**Laboratory work №4**

**Characteristics of photodiodes**

**Theoretical background**

 



Working process

1. Assemble the circuit 1 below;



1. Measure current of photodiode depending on voltage (I-V characteristics);
2. Construct graph of I-V characteristics;
3. Assemble the circuit 2 below;



1. Measure photocurrent of photodiode lighted with red LED;
2. Measure photocurrent of photodiode lighted with green LED;
3. Measure photocurrent of photodiode lighted with blue LED;
4. Measure luminance of red LED using luxmeter;
5. Measure luminance of green LED luxmeter;
6. Measure luminance of blue LED luxmeter;
7. Construct the responsivity graph using measured data.

$$R(λ)=\frac{I\_{ph}}{P\_{opt}}$$