

<https://www.youtube.com/watch?v=7K14cCxfCsk>

- 1) What is the effect?
(8 papers published in Infinite Energy)
- 2) What are the possible application areas?
- 3) What is the device in its simplest form?
- 4) Where is it located on the map of LENR?
- 5) How can the energy be measured?

Explore the physics of direct electric energy production based on

a) Forgotten patents (15 US patents)

b) Forgotten academic research (mainly British)

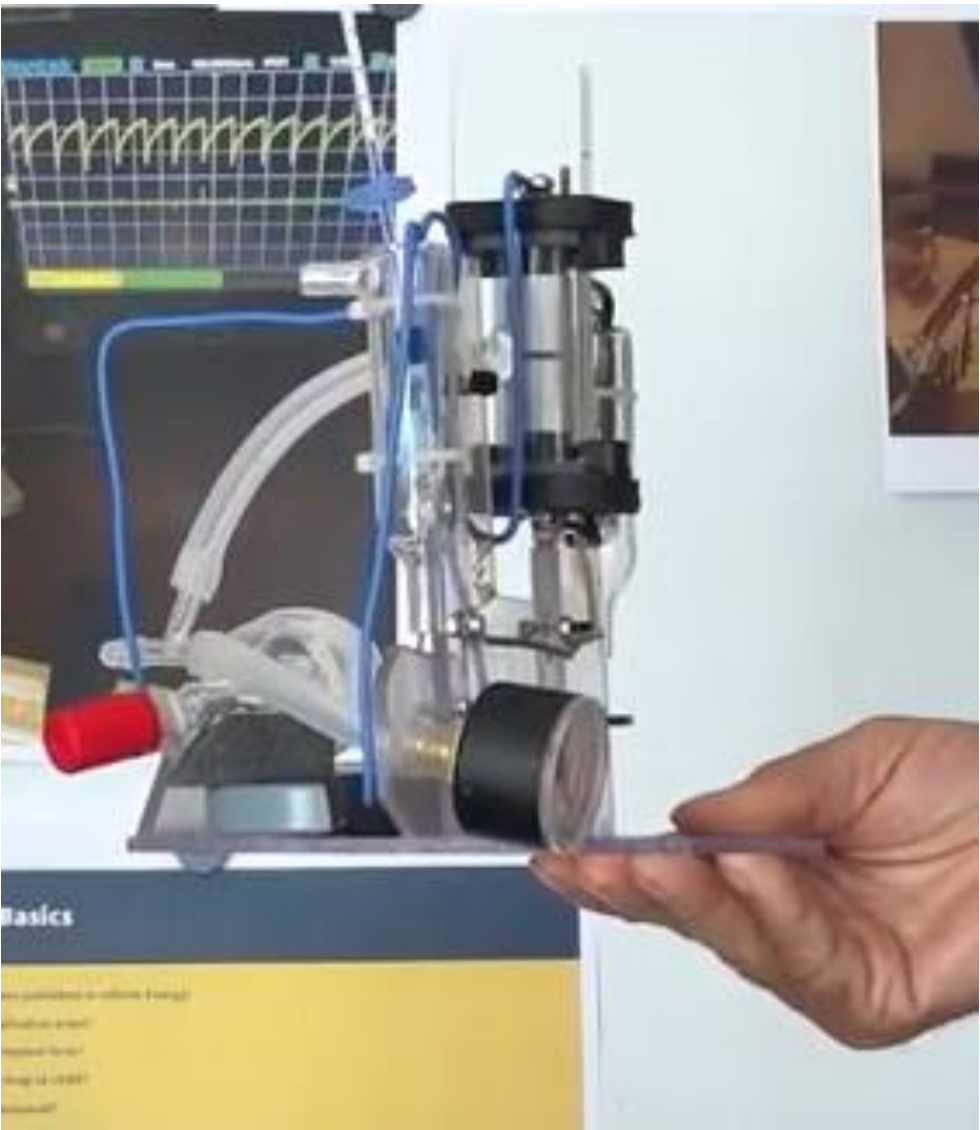
Background: 25+ years lab experience working on replicating forgotten findings, e. g.

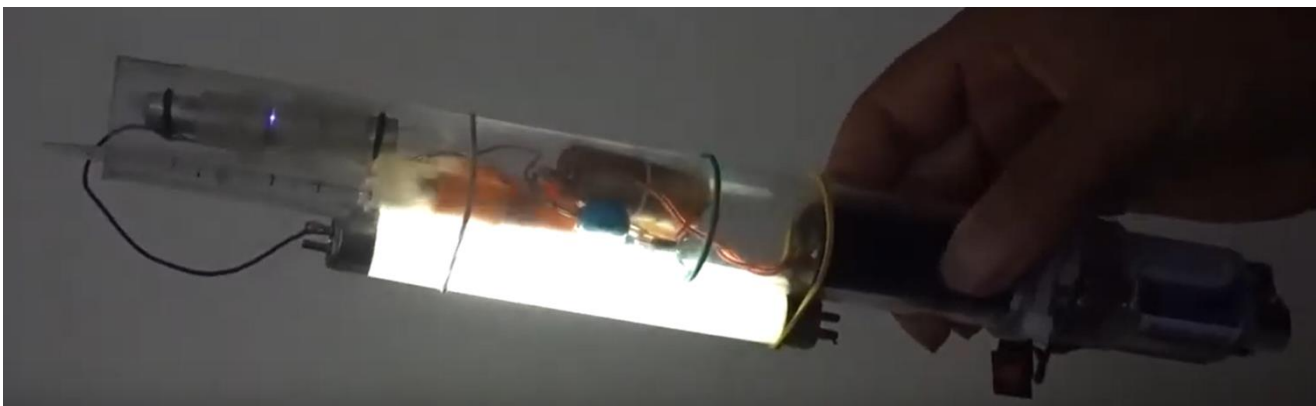
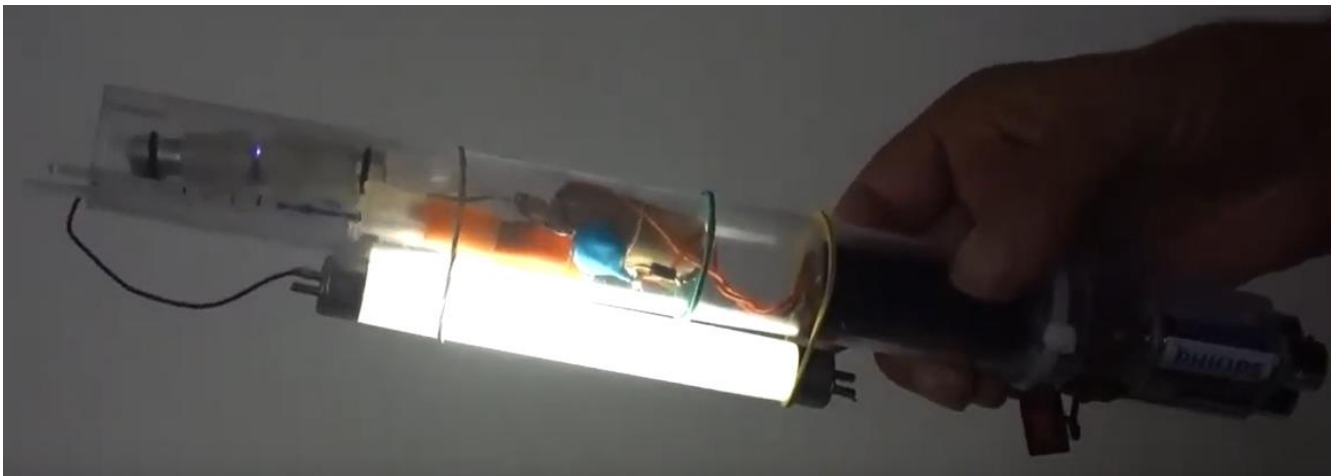
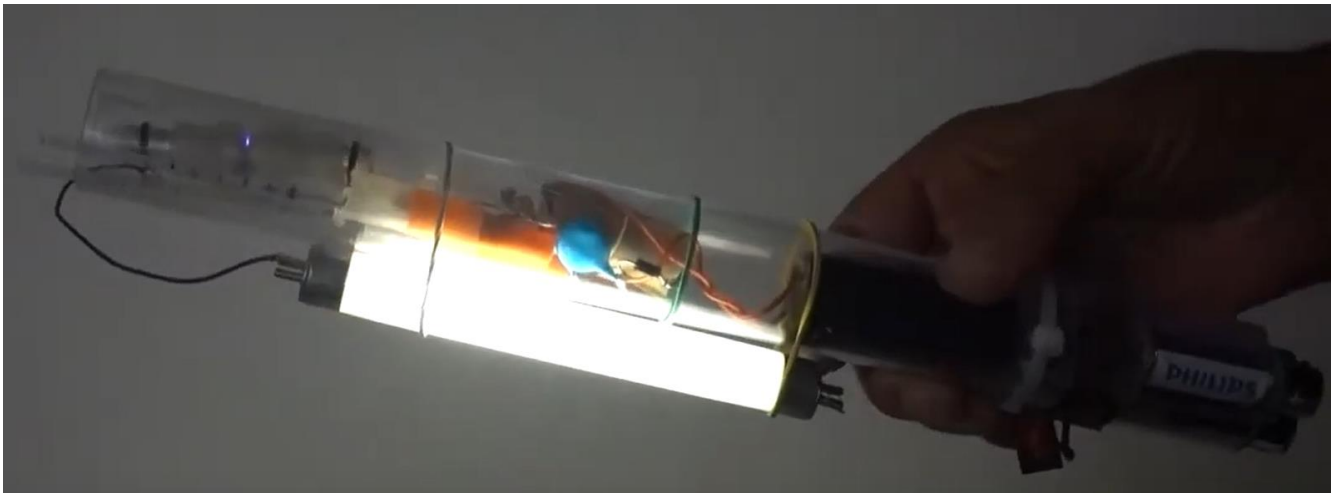
- Alexander Chernetskii
- Alexandra and Dr. Paulo Correa

Understanding the chain of physical processes
Increasing the efficiency of the catalytic fusion process

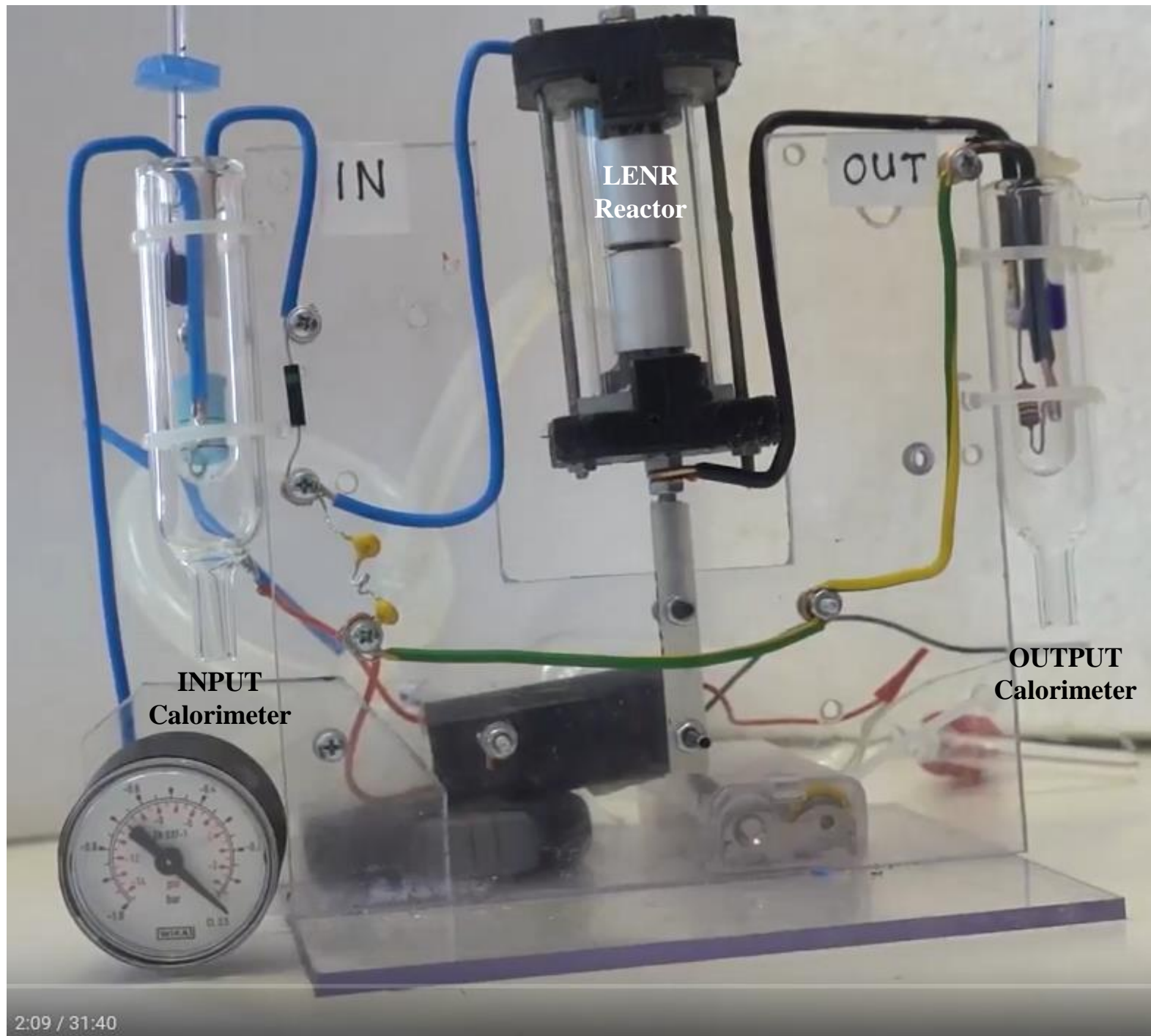
Finding the important technical parameters
and their relations

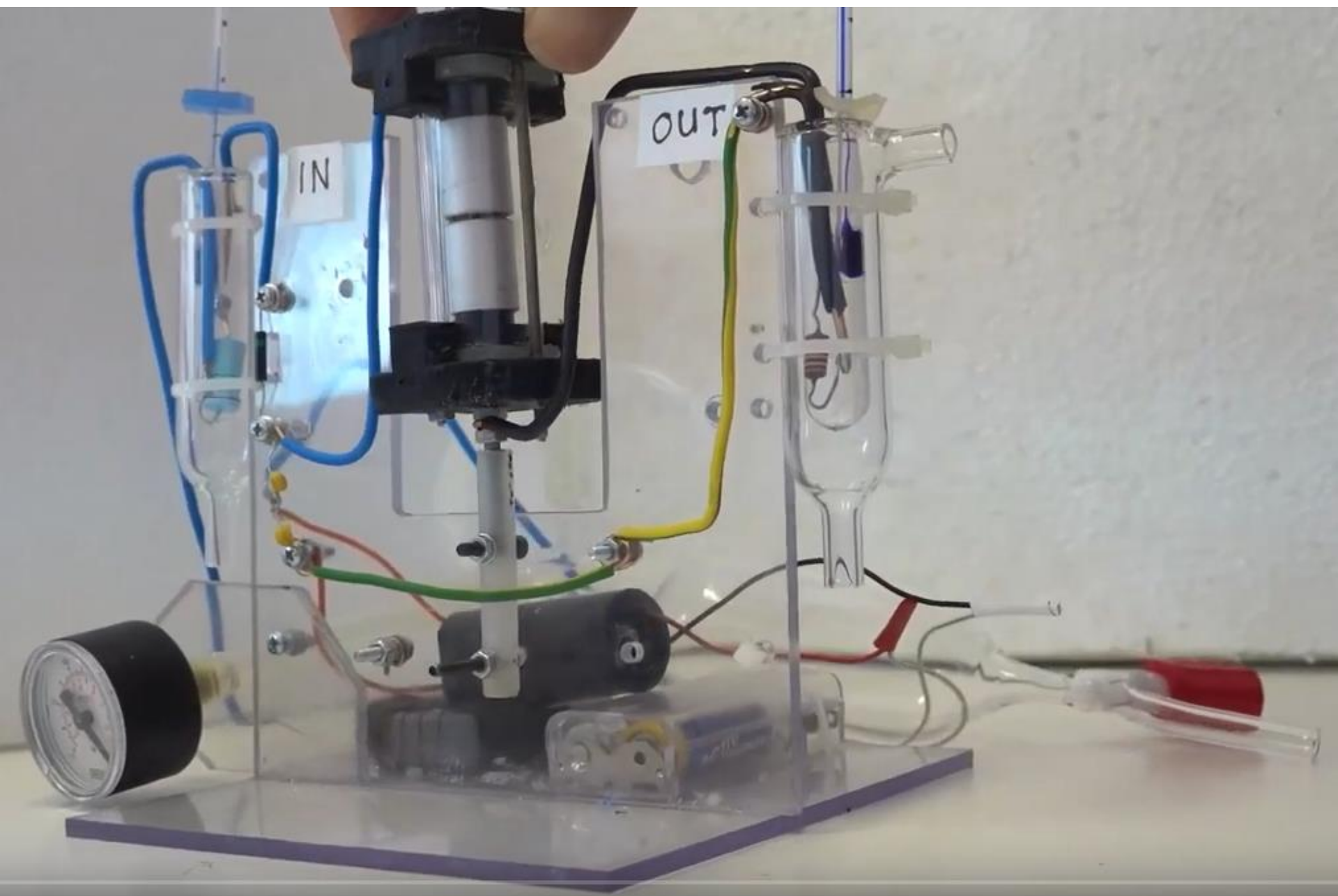
Improving quality control

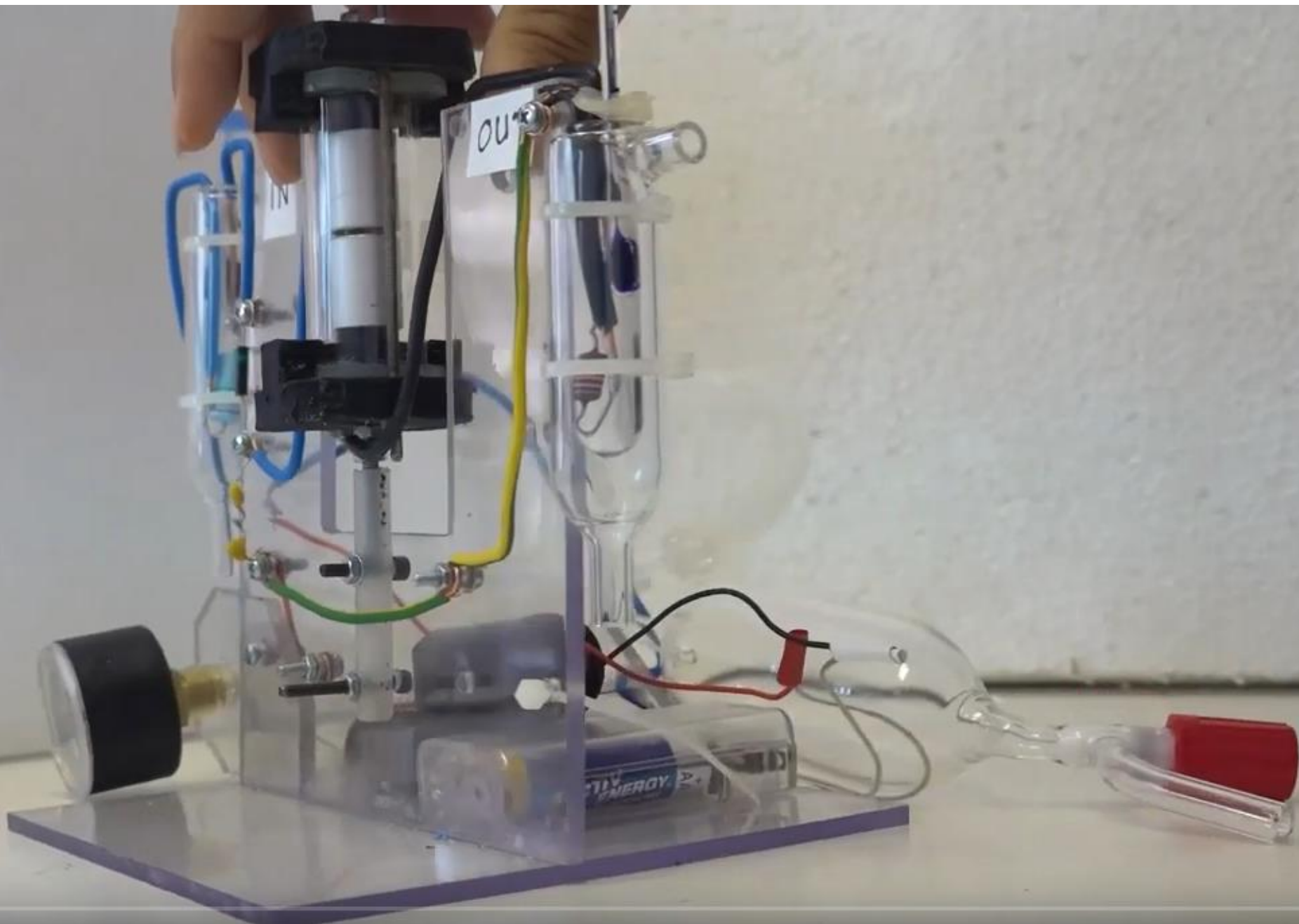


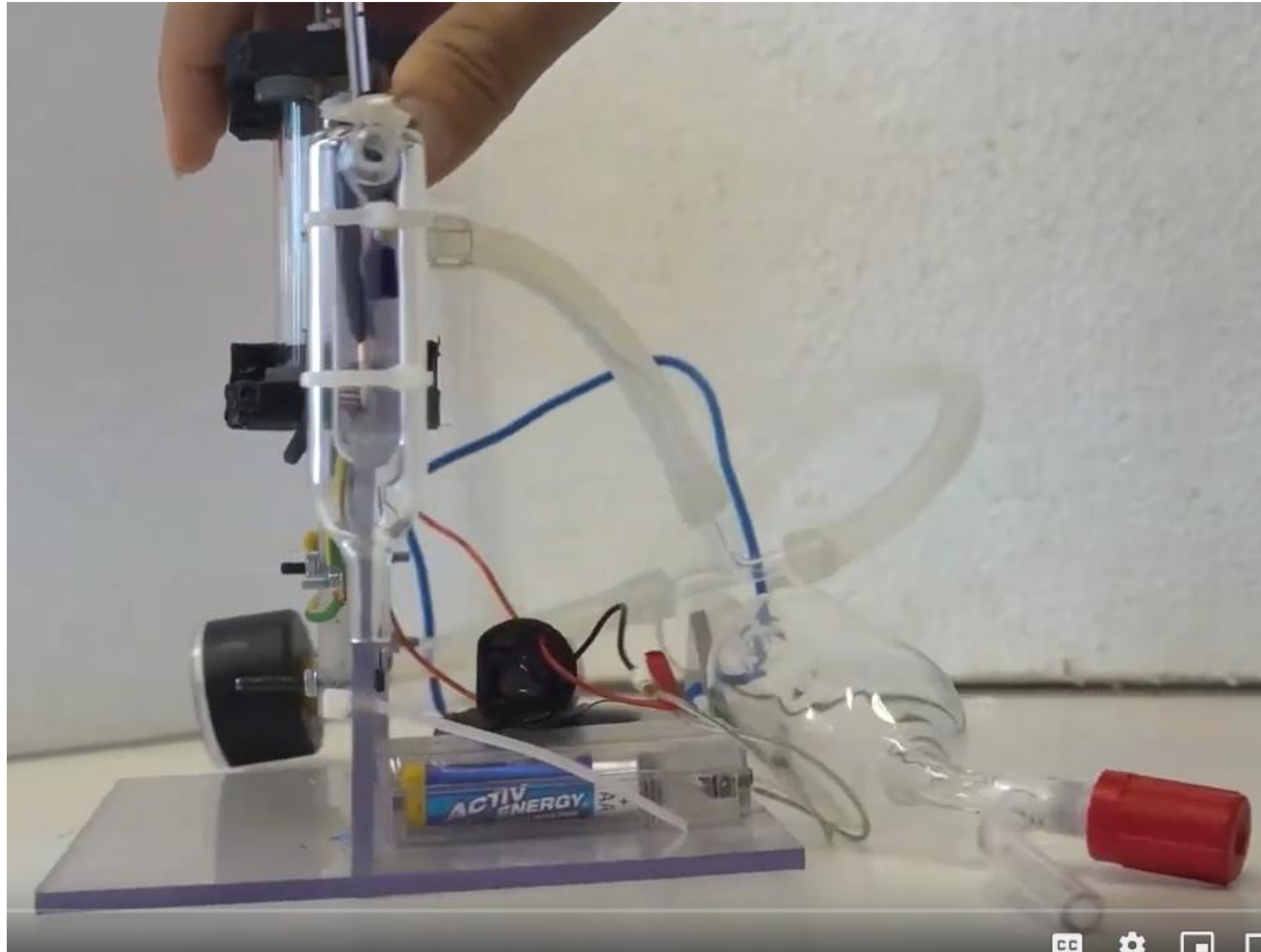


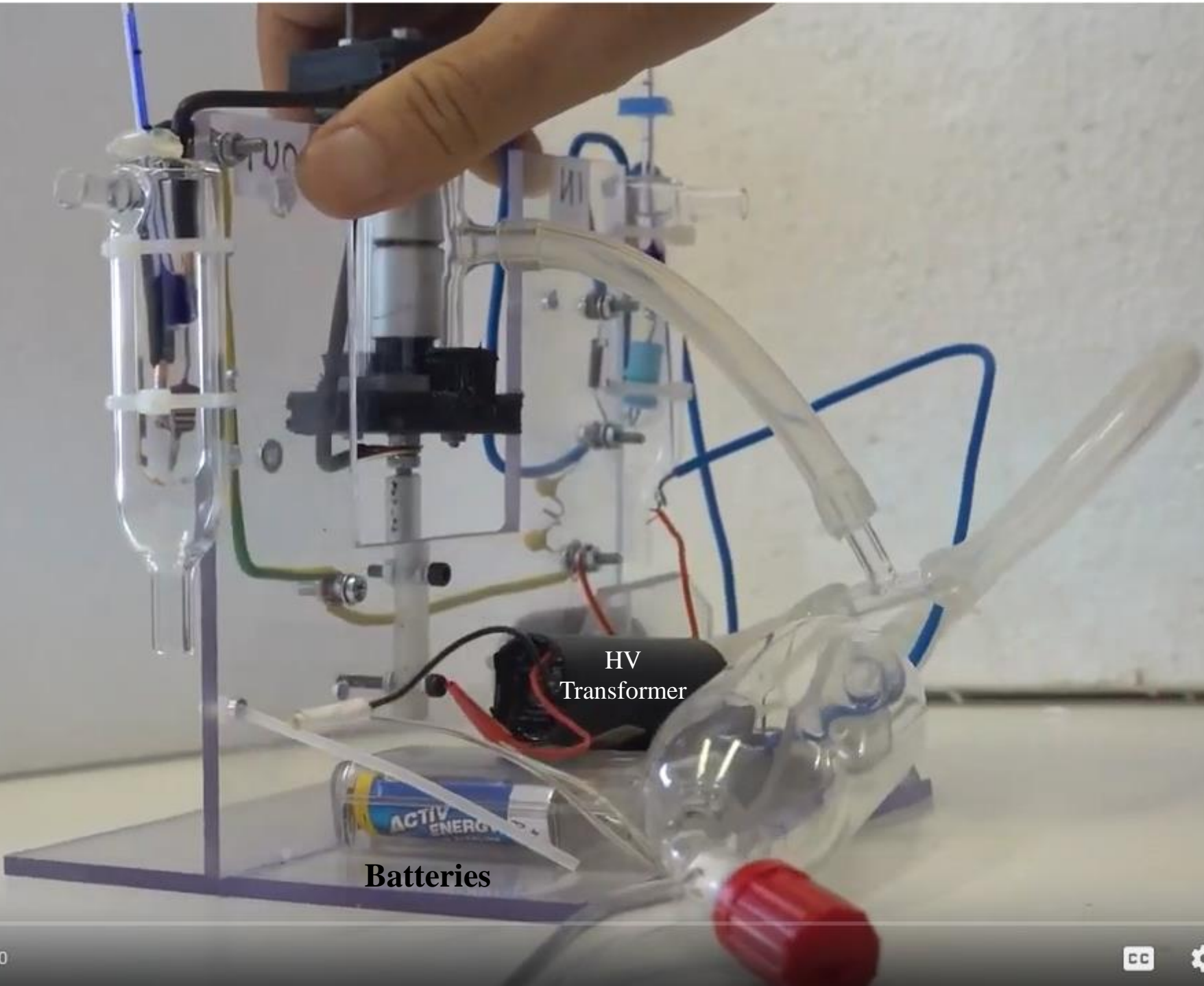


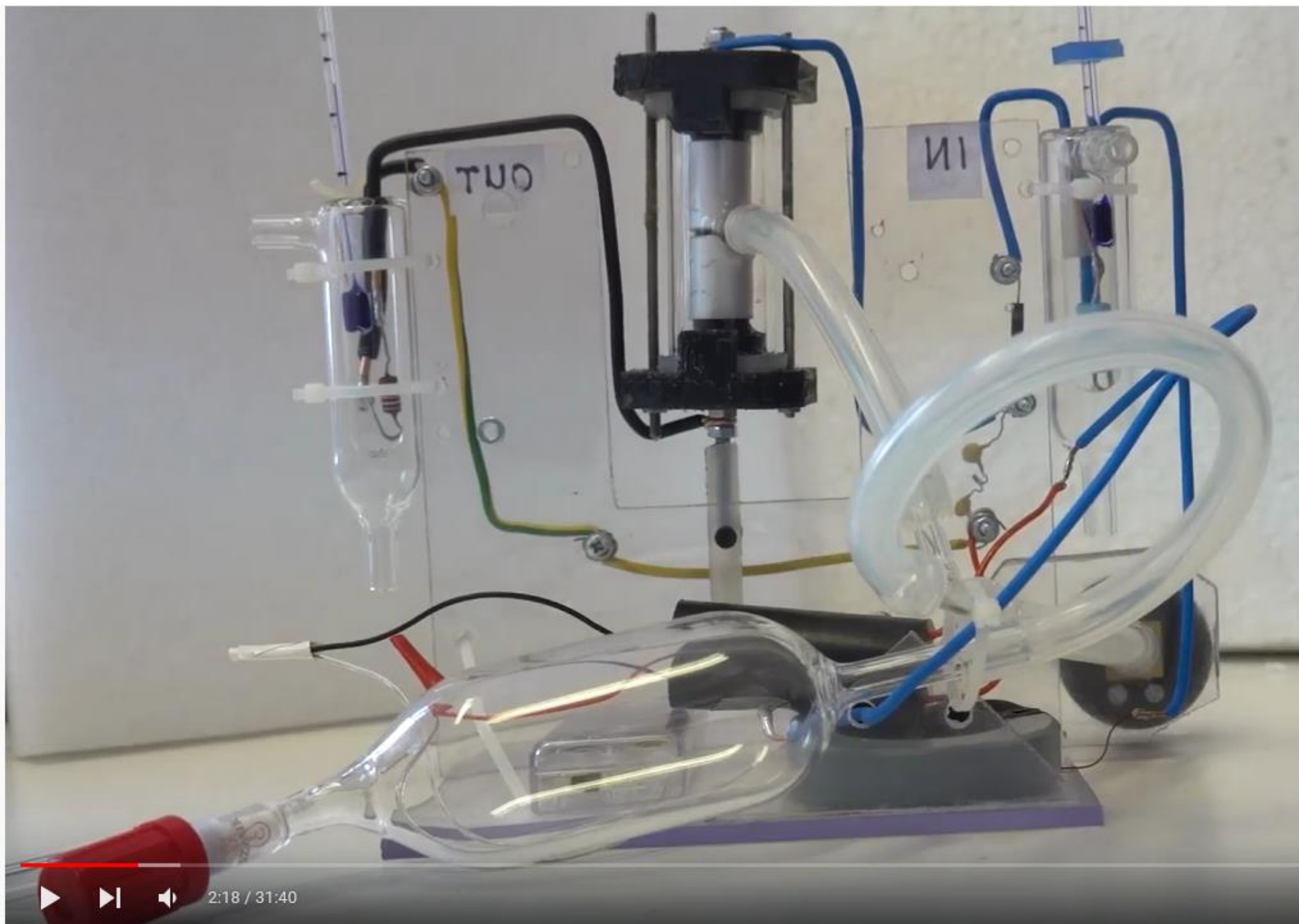


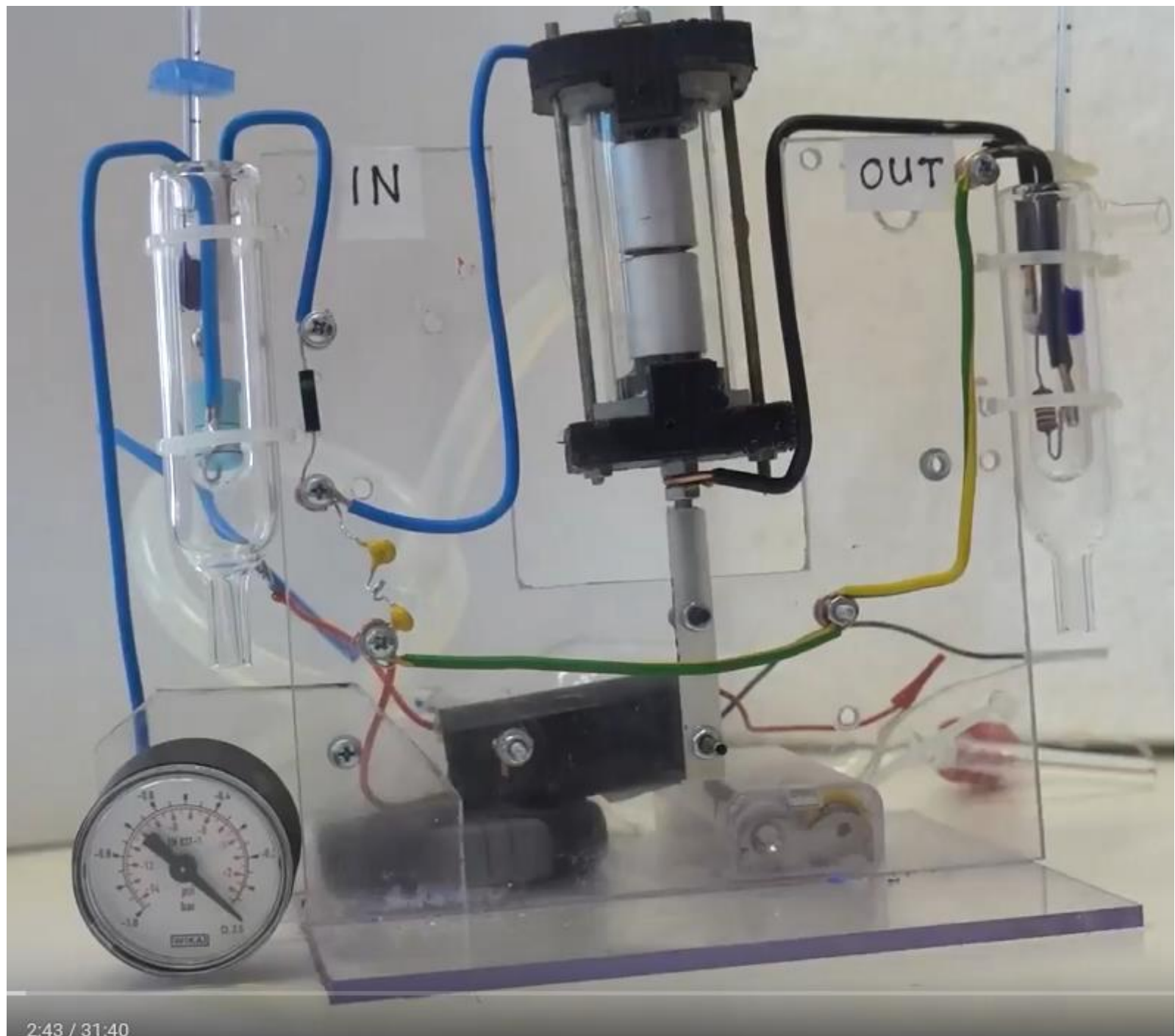


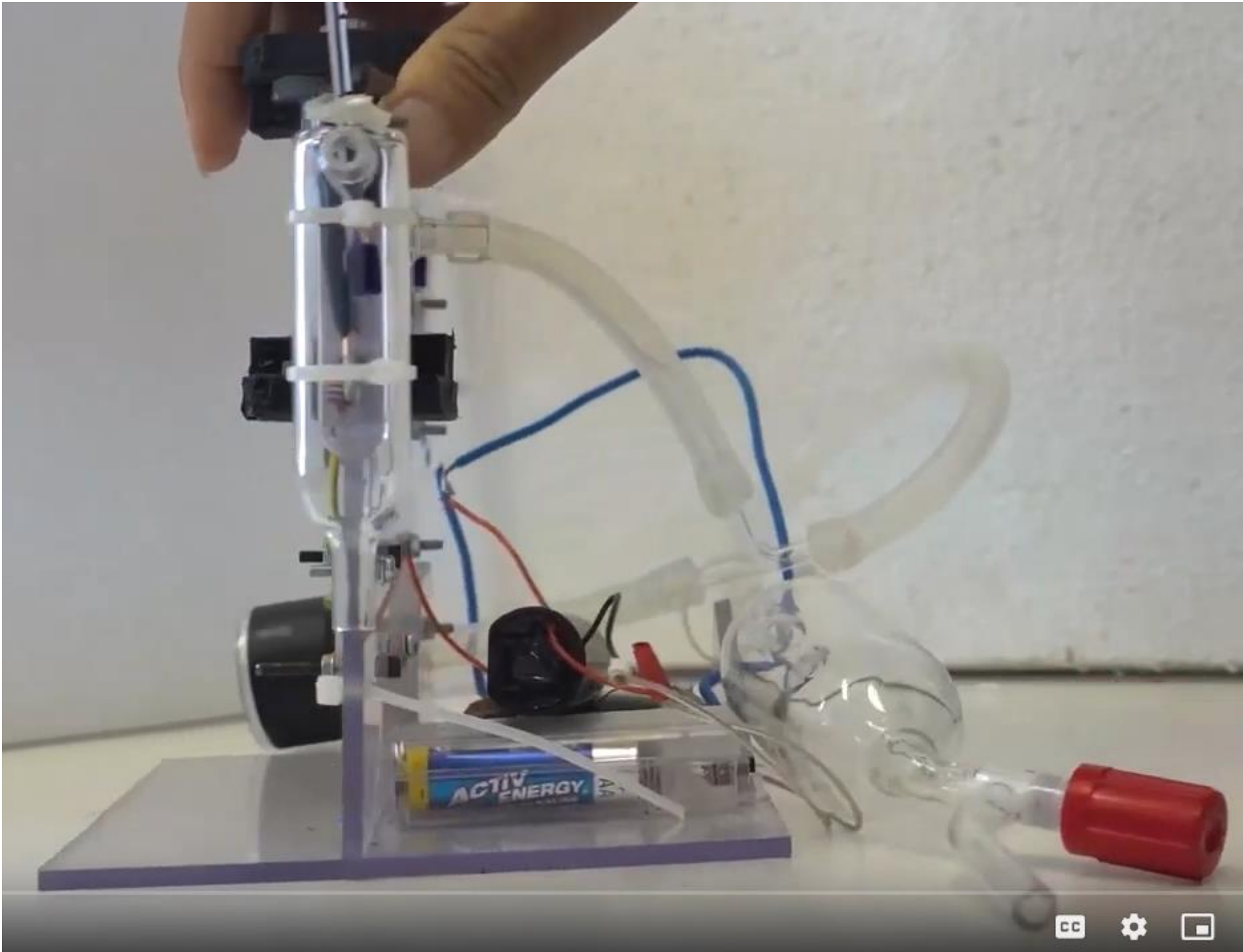










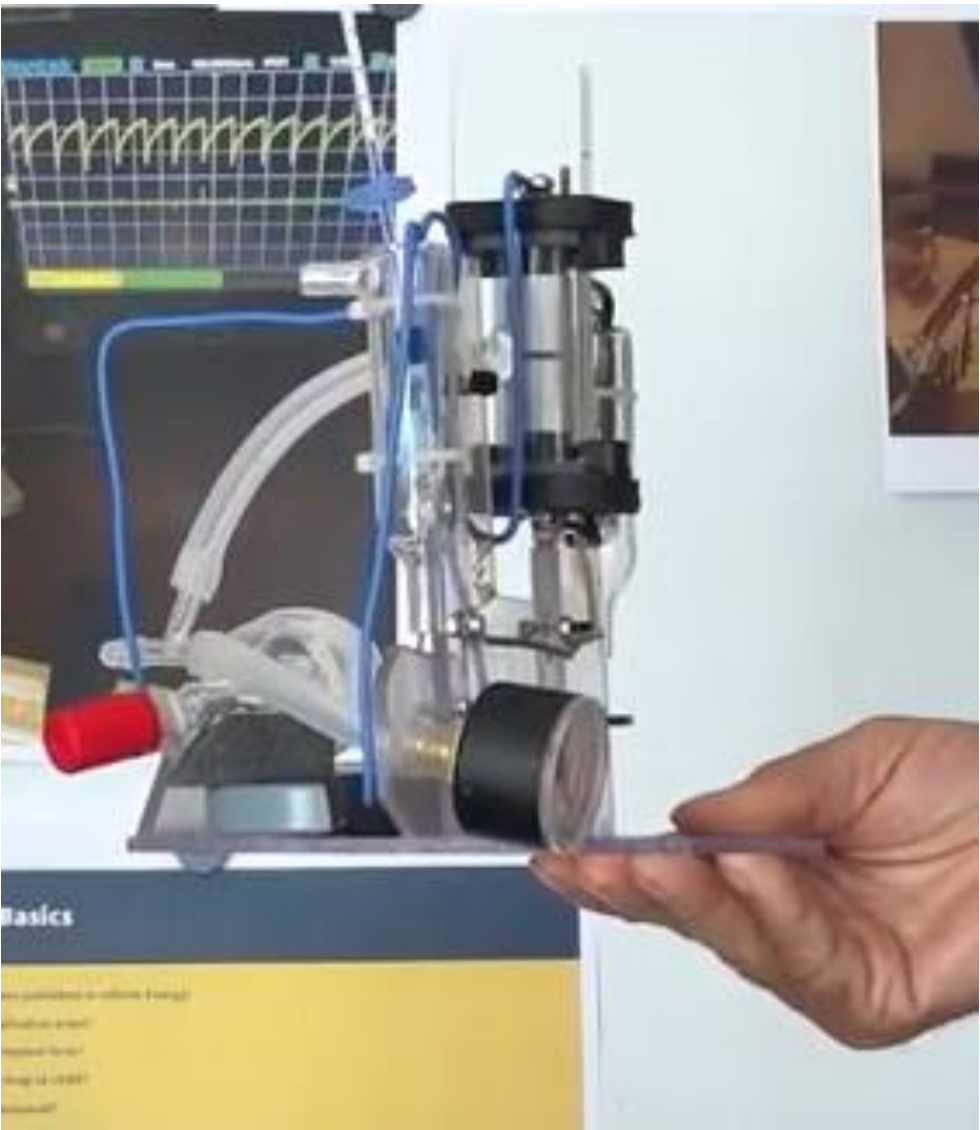


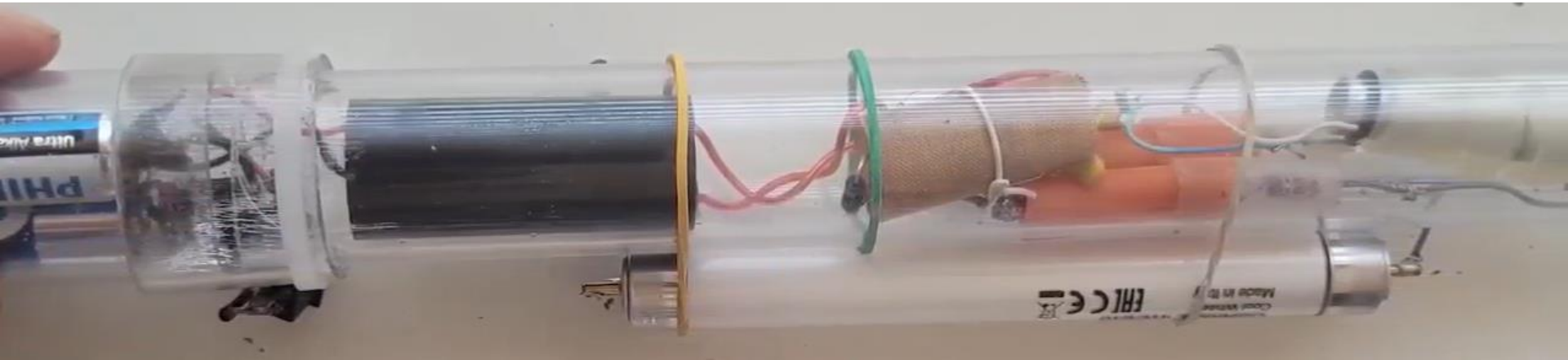
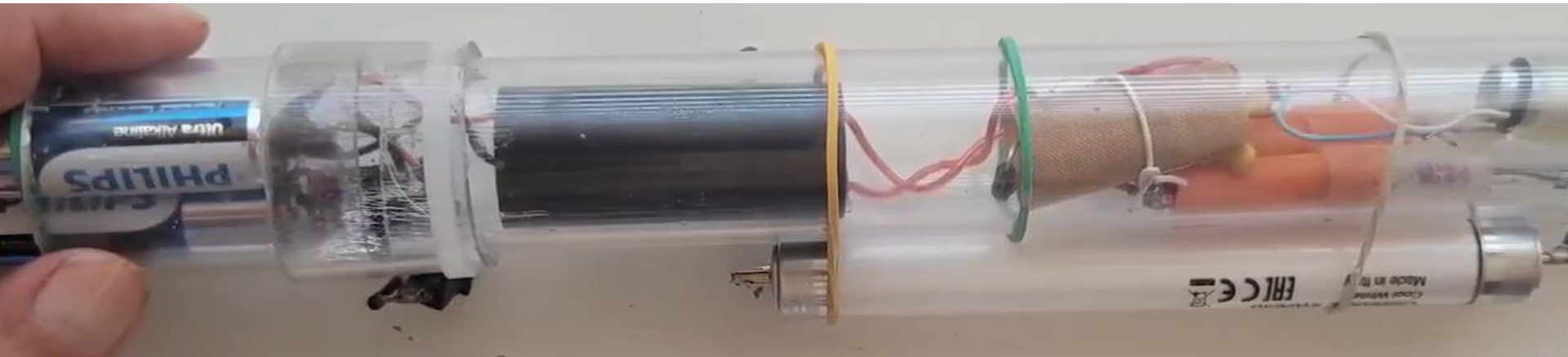
The peak power density of the bursts is in the order of **MW/mm²** (these last for 10^{-9} - 10^{-6} s). Duty cycle: 0,1%

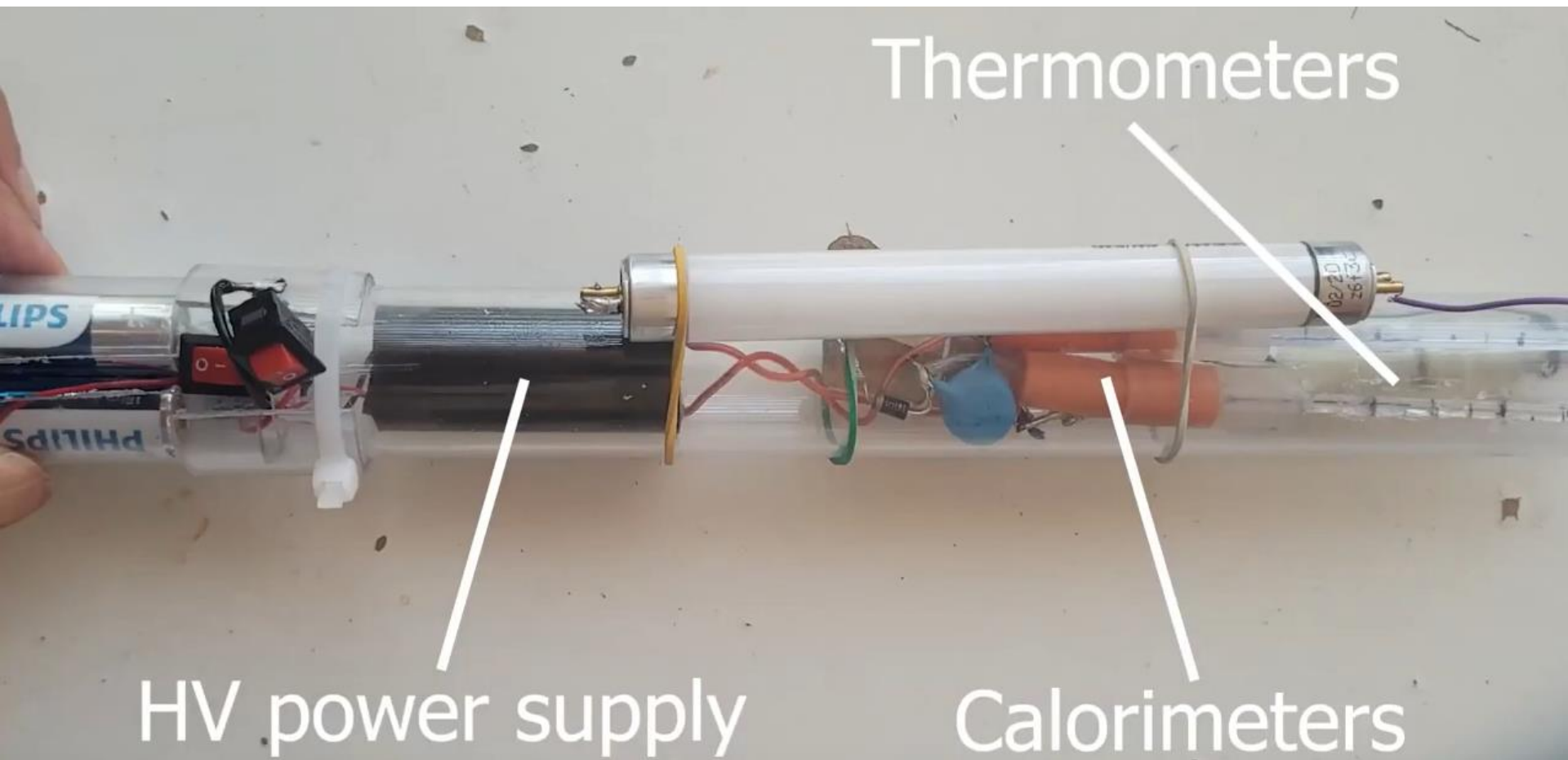
The estimated sustained power output of a large-surface tube for industrial application is around $1 \text{ kW} \pm 0.5 \text{ kW}$ with low heat release

The estimated power-to-weight ratio for a properly designed tube is up to 10 kW/kg . The power-to-weight ratio of the input/power extraction circuit is about the same

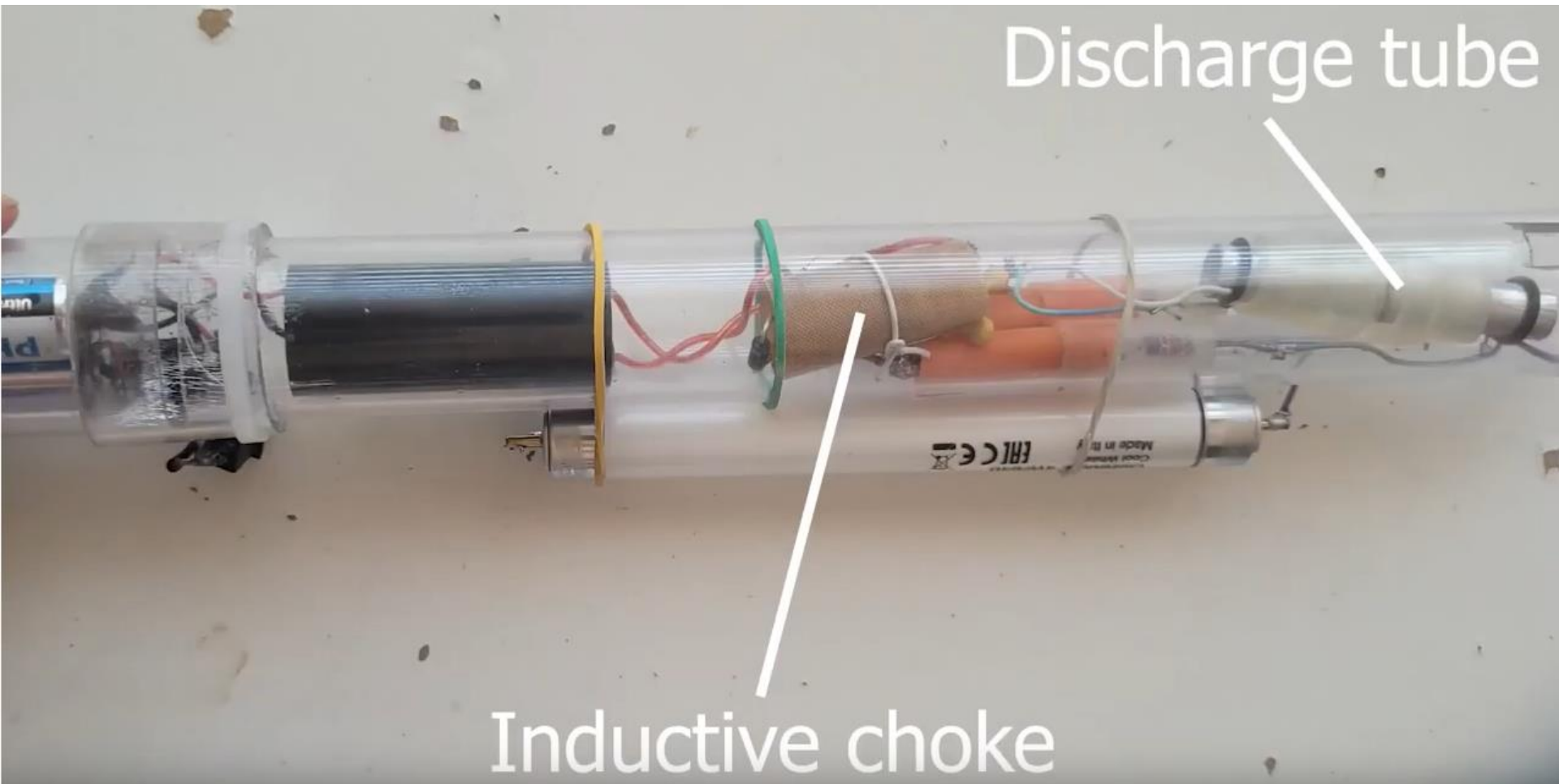
The estimated manufacturing cost for a reactor tube + electronics is under 100 USD/kW



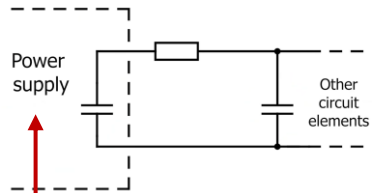




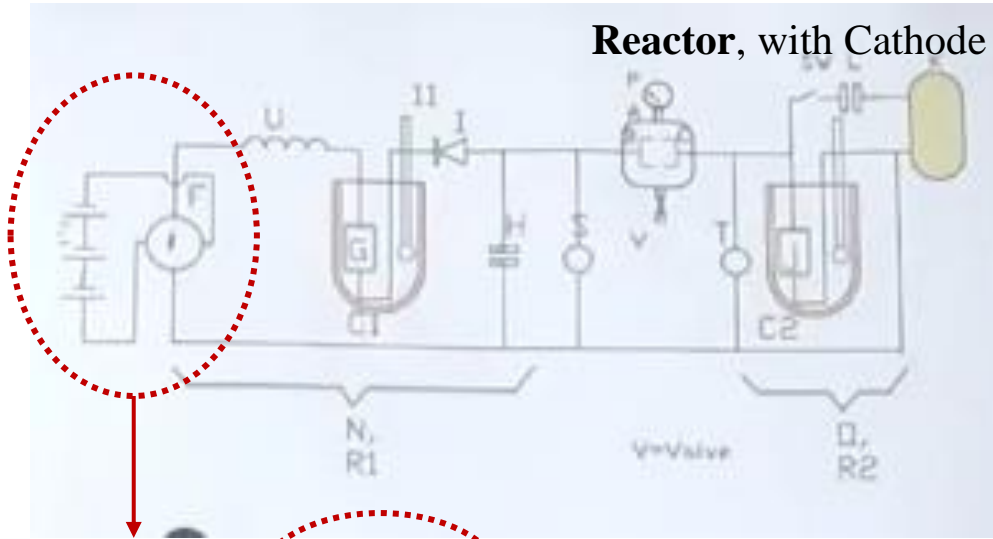
Discharge Tube = The reactor where catalytic fusion occurs



Reactor, with Cathode on Left & Anode on Right

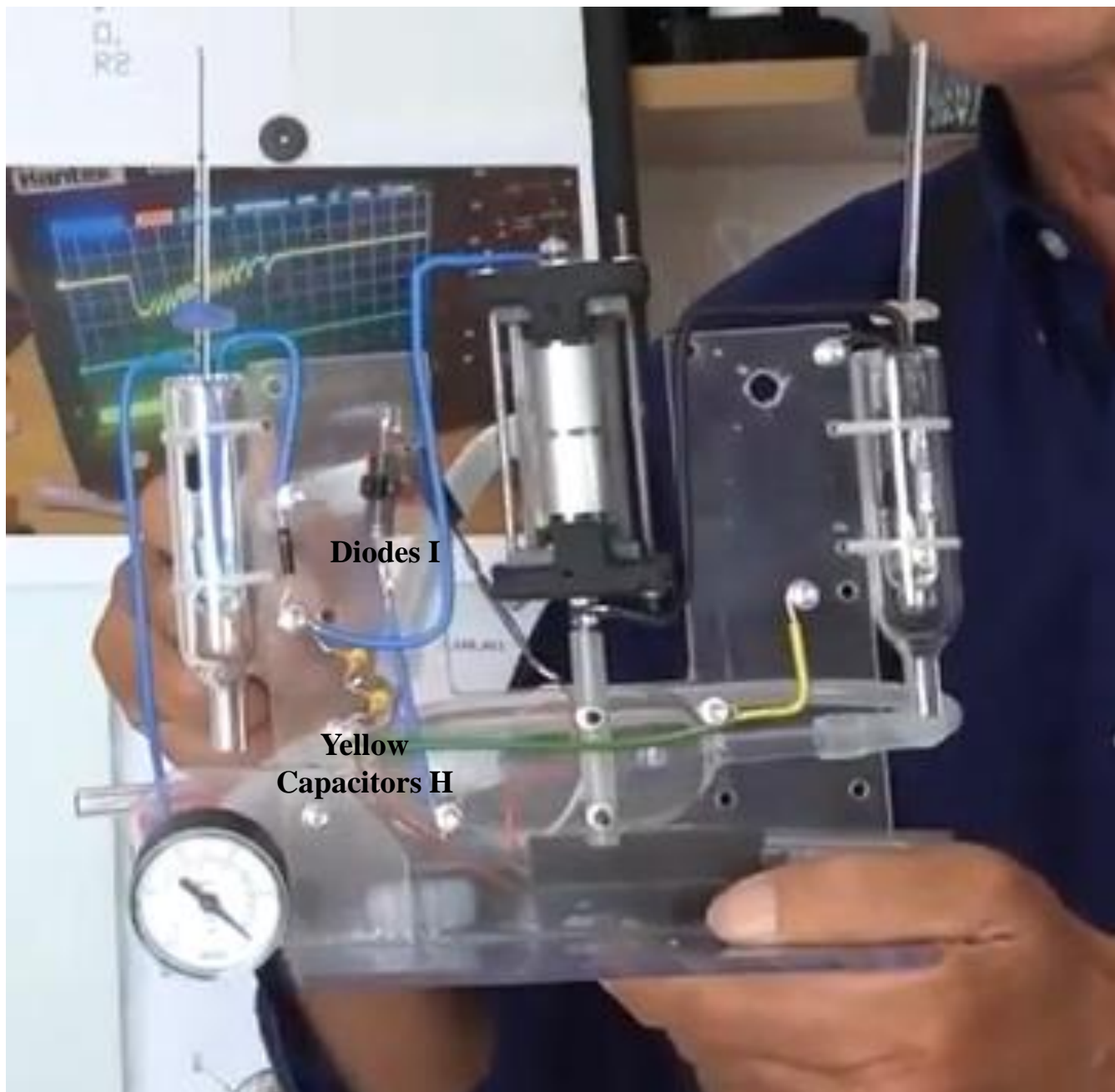


2 kV 40% eff.

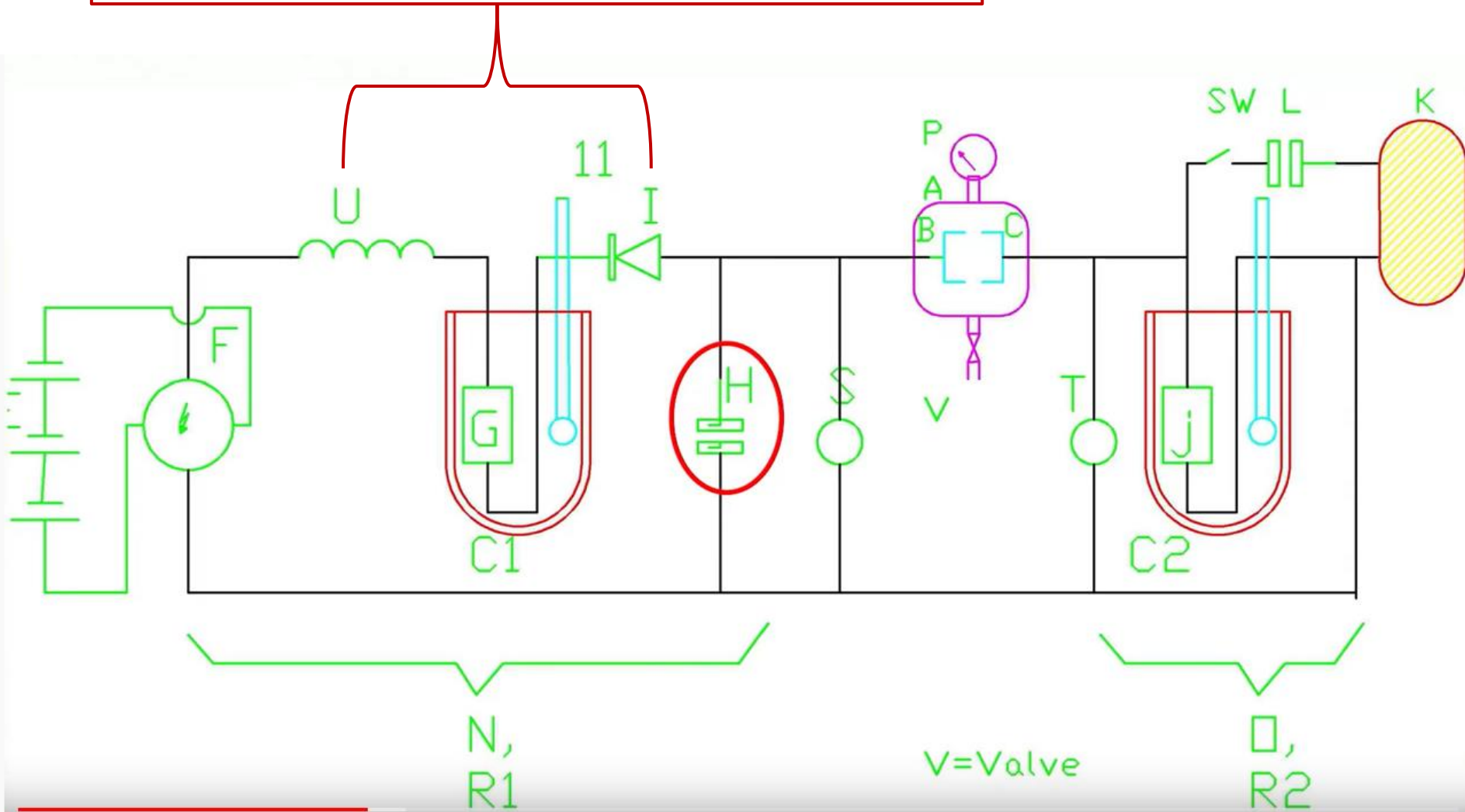


**C1 and C2 are
Calorimeters**





Prevents Feedback from Discharge Tube to Power Supply



Discharge Tube



Anode Output







CONTINENTS ON THE LENR „PLANET”

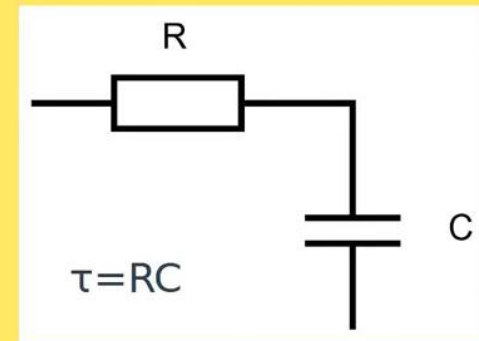
<p>a)</p> <ul style="list-style-type: none"> • Pd + D₂ • Heat • Ni + H₂ 	<p>b)</p> <p>Transmutations:</p> <ul style="list-style-type: none"> • Dusty resonant plasma • Stars, quasars 		
<p>c)</p> <ul style="list-style-type: none"> • Cavitation, bubbles • Sparks in water • Heat + transmutation 	<p>d)</p> <p>Catalytic quasiparticles</p> <table border="1"> <tr> <td data-bbox="649 622 852 765"> <ul style="list-style-type: none"> • Plasmons • Heat </td><td data-bbox="852 622 1049 765"> <ul style="list-style-type: none"> • Condensed plasmoids • Electric energy </td></tr> </table>	<ul style="list-style-type: none"> • Plasmons • Heat 	<ul style="list-style-type: none"> • Condensed plasmoids • Electric energy
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Biological Transmutation

- In the mitochondria
- ATPase rotating enzyme
- Proton pumps, intermembrane matrix

Fundamental relation: when fully charged, the energy stored in a capacitor equals the total dissipated energy on the resistor through which the capacitor has been charged

The input/output power ratio is $5\% \pm 3\%$ for arc, glow and spark discharges according to textbook physics (no catalytic fusion). This is the same for DC and pulsed discharge, when there is no hydrogen in the reactor tube



For $t \geq 5\tau$:
Energy stored in C =
Heat dissipated on R

