

4. The index of refraction of fused quartz at  $\lambda = 550 \text{ nm}$  is about 1.459, obtained from Fig. 34-19. Thus, from Eq. 36-3, we find

$$v = \frac{c}{n} = \frac{2.998 \times 10^8 \text{ m/s}}{1.459} = 2.06 \times 10^8 \text{ m/s} .$$