

Hellenic Accreditation System



Annex I1/4 to the Certificate No. **1130-2**

SCOPE of ACCREDITATION

of

ELQA Programs

Schemes

of

University of Thessaly

as a

Proficiency Testing Provider

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Blood serum (CRM, lyophilized)	Albumin, Alkaline Phosphatase, Amylase, Calcium, C- Reactive Protein, C-Reactive Protein, High Sensitivity, γ - Glutamyltransferase, Glucose, Lactic Dehydrogenase, Bicarbonate, Potassium, Creatinine, Creatine kinase, Lithium, Lipase, Magnesium, Sodium, Total protein, Total Bilirubin, Urea, Uric acid, Iron, Alanine Transaminase, Aspartate Transaminase, Triglycerides, High Density Lipoprotein, Low Density Lipoprotein, Phosphorus, Copper, Chloride, Cholesterol, Direct Bilirubin, ect.	Clinical Biochemistry

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Blood serum (CRM, lyophilized)	Anti - thyroglobulin antibodies, anti-thyroid peroxidase antibodies, Valproic Acid, Vancomycin, Vitamin B12, Digoxin, Free thyroxine, Free triiodothyronine, Theophylline, Follicle-Stimulating Hormone, Thyroid-Stimulating Hormone, Thyroglobulin, Thyroxine, Insulin, Carbamazepine, Cortisol, Estradiol, Total Immunoglobulin E, Paracetamol, Progesterone, Prolactin, Testosterone, Triiodothyronine, Phenobarbital, Phenytoin, Folic Acid, Luteinizing Hormone, Chorionic Gonadotropin, Vitamin D, A-Fetoprotein, Prostatic Specific Antigen, Free Prostatic Specific Antigen, Cancer Antigen 125, Cancer Antigen 15-3, Cancer Antigen 19-9, Carcinoembryonic Antigen, Ferritin, Australian Antigen (HBsAg), Rubella IgG antibodies, Rubella IgM antibodies, HIV antibodies I & II, IgG Toxoplasma antibodies, IgM Toxoplasma Antibodies, IgG cytomegalovirus (CMV) antibodies, IgM cytomegalovirus (CMV) antibodies, Anti-HBs, Anti-HBc, Anti-HCV, Anti-HAV IgG, Vit. D, ect.	Immunology - Specific proteins – Tumor Markets
Blood serum (CRN, lyophilized)	Alpha-1-acid glycoprotein, Anti-streptolysin O, Complement factor C3, Complement factor C4, Immunoglobulin IgA, Immunoglobulin IgG, Immunoglobulin IgM, Rheumatoid Factor, Transferrin, C-Reactive Protein (CRP), C-Reactive Protein High Sensitivity (hs CRP), Creatine Kinase, Creatine Kinase isoenzyme MB activity, Creatine Kinase, Creatine Kinase isoenzyme MB mass, Myoglobin, Homocystein, Cardiac specific Troponine-I, Cardiac specific Troponine-T, B-Type Natriuretic Peptide, Pro- B-Type Natriuretic Peptide, ect.	Cardiac markers
Blood serum (CRM, lyophilized)	Prothrombin time INR, Prothrombin activity, Activate Partial Thromboplastin, Activate Partial Thromboplastin Time, Antithrombin III Activity, Antithrombin III Concentration, Fibrinogen, ect.	Coagulation

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Blood serum (CRM, lyophilized)	Glycosylated Hemoglobin (HbA1c).	HbA1c
Whole blood (CRM)	White Blood Cells, Total, Red Blood Cells, Hemoglobin, Hematocrit, Mean red volume, Mean hemoglobin content, Mean Hemoglobin Concentration, Red Blood Cell Distribution Width, Mean Platelet Volume, Platelets, ect.	Hematology
Urine (CRM)	Albumin, Ascorbic acid, Bilirubin, Blood – Erythrocytes, Glucose, Ketones, Leukocytes, Magnesium, Microalbumin, Nitrite, pH, Proteins, pus corpuscles, Sodium, Specific Gravity, Urobilinogen, Calcium, Potassium, Creatinine, Sodium, Urea, Uric acid, Phosphorus, Chloride, ect.	Urine
Water	Alkalinity, Aluminum, Ammonium, Arsenic, Calcium, Chloride, Chromium, Color, Conductivity, Iron, Magnesium, Manganese, Nitrate, Nitrite, Total Phosphorus, pH, Residual Chlorine, Sulphates, Total dissolved solids, Total hardness, Turbidity, Nitrogen (Kjeldahl), Potassium, Sodium, Total Chlorine, Boron, ect.	Water Physicochemical
Water (CRM, Lyophilized Reference Material)	Total colony count at 22°C, Total colony count at 37°C, Escherichia coli, Total coliforms, Streptococcus, Clostridium Perfringens, Pseudomonas aeruginosa, Staphylococcus aureus, Legionella spp., Salmonella enterica spp, Listeria monocytogenes , Clostridium Perfringens (Spores), etc.	Water Microbiological
Wastewater - Reference Material (RM, Solution)	Biochemical Oxygen Demand, Chemical Oxygen Demand, Chloride, Conductivity, Nitrogen – Ammonia, Nitrogen – Kjeldahl, Nitrogen – Nitrate, Nitrogen total, pH, Phosphorus – Phosphate, Phosphorus, Total, Total dissolved solids, Total Organic Carbon, Total Solids, Total Suspended Solids, Nitrogen (Kjeldahl), Chloride, etc.	Wastewater Physicochemical

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Waste – (CRM, Lyophilized Reference Material)	Total coliforms, Escherichia coli, Streptococcus, Fecal Coliform, etc.	Wastewater Microbiological
Seawater (CRM, Lyophilized Reference Material)	Escherichia coli, Streptococcus, Total coliforms, Fecal coliforms, Total colony count at 22°C, Total colony count at 37°C, etc.	Seawater Microbiological
Food (CRM, Lyophilized Reference Material)	Salmonella enterica spp., Listeria monocytogenes, etc.	Food Microbiological
<u>Foods</u> <u>(Lyophilized</u> <u>Reference</u> <u>Material)</u>	Aerobic Plate Count (APC), Total Coliform (TCOLI), Rapid Coliform (RCOLI), Escherichia coli (E. coli), Enterobacteriaceae (ENTER), Staphylococcus aureus (S.aureus), Yeast, Mold, Clostridium perfringens (CP), ect.	Food Microbiological
Water (solution)	Antimony (Sb), Aluminum (Al), Arsenic (As), Cadmium (Cd), Tin (Sn), Cobalt (Co), Manganese (Mn), Molybdenum (Mo), Lead (Pb), Nickel (Ni), Selenium (Se), Iron (Fe), Copper (Cu), Chromium (Cr), Mercury (Hg), Zinc (Zn), Chromium, hexavalent [Cr (VI)], etc.	Heavy Metals - Potable Water
Waste – Reference material (solution)	Antimony (Sb), Aluminum (Al), Arsenic (As), Cadmium (Cd), Tin (Sn), Cobalt (Co), Manganese (Mn), Molybdenum (Mo), Lead (Pb), Nickel (Ni), Selenium (Se), Iron (Fe), Copper (Cu), Chromium (Cr), Mercury (Hg), Zinc (Zn), Chromium, hexavalent [Cr (VI)], etc.	Heavy Metals - Waste

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Olive Oil (Sample)	Acidity, Peroxides, K232, K270, K268, DK, Moisture, Waxes, Fatty Acids and trans isomers, DECN42, ect.	Olive Oil - Physicochemical Parameters
Honey (Sample)	Moisture, Conductivity, Sugars, Hydroxy-methyl- furfural (HMF), Diastase, Proline, Pollen (Number of pollen grains per 10g of sample), pH, Acidity, Insoluble substances, Color, etc.	Honey - Physicochemical Parameters
Detection / Determination of Salmonella spp. in Animal Feces and Samples from Primary Production	Salmonella spp.	Detection / Determination of Salmonella spp. in Animal Feces and Samples from Primary Production
Inactivated culture (lyophilized Reference Material)	Surface, Total colony count at 30°C (OMX30) – Surface, St. Aureus (SA) – Surface, Salmonella (Salm) – Surface, Listeria (List) – Surface, Total coliforms (Tcoli) – Surface, E. coli (Ecoli) – Surface, Yeasts – Surface, Molds – Surface, Total Enterobacteriaceae (Enterobacteriaceae) – Surface, Legionella (Leg) – Surface, etc.	Control of Laboratory Environmental Conditions
Milk (Reference Material)	Fat, Protein, Casein, Lactose, Urea, Freezing Point, pH, etc.	Milk – Physicochemical Control
Milk (Reference Material)	Somatic Cells	Milk – Somatic Cell Control

Tested materials/ products	Interlaboratory Comparison Test / Properties to be measured	Scheme
Milk (Reference Material)	Kjeldahl nitrogen	Milk – Kjeldahl Nitrogen
Milk (Reference Material)	Antibiotics, such as Penicilline, Sulphamidic, etc.	Milk – Antibiotics Control
Milk (Reference Material)	Total colony count at 30°C, ect.	Milk – Microbiological Control

Address of Provider: University of Thessaly, 41100 Larissa

Approved Signatories: **A. Papaioannou & E. Dovriki**

This scope of Accreditation replaces the previous one dated 1.4.2022.

The Accreditation Certificate No. **1130-2** to ELOT ISO/IEC 17043:2010, is valid until 2.4.2027.

Athens, 30.3.2023

Christos Nestoras
CEO of ESYD