



A Review on Recent Development in Liquid Desiccant Dehumidification Assisted Cooling Systems

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Abstract: *The building uses a substantial amount of energy, much of it for air conditioning (AC) systems. Due to its technique of humidity regulation and usage of refrigerants with potential for global warming, conventional air conditioning based on vapour compression refrigeration (VCR) is neither energy efficient nor environmentally benign. VCR is being replaced by the liquid desiccant air conditioning system (LDAS), which shows promise. This review study offers a thorough summary of LDAS's recent advancements. This also includes discussion of the advancements in dehumidifier, regenerator, desiccant material, and applications. The viability of systems in variable climate, performance measurement and interior air quality are also discussed. This communication will be helpful in identifying the research needs and opening up new avenues for future study to boost LDAS effectiveness.*

Keywords: Dehumidification, Liquid desiccants, Performance, Regeneration

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