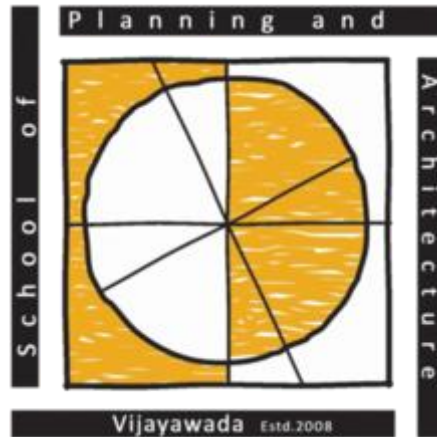


School of Planning and Architecture Vijayawada

(An Institute of National Importance, MoE, Govt. of India)
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Report Submission

Research Paper Titled: Thermal comfort and Daylight assessment of traditional house in Amaravathi, Andhra Pradesh.

Presented in: International Conference on Advances in Mechanical, Civil, and Construction Engineering (ICAMCCE-2024) held on 15th & 16th March, 2024 at Singapore

Organised by: Institute of Research and Journals (IRAJ)



**Institute of
Research and Journals**
Integrated Research and Innovation

Presented by: Ar. Karthik Chadalavada
Assistant Professor
Department of Architecture

Acknowledgement

I want to convey my gratitude to Dr. Amogh Kumar Gupta, Chairperson-BoG and Prof. Dr. Ramesh Srikonda, Director, School of Planning and Architecture, Vijayawada for giving me opportunity to attend the International Conference (ICAMCCE-2024) held on 15th – 16th March, 2024 at Singapore. The exposure and knowledge that I have gained during my participation and presentation will be very valuable components for my future academic and research career development.

Yours Sincerely,

Karthik Chadalavada

Report of Conference

The Institute of Research and Journals(IRAJ) has conducted the International Conference on **Advances in Mechanical, Civil and Construction Engineering (ICAMCCE-2024)** in association with SARC, IIERD Forum & IEEE forum was held on 15th & 16th March, 2024 at Singapore.

The **ICAMCCE-2024** is the gathering of Advances in Mechanical, Civil, and Construction Engineering from all across the countries in which many Academicians, research experts and industry leaders from numerous countries have participated in the conference. The conference offered a plethora of business opportunities, research possibilities and unparalleled access to new markets in the Mechanical, Civil and Construction Engineering.

The paper titled *“Thermal comfort and Daylight assessment of traditional house in Amaravathi, Andhra Pradesh”* has been accepted in the ICAMCCE and was presented physically in the conference by Ar. Karthik Chadalavada on 15th March, 2024. This study aims to understand the significant transformations observed in retrofitting a second generation vernacular dwelling on IEQ. Illustrated through simulation outcomes, a significant improvement in thermal comfort is noted, with an enhancement of up to 20% following the adaptive transformation by the second generation. However, this positive development is counterbalanced by a substantial 25% reduction in natural lighting levels within the indoor spaces. These findings underscore the delicate equilibrium required in the implementation of retrofitting strategies, highlighting the imperative for a holistic and context-specific approach to heritage preservation and sustainable design within the dynamic realm of architectural interventions.



Certificate of Presentation



Conference Photographs

The Conference has inspiring keynote speeches and Expert lectures from the field of Civil & Construction Engineering and the Technical session has presentations from the Authors of diverse fields and countries which gave good opportunity for networking, strengthening the knowledge levels and a positive boost to my academic and research career development.

I wish to thank SPA Vijayawada for giving the support.

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