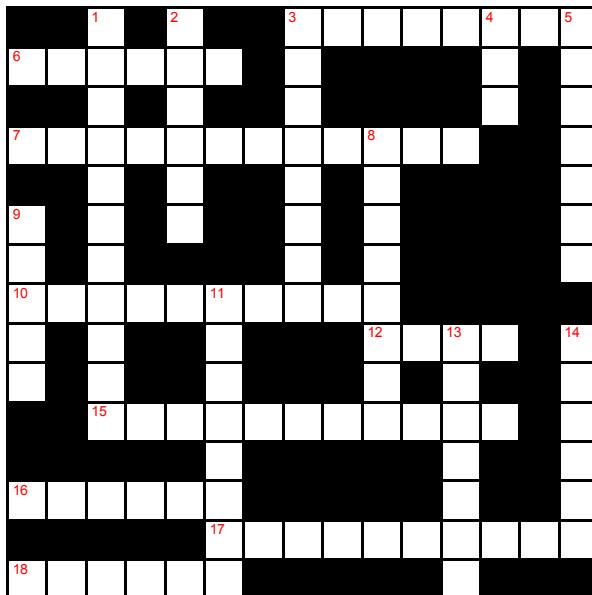


Solar_Energy_Systems_15x15_2008-10-20

B.B. Huria



Across

3 Blackened surface of collector that absorbs the solar radiation and converts it to heat energy. (8)

6 (Propylene ____) An antifreeze, heat transfer fluid that is circulated through liquid type collectors. (6)

7 The amount of heat required to change its temperature by one degree, and has units of energy per degree. (4,8)

10 Sensing device which changes its electrical resistance according to temperature. (10)

12 COLLECTOR ____: The angle between the horizontal plane and the solar collector plane. (4)

15 A liquid such as

Freon that is used in cooling devices to absorb heat from surrounding air or liquids as it evaporates. (11)

16 Sensing device that changes its electrical resistance according to temperature. (6)

17 Collector ____: The ratio of usable heat energy extracted from a collector to the solar energy striking the cover. (10)

18 ____ Solar Energy System: A system that uses both active and passive methods in its operation. (6)

by the flow of fluids (such as air or water) driven by fans, blowers or pumps. (6)

3 Thermostat which measures liquid temperatures. (8)

4 The quantity of heat needed to raise the temperature of one pound of water one degree Fahrenheit. (3)

5 ____ Panels: Panels with integral passages for the flow of warm fluids, either air or liquids. (7)

8 It Changes DC electricity to AC electricity. Most ____s have a 12 or 24 volt DC input and a 120 volt AC output. (8)

9 Black tank that serves as both collector and storage tank. Can be enclosed, with one

side glazed. (5)

11 ____ Radiation: Electromagnetic radiation from the sun that has wavelengths slightly longer than visible light. (8)

13 A measure of solar radiation; equal to one calorie per square centimeter. (7)

14 Solar ____: Electromagnetic radiation emitted by the sun. (6)

Down

1 An instrument for measuring solar radiation. (11)

2 ____ Convection: The transfer of heat