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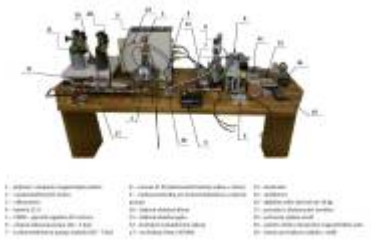
Plasmatic vacuum reactor (PVR) 1



1. Plasmatic vacuum reactor (PVR) consists of two steel hemispheres, which are mutually connected by a ring to form a sphere. Outter diameter is approximately 17 cm and inner diameter is 13 - 14 cm. PVR contains a window approximately 3 - 4 cm diameter, through which you can observe what is happening inside, further input and output of incoming or outgoing voltage. In the center of PVR there is central nonamgnetic collumn (isolated from PVR), which comprises arbor of 2nd high speed DC engine, at it's end neodymium magnets are placed. The arbor is isolated from DC engine teflon-lined. It is possible to move DC engine with the arbor in or our of PVR by 19 - lifting system of the rotating magnetic field (Bolen - cable) and it is driven by 4th 12 V battery. Speed of DC engine can be adjusted from 0 - 11 000 rpm by 5th PWM regulation. Improtant part of laboratory is vacuum system 6,7,8,9, which is used to create vacuum in millibars in 1st receiver and 12th containers . This vacuum system is connected with receiver and containers 17 by pipes and metering valves and 18 protective return valve, which is used to prevent intrusion of atmospheric air to turbomolecular pump, otherwise it would be destroyed. 13. USB Osciloscope is used to measure and record values during tests.

Ostatné časti nášho laboratória:

- 1. stolový počítač
- 2. zdroj na zmenu napätia zo striedavého na jednosmerné (10 A a 40 V)
- 3. zdroj vysokofrekvenčného zariadenia (VFZ) cca 10 - 100 KV s frekvenciou cca 100 000 Hz
- 4. profesionálny univerzálny sústruh na vytváranie určitých komponentov

Časti, ktoré do nášho laboratória ešte potrebujeme:

- 1. vysokofrekvenčné zariadenie na generovanie napätia 100 KV o frekvencii 100 000 Hz a minimálnych prúdoch plynulo regulovateľné (bezpečné pre naše testy)
- 2. HD kamera na zaznamenávanie pokusov (statív máme)
- 3. osciloskop, sondy prípadne násobiče, ktoré dokážu toto vysoké napätie spolu s frekvenciou zmerať a zaznamenať....

Zapojení lidé

- Ján Striček

- Radovan Striček
- Marek Ištvánek

- Plán vývoja plazmatického vákuového reaktora (PVR) 1