

# ME 146 Boiling Homework

from Incropera & DeWitt

efficient for water under atmospheric pressure in contact with mechanically polished stainless steel when the excess temperature is  $15^{\circ}\text{C}$ .

10.20 A silicon chip of thickness  $L = 2.5 \text{ mm}$  and thermal conductivity  $k_s = 135 \text{ W/m} \cdot \text{K}$  is cooled by boiling a saturated fluorocarbon liquid ( $T_{\text{sat}} =$