CALL FOR TENDER

on the purchase of Laboratory equipment and accessories
(indicate subject of purchase)

by procurement procedure Open Tender
(type of procurement procedure)

1. **Name of Contracting Authority:** *I.P. State University of Moldova*
2. **IDNO:** *1006600064263*
3. **Address:** *mun.Chişinău, Alexei Mateevici str., 60*
4. **Phone/fax:** *022 241 240 240/060060045*
5. **E-mail and internet address of the contracting authority: achizitii@usm.md/ https://usm.md/ https://usm.md/**
6. **E-mail or internet address where access to the tender documentation can be obtained:** *the tender documentation is annexed to the procedure in the* AMPSIS.
7. **Type of contracting authority and main object of activity (where appropriate, indication whether the contracting authority is a central purchasing authority or whether the procurement involves another form of joint procurement):** *public higher education institution*
8. **The purchaser invites interested economic operators, who can meet its needs, to participate in the procurement procedure for the supply/delivery/performance of the following goods/services/works:**

No d/o	CPV Code	Name of goods	Quantity/ Unit of measurement	Purchase description	Estimated value excluding VAT *(per lot)*
Lot 1 Institute of Chemistry Institutional funding (code: 010602)					
1.	38000000-5	Magnetic stirrer with heating	1 pc	Chemical resistant ceramic top plate. Agitation volume up to 3 L. ABS protective housing. Electronic speed control from 100 to 1500 rpm. LED panel to display set temperature and set speed. Heating from ambient temperature up to 250°C. Temperature sensor (±1°C). **Delivery deadline** 15.10.2024 **Warranty** min. 24 months	
				Estimated value lot 1	**7.600,00**
Lot 2 Institute of Chemistry Institutional funding (code: 010603)					
1.	38000000-5	Analytical scales	1 pc	Capacity from 0.02 gr up to 600 gr Division 0.001 gr, Automatic adjustment Stabilization time 2 s, Accuracy class I Documents and certificates: the scale to be approved, metrologically valid for 12 months **Delivery time** 60 days	
2.		Analytical scales	1 pc	Capacity from 0.01. gr up to 220 gr Division 0.0001 gr, Automatic adjustment Stabilization time 2 s, Accuracy class I Documents and certificates: the scale to be approved, metrologically valid for 12 months **Delivery time** 60 days	
				Estimated value lot 2	**24.900,00**
Lot 3 Institute of Institutional Chemistry (code: 010603)					

1.	38000000-5	Portable tester	1 pc	**Portable pH/ORP/Conductivity/Temperature Tester** • pH range - from 0.0 to 14.0; • ORP (oxidation-reduction potential) - from -1000mV to +1000mV; • conductivity - from 0 to 1999 µS/cm; • temperature range - from 0.0 to 60.0°C; • pH resolution - 0.1 pH mV; • oxidation-reduction potential resolution - 1 mV; • conductivity resolution - 1 µS/cm; • temperature resolution - 0.1°C; • pH accuracy ±0.2 pH; • oxidation-reduction potential accuracy ±5 mV; • conductivity accuracy ±2% F.S.; • temperature accuracy ±1°C; • manual calibration of Ph; • mV calibration - 2 points; • annual conductivity calibration - 1 point; • 3 x 1.5V battery life/approx. 200 hours of continuous use; • working environment - 0 to 50°C or equivalent; • dimensions up to 190 x 85 x 85 mm; • weight 400 gr maximum **warranty period** 12 months **delivery within** 30 days.	
				Estimated value lot 3	**6.000,00**
Lot 4 Institute of Institutional Chemistry (code: 010602)					
1.	38000000-5	UV lamp 254 nm	1 pc	UV lamp for thin layer chromatography (TLC), for laboratory application, wavelength 254 nm, 4 W, size: 16.1x2.4x2.4x5.5 cm. Mass ~ 100 g. 4 AA 1.5 v (6 V) batteries. **Warranty** minimum 6 months. **Delivery time** 30 days.	
				Estimated value lot 4	**3.200,00**
Lot 5 Institute of Geology and Seismology 23.70105.7007.087.08T					
1.	38112100-4	Field GPS with sensors	2 pcs	GPS type: field GPS Display diagonal: 2.6"; Display resolution: 160x240 Built-in memory: yes; Built-in memory size: minimum 16 Gb; Card reader: yes Pre-loaded papers: Republic of Moldova, Europe Connection: ANT+; Bluetooth: yes; Battery type: Li-Ion, AA, Ni-MH: Dimensions: 160x36x61 mm; Weight: at least 217 g Accessories: carabiners, USB cable, altimeter, barometer, electronic compass with 3 axes **Warranty period:** minimum 24 months **Delivery time:** 30 days	
				Estimated value lot 5	**15.000,00**
Lot 6 Institute of Geology and Seismology 23.70105.7007.11					

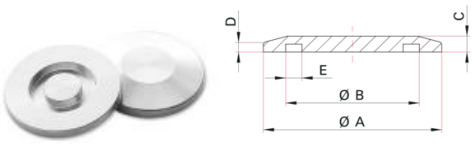
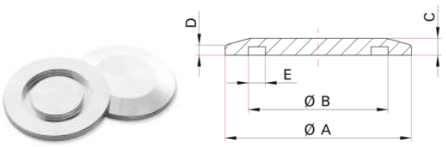
1.	38510000-3	Binocular microscope	1 pc	Laboratory trinocular microscope Increase - from 4 to 50 (inclusive) times Achromatic optics with antifungal coating Bright, AC-powered LED lighting 5.1 megapixel digital camera included, and A 5.1 megapixel digital camera and microscope will be included: Microscope stand with base Immersion oil bottle; Microscope power cord; Dust cover Camera adapter; USB cable for connecting and powering the camcorder; CD with software and drivers **Warranty period**: minimum 24 months **Delivery time:** 30 days	
				Estimated value lot 6	**14.833,33**
Lot 7 State University of Moldova 23.70105.7007.077.07T					
1.	38000000-5	48 liter direct column distiller - complete system	1 pc	Distiller consisting of a distillation vessel with dual function - steam generation and distillation vessel, transfer line and multi-tubular condenser (used for distillation of volatile oils). Distiller volume at least 48 l. Material - food-grade stainless steel. Dimensions of the distilling vessel: diameter 32 cm, height 40 cm. Power supply 220 V. Equipment service 12 months from installation. **Delivery time 60 days** **Warranty minimum 12 months**	
				Estimated value lot 7	**25.000,00**
Lot 8 Department of Industrial and Ecological Chemistry "acad. Gh. Duca", USM					
1.	38510000-3	Trinocular microscope	1 pc	Laboratory trinocular microscope Increase - from 40 to 1000 times 360° rotating nozzle; Achromatic optics with anti-fungal coating; Bright AC-powered LED illumination; 5.1 megapixel digital camera included Microscope comes complete with: microscope stand with base; 360° rotating trinocular head Achromatic objectives: 4x, 10x, 40xs, 100xs (oil) with antifungal coating; Wide field eyepieces: WF10x/18 mm with antifungal coating (2 pcs.) Abbe NA 1.25 condenser with iris diaphragm and filter holder; Filters: blue, green, yellow Bottle of immersion oil; Safety (2 pcs.) Power cable for microscope dust cover; 5.1 megapixel digital camera Camera adapter; USB cable to connect and power the camera; CD with software and drivers User manual **Warranty period** 12 months **Delivery time** 60 days	
				Estimated value lot 8	**25.500,00**
Lot 9 Department of Biology and Ecology, USM					
1.	38000000-5	Technical balance	1 pc	Characteristics: weighing limit from 0,1 to 1000 gr, accuracy 0,01 gr, platen diameter 150 mm Description:The information is displayed on the LCD screen. Power supply via 12V adapter from 220V mains. Libra has the ability to program the following functions: Parts counting; Choosing to work with a printer or a computer; Auto-calculation Units of measurement: gram, carat **Warranty period** - 24 months **Delivery deadline** - October 7, 2024	

				Estimated value lot 9	**14.750,00**
Lot 10 Institute of Plant Genetics, Physiology and Plant Protection (5107) Institutional funding (sub-program 011101)					
1.	38000000-5	Horizontal electrophoresis chamber with current source	1 pc	System for horizontal electrophoresis of superior acrylic or equivalent. The system will contain: 1x horizontal unit, 15x7 cm molding tray, 15x10 cm molding tray, 15x15 cm molding tray, loading guides, barges, combs for 20 samples, 1 mm thick. **Warranty** - 24 months. **Delivery time** - 60 days.	
				Estimated value lot 10	**17.500,00**
Lot 11 Institute of Genetics, Physiology and Plant Protection (5107) Institutional funding					
1.	38000000-5	Laboratory autoclave	1 pc	Capacity 18 L. Self-regulating temperature and sterilization time, audible alarm at the end of the cycle. Possibility of manual adjustment of these parameters. Working temperature 105-127℃. Working pressure 1,42 bar. Timer from 1 to 99 min. Dual slot gauge, dual temperature and pressure scale. Automatic overtemperature and overpressure protection. Water level gauge with anti-scald protection. Minimum water tank capacity 3L. Power supply - 220V / 50Hz. **Warranty** - 24 months. **Delivery time** - 60 days.	
2.		Hot air sterilizer with timer	1 pc	Temperature range - 100 - 300°C; Temperature accuracy ±5°C; Heating time - 25 minutes; Sterilization time 10 - 15 seconds; Inner material stainless steel or equivalent; Power supply - 220 V, 50/60 Hz. **Warranty** - 24 months. **Delivery time** - 60 days.	
3.		Hot air sterilizer	1 pc	Capacity -105L, Consumption-1600W. Electric supply 110V 60Hz (Optional), Internal dimension (L 550, D 348, H 550) mm, External dimension (W*H) mm (850*620*735), Gross weight max 115 kg. **Warranty period** - 12 months from installation. **Delivery time** - 60 days.	
4.		Infrared sterilizer for handles and small laboratory instruments	1 pc	Maximum operating temperature 900℃± 5℃, Maximum standby temperature 650℃± 5℃, Ambient operating temperature -10℃~60℃, Ambient relative humidity 90%, non-condensing. Power consumption ~200w. **Warranty period** - 12 months from installation. **Delivery time** - 60 days.	
				Estimated value lot 11	**63.840,00**
Lot 12 Institute of Genetics, Physiology and Plant Protection (5107) Institutional funding					
1.	38000000-5	Water distiller	2 pcs	Conductivity of distilled water not more than 3 µS/cm. Distillation capacity not less than 4 L/h. Distillation quality - mono. Automatic disconnection in absence of mains water (P=3,0±10% kW, 220V, 50/60 Hz). Thermocouple + tank cleaning indicator. Automatic operation. Housing material - stainless steel or equivalent. Contact material and heating elements - stainless steel or equivalent. pH- 5.0 to 7.0. **Warranty period** - 12 lini from installation. **Delivery time** - 60 days.	
				Estimated value lot 12	**33.660,00**
Lot 13 Institute of Plant Genetics, Physiology and Plant Protection (5107) Institutional funding					

1.	38127000-1	Weather station	1 pc	Temperature, humidity and pressure measurement. Temperature measuring range from 30 °C to +60 °C. Alarm and clock present. Color display, table and wall mount. Power supply type - 2xAAA. **Delivery time** - 60 days.	
2.		Weather station	1 pc	Air temperature and humidity measurement. Temperature measuring range from -30°C to +60°C. Display of date and day of the week. Table mount. Power supply type - 1xAAA. **Delivery time** - 60 days.	
3.		Weather station	1 pc	Measuring air temperature and humidity. Temperature change prediction. Measuring range -40 °C to +70 °C. Alarm system. Clock, date display, day of the week. Table and wall mounting, power supply type - 2xAAAA. **Delivery time** - 60 days.	
4.		Weather station	1 pc	Air temperature and humidity measurement. Measuring range from -40 °C to +70 °C. Display of date and day of the week, presence of clock, table clock. Power supply type 2xAAA. **Delivery time** - 60 days.	
5.		Weather station	1 pc	Measuring air temperature and humidity. Temperature change prediction. Measuring range -40 to +70 °C. Display of date, day of the week, presence of clock, table mount, 4xAAA power supply. **Delivery time** - 60 days.	
				Estimated value lot 13	**4.167,00**
Lot 14 Institute of Plant Genetics, Physiology and Plant Protection (7007) Institutional funding (sub-program 011103)					
1.	38000000-5	Agitator (mixer)	1 pc	Speed range - min. 50 - max.300 rpm Power 30 W. Speed and time display (LED) Operational mode - manual and continuous. Type of movement - circular, oscillating. Variable speed control. Continuous operation as well as self-starter, triggered by pressing the attachment. Include standard attachment for test tubes up to 50 ml. Additional platforms for Erlenmeyer flasks up to 250 ml and Eppendorf test tubes. **Warranty period** - 12 months from installation. **Delivery time** - 60 days.	
				Estimated value lot 14	**6.500,00**
Lot 15 Institute of Plant Genetics, Physiology and Plant Protection					
1.	38000000-5	Laboratory balance	1 pc	Maximum capacity - 1000 g, Reading resolution (d): 0.001 g. Platen dimensions - 100 mm x 100 mm. Platen material - stainless steel. Unit of measurement - grams. Accuracy - 0.01 g. Calibration - internal. Power supply: 220 V/50Hz, LCD display Accessories: protective cover, mains adapter **Warranty period** - 12 months. **Delivery time** - 60 days.	
2.		Weighing, precision	2 pcs	Capacity from 500 mg to 600 g. Accuracy 0.01 g. Internal adjustment (automatic), Stabilization time max 2 s, Tare value (g) 600, LCD operator display, with illumination, Platen dimensions (mm) 128*128. Operating temperature (°C) +15+30. Connection interfaces RS232, USB-A, USB-B, Wireless (Optional), Dimensions (mm) 230x160x68. **Delivery time** - 60 days.	

				Estimated value lot 15	**27.360,00**
Lot 16 Institute of Genetics, Physiology and Plant Protection					
1.	38000000-5	Thermostat bath	1 pc	Total tank capacity - minimum 12 maximum 15 l. Temperature range from +5 to + 99 ºC. Temperature resolution - 0'1 ºC. Temperature stability ±0'5 ºC. Temperature homogeneity ±1 ºC. Digital temperature adjustment. Timer: start and stop - can be programmed in segments (temperature/time). Programmable temperature hold time (unlimited). Steel thermostat tank, stainless steel heating elements, stainless steel heating elements. Equipped with overheating safety device. Heating element protection grid or heating elements under the tank. Power supply: 230V/50Hz, EU standard connection. Graphical display of the actual heating curve (temperature at the moment) and set parameters. **Use with water - priority.** Accessories - 1-2 lids with adjustable sizes (allowing to minimize temperature losses when heating objects of different sizes). Lid covering the whole pot, used during idle time. **Warranty period** - 2 years from installation. **Delivery time** - 60 days.	
				Estimated value lot 16	**20.840,00**
Lot 17 Institute of Plant Genetics, Physiology and Plant Protection 23.70105.5107.04					
1.	38000000-5	Set of glass electrodes for pH meter	1 set	Electrode set for pH meter pH-150m **Electrode 1** Temperature of the analyzed medium: min. 0- max. 100 ºC, Electrical resistance max. 20 kOhm, Potential versus hydrogen electrode at room temperature (min. 198 - max. 204) mV, Temperature potential coefficient 0.25 mV/ºC, Calibration: saturated KCl, Ag +KCl and AgCl +KCl solution, functionality at atmospheric pressure, electrode length min. 130 mm. Special connector, Equivalent to ЭВВЛ-1М4 **Electrod 2** pH measuring range at room temperature: from 0 to max. 14 pH, Isopotential point coordinates: pHi = 4,25 pH, Ei = -25 mV, Electrical resistance from 40 to 50 MOhm, functionality at atmospheric pressure, electrode length min. 130 mm. Special connector, Equivalent to ЭССЛ-45-11. **Delivery time** - 60 days.	
2.		Conductometer	1 pc	The AD3000 is a microprocessor based conductivity, TDS and temperature meter. The automatic EC and TDS range adjustment feature automatically sets the instrument to the highest resolution scale,The AD3000 is supplied complete with AD76309 conductivity probe with built-in temperature sensor and 1m cable, calibration solutions at 1413 µS/cm and 12.88 mS/cm (20 ml sachet each), 12 Vdc power adapter and user manual. **Delivery time** - 60 days.	
3.		pH meter	1 pc	Portable pH and temperature meter. Robust, easy to clean pH electrode with PVDF body and conical tip, automatic temperature compensation, 2-point calibration. **Delivery time** - 60 days.	
				Estimated value lot 17	**19.580,00**
Lot 18 Institute of Plant Genetics, Physiology and Plant Protection 23.70105.5107.04					
1.	00 00 00	Incubator	1 pc	Incubator with SMART control or equivalent. Powder-coated sheet metal housing (gray color with graphite	

				front panel), stainless steel 0H17 (DIN 1.4016) or equivalent interior, solid door, forced air convection, chamber capacity: 150 l, temperature range: +5°C to + 40°C, maximum working load of the unit 30 kg, access port ϕ = 30 mm, test results memory, USB port, door lock, door open alarm, internal LED lighting. **Warranty period** - 2 years from installation. **Delivery time** - 60 days.	
2.		Incubator	1 pc	Incubator with SMART control or equivalent, natural air convection, chamber capacity: 112 l, powder-coated sheet metal housing, stainless steel 0H18 (DIN 1.4301) or equivalent acid-resistant stainless steel interior, double door on the inside - glass and outside - stainless steel. Temperature range from ambient temperature: +5°C to +100°C, temperature protection class: 2.0. Shelves 2, stainless steel wire shelves with runners. Access port: f = 30 mm, USB port. **Warranty period** - 2 years from installation. **Delivery time** - 60 days.	
				Estimated value lot 18	**77.640,00**
Lot 19 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Long working distance objective	1 pc	Microscope objective with infinity correction Magnification: not less than 50X Working distance: not less than 15 mm Numerical aperture N/A: not less than 0,4 FL focal length: not less than 4.00 mm Lens dimensions: length - not more than 90 mm, diameter - not more than 45 mm; Operating humidity: 20 - 80% **Delivery time:** 60 days **Warranty period:** min 12 months	
				Estimated value lot 19	**112.083,33**
Lot 20 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Non-polarizing optical beam splitter	1 pc	Non polarizing optical beam splitter - cube shaped, Dimensions: 15.0 x 15.0 x 15.0 mm3; Reflectance/transmission ratio (R/T): 50/50; Wavelength range: 430 to 800 nm inclusive; Average transmission: 45 ±5 %; **Delivery time:** 60 days **Warranty period:** min 12 months	
2.		Diode-pumped solid-state laser (DPSS) λ=532 nm with Power Supply	1 pc	**Diode-pumped solid-state laser (DPSS) λ=532 nm** Wavelength: 532.00 ±1 nm Output power: not less than 10 mW Transversal module: TEM00 or equivalent Modulation frequency: 0 - 10 kHz Operating voltage: 5 V **Power supply for DPSS Laser** Direct current Voltage : 5 V Current: 2 A **Delivery time:** 60 days **Warranty**: min 12 months	
				Estimated value lot 20	**35.429,17**
Lot 21 Institute of Applied Physics (5007) Sub-program 011201					

1.	38000000-5	Silicon Photodetector	1 pc	Detector: Yes Wavelength (λ): from 400 to 1100 nm; Maximum sensitivity (peak response): no more than 1.5 A/W; Bandwidth: 2 GHz; Signal rise time: less than 150 ps, Dark current: less than 100 pA; Output voltage: max. 2V **Delivery time:** 60 days **Warranty period:** min 12 months	
				Estimated value lot 21	**15.240,83**
Lot 22 Institute of Applied Physics (5007) Sub-program 011201					
1.		Vacuum accessories set		The vacuum accessories set consists of: **Connecting flange**  Dimensions: A - 30 mm, B - 17,2 mm, C - 5 mm, D - 3 mm, E - 0 mm; Material: 304 stainless steel or equivalent; Pressure range: from 10^{-8} mbar to 1 bar; Temperature range: from -196 °C to 300 °C; **Connecting flange**  Dimensions: A - 40 mm, B - 26,2 mm, C - 5 mm, D - 3 mm, E - 3,5 mm; Material: stainless steel 304 or equivalent; Pressure range: from 10^{-8} mbar to 1 bar; Temperature range: -196 °C to 300 °C; **Quick clip - nut locking**  Length: 62.7 mm; Width: 41.4 mm; Inner diameter: 32.6 mm; Material: nickel-plated aluminum or equivalent; **Quick clip - nut locking**  Length: 72 mm, Width: 53.1 mm, Inner diameter: 42 mm; Material: nickel-plated aluminum or equivalent; **Centering ring**  Outer diameter: 17 mm; Inner diameter: 16 mm; Diameter of the cross section of the ring: 5 mm; Ring material: rubber; Circumferential clamp material: stainless steel;	

	38000000-5		1 set	**Centering ring**  Outer diameter: 26 mm; Inner diameter: 25 mm; Cross-section diameter of the ring: 5 mm; Ring material: rubber; Circumferential clamp material: stainless steel; **Straight reducer**  Connecting flange diameter: 40 mm; Reduced nominal diameter: 30 mm; Length: 40 mm; Inner diameter: 16 mm; Material: 304 stainless steel; **Inverted magnetron pressure gauge** Measuring range (air, nitrogen): from 5×10^{-9} . up to 1000 mbar; Output impedance: 2×10 Ω; Response time (depending on pressure): $p > 10^{-6}$ mbar, <10 ms; $p = 10^{-8}$ mbar, ≈1000 ms; Supply voltage: from 15.0 to 30.0 V DC; Power consumption: ≤2 W; Vacuum flange diameter: 40 mm; Electrical connection: FCC68 - mama, 8-pole; Cable: 8 conductors plus shielding; Line length: ≤50 m; Vacuum connection material: stainless steel; Measuring chamber: stainless steel; Anode material: molybdenum; Measuring tube material: nickel, gold; Filament material: tungsten; Internal volume: up to 20 cm^3; Operating temperature: +5 to +55 °C; Filament operating temperature: up to 120 °C; Storage temperature: -40 °C to +65 °C; Protection category: IP 40; **Vacuum gauge controller** Voltage: 100 to 240 V (AC); Frequency: 50 to 60 Hz; Power consumption: ≤45 W; Surge category: II; Protection class: 1; Connection: IEC320C14 or equivalent; Operating temperature: +5 to +50 °C; Number of channels: 1; Compatibility: cold cathode/Pirani MPG400, MPG401, MPG500, MPG504; Analog measurement rate: ≥100/s; Display rate: ≥10/s; Units of measurement: mBar, hPa, Torr, Pa, Pa, Micron, V; Calibration factor: 0.10 to 10.00; Switching functions: 2; Response delay: ≤10 ms; Analog outputs: 1; Recording output: 1; Interface: USB type A, USB type B and Ethernet; **Ethernet cable**  Рисунок Number of pins: 8; Interface type: RJ45 tata-tata; Bandwidth: 2000Mhz; Transmission rate: ≥40 Gbps; Transmission distance: ≥40 Gbps over a 30 m radius; Cable material: OFC copper, 26AWG construction; Cable outer diameter: 7.0 mm; Cable length: ≥3 m; (*For the assembly of the vacuum plant used for vacuuming ingot vials and crystal growth*) **Delivery time:** 60 days	

				Estimated value lot 22	**65.000,00**
Lot 23 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Micrometer	1 pc	Division value: 0.01 mm; Lower limit: 0 mm; Upper limit: 25 mm; Metrology certificate issued in the RM; **Delivery time:** 60 days	
				Estimated value lot 23	**1958,33**
Lot 24 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Decrimper	1 pc	Sealing diameter: 20 mm; Material: steel; Device type: manual; Destination: for caps made of aluminum; (For opening vials used to store samples of semiconductor compounds) **Delivery time:** 60 days	
				Estimated value lot 24	**6.666,67**
Lot 25 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Laser diode power supply and temperature controller	1 pc	Laser diode: Ø5.6 mm and Ø9 mm; Supported Pin Configurations: A, B, C, D, D, E, G and H; (requires some modification for style G); Laser Polarity Selection: Internal Slide Switches; Laser Diode Current (Max): 200 mA; Laser Diode Compliance Voltage: 7.5 V; Modulation Frequency: DC to 200 kHz; RF Modulation Frequency: 200 kHz to 1 GHz; Maximum RF Power: 250 mW, RMS; RF Input Impedance: 50 Ω; Maximum TEC Current: 1 A; TEC Heating/Cooling Capability: 0.5 W (Tambient = 25 °C, TLD = 20 °C); Power Supply Power: minimum 12 W; **Delivery time:** 90 days **Warranty period:** 12 months	
2.		Multi-order quarter wave plate	1 pc	Material: quartz; Wavelength (λ): 532 nm; Diameter Ø1/2" (The *plate will be used for converting linear polarizations into different types of polarizations during microscopic investigations of biological objects*) **Delivery time:** 90 days	
3.		Support for rotating optical elements	1 pc	Coarse rotation: 360°, lockable 2° graduation, labeled every 20°; Adjustment: ±7°; Vernier scale: 5 arcminute resolution; For optical elements with diameter: Ø1" (Ø25.4 mm) or Ø25.0 mm; Mounting hole threaded 8-32 (M4) or equivalent; (The *plate will be used for converting linear polarizations into different types of polarizations during microscopic investigations of biological objects*) **Delivery time:** 90 days	
4.		Rotation bracket	1 pc	For Ø1" through 0.50" (12.7 mm) diameter optics; For Round Cylindrical Lenses; Rotating Optical Alignment in a Lens Tube System; Post Mountable through 8-32 (M4) Threaded Hole or equivalent; Features SM1 Quick Release Adapter on Back of Mount; (The *plate will be used for converting linear polarizations into different types of polarizations during microscopic investigations of biological objects*) **Delivery time:** 90 days	

5.		360° continuously rotating bracket	1 pc	For Ø1" through 0.50" (12.7 mm) diameter optics; Scale can be rotated independently of mounted optics for alignment; Discrete rotation in 22.5° increments; 5 arcminute Vernier scale, compatible with polarizing optics; Retaining ring: included; Post mountable with 8-32 (M4) thread or equivalent; (*To be used for mounting tiles as per point 3 with a precise rotation of 22.5 degrees*) **Delivery time:** 90 days	
				Estimated value lot 25	**42.775,00**
Lot 26 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	405 nm collimated beam laser diode module	2 pcs	Wavelength: 400-410 nm; Power: 4-5 mW; Beam profile: elliptical 3.8 mm X 1.8 mm; Current: 30-60 mA, Beam divergence: 0.8 mrad, Power stability: 2% in 8 hours, Operating temperature: -10 - 40 °C, **Delivery time:** 90 days **Warranty period:** min 12 months	
2.		635 nm collimated beam laser diode module	2 pcs	Wavelength: 635-640 nm; Power: 4-5 mW; Beam profile: elliptical 1.0 mm x 4.5 mm; Current: 48-70 mA, Beam spread: 1.5 mrad, Power stability: 2% in 8 hours, Operating temperature: -10 - 50 °C, **Delivery time:** 90 days **Warranty period:** min 12 months	
3.		637 nm laser diode with SM fiber optic pigtail	1 pc	Wavelength: 632-637 nm, Operating temperature: -10 - +50 °C, Power: 70 mW, Current: 220-300 mA, Power stability: 2% in 8 hours, Pigtail: SM Pin code: G, Connector: FC/PC **Delivery time:** 90 days **Warranty period:** min 12 months	
4.		Coherent laser diode module 640nm/35mW	1 pc	Wavelength: 640 nm, Working temperature: -10 - +50 °C, Power: 35 mW; Current: max 200 mA, Power stability: 2% in 8 hours, Fashion: TEM00; Fashion quality, M2: <1.5; **Delivery time:** 90 days **Warranty period:** min 12 months	
5.		Controller with power supply for 640nm/35mW laser module	1 pc	Maximum laser power: 35 mW; Maximum current: 200 mA, Power stability: 2% in 8 hours, Laser controller with locking key and power supply for laser diode module **Delivery time:** 90 days **Warranty period:** min 12 months	
				Estimated value lot 26	**57.800,00**
Lot 27 Institute of Applied Physics (5007) Sub-program 011201					
1.	38000000-5	Ultrasonic bath and heating system	1 pc	volume = 3-5 Liters, power³ 100W, voltage = 220V, t_{max} =60º C. For sample cleaning **Delivery time:** 60 days **Warranty period:** min 12 months	
				Estimated value lot 27	**3.458,33**
Lot 28 Institute of Applied Physics (5007) Sub-program 011203					

1.	38000000-5	pH meter	1 pc	Laboratory pH meter stationary type Measurement: pH/mV/ °C /om Measurement domains: pH: -2.00 ... +16.00 mV: -1999 ... +1999 Temperature : -50.0 ... +150.0 °C Alphanumeric, LED display with at least 12 segments Pictograms informing about electrode and measuring equipment status Measuring cycle : between 1.5- 2.0 /sec Be accurate: pH: <0.01 mV: <0.1% ±0.3 mV Temperature : <0.3 K Temperature coefficient <0.1 number/K Input : type DIN 19262 Automatic calibration and buffer solution recognition Electrode monitoring: evaluation of zero, slope, response time and electrode glass impedance, electrode status displayed as good / average / poor Device self-test: displaying criteria and electrode data, testing the meter including memory, processing the measured value and recorder output, checking the display and Keyboard during diagnostics, automatic short power-on self check Temperature compensation: Pt 1000, automatic and manual selection in the range 0,0 ... +100,0 °C Automatic matching to measured value setting Automatic storage of calibration data and settings, standalone Data retention > 10 years Recorder output*} galvanically isolated mV: 1 mV/mV / pH: 100 mV/pH / ºC: 10 mV/ºC Protection against voltage surges Operating temperature 0 ... +40 °C Power supply 230 V /50 Hz Enclosure: resistant to corrosive substances, made of polyamide and stainless steel, protection at least IP 54 The delivery set shall include glass combination electrode with a length of at least 16 cm with pH measurement: - in the range 2.00 ... +14.00 and temperature in the range -5 ... +100 °C **Delivery time:** 90 days **Warranty period:** min 12 months	
				Estimated value lot 28	**30.724,00**
Lot 29 Institute of Applied Physics (5007) Sub-program 011203					
1.	38000000-5	Digital multimeter	1 pc	6 1/2 digit resolution DC voltage measurement ranges: 0.1V, 1V, 10V, 100V, 1000V AC voltage measurement ranges: 0.1V, 1V, 10V, 100V, 750V DC voltage base accuracy not greater than 0.0038% in the 10V range 50 measurements per second at 6 1/2 digits resolution Interface: USB Power supply 220-230 V /50 Hz Warranty min. 1 year Delivery time: 4 months. (For precise temperature control in tubes pulsating thermal) **Delivery time:** 90 days **Warranty period:** min 12 months	

				Estimated value lot 29	**40.800,00**
Lot 30 Institute of Applied Physics (5007), Laboratory of Electrophysical and Electrochemical Methods of Materials Processing "Boris Lazarenko" Subprogram 011204					
1.	38000000-5	Spectrometer accessories	1 set	Accessories for FLAME UV VIS spectrometer held for fluorescence measurement 1. Mirror screw, 1 cm (diameter), round 2. Fanta interchangeable 200 um 3. Optical fiber 0.3mm, wavelength range 300-1100nm, fiber diameter 600 μm, length 25cm, SMA 905 connectors, 2 pcs. 4. Variable optical filter, 250-500 nm. High-resolution filter and low-pass UV low-pass filter, bonded together to create an adjustable broadband linear variable filter 5. Adapter for mounting the optical filter on the cuvette holder, compatible with single and dual filters. Includes a cover to block ambient light and can accommodate both single and dual filter slide holders. 6. Teflon cuvette for filter adjustment, made of Teflon in the shape of a 1 cm cuvette, with a surface below the 45° angle at measuring height. Used in a fluorescent cuvette holder configuration with filters to redirect excitation energy into the spectrometer. 7. Cover for cuvette cover. Dimensions (D x W x V): 1.4 x 1.4 x 1.0", Material: Black Anodized Aluminum, Hole diameter for attachment to source: 0.375" Collimator: quartz lens (200-1100 nm), diameter 5 mm, f/2 **Delivery time:** 90 days	
2.		Xenon source	1 pc	Pulsed xenon source for fluorescence Wavelength range: 220 nm - 750 nm (inclusive) Pulse power: 45 μJ/pulse (maximum) Average power: 9.9 W Frequency: 220 Hz (maximum) Pulse time: 5 μs Mode : Multiple mode: up to 220 Hz Single mode: 1 - 220 Hz Lamp lifetime: at least 109 pulses (estimated 230 days continuous operation, pulse frequency 50 Hz) Release/shutter input signal: TTL; 1-220 Hz Release/shutter connection: SUB-D-15 pin Power consumption: 1.3 A @ 11V @ 220 Hz 100 mA @ 12V @ 10Hz **Delivery time:** 90 days	
				Estimated value lot 30	**48.333,33**
Lot 31 Institute of Applied Physics (5007) Sub-program 011210					
1.	38000000-5	Multimeter	5 pcs	Type: Digital multimeter, Current (A) 0,1μ...200μ/20μ/20μ/20m/200m/2A/20A/20A, Voltage (V) 0,1m...200m/2V/20V/20V/200V/1000V, Frequency from 40 to 200 Hz, Type AC/DC, Battery 6F22 9V or equivalent **Delivery time:** 90 days **Warranty period:** min 12 months	
2.		Multimeter	2 pcs	TFT color graphic display, Bluetooth interface, Number of displays: 50.000 counts, Voltage: 1000V AC/DC, Current: 10A AC/DC, Resistance: 50 MΩ, Frequency: 10 MHz, Capacitance: 10 mF, Protection rating: IP67 **Delivery time:** 90 days **Warranty period:** min 12 months	

				Estimated value lot 31	**12.500,00**
Lot 32 Institute of Applied Physics (5007) Institutional					
1.	38000000-5	Back-printed electron detector	1 pc	Back-scattered electron (BSE) detector designed for imaging the composition and topography of the surface under study by detecting sample back-scattered electrons. Combinable with the Tescan Vega generation 4 Scanning Electron Microscope (SEM). Solid-state, motorized, retractable, 4 quadrant, solid-state, back-pressured electron detector, symmetrically positioned below the pole piece. The signal from each of the dials can be isolated or combined for optimized acquisition of compositional contrast or topographic contrast. COLOR mode acquires the image in the HSV (hue, saturation, value) color model, with a color assigned to each quadrant. Detector resolution: 3.5 nm or better at 30kV. The operation of the detector will be done from the microscope software and it will be possible to obtain in the SEM software images with the existing SE detector and the BSE detector at the same time (simultaneously). Possibility of simultaneous characterization of material contrast and complementary topography with the back-scattered electron detector. The offer will include: -delivery to the installation site and installation of the product on site (Institute of Applied Physics, 5 Academiei str., Chisinau, Moldova). -training for operators at the beneficiary's location. (Improvement of the Tescan Vega electron microscope for compositional and topographic imaging of the studied surface by detection of back-scattered electrons on the sample) **Delivery period:** until 31.12.2024 **Warranty period:** min 12 months	
				Estimated value lot 32	**400.000,00**
Lot 33 Institute of Applied Physics 23.70105.5007.14T					
1.	38000000-5	Methane gas detector	1 pc	Sensor type: semiconductor; Gas detected: natural gas (LNG), propane-butane (LPG); Working temperature: from 0 °C to 40 °C; External dimensions: 85x110x32mm; Sound level: 85 dB; Operating mode: LED; Protection class: IP20; **Delivery time:** 60 days **Warranty period:** min 12 months	
2.		Digital multimeter	1 pc	Display: LCD; Digits display: (3999); DC voltage measuring range: 0.1 to 400mV/ 4V/ 40V/ 400V/ 1kV; AC voltage measuring range: 0.1 to 400mV/ 4V/ 40V/ 400V/ 750V; DC current measuring range: 1 to 400µA/ 4mA/ 4mA/ 40mA/ 400mA/ 4A/ 10A; AC current measuring range: 400µA/ 4mA/ 40mA/ 400mA/ 4mA/ 4A/ 10A; Resistance measuring range: 100mOhm to 400Ohm/ 4kOhm/ 40kOhm/ 400kOhm/ 4MOhm/ 4MOhm; Capacitance measuring range: from 10pF to 40nF/ 400nF/ 4uF/ 40uF/ 200uF; Frequency measuring range: from 10MHz to 10Hz/ 100Hz/ 1kHz/ 10kHz/ 100kHz/ 1MHz/ 30MHz; Temperature measuring range: -20 to 1000 °C; Diode test: 1mA; Circuit check: audible signal; Weight with battery: 350 g; Output connector type: USB A; Dimensions (W x H x D): 93x191x48 mm; Software: included; **Delivery time:** 60 days;	

				Warranty period: min 12 months	
3.		Tubular oven	1 pc	Volume: not less than 0.39 L; Maximum temperature: 1250 °C; Continuous operating temperature: 1250 °C; Power: 3.7 W; Nominal supply voltage: 230 V; Number of phases: 1; Nominal frequency: 50/60 Hz; Chamber material: ceramic; Maximum heating time: not more than 50 min; Temperature uniformity: 10°C; Airflow: natural; Chamber depth: not less than 200 mm; Chamber diameter: not less than 50 mm; Total width: not less than 675 mm; Total depth: not less than 545 mm; Total height: not less than 565 mm; Mass: not more than 38 kg; **Delivery time:** 60 days; **Warranty period:** min 12 months	
				Estimated value lot 33	**72.150,00**
Lot 34 Institute of Applied Physics 23.70105.5007.15T					
1.	38000000-5	Electric muffle oven with high operating temperature.	1 pc	Electric muffle furnace with high operating temperature for synthesizing advanced functional materials. • Operating temperature: up to 1300 C° • Internal workspace volume: min 9 L • Efficiency of maintaining stable temperature in the workspace: up to 5 C° • Measurement accuracy: up to 1 °C, lowest possible rate 1 °C/h • Heating time: max 60 min up to 1200 C° • Internal protection against overheating with automatic shut-off when the set target temperature is exceeded by 30 °C for up to 3 minutes • Connected load: from 3.0 to 3.5 kW • Electrical connection: 1-phase, 220 - 240 V, 50 - 60 Hz • High-quality structured stainless steel casing with air outlet from the rear wall of the furnace • Heating element switching via electronic relay • Lift door with hot surface facing towards the operator • Heating elements on tube support • Multi-layer insulation • Type S thermocouple • Temperature controllers of PID or equivalent type with the possibility to enter parameters in freely selectable temperature steps • Transparent graphical display of temperature curves • Password lock controller to protect against operating errors • Warranty: min. 1 year. **Delivery time:** 90 days; **Warranty period:** min 12 months	
				Estimated value lot 34	**138.333,33**
Lot 35 Institute of Applied Physics 23.80013.5007.2TR					
1.	38000000-5	Multimeter for precise measurements of electrical current parameters (DC and AC)	1 pc	DC voltage from 0.1μV to 1000V; error, not greater than ± 0.0075 V; AC voltage: from 0.1 μV to 750V; error, not greater than ±0.09 V; DC current : from 100 pA to 3A; error not greater than ± 0.05 A; AC current : from 100 pA to 3A; error not greater than ± 0.33 A; Resistance: 100 μΩ to 100 MΩ; error not greater than ± 0.014 Ω; Electrical capacitance: from 0.01 nF to 100 μF; error, not greater than ± 2nF Frequency: range from 3Hz to 1MHz; error not greater than ± 0.1 Hz; Display: no smaller than 50 mm (2"), color or black and white (monochrome) Power supply: 220V; 50 Hz	

				Interface: RS232C or equivalent, USB, PC connection via LAN (*For precise temperature control in MoS2 and WSe2 single crystal growth technology furnaces*) **Delivery time:** 90 days; **Warranty period:** min 12 months	
2.		Laboratory centrifuge	1 pc	Rotational speed range: from 100 ÷ 16000 rpm (in steps of 500 or 1000 rpm), Maximum relative centrifugal field (RCF): 23669xg, Rotor type: 10ml x 12; 15ml x 8; 50ml x 6 with possibility of being changed, Maximum capacity: 50 ml x 6, Timer: I stage not less than 24 hours, Display: LED or LCD, Power supply: 220V /50Hz; (*For dimensional separation of MoS2 and WSe2 nanofiber fractions*). **Delivery time:** 90 days; **Warranty period:** min 12 months	
				Estimated value lot 35	**46.166,67**
Lot 36 Institute of Applied Physics 24.80013.5007.3TR					
1.	38000000-5	Polarization camera with CMOS sensor	1 set	Sensor type: CMOS, 5 MP, monochrome with wire grid polarization matrix. Effective pixels (horizontal x vertical): 2448 x 2048 Image area (horizontal x vertical): 8.4456 mm x 7.0656 mm Pixel size: 3.45 µm x 3.45 µm Optical format: 2/3" (11 mm diagonal), frame rate max 35fms, (Full sensor) USB 3.0 interface or equivalent, For measurements on the Digital Holographic Microscope (MHD). The set will also contain the following accessories: **Half-wave achromatic plate** (1 pc.) wavelengths from 400 to 800 nm (inclusive) Average reflectance <0.5% The material from which the board must be made Crystalline quartz and magnesium fluoride Thickness - 1.07 mm Metric Thread , Ø1" **Achromatic depolarizer** (1 pc.) Liquid crystals on glass N-BK7 or equivalent Wavelength range: 350 - 700 nm, Anti-reflection (AR) coating reflectivity: R<0.5% over the wavelength range, Diameter: 1" (25.4 mm) Thickness: 3.2 mm (0.13"), 5 W/cm (532 nm, CW, Ø0.004 mm), **30 mm optical system cover** (4 pcs.) Protective layer, Length 24" Width - 30 mm **Optical beam splitter 30:70** (1 pc.) Substrate: soda-lime glass (silicate glass) Diameter: 1" (25.4 mm) Thickness (Nominal): 1 mm Divisor ratio: 30:70 Divisor ratio tolerance for 450 - 650 nm (AOI = 45°) Reflectance: 30% ± 10% ,Transmittance: 70% ±10% **Post Adaptor** (to Ø1/2") (1 pc.) Metric thread Ø1/2" diameter, 20 mm separation between center of post and back of plate. 4 holes in the corners Fixing of the optical elements of the retarder blade type in the optical scheme of the MHD **Delivery time:** 90 days; **Warranty period:** min 12 months	

				Estimated value lot 36	**108.666,67**
Lot 37Institute of Applied Physics NATO Project					
1.	38 00 00 00-5	Equipment for physical measurements at low temperatures	1 set	General requirements 1. The machine dealer must have a sales and service authorization from the manufacturer. 2. The equipment shall be made by a single manufacturer and shall be a set of components, the set being dedicated to low temperature physical measurements (e.g. photoluminescent, optical and electrical measurements over a wide temperature range (4,5-350K)). 3. The equipment must allow the cryostat to be positioned at an arbitrary angle to the compressor, the latter being connected by suitable hoses 4. The equipment and its components must be new (rebuilt or refurbished equipment or components will not be accepted) 5. Warranty terms -min 24 months **Technical specifications required** Machine - general requirements: - The machine must be a complete kit, produced by a reliable manufacturer 1. **Closed cycle cryostat (for sample placement)** *Quantity - 1 unit.* Crystat spatial orientation - possibility to work in any spatial orientation • The cryostat must ensure (by changing the internal set-up) that the following (minimum) measurements are performed: • Measuring optical properties • Photoluminescence measurement • Other measurements in addition to those mentioned - allowed Minimum temperature in the Cryocooler: **4.5K** (lower values are allowed) **Note:** Sample temperature depends on thermal load Maximum temperature in the Cryocooler: **355 K** (higher values are allowed) Expander mass: maximum **7.5 kg** Two-stage heater for optimal operation at different temperatures - **yes** Cryostat cooling power (50 Hz): • Step 1 (for fast cooling): minimum **8 W** at **77 K** • Step 2 (for experimental thermal load): minimum **0.08 W** at **4.5K** Cryostat material - stainless steel (inox) with components included: • Available ports (flanges) for external connections: **3** • External vacuum port (standard NW-25): **1** **Note:** External port for vacuum: Connection to low pressure (vacuum) - **yes** (pumping up to 10^{-7} mm Hg possible) • Double liner seals for rotation under vacuum: **yes** **2. Helium closed cycle compressor** *Quantity - 1 unit.* **Note:** Compressor cooling - with water Mains supply: 230 V, single-phase, 50 Hz Maintenance cycle: minimum 12000 hours (higher values are allowed) **3. Hoses for the interconnection of the cryostat with the compressor** (Helium supply): *Quantity - 1 set of* two hoses (minimum 3m each) **4. Optical head (housing) intended for use in vacuum conditions at low temperatures** *Quantity - 1 set* **Note:** Made of stainless steel Ports available for window placement: **5 Note:** at 90° from each other; Field of view through port minimum 30 mm (/F 0.8) **5. Thermal shield for optical measurements**: **yes** (it is part of the cryostat) *Quantity - 1 set* **Note:** The heat shield must have 4 holes positioned at 90° from each	

				other Heat shield material: **Cu (OFHC type) coated with Ni** **6. Optical windows**: high purity Quartz (SiO_2) material (it is the component of the cryostat) *Quantity - 3 units.* Maximum diameter 45 mm; Minimum 30 mm field of view through the window; Window thickness: minimum 2 mm **7. Temperature control system** *Quantity - 1 unit.* (is the cryostat component) includes the following components: 10-pin hermetized connector - *Quantity - 1 unit.* Resistive Heater > 30 W - *Quantity - 1 unit.* Temperature sensor 1: (calibrated Si diode) with minimum 100 mm long connection wires for sample temperature measurement (±0.5K) *Quantity - 1 unit.* **Note:** Installed on coldfinger Temperature sensor 2: (calibrated Si diode) with minimum 10 cm connecting wires for positioning on the sample whose temperature is being measured (±12 mK) *Quantity - 1 unit.* **8. 10-pin connector for external connections** *Quantity - 1 unit.* (is component of the cryostat*)* **9. Integrated temperature controller with cryostat** *Quantity - 1 unit.* (is component of the cryostat): Cables for interconnection to cryostat - **yes** Two-channel inputs for sensor connection - **yes** Cryostat heater or heaters (75 W) - **yes** IEEE-488 and USB - **yes** PID auto-tuning control - **yes** Installation Set and Technical Manuals - **yes** **10. Electrical cables for cryostat interconnections** *Quantity - 1 set* **11. Box for transportation** *Quantity - minimum 1 unit.* - **yes** **Delivery terms** from the date of signature of the purchase contract**:** until 31.12.2024, delivery type DDP **Warranty period:** 24 months or more	
				Estimated value lot 37	**848.000,00**
Lot 38 Institute of Applied Physics (5007) Sub-program 011204					
1.	38000000-5	3D printer	1 pc	Type: FDM 3D printer (FFF). Features: fully enclosed building space, air filtration, 1080p camera, automatic leveling. Build space: 200x200x200mm. Display: touchscreen, full color LCD. Connections (file-transfer): LAN, USB, Wi-Fi, Cloud. Drive mode: direct extrusion. Minimum layer resolution: 0,1mm. Filament compatibility: ABS, PLA, PLA, ASA, PETG, PLA-CF, CR-Silk. Filament diameter: 1,75mm. Nozzle diameter: 0,4mm. Operating temperature: 230~250°C. **Note**: Equipment delivered will be new, not refurbished. **Delivery time:** 60 days; **Warranty:** min. 24 months.	
				Estimated value lot 38	**14.000,00**
Lot 39 Institute of Applied Physics (5007) Sub-program 011204					
1.	38000000-5	Platinum electrode	1 pc	**Type:** platinum electrode for use as a counter electrode in electrochemical measurements. **Features: it** features a thin sheet of platinum (surface area ~1 cm^2) embedded in a glass tube. **Working temperature**: 20-70°C. **Compatibility:** with Autolab PGSTAT 302N potentiostat (Metrohm). **Note**: Equipment delivered will be new, not refurbished. **Delivery time:** 60 days; **Warranty:** min. 6 Months	

2.		Ag/AgCl reference electrode	1 pc	**Features:** silver/silver chloride (Ag/AgCl) reference electrode with reference electrolyte, c(KCl) = 3 mol/L and ceramic diaphragm. Suitable for aqueous applications, it has the standard SGJ 14/15 slip ring for easy assembly. **Working temperature**: 0-80°C. **Relative electrical resistance**: < 3 kOhm, for 3M KCl **Dimensional parameters:** upper diameter 11-12 mm, lower diameter 4-5 mm, maximum installation length 125 mm. **Compatibility:** with Autolab PGSTAT 302N potentiostat (Metrohm, type B head). **Note**: Equipment delivered will be new, not refurbished. **Delivery time:** 60 days; **Warranty:** min. 6 Months	
3.		pH combination electrode	1 pc	**Features**: glass electrode for pH measurement of aqueous solutions, combined type (with Ag/AgCl reference electrode), made of glass, with ceramic junction and BNC connector (to be supplied with a connecting cable). **Operating parameters:** pH 0-12 or 0-14 (at 25°C), reference electrolyte 3 mol/l KCl, **Working temperature**: max. 80°C. **Dimensional parameters:** diameter 11-12 mm, length 110-120 mm. **Compatibility:** with Labbox PHEL-GB1-001. **Note**: Equipment delivered will be new, not refurbished. **Delivery time:** 60 days; **Warranty:** min. 6 Months	
				Estimated value lot 39	**26.833,33**
Lot 40 Institute of Applied Physics International Project H2020-MSCA-RISE-2017-777968					
1.	38000000-5	Peristaltic pump	1 pc	Micro-flow peristaltic pump with pumping head for high-precision liquid for ultrasonic sputter coating plant; Flow range: 0.006 to 41.00 mL/min/channel; Flow accuracy: max ±1% ; Rotational speed (rpm) range: 1 to 100 rpm; Rotational speed resolution: max.0.1 rpm; Motor type: variable speed stepper; 15-level switch or control signal external ; Switch on/off switching interval, It pumps in two directions; Communication interface: RS232/RS485; Power supply: 220V AC, 50 Hz **Delivery time:** 30 days **Warranty period:** min 12 months	
2.		Pneumatic sprayer	1 pc	Pneumatic sprayer Material: glass; Flow rate: from 0 to 4 ml/s; Particle size in solution up to 75 μm; Connection system for sprayer: connector gas with sprayer adapter; Solution delivery system to the sprayer: connector with delivery tube Outer diameter 1.3 mm, inner diameter 0.75 mm. **Delivery time:** 30 days **Warranty period:** min 12 months	
				Estimated value lot 40	**23.700,00**
Lot 41 Institute of Applied Physics International Project H2020-MSCA-RISE-2017-777968					

1.	38000000-5	SMU device (high precision current source combined with multimeter)	1 pc	AC supply voltage: 210~260V AC input frequency: 50/60Hz DC output voltage: ±100 nV to ±200 V, DC output current: ±10 pA to ±1 A Resolution: not less than 6½ digits Operation as source and load: four quadrants Device input/output: banana or triax connector; Combination of devices: voltage source, current source, 6 ½ digit digital multimeter (DCV, DCI, Ohm). Measurement modes: two-wire and four-wire Resolution: up to 100 fA/100 nV, Sampling rate: up to 30 us. Measurement features: resistance, power and built-in math Ports: Front USB used for data storage, screen capture or import test setup Built-in USB/digital IO Programming modes: SCPI and scripts Drivers for LabVIEW and IVI **Delivery time:** 90 days **Warranty period:** min 12 months	
				Estimated value lot 41	**300.000,00**
				TOTAL	**2.858.489,32**

9. If the contract is divided into lots, one economic operator may submit a tender (to be selected):

1) For one batch;
2) <u>For several batches;</u>
3) For all batches;
4) Other limitations on the number of lots that can be awarded to the same tenderer

10. Admission or rejection of alternative offers: *<u>not admissible</u>*

(indicate whether admitted or not)

11. Delivery terms and conditions on request:

- *Lot 1 - until 15.10.2024 from the signature of the contract*
- *Lot 9 - until 07.10.2024 from the signature of the contract*
- *Lot 32, 37 - until 31.12.2024 from the signature of the contract*
- *Lots 3, 4, 5, 6, 40 - within 30 days of signing the contract*
- *Lots 2, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 33, 38, 39 - within 60 days of signing the contract*
- *Lots 25, 26, 28, 29, 30, 31, 34, 35, 36, 41 - within 90 days of signing the contract*

12. Contract validity: *31.12.2024*

13. Procurement contract reserved for sheltered workshops or that it can only be carried out in the framework of sheltered employment programs (if applicable): *<u>no</u>*

(indicate yes or no)

14. The provision of the service is reserved to a specific profession by virtue of legal or administrative acts (as applicable): *<u>no</u>*

(indicate the respective laws and administrative acts)

15. Brief description of the criteria for the eligibility of economic operators which may lead to their elimination and the selection criteria; the minimum level(s) of the requirement(s) eventually imposed; the information required (DUAE, documentation):

No d/o	Description of the criterion/criterion	How to demonstrate that the criterion/criterion is met:	Minimum level/ Mandatory
1	Participation request	Completed in accordance with Annex 7 of the	Mandatory

		Standard Documentation, confirmed by applying the electronic signature of the EO.	
2	DUAE	The DUAE form, approved by the MF Order no. 72/2020, completed according to the attached model, confirmed by applying the electronic signature of the EO.	Mandatory
3	Declaration on the validity of the offer	Completed in accordance with Annex No 8 of the Standard Documentation, confirmed by application of the electronic signature of the EO. Validity period of the tender - 60 days from the opening day of the tenders.	Mandatory
4	Offer guarantee	**Form of guarantee - 1%:** a) The tender guarantee by bank transfer to the account of the contracting authority, in accordance with the following bank details, confirmed by electronic signature of the SO, as per Annex no. 9: Payee: *IP State University of Moldova* Bank name: *BC Victoriabank SA, Branch No. 17 Chișinău* Tax code: *1006600064263* IBAN: *MD25VI000000225171710MDL* Bank code: *VICBMD2X457* or b) The offer shall be accompanied by a letter of bank guarantee (issued by a licensed bank) in accordance with Annex no.9 of the standard documentation approved by Order of the Minister of Finance no.115 of 15.09.2021 *The term of *validity of the bid bank guarantee shall be equal to the term of validity of the bid.*	Mandatory
5	Technical specifications	Completed in accordance with Annex No 22, confirmed by applying the electronic signature of the EO.	Mandatory
6	Price specifications	Completed in accordance with Annex No 23, confirmed by application of the electronic signature of the EO.	Mandatory
Documents required by DUAE, according to art. 20 para. (8), Law no. 131/2015, on public procurement, the first-ranked bidder shall submit (by electronic means, with electronic signature) within 3 (three) working days, the updated supporting documents, within 3 (three) working days, demonstrating that all qualification and selection criteria have been met.			
7	Proof of legal entity registration	Registration certificate/registration decision/extract issued by the authorized body, electronically signed copy;	Mandatory
8	Bank account attribution certificate	Issued by the account-holding bank, valid, original/electronically signed copy;	Mandatory
9	Financial report	Copy of the latest financial report, confirmed by electronic signature of the EO.	Mandatory
10	Certificate on the absence or existence of debts to the state budget	Copy, confirmed by electronic signature of the EO.	Mandatory
11	Technical passport	Original or copy (copy - confirmed by electronic signature).	Mandatory
12	A declaration that the transportation, unloading, installation and technical servicing of the goods at the premises indicated by the Buyer will be provided.	Confirmed by electronic signature of the EO **will be presented for the positions in the lot for which it has been requested in the specifications*	Mandatory
13	Declaration confirming that the	Completed in accordance with the Regulation on	Mandatory

	manufacturer/distributor of electrical and electronic equipment (EEE) is included in the List of producers of products subject to extended producer responsibility regulations	waste electrical and electronic equipment, approved by GD no. 212 of 07.03.2018 - by indicating the registration number from the List of producers mentioned.	
14	Declaration confirming the identity of the beneficial owners and that they have not been convicted of participating in the activities of a criminal organization or group, corruption, fraud and/or money laundering.	Completed in accordance with the Form approved by MF Order no. 145 of 24.11.2020 - in original electronically signed; **To be submitted within 5 days by the successful tenderer.*	Mandatory
15	Minimum 3 years specific experience in the delivery of similar goods and/or services	Declaration on the list of the main deliveries/supplies carried out in the last 3 years of activity according to Annex no. 12.	Mandatory
16	Contract performance guarantee	Transfer to the account of the contracting authority, confirmed by the payment order, of 5% of the value of the proposed tender: Payee: IP State University of Moldova Bank name: BC Victoriabank SA, Branch No. 17 Chisinau Tax code: 1006600064263 IBAN: MD25VI000000225171710MDL Bank code: VICBMD2X457 * To be *presented by the successful tenderer when signing the contract*	Mandatory

16. Tender deposit - 1% of the tender value excluding VAT.

17. Contract performance guarantee - 5% of the contract value including VAT

18. Reason for use of the accelerated procedure (in the case of open, restricted and negotiated procedure), where applicable: *not applicable*

19. Specific award instruments and techniques (if applicable, specify whether framework agreement, dynamic purchasing system or electronic auction): *electronic auction, Number of rounds - 3. Minimum step - 1%.*

20. Special conditions for the performance of the contract (indicate as appropriate**):** *not applicable*

21. Evaluation criteria applied for the award of the contract: *lowest price per lot and compliance with the requirements of the tender specifications*

22. Factors for evaluating the most economically advantageous tender and their weightings: *not applicable*

No d/o	Name of the assessment factor	Share %
	-	-
	-	-

23. Deadline for submission/opening of tenders:

- **until:** ***[exact time]*** *Information can be found in the SIA AMPS*
- **on:** ***[date]*** *Information can be found in the SIA AMPS*

24. Address to which tenders or requests to participate must be sent:

Tenders or requests to participate will be submitted electronically via the SIA RSAP

25.Validity period of the tenders: *60 calendar days from the day of opening of the tenders*

26.Place of opening of tenders: *Tenders or requests to participate will be submitted electronically via the SIA RSAP. Late tenders will be rejected.*

27.Persons authorized to be present at the opening of tenders:
***Bidders or their representatives are entitled to attend the bid opening, unless the bids have been submitted through the "RSAP" AIS*.**

28.Language(s) in which tenders or requests to participate must be written: *Romanian*

29. That contract concerns a project and/or program financed by European Union funds: *not applicable*

(specify the name of the project and/or program)

30.Name and address of the body responsible for settling appeals:
National Complaints Settlement Agency
Address: mun. Chisinau, bd. Ștefan cel Mare și Sfânt nr.124 (et.4), MD 2001;
Tel/Fax/email: 022-820 652, 022 820-651, contestatii@ansc.md

31. Date(s) and reference(s) of previous publication(s) in the Official Journal of the European Union of the contract(s) concerned by the respective notice (if applicable): *not applicable*

32. In the case of periodic purchases, the estimated timetable for publication of future notices: *not applicable*

33. Date of publication of the notice of intention or, where appropriate, indication that no such notice has been published: *no 59 of 26.07.2024*

34. Date of dispatch for publication of the contract notice: as indicated in the "RSAP" CIS.

35.In the public procurement procedure will be used/accepted:

Name of the electronic tool	Will use/accept or not
Electronic submission of tenders or requests to participate	Accepted
Electronic ordering system	Not accepted
Electronic invoicing	Accepted
Electronic payments	Accepted

36. The contract is covered by the Government Procurement Agreement of the World Trade Organization (only in the case of notices submitted for publication in the Official Journal of the European Union): *no*

(specify yes or no)

37. Other relevant information:

- *The economic operators participating in this procedure are obliged to submit relevant information and additional documents at the request of the contracting authority within 3 days, in accordance with the legal provisions;*
- *In accordance with the provisions of Art. (12) of the Fiscal Code, as of 01.01.2021, electronic tax invoices are to be issued by resident suppliers through the e-Factura e-Invoice;*
- *Maximum number of days to sign and submit the contract to the contracting authority - 11 days*

Working group leader,
Vice-Rector for Economic and Financial Activity
and International Relations

Digitally signed by Dolghi Vladimir
Date: 2024.08.02 17:15:20 EEST
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

Vladimir DOLGHI