

واردات و فروش کلیه تجهیزات تخصصی آنالیتیکال



پارس طب نوین بین الملل

(شرکت بی.تی.ان اینترنتشال)

  
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## بسمه تعالی

شرکت پارس طب نوین بین الملل از پیشستانان صنعت تجهیزات آزمایشگاهی در ایران بوده و با بیش از ربع قرن سابقه ارائه خدمات آزمایشگاهی با بهره مندی از امتیاز همکاری با چندین کمپانی معظم بین المللی و دارا بودن مجموع کارخانجات تولیدی افتخار دارد که توانسته بستری مناسب جهت گسترش دانش و ارائه فن آوری های به روز دنیا در زمینه تجهیزات پیشرفته آنالیز شیمیایی و حساس آزمایشگاهی فراهم آورد. این شرکت با ارائه محصولات و خدماتی با کیفیت جهانی و مطابق با استانداردهای روز دنیا موفق شده است تا سهم چشمگیری از ظرفیت بازار کشور را به خود اختصاص دهد و همواره در مسیر توسعه بازار و محصول در این صنعت رشد قابل توجهی را احراز نماید. در این راستا شرکت افتخار همکاری متمادی در طی سالیان گذشته را با مراکز ذیل دارا می باشد.

- ۱- مراکز دانشگاهی و تحقیقاتی معتبر اعم از دانشگاه تهران، دانشگاه شریف، علم و صنعت و امیرکبیر

و دانشگاه های آزاد و پیام نور و شاهد

۲- سازمان هوا فضا و صنایع دفاع

۳- آزمایشگاه های همکار استاندارد

۴- سازمان دامپزشکی کشور و انتقال خون

۵- بیمارستان ها و آزمایشگاه های پزشکی

۶- انستیتو پاستور، سرم سازی های کل کشور

۷- سازمان های پزشکی قانونی

۸- پالایشگاه ها و پتروشیمی نفت و گاز

۹- مراکز آب و فاضلاب

۱۰- مراکز تحقیقات کشاورزی

۱۱- صنایع خودرو سازی

۱۲- آزمایشگاه های سازمان محیط زیست

۱۳- کارخانجات صنایع غذایی، دارویی، آرایشی و بهداشتی، لاستیک و صنایع پلیمر

جهت سهولت در ارائه خدمات شرکت مجموعه ای از تجهیزات تخصصی گوناگون را بصورت کامل گردآوری نموده و با استفاده از همکاری کارشناسان و متخصصان با سابقه و اساتید دانشگاهی آماده ارائه خدماتی نوین و به روز می باشد.

در ادامه بصورت اجمالی به تعدادی از دستگاههای فوق اشاره می گردد.



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Spectroscopy  
Instruments

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## Bio-Medical Clinical/ Diagnostics Instruments

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diagnostics instruments



Microplate  
Reader

Biochemistry  
Analyzer

Real-Time  
PCR

## Bio-Medical Clinical/ Diagnostics Instruments

Electrolyte  
Analyzer

Chemiluminesc  
-ence Analyzers

Urine  
Analyzer



## Microplate Readers



Microplate Readers (also called plate readers) are laboratory equipment used to see any biological, chemical or physical change in samples of chemicals in microtiter plates.

### Application:

- Monitor cell growth
- Acid quantities in chemicals
- Cell reactions
- Enzyme activity
- Cell toxicity
- Amounts of chemicals in cells
- Checking substances for drugs

## Real Time PCR



Real-Time PCR instrument is a machine that amplifies and detects DNA.

### Application:

- Detection and quantification of nucleic acid targets
- Protein analysis
- Genetic variation analysis

## Chemiluminescence analyzer



a set of methods used for the quantitative, and less often the qualitative, analysis of chemical elements and compounds; the methods are based on the effect that the substance to be analyzed has on the intensity or spectrum of chemiluminescence. The effect of the substance is detected by visual, photoelectric, or photographic means.

### Application:

- Identification of hydrogen peroxide, alcohols, aniline derivatives, certain nerve gases
- Trace amounts of Co, Cu, Fe, Cr, and As
- Measure ozone and oxides of nitrogen and sulfur in the air

## Urine analyzer

Urinalysis (UA), also known as routine and microscopy (R&M), is an array of tests performed on urine, and one of the most common methods of medical diagnosis.

### Application:

- Ions and trace metals
- Proteins & enzymes
- Blood cells
- Other urine parameters



## Electrolyte analyzer

The Electrolyte Analyzer measures various electrolytes in just 60 seconds. It is a highly economical that is capable of running whole blood, serum, plasma or urine samples.

### Application:

- Measure ions such as Na, k , Cl, Ca, Li and hematocrit



## Biochemistry analyzer

Biochemistry analyzer is a device designed to perform a variety of biochemical tests.. Biochemical testing looks at the levels of specific substances and enzymes that are produced by chemical reactions in the body.

### Application:

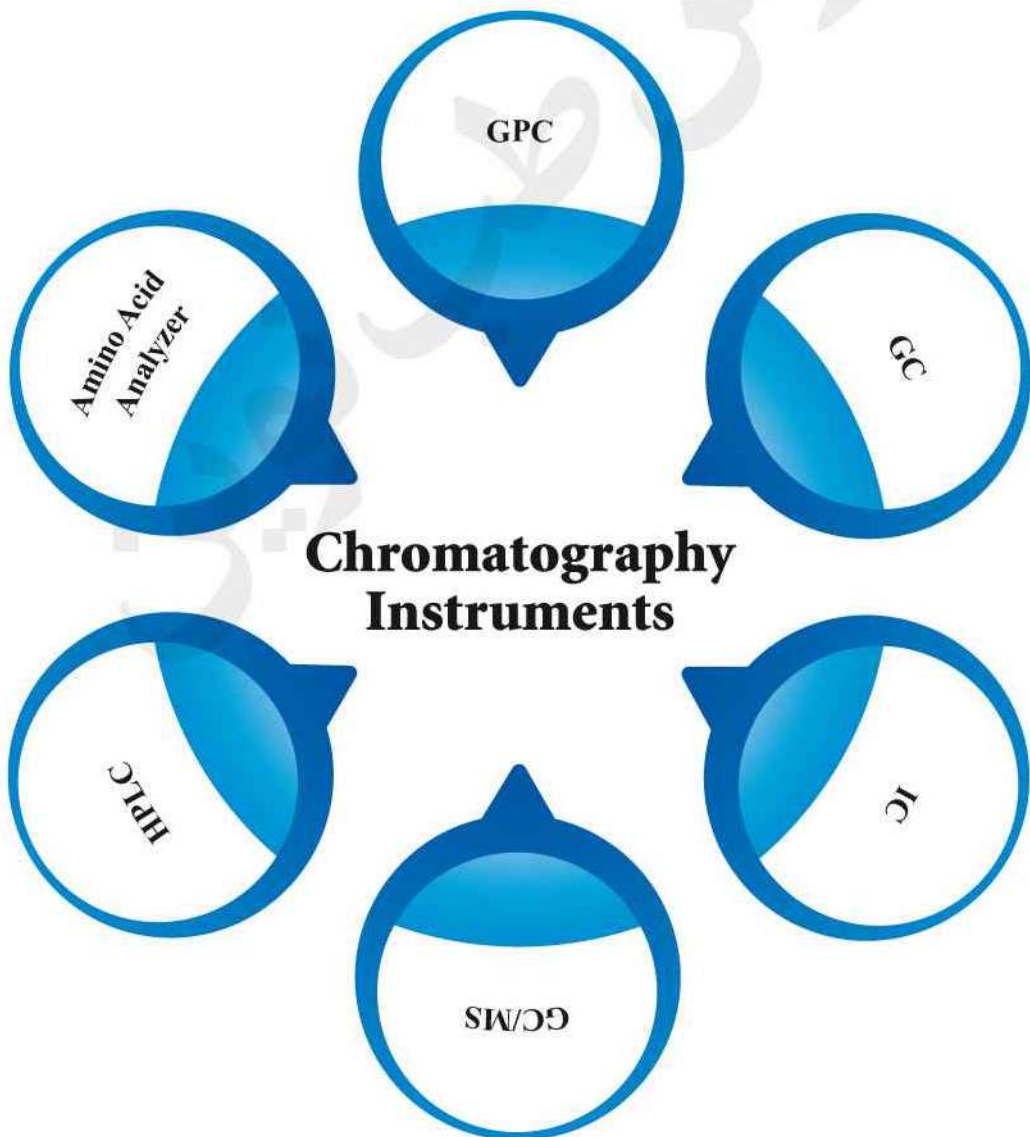
- Testing enzymes for liver function tests
- Testing ions for sodium and potassium levels
- Blood glucose, creatine, and serum albumin



## Chromatography Instruments

**We provide :**

*Offer wide range of chromatography instruments*





## Gel Permeation Chromatography (GPC)

GPC is most suited for polymers characterization. The GPC technique has been extended to waxes, lubricating oil additives, and asphalts as well as to a wide variety of rubbers.

### Application:

- number average molecular weight
- weight average molecular weight
- Z weight average molecular weight



## Gas Chromatography (GC)

Gas Chromatography is a common type of chromatography used in analytical chemistry for separating and analyzing compounds that can be vaporized without decomposition.

### Application:

- Pharmaceuticals
- Cosmetics
- Environmental toxins
- Natural Gas Analysis
- Residual Solvent Analysis
- Fatty Acid Analysis
- Refinery Gas Analysis



## Ion Chromatogram ( IC )

Ion Chromatogram is a process that allows the separation of ions and polar molecules based on their charge.

### Application:

- Determination of alkaline, alkaline earth and transition metals
- Determination inorganic anions, sulfuric compounds of different oxidation level, organic acid





## Gas Chromatography-Mass Spectrometer (GC-MS)



Gas Chromatography–Mass Spectrometry (GC-MS) is a method that combines the features of gas chromatography and mass spectrometry to identify different substances within a test sample.

### Application:

- Environmental monitoring and cleanup
- Criminal forensics
- Law enforcement
- Sports Anti- Doping analysis
- Food, beverage and perfume analysis
- Medicine
- Astrochemistry

## High Performance Liquid Chromatography (HPLC)



HPLC is a chromatographic technique used to separate a mixture of compounds in analytical chemistry and biochemistry with the purpose of identifying, quantifying and purifying the individual components of the mixture.

### Application:

- Medical (e.g. detection of vitamin D concentrations in blood )
- Legal (e.g. detection of performance enhancement drugs in urine)
- Research (e.g. purification of substances from a complex biological sample)
- Separation of similar synthetic chemicals from each other
- Manufacturing (e.g. during the production process of pharmaceutical and biologic products)

## Amino acid analyzer

Amino Acid Analysis is the suitable tool for precise determination of protein quantities.

### Application:

- Determination of amino acid composition
- Content of protein, peptides and other pharmaceutical preparation

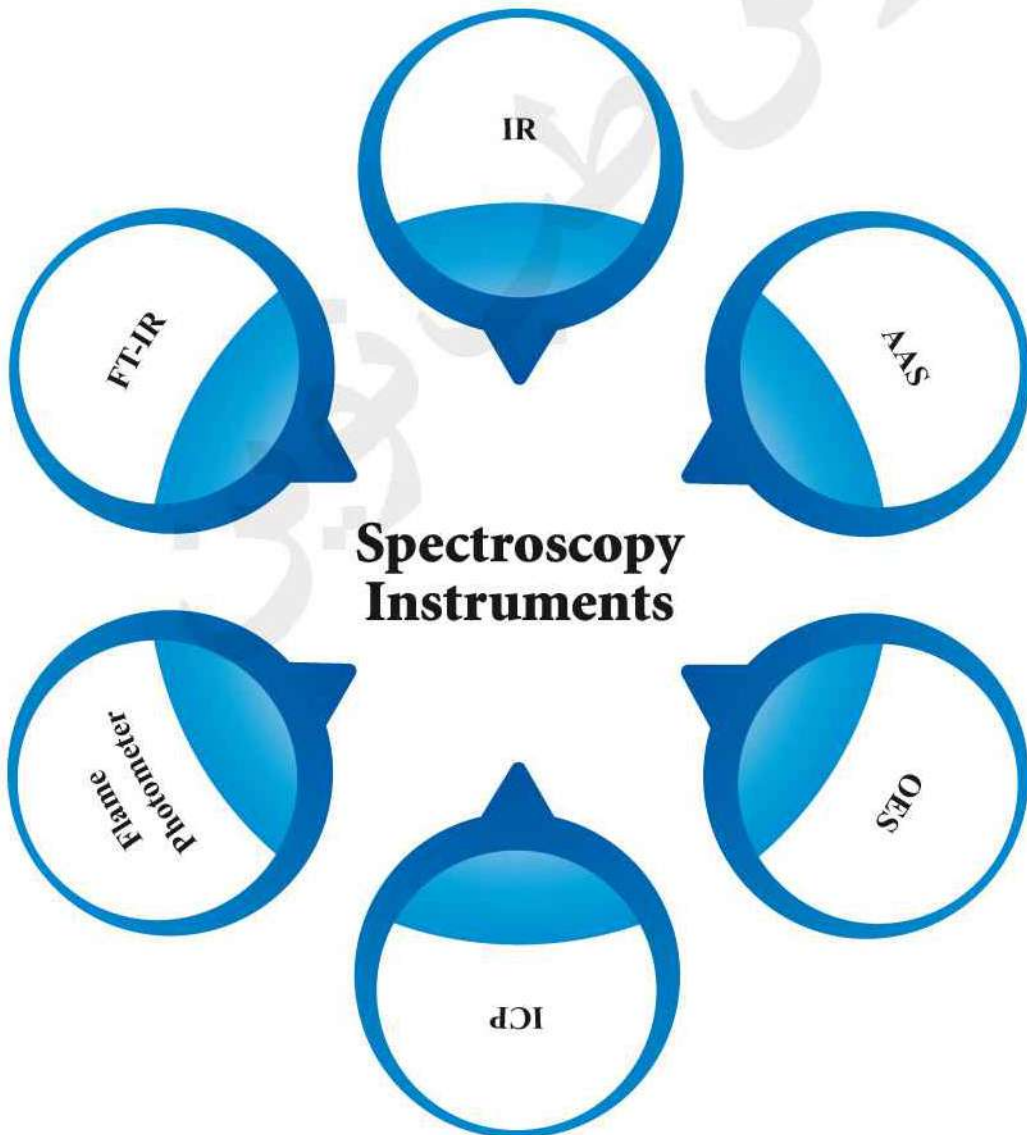




## Spectroscopy Instruments

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Offer wide range of spectroscopy instruments



## IR Spectrometer



Infrared Spectroscopy exploits the fact that molecules absorb specific frequencies that are characteristic of their structure.

### Application:

- Organic and inorganic chemistry in search and industry
- Quality Control (QC)
- Dynamic measurement, and monitoring applications such as the long-term unattended measurement of CO<sub>2</sub> concentrations in greenhouses
- Forensic analysis in both criminal and civil cases
- Degree of polymerization in polymer manufacture

## Atomic Absorption Spectroscopy (AAS)



Atomic Absorption Spectroscopy (AAS) is a spectroanalytical procedure for the quantitative determination of chemical elements employing the absorption of optical radiation (light) by free atoms in the gaseous state.

### Application:

AAS can be used to determine over 70 different elements in solution:

- Pharmacology
- Biophysics
- Toxicology

## Optical Emission Spectrometer ( OES)

Optical Emission Spectroscopy (OES), also called Atomic Emission Spectroscopy (AES) or arc spark emission spectroscopy, is an important tool for fast and accurate elemental analysis of metals and semiconductors.



### Application:

- Investigate atoms, ions and molecules
- Provide information about properties: such as (excited state)species densities, electron-atom, atom- atom, ion-atom collisional effects, energy distribution of species



## Inductively Coupled Plasma ( ICP )

Inductively Coupled Plasma (ICP) is a type of plasma source in which the energy is supplied by electric currents which are produced by electromagnetic induction, that is, by time-varying magnetic fields.

### Application:

- ICP AES is used to determination of metals in wine, arsenic in food and trace elements bound to proteins.
- ICP-OES is widely used in minerals processing to provide the data on grades of various streams, for the construction of mass balances.
- Nutrient levels in agricultural soils
- Trace elements in soil
- and motor oil analysis



## Flame Photometer

Flame Photometry is an atomic emission technique which may be regarded as the simplest of atomic spectroscopic methods and is very similar to the flame test which is applied for detection of alkali metals.

### Application:

- Detection of traces of metal ions, primarily Sodium, Potassium, Lithium, Calcium, and Barium



## FTIR spectrometer

Fourier Transform Infrared (FTIR) spectroscopy is a measurement technique that allows one to record infrared spectra. Infrared light is guided through an interferometer and then through the sample.

### Application:

- Identification of unknowns, sample screening and profiling samples





## Material Science Instruments

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Particle Size  
Analyser

Polarimeter

## Material Science Instruments

XRD / XRF  
Diffractometer

TOC Analyser



## Particle Size Analyzer

Particle size analysis, particle size measurement, or simply particle sizing is the collective name of the technical procedures, or laboratory techniques which determines the size range, and/or the average, or mean size of the particles in a powder sample.

### Application:

- Chemical Industry
- Mining
- Agriculture
- Forestry



## Polarimeter

Polarimetry is the measurement and interpretation of the polarization of transverse waves, most notably electromagnetic waves, such as radio or light waves. Typically polarimetry is done on electromagnetic waves that have traveled through or have been reflected, refracted, or diffracted by some material in order to characterize that object.

### Application:

- Pharmaceutical and chemical industries for quality control.
- Chemical industry
  - measure the angle of rotation
  - measure the ratio of enantiomers in solutions
- Food, beverage and pharmaceutical industries



## Total Organic Carbon analyzer (TOC )

Total Organic Carbon (TOC) is the amount of carbon bound in an organic compound and is often used as a non-specific indicator of water quality or cleanliness of pharmaceutical manufacturing equipment.

### Application:

- Measure water quality
- Quantification of natural organic matter such as Humic acid, Amines and Urea
- Measurement material derived from decaying vegetation, bacterial growth, and metabolic activities of living organisms.



## X- Ray Diffractometer ( XRD )



x-ray Diffractometer illuminates a sample of material with x-rays of known wavelength, moving the sample and detector in order to measure the intensity of the diffracted radiation as a function of beam and sample orientation.

### Application:

- Investigation of glass, ceramic, metals and cement
- Research in geochemistry, forensic science and archaeology
- Identify crystalline phases and orientation
- Determine structural properties:  
Phase composition, Thermal expansion
- Measure thickness of thin films and multi-layer
- Determine atomic arrangement

## X-Ray Fluorescence analyzer ( XRF )

The XRF method depends on fundamental principles that are common to several other instrumental methods involving interactions between electron beams and x-rays with samples, including: X-ray spectroscopy (e.g., SEM - EDS), X-ray diffraction (XRD), and wavelength dispersive spectroscopy.



### Application:

- Research in igneous, sedimentary, and metamorphic petrology
- Soil surveys
- Mining (e.g., measuring the grade of ore)
- Cement production
- Ceramic and glass manufacturing
- Metallurgy (e.g., quality control)
- Environmental studies (e.g., analyses of particulate matter on air filters)
- Petroleum industry (e.g., sulfur content of crude oils and petroleum products)
- Field analysis in geological and environmental studies (using portable, hand-held XRF spectrometers)
- Bulk chemical analyses of major elements (Si, Ti, Al, Fe, Mn, Mg, Ca, Na, K, P) in rock and sediment
- Bulk chemical analyses of trace elements (in abundances >1 ppm; Ba, Ce, Co, Cr, Cu, Ga, La, Nb, Ni, Rb, Sc, Sr, Rh, U, V, Y, Zr, Zn) in rock and sediment - detection limits for trace elements are typically on the order of a few parts per million



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