

# Educational-scientific institute

• of power engineering, electronics

• and electromechanic

### Department of steam generating industry



#### 142 "Energy " 142.01 «Generating technologies and installations»

- Energy-generating technologies and installations are technologies of using various physical, chemical and mechanical processes and technical systems for the production of thermal, electric and other types of energy in various industries. Energy-generating technologies cover theoretical and practical methods and approaches to designing, constructing, manufacturing, assembling and operating power plants, as well as computer modeling of fuel combustion processes, nuclear reactions, heat and mass transfer, heat carrier motion, strength of construction materials used in thermal and nuclear power engineering
- Power generating plants include steam and hot water, power, industrial and domestic boilers, nuclear reactors and steam generators, turbine units, solar collectors, wind power plants, etc., which are used in power engineering, industry, transport, and scientific research.

- Further development of energy as the main branch of the world economy is impossible without a high level of operation of new high-energy, safe and environmentally friendly boiler houses, reactor, steam generator and other power generating units of various types with a wide range of technical characteristics.
- To solve these problems, highly qualified specialists are needed. Thus, the goal of education in the specialization of "Energy technologies and installations" is the training of such specialists who have a high level of professional training and possess the necessary knowledge.



- The bachelor's / master's education program is designed for students who want to become experts in the field of engineering and scientific activity in electrical engineering and study the processes taking place in power plants: boilers, steam generators, nuclear reactors, turbine units, pumping and heat exchange equipment, solar and wind power installations and etc.
- The main attention is paid to mathematical and computer modeling of processes, engineering and engineering of energygenerating technologies and installations. The knowledge and skills that are acquired in the process of preparation correspond to the level of modern energy, which makes it possible to find employment in the industrialized countries of the EU, the USA, and China. Possible employment of graduates: technological and production divisions of energy companies and power plants in Ukraine and abroad: Areva, Siemens, Westinghouse EC, etc.

- Head of the department prof. Efimov A.V. has a high reputation as a scientist and specialist in higher education institutions and enterprises of Ukraine, Russia, Poland, Lithuania, Germany, the Czech Republic, Kuwait and other countries. He constantly supervises postgraduate students and doctoral students. In particular, according to the results of many years of scientific research, the departments defended the theses of 10 post-graduate students, including Kuwait Adel Mohammed G. Al-Tuwaini; from Germany - Moll L.S. and other countries.
- A number of graduates of the department successfully work in leading positions in Hungary, Vietnam, Romania, Slovakia, Bulgaria, USA, Israel.







#### **Our contacts:**

Chair: "Steam Generator Engineering "
Head of the department: EFIMOV Alexander
Professor, Doctor of Technical Sciences,
Academician of the Academy of Sciences of Higher Education of Ukraine
Head of the sector of power engineering of the department "Energy and Resource Saving" Phone:**70-76-555**Web-caйт: http://web.kpi.kharkov.ua/pgs/uk/kafedra-parogeneratorobuduvannya/ Address: Kharkov, st. Kirpicheva 2, Laboratory building, 2nd floor Chair: "Steam Generator Engineering "



## THANKS FOR ATTENTION. Always glad to see you!