S.A.; Othman, N.E.; Syahidah, S.W.; Yakub, F.; Muhammad-Sukki, F.; Ardila-Rey, J.A.; **Shahidan, M.F.**; Mohd Saudi, A.S. (2020). Effects of Urban Morphology on Microclimate Parameters in an Urban University Campus. *Sustainability*, 12, 2962.
- Kasim, Z., **Shahidan, M.F.**, Ujang, N., Dahlan, N.D. (2019). Influence of landscape environmental settings on outdoor pedestrian thermal comfort in tropical climate. *ALAM CIPTA, International Journal on Sustainable Tropical Design Research & Practice*, 12 (2), 74-85.
- Hisham, F.D.B & **Shahidan, M.F.** (2018). Carbon Footprint in Landscape Development Stages: A Life Cycle Approach. *Scholars Bulletin*, 4 (3), 239-246.
- Azhar Mat Sulaiman, M.K., **Shahidan, M.F.**, Jamil, M., Mohd Zain, M.F. (2018) Percentage Coverage of Tropical Climbing Plants of Green Façade. *IOP Conference Series: Materials Science and Engineering*, 401.
- Lim S.T., **Shahidan M.F.**, Abdul R.A. (2017). Performance of groundcover on surface temperature reduction in the application of the extensive green roof. *ALAM CIPTA, International Journal on Sustainable Tropical Design Research & Practice*, 9 (2), 26-32.
- Arabi, R., **Shahidan M.F.**, Kamal M.S.M. and Jaafar M.F.Z., Ahmadi (2015). A comparative study on different application procedures on climatic data logger for outdoor environmental survey. *International Journal of Applied Engineering Research*, 10 (24), 44235-44240.
- Arabi, R., **Shahidan M.F.**, Kamal M.S.M. and Jaafar M.F.Z. (2015). Considerations for plant selection in green roofs. *ALAM CIPTA, International Journal on Sustainable Tropical Design Research & Practice*, 8, 10-17
- Arabi, R., **Shahidan M.F.**, Kamal M.S.M., Jaafar M.F.Z. and Rakhshandehroo M. (2015). Mitigating Urban Heat Island through Green Roofs. *Current World Environment Journal*, 10 (Special Issue) 1.
- **Shahidan, M.F.** (2015). Potential of Individual and Cluster Tree Cooling Effect Performances through Tree Canopy Density Model Evaluation in Improving Urban Microclimate. *Current World Environment Journal*, 10 (2), 398-413.
- Goshayeshi D., Jaafar M.Z., **Shahidan M.F.**, Khafi F. (2013). Thermal comfort differences between polycarbonate and opaque roofing material installed in bus stations of Malaysia. *European Online Journal of Natural and Social Sciences*, Vol 2, No 3.
- Goshayeshi D., **Shahidan M.F.**, Khafi F., Ehtesham E. (2013). A review of researches about human thermal comfort in semi-outdoor spaces. *European Online Journal of Natural and Social Sciences*, Vol. 2, No 4.
- **Shahidan, M.F.**, Jones, P.J., Gwilliam, J. and Salleh, E. (2012). An evaluation of outdoor and building environment cooling achieved through combination modification of trees with ground materials. *Building and Environment*, 58, 245-257. doi.org/10.1016/j.buildenv.2012.07.012 (IF: 2.4)
- **Shahidan, M.F.**, Shariff, M.K.S, Jones, P., Salleh, E. and Abdullah, A.M. (2010). A comparison of *Mesua ferrea* L. and *Hura crepitans* L. for shade creation and radiation modification in improving thermal comfort. *Landscape and Urban Planning*, 97, 168-181. doi:10.1016/j.landurbplan.2010.05.008 (IF: 2.1)

Books/Chapter in Books/Acedemic Magazines/Art and Design Catalogue/ Non Cited Journals

- Gambardella, C., Cennamo, C., Germanà, M.L., **Shahidan, M.F.**, Bougdah, H. (2021). *Advances in Utopian Studies and Sacred Architecture (Advances in Science, Technology & Innovation)*. Springer, Switzerland. ISBN 978-3030507640.
- **Shahidan M.F.**, Kamal M.S.M., Qi B.H.J. (2016). *Tropical Tree for Urban Environment: Their Microclimatic Properties*. Universiti Putra Malaysia Press, Serdang. ISBN 978-967-344-522-6.
- **Shahidan M.F.**, Aziz F.A., Hasna M.F. (2016). *Melaka Skectching through Experience*. Universiti Putra Malaysia Press, Serdang. ISBN 978-967-344-531-8.
- **Shahidan M.F.** *An evaluation of Trees with Ground Materials Cooling Effect on Outdoor and Building Environment*. Synthesis Academic Magazine. 5, Vol. 40, March, 2013.
- Aziz. F.A, **Shahidan M.F.** and Hasna, M.F. *Enthusiasm Aquila*. Stedex'13 Sustainable Tropical Environmental Design Exhibition Vol. 5 ISSN 2180-0685, 2013.
- **Shahidan M.F.**, Aziz. F.A, and Hasna, M.F *Extinction*. Stedex'13 Sustainable Tropical Environmental Design Exhibition Vol. 5 ISSN 2180-0685, 2013.
- Hasna, M.F, **Shahidan M.F.** and Aziz. F.A, *Integrated Green Lifestyle*. Stedex'13 Sustainable Tropical Environmental Design Exhibition Vol. 5 ISSN 2180-0685, 2013.
- Aziz. F.A, **Shahidan M.F.** and Hasna, M.F. *Sentence of Chrysanthemum*. Stedex'13 Sustainable Tropical Environmental Design Exhibition Vol. 5 ISSN 2180-0685, 2013.

- HighBeam Research: Politics and Government Week, Research conducted by M.F. Shahidan and co-researchers has updated our knowledge about urban planning, September, 30, 2010.
- **Shahidan M.F.**, Landskap Kuala Kangsar Bandar Warisan Pusaka Diraja, SENI HIAS – Décor Magazine Article, Mei/Jun 2008.
- **Shahidan M.F.**, Cabaran dalam mereka bentuk taman, LAMAN IMPIANA -Landscape Magazine Article January, 2006.
- **Shahidan M.F.**, Peraduan Mengarang Esei Sektor Awam 2004.

Proceedings

- Mohandesan, S., **Shahidan, M.F.** *Evaluation on Tree Canopies Shading Performance on Solar Heat Stress of Building Walls in Tropical Climate*. LISD International World Congress on Engineering & Design 2020, Oxford, 25-26 January. Oxford University, United Kingdom.
- **Shahidan, M.F.**, Maruthaveeran, S. (2020). *Evaluation of Native Plants Material on Solar Radiation Filtration Effectiveness by Using Microclimatic Properties Assessment*. LISD International World Congress on Engineering & Design 2020, Oxford, 25-26 January. Oxford University, United Kingdom.
- **Shahidan M.F. (2014)**. *Planning For Energy Efficient Design of Tropical Green Infrastructure*. 4th International Workshop Global Challenges University Alliance – Green and Sustainable Cities – the role of landscape architecture, 12 -14 March, The Swedish University of Agricultural Sciences (SLU), Uppsala Sweden.
- **Shahidan M.F. (2013)**. *The Effect of Outdoor Environment Modification on Building Energy Efficiency*. 4th German-Asean Science and Technologies Network (GAST), Universiti Kebangsaan Malaysia and TUM Singapore Asia, Singapore.
- Sulaiman M.K.A.M, Jamil M., Zain M.F.M., Kuttler W., **Shahidan M.F.** (2013). *Shading Performance of Tropical Climbing Plant: Anemopaegma chamberlayniion Green Façade*. Sustainable Tropical Environmental Design Conference, November 2013, Malaysia.
- Sulaiman M.K.A.M, Jamil M., Zain M.F.M., Kuttler W., **Shahidan M.F.** (2013). *Thermal Evaluation of Green Façade on Opaque Wall*. The International Conference on Engineering and Built Environment (ICEBE) 2013, Malaysia.
- **Shahidan, M.F.** (2009). *The Optimum Cooling Effect of Vegetation And Ground Surface Material Modification At Street Level in Mitigating Urban Heat Island Effect*. In proceedings of the Postgraduate Conference Welsh School of Architecture (WSA) 2009, Welsh School of Architecture (WSA), Cardiff.
- **Shahidan, M.F.** and Jones, P. (2008) *Plant canopy design in modifying urban thermal environment: theory and guidelines*. In the 25th Conference on Passive and Low Energy Architecture, Dublin.
- **Shahidan, M.F.**, Salleh, E. and Shariff, M.K.M. (2007). *Effects of tree canopies on solar radiation filtration in a tropical microclimatic environment*. In proceedings of the PLEA2007 - The 24th Conference on Passive and Low Energy Architecture (PLEA), 22-24 November 2007, Singapore.
- **Shahidan, M.F.**, Shariff, M.K.M. (2007). *Influence of Tree Canopies in Outdoor Radiation Filtration in Tropical Landscape*. In proceedings of the The 44th IFLA World Congress, 2007.
- **Shahidan, M.F.**, Salleh, E. and Shariff, M.K.M. (2006). *The Influence of Tree Canopy on Thermal Environment in a Tropical Climate*. In proceedings of the iNTA 2ND International Conference on Sustainable Architecture and Urban Design in Tropical Regions: "Harmony in Culture and Nature" (iNTA 2006 Conference).
- **Shahidan, M.F.**, Shariff, M.K.M. (2005). *Tropical Microclimate Indicators for the Malaysian Urban Landscape*. Asean Postgraduate Seminar, Universiti Malaya, 2005.

Other publications

- **Shahidan, M.F.** (2011). *The Potential Optimum Cooling Effect of Vegetation with Ground Surface Physical Properties Modification in Mitigating the Urban Heat Island Effect in Malaysia*. PhD Thesis.
- **Shahidan, M.F.** (2009). *Urban Environment Without Vegetation: How Worse Can It Be?* Poster Presentation Speaking of Science, Cardiff University.
- **Shahidan, M.F.** (2008). *Study on the Optimum Cooling Effect of Vegetation and Ground Surface Modification at Street Level in Mitigating Urban Heat Island in Perdana Boulevard, Putrajaya, Malaysia*. Poster Presentation GSPE Annual Lecture Conference 2008, Cardiff University.

- **Shahidan, M.F.** (2008). *Study on the Optimum Cooling Effect of Vegetation and Albedo Modification In Mitigating Urban Heat Island Effect: A Preliminary Study*. Poster and Paper Presentation, Postgraduate Conference WSA 2008, Cardiff University.
- **Shahidan, M.F.** (2007). Effectiveness of 'Penaga Lilin' (*Mesua ferrea L.*) and 'Payung Indonesia' (*Hura crepitans L.*) Trees as Thermal Radiation Filters in Outdoor Environment. MSc. Thesis.

Academic awards and recognition

- Gold Medal in International Putra InnoCreative Carnival in Teaching and Learning (PicTL), 2021.
- Institute of Landscape Architecture Malaysia (ILAM) ILAM MLAA Research Honour Award (2019)
- Anugerah Buku Negara 2017 (*National Book Award 2017*) – Kategori Buku Ilustrasi Terbaik '*Melaka Skectching through Experience*'
- Institute of Landscape Architecture Malaysia (ILAM) ILAM MLAA Research Honour Award (2017)
- Institute of Landscape Architecture Malaysia (ILAM) ILAM MLAA Research Honour Award (2016)
- Institute of Landscape Architecture Malaysia (ILAM) ILAM MLAA Research Honour Award (2015)
- Excellence in Service Award, Universiti Putra Malaysia, 2013
- Bronze Medal, Invention, Research and Innovation Exhibition, Universiti Putra Malaysia, 2006.
- Jury Award, 'Creating Greenery At Sky Level; Vertical Park' IFLA International Student Competition 2007 (International Federation of Landscape Architects (IFLA) (2006)
- Excellence in Service Award, Universiti Putra Malaysia, 2005.
- Best Overall 4th Year Landscape Student, Universiti Teknologi Malaysia, 2000/2001.
- Dean List in Bachelor of Landscape Architecture, Universiti Teknologi Malaysia, 2000/2001.

Invited Speakers

- **Shahidan, M.F.** (2018), Horizontal Landscaping Effectiveness in Thermal Effect Reduction. Invited Speaker for Sustainable Green Technology in Landscape Architecture Seminar, 10 January 2018.
- **Shahidan, M.F.** (2015), UHI MITIGATION: Energy Efficient Landscape Design Principles and Implementation. Invited Speaker for Workshop on Reducing Heat Island Effect through Design Principles; Malaysia Green Building Confederation (MGBC), 23 January 2015.
- **Shahidan, M.F.** (2014), Landscape Application for Energy Efficiency of Skyrise Greenery. Invited Speaker for Skyrise Greenery Seminar; Institute of Landscape Architects Malaysia (ILAM), VIVATEL Hotel, 10 September 2014.
- **Shahidan, M.F.** (2014). Planning For Energy Efficient Design of Tropical Green Infrastructure. 4th International Workshop Global Challenges University Alliance – Green and Sustainable Cities – the role of landscape architecture. Swedish University of Agricultural Sciences (SLU), Uppsala Sweden.
- **Shahidan, M.F.** (2013). The Effect of Outdoor Landscape towards Building Energy Efficiency. German-Asean Science and Technologies Network (GAST) Conference 2013, Malaysia & Singapore.

Research and Academic Funding

- **2017-2020** - PROJECT LEADER – Putra Grant for researcher at Universiti Putra Malaysia. 'Enhancement of Tropical Plants Material Database on Solar Radiation Filtration Effectiveness by Using Microclimatic Properties Assessment'. GP/2017/9567300 (RM 47,961)
- **2017-2019** - PROJECT LEADER – Putra Grant IPS for researcher at Universiti Putra Malaysia. 'Effects of Landscape Environment Setting towards Microclimate in enhancing pedestrian Thermal Comfort of Tropical Campus Environment'. GP-IPS/2017/9556900 (RM 24,995)
- **2012 - 2015** – PROJECT LEADER - Research University Grant Scheme for researcher at Universiti Putra Malaysia. 'Developing Tree Canopy Density Model for Malaysian Native Plant Species'. RUGS 03-02-12-2056RU (RM 26,500)
- **2008 – 2011** Academic Practical Scheme (Public University) Scholarship for Doctoral Research at Cardiff University from Ministry of Higher Education Malaysia
- **2005 – 2007** Academic Practical Scheme (Public University) Scholarship for Master Science Research at Universiti Putra Malaysia from Ministry of Higher Education Malaysia

Peer-review Activities

- Journal Reviewer for *Indoor and Built Environment Journal* 2017- Now
- Journal Reviewer for Elsevier *Building and Environment Journal* 2009 - Now
- Journal Reviewer for Elsevier Habitat International 2014 - Now
- Journal Reviewer for Elsevier Landscape and Urban Planning 2013 - Now
- Journal Reviewer for *Alam Cipta International Journal on Sustainable Tropical Design Research and Practice*. 2010 - Now
- Journal Reviewer for *African Journal of Biotechnology* 2012
- Journal Reviewer for *Environmental Engineering and Management Journal* 2013 - Now

Editorial Board Members

- **Scientific and Planning Committee**, 5th International Conference on Countermeasures to Urban Heat Islands (IC2UHI) 2019
- **Editor in Chief**, International Conference on Sustainable Tropical Environmental Design 2015 (SusTED'15), UPM, Malaysia 2015
- **Committee Member**, 3rd Science One International Conference on Environmental Sciences, UAE, Dubai 2013
- **Editor in Chief**, International Conference on Sustainable Tropical Environmental Design 2013 (SusTED'13), UPM, Malaysia 2013
- **Committee Member**, 3rd Science One International Conference on Environmental Sciences, UAE, Dubai 2013
- **Editorial Member**, International Journal on Sustainable Tropical Research Design and Practice (Alam Cipta) 2012– present