

Dr.A,Chelliah M.E., Ph.D.,

Assistant Professor,

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Overview : -

Dr.A.Chelliah Working as an Assistant Professor in the Department of Mechanical Engineering at SRMIST,Ramapuram. He Graduated in Mechanical Engineering at Government college of Engineering, Tirunelveli, Tamilnadu, India. He secured Master of Engineering in Thermal Engineering at Government college of Engineering, Salem, Tamilnadu, India. He Pursued Ph.D. in the field of Building heat transfer at Vellore Institute of Technology, Vellore, Tamilnadu, India. He is in teaching profession for more than 8 years. She has presented number of papers in National and International Journals, Conference and Symposiums.

Areas of Research:

Energy efficient building materials, Phase Change materials, Solar Energy

AWARDS AND RECOGNITION

1. Under the topic of Green Energy, "**Best Poster Award**" in KPIT Shodh Award 2023, an annual international award program launched by KPIT Technologies, Pune to honour researchers.
2. **Raman Research Award (RRA)** for the first author publications by Vellore Institute of Technology, Vellore.
3. Accredited Indian Green Building professional by Indian Green Building council.

PUBLICATION

Science Cited Indexed Journals

1. Saboor S, **Chelliah A**, Sharmas Vali S, Müslüm A, Asif A, Zhenjun Ma (2022) “Strategic Design of Phase Change Material Integrated Burnt Clay Bricks: Cost-Cutting Measures for Air Conditioning and Carbon Dioxide Extenuation Prospective under Hot-Arid and Warm-Temperate Climates”) Journal of Cleaner Production (Publisher: Elsevier, **Impact factor:**

- 11.072**; Index: SCI and Scopus) <https://doi.org/10.1016/j.jclepro.2022.134077>
2. Saboor S, Venkata Ramana M, Erdem cuce, Kirankumar G, **Chelliah A**, Asif A, Chinmaya Prasad M. (2022) “Analysis of effective parameters of building’s glazing on energy saving and carbon emission mitigation prospective” *International Journal of Ambient Energy*,43(1) (Publisher: Taylor and Francis, **Impact factor: 2.54**; Index: SCI and Scopus) <https://doi.org/10.1080/01430750.2022.2111348>
 3. Saboor S, Kirankumar G, Aritra G, **Chelliah A**, Venkata Ramana M. (2021) “Energy Savings and Carbon Emission Mitigation Prospective of Building’s Glazing variety, Window to Wall Ratio and Wall Thickness” *Energies* 14,8020. (Publisher: MDPI **Impact factor: 3.252**; Index: SCI and Scopus). <https://doi.org/10.3390/en14238020>
 4. **Chelliah A**, Saboor S, Aabid Hussain S, Kontoleon K J, Domenico M, Behrouz P (2021) “Polymer and Non-polymer Admixtures for Concrete Roofs: Thermal and Mechanical Properties, Energy Saving and Carbon Emission Mitigation Prospective” *Journal of Building Engineering* (Publisher: Elsevier; **Impact factor: 7.144**; Index: SCI and Scopus). <https://doi.org/10.1016/j.jobe.2021.103495>
 5. **Chelliah A**, Saboor S, (2021). “Air-conditioning Cost Saving and CO₂ Emission Reduction Prospective of Buildings Designed with PCM Integrated Blocks and Roofs” *Sustainable Energy Technology Assessments* 48 101657 (Publisher: Elsevier; **Impact factor: 7.632**; Index: SCI and Scopus) <https://doi.org/10.1016/j.seta.2021.101657>.
 6. Saboor S, **Chelliah A**, Kiran Kumar G, Kim Ki-Hyun, Leed S-H., Shon Zang Ho, Brown Richard J. C. (2021) “Strategic Design of Wall Envelopes for the Enhancement of Building Thermal Performance at Reduced Air-Conditioning Costs” *Environmental Research* 193 110577 (Publisher: Elsevier; **Impact factor: 8.431**; Index: SCI and Scopus) <https://doi.org/10.1016/j.envres.2020.110577>
 7. **Chelliah A**, Saboor S. (2020) “Transforming Waste Disposals into Building Materials to Investigate Energy Savings and Carbon Emission Mitigation Potential” *Environmental Science and Pollution Research* 28,15259–15273. (Publisher: Springer; **Impact factor: 5.19**; Index: SCI and Scopus) <https://doi.org/10.1007/s11356-020-11693-0>
 8. **Chelliah A**, Saboor S, Ghosh A, Kontoleon K.J, (2021) “Thermal Behaviour Analysis and Cost Saving Opportunities of PCM Integrated Terracotta Brick Buildings” *Advances in Civil Engineering* 2021 6670930 (Publisher: Hindawi; **Impact factor: 1.843**; Index:SCI and Scopus) <https://doi.org/10.1155/2021/6670930>

Scopus indexed Journal

9. Kiran Kumar G, Saboor S, Habibur Rahman Sobuz, Sai Siva Subramanyam V, **Chelliah A**, (2020) “Energy Cost Saving Prospects in Buildings Using Various Window Glazing in Dhaka” International Energy Journal 20 (3A) 485-496. (Publisher: RERIC; Index: ESCI & Scopus)
<http://rerjournal.ait.ac.th/index.php/reric/article/view/2526/pdf>
10. **Chelliah A**, Karthick B, Vimalkodeeswaran A, Hariram V.R, (2015) “Helmet cooling system using phase change material”, ARPN Journal of Engineering and Applied Science 10 (4) (2015) 1770–1773. (Publisher: RERIC; Index: ESCI & Scopus)
11. Tharoon T, Praveen Rajha M, Santhosh N, Ranjith S N, **Chelliah A**,(2017) “Diminishing the Casting Defects by using Optimization Technique”, in International Journal of Engineering Research & Technology (Publisher: IJERT ; Index: ESCI & Scopus)

Books/Book Chapters Published:

12. **Chelliah A**, Saboor S (2020) “Numerical Investigation of Unsteady Thermal Characteristics of Lightweight Concrete for Energy-Efficient Buildings” Book Title: Advances in Air Conditioning and Refrigeration (Publisher: Lecture notes in Mechanical Engineering, Springer; Index: Scopus) 293-304. ISBN: 978-981-15-6360-7 https://doi.org/10.1007/978-981-15-6360-7_27.

CONFERENCES ATTENDED

1. Presented the paper named “Design and Fabrication of Solar Motor Cycle” in Kavery College of Engineering, Salem.
2. Participated in the Topic of “Design and Fabrication of Thermal Comfort Helmet” in Ramakrishna Engineering College, Coimbatore.
3. Participated in the Topic of “Numerical Investigation of Unsteady Thermal Characteristics of Lightweight Concrete for Energy Efficient Buildings” in CV Raman College of Engineering, Odisha

Professional Bodies:

ASHRAE

Google Scholar:

<https://scholar.google.com/citations?user=uUHvu28AAAAJ&hl=en&oi=ao>

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