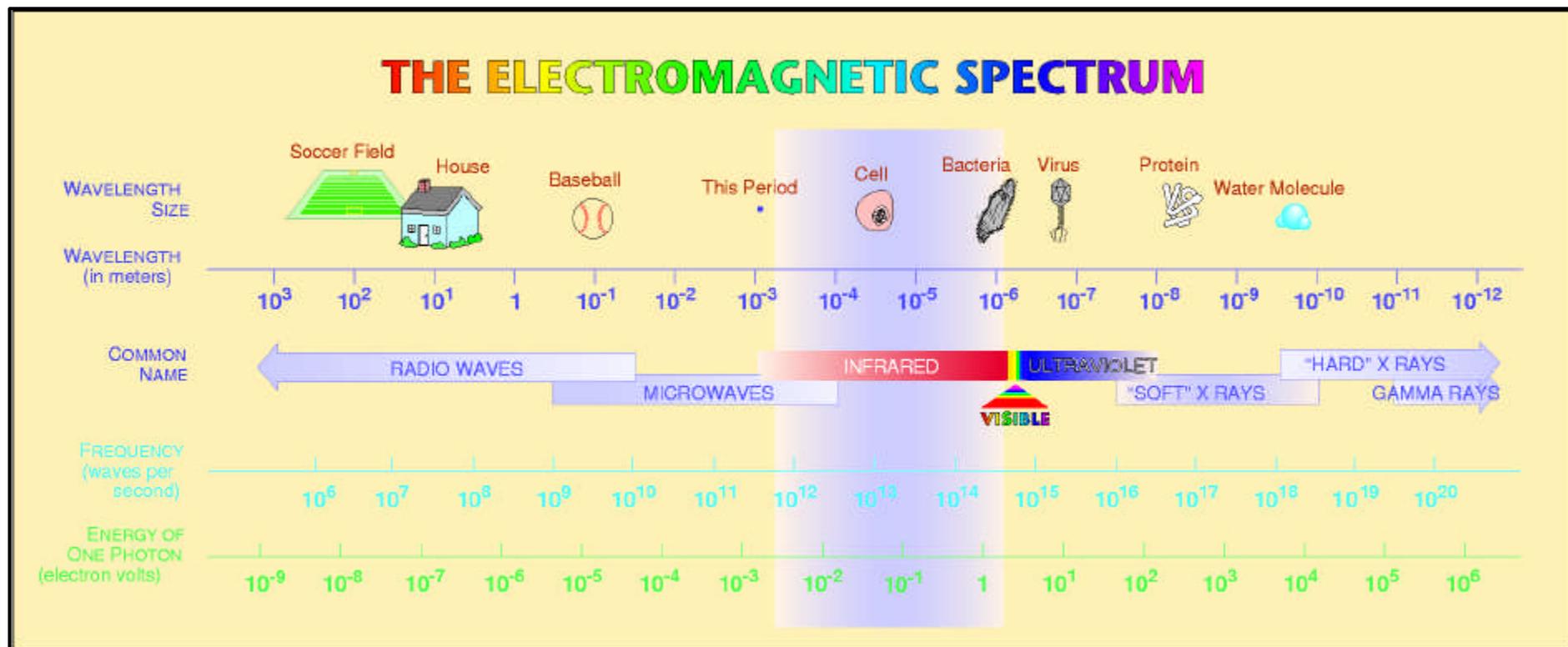




ERNEST ORLANDO LAWRENCE  
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# The Infrared Part of the EM Spectrum



**IR units: wavenumbers ( $\text{cm}^{-1}$ )**, 10 micron wavelength =  $1000 \text{ cm}^{-1}$ ,  $1 \text{ eV} \approx 8100 \text{ cm}^{-1}$

The Advanced Light Source primarily produces ultraviolet light and soft x-rays, but the entire spectrum from the far-infrared to the hard x-ray is generated and used for many different experiments.