Catalogue of Asteroid Polarization Curves
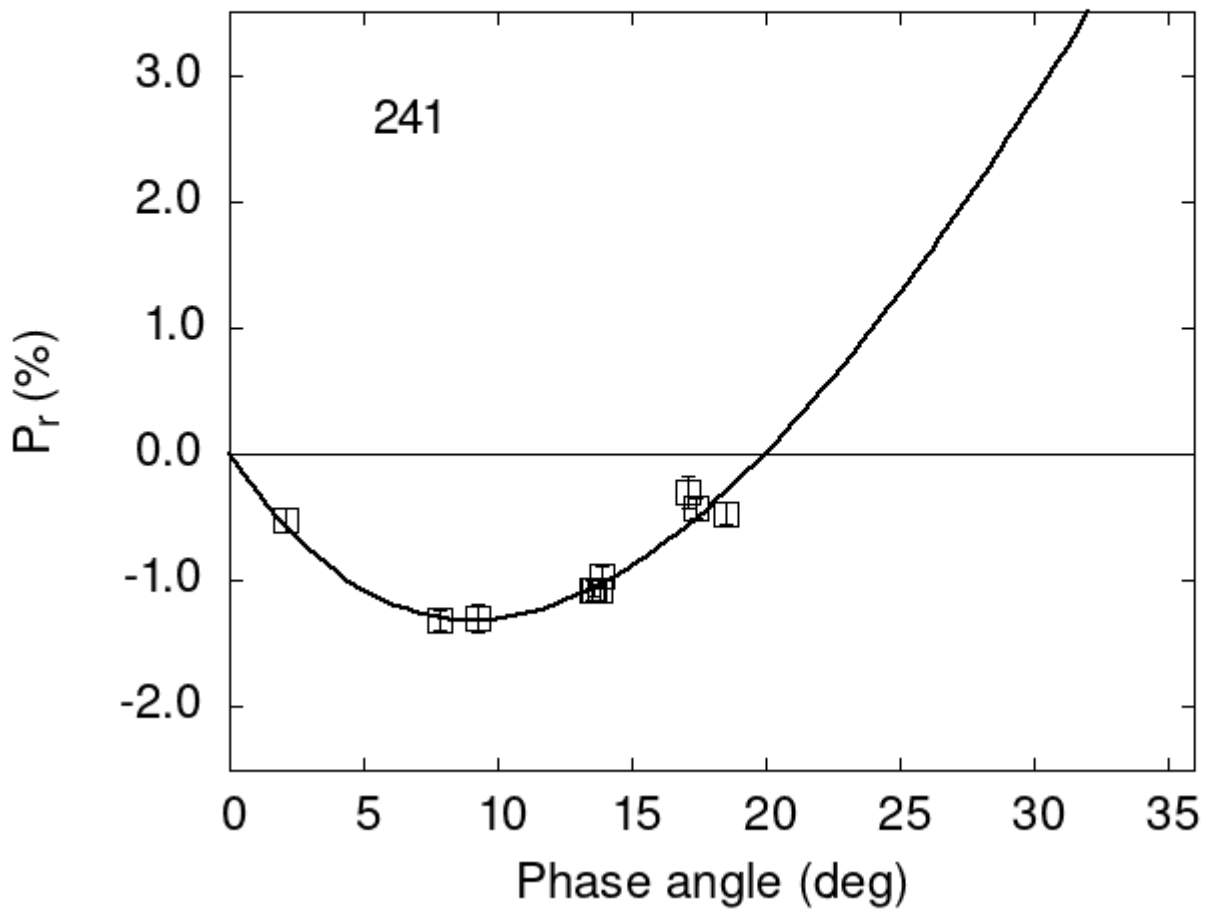
Gil-Hutton (2023)

Polarimetric data:

The columns list the object number, the phase angle (degrees), P_r (%), its error, the filter used, and the reference code.

```
241   2.08 -0.52 0.09 V f
241   7.81 -1.31 0.08 V f
241   9.25 -1.30 0.11 V f
241  13.51 -1.08 0.08 V f
241  13.79 -1.08 0.08 V f
241  13.91 -0.97 0.09 V f
```

```
241 17.11 -0.30 0.13 V f
241 18.49 -0.47 0.09 V f
241 17.40 -0.42 0.08 V a
241 13.60 -1.08 0.05 V a
```

Polarization Curve Parameters:

The polarimetric parameters were obtained fitting the observations to a polarization curve using the function:

$$P_r(\alpha) = Coe_1 \times \left[\exp\left(-\frac{\alpha}{Coe_2}\right) - 1 \right] + Coe_3 \times \alpha,$$

where α is the phase angle in degrees. The minimum of the polarization curve is identified by Pmin, Phmin is the phase angle where Pmin is reached, Ph0 is the inversion angle, and k is the slope of the polarization curve at Ph0.

```
#
#      Coe1     eCoe1     Coe2     eCoe2      Coe3     eCoe3
#    13.9386   0.5675   17.6343    0.8125    0.4731    0.0184
#
#     Phmin    err    Pmin     err   Ph0     err    k        err
#      9.05   1.07  -1.314   0.344  19.96   0.18  0.2182  0.0212
```