

**Proposals
for cooperation
of
“Physical Education”
department of NTU “KhPI”**



“Physical Education” department



Head of the Department, Associate professor

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Areas of specialism:

Bachelor: 01 **“Physical Culture and Sport”**

Master: 02 **“Management of Sport Recreational Activities”**

Master: 03 **“Psychology of Physical Activity and Sport”**

Fields of scientific research of the department:

- 1) The development of innovative means and methods of determination of main physical conditions of sportsmen of different qualification and specialty
- 2) The improvement of stress tolerance of sportsmen by means of psychological training technologies
- 3) The formation of lead-manage potential of a person in the sphere of physical culture and sport.



The most significant achievements of “Physical Education” department of NTU “KhPI” in scientific research are:

- An interactive training simulator for controlling and determining the applied force and the estimated range of javelin throwing
- An interactive training simulator with optical feedback for monitoring of the approach velocity in long jumping
- An electron-optical system for measuring and recording the initial velocity of a golf ball and its estimated range of flight
- A mechanical test bench for determining the parameters of blows in martial arts by means of acceleration indication method

Research papers of the department staff published in international scientific journals:



Галица В.И. Инструментальные средства и методы для диагностики уровня функциональной реакции спортсмена на нормированную физическую нагрузку /В.И. Галица, П.А. Качанов, А.И. Любиев Scientific Journal //“ScienceRise”. - №6(11), 2015

УДК 654.937

DOI: 10.15587/2313-8416.2015.44602

“Technology audit and production reserves”

Галица В. И., Качанов П. А. Разработка инструментальных средств и методов хронометрирования при подготовке эстафетных команд 4 × 100 м // “Technology audit and production reserves”. — № 4/3(24), 2015

УДК 654.937

DOI: 10.15587/2312-8372.2015.46936

The management of physical condition is a dynamic process using an enormous amount of all-round information including constantly changing characteristics and parameters. Timely identification of these changes together with the ability to predict them and react are the key factors for making correct decisions.

“Physical Education” department of NTU “KhPI” is seeking cooperation in development of scientific basis, experimental studies in designing of diagnostic equipment which can be used in the area of physical culture and sport.

Prospective scientific and technical products provide for developing new methods of identification and analysis of kinetic parameters of movement, technical and tactical actions of sportsmen during their competitive activities and their functional state in quiescence and in the process of motor activity.

It is aimed to improve the management system of training process and competitive activities in Olympic sports, to preserve and promote the health of different sections of the population and also to improve the efficiency of the sports training system.