Measurement report3

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Tatabánya

The subject of the measurement:

measurement of the inlet and outlet power of a cyclically operated gas discharge tube based on the equilibrium heat dissipation of electrical signals and load resistances

The basis of measurement:

According to the current state of science, gas discharges are a phenomenon in which the discharge is accompanied by pulses of energy. This phenomenon is due to the catalytic effect of plasma-implied electron clusters, also known as CPs (condensed plasmoids), flowing in the ionisation channel, on gas atoms, resulting in transmutation, based on the Egely principle. In hydrogen discharge, for example, cold fusion.

To experimentally prove this phenomenon, we have spent years building an experimental device to create a gas discharge in a cyclic process.

Circuit diagram of the oscillator:

Object of measurement: measurement of the input and output power of a cyclically operated gas discharge pipe based on equilibrium heat dissipation of electrical signal shapes and load resistors Basis of measurement: According to the current state of science, gas discharges experience a phenomenon during which the discharge is accompanied by energy pulses. The reason for this phenomenon is the catalytic effect on gas atoms of plasma electron clusters, also known as CPs (condensed plasmoids), flowing in the ionization channel, according to the Egely principle, resulting in transmutation. For example, cold fusion in hydrogen discharge. To prove this phenomenon experimentally, we built an experimental device with which we can create a gas discharge in a cyclic process. Wiring diagram of the oscillator:

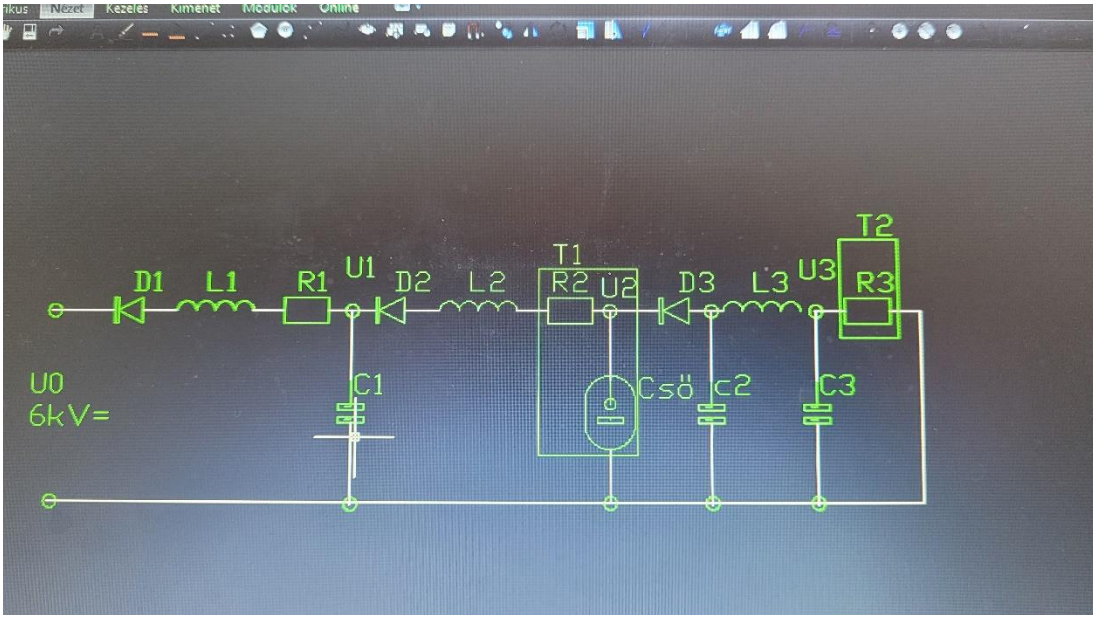

Figure 1 The measuring points in the circuit are the voltages U1, U2 and U3 and the temperatures T1/R1, T2/R2, T3/R3. The present measurement was carried out as shown in Figure 6

The gas discharge pipe is the result of years of development. It has conical aluminium electrodes in a glass tube with anodised surfaces

Based on the measurement layout, it is possible to display the entire measurement data set in a single image. The arrangement of the measurement is shown in Figure 2

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The measurement setup is shown in Figure 2

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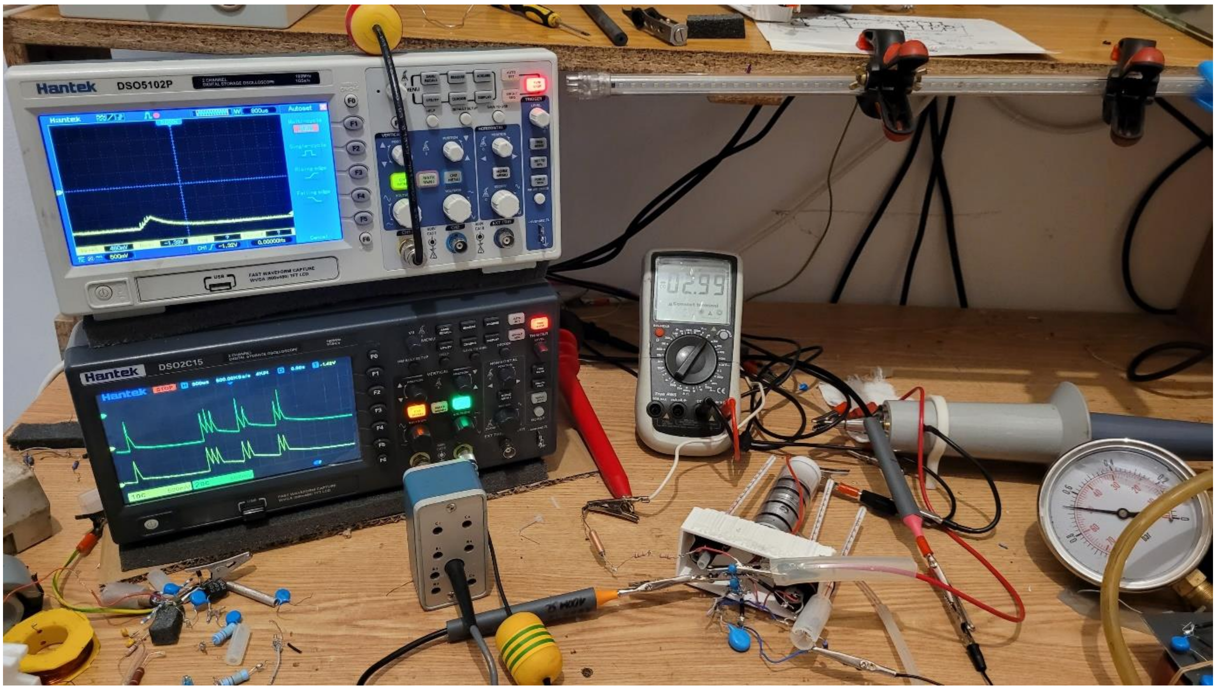

Figure 2: multimeter with the input in kV, upper probe the U3 voltage, lower probe the green U2 cathode voltage, yellow the U1 voltage, in the middle the measuring circuit with the high voltage high frequency probes, the three T1 , T2,T3 glass thermometers, finally on the right the gas pressure gauge

Signals: the U1, U2 and U3 tensions shown in Figure 3

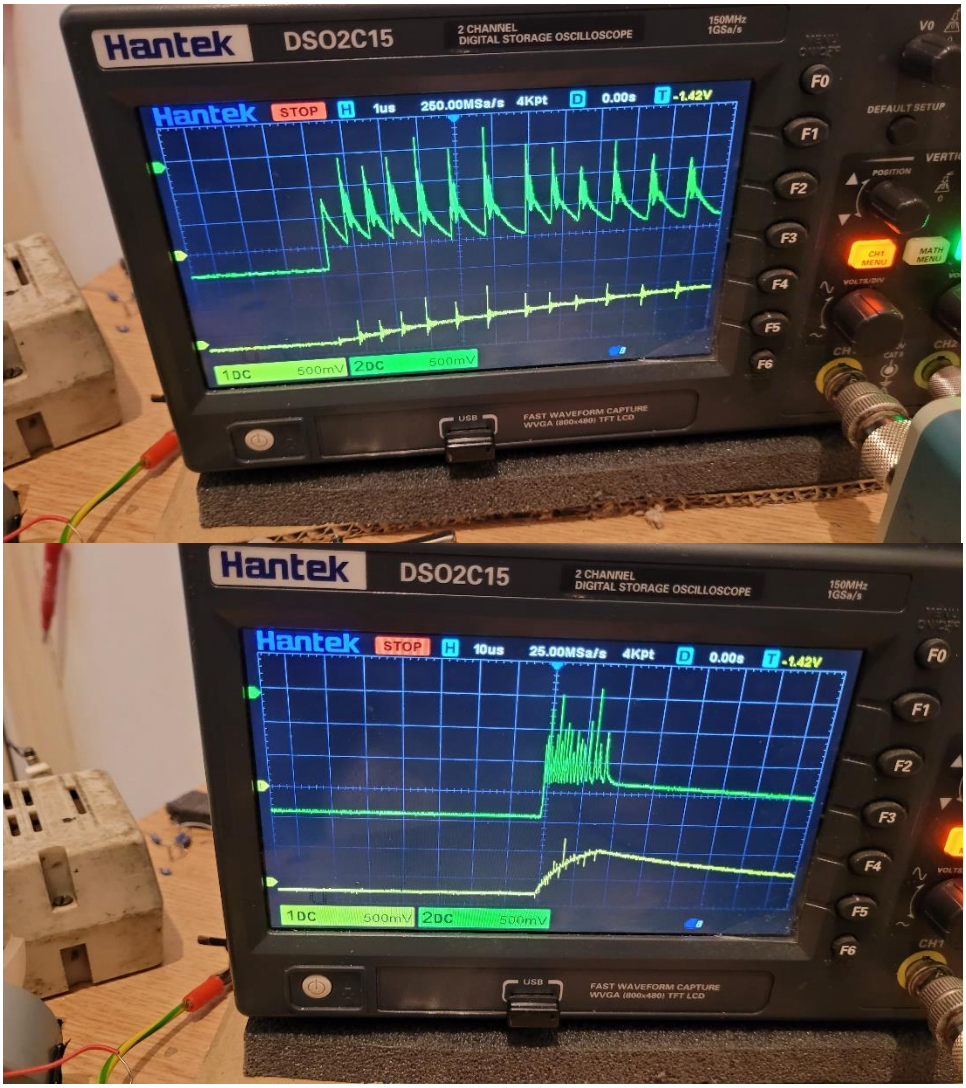

Figure 3 Lower green is the U2 cathode voltage , yellow is the relax capacitor voltage, upper the cathode voltage magnified to show the z energy pulses

Calibration see Figure 6

The accuracy of the measurement in the current setup is estimated at 20-30% and is only suitable for mapping the measurement parameter matrix due to the vobulence. The equilibrium temperatures for a known heating power of 1 w are measured and the power is calculated from them. The thermostats shown in the photograph are calculated with 33(R1),25(R2) and 20(R3) mW/C. The 1 Mohm part of the R1=1.4Mohm resistor heats T1, so dT1 x1.4 is used.

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33(R1),25(R2) and 20(R3) mW/C. The 1 Mohm part of the resistor R1=1.4Mohm heats T1, so dT1 x1.4 is meant.

The plasma looks something like this Figure 4.

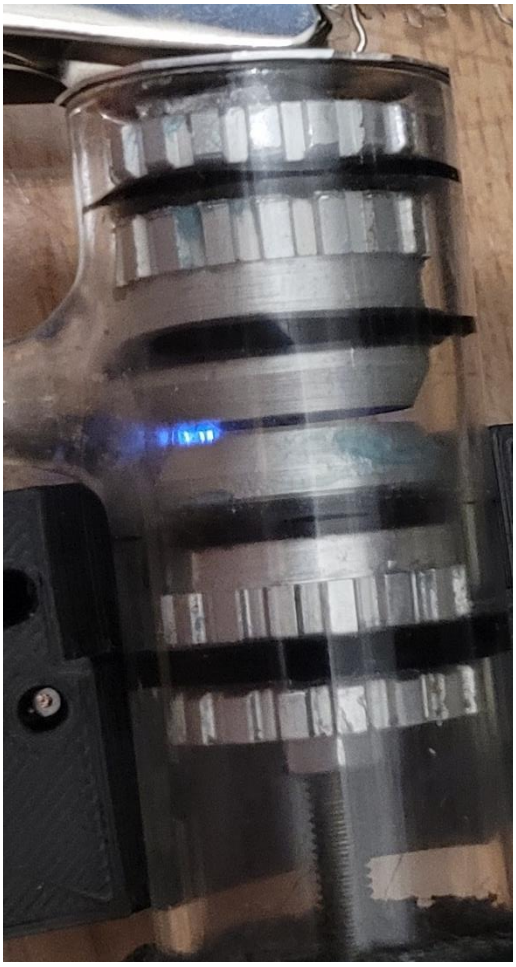

Figure 4 Plasma while the cycle is 40 usec, the discharge is only 0.4 usec and the pulses are an order of magnitude shorter

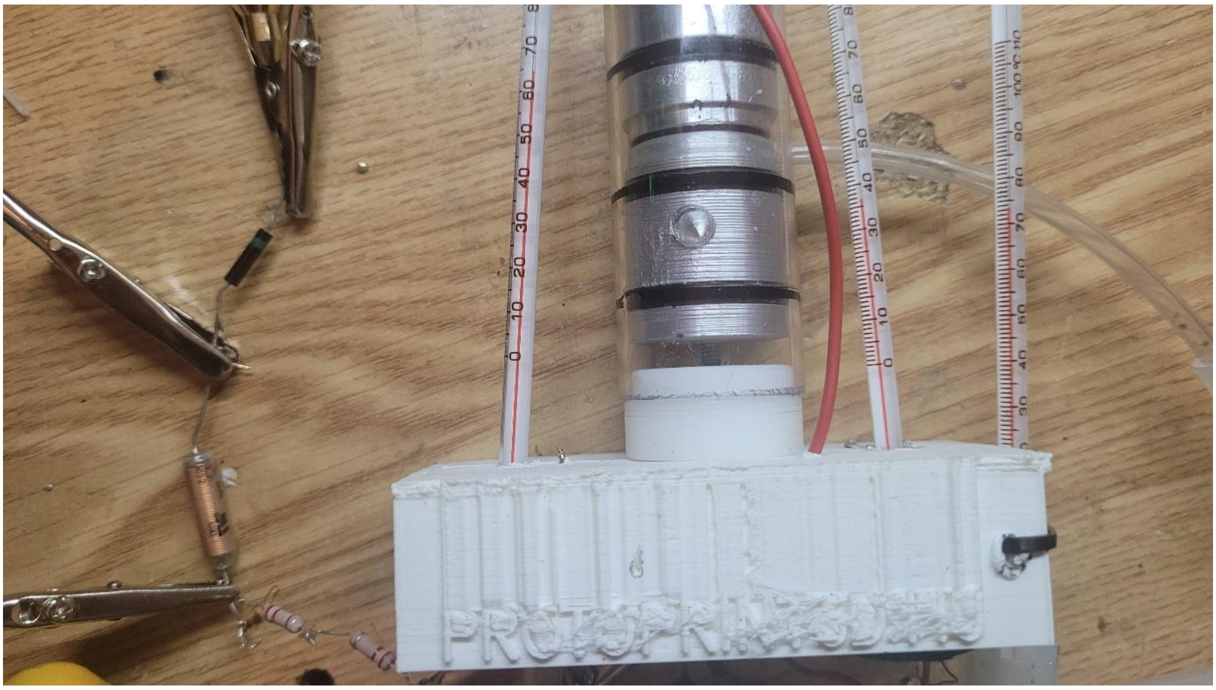

Figure 5.thermometry,T0=22 degrees,left T1(R1)=64 degrees,middleT2(R2)=37 degrees,right T3(R3)=74 degrees

How the circuit works

When the power supply is on, R1 charges C1 et R1xC1 with a time constant... Until the breakdown starts, D1 is closed because R3 is set to be greater than U3 for the breakdown. When the breakdown is initiated, the pulses come in. These are routed to C2 C3.

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Result: from the discharge time constant of the capacitor R2xC1, it follows that the energy of C1 dissipates at R2, this input is at a higher level and the resulting pulses dissipate at R3. This is where the pure fusion energy in heat appears.

Final result: it follows from the capacitor discharge time constant R2xC1 that the energy of C1 dissipates at R2, this input is heated, and the resulting pulses are dissipated at R3. This is where pure fusion energy in heat appears.

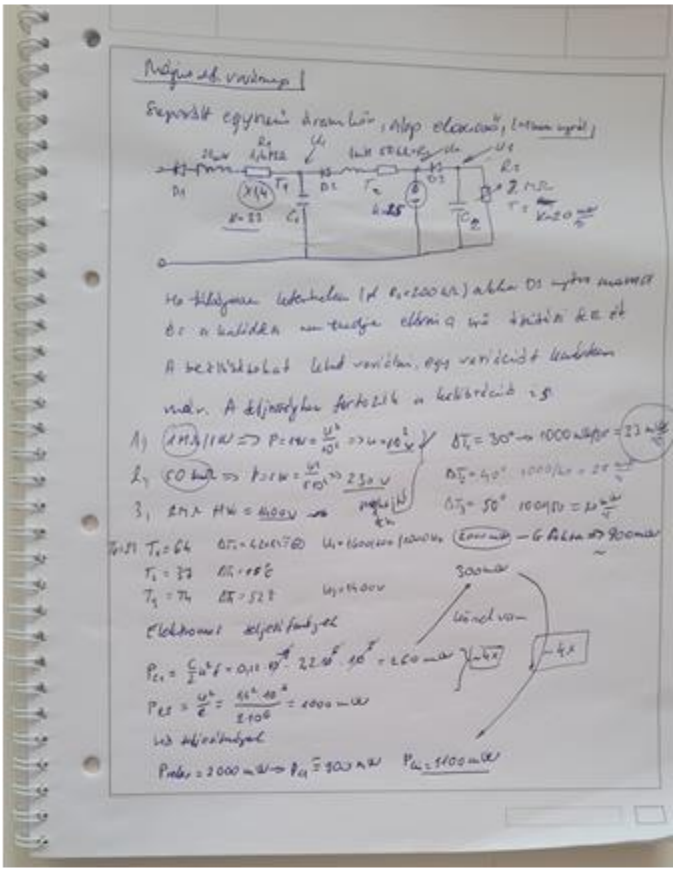

Figure 6.Notes

Data

U 1 =1600V/600V, 1200Hz

U 3 =1400V,2 Mohm

T0=22 degrees

T1=64 degrees dT1=42x1.4~60 degrees(1Mohm inside the thermos,0,4 Mohm outside)

T2=37 degrees dT2=15 degrees

T3=74 degrees dT3=52 degrees

Pc=C/2 x U12 x f=0.12 x 10ad-9 x(2.56-0.36)x 10ad 6x 1.2 x 10ad3~310mW electric

Pc heat=15 x 25 =375 mW dissipation loss of the above input

Pr = U3ad2/R3= 2.56 x 10 ad6/2x10ad6~1280 mWelectromos

Pr heat = 52x20~1040 mW dissipation of the above electrical output

COP~(375+1040)/375=3.8x in heat

A COP~1280/310~4x electrically

The design of the measuring circuit was based on the ability to measure the dissipated power of the resistors.

This power heats the resistor and its installation environment. At steady state, a linear relationship is found between power and temperature. Therefore, the insulation does not have to be as good as possible, but only the heating power associated with the measured temperature in the ranges under consideration has to be calculated. The evaluation of the measurement is even easier if the thermostats are thermally identical.

The operating processes of the measuring circuit can be followed on the oscilloscopes.

1.C1 is charged with a time constant R1 x C1.

2.C1 discharges with a time constant R2 x C1, a hundred times shorter.

3.The potential U2 is below the breakdown voltage until ionisation starts.

4.During the knockover, the potential is again low.

5.The extremely steep pulses generated in the discharge tube during discharge open the D3 diode and are absorbed by the C2 buffer

6.During this short time, a negligible amount of lead from the feed enters C2 with the R1 x C2 time constant.

7.R3 times the continuous power input can be extracted.

The evolution of the performances between the individual circuit units is like this:

1.If C1 is charged for at least 3xR1 x C1 (i.e. charged to U0), then the power P in C1 is approximately equal to the dissipation P R1 (see G factor).

2.Most of the PC1 dissipates on R2, so Pr2 is about the same as PR1

3.PR3 is heated by the pulses that flow out of the tube.

4. The resulting performances are Pbe=PC1, and Pki=PR2+PR3

Csaba Csőkör

Tatabánya

The design of the measuring circuit was based on the measurability of the dissipated power of the resistors. This power heats the resistance and its installation environment. In the steady state, a linear relationship between power and temperature was found. Therefore, the thermal insulation does not have to be as good as possible, but only the heating capacity associated with the measured temperature in the examined ranges is calculated. It is even easier to evaluate the measurement if the thermostats are thermally identical. The operating processes of the measuring circuit can be traced on oscilloscopes. 1.C1 is charged with time constant R1 x C1. 2.The discharge of C1 proceeds with a time constant R2 x C1, one hundred times shorter. 3.The U2 potential is below the breakthrough voltage until ionization begins. 4.During a breakthrough, the potential is low again. 5.The extremely steep pulses generated in the discharge tube during discharge open diode D3 and are absorbed by buffer C2 6.During this short period of time, the time constant R1 x C2 discharges.