



## VISIT OF THE PROFESSOR OF THE UNIVERSITY OF STUTTGART TO DONNTU

The Professor of the University of Stuttgart (SU) and the Director of the Institute of System Dynamics (ISYS) Oliver Zavodni has visited DonNTU in the frameworks of the collaboration agreement.



The Institute was founded by Prof. Gilles, the Honorary Doctor of DonNTU in 1968.

As a result of the scientific study course of Prof. Svyatny the ISR Institute became a scientific partner of the faculties of Computer Engineering and Control Automated Systems in 1973. In 2000 the universities signed their collaboration agreement. Prof. Tsaits, the Deputy Director of the Institute was the coordinator of the agreement. In 2005 Prof. Zavodni became the Institute's Director, and the Institute itself was renamed as the ISYS as there had been a demand in solving control automated system problems in a separate institution.

During his short visit Prof. Zavodni took part in the seminar "Problems of Modelling of Dynamic Systems" and characterized all research projects carried out by his Institute. The participants of the seminar-postgraduate students, students of the German Engineering Faculty and academics of the corresponding departments – asked many questions. The aspects of the future joint work were highlighted during the further discussion.

Prof. Svyatny, who is the coordinator of the agreement between the universities, spoke on the developments and research done by the Department of Computer Engineering and the results of the joint work with the Computer Centre of the University of Stuttgart. Prof. Kalashnikov made his presentation on collaboration with the Siemens Company and the University of Magdeburg and 20-year-old activity of the German Engineering Faculty.

The collaboration on the following issued was planned:

- the scientific study course for the Master's students of DonNTU with the scholarships of Leonardo Eelier (DAAD) and Pro 3 with the outlook of doing their master's paper research;
- joint training of candidates for the candidate's dissertations;
- joint submission of the application to the DAAD for the projects financed by Germany and Ukraine;
- experience exchange, participation in German conferences and preparation of joint presentations;
- continuation of long-term collaboration and organization of the jubilee seminar to celebrate the 40<sup>th</sup> anniversary of the collaboration of DonNTU and SU;

As a part of the social program Prof. Zavodni was at the local concert hall, visited the ballet Don Quixote, the champagne winery in Artyomovsk, and received the evidence that it is worth collaborating with Donbass.

In his note of thanks Prof. Zavodni expressed his will to continue the collaboration between the universities and his gratitude for the hospitality.

## THE PROJECT OF INTER-UNIVERSITY AGENCY OF FRENCH SPEAKING COUNTRIES



The vice-Rector of DonNTU Prof. I. Navka and the head of the Department of Quality Assurance A. Momot visited St Petersburg University of Economics and Finance later September. The visit was organized in the frameworks of the project of the Inter-University Agency of French Speaking



Countries (AUF) “Development of the Organization Mechanism for Joint Educational Programs”.

The aim of the project is to develop collaboration between the partner universities of the AUF: the Technological University of Compiègne (TUC) (France), Donetsk National Technical University (Ukraine) and St Petersburg State University of Economics and Finance (SPSUEF) (Russia) which is based on creation of the mechanism of the Master’s program of the double diploma in quality assurance.

The participants of the project discussed the scientific and financial reports on the project implementation and the budget of the project for 2012. They also analyzed the Master’s programs in quality assurance of the TUC and DonNTU and the program of SPSUEF Quality and Competitiveness Assurance and researched the demand in quality assurance personnel training in France, Russia and Ukraine.

The Vice-Rector I. Navka spoke on further collaboration in bachelor’s training. Prof. A. Momot made his presentation on the program of quality assurance at DonNTU.

Our scientists also participated in the discussion on the mechanism of creation of the Master’s program of the double diploma in quality assurance. They paid much attention to planning of coordination of the curricula and courses at the three universities and discussed the programs of refresher courses and study courses for young researchers from France, Russia and Ukraine.

According to the program of staying the participants took part at the Third International Scientific and Practical Conference National Concepts of Quality: Experience and Outlooks of International Collaboration at SPSUEF.

The conference was supported by the Ministry of Education and Science of the RF and Russian Quality Organization, the Science Committee of the High School and Foreign Affairs Committee of the Government of St Petersburg, the company Test-St Petersburg, Stockholm School of economics, the journal Standards and Quality, the project of ENPI Innovations and Business Collaboration.

More than 150 representatives of universities (teachers, postgraduate students and students), companies, education boards and business communities of different regions of Russia and abroad participated in the conference.

The issues of quality assurance in economics and society, in construction, education and service were discussed at the plenary meeting.

The Rector of SPSUEF Prof. Maksimtsev greeted the participants and emphasized the important role the quality plays in the development of Russian economics and education. The President of the Russian Quality Organization the Chief Editor of the journal Standards and Quality Prof. Voronin noted the importance of the quality assurance personnel training under the conditions of forthcoming complex breakthrough in modernization of the industry of Russia.

The Vice Rector on Quality, the Head of the Department of Economics and Quality Assurance of SPSUEF Prof. E. Gorbashko spoke on the experience and outlooks of development of international collaboration in the field of quality assurance at SPSUEF.



The presentation made by the Deputy Editor of the journal Standards and Quality Prof. Belobragin was devoted to the training and upbringing being the elements of quality.

The participants became interested in the presentation made by Prof. Nikola –Louis Dyuklo from the TUC who spoke on the results of the original investigations of the reasons of difficulties and disadvantages in quality assurance at European companies and possible ways of their overcoming.

The Rector of Stockholm School of Economics (SSE) in Russia A. Lilenberg spoke on the role knowledge plays in the society. The Director on MBA diploma design paper of SSE Prof. I. Dyukov spoke on the research in international competitiveness of the countries.

The Vice-Rector I. Navka and Prof. A. Momot presented the results of research on opinion of employers of Donetsk Region on the level of training of masters at DonNTU. The report caused an active discussion.

There were some other issues discussed at the plenary meeting. Among them were activity of the companies in the modern global market, quality economics, quality of education, motivation of the personnel and introduction of economical production tools etc.

The participants exchanged the experience and opinions on the topics and define further ways of collaboration in development of theoretical research and practical developments in quality assurance.

## THE VISIT TO MSTU NAMED AFTER N.E. BAUMAN

The delegation of our university visited MSTU named after N.E. Bauman on October 18-20<sup>th</sup>. The visit was initiated by the administration and trade union's committee of Moscow University. Our delegation took part in the events devoted to the 10 anniversary of signing of the agreement on collaboration between the two universities and 20<sup>th</sup> anniversary of joint work of Donetsk Region organization of Trade Union of Workers of Education and Science of Ukraine and Moscow State Organization of Trade Union of Education and Science of the Russian Federation.

The story of the collaboration is quite a symbolic one. In 1999 MSTU and DonNTU reported to the British Council on the program of regional academic partnership the Vice-Rectors on International Collaboration emphasized the unique nature of both institutions for many international university associations. Thus, the Euro-Asian University Association that covers only classical universities made an exception for two countries- Russia and Ukraine and proposed MSTU and DonNTU to become its members. This gave a birth to the idea of collaboration between the two universities which was supported by the administrations. In 2002 the collaboration agreement was signed, and in 2010 the agreement on friendship and collaboration between the trade unions of the universities was made. The goal of it was to cooperate in the spheres of education, science and sports.



The conference "Ethics and the Future Science" takes place within the frameworks of the agreement every year. This time the proceeding with the signature of the Rector of DonNTU Prof. A. Minaev were handed in to the administration of MSTU. The agreement was also revised as the person responsible for the agreement from the Russian party (Prof. Volchkevich) had died.

On October 19<sup>th</sup> the members of the delegation of DonNTU (the Deputy Chairperson of the Trade Union Committee D. Polkovnichenko, the International Director S. Dzhura and the team on mini-football) were received by the Vice Rector on Science Prof. V. Zimin, the Chairperson of the Trade Union Committee Prof. G. Batueva and the Chairperson of Moscow State Organization of the Trade Union of the Workers of Education and Science of the Russian Federation Mr. S. Kuzin.



The delegations greeted each other and exchanged presents. They spoke on the future plans in the sphere of development of research, improvement of training process and other issues.

The meeting was preceded by the football match of the veterans of MSTU and DonNTU which took place as a part of the IV International Mini-football Tournament in Moscow.

There had been two training games, one of which finished with the victory of DonNTU, the other one –in tie.

The practice of collaboration of the two trade union organizations can be used in signing international agreements.

There also was a social program during the visit. Our delegation visited the museum of MSTU, its buildings, and saw gymnasiums and sports grounds. The welcome of our hosts was very hearty. The delegation of MSTU will pay its return visit to Donetsk next spring.

## THE JUBILEE OF THE GERMAN ENGINEERING FACULTY

20 years ago the German Engineering Faculty (GEF) was established at DonNTU. It was the first faculty of the kind in Ukraine. Its setting up was based the long-term collaboration between DonNTU and Magdeburg University named after Otto-von-Guericke and became possible due to



the support of the German Company Siemens and the Board of Academic Exchanges DAAD. The first Dean of the GEF Prof. Kalashnikov, the Honorary Doctor of DonNTU the Head of the Industry Department of Siemens-Ukraine Prof. R. Tessmer, the Honorary Doctor of DonNTU the Head of the Department of Electric Drive of the University of Magdeburg F. Palis played an important role in the event.

The Vice-Rector on International Relations Prof. I. Navka, the Deputy Vice-Rector V. Strelnikov, the deans of the faculties and heads of the departments, overseas guests and sponsors were present at the festivities.

The Deputy Consul General of Germany in Donetsk Mr. Kokh was also present at the celebrations. He said: “The GEF is the most important faculty of the kind in Ukraine. His graduates have nice outlooks as to the employment at the international labour market. They are competitive, highly professional and know two foreign languages – English and German. The GEF has been collaborating with the DAAD during 20 years. The DAAD offers scholarships to academics and students and also sponsors the lecturers from Germany coming to Ukraine.”

Prof. I. Navka in his speech called Prof. Palis the guardian angel of the GEF as he had always support the faculty while it was developing. Prof. Palis mentioned that the establishment of the faculty was a result of friendship and collaboration of Prof. Kalashnikov not only with him, but also with the Rector of Magdeburg Technical University Prof. Tessmer. The ideas put forward by the people had been supported by the DAAD and Siemens Company.

The current Dean of the GEF A/Prof. S. Tkachenko thanked the DAAD, the General Consulate of Germany in Ukraine, the sponsors and all international friends for the long-term collaboration, friendship and support



and expressed his hopes on further collaboration. He said that the graduates were the engineering elite that were competitive on the labour market. He promised that the academics of the GEF would support the high status of it.

Today more than 300 students are being trained on 7 specialities of the GEF. In 1996 there were the first graduates of the Faculty. Now there are 450 of them. In 1998 the Engineering and Technical Centre Siemens-Ukraine where the faculty's graduates work was established. In 2003 the first candidate's dissertation of the graduate of the GEF took place at the University of Magdeburg. Today there are 14 of them. In 2006 there was the presentation of the GEF at the German

Embassy. In 2010 the Training and methodological Centre Smart grid was established and in 2011 DonNTU was the State Prize winner in international collaboration nomination. Prof. Kalashnikov, the founder, performed great services for the reward.

The official meeting was followed by a festive concert.

## THE INTERNATIONAL CONFERENCE ON PLATINUM METALS IN CHINA

The conference «KUNMING PM'2012» is the fifth one in the series of the conferences «Platinum Metals». The founder of the conference is the open corporation Scientific and Industrial Complex Supermetal named after E. Rytvin, Moscow (Russia). The conference is bi-annual and it takes place in different countries of the world that are interested in the development of platinum metal industry. This year Kunming Institute of Precious Metals (China) hosted the conference.

Fast development of electronics, motor industry, defense industry and projects of hydrogen energy in the world causes the constant demand in platinum group metals (PGM). Even under the economic crisis when the customer demand in different groups of good fell down, the world demand in PGM only grew.

The development precious metal based new materials is the background for the national safety and the military power of a country. China pays special attention to the issue.

The first natural resources of PGM were prospected in the province of Gansu in 1950. Because of the shortage, low quality and difficulty in



mining the annual production of PGM makes up only 2-3 tons. 38.5% of them are platinum, 19.3% - palladium, rhodium, iridium, osmium and ruthenium – 1.1%, 2.1%, 2.1% and 1.5 % correspondingly. However the vector of the development of the Chinese industry of precious metals rather than the present situation is of importance. Because of the powerful development of electronics and motor industry China has been the leader in precious metal consuming during some years.

Kunming Institute of Precious metals is the pioneer in the development of technologies of extraction, processing and production of metal goods and PGM secondary metallurgy. This year the Institute is celebrating its 50<sup>th</sup> anniversary and carries out 80% of all national programs of China related to the precious metal metallurgy. It is the educational base for refresher courses for narrow specialists and trains masters in precious metal metallurgy.

There were 125 participants from China, Russia, Great Britain, the USA, Germany and Israel at the conference «KUNMING PM'2012». Ukraine was represented by the doctoral candidate of the Department Non-Ferrous Metallurgy and Construction Materials M. Goltsova who made her presentation at the Plenary meeting.

There were 20 presentations at the Plenary Meeting. The most interesting were those of M. Piskulov, the Director General of Moscow office of Johnson Matthey on modern trend in production and application of PGM; Mr. L. Thomas from the corporation Metals Recovery Technology of USA on modern technologies of extraction and secondary processing of PGM; the Director General of the company Norilski Nickel Y. Kotlyar on sustainability of PGM consuming; Mr. Parunov, the Researcher Senior of Moscow State University of Medicine and Dentistry on PGM application in dentistry; Dr. Peng Jinhui, the Deputy Director of Kunming University of Science and Technology on the methods of microwave technology to extract PGM from secondary resources; Mr. Andreev, the Deputy Director General of Yekaterinburg Plant on Processing of Non-Ferrous Metals on difficulties and outlooks of modern Russian PGM exporters.

The presentation of M. Goltsova on the theme of her dissertation caused an active discussion in the end of the Plenary Meeting.

M. Goltsova made contacts with Mr. Joseph L. Thomas from the corporation Metals Recovery Technology of USA, Prof. T. Buslaeva from Moscow State University of High Chemical Technology and A/Prof. of MSU E. Kabanova working in PGM metallurgy.

The participants of the conference visited Kunming Institute of Precious Metals, learnt about its history and modern state and some promising areas of its development. Besides, they visited the workshop that produces platinum catalyst nets and the mill that produces foil of precious metal alloys.

## **THE INTERNATIONAL CONFERENCE ON MODERN PROBLEMS OF TECHNOSPHERE AND ENGINEERS TRAINING**



Donetsk National Technical University, the International Union of mechanical Engineers and a number of the leading companies of Ukraine, Russia, Belarus and other countries held the VI International Scientific and Technical Conference Modern Problems of Technosphere and Engineers Training in Tunisia on October 11-20<sup>th</sup>.

The conference is the annual one. People from 8 countries came to Tunisia: Ukraine, Russia, Belarus, Moldova, Poland, Georgia, Kazakhstan and Tunisia. This year there were 90 of them.

The main topics of the conference were: modern tendencies of development of facilities and technologies of the technosphere; manufacturing as the basis to produce competitive products; ecological problems and their solving in modern manufacturing; quality assurance of products and technical systems, modern problems of metal and process engineering; modern problems of engineering education and integration into the European system of university education; methodological base of creativity; engineering creativity in specialist forming.

The presentations made at the conference were topical, had scientific and methodological novelties, and were devoted to the state and outlooks of the development of manufacturing engineering and features of engineering education in different countries.

The participants exchanged scientific and technical information, defined the promising ways of creation and development of new technologies, discussed the issue of integration into the European system of engineering education and development of joint scientific programs.

## SCIENTIFIC STUDY COURSE IN GERMANY



The Assistant Professor of the Department of Computer Engineering M. Krasnik visited the Institute of Dynamics of Complex Technical Systems named after Max Plank of the University of Magdeburg (Germany) on August 15<sup>th</sup>-October 15<sup>th</sup>. The visit was organized in the frameworks of the collaboration agreement between DonNTU and the Institute. a.

Prof. A. Kienle working at the Institute and at the University named after Otto-von-Guericke issued the invitation.

The spatial and distributed model of the reactor of ethylene polymerization to get low density polyethylene was developed. It was the joint work done with engineers M. Magold and K.

Kunde. It is the continuation of the work of Prof. Kienle and researchers of his department.

M. Krasnik participated in the seminars organized by the Institute. He made the poster presentation Application of the Methods of Cancellation to Model the Process of Production of Low Density Polyethylene at the international conference that took place in Reisenberg in October and was devoted to the mathematical methods of cancellation of complex parameterized models.

## THE INTERNATIONAL CONFERENCE OF CHEMICAL THERMODYNAMICS AND KINETICS



Donetsk National University of Economics and Trade named after M. Tugan-Baranovski held the II International Scientific Conference Chemical Thermodynamics and Kinetics on September 12<sup>th</sup>- 14<sup>th</sup>.

The organizers of the conference were Donetsk National University of Economics and Trade named after M. Tugan-Baranovski, Donetsk National Technical University and Novgorod State University named after Yaroslav Mudry.

236 representatives of 48 universities and institutes of the Academy of Science from such countries as Ukraine, Russia, Germany, Poland, Tadzhikistan, Slovakia, the USA and Israel participated in the conference.

8 presentations were made at the plenary meeting. Prof. V. Matvienko (DonNTU) made his presentation Fluid Phase Balances in the Systems with Natural Gas Components and Organic Adsorbents.

There were two breakup group meetings where 110 presentations were made and discussed.

## THE SEMINAR OF IIC ON INTERNATIONAL PROJECTS

The regional seminar of the Institute of International Collaboration "Practice and Outlooks of Implementation of International Projects in Ukraine" was held on October 4<sup>th</sup>.

Researchers, academics and students of DonNTU and Melitopol, Slavaynsk and Kramatorsk participated in it.

The Head of the Department of Geo-information Science and geodesy Prof. S. Mogilny spoke on the practice of preparation of the TEMPUS projects in the field of education. The researchers of the department have been participating in the TEMPUS project on land management in Macedonia and Ukraine since 2010. In 2013 the curriculum with taking into account the local profile will be developed at the university within the frameworks of the project.

The Head of the Department of Control Automated Systems Prof. Y. Skobtsov spoke on his practice of participation in one of the ERASMUS projects called EWENT in which 17 universities from Belarus, Moldavia, Ukraine, Poland, the Czech Republic, Italy, France, Spain and the Netherlands are taking part. The budget makes up more than 3 mln Euros for three years. The start of the project was a success and DonNTU is taking an active part in it: 5 students are studying abroad (in Warsaw and Prague), and Prof. Y. Skobtsov will have his study course in Warsaw Technical University.

Prof. Zukhba spoke on practice of work of the School of Economics and Management and Otto-von-Guericke University on getting the double diploma.

A/Prof. L.Shabalina of the Department of Foreign Economic Activity spoke on the technology of preparation of the project application.

A/Prof. E.Pavlysh made the presentation on the EU 8<sup>th</sup> program the Horizons of 2020.

The coordinators of the PII7 EU project N. Shestavin and O. Kot informed on the competitions of PII7 EU in the environment protection, science and the society and social, economic and humanitarian science.

The seminar participants discussed the main problems which arise during the application preparation, discussed different ways of collaboration in the university and among the partner-universities.

### **NEW COLLABORATION AGREEMENT**

The collaboration agreement between **St. Petersburg State Culture Institution “Museum-Institute of the Roerichs” (SPSCI)** and DonNTU has been signed.



SPSCI is one of the founders of the International Prize of Nikolai Roerich, the winner of which the International Director S. Dzhura was in 2008.

The parties are ready to support, deepen and develop the collaboration based on the principles of independence and mutual benefit of the parties and organize joint academic and educational programs, lectures and exhibitions.

AS a part of the collaboration in education, science and culture the parties take part in the projects of international foundations to get their grants.

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: 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; web-site: <http://iic.dgtu.donetsk.ua/>; e-mail: [ovs@pop.dgtu.donetsk.ua](mailto:ovs@pop.dgtu.donetsk.ua)