

accurately
100 years
1919-2019

METROLOGY

– the driving force
of economy development



0,3 mm

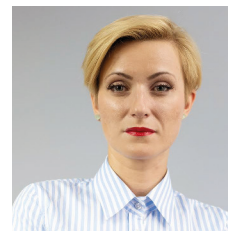
GUIDE

Central Office of Measures as a national metrology institute playing the leading role in the national measurement system is intended to provide measurement capabilities towards the competitive and innovative economy.

President of the Central Office of Measures is a central authority of the government administration, competent for measures and hallmarking in Poland, performing the tasks with help of the – Central Office of Measures (GUM).



President
Radosław Wiśniewski

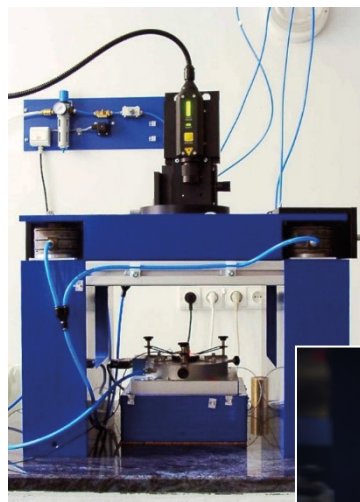


General Director
Karolina Gawel

The General Director has the competence and performs tasks resulting from the Act on the Civil Service and also from separate regulations. In particular, the General Director ensures functioning and continuity of activities of the Office, conditions of its operation, as well as formal and legal organization of the work.

Tasks

- Maintenance and development of national standards of sound pressure and vibration quantities and ensuring their traceability to the national standards in other countries through participation in key comparisons.
- Ensuring measurement traceability in the field of acoustics and mechanical vibration and shocks.
- Conducting research and development works in the field of acoustics and mechanical vibration and cooperation in this field with domestic and foreign institutions.
- Calibration, testing and expertise of measuring instruments used for acoustic measurements as well as vibrations and mechanical shocks.
- Participation in standardization work, national and international, on the development of standards for instruments for acoustic and mechanical vibrations measurements.
- Development of metrological infrastructure and competence of staff in the field of medical ultrasound.
- Development of metrological infrastructure in the field of underwater acoustics.



Measurement set-up of national standard of vibration quantities



Acoustics and vibration measurement standards

Services

- Primary and secondary calibration of measurement microphones.
- Primary and secondary calibration of vibration transducers.
- Calibration, testing and expertise of measuring instruments used for acoustic measurements as well as vibrations and mechanical shocks.
- Type approval of sound level meters.
- Organization of national interlaboratory comparisons.



Measurement set-up of national standard of sound pressure

Contact to the Laboratory:
acoustics@gum.gov.pl

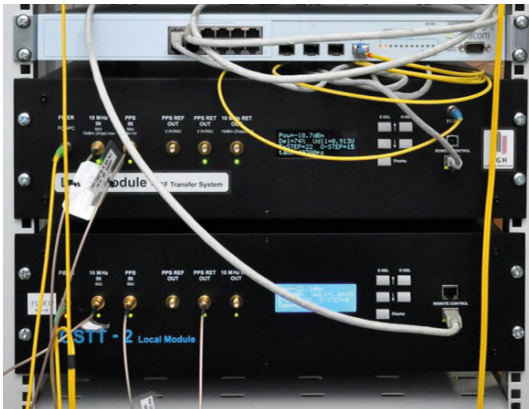
Contact to Section:

- Acoustics – phone: +48 22 581 91 23
- Vibration – phone: +48 22 581 92 07

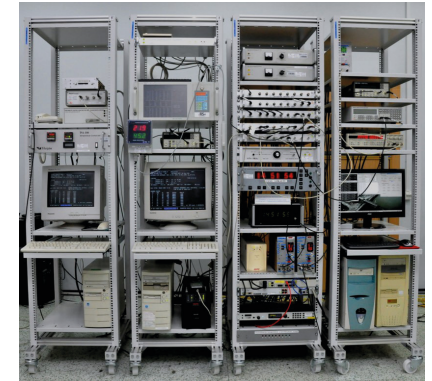


Tasks

- Maintenance of the national standard of time and frequency units.
- Generation of the Polish atomic time scale UTC (PL) and determining the official time of the Republic of Poland.
- Participation in the creation of international atomic time scales TAI and UTC.
- Generation and transmission of acoustic time signals to Polish Radio, maintaining of official time servers and TDS system for distribution of national time.
- Development and improvement of time transfer, maintaining atomic time scales and results analysis of atomic comparisons of time and frequency standards.
- Conducting research and development concerning the national standard of time and frequency units and related measurement stations.
- Transmission of reference frequency signals to other laboratories within Central Office of Measures.
- National collaboration and comparisons in the creation of the independent Polish Atomic Time Scale TA (PL).



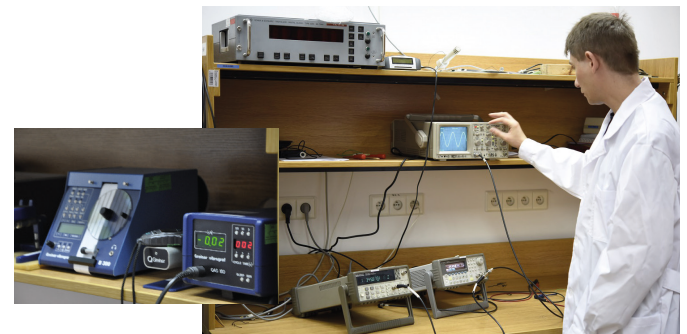
Optic fiber time and frequency distribution systems



Systems for time transfer, for comparisons of atomic clocks and for distribution of signals from the national time and frequency standard

Services

- Calibrations:
 - high stability frequency standards,
 - frequency generators and synthesizers,
 - digital time and frequency counters,
 - clock testers (digital, analog and digital-analog),
 - second counters and timers – controlled electrically, optically, acoustically,
 - quartz and analog clocks,
 - phase calibrators and phase meters.
- Expertises:
 - sources and counters of groups of pulses.



Measuring stations for calibration of instruments in time and frequency field

Contact to the Laboratory:
phone: +48 22 581 91 56
time@gum.gov.pl

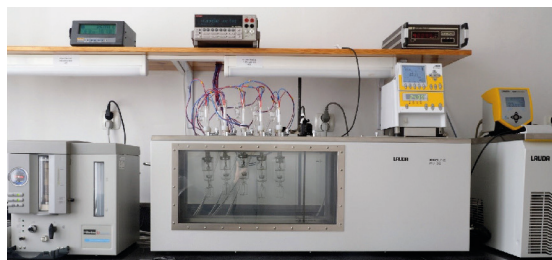


Tasks

- Realization and development of primary methods of measurement and reference materials of highest metrological level providing traceability to SI in chemical and physicochemical measurements.
- Maintenance and development of the national measurement standards and the reference standards.
- Providing traceability in the area of pehametry, conductometry, gas analysis, atomic absorption spectrometry and IR spectroscopy.
- Participation in national and international interlaboratory comparisons.
- Research works on metrology in chemistry.



Measurement system for realization and dissemination of amount of substance unit



National Standard of pH

Measurement system for gas mixtures production using the gravimetric method



Services

- Calibration:
 - gas analyzers and dissolved oxygen meters,
 - gas mixtures,
 - pH meters, pH simulators and pH electrodes,
 - electrolytic conductivity meters and conductivity cells,
 - solid wavenumber standards for IR spectroscopy.
- Certified reference materials:
 - primary and secondary reference materials for pH,
 - primary and secondary reference materials for electrolytic conductivity,
 - primary reference materials for amount of substance content (high purity substances),
 - reference materials for atomic absorption spectrometry (ASA).



Measurement system for dissemination of electrolytic conductivity unit

Contact to the Laboratory:
phone: +4822 581 92 01, chemistry@gum.gov.pl

Contact to Section:
– Gas Analysis – phone: +48 22 581 94 39
– Electrochemical Analysis – phone: +48 22 581 92 25
– Inorganic Analysis – phone: +48 22 581 94 54



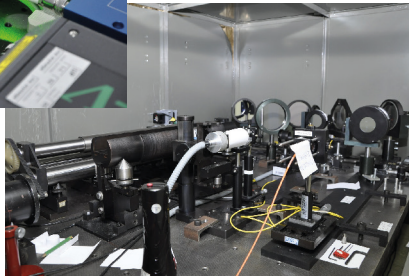
Tasks

- Maintenance of the national measurement standards for length, plane angle, refractive index and optical rotation.
- Ensuring traceability in the field of length, plane angle, refractometry and polarimetry.
- Performing the research in the field of light frequency of stabilised lasers, measurements of length, plane angle, surface texture parameters, refractive index and optical rotation.
- Performing tests and checks for the needs of legal metrological control, conformity assessment and type approval.
- Organizing and taking part in national and international comparisons.



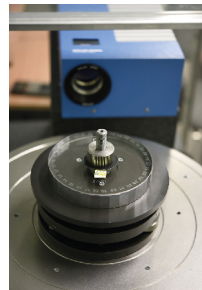
Optical frequency synthesizer

Interferometric comparator for calibration of long gauge blocks

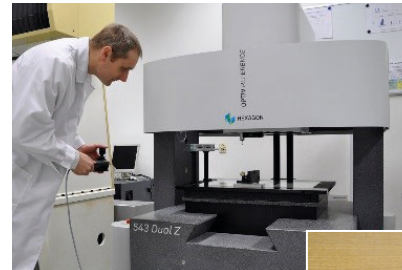


Services

- Calibration of:
 - stabilised lasers,
 - gauge blocks,
 - laser distance meters,
 - optical flats,
 - ring and plug gauges (internal and external cylinders),
 - 1-D measuring machines,
 - mechanical comparators for gauge blocks,
 - optical polygons, angle gauges, rotary tables, goniometers,



Measuring station for reproducing the unit of plane angle



Coordinate measuring machine

Digital tachograph in the training version and a device for its calibration and checking



- photoelectric autocollimators, electronic levels,
- visual and photoelectric refractometers,
- solid and liquid refractive index standards,
- photoelectric polarimeters,
- quartz control plates (polarimetric standards),
- straightness and roundness standards,
- tapes (rigid, semi rigid),
- precision line scales and stage micrometres.
- Expertise of instruments and stands for:
 - taximeters verification,
 - tachographs checks,
 - verification of devices for measuring the speed of vehicles in traffic control.
- Manufacturing of the certified reference materials:
 - glycerol,
 - sucrose.

Contact to the Laboratory:
phone: +48 22 581 95 43,
length@gum.gov.pl

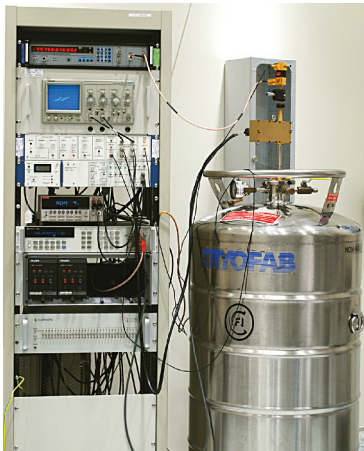
Contact to Section:

- Length – phone: +48 22 581 93 32
- Angles – phone: +48 22 581 95 58
- Precise Geometric Measurement – phone: +48 22 581 95 07
- Taximeters and Tachographs – phone: +48 22 581 94 96



Tasks

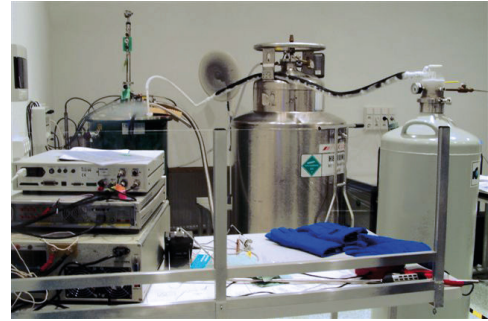
- Maintenance and development of standards and measurement facilities of electric and magnetic quantities.
- Transfer of electric and magnetic quantities measures units maintaining the traceability by performing calibrations of measurement equipment for interested entities (e.g. regional administration of measures, measuring laboratories, industry).
- Conformity assessment tests of electric energy meters,
- Electromagnetic compatibility (EMC) tests for conformity assessment and type approval of measurement equipment being subject to legal metrology control.
- Research and development work related to electrical metrology,
- Development and implementation of innovative measurement methods for particular electric and magnetic quantities.
- Organization and leading interlaboratory comparisons and participation in international comparisons.



The national standard for DC voltage – Quantum Josephson Voltage Standard

Services

- **Electrical Quantities Standards Section** – performs calibrations of:
 - DC voltage sources,
 - DC resistance standards: fixed resistor, resistance box,
 - precision thermometer,
 - DC resistance meters.



The national standard for resistance – Quantum Hall Resistance Standard

- **Low Frequency Electrical Quantities Section** – performs calibrations of:
 - calibrators, reference multimeters and digital meters,
 - thermal voltage and current converters for TVC, TTC and AC/DC transfers,
 - capacitors, induction coils, AC resistors,
 - devices for impedance measurements e.g. the RLC meters and bridges, impedance analyzers.



The national standard for AC voltage – thermal AC/DC converters and the national standard for inductance – reference coils

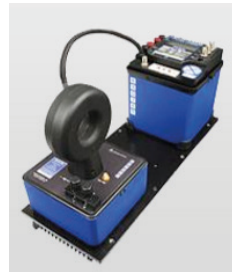


Services

- **Electrical Power Engineering Measurements Section** – performs calibrations of:
 - AC electrical power and energy meters, single- and three phase,
 - AC electrical power and energy calibrators,
 - instrument transformers,
 - burdens for instrument transformers,
 - bridges for calibration of instrument transformers,
 - AC high voltage meters.

Furthermore, the section performs tests of meters of active electric energy of alternating current for conformity assessment within the notified body (JN 1440) for compliance with MID requirements.

Section also issues opinions on documentation attached to applications for the verification of electricity meters in the aspects of technical equipment, measurement procedures and uncertainty calculations.

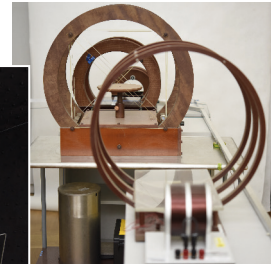
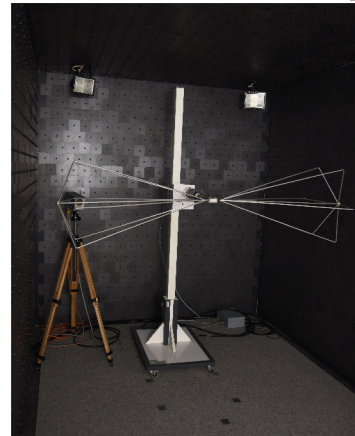


The national standard of AC voltage ratio at 50 Hz – capacitive divider and the reference standard for active electric energy of alternating current – single phase reference transfer standard

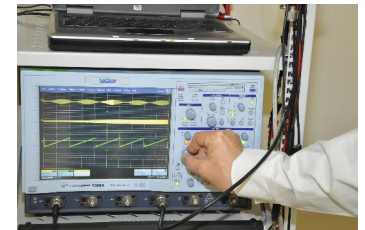
- **Microwaves, Electromagnetic Field and Electromagnetic Compatibility Section** – performs calibrations of:
 - high frequency (hf) power meters,
 - hf power sensors,
 - hf voltmeters,
 - hf attenuators,
 - hf measuring receivers,

- passive elements in the scope of scattering parameters,
- constant and alternating magnetic field strength meters (probes),
- electric field strength meters (probes),
- permanent magnets.

Furthermore, the section performs electromagnetic compatibility tests for conformity assessments and type approvals of measurement equipment being subject to legal metrology control.



The reference standards of magnetic field strength – Helmholtz coils and anechoic chamber I for EMC tests



Test stand for EUT resistance to conductive disturbances induced by radio frequency fields

Contact to the Laboratory:
phone: +48 22 581 92 41; electricity@gum.gov.pl

Contact to Section:

- Electrical Quantities Standards – phone: +48 22 581 94 62
- Low Frequency Electrical Quantities – phone: +48 22 581 92 42
- Electrical Power Engineering Measurements – phone: +48 22 581 91 51
- Microwaves, Electromagnetic Field and Electromagnetic Compatibility – phone: +48 22 581 95 03



Tasks

- Maintenance and development of national and reference measurement standards.
- Development of measurement methods traceable to the measurement units of SI in photometric and radiometric measurements of the highest accuracy.
- Providing the traceability for Polish customers via calibration of measuring instruments.
- Research in the field of photometry and radiometry for supporting various branches of Polish economy.
- Dissemination of knowledge and experience in the field of photometry and radiometry.

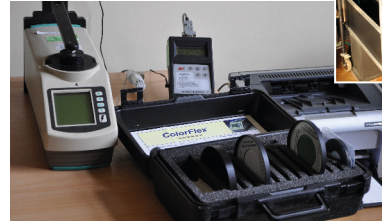
Ulbricht's sphere for the realisation of the national measurement standard of luminous flux



Services

- Calibration of:
 - spectral regular transmittance and absorbance standards,
 - spectrophotometers for spectral regular transmittance and absorbance,
 - wavelength standards,
 - spectrophotometers for wavelength,
 - tristimulus values and chromaticity coordinates standards for transmitted light,
 - luminous intensity standards (incandescent lamps),
 - luminous flux standards (incandescent lamps),
 - correlated colour temperature standards (incandescent lamps),

Photometric bench for the realisation of the national measurement standard of luminous intensity



Reference spectroradiometer for calibration of luminance factor standards in 45°:0° geometry

- digital luxmeters,
- luminance meters,
- trichromatic colorimeters for chromaticity of light sources,
- photoluminescent materials (luminance and time of decay),
- glossmeters,
- gloss standards,
- luminance standards,
- radiant power metres,
- spectral responsivity standards (monochromatic radiation),
- radiant power metres (monochromatic radiation),
- white light and UV-light NDT metres,
- calibrators for luxmeters,
- light cabinets,
- colour and gray scale standards,
- colorimeters for reflected light.
- chromaticity of safety signs.

Contact to the Laboratory:
phone: +48 22 581 92 95; radiation@gum.gov.pl

Contact to Section:
– Spectrophotometric Standards – phone: +48 22 581 93 11
– Photometric and Radiometric Standards – phone: +48 22 581 94 46
– Colour Standards – phone: +48 22 581 94 36



Tasks

- Maintenance and development of national standards of measurement units and reference standards, and ensuring their traceability with international standards and standards of other countries through calibration and participation in international comparisons.
- Dissemination of the mass unit according to the new kilogram definition with the least possible uncertainty for domestic and foreign entities.
- Ensuring measurement traceability in the field of: mass, force, torque, hardness, density, viscosity, surface tension, static volume, pressure and mass ethanol concentration with measurement traceability.
- Carrying out tasks of the Notified Body in the scope of conducting the conformity assessment process with the requirements of the NAWID and MID Directives.
- Issuing certificates of calibration and expertise of measuring instruments in the field of mass and related quantities
- Production of certified reference materials for density, viscosity, surface tension and mass ethanol concentrations.
- Conducting national interlaboratory comparisons as a reference laboratory.
- Carrying out research and development works in the field of mass and related quantities.



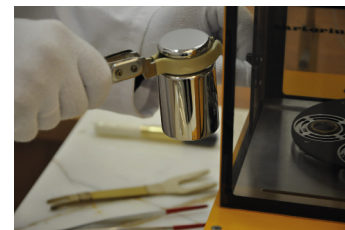
Automatic vacuum mass comparator AVK-1000

Services

Mass standards and Weighing Mass Instruments Section

- Calibration and testing of instruments for measuring mass, including mass standards, reference standards of force and pressure, non-automatic and automatic weighing instruments, and parts of instruments such as indicators, standard instruments to measure grain density.

1 kg mass standard prepared for calibration in the mass comparator



Loading the 50 kg mass standard to the comparator

Force and Hardness Section

- Calibration of force measuring instruments, including force transducers, torque transducers and reference torque wrenches, force measuring devices and static testing machines, calibration of hardness measuring instruments, diamond indenters, hardness measuring instruments including reference blocks according to the hardness scales: Brinell, Rockwell and Vickers.



Measuring stand for calibration of Rockwell hardness reference blocks



Physicochemistry Section

- Calibration of density measuring instruments, such as oscillation type density meters, glass and metal pycnometers, hydrometers, hydrostatic balances, liquid and solid samples, calibration of viscosity measuring instruments, such as glass capillary viscometers, Höppler's viscometers, Stabinger's viscometers, rotational viscometers, flow cups, production of certified reference materials: standards of density, viscosity and surface tension, calibration of static volume measuring instruments, such as flasks, graduated pipettes, measuring cylinders, burettes, piston pipettes, containers.



Reference stand of the kinematic viscosity, Ubbelohde viscometers

Hydrostatic weighing stand for dissemination density unit to solid and liquid standards

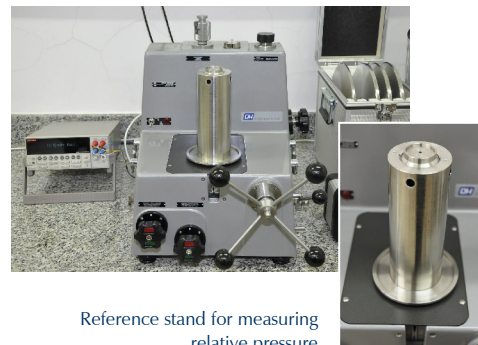


Thermodynamics Section

- Calibration of pressure measuring instruments, including pressure balances and piston – cylinder pressure gauges, electronic pressure gauges, calibration of instruments for measuring ethanol in the exhaled human breath, including ethanol standards and breath analyzers.

Certification Group

- Carrying out process of conformity assessment and type approval.
- Coordination of testing and checks of measuring instruments included in the conformity assessment and legal metrological control, including:
 - non-automatic weighing instruments,



Reference stand for measuring relative pressure

- continuous totalizing automatic weighing instruments (belt weighers),
- automatic catchweighing instruments,
- automatic gravimetric filling instruments,
- automatic rail-weighbridges,
- discontinuous totalizing automatic weighing instruments (totalizing hopper weighers),
- automatic instruments for weighing road vehicles in motion and measuring axle loads,
- development of new type of measuring instrument – High Speed Weighing in Motion,
- 20 L, 1 L and 1/4 L utility instruments to measure grain density,
- tyre pressure gauges for motor vehicles,
- oscillation type density meters for measuring liquid density (from 450 kg/m³ to 2000 kg/m³),
- glass hydrometers – alcoholometers and alcohol hydrometers,
- glass hydrometers – densimeters for liquids other than alcohol,
- mass standards (weights) of accuracy class: E₁, E₂, F₁, F₂, M₁.

Contact to the Laboratory:

phone: +48 22 581 95 47; mass@gum.gov.pl

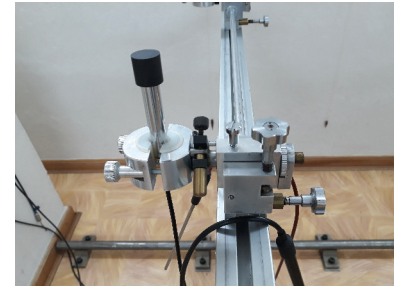
Contact to Section:

- Mass Standards and Weighing Instruments – phone: +48 22 581 92 16
- Force and Hardness – phone: +48 22 581 91 09
- Physicochemistry – phone: +48 22 581 94 10
- Thermodynamics – phone: +48 22 581 92 00
- Certification Group – phone: +48 22 581 92 57

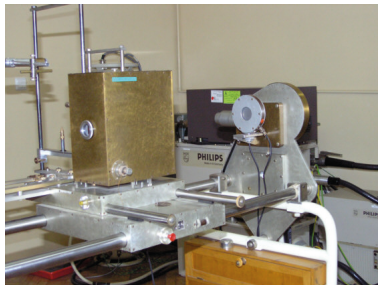


Tasks

- Maintenance and development of the primary standards for air kerma of x-ray and gamma radiation.
- Ensuring traceability of dissemination of air kerma.
- Maintenance and development of the reference standard for absorbed dose to water of gamma radiation.
- Ensuring traceability of dissemination of absorbed dose to water.
- Ensuring, through comparisons, traceability of standards.



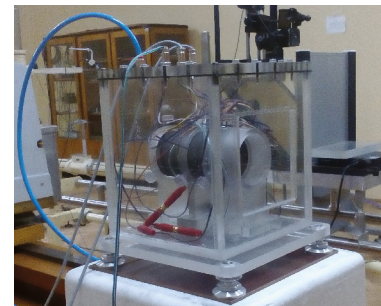
Ionizing chamber – primary standard of air kerma for gamma radiation



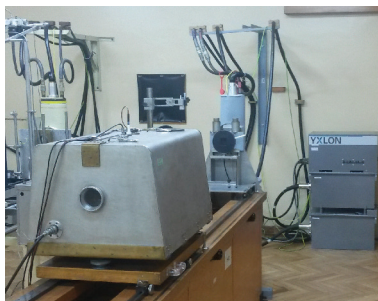
Ionizing chamber – primary standard for low energy x-rays

Services

- Calibration of therapy and radiation protection dosimeters.
- Irradiation of samples with reference doses for x-ray and gamma radiation.



Graphite calorimeter – primary standard of absorbed dose to graphite and absorbed dose to water



Ionizing chamber – primary standard for medium energy x-rays

Contact to the Laboratory:
phone: +48 22 581 93 58
radiology@gum.gov.pl



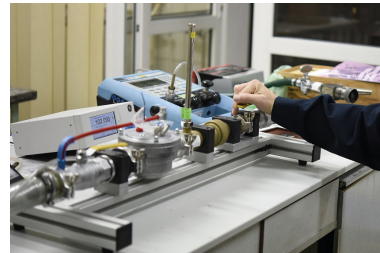
Tasks

The most important tasks of the Flow Laboratory are the following:

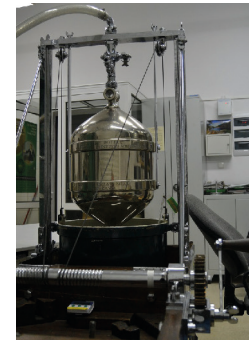
- Maintenance and modernisation of reference standards of water volume flow and water flow rate.
- Maintenance and modernisation of reference standards of gas volume flow and gas flow rate.
- Dissemination of legal measure units from national measurement standards to measuring instruments.
- Maintenance and development the reference standards and ensuring that it is related to national standards of other counties by participation in international comparisons.



Reference standard of water volume flow and volume flow rate – testing of water meter in the 45-degree position



Transfer standard with Critical Flow Venturi Nozzle



Reference volume tank (25 dm³)

- measurement stands for calibration of measurement tanks with liquid stored in these tanks.

- Conformity assessment:

- volume conversion devices for gas meters, water meters, measuring systems for liquids other than water (including fuel dispensers), heat meters, calculators – sub-assemblies of water heat meters, temperature sensor pairs – sub-assemblies for water heat meters, Flow sensors – sub-assemblies for water heat meters.

Services

- Calibration:
 - instruments for measuring gas volume flow and volume flow rate (gas meters and gas flow meters),
 - bell provers,
 - instruments for measuring water volume flow and volume flow rate (water meters and water flow meters),
 - measuring systems for liquids other than water and control meters for propane-butane gas (LPG).
- Expertises of:
 - measuring stands for testing: gas meters, conversion devices for gas meters,
 - measuring stands for testing: water meters; heat meters, calculators – sub-assemblies of water heat meters, temperature sensor pairs – sub-assemblies for water heat meters, flow sensors – sub-assemblies for water heat meters; measuring systems for liquids other than water (including fuel dispensers); components of measuring systems for liquids other than water or complete installations,



Reference bell prover (200 dm³)



Calibration of Coriolis flow meter

Contact to the Laboratory:

phone: +48 22 581 93 06; flow@gum.gov.pl

Contact to Section:

– Gas Flow – phone: +48 22 581 93 19

– Fluid Flow and Heat Measurements – phone: +48 22 581 93 06



Tasks

- Maintenance and development of the national standard of temperature unit and ensuring that it is related to national standards of other countries by participation in international comparisons.
- Maintenance and development of the reference measurement standards of the dew point temperature unit and relative humidity, and ensuring that it is related to national standards of other countries by participation in international comparisons.
- Dissemination of temperature unit, dew point temperature and relative humidity.



Measuring stand of the national standard of temperature unit

Initial testing of a liquid glass thermometer, measuring stand of working standard of temperature range from -80 °C to 550 °C



Services

- Calibration:
 - SPRT thermometers,
 - fixed point cells,
 - type S, R, B thermocouples - fixed points method in Zn, Al, Ag, Au, Cu,
 - liquid-in-glass thermometers at the triple point of water,
 - electronic thermometers,
 - type B thermocouples – wire method at the melting point of Pd,
 - resistance thermometers PRT,
 - standard hygrometers,
 - industrial hygrometers,
 - thermohygrometers, humidity transducers, electronic psychrometers,
 - electronic thermometers (calibration in a climatic chamber),
 - moisture meters for cereal grains and oil seeds.



Measuring stand of relative humidity reference standard from 10 % to 98 % for air temperatures from -40 °C to +95 °C

Contact to the Laboratory:
phone: +48 22 581 94 35; thermometry@gum.gov.pl

Contact to Section:
– Temperature – phone: +48 22 581 94 32
– Humidity – phone: +48 22 581 91 47



Legal metrological control of measuring instruments is carried out by the bodies of administration of measures before placing them on the market /introducing them into use by:

- type approval of measuring instruments,
- initial verification or unit verification, and
- subsequent verification – for measuring instruments in use.

The detailed list of measuring instruments which are subject to legal metrological control is available on the GUM's website in the Certification tab.

Except for the bodies of measures administration, the specific activities in the scope of legal metrological control of measuring instruments are performed by the entities which were granted authorisation by the President of the Central Office of Measures to carry out the initial verification or the subsequent one with regards to measuring instruments of of specific types.



Notified Body 1440

The Central Office of Measures shall conduct conformity assessment procedures for measuring instruments on the authorization of Minister of Development and Finance with regard to MID and NAWID directives.

Non-automatic Weighing Instruments Directive 2014/31/EU (NAWID)

non-automatic weighing instruments – B + D, G modules

The Measuring Instruments Directive 2014/32/EU (MID)

- MI-001 Water meters – B+D modules
- MI-002 Conversion devices for gas meters – B+D modules
- MI-003 Active electricity meters – B+D modules
- MI-004 Heat meters – B+D modules
- MI-005 Measuring installations for liquids other than water – B+D, G modules
- MI-006 automatic weighing instrument – B+D, G modules
- MI-007 Taximeters – B+D modules
- MI-008 Material measures of length – B+D, G modules
- Capacity serving measures – B+D modules

The confirmation that the measuring instrument has been examined and found to comply with the the MID or NAWI directives, is the CE marking and the supplementary metrology marking placed on the instrument and declaration of conformity, e.g.:

CE M 16 1440

An example of conformity marking for a measuring instrument compliant with MID directive

CE M 16 1440

An example of marking conformity for a non-automatic weighing instrument compliant with the NAWID Directive

Detailed information on the scope of notification and appropriate forms are available on the website of GUM in the bookmark of Certification.

Contact:
phone: +48 22 581 92 68; bsm@gum.gov.pl

Contact:
phone: +48 22 581 94 51; certification@gum.gov.pl



Metrological software: measurement instruments and cash registers

In order to meet the challenges resulting from the use of modern IT technology in metrology, GUM deals with testing security of software and metrological data.

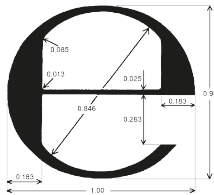
Contact:
phone: +48 22 581 93 93; zmi@gum.gov.pl



Prepackaged goods

GUM participates in the system of supervision over packaging of products in Poland, ensuring uniformity of judgments issued as part of the inspections carried out.

In the field of packaging products there are conducted controls by the Regional Offices of Measures in order to ensure that the purchased goods prepackaged are in line with the producer's declaration of quantity.



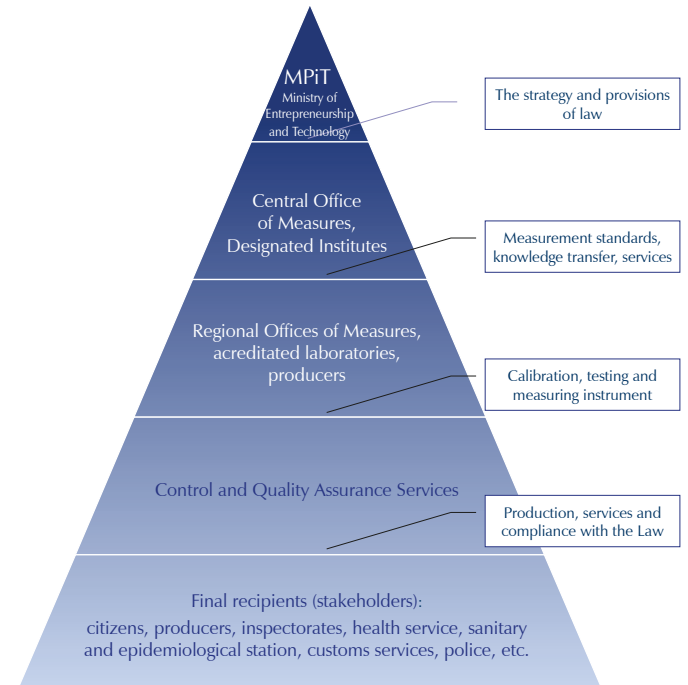
Contact:
phone: +48 22 581 95 04; towpacz@gum.gov.pl

Supervision

President supervises the market of measuring instruments and pre-packaged goods among other through:

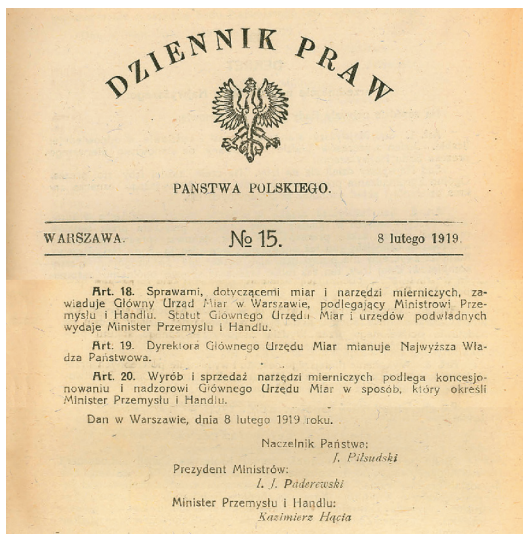
- inspection of measuring instruments currently in use and subject to legal metrological control,
- inspection of entities and entrepreneurs operating under permission or authorisation issued by the President of GUM regarding the fulfilment of conditions needed to perform permissions and authorisations granted,
- keeping the register of identification marks of measuring bottles producers and supervising the compliance with the Prepackaging Act in accordance with the competences of the relevant authority.

Information about results of conducted inspections is on the BIP GUM's website.



Contact:
phone: +48 22 581 91 60; bsm@gum.gov.pl





Decree on Measures establishing Central Office of Measures (GUM)

Central Office of Measures (GUM), as the institution supervising the reliability and uniformity of measures in Poland, began to act on April 1, 1919, upon the Decree on Measures, signed by Józef Piłsudski, the Polish head of state on February 8, 1919.

Contemporary GUM acts upon the Law on Measures and upon the Law on conformity assessment.

GUM is the central office of government administration, competent in matters of measures and hallmarking in the Republic of Poland.

Acting as the National Metrological Institute (NMI), from 1925 (since the date of accession Polish to the Metric Convention), has been carrying out the tasks in the areas of scientific, industrial and legal metrology. It makes possible to ensure uniformity of measures and required accuracy of measurements in Poland by realization and maintenance of the measurement standards and dissemination of measurement units (this regards the SI units and other legal measurement units).

Since 1999 – GUM has become the signatory of the CIPM Mutual Recognition Arrangement (CIPM MRA) – international agreement on international equivalence of measurements.

GUM has been supporting the development of national industry within the scope of responsibilities of different departments. It provides transfer of metrological knowledge to entrepreneurs through technical consultancy, metrological trainings, seminars.

GUM actively cooperates with national research centers in the area of metrology.

GUM plays an active role in the work of international metrological organizations.

Since 2010 it has been taking part in European research programmes in the field of metrology: EMRP – European Metrology Research Program and EMPiR – European Metrology Program for innovation and Research.

GUM operates in compliance with PN-EN ISO/IEC 17025, PN-EN ISO 9001 and PN-EN ISO/IEC 17065 standards.



List of metrological services related to calibrations of measuring instruments, certified reference materials and consultancy services together with the trade offer is available on the GUM's website.



Consultative Metrology Teams (KZM) are advisory bodies of the President of GUM, set up under His decisions.

The Teams are formed by the outstanding national Experts, representing industrial and research centers in Poland.

Consultative Teams were officially established in the field of:

- health and food safety,
- energy,
- technology and industrial processes,
- infrastructure and special applications,
- environment and climate change,
- vehicles with electric drive,
- market regulation,
- hallmarking,
- industrial development of the Świętokrzyskie Voivodeship.

Technical Committees

The Technical Committees are assessing bodies that evaluate the work of laboratories of GUM, set up under the decisions of the President of the Central Office of Measures.

The committees are formed by the foreign and outstanding national experts, representing domains of metrology which are consistent with research and development activity of GUM.

The Technical Committees recommend proposals for improvements implementation to the President to increase the technical competences of laboratories.

Nine Technical Committees were appointed for:

- acoustics and vibrations,
- time and frequency,
- chemistry,
- length,
- electricity and magnetism,
- photometry and radiometry,
- weight
- ionizing radiation,
- flows,
- thermometry.

Świętokrzyski Laboratory Campus of the Central Office of Measures (ŚKLGUM)

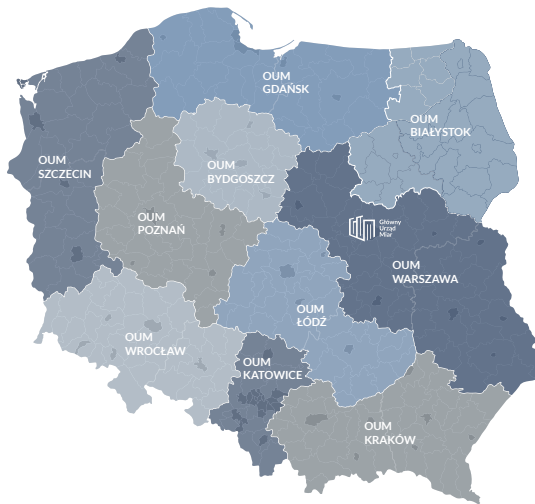
The project conducted under collaboration between GUM and Świętokrzyski University of Technology covers the construction of research and laboratory architecture complex and fitting-out of the buildings included.

The complex of research laboratories will allow to carry out the research and development work in an effective and professional way. Through increasing cooperation between the research-scientific and industry centers it will contribute to the growth of economy.



Creation of the research and measurement space in ŚWIETOKRZYSKI region, carried out in accordance with the assumptions of “Plan for responsible development” strategy adopted by the Council of Ministers on February 16, 2016, will contribute to development of national industry.





Administration of Measures consists of:

- Central Office of Measures (official residence: Warsaw, Elektoralna 2 St, 00-139 Warsaw),
- 10 Regional Offices of Measures (placed in Białystok, Bydgoszcz, Gdańsk, Łódź, Katowice, Kraków, Poznań, Szczecin, Warszawa and Wrocław).

The activities of Regional Offices of Measures include, among others:

- verification, calibration of measuring instruments, expertising,
- participation in testing measuring instruments carried out by GUM for purposes of type approval,
- supervision of the compliance with the Act on Measures and the Act on Prepackaged Goods,
- collaboration with the governmental administration and local government administration in mentioned above scope.



Hallmarking administration bodies in Poland includes:

- President of the Central Office of Measures,
- directors of the Regional Assay Offices (in Warszawa and Kraków).

Directors of the Regional Assay Offices perform their duties through the Regional Assay Offices, together with their branch offices.

Regional Assay Offices activity include:

- assaying the precious metal content in jewellery objects and alloys,
- hallmarking jewellery objects and alloys,
- supervision of the compliance with the Act on Hallmarking,
- collaboration with the governmental administration and local government administration in mentioned above scope.



CENTRAL OFFICE OF MEASURES

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ORGANISATIONAL UNITS OF THE CENTRAL OFFICE OF MEASURES

Bureau of General Director

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bdg@gum.gov.pl; legislacja@gum.gov.pl; finanse@gum.gov.pl

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Time and Frequency Laboratory

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Chemistry Laboratory

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Length Laboratory

tel. +48 22 581 95 43, e-mail: length@gum.gov.pl

Electricity and Magnetism Laboratory

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Photometry and Radiometry Laboratory

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Mass Laboratory

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Ionizing Radiation Laboratory

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Flow Laboratory

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Thermometry Laboratory

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Department of Interdisciplinary Metrology

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Bureau of Strategy

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Bureau of Measurement Service

tel. +48 22 581 92 68, e-mail: bsm@gum.gov.pl

REGIONAL OFFICES OF MEASURES

Regional Office of Measures in Warszawa

ul. Elektoralna 4/6, 00-139 Warszawa
tel. +48 22 581 91 31
e-mail: oum.warszawa@poczta.gum.gov.pl

Regional Office of Measures in Białystok

ul. Kopernika 89, 15-396 Białystok
tel. +48 85 745 53 56
e-mail: oum.bialystok@poczta.gum.gov.pl

Regional Office of Measures in Bydgoszcz

ul. Królowej Jadwigi 25, 85-959 Bydgoszcz
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e-mail: oum.bydgoszcz@poczta.gum.gov.pl

Regional Office of Measures in Gdańsk

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e-mail: oum@oum.gda.pl

Regional Office of Measures in Katowice

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Regional Office of Measures in Kraków

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Regional Office of Measures in Łódź

ul. G. Narutowicza 75, 90-132 Łódź
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e-mail: oum.lodz@poczta.gum.gov.pl

Regional Office of Measures in Poznań

ul. Krakowska 19, 61-893 Poznań
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e-mail: oum.poznan@poczta.gum.gov.pl

Regional Office of Measures in Szczecin

Pl. Lotników 4/5, 70-414 Szczecin
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e-mail: oum.szczecin@poczta.gum.gov.pl

Regional Office of Measures in Wrocław

ul. Młodych Techników 61/63, 53-647 Wrocław
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e-mail: oum.wroclaw@poczta.gum.gov.pl

REGIONAL ASSAY OFFICES

Regional Assay Offices in Warszawa

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tel. +48 22 581 91 43, e-mail: oup.warszawa@poczta.gum.gov.pl

Regional Assay Offices in Kraków

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Bureau of Strategy
Warsaw 2019