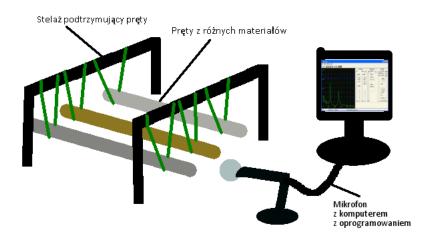
$E\sigma\varepsilon$

$$E = \frac{\sigma}{\varepsilon}$$

$$E = 4\rho l^2 f^2$$

 ρlf



$$\rho = \frac{m}{V}$$

mV

rh

$$V=\pi r^2 h$$

ah

$$V = a^2 h$$

Rrh

$$V = \pi (R^2 - r^2)h$$

 λ

$$\lambda = \frac{1}{f}$$

l

$$l = \frac{1}{2}\lambda$$

V = 2lf