

Engineering Electro Physics
Department
Specialty

“RENEWABLE SOURCES OF ENERGY AND
HIGH VOLTAGE TECHNOLOGIES AND
ELECTROPHISICS”

<https://www.kpi.kharkov.ua/ru/home/department/?id=20>

<http://web.kpi.kharkov.ua/ief/ru/>



The Acting Head of the Department

Doctor of Engineering Sciences,
Professor **Nikolai Ivanovich Boyko**

Email: qnaboy@mail.ru

Phone: +38 (057) 70-76-245, +38 (097) 36-54-971



Renewable energy is...

- ▶ Wind power (wind turbines);
- ▶ Bioenergy (biofuel).



Renewable energy is...

- ▶ Solar energy (photovoltaics and solar heating);
- ▶ Small hydroelectricity.



Renewable energy is...

- ▶ Geothermal energy (heat pumps);
- ▶ Energy efficiency;
- ▶ Clean technologies.



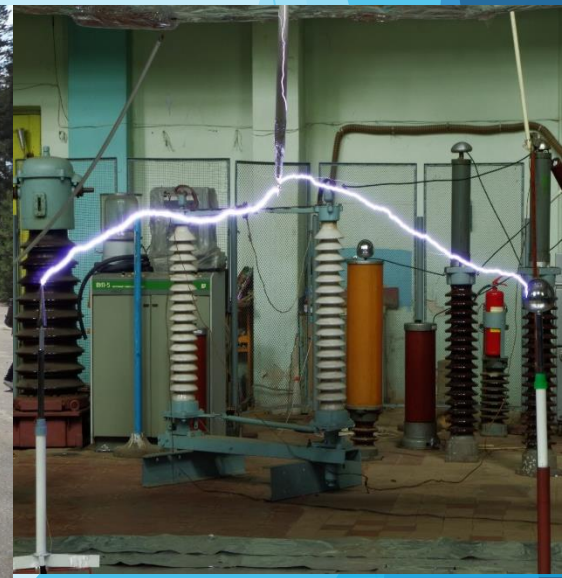
High Voltage Technologies is

- ▶ Electric power transmission;
- ▶ Electromagnetic safety of computer systems;
- ▶ Lightning safety.



High Voltage Technologies is

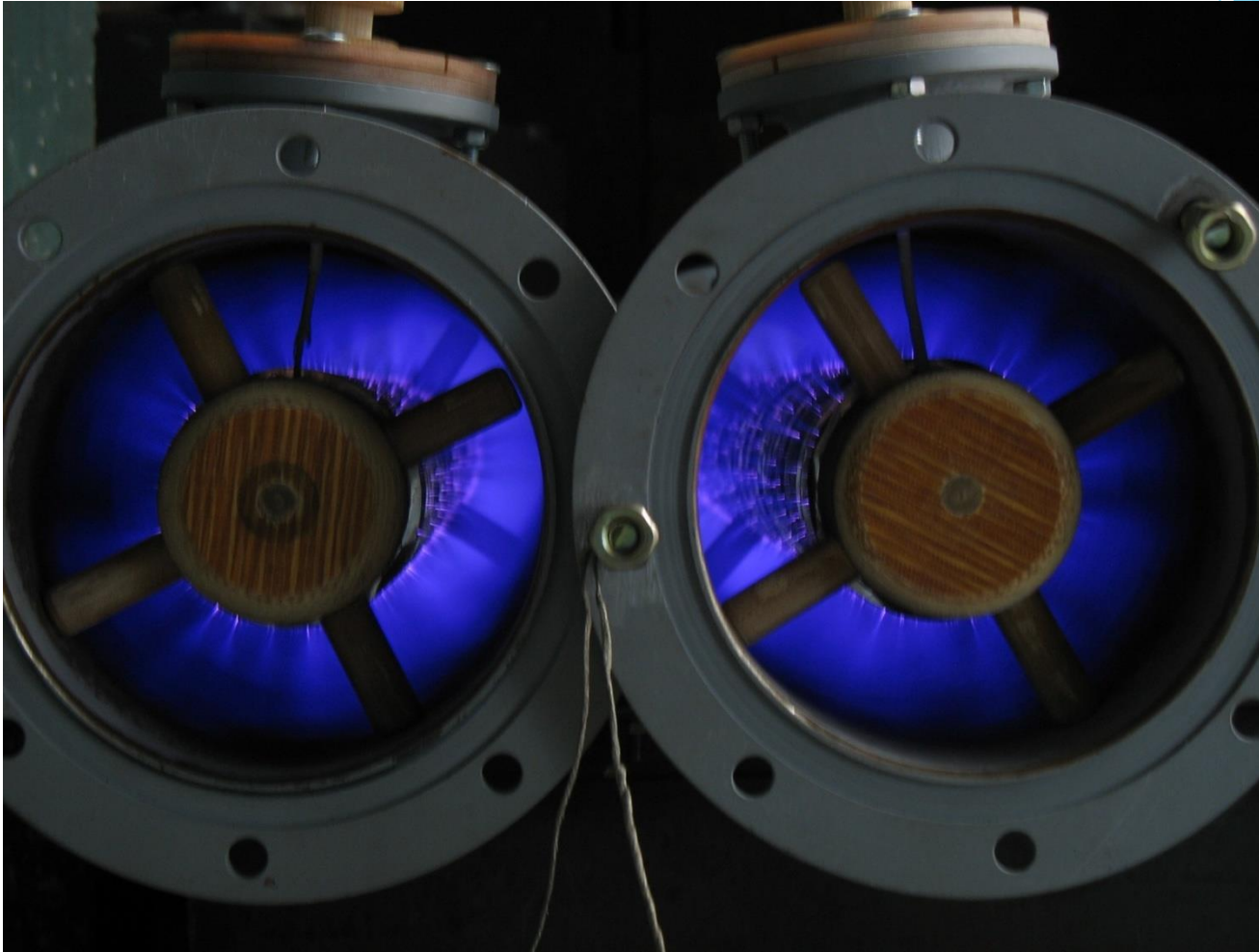
- ▶ Electromagnetic pulse forming;
- ▶ Water cleaning system;
- ▶ Ozone generators;
- ▶ Food processing by pulsed electric field (PEF).



Student practice

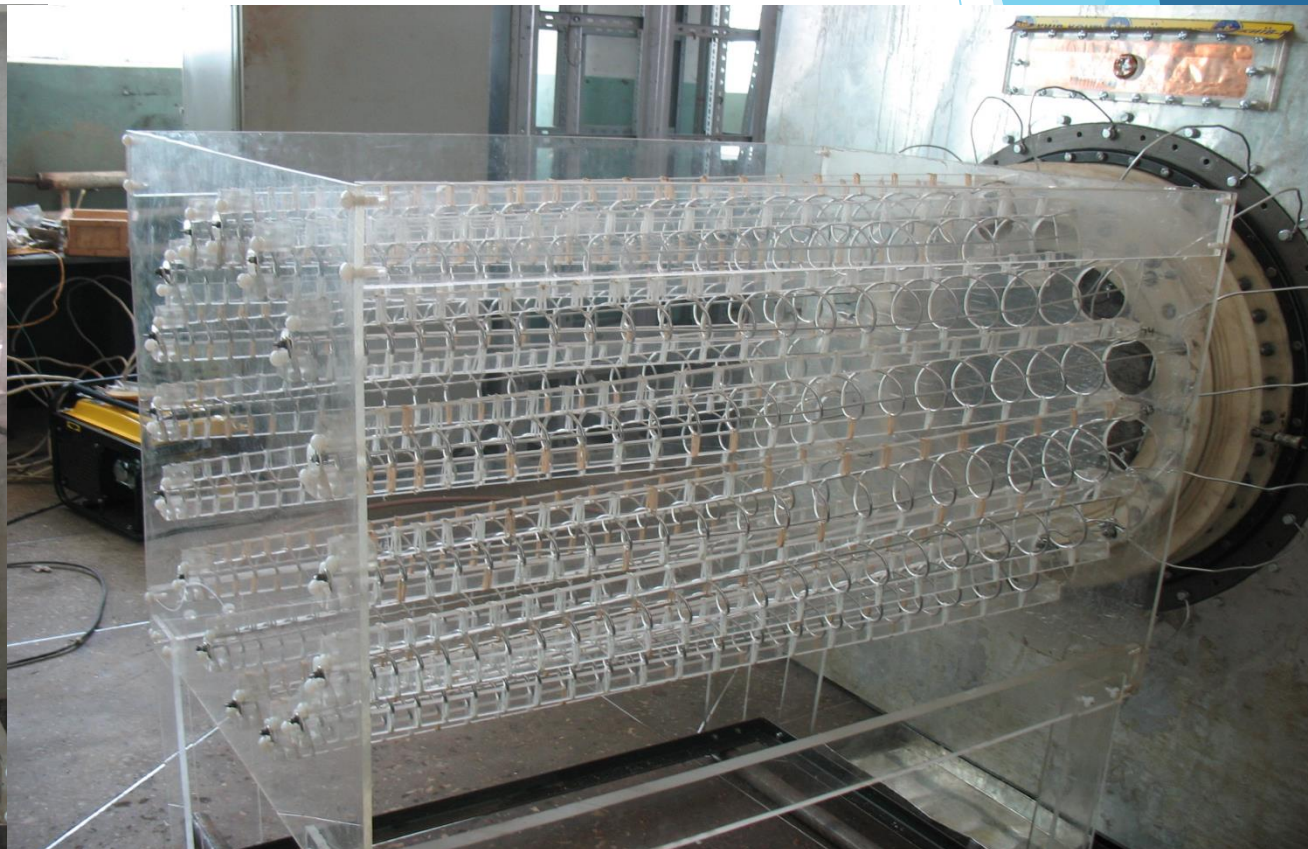
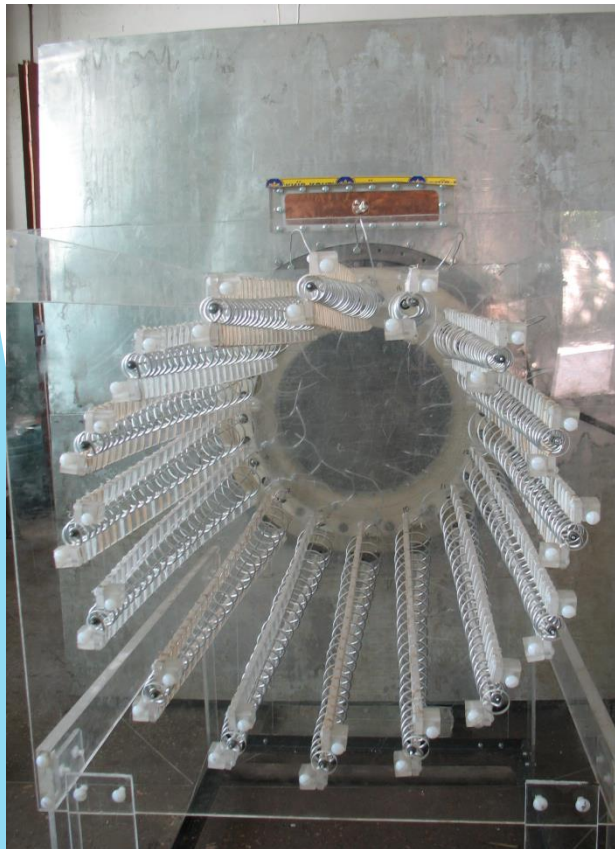


Some achievements of Engineering Electro Physics Department

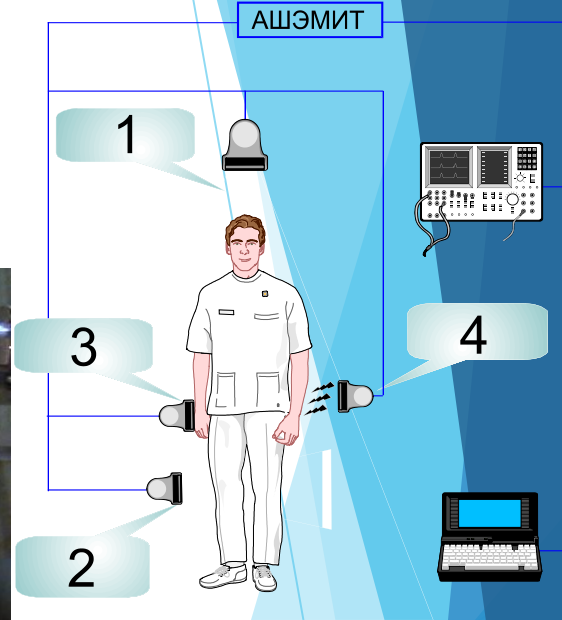


Working ozone generator which uses pulsed corona discharge with enhanced ionization zone

Multiaerial generator of strong electromagnetic pulses for wireless electric power transmission which uses Tesla Transformers



Device for wideband pulsed electromagnetic therapy



There are four ways to treat:
1 - global impact; 2 - local impact;
3 - point impact; 4 - spark impact.



Contact Us

NTU "KhPI"
21, Frunze str.,
61002, Kharkiv,
Ukraine

Phone: +38 (057) 70-76-245, +38 (057) 70-76-052,
+38 (050) 134-43-63, +38 (093) 65-08-088,
+38 (097) 89-230-88

e-mail: kafedraIEF@gmail.com

web site: <http://web.kpi.kharkov.ua/ief>

Facebook: <https://www.facebook.com/groups/1831919860386127>