

Ciklus 2, Vežba 6:

Određivanje koeficijenta viskoznosti stoksovom metodom

1. Tabela 1.

| No | r_s (cm) | t_1 (s) | t_2 (s) | t_3 (s) | t_s (s) | Δt_s (s) | ϑ_s (cm/s) | $\Delta \vartheta_s$ (cm/s) | r_s^2 / ϑ_s (cms) | $\Delta r_s^2 / \vartheta_s$ (cms) | r_s / R_s | $\Delta r_s / R_s$ |
|----|------------|-----------|-----------|-----------|-----------|------------------|----------------------|-----------------------------|-----------------------------|------------------------------------|-------------|--------------------|
| 1 | 0.242 | 1.85 | 1.86 | 1.86 | x | 0.01 | x | x | x | x | x | x |
| 2 | 0.253 | 1.76 | 1.77 | 1.77 | x | 0.01 | x | x | x | x | x | x |
| 3 | 0.282 | 1.51 | 1.50 | 1.52 | x | 0.01 | x | x | x | x | x | x |
| 4 | 0.321 | 1.26 | 1.25 | 1.24 | x | 0.01 | x | x | x | x | x | x |
| 5 | 0.360 | 1.08 | 1.08 | 1.08 | x | 0.01 | x | x | x | x | x | x |

$$s = (41.7 \pm 0.1) \text{ cm}$$

$$R = (2.24 \pm 0.002) \text{ cm}$$

$$\rho_{\text{glicerina}} = (1200 \pm 20) \text{ kg/m}^3$$

$$\rho_{\text{gvožđa}} = (7800 \pm 50) \text{ kg/m}^3$$

- Polja u tabelama pod oznakom "x" popuniti vrednostima koje je potrebno izračunati pomoću formula datih u zaglavlju tabela (koristeći date podatke u tabelama dobijene merenjem).