The 2009 ISO Award for Higher Education in Standardization

Ukraine – Quality approach to agricultural products

by Dr. Sergiy D. Melnychuk

The National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine) offers Master’s degrees on quality, standardization and certification of agriculture products specifically targeted at:

- Quality, standardization and certification
- Meat processing and food technologies
- Fish processing and food technologies
- Laboratory diagnostics of quality and safety of livestock and plant products.

The Master’s training is on the basis of a bachelor (17 months) and specialist – higher education (one year). Students can choose from full-time, correspondence or external learning.

The training addresses the standardization and certification of agricultural enterprises, regardless of ownership form.

Graduates with a variety of educational backgrounds may enter this speciality.

Targeted objectives

After completing their specialization, students will be able to understand any related economic and legal aspects, such as consumer protection. They will also learn about the sociology and psychology of quality, so as to get an all-encompassing view of societal factors. Here, the students analyze the patterns and processes of human social relations, methods of social research and more.

The programme’s broad scope covers information technology, standardization, certification, auditing, quality control, technical diagnostics and much more. Graduates are trained to work as quality managers in both government and private business and as department managers of product certification and standardization. Students will therefore need to become familiar with the Ukrainian perspective on quality standardization, certification and management, including specific methodology and types of standardization documents. In particular, the need to harmonize national standards with European and international ones are highlighted, as well as the advantages of doing so.

Particular emphasis is given to the quality and safety of agricultural products. This includes aspects such as management, metrology, international and European certification and accreditation systems, such as agricultural product standardization, etc.

Crop and livestock production are also addressed, including agricultural machinery, research activity and industrial ecology and labour protection. Topics such as economics, research and testing, development of documents for inventions, patents, etc. are also part of the curriculum.
In addition, students benefit from other activities including physical education and training for a healthy lifestyle.

**Laboratory for quality and safety**

The quality management system of the Ukrainian Laboratory of Quality and Safety (ULQS)* has been established on the basis of the requirements of ISO/IEC 17025:2005, *General requirements for the competence of testing and calibration laboratories*. The National Accreditation Agency of Ukraine certified the competence of ULQS in accordance with ISO/IEC 17025:2005. One year later, the laboratory confirmed its competence, extending the area of accreditation.

ULQS is certified by the Ukrainian State Research and Production Centre of Standardization, Metrology, Certification and Consumer Protection (*Ukrmetrteststandart*). The centre indicates the criteria for certification of laboratories measuring the state metrological system.

According to a 2007 order of the Ministry of Agrarian Policy of Ukraine and the Ukrainian Academy of Agrarian Sciences, ULQS was awarded the status of the enterprise laboratory for genetic control. In April 2009, the agricultural expertise of ULQS was confirmed by the certification body TUV Rheinland Polska – a significant step towards European recognition.

In November 2009, the Prime Minister of Ukraine, Yuliya Timoshenko visited the ULQS.

*) ULQS of Agro Industrial Complex (AIC) products

**Courses for all interests**

**Humanities and social-economic subjects**

- Quality economics
- Civil defense
- Legal aspects of quality, standardization and certification
Quality sociology and psychology
Physical training

Profession-oriented disciplines

- Quality supply
- Informational technologies
- Standardization
- Quality certification and audit
- Quality control
- Control and engineering diagnostics
- Methodology of state standardization and quality management organization

Elective disciplines (the University's choice)

- Quality and safety of agricultural products
- Certification in the context of the country's international economic activity
- Quality management of agricultural products
- Product and service quality control systems according to ISO 9001

Elective disciplines (the students' choice)

- Foreign language for business
- Agricultural management
- Agricultural marketing
- Methodology of management decisions
- Methodological supply of certification tests of agricultural products quality
- International and European systems of certification and accreditation for quality and safety of agricultural products
- Standardization and certification of agricultural products
- System analysis of certification
- Methods of agricultural product quality improvement
- Agricultural product quality monitoring
- Practical training

How it all started

The history of National University of Life and Environmental Sciences of Ukraine (NUBIP of Ukraine) began in 1898, with the foundation of the Department of Agriculture within the Kiev Polytechnic Institute (KPI). In 1918, this was transformed into the Agricultural (Agronomic) Faculty, and the Kiev Agricultural Institute was subsequently founded in 1922.
The Kiev Agricultural Institute and the Kyiv Forestry Institute merged to form the Ukrainian Agricultural Academy in 1954. Three years later, the Kiev Veterinary Institute joined the Academy.

In 1992, the Ukrainian Agricultural Academy became the Ukrainian State Agricultural University, receiving the status of a national institution by an edict of the President of Ukraine in 2000. The University is subordinated directly to the Cabinet of Ministers of Ukraine, as an autonomous self-managed higher educational establishment.

In 2004, the Crimean Agro-Technological University joined the National University of Life and Environmental Sciences of Ukraine, and renamed the Southern Affiliate “Crimean Agro-Technological University” of NUBiP of Ukraine. The Ukrainian Scientific and Research Institute of Agricultural Radiology and other sub-units became the part of NUBiP of Ukraine.

In 2008, NAUU was renamed the National University of Life and Environmental Sciences of Ukraine and was awarded the status of a research institute.

About the author

Dr. Sergiy D. Melnychuk is a professor and corresponding member of the Ukrainian Academy of Agricultural Sciences. Since 2004 he has held the post of Vice-rector for Training, Research and Practical Issues on quality, standardization and certification of agricultural products. He also serves as Director of the Ukrainian Quality and Safety of Agricultural Products Laboratory. In 2005, Dr. Melnychuk headed the commission “Standards, Safety and Environmentally Friendly - Products” under the Cabinet of Ministers of Ukraine.