Performance evaluation of spherical and pyramid solar stills with chamber stepwise basin

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**ABSTRACT**

In this work, novel designs of single slope solar still are suggested. Spherical and pyramid shapes with chamber stepwise basin were added to the conventional solar still design. An experimental study was performed to investigate the effect of introduced design modifications on the output parameters of the modified solar still. The addition of semi-spherical and chamber stepwise design enhanced the productivity of modified distiller by up to 57.1% as compared with pyramid solar still.

**Keywords**: Solar still; Spherical shape; Pyramid shape; Chamber stepwise basin