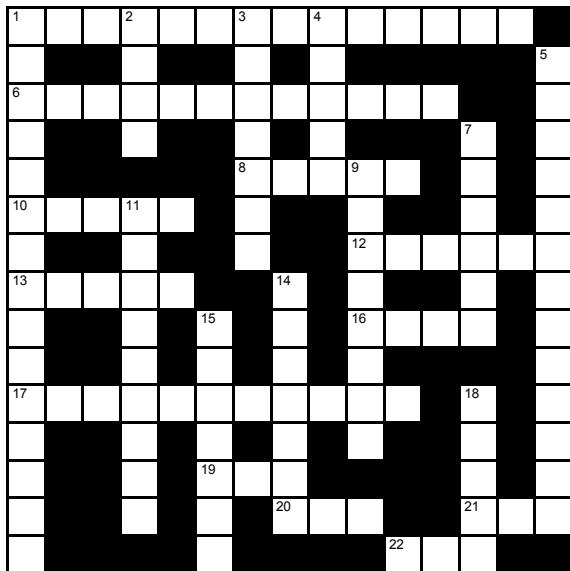


# Solar\_Energy\_15x15\_22008-10-20

B.B. Huria



## Across

- 1 A device capable of transforming energy from electric to chemical form and vice versa. (7,7)
- 6 An electric current induced by radiant energy. (12)
- 8 \_\_\_\_ Semiconductor: A semiconductor produced by doping an intrinsic semiconductor with an electron-donor impurity. (1-4)
- 10 Abbr. for a process for making inexpensive Gallium Arsenide (GaAs) photovoltaic cells. (5)
- 12 The flow channels or pipes that distribute the heat transfer liquid across the face of an absorber. (6)
- 13 Nickel Cadmium Battery. (5)
- 16 Useful \_\_\_\_: Period during which a cell or battery is capable of

operating above a specified capacity. (4)

- 17 A very thin region of static electric charge along the interface of the positive and negative layers in a photovoltaic cell. (4,7)
- 19 Edge Defined Film-Fed Growth method for making sheets of polycrystalline silicon for photovoltaic devices. (3)
- 20 A cgs unit of work or energy; the work done by a force of one dyne acting over a distance of one centimeter. (3)
- 21 A measure of the electrical resistance of a material. (3)
- 22 An electrically charged atom or group of atoms that has lost or gained electrons. (3)

## Down

- 1 That's what first 'S' in 'SMES' stands for. (15)
- 2 Charge \_\_\_\_: The current applied to a cell or battery to restore its available capacity. (4)
- 3 The two times of the year when the sun crosses the equator and night and day are of equal length. (7)
- 4 Electrical current produced by a photovoltaic array when it is exposed to sunlight. (5)
- 5 \_\_\_\_ Cell: A compound photovoltaic device in which sunlight is first divided into spectral regions by optical means. (5-8)
- 7 A unit of electrical current that flows across one ohm of resistance at 1 volt. (6)
- 9 \_\_\_\_ Connection: A way of joining solar cells or photovoltaic modules by connecting positive leads together and negative leads together. (8)
- 11 A PV array that consists of nonconcentrating PV modules. (4-5)
- 14 That's what last 'S' in 'SMES' stands for. (7)
- 15 The pipe that runs across the edge of an array of solar collectors, gathering or distributing the heat transfer fluid from, or to the risers in the individual collectors. (7)
- 18 A chemical element commonly used as the dopant in photovoltaic device or cell material. (5)