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**MAY 20 - INTERNATIONAL METROLOGY DAY**

Akhmedova's daughter Setora Askara  
Student of the KarMII group MSS-222-22

**Abstract**

This article describes metrological activities, its importance in the areas of production and service, as well as metrological activities carried out by the Kashkadarya branch of the state institution “National Institute of Metrology of Uzbekistan”.

**Keywords:** metrology, “Metric Convention”, measurement, measurement, dimensions, metrological service.

**Introuction**

Regardless of the science that a person intelligently cognizes, forms and develops, and its direction, we will definitely have to measure their various methods and their relationships. In this case, ensuring their unity with the help of methods and measuring instruments and achieving the necessary accuracy can only be achieved through metrology and its practice.

For this reason, every modern science, scientific direction, production sphere, be it natural or social, to one degree or another depends on the standardization of metrology and quality assurance issues. For this reason, knowledge of the basics of metrology and understanding it in practice is considered one of the important criteria for ensuring the future development of science and technology, not only for technical specialists, but also for specialists and employees in various fields.

World Metrology Day is celebrated annually on May 20. This day, May 20, 1875, was chosen to honor the "Metric Convention" ( Metre Convention ), signed at an international diplomatic conference in Paris, and the creation on its basis of the intergovernmental “International Organization of Weights and Measures”. In 1875, the convention was signed by 17 countries, including Russia. It can be noted that one of the initiators of the creation of the “International Organization of Weights and Measures” was the St. Petersburg Academy of Sciences.

The Metric Convention was amended in 1921 and currently has 50 countries as members.

The International Bureau of Weights and Weights, located in France ( Severs ), maintains standards for international units of measurement such as: meter, kilogram, ionizing radiation unit, electrical resistance unit. In addition, metrologists conduct various metrological studies. Currently, the “Metric Convention” ensures its main goal - the uniformity of units of measurement in all countries participating in the convention. On May 20, on the eve of International Metrology Day, the heads of the International Bureau of Weights and Scales and the International Organization for the Legislation of Metrology (OIML) traditionally address letters to the world community and metrology.

community, its most important and socially significant problems and determine the provision of their metrological solution.

The activity of metrology embodies the modernity of production in all industries, the automation of technological processes, the use of world standards to ensure the safety of the population and their implementation in our Republic.

The modernity of measuring instruments and equipment in many cases determines the reliability of the measurement result. It is known that the need for measurements has arisen since ancient times, and as a result of developments over time, measurements and tests have also developed, and the requirements for their accuracy have also increased.

If we turn to history, it began on April 18, 1923, when the decision of the KRK of the Turkestan Republic approved the "Rule on Weights and Scales" and created the Bureau of Weights and Scales of Turkestan under the Internal Committee for Trade Regulation. in the city of Kokan , the scope of which is the entire Republic of Turkestan. In 1924, the first State Laboratory for Control (DNL) of standards and measuring instruments was created.

In 1924, the Chamber of Comparison was transformed into the Central Asian Chamber of Weights and Measures and became the founder of metrological services in the republics of Kyrgyzstan, Tajikistan and Turkmenistan.

In March 1930, a Standardization Committee was created under the Council of People's Commissars of the Uzbek SSR, and in 1931 it was merged with the Chamber of Weights and Scales.

In the post-war years, State Control Laboratories (LNL) were created in each regional center, the work of which was led by the competent Committee on Measurements and Measuring Instruments under the Council of Ministers of the Uzbek SSR.

In 1966, DNL was transformed into a laboratory for state control of reference and measuring equipment. The State Laboratory for Control of Reference and Measuring Equipment of the Republic of Uzbekistan ( UzRDNL ) was created in Tashkent.

In 1979, UzRDNL was transformed into the Center for Standardization and Metrology of Uzbekistan ( UzSMM ).

In 1992, UzSMM was transformed into the Center for Standardization, Metrology and Certification of Uzbekistan under the Cabinet of Ministers of the Republic of Uzbekistan ( Uzdavstandart ).

In accordance with the decision of the President of the Republic of Uzbekistan dated April 28, 2017 "On measures to improve the activities of the Agency for Standardization, Metrology and Certification of Uzbekistan" No. of the State Enterprise "National Institute of Metrology of Uzbekistan" ( " UzMMI "DK") was created on the basis of the metrological divisions of the state enterprise " Demonstration Center" and the state institution "Research Institute of Standardization, Metrology and Certification".

In accordance with the decision of the President of the Republic of Uzbekistan dated August 15, 2019 "On further improvement of the conformity assessment system and development of a complex of testing laboratories in the Republic of Uzbekistan "No"

from January 1. In 2020, the state enterprise will be transformed into the state institution "Uzbek Scientific Testing Center and quality control center" (state institution "UzTest") and the creation of its founder - the regional one - tests are being completed and, on the basis of certification centers, regional branches of the state enterprise "UzTest" and regional branches of the state institution "National Institute of Metrology of Uzbekistan" have been created.

The Kashkadarya branch of the state institution "National Institute of Metrology of Uzbekistan" is taking the necessary measures to provide our citizens with quality services.

The field of metrology is a comprehensive field, it is present in every science, scientific field, industrial field, be it natural or social, and we constantly encounter and use it in our daily lives. For example, measuring instruments such as FloBoss, AutoPilot are used to measure the volume of hydrocarbons (natural gas) at production enterprises. Imagine the financial damage that can be caused to manufacturing plants due to a single mistake or negligence. For this reason, the metrological features of consumption measuring instruments and other measuring instruments used at each production enterprise are constantly subject to state metrological comparative verification.

Human life and health are the most valuable, priceless wealth in the world. In medical institutions, doctors saved people from illness directly with the help of measuring instruments used in medicine. Therefore, ensuring the uniformity and reliability of measurements in medical practice is always a pressing issue. Today, the medical field is equipped with modern measuring instruments. For example, thermometers for measuring body temperature, tonometers for measuring blood pressure, an electrocardiograph for studying the internal organs of a person, patient monitors, biochemical analyzers, etc.

Employees of the DM Kashkadarya branch of the National Metrological Institute of Uzbekistan work closely with medical institutions in accordance with the Law of the Republic of Uzbekistan "On Metrology" and organize the provision of on-site metrological services. The branch's specialists contribute to the preservation of people's health by checking the accuracy and correct operation of the above-mentioned medical measuring instruments in the region.

Nowadays, it is impossible to imagine our life without cars. Today, the number of modern and high-speed vehicles and the speed of traffic on the roads are increasing every year. Ensuring road safety in our country, in particular, improving the technical condition of vehicles and preventing road accidents, is one of the main tasks. It is known that every car is equipped with a speedometer, which measures speed and distance traveled. It should be mentioned here that failure of the speedometer measuring device, exceeding the permitted speed in a car, leads to dangerous consequences for human life. Specialists of the Kashkadarya branch of the National Metrological Institute of Uzbekistan provide qualified services in this direction.

In addition, in ancient times, the markets of the East, especially the markets of our country, were famous for their freshness and yellow fruits. Especially if the relationship

between the seller and the consumer in our markets is based on fairness, impartiality and correctness, including if they follow the criteria of fairness and fairness in the operation of electronic scales, which are mass measuring devices in use, of course there will be a blessing everywhere, there will be no any conflict situations.

In total, there are 22 farmers' food markets in the Kashkadarya region, with a total of 7,827 tents installed at these markets. Hence, the number of trading places required for weighing is 3713. In total, there are 1777 electronic scales on the market, which are subject to state metrological comparative testing once a year by the Kashkadarya branch of the National Metrological Institute of Uzbekistan.

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