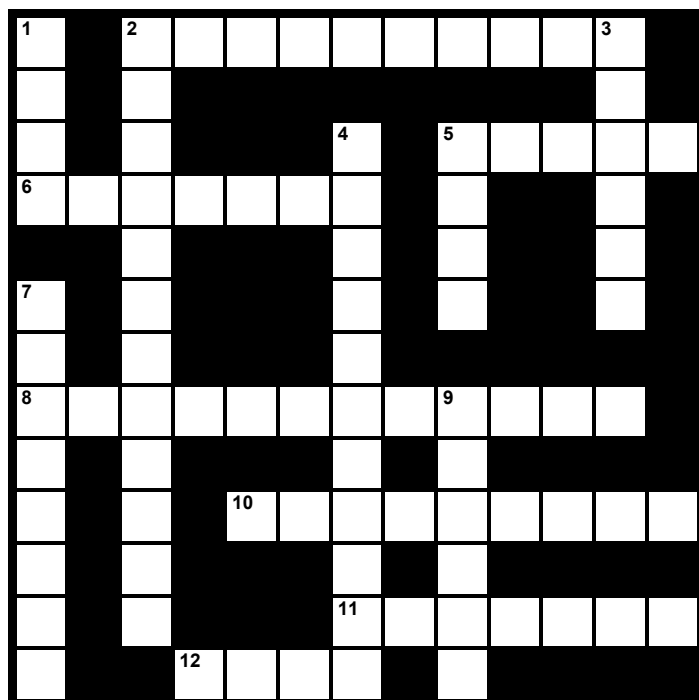


Thermodynamics_13x13_2003-06-04

B.B. Huria



Across

2 A group of thermocouples connected in series. (10)

5 Its specific heat is one. (5)

6 Rotary engine in which the kinetic energy of a moving fluid is converted into mechanical energy by causing a bladed rotor to rotate. (7)

8 The principle that equal volumes of all gases (at same temperature and pressure) contain equal numbers of molecules. (9,3)

10 It is a theoretical

cycle on which petrol and gas engine runs. (4,5)

11 The absolute scale of temperature related to the Fahrenheit scale is the XXXXXXX (R) scale. (7)

12 Carbon fuel produced by distillation of coal. (4)

Down

1 A form of energy that is transferred by a difference in temperature. (4)

2 A kind of thermometer consisting of two wires of different

metals that are joined at both ends. (12)

3 The capacity of a physical system to do work. (6)

4 The degree of hotness or coldness of a body or environment (corresponding to its molecular activity). (11)

5 Natural solid fuel. (4)

7 The process whereby heavy molecules of naphtha or petroleum are broken down into hydrocarbons of lower molecular

weight (especially in the oil-refining process). (8)

9 XXXXXX law of thermodynamics states that every process that occurs in nature is irreversible and unidirectional, with that direction being dictated by an overall increase in entropy. (6)