За якість та безпеку життя! • For Quality and Safety of Life!

UNIVERSITY COURIER

Founded in 1956

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Newsletter of National University of Life and Environmental Sciences of Ukraine • Cabinet of Ministers of Ukraine

University celebrates its 115th anniversary. To this event and 15th anniversary of GCHERA – Global confederation of higher education associations for agricultural and life sciences - the International scientific conference "Earth bio-resources and environmental biosafety: challenges and opportunities" is dedicated

MILESTONES OF HISTORY

...It is already well over a century, but it is still young

It is already well over a century, but it is still young. It is our National University of life and environmental sciences of Ukraine, which is celebrating its 115th anniversary. It has happened that its roots go back to the XIX century, but the crown keeps on growing through our country and the world, - into the XXI century. Founded in the Russian Empire, it survived it and one more - the Soviet one, as well as two World Wars, and is still working today for the development of independent Ukraine.

On the highest command of the Emperor

History of the University goes back to the agricultural department of Kyiv Polytechnic Institute.

Modern system of agrarian education in Ukraine by its formation owes much to this educational institution, opened in the late XIX century. On March 11, 1897, the Emperor Mykola II was submitted the memorandum on the necessity to create a Polytechnic Institute with agricultural department in Kyiv. And on January 30, 1898, with a personal resolution the "imperial" order "to open the first courses of Polytechnic Institute in Kyiv in the current year fall in temporary premises and appoint the privy councilor Viktor Kyrpychov as a director and instructor of this Institute" was approved. Appointed at the Ministry of Finance the commission, in which a major role was played by the director of the newly established institution, professor, distinguished mechanical engineer V.A. Kyrpychov, developed regulations for Kyiv Polytechnic. This document consisted of 75 articles that define KPI objectives, procedure for its financing, framing, rights and duties of students, employees, management structure. According to the regulation, published on June 8, 1898, the Emperor Oleksandr II Kyiv Polytechnic Institute was considered the higher educational establishment, aiming at providing its students the technical education and had four departments - agricultural, engineer, mechanical and chemical.

Training in the Institute started on September 1, 1898 in premise of the 1st Kyiv Commercial College (now it is a book factory in 24, Vorovskoho Str.), taken on a temporary lease. And in April 1902, the students moved into six newly-built buildings at Brest-Lytovske highway, built in the Romanesque style under the guidance of academician of architecture I.S. Kitner.

Organizers of the KPI agricultural department took into consideration, that it was the sole source of the higher agricultural education at that time not only in the Kyiv region, but also throughout Ukraine. Its first dean was the Master of agriculture State counselor, distinguished professor and head of an animal husbandry department M.P.Chyrvynskyi, whose doctrine has become a part of national science treasury. By the way, in 1905, after the rehabilitation of the autonomy of higher education establishments, he became the first elected director of the institute. In 1908 a full professor, eminent agricultural scientist P.R. Slozkin, who was holding a course of general geoponics was elected the dean of the institute.

A distinguished professor of the imperial Moscow University K.A. Timiryazev was a KPI honorary member and lecturer of the agricultural department. His student E.P. Votchal was heading the botany chair for 30 years and developed an excellent laboratory on its basis. Having considerable experience in phyto-physiology laboratories of the Moscow University, in Petrovska agricultural and the Forest academies, University of Warsaw, being thoroughly acquainted with the organization of laboratories and research stations of Vienna, Innsbruck, Zurich, Bearn, Heidelberg, Halle, Berlin, from the very first years he turned it into the center of ecological-physiological research. It was K.A. Timiryazev who founded school of Ukrainian botanists-physiologists. His students and likeminded people were working with him, later outstanding scientists V.R.Zelenskyi, V.V. Kolkunov, M.K. Malyushytskyi, I.M Tolmachov, O.M. Kekuh, M.I. Orlovskyi, O.O. Tabenetskyi, I.F. Zavhorodniy, P.E. Yaroshynskyi and others.

Zoological laboratory and zoological museum created under the direction of Y.M. Vahner were playing an important role in training the agricultural specialists. It is difficult to imagine the successful work of the department without a course of designing the constructions and operating the agricultural machinery. This area was led by a young mechanical engineer professor K.I. Shyndler, who had native and foreign experience in designing and applying the agricultural machinery. His school became a leading one in training the agricultural specialists. On the Batyiva hill K.I. Shyndler founded the first in the Russian Empire test laboratory for agricultural machinery and appliances, which was remaining the basis for educational practice and research work until 1916. And professor M.P.Chyrvynskyi, one of the founders of national zoo-technical science, created a general zoo-technical laboratory and model sheepfold. Besides, the partial agriculture laboratories (Professor P.R. Slyozkin), general geoponics (professor O.V.Klyucharov), partial zoo-technology (Professor S.O. Ivanov), forest study-room, meteorological and entomological stations and other studies and services were functioning.

The first graduation - 32 scientists and agronomists - took place in 1903. Chairman of the State Examination Commission was a well-known scientist, honorary member of a popular Kyiv Society of Natural Scientists D.I. Mendeleev, who commended the graduates. Having acquainted with the state of scientific and training work at the institute, in his memorandum to the Minister of Finance, he wrote, "I have seen most of the best laboratories in Western Europe, saying nothing about the Russian university laboratories, and I think that the laboratories, classrooms and workshops in Kyiv Polytechnic distinguish among all I had seen not only because of the modernity and variety of equipment, but various improved devices assigned for student classes, that is especially noteworthy".

Specific thing is that the leading scientists of KPI agricultural department believed that the training process should be combined with research. This thesis was implemented in his judgment by professor E.P. Votchal, "Only the one who works in science can teach".

The analysis of the works of KPI agricultural department lecturers allows us to claim that they were paying attention to the forms of management in the agricultural sector, supported the Stolypin agrarian reform; its implementation was to ensure the establishment of hamlet-based private ownership of land. At the same time recommendations for improving the farming methods in estates were developed.

But great ruin, World War I, came and resulted in the revolution of 1917 in the decaying Empire. At that time

End p. 2

MILESTONES OF HISTORY

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End. Beginning on p. 1

KPI, like many other institutions did not function.

Within only nineteen pre-revolutionary years 639 specialists graduated from the agronomical department.

In times of liberation competitions

In 1918 KPI was reconstructed as well as agricultural (agronomical) faculty, where 44 students were studying. And during the Civil war, when the government was constantly changing, it was working with breaks.

At this time the Directorate - Government of the Ukrainian People's Republic - passed the law on Kyiv Agricultural Academy - a state high school, which had to be subordinated to the Ministry of Lands. This law included the creation of six faculties - agronomical, forest, boundary, veterinary, engineering, economic, which were divided into units, and training had to be carried out in Ukrainian. However, defeat in the war and elimination of the UPR in 1920 prevented putting this idea into practice.

The Soviet period

The Civil War is already history. In spring 1921, KPI resumed its work. And with it the agronomy department where 194 students were studying, did as well. It is on its basis at KPI in 1922 that the Kyiv Agricultural Institute (KAI) with 4 departments was founded - zoo-technical, economic, agricultural machinery and arable farming, which within a year became an independent higher educational establishment. It was gradually expanding, and in early 1930 in Holosievo four buildings, two residential buildings (are still functioning), three dormitories and auxiliary buildings were built, and the Institute included already several faculties - agricultural management, forestry engineering, agricultural mechanization, agrochemistry and pedology, ameliorative-hydrotechnical, cultural-technical, working - plus agropedagogical department and training farms as well as the testing stations.

In KAI complex in the 30s there were formed and started its activity agrochemical institute, institute of agricultural mechanization and electrification, agro-engineering institute of sugar industry, engineering-economic agricultural institute, zoo-technical and agropedagogical institutes, later reorganized into independent research institutes or faculties of KAI (by the way, - in the late 1934 the director of the Kyiv agrochemical institute I.S. Myronivskyi reclaimed the resumption of this name - Kyiv agricultural institute.

Now let us return for a moment to the times when Poland was a part of the Russian Empire. Let us return, in order to understand how one of its best training-scientific Institutes - of Forestry and Landscape Architecture has appeared in the structure of the present NULES of Ukraine.

Its predecessor - Kyiv Forestry Institute - originates from the Warsaw forest school, associated with the Institute of Agriculture and Forestry in Marimont (Poland) in 1840. Later (1862) this institute was moved to Novo-Alexandria (now Pulawy, Poland). Scientific supervisor of the institution in the 90s of the XIX century was a well-known natural scientist Professor V.V.Dokuchaev. At the beginning of World War I the forestry faculty moved to Kharkiv, and in 1921 it joined the Kharkiv Agricultural Institute. In September 1930 by the resolution of the Ukrainian government the integration of KhAI forestry department and KAI forest engineering faculty took place, and on their base the Ukrainian Institute of Forestry was founded. Within six years it transformed into the Kyiv forestry institute (KFI) with one forestry faculty, which was training about 650 students.

In 1954 the Kyiv Agricultural Institute was merged with the Ukrainian Forestry Institute into the one educational establishment - Ukrainian Agricultural Academy (UAA). In 1957-1962 it was a part of the Ukrainian Academy of Agricultural sciences as its educational unit. It was that time when it consumed the Kyiv veterinary institute, which in 1920 was starting its work as a veterinary faculty of the Kyiv Polytechnic Institute, and since 1921 was operating as an independent Kyiv Veterinary and Zoo-technical Institute. Since 1930 it has been working as a Kyiv Veterinary Institute.

In 1962, the Ukrainian Agricultural Academy became subordinated to the Ministry of Agriculture of the USSR and became one of the best higher educational establishments of the Soviet Union, which was testified by a transient red flag of the Central Committee of the CPSU and the Council of Ministers of the USSR and the Komsomol Central Committee, handed in the UAA staff in 1989 as the winner of socialist competition among 108 agricultural universities. Justly in the late 80s of the last century it was it which was entrusted to assist in and coordinate the creation of the Agricultural Institute in Phnom Penh (Cambodia).

The developments of scientific schools of the professors V.F. Peresypkin (new varieties of canola and wheat), P.D. Pshenychnyi (development of principles and practical recommendations for protein and mineral nutrition of animals), K.B. Sviechyn (individual development of animals), D.Y. Vasylenko (problems of pig breeding), M.A. Kravchenko (new breeds of cattle and horses), H.O. Bohdanov (livestock feeding), I.O. Povazhenko (problems in veterinary surgery), H.O. Himmelreikh (animal morphology), M.F. Gulyi (mechanisms of regulation of metabolism and productivity of animals), V.V. Nikolskyi (veterinary virology), M.T. Skorodumov (veterinary therapy), O.K. Shcherbyna (veterinary epizootology), S.Y. Yaroslav (animal physiology), S.V. Bazhenov (veterinary pharmacology), I.I. Martynenko (automation of technological processes of agricultural production), M.P. Dyadechko (biological plant protection) and others came into the national scientific treasure for ever.

In 60s-80s of the XX century many UAA scientists were awarded the high government awards. Thus, laureates of the Ukrainian State Prize in Science and Technology became M.K. Didenko, S.H. Duka, M.F. Hulyi, S.M. Kozhevnikov, V.F. Peresypkin, O.A.

Growing up with independent Ukraine

In August 1992, the Ukrainian State Agrarian University was founded on the UAA basis and on 29 July 1994, by a decree of the Verkhovna Rada of Ukraine it was granted a "national" status. Since then it was known as the National Agrarian University and was in the CMU functional management.

Current name - the National University of Life and Environmental Sciences of Ukraine (NULES of Ukraine) - it acquired in 2008 by the decree of the Cabinet of Ministers of Ukraine. The same decree approved the supervisory board of the university and amended some changes and additions to its Statute. In 2010, by the decree of the Cabinet of Ministers of Ukraine the National University of Life and Environmental Sciences of Ukraine was granted the status of a self-governing (autonomous) research national university. Since then the university has been a research type institution, which conducts educational, research, scientific innovative, training-industrial and informational consultative activities aiming at developing the modern issues of sciences on life and environment, at using, reproducing and sustainable development of bio-resources of land and aquatic ecosystems, introduction of the newest environmental agro and biotechnologies, safety technologies of revival and fertility of soils, energy-saving agrotechnologies, ecological and legal management in rural areas, monitoring and enforcement of standards, quality and safety of agricultural products, processed products and environment.

Today NULES of Ukraine consists of 12 training-scientific and 13 research institutes, 20 faculties, 3 research stations and 7 training and research farms, unique Ukrainian Laboratory of Quality and Safety of Agricultural Products. Its structure consists of Southern Branch "Crimean Agrotechnological University", 12 regional universities of III accreditation level - Berezhanskyi and Nizhynskyi agro-technical institutes, colleges - Irpin Economic, Nemishaivo Agro-technical, Agrarian Zalishchyky after. E. Khraplyvyi, Mukacheve and Prybrezhnenskyi agrarian ones, Boyarskyi of ecology and natural resources, Crimean agro-industrial and Bakhchysaray of construction, Architecture and Design plus Crimean College of Hydromelioration and mechanization of agriculture. The university students' family are 40,000 boys and girls. Professions and simply eternal, good, wise things are taught by well-known professors and scholars; among them actually every year gives the laureates of the State Prize of Ukraine in Science and Technology, Prize of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, President of Ukraine for young scientists. 650 students take thepost-graduate and doctoral training.

This powerful training-scientific and innovation complex, which is deservedly considered the center of agrarian science and education in Ukraine, is capable of training (and trains!) professionals in almost all specialties of agrarian and nature protection area, forestry and veterinary medicine, fruitfully cooperates with many research institutes of NAS and NAAS of Ukraine. And cooperation within GCHERA (*see article on p. 3* - **Ed**.) opens new prospects.

L. Lanovyuk,

DEDICATED TO THE UNIVERSITY

Years, like birds, flying faster and farther
And the capital changes its face.
Only in the Holosiiv land is invariably
Standing a glorious school which is already 115 years old.

It survived all dismal tricks of history,
Reforms, wars and hardships it endured.
It was going firmly along its educational trajectory,
Increasing wisdom for many centuries ahead,

So, let the light of wisdom inspire us,
New wonderful spaces are opening for us.
And NULES of Ukraine is not tired of time span,
Your people are full of faith.

Never stop to give light, our great NULESU,
Through the centuries carry your slogan
So that our country and world want to listen to you,
And the sun of science shine forever!

Mariana Palahnyuk, Master's degree of the economics faculty

UNIVERSITY THESE ARE PEOPLE OF YOURS

A word about the first rector

Today is 110 birthday of a famous scientist, Honored Worker of Science of Ukraine, the first rector of the Ukrainian Agricultural Academy, Academician P.D. Pshenychnyi.

Pavlo Dmytrovych passed a long and fruitful way from a student to academician, one of the founders of the Ukrainian livestock scientific school. A great connoisseur of world and domestic livestock, a talented teacher P.D. Pshenychnyi actively and effectively promoted the newest achievements of science and livestock practices, formed an extensive network of research institutions in the livestock industry, thus ensuring its future.

A graduate student of the Kharkiv Zoo-technical Institute, he started his research activity in 1931 as a head of a Kyiv livestock research station "Terezine". Due to scientific achievements P.D. Pshenychnyi, in 1937 without defending his candidate thesis - by the totality of his scientific papers - was awarded PhD in agricultural sciences.

Since 1938, P D. Pshenychnyi worked in Bashkir Agricultural Institute (Ufa), which he later was heading, and then returned home. In 1943-1953 he was a head of the chair of feeding farm animals of the Kharkiv Zoo-technical Institute, where he defended his doctoral thesis. In September 1953, P.D. Pshenychnyi moved to Kyiv, where he headed the livestock sector of the Academy of Sciences of Ukraine and the chair of general breeding of Kyiv Agricultural Institute. And when at the Kyiv agricultural and forestry institutions the Ukrainian Agricultural Academy was founded, he was appointed a rector of the newly established university. When in 1957 a zoo-technical faculty was opened at the training department of the Ukrainian Academy of Agricultural Sciences (UAAS) a chair of feeding farm animals appeared, and Professor P.D. Pshenychnyi was heading it until 1974.

In December 1956, the Council of Ministers approved him a member-academician of UAAS where he worked a vice president, and in 1959-1962 - Academician-Secretary of a livestock department.

Scientific heritage of Professor P.D. Pshenychnyi includes an original direction of the development of principles and methods aiming at developing and stimulating the functions of nutrition and metabolism in young farm animals, ways of improving the efficiency of feed, the issue of age variation of species and economic useful traits in animals under the influence of different levels of feeding and forming productivity of farm animals in ontogeny. The results of scientific research were published in more than 280 books, monographs, articles, recommendations.

Pavlo Dmytrovych paid great attention to educating our new scientific generation. He has trained 22 doctors and 132 candidates of science. In general, for 45 years of his teaching activity he has trained about 5000 specialists for agriculture - agronomists, livestock scientists, doctors of veterinary medicine.

For the development of our university Professor P.D. Pshenychnyi has done a lot. And giving him credit, in 2001 the chair of animal nutrition and feed technology of NULES of Ukraine was named after him.

I. Ibatullin,
Vice President of NAAS of Ukraine
M. Sychov,
Professor of the chair of animal nutrition and feed technology after P.D. Pshenychnyi

PRODUCTION

Formula of success

This year will see the 10th anniversary of cooperation of the University industrial unit - Frunze training and research pedigree poultry plant of NULES of Ukraine with the company Hendricks Genetics. Last year the enterprise was awarded a diploma of this company - for high standards of production and the highest rates of Hisex cross.

A Frunze SRPPP of NULES of Ukraine, which has a 50- year history - executor of a state program of breeding livestock and poultry. It is the only state enterprise, which has preserved - a pedigree reproducer of II order for breeding laying hens of cross Hisex White and Hisex Brown. Its products cover 30 percent of the Ukrainian market of a daily chickens. Frunze SRPPP of NULES of Ukraine also has the status of a pedigree plant for breeding cattle of Ukrainian red dairy breed.

- Today we produce 6.5 million daily chickens per year, supply our products in 20 regions of Ukraine and export to the Republic of Moldova - says the company director A.V. Pryakhin. - Our specialists are involved in many international, state and republican agricultural exhibitions and seminars, conduct annual training seminars on working with cross Hisex, involving Dutch colleagues. Practice shows that Hisex today is the most productive egg cross in Europe. Every year we update parent flock of chickens Hisex by supplies from the Netherlands and France. This summer by two parties of charter flights 86,000 birds have been supplied. That is, the company is provided by pedigree resources for the years to come.

Our main goal as a state enterprise is to improve the quality of life for people living and working in Frunze. They should have an interesting work and high quality leisure, willingness to work and live here, then production tasks will be performed.

N.Cheblova

LET'S UNITE!

Fifteen years of progress and achievements under the banner of GCHERA

GCHERA - Global Confederation of Higher Education Associations and Agricultural Sciences and Life Sciences is 15 years old.

The whole international community now faces the necessity to resolve global problems - to provide the world's population with food, while reducing environmental pollution. It is expected that by 2050 the population of the Earth will have been 9 billion people. Will everybody have an access to food? Will it be enough fresh water for all people? To what extent will the air, water and soil be safe? Food and Agriculture Organization of the UN FAO called upon the countries of the world to increase the efficiency of agriculture by 60% till 2050.

Among others, there are two effective ways to resolve these global problems - improving the training of highly qualified specialists and support of research in agriculture, forestry, fishery and veterinary medicine. Political and economic changes in the world happening in recent years can help to resolve these challenges.

In autumn, 1998, the National Agrarian University celebrated its 100th anniversary. Within this event an international conference "Globalization of Higher Education and Science: Status and prospects at the turn of the XXI century" was organized. It convened together nearly 400 representatives from 30 countries - well-known scientists and educators. This gathering of supporters almost from all the corners of the world was put in the basis of creating the Global Consortium of Higher Education and Research in Agriculture (GCHERA), which was born in Ukraine in our university. Therefore this place and date will forever be inscribed in our history.

There are three universities-organizations of this conference - Iowa State University (Ames, Iowa) National Agrarian University, now is known in the world as the National University of Life and Environmental Sciences of Ukraine (Kyiv), the Berlin University of Humboldt (Germany). GCHERA first president was elected a leader of the Iowa State University (USA) Dr. Martin Zhyshke and First Vice President became Rector of NAU Academician D.O. Melnychuk.

Since then this kind of international conferences are held every two years in different parts of the world and gather more and more participants.

The second conference of GCHERA "Higher education and research in agriculture and food industry in XXI century" (San Francisco, USA, 2001), chose D.O. Melnychuk a president of the consortium. The key issues of discussion were food safety and environmental protection (these two issues should be solved simultaneously), instant resolutions about international cooperation, effective sagacious leadership - the key for solving these problems and research and education are key elements of success.

In 1991-2003 the problems of quality and safety of agricultural products, legal support of this industry, ecologization of environment and sustainable development of society and although agricultural sector of economy began to grow in the community. It was the main area of discussion on the third global conference GCHERA" Global Reforms of higher education and research - the answer to the worldwide problems of quality and safety of agricultural and food products". It was held in Ukraine at the National Agrarian University on September 2003. At that time the appeal of all participants to all committed international organizations, universities, research institutions and business communities, general public and interested groups of community was adopted, and the main tasks were identified in it on strengthening the role of world universities in solving the problems such as improving the quality and safety of agricultural products, ecologization of all agricultural sectors at all stages of the human life cycle, minimizing the harmful effects of agricultural production on the environment, development of quality management systems in agrarian production, processing and storage of agricultural products, reinforcement of humanitarian training as a factor of democratic development and facing-off terrorism, drugs and other negative social manifestations in the society, cooperation with international organizations, patronizing education and science - UNESCO, FAO, USAID and others.

The conference determined that the most important goal of reforming higher agricultural education and research should be the ideology of sustainable development as an answer to recent challenges in nature and society. Therefore in the basis for reforming agricultural education (including postgraduate education) and scientific research there should be interests of sustainable development of agricultural sector of economy, development of rural territories and humanization of society.

Creation of GCHERA and its activities are of great importance for the development of our university. This has given us the opportunity to learn the systems of higher education in the world, get acquainted with its leaders, to go through training in international research centers for our scientists and faculty as well as our students.

The Fourth GCHERA Conference "Strengthening the mission of universities and research institutions for constant global development" was held in 2005 in China, chaired by the president of the consortium - Vice-President of the University Chzhedzyanh Yanh Cheng. Its key topics were reforming higher education and research in agriculture, reorientation of research to achieve the mission, international cooperation to support the global mission of universities and research institutions, extension of cooperation as part of the mission for global development.

The Fifth GCHERA Global Conference "Innovation and Leadership for appropriate reforms in agriculture" was held in 2007 in Costa Rica, chaired by the former President of the consortium and rector of EARTH University Jose Zahlula. Oscar Arias Sanchez, president of the country, laureate of Nobel Prize for Peace, solemnly opened this conference and became an honorary member of this organization. The issues of leadership, environmental protection and reasonable using of natural resources, innovation, entrepreneurship, interaction of governments and universities were considered at the conference.

The Sixth GCHERA Conference, held in November 2009, in Nairobi (Kenya) under the title "Food, Health and Energy: Challenges for steady Agriculture", was hosted by the University of Agriculture and Technology Yomo-Kenyata, whose vice-chancellor professor Nick Vandzhohi was heading the consortium in 2007-2009. More than 250 representatives from many countries welcomed the President of Kenya Mvai Kibaki and Prime Minister doctor Odinga Rail, and discussed the issue of food safety, health problems, ecological disasters caused by climate changes, sustainable development of rural areas, etc., and the main issue - how modern universities can and should respond to these challenges.

For 2009-2011 the conference delegates elected a new head of association - rector of La Salle Beauvais Polytechnic University - Philipp Choke (France). Accordingly, the seventh GCHERA conference was hosted by France. Here the problems of key role of the universities in agrarian area in sustainable development of nature and agriculture were considered, a president of the consortium - rector of the K.A. Timiryaziev Russian State Agrarian University of MAA Professor V.M. Bautin was elected.

At the meeting of Kenya Consortium Executive Committee a honorary president D.O. Melnychuk and the current President of GCHERA Philipp Choke expressed the idea of unifying the regional university associations under the GCHERA auspices. It was supported. In such a way a Global Confederation of Higher Education Associations and Agricultural Sciences and Life Sciences was founded. It includes the respected regional associations from all continents of the planet. In Europe these are an Association of the European Universities of Life Sciences (ICA), the Board of rectors from leading agricultural universities of CIS member-countries, in North and South America it is an Association of Land-grand universities of the USA (APLU), Association of Canadian Faculties of Agriculture and Veterinary Medicine (SFAVM), Inter-American Institute for cooperation in agriculture (IISA), in Africa it is a Regional forum of universities for development in Agriculture (RUFORUM), International Association of Directors and deans of Agricultural universities Francophone countries (CIDEFA), in Asia it is the Asian Association of Agricultural colleges and universities (AAACU), Indian Association of agricultural universities (IAUA), in the Pacific region it is the Association of Australian and New Zealand presidents of agricultural universities. And these are actually the most influential associations of agricultural universities and universities of life sciences.

Thus, the history of GCHERA is opening a new page, which gives the opportunity to increase much higher the mobility of students, teachers and researchers in agricultural and life sciences. It opens the door to the new educational and scientific innovation projects for our university.

I. Bilous

From the editor. Today about the 15 years-old events, when in the Ukrainian lands one of the biggest educational and scientific associations of the planet was born, three oaks planted by the founders of GCHERA, the memorial stone in our university park and the founder's photo, remind.

INTERNATIONAL RELATIONSHIPS

Prospects of Visegrad University Association

Delegation of NULES of Ukraine, which was represented by the employees of the Institute of Business took part in the annual meeting of the Visegrad University Association, held in the Mendel-University (Brno, Czech Republic).

Within a year under SAI was organized an international symposium "Sustainable development and agribusiness", Visegrad Summer School 2013 EURUS AGRI "Food Science and Human Nutrition, Agribusiness and Innovation", an international scientific journal "Journal of Visegrad bio-economy and sustainable development" was published, etc. So, the mentioned summer school, which was conducted in two stages (the first - in the Slovak Agricultural University in Nitra and the University of Natural Resources and Life Sciences, Vienna, Austria), the second - in the Russian State Agrarian University - RSAU after K.A. Timiriaziev and St. Petersburg State Agrarian University, Russia), was attended by representatives of 17 universities from 8 countries, including NULESU.

At the meeting, several measures were proposed and activities of 2013 2014 were agreed. In particular, it was a further edition of a scientific journal,

Our reference. Visegrad University Association (SAI), NULESU being its member, was established within a strategic project "Sustainability in the agricultural sector of the Visegrad Four (V4) and the cooperating regions", which is coordinated by the Slovak University of Agriculture (Nitra) supported by the International Visegrad Fund group. Today the association includes 49 universities from around the world. The main objective of SAI is to establish joint cooperation partner universities to provide quality education and research environment that will promote closer cooperation between the Visegrad countries and regions cooperating in the context of sustainable development.

organization of the International Summer School on sustainable development and management of water resources, which will be held in two modules (in Slovak Agricultural University and Hamburg University of Applied Sciences, Germany), "round table" in the commission of the European Union on agriculture and rural development on foreign cooperation of the EU, V4 and Southeast partnership, the EU Danube Region on strategy, presentation of SAI activity, scientific-research initiatives, presentation of the new project "SAI for Youth" , whose mission is creating a "bridge" among students and university management, proposals for participation in the Green University platform initiated by the European trading Academy (Germany), introduction of SAI awards (commission includes the NULESU rector Academician D.O. Melnychuk) for significant achievements in education, science and research, active international cooperation, promotion of Visegrad university Association and other measures to support its ideas, financial support of the organization.

T. Kaminska,
Dean of the Faculty of Economics

Recently, the University of St. Stephen in (Hodolo, Hungary) supported by the Visegrad University Association hosted the first symposium of its graduate students "Multi-functionality and Regional Development", which among young scientists from leading universities in Europe, Africa, Russia and the United States welcomed the representatives of the NULESU Training and Scientific Institute of business.

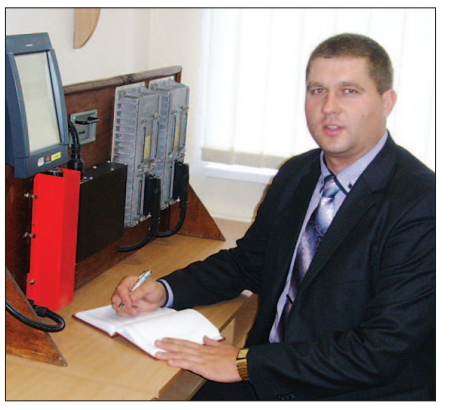
They discussed the development of agriculture, regional development, sustainable agribusiness and tourism, economic growth, technology and environment, marketing, biotechnology and sustainable development, food security, formed an association of university students of the Visegrad University Association (VUA Youth).

D.Kyrylyuk, post-graduate

SEE WHAT WE CAN DO!

DECREE OF THE PRESIDENT OF UKRAINE № 316/2013

Grants of the President of Ukraine to support research activity of young scientists for 2013



According to the 1st Article of the Decree of the President of Ukraine on April 9, 2002 № 315 " On additional measures to support young scientists" (as amended by the Decree of 16 May 2008 № 444) and the Decree of the President of Ukraine dated 24th December 2002 № 1210 "On Regulations the Grants of the President of Ukraine to support research activity of young scientists":

1. On 2013 to designate for grants of the President of Ukraine for such young scientists as:

BROVARETS Olexandr - born in 1984, Ph.D. in technical sciences, Senior Lecturer of National University of Life and Environmental Sciences of Ukraine, for scientific research "Development of modern systems of monitoring farmland"...

October 4, 2013 the President of Ukraine *Viktor YANUKOVYCH*

OUR INTERVIEWS

Science Park "Sustainable Environmental Management and Quality of Life": Plans and Their Implementation

Science Park of NULES of Ukraine "Sustainable Environmental Management and Quality of Life" was created to develop R&D and innovation activity, effective and efficient use of existing scientific potential, logistics, commercialization of research results and their implementation at the national and international markets in the University. Our conversation with the director S. O. Shepelev was dedicated to the basic principles of its establishment and functioning.

- Serhiy Olexandrovych, what was the need to create such a unit?

- Today, the only way out of the financial crisis of the national economy requires managers of all levels of ability not only crisis management, but also to ensure its transition to sustainable innovative development, the general concept of which implies the need of indirect knowledge of the balance between meeting current needs and protect the interests of future generations, particularly their need in safe and healthy environment.

Sustainable innovation development - is scientifically, technologically, economically, socially and environmentally sustainable development of certain areas and localities located on them. Its main objective is a consistent and scientific development and functioning of their economic, social and environmental components based on the rational use of all resources - natural, human, industrial, scientific, technical, informational and others.

The development of modern society is largely determined by the availability and efficiency of innovation processes in it. They lead to the transformation of the results of research into new products, technologies and services. Today's world one of the most effective mechanisms for the implementation of this transformation are various innovative structures and above all scientific and technical areas with a wide range of science parks, technology parks, technology towns and others.

Today such innovative structures in Ukraine, unfortunately, remain problem issues and are the effective tools to influence on the development of innovative processes and the economy in general. And we try to draw a line, not being Sisyphus, who dragged stones useless and without pay.

- What is exactly a Science Park?

- This is an organization led by professionals who want to improve the business of their partners, introducing culture of innovation and the competitive recovery of related enterprises and institutions, based on knowledge. To achieve this the Science Park have to manage the flow of knowledge and technology between universities, research institutes, companies and markets, promote the creation and growth of companies based on innovation, implementing scientific advances in economic processes through the creation of new technologies.

- What are the basic principles of its operation?

- They can be counted on the fingers. First of all, it is the creation of new innovative products and measures for their commercialization, organization and support of high technology and competitive in domestic and foreign markets innovative products. Secondly it is informational, methodological, legal and consulting partners and founders of the Science Park, providing patent and licensing assistance. Thirdly, it is the involvement of students, graduates, postgraduates, researchers and university staff to develop and implement Science Park projects, training, retraining and advanced training of specialists required for the same. Fourthly, promote and support small innovative businesses, attracting and using risk (venture) capital and support high technology industry. Fifthly, it is a protecting and promoting the interests of the founders and partners of Science Park in state and local governments, relations with other entities in the organization and execution of research projects of the park to the extent of its constituent documents. And finally it is the development of international and domestic cooperation in science, technology and innovation, attracting foreign investments, performing other functions that are not prohibited by law.

- Can we talk about anything specific?

- Yes, nowadays Science Park of NULES of Ukraine is cooperating with well-known domestic companies and companies of Europe and the United States -"AMACO", "John Deer Ukraina", the Institute for Agricultural and Food Policy University of Missouri, "Pioneer Hi-Bred Int'l Inc","Sarmac Croup SRL"(Italy), National Centre for Agricultural and Food Policy of the U.S. Department of the State, LLC "Trump card " (Ukraine) and others.

I think the students are very much interested in the project of Ltd. "Module Yug" (Ukraine), which allows within about 60 days to supply a modern campus with mini-dormitories with 50 rooms, and faculty and staff - to erect the university vacation houses in the areas of separated training units in the Crimea, which we are already starting this year.

We are ready to listen to anyone who has a mature concrete promising idea, and if it is worth considering - to promote the initiator in its implementation. And this is hefty money. So we welcome the employees and students of NULESU of Ukraine to fruitful cooperation, active solving the modern problems and making decisions existing in education and scientific research in agrarian sector. Scientific management of the Science Park will carefully consider all proposals, projects, business plans, achievements and information about upcoming programs.

Interviewed by I.Bilous

SCIENTIFIC POTENTIAL

We have gold under our feet, but we look into the sky and envy Europe

Creative Technical Community of Ukraine has recently celebrated their professional holiday - the Day of Inventor.

By ranking compiled by Bloomberg on seven indicators, Ukraine took the position 42 among 50 innovative countries due to education and patent activity.

About the Innovation Factor and Intellectual Property

In case of developing the market infrastructure the economic potential of all industrial countries is determined by a significant increase of the role of science and technology in production. Today the innovative factor determines the current development and ensures economic security of the higher educational establishments.

National University of Life and Environmental Sciences of Ukraine is among the leading institutions with the highest inventive activity. According to the State Department of Intellectual Property, in 2008-2012 NULES of Ukraine filed 1477 applications, National University of Food Technologies took the second place with 1,166 applications for five years, and the National Technical University of Ukraine "Kyiv Polytechnic Institute" took the third place: 1132.

Recently, since 2012 our University has received 506 patents and utility models. That is the status of a research university (which is 50 patents), we significantly exceed this figure.

Intellectual property in XXI century is the basis of additional revenue through exclusive use of new technologies, sales of licenses, patents and other products of creative work. Innovation is defined as the end result of embodied as a new embedded market and improved process that is used in practice or a new approach to social services. The law that defines the rights to intellectual property based on the right for everyone to own, use and manage the results of own intellectual and creative activity, which gives intangible benefits reserved by its creators and may be used by others only in agreement with them (unless specified law). Intellectual property of NULES of Ukraine consists of industrial property (inventions, utility models), plant varieties, copyright and related rights, patents for utility works, licenses.

Creation and production of competitive products cannot be without patent legal status, competitive relation of the object and the current situation on the market. Without this it is impossible to identify the actual cost of production, the social need for it, and its ability to adapt to specific customer requirements and ensure its implementation.

End p. 9

Students of the technical TSI are at the event of the Ukrainian alliance devoted to fighting against counterfeits and piracy

COLLEAGUES

It is difficult to imagine "ApiExpo-2013" without the University chair of beekeeping

The XXXXIII Apimondia International Congress was held in Kiev within which the international exhibition "ApiExpo 2013" - the biggest and the most prestigious meeting of world beekeepers in Ukraine - attracted a lot of attention. This is no coincidence: nowadays Ukrainian beekeeping is the first among the European countries and in the top four in the world.

The exhibition was attended by over 6000 representatives of beekeeping industry from 100 countries in the world - the leading industry experts, academics, educators, api-therapists, specialists of laboratories and veterinary services, international and national organizations, beekeepers - professionals and amateurs, manufacturers of beekeeping equipment, veterinary drugs, and various additional products or just sympathizers of beekeeping and its sweet products.

"ApiEkspo-2013" was held with the participation of at least 300 organizations, enterprises and institutions; NULES of Ukraine takes the proper place among them. The Department of Beekeeping named after V.A. Nestervodskyi presented their latest achievements in the beekeeping industry, as well as scientific research (18 abstracts was presented for competitive selection to the scientific program in Apimondia Committee). They include the modern beekeeping technologies, scientific research and development that make it possible to determine the quality and safety of products, new materials and technologies increasing productivity. A particular attention was drawn to scientific achievements in selection works with the Ukrainian bee species, its features as well as qualities, work to determine the food quality, and honey in particular. The Ukrainian Laboratory of Quality and Safety of Agricultural Products introduced a comprehensive evaluation of honey quality to meet ten requirements pointed in ISO 4497:2005 Natural Honey, conducted a study to determine pesticide residues in honey and pesticide toxicity for honey bees for their registration in Ukraine.

The Members of Congress also visited Holosiivo. Now here in the National University of Life and Environmental Sciences of Ukraine, there is the only Department of Beekeeping in Ukraine, which has introduced a scientific school, trains specialists and teaching staff of all the education and qualification levels, and provides postgraduate and doctoral studies. On its base, in 1922, in Holosiivska experimental apiary, in favorable forest environment the eminent scientist V.A. Nestervodskyi started his scientific and educational work in the former Kyiv Agricultural Institute, the results of which became famous and effective for the industry progress.

- More than 800 Congress members from over 25 countries would like to see the department - says its head, O.M. Losev. - Most of them were delegates from Slovakia, Lithuania, Poland, Spain, Iraq, China, and Tanzania. The Danish Delegates were headed by the Former President of Apimondia who was to Kyiv and visited the University during his recent leadership of this organization. They learned about the exposure, prepared for the 90th anniversary of Holosiivska experimental apiary, and the works of scholars from different times that were published in books of 2012, 2013, which reflected the research results of teaching staff of the department. Complex bee using, getting biologically active products became essential direction to increase families' productivity. In the training and research apiary a lot of scientists were interested in Ukrainian bee species and Khmelnytskyi species created by selection, and its genetic passport. In our educational museum the visitors were attracted by the world's first frame hive, invented by Petro Prokopovych in Chernihiv almost 200 years ago.

For the Congress the chair prepared and demonstrated a unique collection of honey samples that were presented by beekeepers from all the Ukrainian natural areas, the developed equipment and scientific technology of a queen bee tool insemination.

An interesting and useful communication promotes cooperation among beekeepers from different countries, in particular through the exchange of scientific information, translation and publication of books in national languages.

V. Polishchuk,
Professor of the chair of beekeeping after V.A. Nestervodskyi

TIME AND BOOK

Historical aspect of the University scientific library

The way from the Agricultural Department of KPI to the Research National University of Life and Environmental Sciences was difficult and multifaceted. Not only the faculties and departments were formed in those years, 1920-1930, but also the book funds of each separate institution - agricultural, veterinary, forestry.

Leafing through the pages of scientific papers, which were published at that time, it is interesting for us, the librarians, to know how the book funds of institutional libraries were being formed. At that time the country was suffered from famine, chaos, lack of funds, instability. And yet there were libraries and they replenished their funds!

One of the editions of "University Courier" (2008) has already told about the library of Kyiv Agricultural Institute and the role played by research group in creation of the institute library in the 1903-1928.

In the second volume of "Notes on Veterinary and Zoo-technical Institute" published in 1924, in addition to scientific articles and chronicles the institute life, much attention was paid to the formation and activities of the institute library and research group of Veterinary Institute during its work.

It is what they write: "In October, after the Resolution of Hubprosvita the Institute obtained the part of the Library of the Former Higher Courses for Women, which contained mainly the books on life sciences, as well as reference books, encyclopedias, dictionaries and books for other departments related to the sciences, taught at the Institute. It was obtained 7417 books of different disciplines and 6863 editions of various newspapers. Till that time, the institute library consisted of the 6991 book, along with the transferred part it presents considerable number - 22,271 volumes in which students and professors are able to meet largely their research and teaching needs. An intensive work on book organizing and cataloging is conducted... "

Institute was transferred to the house of Former Higher Courses for Women, which was really destroyed. In summer and autumn it was repaired and "the room for book collection and several laboratories were equipped by the latest technologies".

This edition presents the paper of O. Bondarchuk and I. Skoryk "Research group" in which students, talking about the creativity of young people in Veterinary and Zootechnical Institute, point out: "... the Board of the Institute is quite positive about the group and help it with its work and even with funds. For example, for the veterinary section for the compilation of bibliographic index the calculation of 7 rubles. 50 cop was approved by the Board of the Institute to purchase 10,000 catalog cards." Students pay attention to the feasibility of concluding bibliographic index, explaining that without it they spend a lot of time to find the necessary materials, scattered in various publications. In his introduction to "Basics of pathological and anatomical diagnosis" professor N. Marie writes about the conditions under which the veterinary scientists had to work. It is good, when a veterinarian lives in a big city where he can use the libraries, but how should the veterinarian from the village work?

Furthermore, as the author writes, "...a lot of veterinary institution, a lot of scientists in the field of veterinary medicine started to give the key to the existing literature on veterinary medicine, that means to make bibliographic index, but unfortunately, this work has not been carried out to the end." So students - members of the research group from subsection of scientific study of veterinary medicine - took up the job. It was led by Professor M. Leontovych.

That means the library played a significant role in training specialists in the field of agriculture, and research groups helped students to become "real veterinarians, agronomists" not only with their diplomas.

L. Polozenko, Head of Information and Bibliograp by Department of Scientific Library

OUR HEROES

Principle of three D,
or Wings for Flight

- Birds were gifted with wings to fly. And what about human?

It was the question long ago (oh, how many years have passed since then!) a village teacher once asked her little pupils. And without getting a clear answer from anyone, she was not angry: the time for understanding will come. Are there children interested in such matter as the happiness of mankind, or the meaning of life? The apples in the neighboring garden or Hnidko on village stables waiting for a piece of some food - it is another thing, clear and close...

But the question of nursery teacher is deposited into the children soul, and after his coming back home from school, a small pupil asked his mother:

- What does a man need for a flight?

- For a flight? - The woman trained by hard life asked without being surprised. - A lot things: Mind, and conscience, and the desire to do good things!

Those words fell on fertile ground. Today, a scientist with world name - Hero of Ukraine, academician of the National Academy of Sciences of Ukraine and the National Academy of Agrarian Sciences of Ukraine, laureate of the State Prize of Ukraine in Science and Technology, Lieutenant-General of the Military Veterinary Medicine, Honored Worker of Science of Ukraine, laureate of Prize named after V. Vernadsky and the international award "Friendship", Doctor of Biological Sciences, Honorary President of Global Confederation of Higher Education Associations and Agricultural Sciences and Life Sciences, member of the Higher Council of the UN FAO General Director, Honorary Senator of Louisiana (USA), Rector of National University of Life and Environmental Sciences of Ukraine Professor D.O. Melnychuk - continues to profess this simple principle: to do good things. And he teaches to do that his two sons who have successfully followed his father's path, and four grandchildren, for whom everything is only beginning...

Everything started on November 5, 1943, when in Cherkassy oblast, in the village Mariyka, Zhashkivskyi region, in a simple peasant family the first child Dmytryk was born. They went to the village school, after leaving it the thirst for knowledge led the boy to the veterinary faculty of Ukrainian Agricultural Academy. Having "excellent" marks, he admired scientific work, in which he was engaged in student research group of the Department of Biochemistry. Then he made his first scientific works.

He was graduated from the Academy in 1964, having acquired the specialty of veterinarian. He worked in production, studied in postgraduate school at the chair of biochemistry, the faculty of veterinary of UAA in specialty "biochemistry".

D.O. Melnychuk gained the degree of PhD in Biology in 1968, successfully defended his dissertation. Working as an assistant Department of Biochemistry of UAA, he further developed a scientific perspective, worked from early morning till late evening, being responsible for the study of such complex issues as the regulatory role of various forms of carbon dioxide in heterotrophic organisms. An innovative case, a very few people in this world have worked on this topic. In addition, it had a considerable practical importance, and therefore was controlled by the government agencies.

Much of the research he conducted in the Department of Biosynthesis and Biological Properties of Protein of the O.V.Palladin Institute of Biochemistry of AS of UkrSSR, which for many years was headed by his "godfather" in academic science M.F. Hulyi. It was the place a scientific talent of Dmytro Oleksiyovych fully blossomed and asserted. Not only had the spirit of science that dwelled in these walls helped its formation. The constant communication with scientists and scientific luminaries of world elite in the field of biochemistry - academicians O.V. Palladin, R.V.Chahovets, D.L. Ferdman, V.O. Belitser and others was of great importance.

After defense of the thesis the direction of the Institute of Biochemistry, Academy of Sciences of Ukraine, invited D.O. Melnychuk to scientific work - in an already known to him "Section of Biosynthesis and biological properties of the protein". There he held a number of brilliant scientific experiments on subcellular structures using radioisotopes, obtained new scientific data that confirmed not only regulatory, but also the substrate role of carbon dioxide. This discovery of already renowned scientist D.O.Melnychuk at that time, became the background for a new effective medication that are widely used in medicine (karbostymulin) and in livestock (karboksylin MP- 15 and MP- 30). For development and preparing of these production and implementation them in the economy, the group of scientists led by M.F.Hulyi and D.O.Melnychuk was awarded the USSR State Prize in Science and Technology.

Dmitro Oleksiyovych defended the Doctoral thesis in 1974, when he was only 31 years old. So he became the youngest doctor of biological sciences in the former USSR. It seemed that most important things in his life are reached, but the desire to create called to the new actions.

The Scientist deeply advocates with the scientific presentations at International, National and Union Symposium, congresses, conferences, and works with production workers and ministries and departments leaders. The significant achievement in the Ukrainian and World Biochemistry was the first scientific monograph of D.O. Melnychuk - "The role of carbon dioxide in the metabolism heterotrophic organisms regulation", which contained the latest experimental materials on this issue. This motivated the leadership of Institute established the Metabolism Regulation Laboratory, headed by D.O. Melnychuk. In 1979 he was appointed as the head of the Biochemistry Department, Ukrainian Agricultural Academy (part time), which he managed until now. Under his direction the scientific laboratories were upgraded, talented youth invited to graduate - graduates of the Veterinary Medicine Faculty. Thereby The Ukrainian Laboratory of Quality and Safety of Agricultural Products was born, the only of its kind today. Dmitro Oleksiyovych began to read lectures on such difficult subjects as biochemistry with the basics of physical and colloid chemistry. In 1984 he was conferred the title of Biochemistry Professor. That same year, due to outstanding talent as scientist, teacher and organizer, the USSR Government appointed Professor D.O. Melnychuk to a very responsible position -The Rector of the Ukrainian Agricultural Academy (now known to the world as the National University of Life and Environmental Sciences of Ukraine). One year later the Soviet government instructed him to guide the creation and development of the Agricultural Institute in Cambodia, which he successfully coped with. During this period Vinnitsa branch UAA has grown to an independent institution, but afterwards - became the university.

This phase of activity of Dmytro Oleksiyovych coincided with the major political changes in the former USSR and in Ukraine. The young Ukrainian state Course in the entry into the world community and focus on the market economy led to significant changes in the statute and structure of the university, its transition to innovation policy, revision of curricula and programs in all specialties, new items, new organization of educational and research institutions, faculties, departments and so on.

As a rector, D.O. Melnychuk didn't limit himself by administrative activities. Dmytro Oleksiyovych is among the Ukrainian scientists whose scientific research have become the pride of native science, have found recognition in the many universities of Europe and the USA. The main area of his scientific work is studying the molecular mechanisms metabolism regulation in animals and humans, sourcing and developing ways for their violations correction. The priority of scientist developments confirmed by nearly 50 patents for inventions, numerous recommendations adopted for widespread implementation in practice of veterinary medicine of Ukraine. Our hero has trained 12 doctors and 25 candidates of science. He was elected twice as vice-president of the Ukrainian Academy of Agrarian Sciences.

Academician D.O. Melnychuk is the author and co-author of 2 books, 4 textbooks. From his pen came more than 500 scientific papers published in reputable scientific journals of Ukraine, Russia, Germany and the USA. Now the university passes the accreditation by the United States educational standards.

D.O. Melnychuk played the leading role in output of Ukrainian Education and Science in the international arena. Today NULES of Ukraine has formal cooperation agreements with 119 leading universities and institutions of 30 countries, memorandums of mutual education systems with the ability to obtain a double degree with the 7 recognized universities! His rector is an honorable professor of the University of Iowa (USA), Honorary Doctor of the Berlin University of Humboldt Foundation (Germany) and Ghent (Belgium) University, Russian State Agrarian University - the K.A. Timiriazev Moscow Agricultural Academy, Astrakhan Technical University (Russia), an emeritus professor of Warsaw and Lublin (Poland) Universities and outbound professor at Tokyo University of Agriculture (Japan). In 2001-2003, D.O. Melnychuk was a president of one of the biggest educational and scientific organizations in the world - Global Consortium of Higher Education and Research in Agriculture (GCHERA), and honorably represented his high office interests of Ukraine. Currently he remains its honorary president for life.

The cooperation with foreign firms - "John Deere" (USA), AMACO and many others activities Science Park, initiated by D.O. Melnychuk are very important for the university, which is also engaged in these famous brands.

Scientific and administrative activities of Dmytro Oleksiyovych are highly appreciated in our country and abroad. His state awards are: "For Labour Valour", Order of the State and the Gold Star of Hero of Ukraine full "bow" of the Order "For Merits". Government of the Russian Federation said his Order of Lomonosov, and France - the "Order of Merit".

After one of his visits to the United States he returned to his homeland as honorary senator of Louisiana. Just then he had to meet with a peculiar interpretation of the State Emblem of Ukraine - trident - in one of the works of the Ukrainian diaspora in the United States : "Speak well of people, think about the people well, do good to people!" A sort of principle of three D is. And the thought appeared that mother in her simple wisdom was right again...

V.Obrambalskyi

Popular Japanese newspaper told about the possibilities of NULES of Ukraine

On the eve of the University jubilee one of the largest by circulation and popular in Japan newspaper "Nikkei" published an interview with the rector Academician D.O. Melnychuk.

As it is known, scientists, radiologists of NULES of Ukraine have been providing substantial assistance to the Japanese counterparts in liquidating the consequences of the Fukushima 1 NPP. Therefore Dmytro Oleksiyovych was telling about their experience in liquidating the Chornobyl disaster, possibilities of our University as a whole and its Ukrainian scientific-research Institute of agricultural radiology, in particular.

民の健康管理に注意を払った方がいい。除染は人間が立ち入らなければならない場所だけに限定するのが望ましい」とも話す。

■「赤い森」の奇妙な発見

ただ、この指摘はそのままどこにでもあてはめてよいものでもないだろう。放射性物質の沈着や移動の状況は、その土地の降水量や土壌の性質などによって異なる。福島などでは日本の科学者が森林を調べて、セシウムはやはり森林から外に移動しにくいとの結論を公表している。一方で、渓流の水を介して山あいの水田などに流出しているケースも知られている。地域の実態に即した対応が要る。

ガシュク博士らは森の生物を調べるうちに奇妙なことにも気づいた。「赤い森」と呼ばれる最もひどい汚染地のひとつで捕らえたネズミには事前の予想より突然変異が少ない傾向があったのだ。

周囲の放射線量を考えれば、もっとたくさんの突然変異が見つかってもいい。実験室の中で、汚染された森の中と同等の放射線を浴びせれば、ネズミのDNA（デオキシリボ核酸）には変異が生ずるのは間違いない。しかし自然界でとらえたネズミには変異が少ない。

なぜそうなのか。まず考えられるのは、試料の偏りだ。生きたまま捕らえられるネズミは放射線による障害が少なかったものだけに偏っている可能性がある。障害のあったネズミは死んでしまうので捕らえられる機会が少ない。

また自然界では何らかの理由で放射線による悪影響を修復する仕組みが強い可能性もある。

ウクライナ国立生命環境大学のディミトロ・メリニチュク教授

■現象解明へ福島大が研究参加の意向

「生命の設計図」と呼ばれるDNAの塩基配列が同じであっても、遺伝情報が異なる形で生物個体に現れることがある。従来の遺伝子の考え方とは違う遺伝情報の現れを研究する分野を、専門家は「エピジェネティクス」と呼ぶ。

ガシュク博士らは汚染された森で見つけた現象がエピジェネティクスの考え方で解明できないかと考え、欧州連合（EU）から資金を得て、今年から4年がかりの研究プロジェクトを立ち上げた。欧州の科学者との共同研究だが、これに福島大学が参加の意向を示している。

岸田文雄外相は、8月下旬にウクライナを訪問しチェルノブイリ原発も視察した。ウクライ

FROM THE FIRST PERSON

For thirty years everything has happened

The 115th anniversary of NULES of Ukraine by fate coincided with the 70th anniversary of a person who has been heading it for nearly thirty years and has made of it what it is today - a well-known University in Ukraine that now (the only one in the post-Soviet space, and fortunately!) is successfully going through the international accreditation in the USA - Hero of Ukraine, rector academician D.O. Melnychuk. On the eve of this landmark event, we met with the hero of the day, so that he could share his the most memorable moments of his principalship.

"In Ukraine no one dared contradict Shcherbytskyi"

- Dmytro Oleksiyovych, how did they become rectors in the Soviet period?

- It depends. I, for example, was not striving at all! I just defended my doctoral dissertation and was then the youngest doctor of biological sciences in the Soviet Union, when my instructor academician M.F. Hulyi started conversation about how to send me his post of the Director in the Institute of Biochemistry. The necessary approvals in the Central Committee of the Communist Party of Ukraine were held already. But man proposes, God disposes.

It happened that a rector of the Ukrainian Agricultural Academy very severely fell ill and my case was considered in a different perspective, which nobody could even predict. Guess from two times, in what? That's right, to head the Academy (where at that time "up to exhaustion" its rector and a secretary of the Party committee were confronting each other, involving the research groups - it was awful situation!). Everything I wanted then was to stop the flywheel of appointment, to remain a "pure" scientist- biochemist. And I have not grown to the position of a rector!

With that thought I went to my supervisor. Maxym Fedorovych telephoned a president of ASU Borys Paton and expressed my request. And after hearing the answer to my dumb question he answered, "It's already not in my power."

Then the interviews followed in the City Party Committee and all the secretaries of the CC of the CPU, where I was constantly assuring that I wasn't a suitable candidate. But the case was moving higher and higher, and one night the phone rang. The call was from the reception of the First Secretary of the CC of CPU, member of the Politburo of CC of CPSU: they asked me to a meeting with Volodymyr Shcherbytskyi. Sunday was a regular working day for him.

Early in the morning I was there. I entered an enormous study, where in the very end there was "himself" sitting. A jacket on the back of the armchair was somehow subconsciously calming down.

Our conversation dragged on, I was still hoping to stay in the institute, was refusing untill the last strength left me. I was doing it despite the fact that nobody in Ukraine dared contradict Shcherbytskyi, and here some young doctor of sciences! But when I again "started an old record," Volodymyr Vasylyovych said, - But in my table there is a list of very reputable people in the country who believe that you can be entrusted this matter. Compared with each of them you are still nobody. Want to stay the same in future?..

And hands me a sheet of paper - that same list. I carefully reviewed it and noticing an appraising glance of my companion, said, - Yes, very respected people. If it is so - I agree but it won't be easy with me...

The same day I revealed before "the first himself" my vision of the institute withdrawal from crisis: a special resolution of the government of Ukraine on the development of the Academy for the nearest five years with allotting an impressive sum of money - 46 million rubles (at that time it made about 50 million USD!). And a number of other formal and informal arrangements that had to fundamentally change the management of the educational institution, development of research, reduce the influence of administrative, party and regulatory authorities at least for three years. And all of it we did get! No wonder Volodymyr Shcherbytskyi was considered a man of a word. By the way, it was he who was definitely against (and successfully) the fact, when in the late 80's in Moscow I received a proposal to take the post of a head of the Department of Higher Education of the USSR of the Ministry of Agriculture of the USSR with further moving to a Deputy Minister: he did hate when Ukraine was losing its personnel. And I was already shown an apartment in Moscow in Gorkoho street. Nice was the apartment...

And then there were uneasy Boards of the USSR Ministry of Education and Ministry of Agriculture of the USSR, an interview with the Secretariat of the Central Committee of the CPSU. Generally, the process stretched for six months, and in August 1984 the Ukrainian Agricultural Academy was headed by the youngest in the Soviet Union - forty years old rector, that was me...

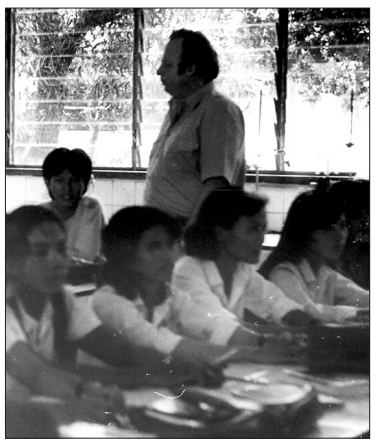
- And now, after almost thirty years, don' you regret about your choice then?

- No way. Our university today is a leader in its sphere of education, the only one of Ukrainian institutions, and indeed in the post-Soviet space, which is the first to go through the international accreditation in the USA. Almost two-thirds of our students - and they are more than 40,000, mostly rural youth (and I say this with pride for it is village which is the cradle and hope of Ukraine!), even now when everywhere commercialization is reigning, is studying at the expense of the state. By the way we have always had understanding in this regard, no matter who is in power...

"And could you play nocturne" on the sound that bamboo creates?

- How did you start the international activities of the University?

- "And could you play nocturne on the flute of gutters?" - This was, as far as I remember, written by Volodymyr Mayakovskyi. As for me, it is really easier to play Nocturne on this the most unusual of all instruments than to create "from scratch" a university on the sound, created by bamboo in an Asian country involved in a civil war amid the global political confrontation.



I am talking about Cambodia, more correctly, Cambuchia, where in Phnom Penh we were creating a Cambodian Agricultural Institute. It was our first international project for which I was personally responsible as the UAA rector. The same way - for the lives of many of our colleagues who went with me there. And it is in literal meaning of words! Well, what to say, when after the fall of the Iron Curtain at the government reception in one of the European countries a neat man approached me, shook my hand and said we... knew each other. However, through the lens of a gun sight. It turned out he was at the time in the security services, had a task to liquidate the leaders of work on creating there the agricultural and technological institutes, thereby disrupting their organization. With the first, that is me he failed! But to another the fate was cruel: dolus malus met a rector with his entire team that was patronizing the Institute of Technology, were shot right at the "Rafik" by which they went to their workplace...

I'm not talking about snakes in my bed. And what our colleagues happened to endure to who were working there for years!..

Anyway we have created the Agricultural Institute, and by the collapse of the Soviet Union we had two graduations of the professionals who were weighting as gold...

How the Soviet Order saved the reputation of the University

- Celebration at the highest level of 100th anniversary of the university became a significant milestone in its history. Some people say that some backstage events could have disrupted this holiday?

- Those semidiurnal that shortened my age, I will always remember. An evening call from the government switchboard telephone. I take the receiver.

- Dmytro, what have you done that the President canceled the celebration of the 100th anniversary of the university? - I hear the excited voice of the President of the National Academy of Agricultural Sciences Olexiy Sozinov.

- Nothing - I replied, but my sole wasn't in the place.

- Are you sure? I heard it from Borys Evhenovych (President of ASU B.E. Paton. - Ed.), and he heard it from Leonid Danylovych ...

Imagine a man standing on the edge of an iceberg that is melting rapidly and feels how a prop goes from under his feet. Imagined? In that moment I was like that man. The appearance of this, well, very unpleasant news, had simple explanation: one of the "well-wishers" (who were, are, and, unfortunately, will be), told the President of Ukraine Leonid Kuchma a "news" that the National Agrarian University did not take into account its centenary history, and its rector juggled the facts. What to do? Till the time "X" when the celebration was about to start in a day. The whole world already knows, guests from America and Europe were already in Kyiv, and someone was about to come. And here this thing!

I went outskirts - into the field. I was born and grew up in the village where I breathe and think easily. But it didn`t prompt me a way-out. Tired from excitement I drove home. The night was as dark as my abiding hopelessness. And it was that night, showing mercy, that sent an impulse of hope into my brain. No wonder a new day was breaking out known with folk as the day of Faith, Hope and Love and their mother Sophia.

I looked at the clock and there - four a.m., the dawn. So I call to Halyna Talymonivna Shevchenko, who then ran the personnel department and concurrently was engaged in what today is called the document circulation. No, I think if such a thing happened, let her excuse me. Who can know, if not her - one of the oldest university workers, its "walking library"?

- Good morning - I'm trying to smooth the experience of the early call.

- What a morning, it is night outside - she is not surprised, this is what a school of life means. - Tell me what happened and what I should do?

So the two of us, in the dawn began our working day. At that time we were alone at the university. We went to the museum and began to search for the documents on the 50th anniversary of the Kyiv Agricultural Institute - the predecessor of the Ukrainian Agricultural Academy and, accordingly, the university - and assigning to the institution on this occasion the Order of the Red Flag. We found! And also - the original Decree of the Presidium of the Supreme Soviet of the USSR on the occasion signed by its Head M. Shvernyk and secretary A. Horkin on October 9, 1948, and with them - a greeting telegram from Stalin himself, without his approval any decisions of this kind were not accepted", ... for merits and in connection with the 50th anniversary of the Agricultural Institute."

These facts were killing to our opponents. But how to convey this fact to the President?

And it will be six a.m. soon by my watch. It is still dark outside, but the country is waking up, and it`s head who comes to his office early enough. So we can`t waste any minute. As a fellow colleague I called to the head of the Academy of Security Service of Ukraine Vyacheslav Tytarenko (we were members of the Moscow regional committee of the Communist Party of Kyiv, and I could afford such a frivolity as an exception).

- Do what you want, but I have to send to the President some documents for detailed familiarization!

I do not know, which lever was pressed, but the head of the state received all documents and noted that there may not be any mistake. I must say that Leonid Kuchma changed its previous opinion immediately. And he ordered: the centennial of the National Agrarian University remains in force. And asked to convey a rector that he would not be celebrating two hours, as was planned by protocol, but all day long. This whole saga lasted, remember, from 9 pm to 8 am. That is only eleven hours. But what the eleven hours!

The official part of the celebration was held in the University and in the National Palace "Ukraine". In addition to the President, it was also Chairman of the Parliament, the Prime Minister, MPs, ministers and many high foreign guests representing leading universities and scientific institutions of the world (by the way, most of them later became members GSHERA). To say they were impressed by this level of acceptance - it was not quite right. They were shocked!

This is a state award - Soviet Order of the Red Flag - saved the reputation of the University through the entire half-century...

V. Obrambalskyi

Newly appointed rector of the employees of the Academy is presented by the Secretary of the Central Committee of CPU Ivan Mozhovyi

УКАЗ

ПРЕЗИДИУМА ВЕРХОВНОГО СОВЕТА СССР

О НАГРАЖДЕНИИ КИЕВСКОГО СЕЛЬСКОХОЗЯЙСТВЕННОГО ИНСТИТУТА МИНИСТЕРСТВА ВЫСШЕГО ОБРАЗОВАНИЯ СССР

За достигнутые успехи в деле подготовки кадров для сельского хозяйства, в связи с 50-летием со дня основания, наградить Киевский сельскохозяйственный институт Министерства высшего образования СССР орденом ТРУДОВОГО КРАСНОГО ЗНАМЕНИ.

Председатель Президиума Верховного Совета СССР Н. ШВЕРНИК

Секретарь Президиума Верховного Совета СССР А. ГОРКИН

МОСКВА, КРЕМЛЬ, 9 октября 1948 года

UNIVERSITY UC COURIER
Newsletter National University of Life and Environmental Sciences of Ukraine
№ 10-11 (1954-1955) November 1, 2013

COMPLEX OF NULES OF UKRAINE

Ukrainian TSI of information and telecommunication support agricultural and environmental sectors of economics

Professor V.V. Koval,
Director of the Institute:

History of the Institute is closely intertwined with the history of the development of information infrastructure in the university, Ukraine and the world at large. An important activity of the Institute is to train personnel for the information and analytical support of different industries of economics of Ukraine. Educational process aimed at training specialists in the field of computer science and economic cybernetics for education levels of "bachelor" and "master". Training course "Economic Cybernetics" is a unique combination of computer and economic disciplines, providing the opportunity to work in different sectors of the economy without obtaining additional education and overtraining. Graduates of this course are professional economists who are fluent in information technology, management skills and workforce management business. Graduates of specialty "Computer Science" work as a software engineer, administrators of local and corporate networks, specialists in the design and development of information and automated systems, artificial intelligence and expert systems, Web-design. For the practical training of students specialists of leading manufacturers of hardware and software are involved. In particular, the IBM Corporation in Ukraine according to the "IBM Academic Initiative" held at the Faculty of Computer Science and Economic Cybernetics permanent training seminars and courses. Commenced implementation into the learning process the software of companies Apple, MicroStrategy, Sun, IBM, SearchInform, etc. Our masters are able to attend the program of research and production areas. Students are actively involved in research conducted at research laboratories in cooperation with the National Space Agency of Ukraine, Institute of Space Studies, UkrISTEI, companies IBM, Intel, Microsoft," Ukrtelecom", "INCOM", "Datagrup", "R-G-DATA" and "ScanEx", "Panorama" (Russia) and others. Three years ago, as part of the Institute appeared the center of distance learning technologies. It carries out scientific, methodological and technical support of information system electronic and educational environment of NULES of Ukraine by electronic resources. Particular, provides technical, programmatic and methodological support of educational and informative portal (moodle.nubip.edu.ua), which includes e-learning courses for students of 12 educational and research institutions, electronic archive of teaching materials (http://elibrary.nubip.edu.ua), electronic collaborative media (http://agrowiki. nubip.edu.ua), where scholars, educators and students are placed thematic articles on the problems of research, standards (Codex Alimentarius, ISO, SOU, SSU). In addition, experts of the Centre provides training for teachers, and the use of ICT in the learning process by organizing and conducting seminars, workshops, on-line and off-line counseling. Television Centre provides recording and editing video for educational, cultural and educational process, the integration of multimedia content in a system of institutional electronic resources, creation, deployment and management of multimedia content on the video server (http://video.nubip.edu.ua).

Research Institute for Information Technologies in environmental management, which is part of the TSI, combined scientific work of research and innovation laboratories. During the first year its experts had completed a number of research and application of IT developments. Thus, the developed information system for monitoring of agricultural market infrastructure geospatial reference (gold medal "Agro 2012"), a software system information and analytical support producers in crop using geospatial data (diploma "Agro 2012"), created geoportal of NULES of Ukraine set of geographic information services. Conducts research in the areas within the State Program - "Establishment of information-analytical support of government and agricultural structures represent data in geospatial environment", "The development of the theory of constructing the systems of managing agricultural production of biotechnical objects and features of natural disturbances," "Development of information technologies for data landfill and distance measurements to evaluate the crop". In coordination with FAO completed a few projects. In particular, the strategy of development of information support agriculture and rural Ukraine until 2015, adapted distance course IMARK the technologies of digital documents prepared new graduate courses that are based on the modern world of information resources. Performed research on self-supporting and initiative topics, including "Development of information technology impact analysis of the world market for food security status of Ukraine", which covers the years 2012-2014.

A year ago, created problematic Research Laboratory of Information and Communication Technologies, that is engaged in research to build the National synchro-information system of Ukraine. It will provide high-quality facilities of synchro-information of agricultural, environmental and other sectors of the economy, primarily through process integration of various services based on modern technologies nanosecond range and use the domestic production of precision devices. Done the testing of GPS-monitoring device synchro-information nanosecond range, performed statistical analysis of the signal precise time protocol IEEE-1588 -based enterprise IP-based networks of NULES of Ukraine, developed proposals for the harmonization of standards protocol transmission time signal RTR. In 2011, Head of Technology Development Department Professor A. Shelestov received a grant of the President of Ukraine for scientific studies of the impact of climate change on food security and creating GIS services forecasting of emergency situations in agriculture. The author of these lines - a contender for the State Prize of Ukraine in Science and Technology in 2013, presented this award for the creation of system of national information and communication infrastructure. Among the interesting innovations that were introduced and have received well-deserved recognition is information-analytical system for monitoring the socio-economic development of agriculture of Ukraine (http://monitoring.agroua.net/). This software and analytical monitoring of complex objects agricultural market - based technology that allows the structural analysis of the composition and location of agricultural infrastructure, and a list of characteristics about them. Results are presented as informative using the map service. This development, awarded Gold Medal on Exhibition "Agro-2012", allowed to develop an effective model of storage, display and analysis of socio-economic information complex on agricultural and environmental sectors through the use of software platform of Microstrategy business analysis. The real contribution of the Institute to improve access to agricultural information is creating an Internet portal "The agricultural sector of Ukraine" AgroUA.net (http://agroua.net/). The purpose of his creation - the development of a global and comprehensive information resource to meet the needs of agricultural information, reference, technical, technological, economic, market and other measures of agricultural producers, commercial organizations, extension services, researchers, teachers, students and other users. Portal AgroUA.net received a number of web-related projects aimed at fully inform users of the world achievements in the field of agriculture. Among these resources "France for Agrarian Ukraine" (http://france.agroua.net/), "Agricultural Germany to Ukraine" (http://germany.agroua.net/). At the exhibition "Agro-2013", it is marked by the golden medal in the category "Best Information and Advisory agricultural Internet portal". Due to large amounts of content around the portal and the transience of information, we suggest users to participate in refining and updating information at web portal AgroUA.net. It is also a great opportunity for researchers, graduate and masters promote online their scientific achievements and practical development. Materials for publication should be addressed to shvid@ukr.net or sayapin_sp@ukr.net.

In collaboration with the leading advisory services and their leaders is created a NULESU-based electronic consultation system eXtension. One of the latest major joint developments with the TSI of Veterinary Medicine and the quality and safety of animal products was the creation of software workstation for doctors of veterinary medicine in the development of operational monitoring veterinary welfare in cattle. Implementation of this project will create a specialized information system within the correct sector as part of economic accounting and workstation for veterinary, centralized information system construction data holdings to summarize the situation in the area at the data center institute, to use full advantage of capacities of NULES of Ukraine as a central scientific provide consultation and technical support software. Our team partners with leading universities in the world. Our colleagues were trained and educated in the structures of the UN Food and Agriculture Organization (FAO), the universities in the USA and Europe. The activity at the international level is formalized by several international agreements on cooperation.

All this, without any doubt, created the necessary conditions for establishing the university cyber-informational space of biosafety and bio-resources, its implementation in the national and international cyberspace and constructing a global information society. Actual problems here are pilot-designing of the university data processing center, designing a data geo-base of biosafety and bio-resources, geographic information system with space remote sensing of the Earth, creation of integrated geo-informational and forecasting-analytical system for information support of the central government, research and educational institutions, development and implementation of computer control systems and robotics in agriculture and environmental industries, the creation of the National synchro-informational system. In terms of solving the formulated problem is urgent structural ordering information and communication infrastructure of the university by functional features, combining information resources geographically separated units NULES of Ukraine, active introduction of distance learning, virtual scientific term teams and laboratories, establishing the National Biosafety cyber-informational space of biosafety and bio-resources involving the information resources of NAAS of Ukraine and other scientific institutions.

SCIENTIFIC POTENTIAL

We have gold under our feet, but we look into the sky and envy Europe

End. Beginning on p. 5

The real value of results of creative activity can occur only after presenting information to the public, the emergence of interested in the practical application people of this result and establish an actual public demand for new object creation. Scientists managed themselves by criteria such as the life cycle of the product and cost effectiveness. Their strategy is aimed at creating competition s exaggeration of something new that certain industries will be considered unique. Scientific and technological development and innovation is an intermediate result of research and production cycle and to the extent practical application is converted to scientific and technological innovation the final result. Started from this point you need to start and build a socio-legal relationship involving the provision of use of certain intellectual property rights to interested parties under civil law (licensing) of the permit (license) to use partial or full amount of these human subjects management.

In 2012-October 2013, our university worked out 199 technologies, 180 new types of equipment and machinery, 72 substances created by chemical means. However, no license was signed (!), although in recent decades in the world, new trends have formed new relationships between scientists and society. Previously, science answered the question how to solve a particular problem, but society today demands that it foresaw the problems that would arise soon and find solutions. Motivation was also changed: science not only meets the established demand in society, but also provides the scope and predicts demands in the field of knowledge.

In this regard it is important to remember that the inventive activities should be actively involved in undergraduate and postgraduate students. In NULES of Ukraine this concern seriously our students in collaboration with leaders received 42 patents, and this is 19% of the total. They after graduating from university cried to convey the necessary information society. Indeed, many companies are planning to achieve a competitive advantage by improving production technology, and they have a question: where to find information about the technologies that can improve the efficiency of their operations? Colleagues, we have the gold earth under our feet and we look into the sky and envy Europe, which lives well...

Since ancient times scientists are working to develop and improve of economic policy that would allow to maximize economic efficiency in a market environment. The most important of them are transparency, competition and supremacy of law.

Pirate is terrible not only in the sea

In the spring of 2012 the United States began investigation of chronic copyright violations in Ukraine. This happened after our country topped the list for the biggest "pirates" in the world - the so-called "list of 301" countries - violators of intellectual property. For student awareness about the negative consequences associated with plagiarism and piracy, patent department of NULES of Ukraine together with the faculty of construction and design of machines of the Technical TSI participated in a "round table" "The main activities for the protection of intellectual property rights", organized by the World Organization of Intellectual Property with Ukrainian alliance in fighting against counterfeiting and piracy, Ukrainian national Committee of the International Chamber of Commerce and the National Intellectual Property Service. Remember that according to the law, there is an administrative and criminal liability for violation of intellectual property rights:

for illegal use of intellectual property rights ; appropriation of authorship on this object, other intentional infringement to the object of intellectual property right, protected by the law - a fine in amount of 170 to 3400 UAH. With confiscation of illegally manufactured products and equipment and materials for their production (Article 51 piles AP)

for illegal use of inventions, utility models, industrial designs, topography of integrated circuits, plant varieties, rationalization suggestion, attribution of authorship for them; illegal use of a trademark for goods and services, trade name, qualified indication of origin of goods; Illegal reproduction, distribution of scientific work, computer programs and databases, their illegal copying and distribution in other media - a fine in amount of 17-34 thousand UAH, with confiscation and destruction of the product and the equipment and materials that were specially used for its production (Part 1 of Art. 176 CC, Part 1, Art. 177 of the Criminal Code, Part 1, Art. 229 CC) the actions that are indicated above, if they are committed by an official through abuse of office, or an organized group, causing material damage on a large scale - a fine in amount of 17-25 thousand UAH., with deprivation of the right to occupy certain positions or engage in certain activities for a term up to three years or without it, and with the confiscation and destruction of the product and the equipment and materials that are specially used for its production (Part 3 of Art. 176 CC, h.3 c. 177 CC Part 3 of Art. 229 CC).

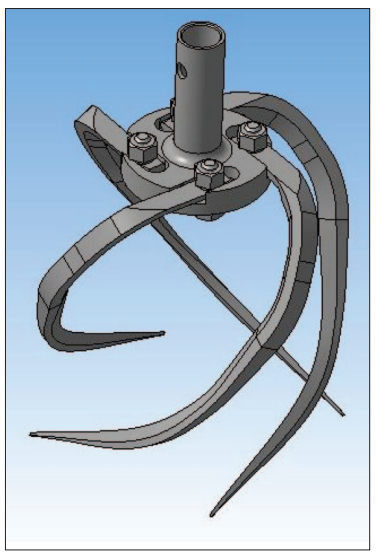
Conveyor of technical ideas

Holiday of inventor and innovator unites people, the main features of which are the talent and creative approach to their work. At the heart of great achievements are always the best ideas and that one, who can give the best interpretation and make them tangible and accessible reality. Technological progress is possible just due to strong personalities. Intellectuals - this is our most important asset, and the University is proud of its inventors who work within its walls. According to the poet, let's remember their names : TSI of Natural Sciences and the Humanities - N.M. Antraptseva, R.V. Lavryk, V.P. Leheza, V.I. Maxin, V.A. Kopilevych, L.V. Voytenko, TSI of livestock science and water bioresources - I.I. Ibatullin, S.V. Pavlichenco, I.M. Kurbatova, TSI of forestry and park gardening - P.I.Lakyda, O.O. Pinchevska, Z.S. Sirko, TSI of plant science, environment and biotechnology - V.T. Hontar, S.M. Vyhera, M.D. Melnychuk, M.F. Pariy; Ukrainian TSI of bio-resources quality and life safety - L.V. Bal-Prylypko, O.S. Vinnov, S.D. Melnychuk, TSI of veterinary medicine and quality and safety of animal products - V.A. Gryshchenko, D.A. Zasyekin, A.Y. Mazurkevych, D.O. Melnychuk, TSI of technology - L.F. Aniskevych, V.M. Bulhakov, D.H. Voytyuk, H.A. Holub, V.O. Dubrovin, O.O. Kotrechko, S.S. Karabinyosh, O.A. Marus, Y.O. Romasevych, TSI of energy and automation - V.V. Kozyrskyi, A.V.Petrenko, South Branch of NULES of Ukraine "Crimean Agrotechnological University" - L.F. Babytskyi, V.Y.Moskalevych, M.M. Makrushyn, Y.B. Herber, I.V. Sobolevskyi, A.V.Stepanov and others.

It is difficult to count all their achievements, at least during one year. So, we'll try to tell about at least some of the developments of our scientists, inventors, describing the diversity of innovation activities at the university.

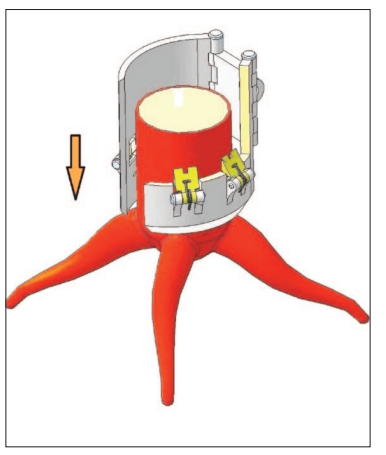
Device for collecting chufa. Chufa or earth almond are peanuts, which are placed on the rhizomes of up to 1000 pieces. They are picked by a special device (developers O.M. Pohorilets, M.H. Lyshko, D.H. Voytyuk), during this process the stripping of nuts goes in a soft "gentle" mode, reducing their micro damages. The nuts are used for the manufacture of confectionery, starch, drinks, as raw materials for biofuels and tops - for making rope, paper and insulation materials.

Cultivator for gardener. The device is developed by university scientists (O.O. Kotrechko, D.H. Voytyuk, V.V. Ishchenko, Y.M. Mykhailovych) is



the first assistant to care for backyard and garden. Easy and safe to use, it provides better quality of cultivation, reducing energy expenditure and material resources by replacing used teeth.

Device for removing central part of a stump. Forestry is an important sector of the national economy of Ukraine. Forest resources are protected and classified as environmentally vulnerable resources to which should be used such technologies that would maintain productivity, vital activity and fertility of the forest. Authors of the innovative development (V.M. Gryb, S.V. Maslay and others) have created a device that allows you to remove whole trees and stumps of different diameters without



destroying the top layer of soil. Advantages of the invention : there is no need to dig a big pit or trench, the root systems of neighboring trees do not suffer, labor intensiveness is minimal, stumps can be removed even under adverse conditions (near fences, buildings and other trees), in order to provide careful attitude towards the environment.

Device for determining deterioration of food. Storage of foodstuffs and finished goods is the initial and final stage of any process. Changes that occur in raw materials during storage result in losses of 7 to 30%, and that is why they must be controlled. H.I. Podpryatov, S.M. Gunko and others have developed a device that allows at the right time to identify processes of food rotting, to keep quality and to decide if it should be sorted.

Knife for hunters. We are used to the fact that the image of the hunter is associated primarily with a gun. However, there are many types of hunting, where it plays an important role and the hunter needs it almost always. It has two main functions - household and hunting itself. V.N. Bolshakov, V.M. Tyshchenko, V.I. Kurylo and others have developed a hunting knife model in order to use it to shoot (as dart). It allows you instantly to reveal stabilizer with one hand, to reduce time and improve quality of throwing.

Against the background research on Hadron Collider (to which, incidentally, scientists of the University are also involved), maybe this is little thing. But the hunter in the forest doesn't need collider, he needs a knife.

Processing of oak acorns. Of all the natural resources that make up the wealth of our country, the forest occupies a special place. This is the most perfect natural complex that is able to reproduction which provides more than 20,000 kinds of valuable products, and acorn crop is the main way to restore oak forests. However, the acorns that fall off are usually affected by various diseases and are not suitable for breeding. Processing of oak acorns is caused by the need of preservation of their useful properties as inoculum. Previously, they were kept in trenches or pits, and our colleagues A.F. Hoychuk and V.M. Belous invented a way to process them and created device - lattice for its application. Acorns are treated with beeswax, so you can save seed for five years.

Energy efficient greenhouse. V.O. Lazorenko offers energy-saving greenhouse, heat treatment of which is provided by a renewable source of solar energy. Photo cells, under the influence of radiation, convert it into electricity. I wonder how it works : on cloudy days by absorbing infrared radiation that passes through the clouds, and when the temperature drops to minus 30°C. Climate adjust control of irrigation and mineral nutrition of plants is made by a computer control system of microclimate. According to the expenses the invention is an alternative and cheap source of energy in industrial greenhouses.

Selection has been prepared by the staff of the department of patent licensing, inventive and innovative work - L. Lukyanchuk, head of the department, A.Palamar, H.Ponomarenko, N. Malakhovska

Information on subject

In 1922, Canadian scientists Frederick Banting and Charles Best during experiments obtained hormone of the pancreas - insulin and diabetes is no longer a fatal disease. On our planet, there are about 130 million of diabetics.

Hedy LaMarr in 1941 patented a secret communication device that dynamically altered the frequency of speech. Since 1962, the invention was used in the American torpedoes, and today it is used in the mobile communication and Internet - Wi-Fi.

Solar panels are set on a bathing suit...: You can spend a day on the beach listening to your favorite songs without worrying that the battery of your IPod can discharge. Andrew Schneider has made these bikini photoelectric with a panel film and USB connection.

In 1954 in the UK road signs for the blind were patented, that should be distinguished by touch. A bit earlier in the U.S. the automobile horns were invented for the deaf, they were throwing off the flow of flavored air.

Michael Jackson has an official patent in the U.S. Patent Office for a special invention of shoes attached to the stage, that allows a person to lean far forward and defy the law of gravity.

Incorrigible loafers were not forgotten, either. A gift for them is electric fork that rotates and spins spaghetti around. But there are two "buts": besides the fact that it looks funny, this device is much slower than a human hand.