

## Collaboration in STEM Education

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## PURITY AND COLOURS – MISSION POSSIBLE

It demonstrates the protection of water purity and opportunities for separation of household waste, what is "bionics" and opportunities for "smart road marking".

Aimed at the practical application of theoretical knowledge for domestic water purification, separation, the mechanism of color perception in humans.

Age group: 16 - 18 years

for more information: <a href="https://robomen.net/pcsons2022">https://robomen.net/pcsons2022</a>





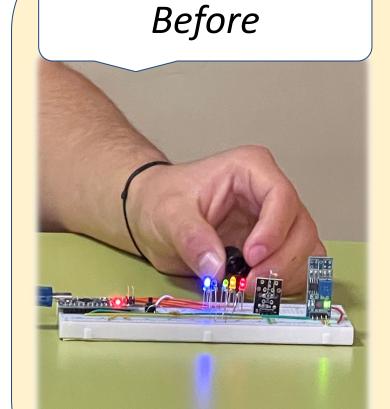
Model of a filter for domestic water purification

This model has been further developed in cooperation with the Bulgarian Academy of Sciences

**proposal:** to make a filter, Model of a filter for domestic water purification

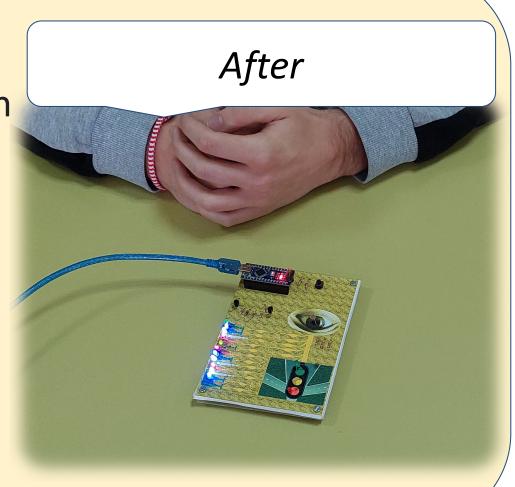
which is intended for local sites
(houses, villas, hotels, small
businesses, institutions, etc.) in order
to purify sedimentary polluted water.





## Color perception model

- first area demonstration of the functionality of the human eye and its color perception;
- second area by changing the mode (menu) to make a choice for traffic lights energy efficiency and a pleasant perception of smarter traffic lights that change the intensity of light, depending on whether it is day or night, sunny or cloudy day.



The fact that the models are related to practically important issues such as environmental protection and that are constructed by students, prove that education for the benefit of humanity and nature is a **mission possible**!





