

PHYS417 Modern Lab
Prelab- Hall Effect Experiment

*Except where noted, all answers can be found in **PASCO (Hall Effect Experiment EX 5561)** write-up.*

Introduction

1) What is the Hall Effect?

'Google' questions.

2) What are some of the uses for the Hall Effect?

3) What is an n-doped semiconductor? (Keep answer short).

4) What is drift speed?

Theory

5) What is the difference between figures 1a and 1b on page 8 of PASCO writeup?

6) How does the Hall effect determine the charge of the charge carrier?

7) What is Hall coefficient?

8) What is the mobility (of charge carriers)?

Procedure

9) On page 13 of writeup there are two procedures (i.e., two variables that will kept constant). What are those?

10) On step 7 of 'Procedure I, there is a step on "Hall Voltage Compensation". Why is this step necessary?