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## Performance investigation on various models on solar photovoltaic thermal (PVT) hybrid system

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Publication date 2019/10/2

Journal AIP Conference Proceedings

Volume 2161

Issue 1

Publisher AIP Publishing

**Description** This research article deals with the first law of thermodynamic analysis on solar photovoltaic thermal hybrid system with three kinds of models namely model 1 (fully transverse obstacles), model 2 (partially transverse obstacles) and model 3 (longitudinal obstacles with baffles) experimentally. It was designed, fabricated and tested at the tropical climatic condition of Chennai. Two different mass flow rates of air (0.0071 kg/s and 0.0085 kg/s) have been used for enhancing the performance of the system. The performance of solar PVT hybrid system relies on solar radiation, physical geometry and mass flow rate of air. All the models were subjected to first law analyses which were compared with respect to local time and other parameters such as glazing temperature, outlet air temperature. The PVT hybrid system experimentally proved to enhance the thermal performances with an increasing air mass flow rate. The ...

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