

Donetsk National Technical University INSTITUTE OF INTERNATIONAL COOPERATION

Newsletter

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Voice of Donbass is Heard at the UNESCO International Forum Голос



Moscow hosted the X jubilee international forum of the UNESCO non-government partners "Science for the Common Good of Humanity" on November 26-27th. It was supported by the Russian Academy of science and the Russian Peace Fund. More than 600 researchers from 51 country

of the world (Russia, France, Germany, Austria, the USA, India, Japan, China, Kazakhstan, Australia, countries of Africa and South America) participated in the forum.

There were 25 plenary meetings and panel discussions in the frameworks of the event. They covered the issues of interaction of non-government organizations, the civil society and the scientific community, raise of social responsibility of science and researchers, their influence on political decision making.

Special attention was paid to science ethical problems – the human being, the nature, and the technosphere interaction, possible answers to global civilization challenges, and, in particular, the future role and place of the human being because of fast development of technical solutions in the field of artificial intelligence. Mr. S. Lavrov, the Head of the Ministry of Foreign Affairs of the RF, opened the forum and said that the term "scientific diplomacy" was not just a device nowadays. It is a called-for form of promotion of the ideas which humanity development depends on. "Today the world is at the stage of swift changes, and the interface of efforts of those who are interested in its translator and stable development including representatives of academic circles and the general public is in demand as never before, » the Minister emphasized.

"Scientific diplomacy gains in strength every year. Now it is one of the key components of the world social practice", mentioned the Head of the International Committee of the State Duma of Russia Mr. L. Slutski.

The President of the Russian Academy Of science Prof. A. Sergeev noted: "Science is to build new bridges between countries instead of the destroyed ones."

The participants remarked that politicians had always asked scientists for help at crisis moments. People with scientific world outlook understand the challenge and threat scales better.

Prof. Marenich's presentation made at the forum was a bright example of implementation of the scientific diplomacy. He participated in the forum on the invitation of Prof. Sergeev.

Rector of DonNTU paid attention of the world scientific public to the danger of using scientific achievements by dishonest politicians and businessmen for mercenary ends.

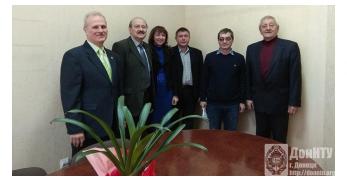
"Speaking of the current dramatic events taking place in Donbass, we should remember the initiative of development of Yuzovski shale gas field which has become one of the stimulus forces. The company "Shell" under the patronage of the Biden family (the USA) got the right on the development. The shale gas recovery is known to turn a huge territory into a desert which is useless to live in. The matter is in the Donbass densely populated territory, the place with a wonderful climate, historical monuments, which is the minor motherland for millions of people living there.

We should remember that first the Ukrainian artillery attacked holiday Slavaynsk and industrial Kramatorsk according to the criminal order of Kiev government. The towns are in the centre of Yuzovski shale gas field. It was aimed at creating intolerable conditions for the population and making them leave their native land. Then it was turn of Donetsk and other towns of Donbass. On May 26th 2014, next day after the Ukraine's president elections, the military forces of the country bombed the international airport of Donetsk. All citizens of Donetsk are witnesses of it. Then the artillery attacked peaceful towns of Donbass by the weapons of the largest caliber, banned phosphorus ammunition, and ballistic missiles "Tochka –U". Only due to the resolute rebuff of the Donbass volunteer corps the Ukrainian chastisers were stopped. So the interest of dishonest dealers in the gas field went down.

The science social responsibility makes us be watchful, ready to resist the similar actions of the dishonest politicians and dealers in their attempts to get profit using scientific solutions to the prejudice of people and the environment", he said.

The call found a response in the final clauses of the forum and solidarity of the discussion participants with the attitude of the citizens of Donbass who defend their right to live and develop on their native Donetsk land.

Associate Professor from ASTU Delivers Lectures to DonNTU's Students



The Associate Professor of the "Communications" Department of Astrakhan State Technical University Dr. Vytovtov delivered his open lecture to students of the Faculty of Computer

Science and Technologies on December 5th. The lecture covered the issues of photonic computers and communication systems and was of great interest. The audience discussed the terms of the photonic computer creation and their application to solve different scientific tasks. The Deputy Minister of Education of the DPR Prof. Anoprienko attended the event.

Dr. Vytovtov visited the DonNTU's History Museum and laboratories of the Faculty of Computer Science and Technologies where the 94 unit supercomputer NEC5800K, a graphic supercomputer and other modern computers are.

He also visited the Automobile Roads Institute of DonNTU, got to know its history, delivered a lecture to its students and was in the car diagnostics laboratory and workshops of the Road and Transportation Faculty.

DonNTU's academics have taken part at conferences held by ASTU and made their presentations there. The prospects of widening of collaboration between our universities were also discussed in Donetsk. Prof. Strunilin, the Dean of the Faculty of Computer Science and Technologies participated in the discussion.

Associate Professor of DonNTU Participates in the International Scientific and Practical Conference in Bryansk

Dr. S. Dzhuar from the department of Industrial Company and City Energy Supply took part in the international scientific practical conference and "Digital Region: Practice, Competencies, projects" held Bryansk at State Engineering **Technological** and University (BSETU).



It was aimed at forming fundamental and applied research trends, discussing topical issues of using digital technologies in the region's management.

Dr. Dzhura made his presentation at the conference. DonNTU had submitted 10 presentations which had been included into the conference proceedings DonNTU's representative strengthened links with BSETU and the conference participants.

The organizers of the event had prepared an interesting social program: visiting of the concert hall, the Local History Museum, the Museum of Fine Arts, and sightseeing of Bryansk battle scenes.

Researchers from DonNTU and Dagestan Scientific Centre Go on Collaborating



IX international scientific and practical conference "Regional Issues of Economics Transformation: Integration Processes and the Region's Social and Economic Policy" was held at DonNTU on December 5th. The event was organized within the frameworks of the

agreement between our university and the Institute of Social and economic Research of Dagestan Research Centre of the Russian Academy of Science. DonNTU is a coorganizer of this annual conference, and the staff of the department "Personnel and Business Administration" takes an active part in it.

There were four breakup groups in it:

- Integration processes in the economics of the regions: the frontier and transfrontier collaboration and inter-regional economic interaction.
- State policy of the regional development as the basis for the national security.
- Modernization of the regional economics and forming of the regional innovation centres of economic growth: metropolitan agglomerations, territorial and production clusters, tourist recreation zones, and transport and logistics units.
- Human capital and labour potential being the factor of the region's sustainable development: employment and labour productivity rise.

Participants from DonNTU, the Russian Academy of national Economy, and Bashkirski State University made their presentations on the plenary meeting.

The proceedings of the conference will come out soon.

Participation in the Seminar "Making of Hydrogen Technology Energy Devices Corresponding to the World Commercial Practice in Russia"

Prof. Goltsov and Ms Goltsova (both from the department of "Physics") participated in the seminar "Making of Hydrogen Technology Energy Devices Corresponding to the World Commercial Practice in Russia" at Moscow Energy Institute on November 19-30th.

The seminar attendance was important from the point of view of getting information on modern



achievements of hydrogen technologies and making scientific contacts with engineers and researchers of the RF. There also was an important task to strengthen the DonNTU's priority in hydrogen material science and hydrogen metal treatment.

Prof. Goltsov made his presentation "The First All-Union School of Young Researchers of Hydrogen Energy and Technology". It aroused lively interest of the participants from the key research institutes, academic and educational institutions and commercial companies. The Goltsovs were also awarded jubilee medals and prize papers for their more than 40-year professional activity in the field of hydrogen energy.

The Goltsov also had some meetings with the President of the National Association of Hydrogen Energy and the president of the Russian Engineering Academy Prof. B. Gusev.

The visit had a positive effect on collaboration of DonNTU with the Russian research community.

Collaboration Goes On



The Associate Professor of DonNTU A. Zvyagintseva visited Belgorod National Research University in September-November 2018.

She made her research, attended seminars with Master's students, wrote 2 joint papers and submitted them to journals, participated in local conferences, and developed joint working programs on some disciplines.

The negotiations she had with the university's administration showed the interest paid to the development of scientific links with DonNTU and bright prospects of the collaboration.

DonNTU's Representative Participates at the Joint Technical Meeting in Egypt

Prof. Korchevski took part in the joint technical meeting in Cairo (Egypt) on December 7-13th.

He had been invited by the company "EcoResourceEngineering" (Sophia, Bulgaria).

The key experts-metallurgists were interested in joint work of DonNTU and the "EcoResourceEngineering" in ecological programs of the waste (metallurgical slag) complete recycling.



Prof. Korchevski made his presentation "Technological Solutions of Using Secondary Mineral Resources of Metallurgical Plants". The discussions on the presentation at the round table meeting took more than 7 hours. The participants were interested in the development of the DPR.

The visit was crowned by signing of the framework agreement.

DonNTU's Staff Members Participate in the International Conference



On December 11th Donetsk National University of Economics and Trade hosted the XII international scientific and practical conference "Topical Issues of University Graduate Employment" organized by the Council on Social Partnership in Education of the Ministry of

Education and Science of the DPR.

Members of the Republican government were in the conference panel. The representatives of universities and high schools, companies and enterprises of the DPR, the LPR and the Russian Federation participated in the conference.

Prof. Marenich, the DonNTU's Rector, and M. Repenko, and expert of the Career and Public Communications Centre represented our university at the event. The head of the DPR Mr. Pushilin emphasized the importance of practical classes and the necessity of them to meet the requirements of the DPR. He also informed on the task given to the corresponding boards to develop the roadmap of forming of the state order, the graduates' employment with taking into account the Republican companies' demands.

The representatives of ministries, educational institutions and companies made their presentations on the prospects of graduates' employment. There also were several breakup groups at the conference where Ms. Repenko made her presentation "Interaction between Educational Institutions and Employers during Training and Employment of Experts". She emphasized the necessity to specify the ways of interaction of the university with the real economic sector and mentioned main tasks for solving of which the collaboration between the university and companies is crucial:

- vocational guidance, professional motivation and adaptation;
- professional educational programs development;
- work and pre-graduation practice;
- diploma project supervision;
- employment (study course);
- professional development and advanced training.

Modern universities are not only education centres but also channels of qualified work force distribution. The task of the employers is also to keep talented youth in the region and the country, to help their entering local universities and further employment on the territory.

The participants discussed the DPR's labour market problems, scientific and practical issues of students' work practice, graduates' employment and their promotion tracing.

DonNTU Hosts I Republican Scientific and Practical Conference "Modern World Economics: Challenges and Reality"

The Department of Foreign Economics, the Institute of economic Research of the DPR, Orenburg State University and Novgorod State University named after Y. Mudri held the I republican scientific and practical conference "Modern World Economics: Challenges and the Reality" on November 21st. Prof. Y Khomenko was its



moderator.

The key Russian scientists and practitioners made their presentations at the plenary meeting. They covered the issues of global and regional trends, innovation development in partially recognized states, prospects of the DPR's development etc. There were three breakup groups in the frameworks of the conference where participants from five Russian universities, three from the LPR and six from the DPR made 54 presentations.

There also was a round table meeting "Economic, social and legal aspects of formation of the Donetsk People's Republic under the conditions of the world realities" at the event.

The group of researchers worked out non-standard strategies of the further conduct of the DPR in the field of economics and law. The Resolution will be passed to the Council of Ministers, the Ministry of Economic Development, the Ministry of Industry and Trade to take measures to provide stable economic growth of the region in the realities of the modern, dynamically changing international economics.

There also was a special breakup group for schoolchildren and first and second year students "Topical issues of the world economics". 87 young researchers submitted 53 papers to the organizing committee of the conference. They shared the results of their research on world country economics problems and the world economics global problems and the ways to solve them. All the breakup group participants got the conference certificates. The schoolchildren were greatly interested in the methods of writing papers, making presentations and organizing the discussions.

All conference participants showed their readiness to go on collaborating with the department of "Foreign Economics".

DonNTU Welcomes International Conference on Raw Material Usage



The Mining Faculty of DonNTU held the XXI international scientific and technical conference-seminar "Complex Processes of Concentration, Processing and Usage of Minerals and Raw Materials" on December the 6th. This is a traditional event called "Papushin's Readings" to honour Prof.

Papushin who has worked at the university many years.

Students, Master's students and postgraduates from the Russian federation, the LPR, Bulgaria and Montenegro took part in the event and made 16 presentations.

They covered the issues of coal origin, topical problems of Donbass, trends of mineral concentration technologies, innovations in complex processing of mineral and secondary raw resources, results of theoretical research and experiments carried out by students.

The students were very active and answered the questions rather professionally. The presentation on homemade coal bricks was of particular interest.

The best presentations got honorary diplomas. The materials will be published in the conference e-proceedings.

Our Sportsmen in Rostov

DonNTU's sportsmen took part in the swimming competitions in Shakhty town, Rostov Region.

Our swimmers demonstrated good results and their coaches analyzed their qualification level and made up the program of their further training and preparation for different competitions.



Professor of MSTU named after N. Bauman Gives His Book to DonNTU as a Gift

Prof. V.Tsegelski from MSTU named after N. Bauman has given his monograph "Jet Devices" (2017) to DonNTU's Library as a gift.

He is an expert in hydraulic gas dynamics of two-phase flows and jet devices, the author of more than 150 publications. He also has more than 100 inventor's certificates and patents of a number of countries (Russia, the USA, China, Canada and some key European countries). A part of the inventions has been introduced into the industry of 11 countries of the world.



The monograph covers the results of theoretical research and experiments of the two-phase jet devices and gas ejectors with sonic and super-sonic nozzles. The general theory based on irreversible process thermodynamics and explaining the processes taking place there from the common positions is offered. The physical characteristics of the two-phase and gas environment in the device air-gas channel are examined. The methods of calculation of the two

phase jet ejector and injector devices and gas ejectors with cylindrical and conic mixing chambers are given. The prospects of using the devices in gas-and-oil producing industry, oil refining industry, petrochemistry, energy, space and deepwater technologies are shown. The book was published with the financial support of the company "Technovacuum", where experiments are carried out.

DonNTU's Scientific and Technical Library is grateful to Prof. Tsegelski for his gift.

You can borrow the book in the Library (the third building of DonNTU).

The Newsletter is prepared by the International Office of DonNTU.

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