



## XV INTERNATIONAL CONFERENCE “ETHICS AND THE FUTURE SCIENCE”



DonNTU, MSTU named after N. Bauman and other famous universities of the RF are co-founders of the international interdisciplinary scientific conference “Ethics and the Future Science”. The fifteenth jubilee conference was on “On the Ways to the Welfare of the Mankind”.

The conference organizers were: the journal and the charity fund of preservation and development of cultural values “Delphis” (Moscow), Russian State Medical University (Moscow), Moscow

State Technical University named after N. Bauman (Moscow) and Donetsk National Technical University – the only representative of the DPR. Our university was represented by a member of the Organizing Committee of the conference, Director International of DonNTU Dr. S.G. Dzhura.

The scientists representing the «Delphis” group have been discussing the issues on the role of ethics in the future science for 15 years. They built a new world outlook paradigm based on the wide scientific and philosophical synthesis proposed by the system analysis and synergy. The conference helped make up the script of development of new concepts of science and production, discussed a wide range of cultural problems, natural science, medicine and education and the current state in the world.

There were 57 presentations at the conference including 12 workshop reports. They referred to educational process taking place in the society. Dr. Dzhura made the presentation “Development of Multidimensional Logic: on the Way to the Universal Brotherhood” which is a teamwork of him and the famous researchers of DonNTU Prof. A. Anoprienko and Mr. S. Ivanitsa. The presentation aroused keen interest of the participants and a discussion. It is a particular revolutionary proposal of DonNTU as to the scientific and industrial cooperation with the RF in the new type of post-binary processes developed at DonNTU.

The video of the presentation can be watched at <https://vimeo.com/162666643>

The details on the conference can be found at the site of the “Delphis” <http://www.delphis.ru/journal/news/programma-xv-konferentsii-etika-i-nauka-budushchego-na-putyakh-k-obshchechelovecheskomu>

## **The Development of Collaboration with Ural Federal University named after B. Yeltsin**

In March 2016 Dr. A. Kolomytseva was invited to Ural Federal University named after B. Yeltsin to take part in development of programs of academic mobility and a scientific and technical collaboration.



The main goal of the visit was prolongation of collaboration of the departments of “Economic Cybernetics” of DonNTU and “Systems and Decision Making Analysis” of UrFU as to development of the network academic program of double degree in Business Information Science and International Electronic Business.

The collaboration in the field implies the following:

- 1) Signing of the agreement “The Network Implementation of the

Double Degree Academic Program.

- 2) Coordination of the schedule and joint curriculum on students’ training in the network academic program.
- 3) Development and coordination of the project “The Joint Academic Program for Network Implementation of the Double Degree Academic Program.”
- 4) Making up of the plan of joint publications of the academics of both departments at the editions of reference of the RF.
- 5) Making up of the plan of publication of methodological books in main disciplines of the program to provide a high quality of students’ distance learning according to the double degree program.
- 6) Development of the schedule of work at the joint scientific research of both departments of the above mentioned universities.

Signing of the agreement on prolongation of the collaboration between DonNTU and UrFU showed our scientists were rated highly in Russia.

### **Development of Scientific Links of DonNTU**

On March 2016 Prof. G. Averin was invited to Moscow State University named after M. Lomonosov to deliver his lecture “From Thermodynamic to Temporology: the Field Theory Foundations.”

You can get acquainted with the lecture at <http://www.chronos.msu.ru/ru/mediatek/videozapisi-seminara>

Donetsk Technical National University would like to thank Prof. G. Averin for his contribution into development of scientific links of our university.

## Study Course of Dr. S. Khrapko in Moscow

Dr. S. Khrapko had his study course at the company of “Advanced Technology Systems” (Lyubertsy, Moscow Region) in December 2015- March 2016. During the event Dr. Khrapko did the following:

- 1) got the general equation of the electron contribution in phase thermodynamic functions with participation of elements of variable valence;
- 2) worked at construction of models to create technological process control automated systems in metallurgical units;
- 3) analyzed steel-making bath dynamics and forecasted numerically some characteristics of processes for example of pulsating of oxidation of carbon under the bath boiling.

The results will be used by Dr. S. Khrapko at his lectures in melting technology automated design systems and technological process automation. The paper on the research is going to be published in the journal “University’s Newsletter”. The signing of the agreement in research with the RF and getting funds by DonNTU is an essential moment in the work.



## DonNTU’s Academics at the Economic Forum in Moscow

The topic of “Innovative Development of Russia: Imperatives and Alternatives” was discussed at Moscow Economic Forum (MEF-2016) on March 23-25<sup>th</sup> 2016.

There were guests from the Institute of Economics (Russia), the International Currency Fund, universities of Poland, Moscow State University named after M. Lomonosov, and Dr. Z. Alfyorov, a Noble Prize in Physics winner.

DonNTU was represented by Dr. Kandaurova who made her presentation “Identification of the Problems of Formation and Usage of Human Capital in the Context of Innovation Development of an Enterprise” and Dr. M Zorina whose presentation was called “Problems and Outlooks of Implementation of the Strategy of Management of an Industrial Enterprise in the Innovative Development of the Regional Business.”



Prof. Y. Khomenko, Prof.V. Kucher, Dr. E. Polyakova, Prof. I. Ponomaryov, Dr. O. Savelyeva, Dr. T. Kovalenko, Dr. I. Pavlovskaya, Dr. V. Goroshchenko took part in the Forum by correspondence.

The Forum was well-organized and rather a large-scale. There were four round work table meetings at which more than 5000 people made their presentations. The majority of projects were competent. The atmosphere of the Forum allowed discussing of serious economic and political issues.



## INTERNATIONAL COLLABORATION IN PERSONS

### RICHARD TESSMER

Trends of development of engineering education require training and re-training of a new generation of experts oriented to the modern tendencies of development of science and engineering and familiar with the technical level of key companies and having good knowledge in foreign languages. The first ever in the country German Engineering Faculty (GEF) was established at Donetsk National Technical University in 1992. The event was based on long-term collaboration with Otto-von-Guericke Magdeburg University and supported by the Siemens Company and the German Board of Academic Exchange (the DAAD). The first Dean of the GEF Prof. V. Kalashnikov and the Honoured Doctor of DonNTU, the head of the Industrial Department of the company Siemens-Ukraine Prof. Richard Tessmer played an important role in the establishment of the institution.

The German Engineering Faculty combines fundamental training at the university with practice of the world science and engineering. The professional training is carried out in German with the usage of German books and facilities. The Faculty's labs are equipped with the modern facilities produced by the Siemens Company. Academic programs are coordinated with analogous disciplines taught at German Universities. Similar curricula and unification of requirements as to the training integrates the Faculty into the German system of special education and makes us closer to the European standards of education.

The best students of the Faculty have their integrated studying on Master's program at the University of Magdeburg in the frameworks of the DAAD project and get the German degree of Master of Science. The GEF makes its contribution into the globalization of economics and education by joint with the University of Magdeburg research aimed at creation of the multinational research team.

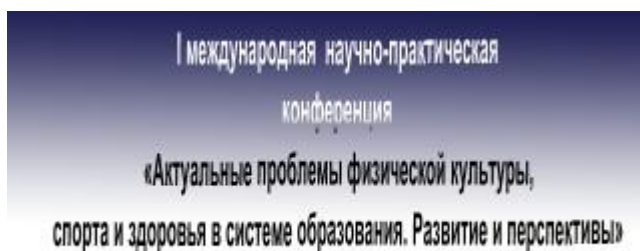
The graduates of the GEF have not only professional knowledge but also that of economics, management, German and English and German culture. Thus the GEF is a bridge between experts from Germany and people working at different companies and enterprises of our young Republic.

The concept of integration of graduates of DonNTU into the international labour market has been developed and implemented. The graduates of the GEF showed their ability to fulfill engineering tasks and proved their competitiveness at the European market.

We would like to thank Prof. R. Tessmer for his invaluable contribution into development of collaboration between Donetsk National Technical University and Otto-von-Guericke Magdeburg University.



## **I International Scientific and Practical Conference “Topical Issues of Physical Education, Sports and Health in the System of Education: Development and Outlooks”**



On March 24<sup>th</sup> DonNTU hosted the I International Scientific and Practical Conference in Physical Education. The Department of Physical Education of DonNTU was its organizer.

Because of establishment of new state institutions, reorganization of educational structures and further

planning of development of physical education and sports in the Donetsk People's Republic there is a necessity in forming of the modern aspects of mass physical training movement, development of children's, youth and professional sports, and raise of physical abilities of students.

The participants of the I International Conference agreed that physical education and sports in the system of higher education solved many social and economic problems such as union of the society, distraction of the youth from bad habits, disease prevention, raise of life expectancy and standards. A sport is the object of international regulation and collaboration.

There were the following breakup groups at the conference:

1. Topical issues of planning and organization of physical training in the system of education.
2. Pedagogic and psychophysical aspects of development of physical education and sports.
3. Health and medical and biological foundations of physical education; reaction and rehabilitation.
4. Innovative methods of sportsmen training and selection into sports groups.
5. Management and marketing in physical education and sports.
6. Philosophical and historical aspects of development of physical education, Olympic and professional sports.

The Minister of Youth, Sports and Tourism of the Donetsk People's Republic Mr. M. Mishin, the Head of the Department of Higher and Professional Education and Science of the Donetsk People's Republic Ms T. Denisova, and the Head of the Department of Physical Education and Sports of DonNTU Dr. P. Navka greeted the participants.

The conference was attended by academics from the Russian Federation, Moldova, Kazakhstan, Belarus and Ukraine.

The Organizing Committee of the Conference noted the topicality of the presentations, innovative approach to the issues, a high level of organization and reasonability of holding of the conferences like that one.

## IV International Forum

On April 7<sup>th</sup> DonNTU hosted the IV International Forum “Technologies and Processes in Mining and Construction”. Its founders were DonNTU, Tula State University, Belarus National Technical University, the Academy of Construction of Ukraine and Donbass State Technical University (DSTU).

The participants were greeted by Prof. Y. Bulgakov, the Director of the Institute of Mining and Geology. He spoke on the problems the mining industry of Donbass faced because of the warfare and the ways of their overcoming.

The Acting Rector of DonNTU Prof. K. Marenich said he was happy our university hosted the Forum. He emphasized that Donbass was concentration of different industries based on the coal industry which was not only to be preserved in such a difficult period of time but also strengthened which would allow other industries to develop. Very valuable types of coal occur in our region, and according to the Professor, it is impermissibly to use them as fuel. They are to be processed as the basis for chemical industry.

The presenter of the event, Prof. S. Borshchevski, the Dean of the Mining Faculty, noted that mining, construction and metallurgical industries were the basis for the industries of all the countries, especially of the Donbass Region.

The key researcher in mining, Mr. G. Litvinski, a graduate of DonNTU, highlighted the importance of research that was the strategic and crucial vector of growth of any



branch of industry. As to mining it is automation and robotics that help increase production volume and provide safety for miners.

Dr. V. Skazhenik and the oldest researcher of DonNTU Prof. M Zborshchik were the Forum participants.

Many students were also present at the plenary session and the work of 9 breakup groups.

The events like this one show that DonNTU continues developing in

scientific and cultural areas despite the warfare.

## Training in Germany

Three students of Donetsk National Technical University (V. Kalashnikov, A. Strachkov and K. Romanova) had their incorporated training at Otto-von-Guericke Magdeburg University in October 2015- April 2016. According to the given task the students were to

- attend the courses of the German language C1 and DSH and pass the exam to get the certificate;
- work with foreign teachers and visit some companies;
- attend lectures and seminars at the university;

- fulfill the yearly project.



The students took the language course at the Language Centre and got the certificate of C1 level. The classes were organized in accordance with the special methodology designed for Russian speaking students who study electrical engineering in Germany.

They also attended the following lectures and passed the exams:

- Generatorsysteme zur regenerativen Energieerzeugung
- Elektrische Energienetze 2 – Smart Grid
- Modellierung und Simulation elektrischer Antriebe
- Systeme der Leistungselektronik
- Windergie
- EMV regenerativer elektrischer Systeme
- Regenerative Elektroenergiequellen-Systembetrachtung

They were given the opportunity to visit large power companies, Siemens being among them. They visited the instrumentation station and saw the products manufactured by the company.

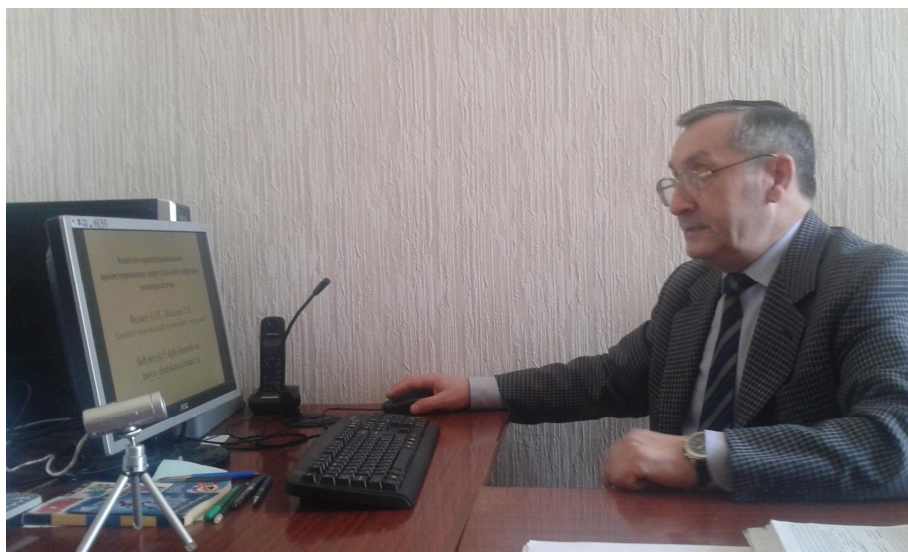
There was a very interesting excursion organized for our students by the company ENERCON (Magdeburg) on the plant of which is one of the largest coast wind turbines.

Our students spent their leisure time with other students from Germany, the USA, Columbia, Japan and India and had a chance to know the culture of the countries. They visited museums and places of historical interest.





## Collaboration with Ulyanovsk State Technical University



Last year DonNTU and Ulyanovsk State Technical University (UISTU) signed their collaboration agreement. Since then the research collaboration has been developing very actively. One of the clauses of the agreement implies organization of scientific conferences. Thus Dr. O.

Fedyayev (the Computer Engineering Faculty) took part at the III International Scientific and Practical Conference “E-learning in Continuous Education” on April 13-15(<http://conf-el.ido.ulstu.ru>) hosted by UISTU. He made his presentation “Agent-oriented Design of the University Virtual Department”. DonNTU was a conference partner and Dr. Fedyayev was a member of the Conference Programming Committee. While discussing his presentation the Vice-Rector in Research of UISTU Prof. N. Yarushkina emphasized the importance of research result exchange and hoped for further collaboration with DonNTU.

The history of collaboration between DonNTU and UISTU is quite long. In 2001 and 2003 Dr. Fedyayev and his postgraduate student A. Gladunov made the presentations at the conferences “Interaction of Man and the Computer” held by UISTU. Dr. Fedyayev and his student V. Ryabchenko were awarded the 1<sup>st</sup> level diploma at the conference “Information Science and Computers (UISTU, 2011), last year he and his Master’s student V. Bakalenko made their presentation “Intellectual Interface for Verbal Input of Program Initial Code” at the international conference “Interactive Systems: Problems of Interaction of Man-Computer”.

This year the Department Dr. O. Fedyayev heads is going to organize the international scientific and practical conference “Programming Engineering: Methods and Technologies of Development of Data processing Systems”. The staff of the Faculty of Information Systems and Technologies of Ulyanovsk State Technical University plans to take part at the event.

The Newsletter is prepared by the International Office of DonNTU.

Should you have any questions or offers as to the published material, please contact us at: 1<sup>st</sup> building of Donetsk National Technical University, Office 220; tel.: (062) 301 – 08 – 25; (062) 337 – 32 – 66; fax: (062) 304 – 12 – 78; URL: <http://iic.dgtu.donetsk.ua/> E-mail: [ovs@pop.dgtu.donetsk.ua](mailto:ovs@pop.dgtu.donetsk.ua)