



## **CALL-OFF AGREEMENT BETWEEN DONNTU AND UDMURTSKI STATE UNIVERSITY**



**G.V. Merzlyakova, Doctor of History, Prof., Rector of UdsU.**  
Photo: the official site of the University <http://udsu.ru>

A call-off 5 year collaboration agreement between DonNTU and Udmurtski State University (UdsU, the Russian Federation) has been signed.

UdsU was founded in 1931 and is the largest scientific and educational centre of Udmurtia. In autumn 2012 the university was the prize winner of the Russian contest “Systems of High Quality Training of Graduates of Educational Institutions of Vocational Education” and was in the



**A.Y. Anoprienko. Rector of DonNTU.** Photo: the official site of the university <http://donntu.org>

list of efficient universities of Russia. In 2011 a diploma was handed in to the 100 000<sup>th</sup> graduate. UdsU, industrial companies, ministers and academic institutions of the Udmurtskaya Republic and Russia has participated in development of high tech industries such as medical biotechnologies, computer science, and space research. The university trains engineers for the mining industry in accordance with the collaboration agreement with the oil and gas company “RussOil”. The modern building of the Institute of Gas and Oil of UdsU was put into operation due to the support of the Chairperson of the Board of Guardians of UdsU A.A. Volkov.

Prof. G.V. Merzlyakova, Doctor of History, the Deputy of the State Council of Udmurtia, the Honoured Worker of People’s education of Udmurtia, the Honoured Worker of the High School of the Russian Federation is the Rector of UdsU.

*A call-off agreement is the agreement in which collaboration principles*



**The Emblem of DonNTU.**  
Photo: the official site of the University <http://donntu.org>



**The Emblem of UdsU.** Photo: the official site of the University <http://udsu.ru>

*are stated but some significant terms are not defined. These terms are introduced later on.*

*The call-off agreement is a contract by its origin. That is why all clauses of the state legislation related to its validity, forms and signing are applied to it.*

The agreement provides two diplomas and helps implement joint scientific projects, academic mobility programs, joint publications, information exchange, research event organization, development of joint bachelor's programs. The both sides undertake to observe the copyright (joint one and created before signing the call-off agreement) laws. An additional agreement to reach the goals and share obligations during preparation of joint academic events is expected to be developed and signed.

It is also important that the Rector of DonNTU A.Y. Anoprienko has signed collaboration agreements with

- Bryansk State Technical University;
- All-Russian Research Institute of Electrification of Agriculture, Moscow;
- Vytka State University, Kirov;
- The Museum-Institute of the Roerichs family, St. Petersburg;
- St. Petersburg State University;
- St. Petersburg State Polytechnic University;
- Siberian State Geodesy Academy, Novosibirsk;
- Ural Federal University;
- South-Russian State Polytechnic University named after M.I. Platov.

19 documents more are in the stage of signing.

## **INTERNATIONAL COLLABORATION IN PERSONS**

### **VLADIMIR STEPHANOVICH LITVINENKO**

We continue writing about the people who apply efforts to make collaboration with our university successful. V.S. Litvinenko, the Rector of the National Mineral and Raw Materials University "Mining" (St. Petersburg), an academician of the Russian Academy of Science, the International Academy of Science of the High School, the Academy of Mining, the International Academy of Ecology and Nature Safety, a member of the Presidium of the Highest Attestation Commission of the Ministry of Education of the RF, of the Expert Council of the State Duma of the Federal Assembly of the RF on Nature Management, the Head of the Interstate Russian-German and Russian-Canadian dialogues on the issues of mineral usage was among the first who responded and supported DonNTU during the difficult times.

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**V.S. Litvinenko, Doctor of Science, Professor, the Rector of the National Mineral and Raw Materials University “Mining” (St. Petersburg), a full member of the International Academy of the High School, a business man and politician. Photo: <http://www.peoples.ru>**

V.S. Litvinenko is 59. He graduated from Novocherkassk Geological College in 1978 and in 1982 got his honours degree at Geological Survey Faculty of Leningrad Mining Institute. In 5 years he defended his Candidate’s Dissertation and in next 5 years his Doctoral Dissertation. He worked as an academic, the Administration Vice-Rector of St. Petersburg State Mining Institute, the International and Commercial Activity Vice-

Rector of the same university. He was elected the Rector of the University three times (in 1999, 2004, and 2009). He was able to preserve the level of research at the University and raise it. The turnover of annual research is about 600 mln. rubles now. The University shows its research achievements at international exhibitions in France, Belgium, South Korea, China and other countries every year. In 2012 the University got 30 medals, including 16 gold, 11 silver and 3 bronze ones.

V.S. Litvinenko is a famous researcher, the author of more than 150 research papers, and 5 monographs. He has 28 patents (including foreign ones). He is interested in organization and management of mineral resources and mining problems.

Prof. Litvinenko was awarded the Order of Honour (1998), the Order For the Service to the Motherland of the IV Degree (2003) and the III Degree (2010), the Order of St. Andrew (2001), the Order of Knight Commander (Belgium), the Medal of the Academy of Science of the High School of the Russian Federation, the Honorary Decoration of the Federal Board on Intellectual Property. He is also the winner of the State Prize of the Russian Federation in science and engineering For the Development and Introduction of Ecologically Safe Combined Technologies of Mining and Complex Processing of Ore that provide putting into operation the unique Yakovlevski ore deposit, the winner of the State Prize for Russia Geological Atlas, the winner of the Prize of the Government of St. Petersburg for achievements in higher and vocational education. He introduced the quality control system based on the international standard system in his university. He pays his special attention to personnel training. He developed the program of training of young scientific and pedagogic personnel on the system of a student-an associate professor-a master- a postgraduate student-a doctoral student including research and industrial study course at the best local and foreign companies. The program consists of three stages: an individual, a research, and language and pedagogic student training through the associate professor system for further entering to the Master’s course and post-graduate course, the competitive exam and studying at the post-graduate course with advanced language and computer training, employment of the graduates and support of young candidates of science. Thus there

are 140 candidates of science who are younger than 30 and the academics having degrees of candidates and doctors of science make up 85%.

New departments of Geo-Ecology, Oil and Gas Field Development, Furnace Technologies and Processing of Utilities were established and training on such new specialities such as Natural Utility Chemical Technology, Oil and Gas Processing Equipment, training of Bachelors and Masters on The Environment Protection, Chemical Technologies and Biotechnologies, Economics was organized under his being the Rector. Besides, due to his attempts the Scientific Centre on Geo-Mechanics and Mining, the Centre on Engineering Investigations equipped by high tech unique devices and facilities that cost 1.5 bln. rubles were established.

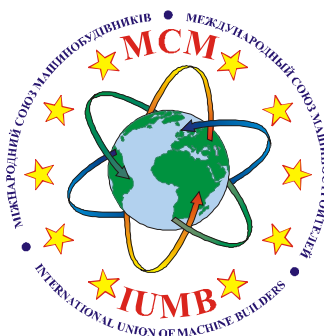


Prof. Litvinenko showed his administrative abilities in making capital repairs of the Institute's buildings, laboratory premises, computerizing of the academic and research process, creation of the modern laboratory base on all the majors. Now the number of computers for every 1000 students makes up 400, and all of them are connected to the Internet.

Prof. Litvinenko is also a politician. In 1995 he joined the Council of the local branch of the movement of Russia is our Home, in 1999 he was a member of the federal and political council of the party, and later on he became the deputy chairperson of the party's city council. He took part in the election campaigns of V. Putin (2000, 2004, 2012), and headed the political campaigns of V. Matvienko (2003).

The president of the Russian Federation visited the National Mineral and Raw Materials University "Mining" in January 2015. During the visit the President and students mentioned difficult conditions the training of students at DonNTU is taking place and proposed their help in the form of text-books, methodological recommendations and facilities for the departments and subdivisions of DonNTU.

## APPEAL



to mechanical engineers, researchers, academics, universities, organizations, plants, companies, doctoral and postgraduate students from Russia, Belarus, Kazakhstan and other world countries on joint holding of the

**International forum "TECHNOSPHERE - 2015 in Sevastopol (Sevastopol State University) on September 14-20<sup>th</sup> 2015.** It will include a number of conferences, seminars,



exhibitions and other events that will be organized in the frameworks of a single forum and community of scientists, experts and representatives of companies of different branches of industry.

The international forum is aimed at consolidating of scientists, experts and representatives of companies and plants to solve topical problems in different branches of economy, exchanging of information, defining of the promising ways of development of new technologies and international collaboration, making commercial links in different areas of the technosphere.

The following events are being planned to be organized in the forum frameworks:

1. International Scientific and Technical Conference “Modern Trends and Outlooks of Development of Processing Technologies and Equipment in Mechanical Engineering” (Sevastopol, Sevastopol National Technical University, the Chairperson – Prof. S.M. Bratan).

2. The XXII International Scientific and Technical Conference “Mechanical Engineering and Technosphere of the XXI Century” (Donetsk, Donetsk National Technical University, the Chairperson A.N. Mikhailov).

3. International Scientific and Technical Conference “Mechatronics Systems in Mechanical Engineering” (Donetsk, Donetsk National Technical University, the Chairperson Prof. V.V. Gusev).

4. International Scientific and Technical Conference “Development of Technologies and Creation of Tools for the Modern Mechanical Engineering” (Lugansk, Lugansk University named after V.Dal, the Chairperson Prof. V.A. Vitrenko).



**Forum 2014. Photo: from the archives**

5. The XVI Congress of the members of the International Union of Mechanical Engineers that unites 21 countries.

6. The list of the events can be continued. We are looking forward to getting your proposals.

The joint organizational committee invites universities and organizations, holders of conferences, symposia and exhibitions and persons interested to take part in the event and make presentations.

The International Forum TECHNOSPHERE - 2015 will gain support from the International Union of Mechanical Engineers. The participants will be provided with hotels, hostels and holiday hotels accommodation in Sevastopol.

### **THE MAIN SUBJECT-MATTER OF THE FORUM**

1. Practice and outlooks of creation and application of advanced and non-traditional technologies. Integrated technologies. Assembly in mechanical engineering and instrument making. Abrasive and vibroabrasive technologies.

2. Mechanization and automation of manufacturing. Advanced equipment.

3. Complex automation of design, preparation and management of the manufacturing. Technosphere economic issues.

4. Creation and application of advanced tools and tool materials.

5. Product and technical system quality management. Engineering issues of the product surface layer.

6. Modern problems of theoretical engineering and machine components.

7. Modern problems of theoretical engineering of materials, processes and material science in mechanical engineering. Specifying technologies and mechanical engineering product coating. Nanomaterials and nanotechnologies. .

8. Technical system modeling and calculation.

9. Technosphere special machinery and technologies. Technosphere ecology issues.

10. Modern problems of engineering education.

Company advertisements and presentations are welcome in the frameworks of the forum. The conference working languages are **Russian, Ukrainian, English, German and French.**

### **ACCOMMODATION AND SOCIAL PROGRAM**

The participants are planned to be provided with students' hostel, holiday hotel and hotel accommodation in Sevastopol. The social program will give them the opportunity to go sightseeing in Sevastopol and around the Crimea.

### **PARTICIPATION FEE**

To refund expenses related to organization and proceedings publishing each participant is to pay the sum equivalent to 20 USD on arrival (the receipt will be issued).

### **THE ADDRESSES OF THE FORUM ORGANIZING COMMITTEES**

1. International Scientific and Technical Conference "Modern Trends and Outlooks of Development of Processing Technologies and Equipment in Mechanical Engineering" (Sevastopol).

Organizing Committee, the Department of Manufacturing Engineering, Sevastopol State University, Students' Campus, Streletskaya Bay, Sevastopol, 99050, Russia.

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✉ E-mail: [serg.bratan@gmail.com](mailto:serg.bratan@gmail.com)

The Chairperson -**Sergey Mikhailovich Bratan.**

2. The XXII International Scientific and Technical Conference "Mechanical Engineering and Technosphere of the XXI Century" (Donetsk).

Organizing Committee, the Department of Manufacturing Engineering, Donetsk National Technical University, 58, Artyoma Street, Donetsk 83001, the Donetsk People's Republic.

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☎ Mobile phone: +38 050 620-23-96

✉ E-mail: [tm@mech.dgtu.donetsk.ua](mailto:tm@mech.dgtu.donetsk.ua) или [mntk21@mail.ru](mailto:mntk21@mail.ru)

🌐 <http://konf-sev.donntu.org> <http://iumb.donntu.org> <http://www.dgtu.donetsk.ua>

The Chairperson -**Alexander Nikolaevich Mikhailov.**

3. International Scientific and Technical Conference "Mechatronic Systems in Mechanical Engineering" (Donetsk).

Organizing Committee, the Department of Mechatronic Systems and Tools, Donetsk

National Technical University, 58, Artyoma Street, Donetsk, 83001, the Donetsk People's Republic.

☎ Tel/fax: +38 062 301-08-70,

☎ Mobile phone: +38 095 460-68-35

✉ E-mail: [mc@mech.dgtu.donetsk.ua](mailto:mc@mech.dgtu.donetsk.ua)

The Chairperson - **Vladimir Vladilenovich Gusev.**

4. International Scientific and Technical Conference “Development of Technologies and Creation of Tools for the Modern Mechanical Engineering” (Lugansk )

Organizing Committee, the Department of Manufacturing Engineering and Engineering Consulting, Lugansk University named after V. Dal, Molodezni Quarter, Lugansk 91034, the Lugansk People's Republic.

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✉ E-mail: [v\\_vitr@ukr.net](mailto:v_vitr@ukr.net)

The Chairperson – **Vladimir Alexeyevich Vitrenko.**

## «DON'T PANIC! » - DONNTU'S STUDENTS DISCOURSE



Герб университета Отто-фон-Герике.

Фото: <http://www.ovgu.de>

Collaboration of DonNTU with Otto-von-Guericke University (Magdeburg) is going on. 6 students of our university had their incorporated studying on Master's program in Germany last semester. They are A. Yesaulenko, Y.

Shevtsova, A. Surzhenko, D. Krupnov, S. Pisarev and A. Shipulin.

They studied at the Faculty of Electrical Engineering and Information Technologies. After

studying some disciplines the students took their exams.

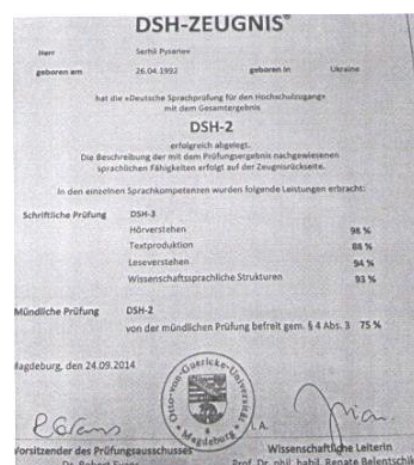
*The assessment system in Austria and Germany is very strict. The maximum point amount a student can get is 13. Here is the mark scale. 13 points: the mark is “very good” /Sehr gut (1) that corresponds to “5” in the Russian system; 12-11 points: the mark is “good” /Gut (2) that corresponds to “4” in the Russian system; 10–8 points: the mark is “satisfactory” / Befriedigend (3) that corresponds to “3” in the Russian system; 7points: the mark is “sufficient”/Ausreichend (4) for which there is no alternative in the Russian system; 0–6 points: the mark is “not sufficient” that corresponds to “2” in the Russian system. The mark “Befriedigend”(3) means that a student has the knowledge that the university requires. The marks “2” and “1” mean that the student makes more efforts than he is required. To get the highest mark the student is to have no mistakes and corrections in his paper. The strictness is due to the demand of knowing the subject which is the main principle of studying abroad.*

The students A. Yesaulenko and A. Shipulin managed to prepare their research papers abroad. The main source of information was the books from the University of Otto-von-Guericke's library written in German and English. The student S. Pisarev failed to do it. All the employees of the Electric Drive Department were too busy and could not find the time to help the students with the research. However, he was happy to attend lectures and practical classes of the university's professors.

All the students had their German language crash course and took the DSH exam.

*DSH (Deutsche Sprachprüfung für den Hochschulzugang) – is an exam passing of which allows foreign students to study at the universities of Germany. It states the level of the language of those eager to study in the country. Studying at the universities of Germany requires foreign students to have B2 level or higher and the result in most cases is recognized by the university the exam was taken at. It consists of two parts- written and oral ones. The knowledge is measured in %. 57 % means the exam is not passed. DSH1: 57-66% means that the level is low to enter the university but there are some exceptions. DSH 2: 67% – 81% means the knowledge level is sufficient to enter any university, however there might be some universities that require a higher level of knowledge of the language. DSH 3: 82% – 100% it means that the knowledge level is high and sufficient to study at any university of Germany.*

*As far as the language knowledge level is concerned, there are 3 of them. Group A corresponds to the elementary level (Grundstufe), B to the intermediate level (Mittelstufe), and C –to the high level (Oberstufe). There are sub-levels in which level. They give more detailed information on the German language knowledge level. For example, the level A1 shows that the person has little or zero knowledge of the language. He uses and understands simple expressions and sentences related to everyday situations. The level A2 shows that the student can make up his speech of a descriptive character: he can speak about his profession or his native city. The level B1 shows that the student has good knowledge of the language. He can talk on the level of everyday situations than can emerge at work and is able to speak during his travelling. He speaks about his sphere of interest dreams and finds no difficulties in describing events. The level B2 shows that the student understands the ideas of adapted texts on different subject matters, can take part in technical discussions in the field of his specialization. The level C1 proves a very high level of the language knowledge. The student understands difficult texts, is fluent in reading them, his speech is more spontaneous and he chooses the words and expressions quickly. This level knowledge is necessary for further studying and career. The level C2 is the highest one. It corresponds to the level of the language bearer. The student has no difficulties in expressing his thoughts, understands everything he hears and reads, he also can easily summarize the information he gets from oral and written*



**Результат сданного экзамена DSH. Фото: из личного архива С. Писарева.**



*sources. He can also explain the information and give proof of it and make up rather a long text of descriptive and narrative character; he can also reason on the language..*

A. Shipulin and Y. Shevtsova got DSH-3, A. Surzhenko, S. Pisarev and D. Krupnov - DSH 2.

**Club IKUS (Intercultural Club for Foreigners).***Photo from the personal archives of D. Krupnov*



One of the tasks of the integrated studying is integrating into the world of the country you are staying in. The student D. Krupnov says: *“It is quite difficult to find common grounds with local students when you have just come as there certainly is the language barrier.*

*There is a small club in the University building in Magdeburg where every foreigner can come on Thursday or Friday evenings to communicate with the Germans who are interested in talking to citizens of other countries. The club is called IKUS. The students do not just communicate there. They also take part in different events and contests. For example, the IKUS holds theme parties where hosts are foreign students who speak about their native country, sing their songs, do national dances, and treat their guests to traditional meals. It was the IKUS that helped*

*me to meet the Germans whom I spent a part of my free time cooking shashlyk in the local park, visiting a birthday party...One of the guys helped us prepare for the German exams. It is called a tandem in Germany when two students are eager to learn the*

*foreign language through the everyday communication. I was lucky to have met the student. He has been studying Russian for 7 years but there is the lack of communication and practicing it. We met once a week, read books, studied grammar constructions and just talked”.*

*A foreign student is always under the stress when he is in the citizen office where the documents of foreigners are registered. But if you are quite attentive, understand the foreign language and do not panic everything will be*



*OK”.*

***The German Bundestag.  
The Photo from the personal  
archives of A. Yesaulenko***

Our students emphasized a strict discipline in the hostel. No noise is to be made from 13.00 till 15.00 and from 22.00 till 07.00. Non-observance of the rule can be prosecuted.

The students walked around the capital of Germany and visited the Berlin Wall, the park Sans Souci (its territory covers 290 hectares), the Brandenburger Tor, the Alexanderplatz, and the Checkpoint Charlie and had a cup of coffee at the Sony Centre.



**At the ENERCON plant.  
Photo from the personal archives  
of A. Yesaulenko**

The student A. Shipulin was impressed by the excursion to the ENERCON plant in Magdeburg. It produces windmills in Germany. They were shown the manufacturing of wind turbines and generators with the capacity of up to 7.5 MW.

Y. Shevtsova says that *she also visited Quedlinburg that is protected by the UNESCO in which there are a lot of historical architecture monuments and took part in the Pumpkin Holiday where people can gather blackberry and drink the famous German beer.*

The integrated studying made the students' mental outlook wider. They are sure they will have new opportunities for more fruitful studying.

### **Development of the INFINITY project at DonNTU**



The student of DonNTU Kristina Bezborodova has come back from the High Mining and Metallurgical School of Ostrava Technical University (The Czech Republic).

She spent abroad a semester having her integrated studying within the frameworks of the INFINITY project of the Erasmus Mundus program. She studied photogrammetry, data base systems, geological and information technology application planning, introduction into the geological and information science, creation of the 3D model, MSAccess, distant probing and passed exams on each of the disciplines. The lowest score she had was 96 points (out of 100) and 100 on some of the disciplines. She used textbooks and e-books, such as Linder, W: Digital Photogrammetry. Practical Course. Springer-Verlag, Berlin, Heidelberg 2006, 214 p. Database Design and Development: An Essential Guide for IT Professionals by Paulraj Ponniah. Besides she was taught to work with ArcGIS, Photo Modeler, AgiSoft PhotoScan and Cyclone. She also managed to find time to go sightseeing around the Republic.

The Newsletter is prepared by the International Office of DonNTU.

Should you have any questions or offers as to the publication material, please address us at:  
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[ovs@pop.dgtu.donetsk.ua](mailto:ovs@pop.dgtu.donetsk.ua)