

**Answer on Question #45267, Physics, Molecular Physics**

an ungraduated thermometer reads 7.5cm in pure melting ice and 23.5cm in steam at 100degrees celcius. what is the reading on this thermometer when actual temperature is 65 degrees celcius

Solution

One degree change will cause change of readings on

$$(23.5 - 7.5)/100 = 0.16 \text{ cm}$$

Hence, 65 degrees will give

$$7.5 + 65 \cdot 0.16 = 17.9 \text{ cm}$$