

ENERGY RESEARCHERS ARIANA







## **ABOUT US**

Energy Researchers Ariana (ERA) provides oilfield and mining services delivering solutions and expertise to national, international and independent organizations. Since its founding in Ahvaz, Iran in 2014, ERA has developed constructive and cost-effective alternative solutions to complex and expensive exploration, production and environmental problems. Petroleum exploration using surface geochemical techniques (e.g. MPOG and soil gas) had been conducted by ERA for the first time in Iran. In addition, ERA provides the advanced services in the fields of organic/petroleum geochemistry, basin modeling and petroleum system analysis, remote sensing (RS) and geographic information systems (GIS), environmental evaluation of organic pollutants, and mineral resources characterization. By utilizing these services, the risk associated with exploration of natural resources is significantly reduced, and the corresponding environmental impacts would be controlled.



## What are laboratory equipments?

# Laboratory equipment refers to the various tools and equipment used by scientists working in a laboratory. We have an advanced selection of professional quality laboratory equipment, clinical measuring/dispensing accessories, and multifunction lab devices. The types of laboratory equipment available in the ERA company laboratory include:

# **Facilities:**

- 1- Gel-doc
- 2- NanoDrop
- 3- Coloni-Counter
- 4- Rotor-Gene-Q
- 5- Vortex-Genie
- 6- QIA Cube
- 7- Micro Centrifuge
- 8- Incubator
- 9- Laminar Hood
- 10-Fume Hood
- 11- Ultrasonic Bath
- 12- Shaker
- 13- Macro Centrifuge
- 14- HPLC
- 15- Hydrogen Generator
- 16- GC



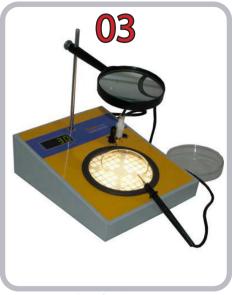
#### **GEL-Doc**

A gel doc, also known as a gel documentation system, gel image system or gel imager, refers to equipment widely used in molecular biology laboratories for the imaging and documentation of nucleic acid and protein suspended within polyacrylamide or agarose gels.



## **NanoDrap**

The NanoDrop Spectrophotometer from NanoDrop Technologies is designed for measuring nucleic acid concentrations in sample volumes of one microliter. The key to this advanced spectrophotometer is its unique sample retention technology that overcomes the need for cuvettes when taking measurements.



## **Coloni-Counter**

Colony counters specify the number of microbial colonies present on sample plates for maximized working efficiency in the lab. The equipment rapidly accelerates medical and biology research procedures that demand microorganism growth rates.



#### Rotor-Gene

The Rotor-Gene Q MDx instrument, with Rotor-Gene Q software version 2.1.0 or higher, is a real-time nucleic acid amplification and detection system, which measures nucleic acid signals from amplified DNA using fluorescent detection.



#### **Vortex-Genie**

A vortex mixer, or vortexer, is a simple device used commonly in laboratories to mix small vials of liquid. It consists of an electric motor with the drive shaft oriented vertically and attached to a cupped rubber piece mounted slightly off-center.



## **QAI-Cube**

The innovative QIAcube uses advanced technology to process QIAGEN spin columns, enabling seamless integration of automated, low-throughput sample prep into the laboratory workflow. No change of purification chemistry is required, assuring fast startup and immediate results.



## **Micro Centrifuge**

Compact microcentrifuges isolate DNA or simply separate micro volume mixtures. Load microtubes and standard or dell-welled plates in the instruments easily. Adaptable to any industrial or laboratory setting, non-refrigerated or refrigerated models come with multiple mode options for the high-speed and powerful rotors.



### **Incubator**

An incubator is a device used to grow and maintain microbiological cultures or cell cultures. The incubator maintains optimal temperature, humidity and other conditions such as the CO2 and oxygen content of the atmosphere inside.



#### **Laminar Hood**

The goal of a laboratory hood is to safely contain and/or remove hazardous biological and chemical contaminants before they can escape into the lab or environment. Spanning benchtop models to walk-in units, hoods are used in fields ranging from chemistry to the life sciences to forensics.



#### **Fume Hood**

A fume hood is a ventilated enclosure in which gases, vapors and fumes are captured and removed from the work area. An exhaust fan situated on the top of the laboratory building pulls air and airborne contaminants through connected ductwork and exhausts them to the atmosphere.



#### **Ultrasonic Bath**

An ultrasonic bath is a cleaning device that allows for thorough cleaning in almost any metal, plastic, ceramic or other material. Jewelry and watches, optics, weapons, dental tools, aesthetics, coins, parts after machining, auto parts, and more.



### Shaker

A shaker is a piece of laboratory equipment used to mix, blend, or agitate substances in a tube or flask by shaking them. It is mainly used in the fields of chemistry and biology. A shaker contains an oscillating board that is used to place the flasks, beakers, or test tubes.



## **Macro Centrifuge**

A laboratory centrifuge is a piece of laboratory equipment, driven by a motor, which spins liquid samples at high speed. There are various types of centrifuges, depending on the size and the sample capacity.



## **HPLC**

High-performance liquid chromatog -raphy (HPLC), formerly referred to as high-pressure liquid chromatography, is a technique in analytical chemistry used to separate, identify, and quantify each component in a mixture.



## **Hydrogen Generator**

A hydrogen generator uses a proton exchange membrane (PEM) to produce high purity hydrogen gas from water to create hydrogen on demand. The PEM cell was originally developed by NASA and is extensively used in industrial and laboratory applications that required hydrogen gas generation.



GC

Gas chromatography (GC) is a common type of chromatography used in analytical chemistry for separating and analyzing compounds that can be vaporized without decomposition. Typical uses of GC include testing the purity of a particular substance, or separating the different components of a mixture.