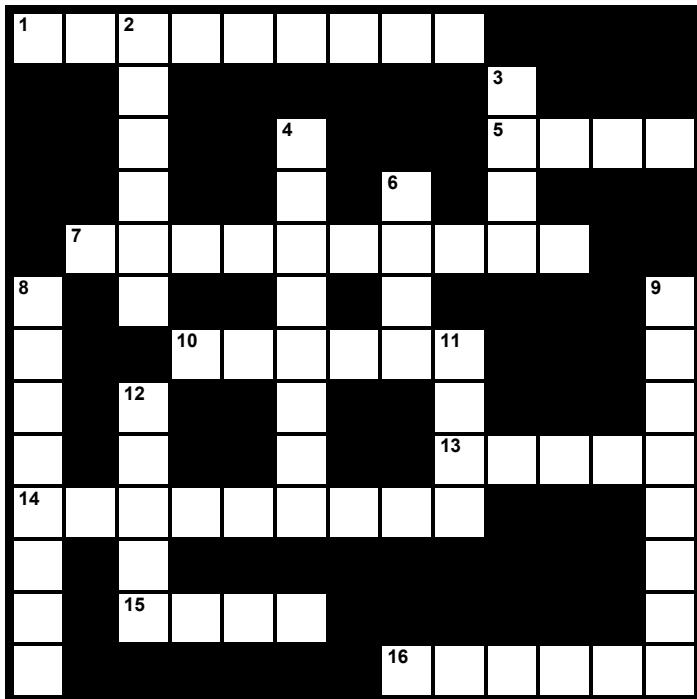


## Fluid Mechanics 13x13 2003-04-21

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### Across

1 The centre of buoyancy is the point through which the XXXXXXXX force acts. (9)

5 When a vertical cylinder containing fluid revolves, the fluid level rises along cylinder walls and this rise is equal to the fall in fluid level observed at the XXXX of the cylinder. (4)

7 Owner of the principle which states that the upthrust experienced by a floating object is always equal to the weight of the liquid that the said object displaces. (10)

10 When a vertical

cylinder filled with fluid to the open top is made to revolve about its axis at such a speed that half the fluid gets spilled out, in that event zero pressure will be observed at the centre of the XXXXXX of the cylinder. (6)

13 A unit of kinematic viscosity that is equal to 1 centimetre squared divided by second. (5)

14 Surface XXXXXXXXX promotes the transition from laminar to turbulent flow. (9)

15 The phenomenon of resistance to motion through a fluid. (4)

16 A natural event that

involves a change in the position or location of something. (6)

### Down

2 When an ideal fluid flows past a XXXXXX, total drag is zero. (6)

3 The wave that spreads behind a boat as it moves forward. (4)

4 The resistance encountered when one body is moved in contact with another. (8)

6 At critical temperature of a liquid, the surface tension becomes XXXX. (4)

8 Point representing the mean position of the matter in a body. (8)

9 The intermolecular force that holds together the molecules in a fluid. (8)

11 The property of a body that causes it to have weight in a gravitational field. (4)

12 A continuous amorphous substance that tends to flow and to conform to the outline of its container: a liquid or a gas. (5)