

## PROBLEM 10.6

**KNOWN:** Water boiling on a mechanically polished stainless steel surface maintained at an excess temperature of  $15^\circ\text{C}$ ; water is at  $1\text{ atm}$

PROBLEM 10.20

Electrical conductivity of a silicon chip Properties of saturated fluorocarbon

I

PROBLEM 10.20 (Cont.)

$$\left[ 0.1 \times 10^{-3} \text{ kg/c}^2 \vee 0.807 \text{ m/c}^2 / (16192 - 134) \text{ kg/m}^3 \right]^{1/4}$$

### PROBLEM 10.33

**KNOWN:** Forced convection and boiling processes occur in a smooth tube with prescribed water velocity and surface temperature.

**FIND:** Heat transfer rate per unit length of the tube.

**SCHEMATIC:**

