**Hellenic Accreditation System**



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| Annex I1/4 to the Certificate Νο. **1130**-2SCOPE 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 |
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| 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**  |
| 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 Ε, 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 Toxoplasm 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-Ι, Cardiac specific Troponine-Τ, 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** |
| 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 Perfrigens, Pseudomonas aeruginosa, Staphylococcus aureus, **Legionella spp., Salmonella enterica spp, Listeria monocytogenes**, Clostridium Perfrigens (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**  |
| 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**  |
| Foods (Lyophilized Reference Material) | Aerobic Plate Count (APC), Total Coliform (TCOLI), Rapid Coliform (RCOLI), Escherichia coli (E. coli), Enterobacteriaceae (ENTER), Staphylococcus aureus (S.aureus), Yeast, Mold, Clostridium perfrigens (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** |
| 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** |
| 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*