



## THE VISIT OF GERMAN EXPERTS TO DONNTU



The Professor of Hamburg Technical University (TUHH) and the Director of the Institute of Solid Process Technologies (SPE) Stephan Gainrikh visited DonNTU in early December. The visit was organized in the frameworks of the collaboration agreement between the two institutions.

The Institute SPE was founded by Prof. Verter in 1980 and was among first institutes within the university's structure. It has been headed by Prof. S. Gainrikh since April 2008.

Scientific interest of the SPE covers chemical engineering. The Institute closely collaborates with German and international companies.

Prof. Gainrikh met the Rector of DonNTU Prof. A. Minaev, Vice-Rectors I. Navka, Y. Bashkov, A. Levshov and discussed further collaboration of the TUHH and DonNTU and collaboration agreement on the university level. Prof. A.S. Parfenyuk, Prof. Svyatny (both are heads of departments) and the Associate Professor of the SPE S. Antonyuk also participated in the meeting.

Prof. Gainrikh participated in the scientific seminar "The Outlooks of Development of Research in Waste Granulation and Processing". The leader of the seminar Prof. A. Parfenyuk spoke on the results of collaboration of his department and the SPE since the international collaboration agreement was signed three years ago. The Head of the German Language Department Prof. G. Levchenko also took part in the seminar. Prof. Gainrikh made his presentation on the research projects carried out by the SPE. The audience (students of German speaking groups, postgraduate students and academics) asked many questions which were followed by the discussion that highlighted the joint tasks. The fourth and fifth years of study students spoke on the results of investigations they carried out.

The seminar "Technological Process Parallel Modelling" was organized at Computer Engineering Department. Prof. Svyatny spoke on the development of parallel modeling environment and outlooks of building of the technologically oriented environment. The doctoral candidate O. Dmitrieva made her presentation on the development and research of parallel computing methods to solve systems of differential equations of large dimensions. Prof. Gainrikh, Svyatny, Antonyuk and Kushnarenko took part in the discussion. The construction of parallel solvers of equations based on new methods was recognized one of the most promising areas of collaboration.

The visit ended with the meeting of Prof. Gainrikh and A. Parfenyuk. They spoke on the topics of the research and developments of the Department of Machines and Apparatus of Chemical Industry and details of the joint research in waste granulation and processing and the results of the joint project "The Development of the Strategy of Optimization with the Model Support of the Granulation Process in the Boiling Sphere".

It was the New Year's Eve, so Prof. Gainrikh and his colleagues congratulated DonNTU with it and expressed their hopes for further successful collaboration.

## FRENCH-UKRAINIAN COLLABORATION IN THE FRAMEWORKS OF THE PROGRAM MASTER

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Prof. Patrick Enaff and Pier Andri from the ETIS laboratory have visited DonNTU within the frameworks of collaboration with Versailles University (France).

The main attention was paid to the selection of new candidates among the 4<sup>th</sup> year students for the program MASTER. The group has been working since September 7<sup>th</sup>. There are 7 hours of classes of French in the week's schedule. Some students of the group will be proposed to participate in the program of double Master's diploma.

The considerable amount of time was paid to the corrections of the thesis of V. Khomenko who is working at the laboratory LISV on the series of final experiments on the humanoid robot ROBIAN-2.

The aim of V. Khomenko's study course is the presentation of his thesis in front of the Director of the LISV Prof. Y. Alaili and the French supervisor Prof. F. Ben-Uezdu.

During Prof. Enaff's visit the Master's students V. Dolmatov, D. Ipanov, M. Zaitsev reported on their work at the diploma papers the defense of which took place on December 18<sup>th</sup> (see below).

Prof. P. Andri delivered 8 lectures and organized 12 practical classes on neural networks. For this OC LINUX was installed on the computers of the room 8.205.

It was the first visit of Prof. Andri to Ukraine. He was pleased with the welcome and the level of the language and professional training of the participants of the MASTER program and the rate of the French language learning.

The next visit of our French colleagues will take place in January 2013 during which the issue of the "intervention" of the French language into the courses of Physics, Mathematics, Industrial Electronic, Control Theory etc .will be discussed. In the opinion of the parties it will promote the raise of the level of the French technical language and acquaintance with the latest achievements of the joint research.

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The first defense of the Master's diploma papers of the students of the French Engineering Faculty within the frameworks of MASTER program took place on December 18<sup>th</sup>. The vent was in on-line mode. The students A. Pugach, E. Snegina, A. Nikitin made presentation of the work at the special classroom of the laboratory ETIS of the University of Cergy Pontoise (France) aimed at such events.

The ETIS laboratory was represented by famous experts in robotics, artificial intellect, neuron networks, perception and artificial vision Prof. Gosier, Kou, Enaff, Andri, Monaselli. DonNTU was represented by A. Melnik and V. Khomenko.

The work of A. Nikitina, A. Pugach, E. Snegina covered the position video control, system training, neuron regulator application. Every work had theoretical and experimental parts. The Master's students introduced the latest robotic equipment with Web-cameras for implementation of the developed algorithms and programs.

The broadcast of the defense was watched by the leaders of the French Engineering Faculty, professors of the Department of the French Language and the students of the faculty. They were able not only to listen to our students and watch them but also to ask questions.

Later the students V. Dolmatov, D. Ipanov and M. Zaitsev defended their papers at DonNTU. Now the French party was able to ask their questions. The topic of the students' research was the dynamics of the electrical and mechanical arm-chair and interaction of the third force with the manually controlled arm-chair.

It was for the first time in Ukraine when the papers have been defended in two countries at one and the same time. The students had 20 minutes for the presentation and 10 minutes for answering questions. But sometimes it took up to 20 minutes to answer all the questions. Our Master's students were excited but they made good presentations and answered all the questions properly.

The members of the commission discussed all the aspects of every presentation and paper. The verdict was strict enough: A. Nikitin, A. Pugach, E. Snegina will get their diplomas of "MASTER-SIC"; V.

Dolmatov, D. Ipanov, and M. Zaitsev should continue their work at the projects and then present them in front of the commission of DonNTU in January 2013.

One of the main conditions of functioning of the “MASTER-SIC” program is good level of technical French in the area electro-mechanics, robotics, artificial intellect, neuron networks. The requirements of the French party for the French, theory development, experimental part and presentation of the obtained results, ability to give quick answers are strict enough.

This invaluable experience of French-Ukrainian collaboration will be applied while training our Ukrainian Masters and in further development and improvement of the French-Ukrainian program “MASTER-SIC”.

### **THE VISIT OF THE RUSSIAN SPECIALIST**

N.G. Solovyov, an academic of the Russian branch of the corporation “Inter Systems International Corporations” (Moscow) has visited DonNTU on the invitation of the Department of Automated Control Systems.

He delivered some lectures on object system of control of the database InterSystems Cache which became a part of the refresher courses in the frameworks of the academic program of the corporation. The slides of the corporation were used and the audience worked on their PC. The participants got 10 free copies of the manual СУБД Cache and 10 copies of methodical tasks for practical work.

### **SCIENTIFIC STUDY COURSE AT MAGDEBURG UNIVERSITY**

The Professor of the Department of Enterprises' Economy O.Y. Popova has visited the University of Otto-von-Guericke.

She attended lectures on microeconomics, and enterprises' economy, exchanged the methodological material on the disciplines which can be used to teach basic of higher and financial mathematics, to do research and work at diploma and Master's papers.

She also studied curricula of the speciality Enterprises' economy and discussed the possibility to arrange the program of double diploma for the Master's students of the department.

Prof. Popova visited the library which has a lot of text-books, monographs, and journals on ecological management in German and English. The library is equipped with the search system which allows making the quick search of the professional literature. She was working in the JSTOR system in which there are papers of the scientists published in the leading economic journals.

The hosts were interested in making business contacts, exchanging of the experience and doing research, and in organizing training of Masters in economics.

The professor got a great number of e-versions of monographs on resource provision of enterprises and the resource potential control. They will be used in writing papers on manufacturing ecology for conferences of different levels and in preparing the lecture materials and methodological recommendations for self-studying and seminars.

### **WORK AT THE PROJECT OF INTER-UNIVERSITY AGENCY OF FRENCH SPEAKING**

The Senior Lecturer of the Department of Quality Assurance E.V. Miroshnichenko had her study course at St. Petersburg State University of Economics and Finance (SPUEF) organized in the frameworks of the project Development of the Organizational Mechanism to Create Joint Educational Programs.

The aim of the project is to develop collaboration among the university-members of the Inter-university Agency of French-Speaking: the Technological University of Compiegne, DonNTU and SPUEF based on creation of the mechanism of master's program of double diploma in quality assurance.

The forming of the joint program of double Master's diploma “Strategic Management of Quality in the International Environment is based



on studying of the academic and methodological complex of disciplines, experience the academics have, implementation of innovation technologies of training under the conditions of the international integration.

E. Miroshnichenko studied the multi-level system of training in quality assurance, methods of research at SPUEF, and academic and methodological complex of master's program on quality management in Russia. She analyzed the master's programs Quality, Standardization and certification at DonNTU, "Quality and Competitiveness Control at SPUEF and Quality Control and Company's Competitiveness at the University of Compiegne.

The general strategy of training aimed at achieving joint educational goals and training highly qualified professionals in quality assurance who can provide sustainable and efficient interaction of Ukraine and Russia under the economic globalization was developed.

The partners also defined the positions that required strategic solutions necessary to sign an agreement of double diploma program between DonNTU and SPUEF.

## **THE INTERNATIONAL SEMINAR ON ADVANCED TECHNOLOGY IN MINING ENGINEERING AND AUTOMATION**

On December 20<sup>th</sup> the faculty of Electrical Engineering and Computer Engineering Technologies and Automation organized the seminar on the advanced technologies of cable consolidation and explosion protected cable inputs made by the company CMP-Products (England) and on explosion protected joint boxes and control stations made by ROSE (Germany).



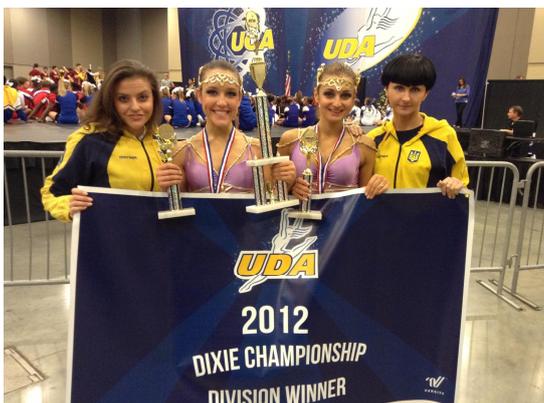
Viktor Lasarev working for the company Automation System Service (Kharkov) made his presentation on the developer and supplier of the specialized electro-technical equipment in Ukraine. He highlighted the issues of selection and assembly of the cable inputs for the objects of mining, oil and gas and chemical industries. He used the video showing the peculiarities of the modern cable inputs and their functions, concepts of explosion safety, standards and compatibility of the cable inputs with the equipment and cables, methods of consolidation etc.

The graduate students and representatives of the companies Donetsk Engineering Group, Donbassugleavtomatika, and others took part in the seminar. The seminar was followed by a discussion of practical moments. The company Automation Systems Service spread documentation on the main types of the products. Besides, the Faculty of Electrical Engineering was presented with the test bench with the patterns of the cable inputs which is now placed at the laboratory of the Department of Power Supply of Enterprises and Cities.

The Faculty is grateful to the company and is sure the further collaboration will be fruitful.

## **REFEREEING AT THE INTERNATIONAL COMPETITION IN CHEERLEADING IN THE USA**

The Senior lecturer of the Department of Physical Education and Sports Y. Ivanchenko has visited the USA on the invitation of the International Cheerleading Union (ICU). She took part in the training and refereeing seminar on cheerleading, was a referee of the championship Dixie 2012 and reasserted her referee's category. Cheerleading combines the elements of show and spectacular sports (dancing, gymnastics and acrobatics). The team of DonNTU on cheerleading is the champion of Eastern Europe 2010, a repeated prize winner of championships and cups of Ukraine.



Y. Ivanchenko visited the main office of the ICU in Memphis and discussed the outlooks of the development of cheerleading in the world and Europe and possibilities of entering of the ICU into the Sport Accord with the president of

the ICU Mr. Jeff Webb.

There was a joint with the American team training in which both parties exchange the experience.

The training and refereeing seminar on cheerleading provided additional theoretical information and preceded the championship Dixie 2012 which took place in Jackson city. Y. Ivanchenko was a referee of it.

Then she passed the exam which reasserted her cheerleading referee's status and was recommended as a referee for the World Championship on Cheerleading in 2013.

She gained new knowledge, skills and experience which will be used by the team of DonNTU to achieve higher results.

## THE CAREER CENTRE AT INTERNATIONAL CONFERENCES

The autumn term was very busy for the Career Centre (the head – Associate Professor L.I. Kovalenko) – the Career Day, the presentation of the corporative school of the company Gerkules, the Career Forum of Donetsk Chamber of Commerce. There were a number of events oriented on the labour market needs, including some international conferences.

The Career Centre participated in 2 international conferences and a master class Independent Evaluation of Professional Abilities organized by the Regional Representation of Testing and Development Centre of MSU Humanitarian Technologies in Donetsk.

In November DonNTU's Career Centre took part in the VII International Scientific and Practical Conference Problems and Outlooks of Employment of University Graduates at Donetsk National University of economics and Trade named after Tugan –Baranovski. It covered a wide range of topical problems related to the development of the mechanism of collaboration of universities and employers. The conference discussed practical aspects of efficient interaction of the sphere of educational services and job market, qualitative training of specialists as the priority of higher education. It was highlighted that industrial practice is an important factor of training of a competitive graduate. The level of presentations made by the participants was very high. They were greeted by the mayor of Donetsk Mr. Lukyanchenko. The representatives of many educational institutions of the Donetsk Region and Ukraine and leaders of business associations and public organizations of different levels were among the participants. The coordinator of the Career Centre of DonNTU A. Sled made her presentation The Social Responsibility of the Partners in the System of Relations of Universities and Employers which was followed by an intensive professional discussion.



The conference Corporative Training: Challenges and Outlooks organized by the Academy DTEK and hosted by DoNTU gave the information on the tendencies of development of the corporative training in Ukraine, Russia and Europe.

On December 10<sup>th</sup> the Centre organized an informative meeting with the coordinator of the program Volunteers of UN in Ukraine Oksana Onasenko who told the students about different possibilities to work as the UN volunteers and improve their knowledge of a foreign language. She also finalized: "Engineers are especially important for our program as they are constantly in demand."

The events related to the students' employment supported by the Rector, Deans and Students' Trade Union make our student active as to their job seeking.

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)