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Тернопільський національний технічний університет ім. Івана Пулюя

IVAN PUL'UJ – WORLD-KNOWN SCIENTIST

Науковий керівник: ст. викл. Петришина Л. Й.

Консультант: к.ф-м.н., доцент Пундик А. В.

Declaration of independence of Ukraine in 1991 arose a keen interest of Ukrainian community in glorious and at the same time tragic history of its Motherland lavish with famous figures.

The most well-known Ukrainian scientist of late XIX – beginning of the XX centuries was Ivan Pul'uj. His discoveries are in the field of physics, illuminating engineering, electrical engineering and telephony.

Scientific works by Ivan Pul'uj in the field of physics and electrical engineering in addition to deep fundamental experimental and theoretical researches also contain a great number of discoveries having a great practical value from long ago to recent years.

One of the most interesting Ivan Pul'uj's devices is the device for demonstration of free falling of bodies.

Falling of the body in vacuum when only gravitational force acts upon is called free falling.

For effective demonstration of body free falling it is necessary that the bodies quite different in the form, dimensions and weight start the falling simultaneously. Ivan Pul'uj succeeded to provide such conditions in the device by means of which it was easy, convenient and safety to demonstrate that in air-free space all bodies fall with the same speed.

Ivan Pul'uj's device consists of well vacuumed and sealed from both sides glass tube 40 mm in width and 1500 mm in length. Metal (perhaps steel) ball 15 mm in diameter and light feather with thin iron pin were placed inside this tube.

Rubber cork was placed into the lower end of the glass tube in order to protect the tube from the impacts of falling ball. Brass bush with flange and iron core electromagnet screwed on it was glued by sealing wax to the upper end of the tube.

Thin point of iron needle having 2 mm in length was inserted into thicker end of feather. Very thin glass pipe sealed from one side was attached to the feather in order to avoid needle drawing from feather by electromagnet.

Tube for falling is suspended in the fork of woodstand by means of two pins attached to electromagnet.

The way of carrying out the experiment is presented in the article.