DonNTU's Team Takes Part in the Final of the International Championship in Technological Strategy "Metal Cup. 4th Industrial Revolution"

Siberian Federal University (Krasnoyarsk) hosted the Final of the International

Championship in Technological Strategy "Metal Cup. 4th Industrial Revolution" on September 16-19th. It covered digital metallurgy issues. The participants were to analyze promising digital technologies applied in their countries, to develop metallurgy digitization strategy up to 2030, to specify professional transformation characteristics in the field, and to offer an efficient program of training professionals in metallurgy under the conditions of Industry 4.0.

11 teams participated in the final stage. They were from China, Guinea, Jamaica, the Philippines, Brazil, the DPR, Hungary, Belarus, Kazakhstan and Russia. Two teams represented Russia: Russia 1 (universities' team) and Russia 2 (special education schools' team).

DonNTU's team was represented by its students V. Kirbaba, A. Orlovski, A. Rozhin, V. Trubikhin, and D. Kalinichenko. They were accompanied by Dr. V. Kochura, the Vice-Dean of the Faculty of Metallurgy and Heat and Power Engineering.   All teams' presentations were of a high level. 19 experts from such large metallurgical companies as "Norilski Nickel", Severstal", CTPZ", RUSAL", NLMK" and representatives from leading world universities evaluated the participants' solutions. China's team won the cup, Jamaica's team ranked second, and the Philippine's team ranked third. It was the first ever participation of DonNTU's team in such an

important event. However it ranked sixth and outperformed the teams from Russia, Kazakhstan and Belarus.

Our students found out much about introduction of Industry 4.0 at world metallurgical plants, made friends with representatives from other countries and felt the atmosphere of the "most metallurgical city" of Siberia.

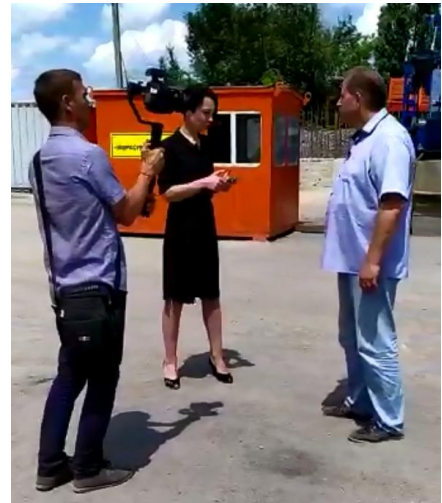## Cooperation between DonNTU and the Moldavian Republic Goes on

The Dean of the Mining Faculty Prof. A. Korchevski was invited to visit the company "Radical" to sign a cooperation agreement and take part in a technical meeting in summer 2019.

The Bulgarian company "EcoResourceEngineering" has a framework cooperation agreement with DonNTU and initiated widening of the joint activity in complex processing of wastes from particularly loaded productions and introduction of metallurgical module installation on the territory of Transnistria.

The monograph written by the academics of DonNTU's Department of Minerals Concentration "Clotting, Caking and Briquetting of Mineral Resources and their Concentration Products" was given to the Director Mr. S. Todorov.

Prof. Korchevski also visited the object with a module installation to process metallurgical slag. It allows getting broken-stone fractions of 0-5 мм; 5-10 мм; 10-20 мм; 20-40 мм and extracting metalized regulus.
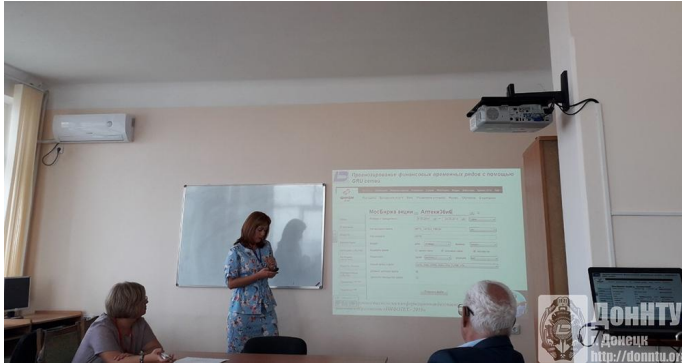
The delegation of Transnistrian Moldavian Republic and representatives of the Republican TV were present at the installation experimental-industrial launching. Prof. Korchevski gave an interview to the Republican press.

DonNTU's Teacher Takes Part in the All-Russian Scientific and Technical Conference "Information Technologies and Data Security in Science, Engineering and Education "INFOTECH-2019"

Sevastopol State University hosted the All-Russian scientific and technical conference "Information Technologies and Data Security in Science, Engineering and Education "INFOTECH-2019" on September 18-20th.

The participants discussed fundamental issues of synthesis of intellectual systems of decision making support and analysis of new trends of development of information technologies aimed at getting efficient solutions of the tasks of system analysis, control and modeling and introduction of computer technologies in different spheres of industry and education.

Dr. T. Vasyayeva from the Faculty of Computer Science and Technologies represented DonNTU at the event. She made her presentation "Prognostication of the Financial Time Series with the Help of GRU Networks" which aroused participants' interest.

There also was a social program which included sightseeing of the city.

DonNTU's Teachers Participate in the International Digital Summit 2019 in Nizhni Novgorod

Dr. O. Kolomytseva and Dr. L. Shabalina took part in the International Digital Summit 2019 in Nizni Novgorod in September 26-27th. Due to the initiative of colleagues from the RF in the frameworks of an integration program and the support of the company "Russian Centre" they got a chance to get to know advanced practice and modern technologies of the projects of computer engineering in commercial and industrial sectors of the RF economics and digital technology development in education.

Transition of niche automation to forming of open platform solutions to build through digital processes in social spheres and economics was the key subject-matter of the summit. A number of events on the implementation of the project "The RF Digital Economics" were organized in its frameworks.

The education system representatives participated in the discussion "Smart-university: digital model of the university infrastructure and application of innovation technologies in education". The best practices of Russian

and foreign universities to create "smart" infrastructure of educational institutions were discussed. The university scientific potential was stated to be one of the factors to create and introduce the "smart" technologies and "smart" city and region elements.

Fantasy Writers are DonNTU Library's Guests

Students, academics and staff of DonNTU met fantasy writers of Russia and the DPR in DonNTU's library on September 26th. The event was organized in the frameworks of the Republican fantasy festival "Stars above Donbass".

S. Chekmaev, M. Kharitonov, M. Tyrin, A. Stolyarov, D. Baikalov and V. Rusanov spoke about their creativity, life and their work specificity in front of the audience. The writers answered numerous questions about the earth and Universe future, the society new model and virtual reality.
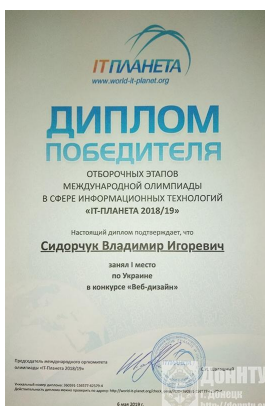
There was a photo shoot in the end and the guests autographed the event poster. S. Chekmarev gave two books to the library: "Moral Conscious Bearers" and the collection of social fantasy "Socium".

DonNTU's Student is a Finalist of the XII International Contest "IT Planet 2018/2019"

DonNTU's student V. Sidorchuk has passed all qualifying rounds of the XII International Contest "IT Planet 2018/2019". The National Research Technological University (Moscow) will welcome its final stage in October. It is one of the most important events in the sphere in the RF. It is aimed at making closer links between universities and business structures of Russia and the CIS, and improving IT education.
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The contest is supported by the Fund of President's Grants, the Agency of Strategic Initiatives on New Project Promotion in the nomination "Young Professionals".

Students and young professionals from Russia and the CIS countries will take part in the final. There will be 14 nominations such as "Programming", "Cloud Computations and Data Base", "Telecom", "Mobile Platforms", "Digital Creativity", "Free Software and Robotics" and the special nomination "Unlimited Opportunities" aimed at developing program solutions for disabled people. Key Russian and international IT companies such as 1C, Huawei, Oracle, Linucscentre, 1C-Gendalf, Moriso, Simbirsoft, TIM3R, Studio 15, and Motorica are the event founders and partners.

The finalists will participate in open educational events such as master classes and lectures to get to know new technologies, improve personal and professional efficiency. One of the lectures will cover the issue of robotics where the participants will be offered to assemble robots and have a competition among them.

Companies' representatives will make presentations of academic programs of vendor-partners of the contest. They will speak about free and preferential possibilities universities and students might have.

The winners will be awarded with diplomas and valuable gifts.

Our Students Participate in the Programming World Championship

The Institute of Computer Technologies and Data Security of the South Federal University (Taganrog) hosted the qualifying stage of the quarter final of the Programming World Championship ACM ICPC on September 15th 2019. ACM ICPC is the largest annual students' contest in programming. The first one took place

in 1977. The team of DonNTU's students (three in number) participated in the contest. There were more than 400 teams (about 1200 participants) from Russia and more than 50 000 participants from all over the world. The contest qualifying stage lasted for 4 hours.

Each team had to pass the prepared beforehand tests with time and main memory limits. The mistakes were indicated (if any) for which the participants got penalties.

The participants

- improved their skills in programming, sports programming, team work when the program code is made up, development and application of algorithms and their further transformation into the program code when nontrivial tasks are solved;
- improved their knowledge of the most optimal programming language;
- got ideas as to organization of contests at DonNTU through the Codeforces service, a special online platform developed for sports programming contests widely used all over the world;

Our team ranked 115th which is a good result if to take into account a high level of competition and the training level of the opponents.