EXPERIMENT 3: CONSERVATION OF MECHANICAL ENERGY

Terrence Ho | ID: 804793446
Date of Lab: May 2nd, 2017
Lab Section: Tuesday, 5 P.M.
T.A.: David Bauer
Lab Partners: Robathan Harries

Contents

DISCUSSION

PLOTS AND TABLES

Mass of Glider with Photogate Comb = 0.225 ± 0.0005 kg

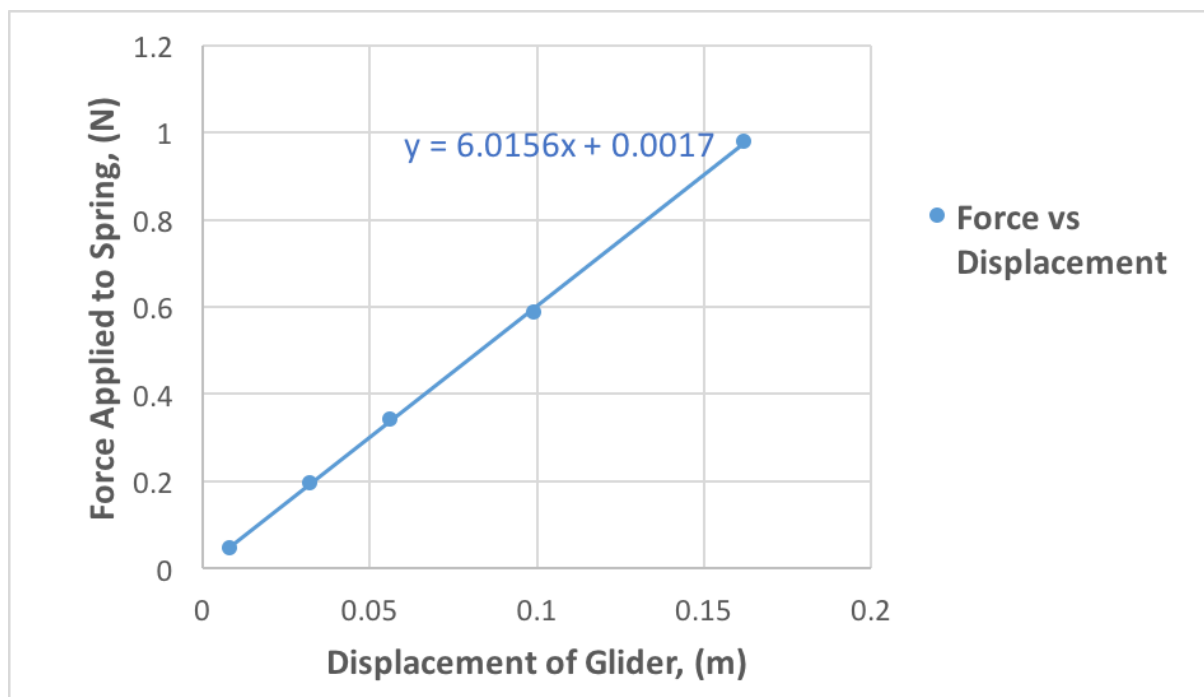| Hanging Mass (kg)	Applied Force (N)	Glider Displacement (m)
0.100 ± 0.0005	0.98 ± 0.005	0.162 ± 0.00005
0.060 ± 0.0005	0.588 ± 0.005	0.099 ± 0.00005
0.035 ± 0.0005	0.343 ± 0.005	0.056 ± 0.00005
0.020 ± 0.0005	0.196 ± 0.005	0.032 ± 0.00005
0.005 ± 0.0005	0.049 ± 0.005	0.008 ± 0.00005

Figure 3.1 Measuring Spring Constant by comparing force applied by hanging mass and displacement. The spring constant found in this case is $k = 6.016 \pm 0.002$ in N/m.

EXTRA CREDIT

REPORT

Abstract