

companies.

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## CHEMICAL REFERENCE STANDARDS

สารเคมีมาตรฐาน



## ORGANIC SINGLE ANALYTES & SELECT MIXTURES

- Persistent Organic Pollutants (POP) : PCBS & metabolites, Halogenated aromatics, Dibenzo-pdioxins, Dibenzofurans, PBDE congeners, PBBs metabolites
- Volatile Organic Compounds (VOCs)
- Individuals by functional group : Amines, Anilines, Amino compounds, Ethers, Halo ethers, Haloacetic acids. Fatty acid ethyl ethers & Phthalates
- Individuals by application : Explosives, Fuels & hydrocarbons, Plastic additives, Food analytes (Methyl esters, glycerides, AOCS
- Cannabis and Hemp Testing Standards : THC,THCA,CBDA,CBD,CBN,CBG,CBC,THCV,CBDV, Terpene standards

## ENVIRONMENTAL PROTECTION AGENCY (EPA)

- Individuals analytes from EPA nethods
- Contract Laboratory Program (CLP)
- 500 series
- 600 series
- 1300



## REFERENCE STANDARDS FOR PLASTIC ADDITIVES

 Contains the most comprehensive list of Plastic and other polymeric standards Accelerants, Antidegradants, Antifoams, Antioxidants, Antiozonates, Blowing Agents, Coupling Agents, Cross-Linking Agents, Flame Retardants, Plasticizers, Processing Aids, Retarders, Stearates, UV Stabilizers, Vegetable Oils, & Deuterated

## INORGANIC STANDARDS & QC STANDARDS



- Single Element : ICP, ICP/MS & AA Pesticides & HerbicidesPesticides & Herbicides
- Ion Chromatography Standards
- Wet chemical Turbidity, Alkalinity, Hardness, Conductivity, Oil & Grease, Biochemical BOD, COD & Solids
- ICP & ICP/MS Multi element Standards
- OrganoMetallics (Wear metals) AA, ICP, DCP & XRF Analysis
- Lubricating Oil Standards
- Inorganic ASTM Methods

## REFERENCE STANDARDS FOR PETROCHEMICAL

- Over 100 ASTM Methods D-56 to D-7065 (Cross Ref. IP, ISO, DIN, JIS, AFNOR Methods)
- Physical properties Flash point, Distillation, Viscosity, Aniline point, Freezing & Cloud point
- Sulfur standard Diesel Fuel, Residual Oil, Mineral Oil, Kerosene, Gasoline & Crude Oil
- PIANO, PONA, PNA Analysis n-Paraffins, Isoparaffins, Aromatics, Naphthenes & Olefins
- BioFuels ASTM D6584 / EN14105 Free & Total Glycerin, EN14103 Fatty Acids Methyl Esters (FAMES), Fatty Acid Ethyl Esters (FAEES), EN14214 Wear metals
- Universal Oil Products (UOP)
- Total Petroleum Hydrocarbon (TPH) & Fuel & Hydrocarbon





## PROFICIENCY TESTING

WHAT IS LGC PROFICIENCY TESTING?

## โปรแกรมการทดสอบความชำนาญห้องปฏิบัติการ ทดสอบและสอบเทียบ

way of meeting the requirements of ISO/IEC 17025, ISO1400 etc. in the area of quality assurance of laboratory results. It is also mandated by accreditation bodies that laboratories participate in proficiency testing programs for all types of analyses undertaken in that laboratory, when suitable programs exist.

## BENEFITS OF PROFICIENCY TESTING PARTICIPATION INCLUDE

Monitor and improve quality of measurements Demonstrate control Staff development and training Evaluate methods and instrumentation

## SECTOR SPECIFIC SCHEMES WATER & ENVIRONMENTAL PROFICIENCY TESTING SCHEMES

#### AQUACHECK

wastewaters ,sludges,sediments soils, Chemical analysis

#### QWAS

Microbiological analysis of waters, effluents and sludge

#### CONTEST

#### STACKS

#### • AIR PT

#### HYGIENE

#### CRYPTS















## FOOD PROFICIENCY TESTING **SCHEMES**

#### QMS

Microbiological examination of food and food ingredients

#### QDCS

Composition and safety testing in the dairy sector

Chemical and Microbiological analysis of meat products

#### • QGS

Analysis of gelatin samples

#### • QCS

Microbiological and chemical testing of chocolate

Chemical testing of food products

Chemical and microbiological analysis for the chocolate industry

#### Animal Feeds

Chemical & Microbiological analysis of animal feed products

#### CONF-IDENT

Confirmation & Identification



## PROFICIENCY TESTING

## BEVERAGE PROFICIENCY TESTING SCHEMES

#### BAPS

#### DAPS

Analysis of a wide range of alcoholic beverages

#### • QBS

Chemical and microbiological testing of soft drink

Analysis of malt & barley used by the malting, brewing & distalling industries

## **FORENSIC & CLINICAL EQA SCHEMES**

#### DOF

Analysis of Heathcontrol Drug in Oral Fluid Scheme

Analysis of Heathcontrol Drug of Abuse in Urine Scheme

#### TDM

Analysis of Heathcontrol Therapeutic Drug Scheme

#### Toxicology

Analysis of Heathcontrol Toxicology Scheme

#### Forensics

Analysis of Alcohol in blood Drug profiles

- CLS: Clinical Laboratory Scheme
- SAR: SARS-CoV-2 Scheme
- IPT: Immunosuppressant Scheme
- TDM: Therapeutic Drugs Scheme
- DAH: Drugs of Abuse in Hair Scheme
- QUARTZ: Forensic Blood Toxicology Scheme
- FAE: Forensic Analysis for Explosives Scheme
- FIRMS: Forensic Isotope Ratio Mass Spectrometry Scheme

### OTHERS SCHEMES

#### QMIS

Identification of microorganisms

#### PHARMASSURE

Measurement of a range of analysis in pharmaceutical products used in hospitals

#### PHYTAS

Qualitative and quantitative analysis of botanical produsts

#### Cosmetics and Toiletries

Chemical and microbiological testing of Cosmetics and Toiletries

#### TOYTEST

Toy safety testing to The European Standard EN71 and ASTM F96

#### DAH

Drugs of Abuse in Hair Scheme

#### CANNABIS

Cannabis & Related Products

#### NiMS

Nickel Migration





















## Certified Reference Materials (CRM)

## Standard Reference Materials (SRM)



Excellence through measurement



## REFERENCE MATERIALS FOR CLINICAL ANALYSIS & FORENSIC TOXICOLOGY

- Reference Materials for Clinical Analysis Blood, serum, urine with certified values of trace elements, hormones and vitamins.
- Reference Materials for Forensic Analysis Alcohols, steroids and drugs in blood, serum, urine and hair; deuterated and native forensic standard solutions.

## **ENVIRONMENTAL ANALYSIS** REFERENCE MATERIAL

- Certified matrix reference materials for organic. inorganic, metals & nutrients analysis of
  - : Waters Drinking, Rain, Fresh, Spilked / fortified Water
  - : Sediments Freshwater & Marine sediments
  - : Soils & Sewage sludges





## REFERENCE MATERIALS FOR **FOOD INDUSTRY**

- Milk & Milk products Milk powder, Processed cheese, Whey powder & Infant Food
- Meat & meat products Beef, Pork, Lamb, Chicken, Fresh meat
- Fish & Fish products
  - : Shellfish; Mussel tissue, Oyster tissue
- Cereals & genetically crops
- Vegetable matter Fruit & vegetables; Apple, Carrot, Tomato, Peanut butter

## REFERENCE MATERIALS FOR PHYSICAL PROPERTIES

- Thermal properties Melting, freezing & triple points Flash point & Vapour pressure
- Particles & surface properties Particle size, Surface area, Coating & Surface tension
- Opticle properties

## PHARMACEUTICAL REFERENCE SUBSTANCES AND **IMPURITIES MATERIAL**

Reference substances from the world's Pharmacopoeia

#### LGC Quality - ISO Guide 34

- GMP/GLP
- ISO 9001
- ISO/IEC 17025
- ISO/IEC 17043





## THAILAND REFERENCE MATERIAL (TRM)

#### Inorganic Standard

- Secondary pH standards (Range: 1.10, 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 11.72)
- Zinc, Cadmium, Arsenic Standard Solution
- pH of ethanol
- Chloride, Sodium Standard Solution
- Secondary Electrolytic Conductivity Solution Potassium Dichromate Standard for Spectrophotometer

#### Sucrose Standard

 Sucrose Standard Solution (% Brix) (0.01%, 0.02%, 0.03%, 0.04%, 0.05% Brix) (5.00%, 10.00%, 20.00%, 30.00%, 40.00%, 50.00%,60.00% Brix)

#### Organic Standard

- Acaricide Pesticide
- Carbamate Pesticide
- Pyrethroid Pesticide
- Organochlorine Pesticide
- Organophosphate Pesticide
- Insecticide Pesticide
- Benzene, Ethylbenzene, Toluene, Xylene

### Gas Standard

- Gas Standard (Oxygen in Nitrogen)
- Carbon dioxide in Nitrogen
- Methane in Nitrogen
- Methane in Air
- Propane in Nitrogen
- Sulfur Dioxide in Nitrogen



#### Matrix Reference Material Etc.

Food/ Clinical/ Environmental

- Element in Glutinous Rice Powder
- Trace and Essential Elements in Prawn
- Total Malachite Green in Freeze Dried Prawn
- Melamine in cracker
- Alfatoxins in Peanut Butter
- Clenbuterol in feed /Salbutamol in feed
- Elcment/Total Cholesterol in Frozen Human Serum.
- Elements in Soil
- Mercury in Drinking Water
- Trace Elements in Drinking Water







# CHIRON

### REFERENCE MATERIALS

#### by ZeptoMetrix

#### Environmental analysis

- Nitroso
- Dioxins
- Furanes
- Nonfood
- Pigments
- Nitramines
- Microplastics
- > Phenolethoxylates
- > Plastic additives or raw materials

#### Food safety and hygenics

- Toxins
- > Parabens

Food Safety

Toxicology

Microplastics

- Aroma
- > Hygienics
- Colour Vitamins

Your

quality

business

is our

- Unsaturated
- > Fatty acids and derivative







- Steroids
- nucleic acids
- Cannabinoids
- Forensic drugs
- Plant chemicals
- Nucleotide bases Psychoactive drugs Veterinary Medicine







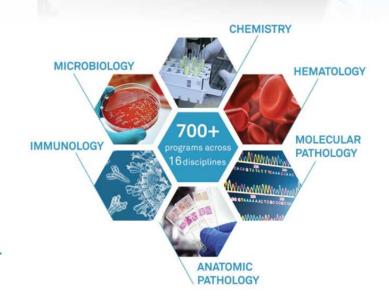




## Proficiency Testing/External Quality Assessment (PT/EQA)



Performance you can measure. Accuracy you can trust.



## Anatomic Pathology Education Programs

- Quality Cross Check
- Point-of-Care Programs
- General Chemistry and Therapeutic Drug Monitoring
- Endocrinology
- Blood Gas, Critical Care, and Oximetry
- Toxicology
- Accuracy-Based Programs
- Instrumentation Verification Tools
- Hematology and Clinical Microscopy

- Reproductive Medicine
- Coagulation
- Microbiology
- Immunology and Flow Cytometry
- Transfusion Medicine, Viral Markers, and Parentage Testing
- Histocompatibility
- Genetics and Molecular Pathology
- Anatomic Pathology
- Forensic Sciences





## FOOD SAFETY DIAGNOSTICS



tissue, urine, and water testing. Charm II is the choice of food industry

# **Applications**

- Multi-testing: Antibiotics, Aflatoxins, Pesticides, Alkaline, Phosphatase
- US, SL, MRL & CODEX level screening methods
- Multiple Antibiotic: Beta-lactams, Tetracyclines, Sulfonamides,



# Charm EZ System for Milk Testing

The Charm EZ system makes quick work of antibiotic and aflatoxin M1 testing in milk. Simply insert a ROSA lateral flow strip and add milk.

The system is configured with tests calibrated to US Safe Levels, EU, CODEX, and Customs Union MRLs.



## Charm EZ-M System for Grain Testing

The Charm EZ-M system reads any quantitative ROSA mycotoxin strip used for grain testing. Charm has ROSA tests for aflatoxin, DON (vomitoxin), fumonisin, ochratoxin, T-2/HT-2 and zearalenone that are GISPA certified.

Testing is so fast and simple to perform real-time analysis on raw ingredients as part of acceptance testing. By screening grains in the receiving area, food manufacturers can be assured that raw materials are of an acceptable quality.



## **EPIC System**

The Charm EPIC system is a microplate bioluminescence system that predicts spoilage in shelf-stable, ultra high temperature (UHT), and extended shelf life (ESL) beverage products. EPIC detects ATP, a bio-marker of microbiological quality. The system can screen beverage products in 24 to 36 hours. It can be tested in white milks, flavored milks, soy beverages, creams, yogurt-based drinks, ice cream and condensed milk.



The novaLUM II-X system brings together Charm's trusted ATP (adenosine triphosphate) detection technology and sophisticated new novaLINK 5 software to create a powerful system that makes sanitation verification, corrective action, and documentation easier than ever. In conjunction with Charm's PocketSwab Plus, FieldSwab, WaterGiene, and AllerGiene tests, the novaLUM II-X system is used for sanitation and allergen control, pasteurization verification, and pesticide screening. In just five seconds,

the novaLUM II-X system is able to detect even the lowest levels of ATP contamination.





Gold Standard Diagnostics is a global network of companies with decades of experience on the test kit, reagent and instrument development and manufacturing market. We provide fast, reliable, and easy to use diagnostic assays and instruments in the fields of environmental testing, food pathogen (Culture media, Microgen Bioproducts for Sampling and Confirmation).



### Microgen Kits

### Microgen Biochemical Identification

- Cost-effective and accurate
- Software available (MID60)
- No additional equipment needed (only incubator)

#### Microgen Latex Agglutination

- One of the most inclusive kits in the market
- Highly sensitive and specific

#### Microgen Path-Chek

- Repid and cost-effective
- Highly sensitive and specific

#### BACGro™ Culture Media

#### Set the Gold Standard for your Laboratory

- Easy to prepare media for pathogen screening
- Competitive pricing
- Consistency in results
- High standards in quality & performance
- Compliant with a wide range of reference
- Custom manufacturing & packaging solutions







#### **ABRAXIS® Environment and Water Kits**

We provide innovative, near real time, field and lab based testing solutions for water and environmental samples.

- Algal Toxins
- Pesticides (including Glyphosate)
- Industrial Chemicals / Hydrocarbons
- Markers for Bioactivity
- Surfactants
- Equipment





## 3D DIGITAL MICROSCOPE FOR **TOTAL IMAGING SOLUTIONS**





DIGITAL MICROSCOPE **HRX-02** 

- 1 10,000x Magnification
- 2D and 3D Measurement
- Point Height Measurement
- Volume and Area Measurement
- Roughness Measurement
- Auto Focus / Movie recorder
- Auto Calibration Select Sensor
- 360 Degree View Rotary Head
- Big Depth of Field
- Long Working Distance
- Continuously Zoom-in Focused
- Variable Observe Angle (25-55 Deg)
- Multi Layer Focus
- Live HDR & Automatic Optimisation
- New 5.0 Mega pixel CMOS chip supporting
- Running on 4K window PC
- Real-Time Measurement
- Anti-Vibration (Camera Stabilization)
- New Motorized Lenses





SMT / Semiconductor



Genetics



Metallic Organization



Human Hair 3,500x



Metal Corrosion





Biology



Non Contact Lens



Rotation Stage





360 Degree observation Handy Contact lens



#### **Applications**

Forensic, Museum, Automobile, Gemology, Medical/Pharmaceutical, Petroleum Research, Borne Piece - Archaeology, Automobile, Mintage, Gemology, Agriculture, Quarantine, etc.



Heat sensitive metabolites, isomers and complex molecules retain their compositiom as they are not degraded by heat or pressure.

## WORLD LEADER IN SAMPLE **PREPARATION**

- Particle size reduction
- Cryogenic grinding
- Tissue homogenization DNA/RNA extraction
- Pressing & pelletizing
- Sample handling for XRF

#### Freezer Mill CG-200



#### Freezer Mill CG-400



#### Freezer Mill CG-500



#### What is Cryogenic Grinding?

- The Ultimate Sample Preparation Technique for Pulverizing "Difficult" Samples
- Grinding materials at low temperatures.
- Liquid Nitrogen -196°C
- Not degrade by heat pressure

#### "Ungrindable" samples can be pulverized

- Leaves, roots, stems, seeds (cotton, sunflower, com), Polymers, rubber, silicones
- Fibers, hair, textiles
- Skin, bone, muscle, cartilage, etc.
- Food products, paint chips, pharmaceuticals Gums, resins, waxes
- Electronic components
- Tough food, feed materials (dog chews)

Plastic Toys





#### Dog Treats





#### Polyethylene Beads







Mixer Mill 8000D BM-450

Easily pulverize hard or brittle samples to analytical fineness in minutes. Grind rocks, minerals, grains, pharmaceuticals, plant and animal tissue, cement, and ceramics



X-Press XP-400

Hydraulic laboratory pellet press is an automatic and fully programmable pellet press designed for repetitive pressing of sample pellets for XRF, IR, and other analytical techniques.



**Enclosed Shatter Box** SM-200

ShatterBox® ring and puck mill is ideal for pulverizing dry, brittle samples and slurry grinding. To use, place your sample between the puck and the wall of the grinding container, place the clamp over the container









#### Spelt Seed





#### GENO/GRINDER® HG-600

The HG-600 Geno/Grinder® 2010 high-throughput homogenizer and cell lyser is designed for rapid cell disruption of plant and animal tissue through bead beating. Accommodates full range of sample vials from 2 to 50 mL

- Fast and efficient extraction of nucleic acids, proteins, and other molecules
- Pesticide extraction and other food analysis

#### MiniG HG-400

The HG-400 MiniG® is small yet powerful tissue homogenizer and cell lyser. The adjustable clamp can handle sample vials from 2 mL to 50 mL or up to two deep-well microplates. Using the bead beating method, it is designed for

- rapid cell disruption, cell lysis, and tissue homogenization.
- DNA/RNA research and extraction, protein extraction, biofuel research, and pesticide residue extraction via the QuEChERS or SWeET method.
- The grinding process is visible through the see-through lid window

#### CryoBlade CG-900

Breakthrough, automated processing from bulk to test portions in 15 minutes or less

- High-throughput process up to 1 kg of sample per run
- Efficient complete a method in 15 minutes or less
- Versatility capability to use liquid nitrogen or dry ice to process your sample
- Safety automated dispensing of liquid nitrogen eliminates the handling and manipulation of liquid nitrogen (patent pending)
- 230 VAC operation

#### Rice





Cannabis







## Complete Solutions for Sample Preparation

TurboVap® Evaporators

Fast Evaporation with Patented Vortex Technology













#### TurboVap® LV

Evaporation of either 24 or 48 position mode with independent control of flow in each row.

Compatible with tube sizes ranging from 10 to 32 mm and from 32 up to 165 mm in length. Acid resistant version available.

#### TurboVap® II

Evaporates six 50 or 200 mL samples with independent vial control. Automatic sensors detect when the solvent reaches the end-point volume and automatically stop the evaporation. Acid resistant version available

### Biotage® Extrahera™ Classic

#### Automated Sample Preparation with optional **GLP Software Package**

Biotage® Extrahera™ is an automation system for sample preparation methods, and does it with engineeredprecision. Extrahera™ is a powerful, user friendly automation system for Supported Liquid Extraction (SLE), Solid Phase Extraction (SPE), Phospholipid Depletion (PLD) and Protein Precipitation (PPT) based methods, in plate or column formats. Creating a method is simpler than ever. The clean and simple user interface delivered with Extrahera makes setting up your system a an easy task.

#### Biotage® Horizon 3100 Oil & Grease Extractor A Complete Solution for Oil & Grease Analysis

The Biotage® Horizon 3100 Oil & Grease Extractor automates the entire extraction process and is fully compliant with US EPA Method 1664A/B and Standard Methods 5520G. Process samples simultaneously directly from original sample bottle. Accommodates a wide range of sample bottles.

For extraction oil & grease from a wide range of clean and dirty aqueous samples. The Speed-Vap IV Solvent Evaporation System provides safe for oil & grease extractions.





But Bla CBla Hisa Hisa

THE RESERVED AS A PERSON ASSESSED.

### Biotage® PRESSURE+

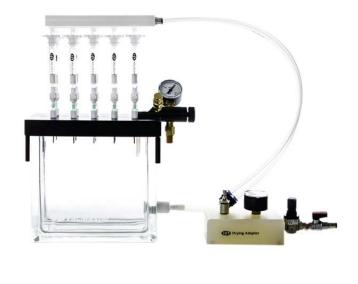
#### Positive Pressure for Smarter Sample Prep

Biotage® PRESSURE+ manifolds deliver positive pressure, parallel processing for 96 well plates, 1 mL 3 mL and 6 mL column formats. The systems utilize a consistent, uniform flow of positive pressure to move both low and high viscosity liquids through SPE plates and columns.

Each port of the manifold independently maintains constant pressure, increasing the overall reproducibility of analyte recoveries.

#### Vacuum Manifolds for Columns

Biotage® VacMaster™ Sample Processing Manifolds allow up to 10 (VacMaster-10) or 20 (VacMaster-20) SPE or filtration columns to be processed simultaneously under vacuum. Easy to use vacuum controls provide excellent sample flow control, leading to reproducible, reliable extraction conditions.





#### SPE & SLE Consumable Parts

- ISOLUTE SPE Columns and 96-well plates
- ISOLUTE SLE
- ISOLUTE QuECHERS
- ISOLUTE Ion Exchange Columns & Plates
- ISOLUTE Specialty Columns & Plates
- EVOLUTE Polymeric Columns & Plates



## MASS SPECTROMETER

#### SCIEX ZenoTOF Systems

Driven by the power of the Zeno trap coupled with electron activated dissociation (EAD) fragmentation technology, the ZenoTOF product family unlocks sensitivity gains allowing you to uncover new information for certainty in your results to make better-informed decisions, faster.

#### X500R QTOF System

The X500R QTOF system is the first robust, high-performance, high resolution MS system designed for routine food, environment, and forensic testing.



## Echo<sup>®</sup> MS System

Accelerating your speed of analysis with up to 3 samples per second, RUN FAST delivering results up to 50x faster than conventinal LC-MS, RUN FAST with uncompromising data quality only with the Echo® MS System.

#### APPLICATION:

- Environmental
- Metabolisms
- Clinical Research

#### Triple Quad Systems

SCIEX technology optimizes tandem mass spectrometry to keep your lab running at maximum productivity.

These systems enable scientists to acquire multiple reaction monitoring (MRM), precursor, neutral loss, and product ion scans to develop powerful methods for complex matrices, all while maintaining reproducibility and robustness.

#### QTRAP System

The SCIEX QTRAP System deliver new and exciting discoveries for identification, characterization and quantitation of your samples. From high throughput analysis to detailed analyte investigations, the QTRAP system goes beyond your expectations.



7500+ System

#### • Triple Quad 7500+ LC-MS/MS System - QTRAP Ready

The SCIEX 7500+ system takes precision quantitation to the next level. Achieve accurate results over sustained periods of time, across thousands of sample sets in increasingly complex matrices. Studies can be delivered in shorter timelines with the confidence to tackle new and emerging challenges. Maintain our highest levels of sensitivity for up to twice as long in complex matrices, and develop resilient assays for even the most complex matrices. Increase the scope for large MRM panels with our fastest triple quad ever and take control of your instrument downtime with front-end user serviceability.

- Lipidomics
- Forensic Drugs Testing
- Proteomics

- Food & Beverage
- Technology
- Drug Discovery



#### imChem HPLC columns



Our range of Surf, 3µm and 5µm analytical columns is dedicated to research and analysis. It is completed by a range of semi-preparative Surf columns, in 5µm and 10µm. In parallel, we offer a new analytical HPLC range, Shaper, in 3µm and 5µm, with higher resolution. To complete the range, we also have a range dedicated to scale-up, Coral, from 5 to 50 µm.



#### imChem Vials and Filters



#### imChem GC Capillary Columns



All our columns are manufactured from a tube of fused silica, a material that is both extremely pure and possesses very strong chemical inertia. Its polyimide coating guarantees it the flexibility typical of capillaries used for gas chromatography.

We attach a great deal of importance to the selection of the tube, a stage that is critical for the rest of the process.

Currently, HPLC is widely used in the chemical, biological and pharmaceutical fields. GVS three HPLC series include silica and polymer matrix columns, both analysis and preparative columns, to meet needs of customers in various fields.





Our HPLC columns have been designed and manufactured by Imtakt Corporation with exceptional craftsmanship and decades of industry experience. Our columns give chromatographers high resolution for unique problems.

Imtakt offer a wide variety of unique stationary phases to help you toward solutions for your challenges.





## PETROLEUM AND PETROCHEMICAL

## TESTING EQUIPMENT



Loss on Heat Thin Film Oven



Semi-Automatic **Ductility Testing Machine** 



Flash Point



Centrifuge





Digital Penetrometer



Automated Air Release Value Analyzer



### **ENVANTAGE-ESD**

**ESD Octane Analyzer System** 

LABORATORY SYSTEMS

SEMI AUTO SYSTEMS

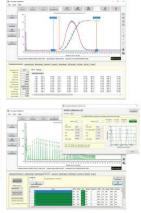
ONLINE SYSTEMS

- Falling Level Technology
- Automates Octane Determination
- Supports Manual Procedures
- Automatic Temperature Control
- LIMS Communications
- Disaster Recovery
- Redundant Server Standard
- Modbus Communications
- SQC

## **ENVANTAGE -Software**







Dragon II (DHA, Simdis and MergelT) for gas chromatography application analysis of petroleum products

# HITACHI

## X-RAY FLUORESCENCE ANALYZER: EDXRF



- The easiest, fastest and more versatile LAB-X ever
- Software and hardware are optimized for high through put testing
- User interface is inspired by our leading line of point and shoot handheld analyzers
- The large industrial-grade touch screen is resistant to chemicals and clearly displays results and controls
- Atmospheric compensation allows all measurements to be taken in air path, eliminating the cost of external gases
- LAB-X5000 complies with ASTM D4294, ISO 8754, ISO 20847 and IP 336.
- Suitable for Chemical, Petrochemocal (Fuel, Lubricating), Cement, Mining, Si on paper and etc.



#### X-Supreme8000

- Minimal or no sample preparation
- Unattended operation, and it can be used by non-laboratory operators
- Focus SD technology for speed, accuracy and long-term
- Flexibility to perform qualitative, semi-quantitative and full quantitative analysis
- X-Supreme8000 complies with ASTM D4294, ISO8754, ISO20847 and ISO13032 test methods
- Suitable for Chemical, Petrochemocal (Fuel, Lubricating). Cement, Mining, Si on paper and etc.



## Orbis 2 Plus Micro-XRF Analyzer

The Orbis 2 Plus Micro-XRF Analyzer is an upgraded model that is exceptionally well suited to analyze smaller samples or make faster measurements. The instrument is delivered with an advanced, LN-Free X-ray silicon drift detector (SDD), enhanced color video camera with 3x digital zoom, and a smallest 300 µm monocapillary standard. The Orbis PC's sample positioner has an upgraded XYZ stage with higher-precision sample positioning.



#### Standard Orbis PC components include: Rh tube (50 kV, 50 W)

- Rh tube (50 kV, 50 W)
- 30 µm ultra-high intensity poly-capillary optic (optional)
- Automated primary beam filter system (Open position, 6 filters, Shutter)
- Dual CCD cameras: 10x color; 100x color (3x digital zoom)
- Advanced 50 mm2 Silicon Drift Detector (SDD), Be or C5 window for low energyline detection - No liquid cryogen cooling required
- High precision computer-controlled XYZ stage
- Sample chamber: vacuum or air (He optional)
- Chamber Scope for viewing sample and control
- Stage control and Image based navigation
- Operating SW with automated analysis and quantification routines including:
  - Fundamental Parameter analysis with or without standards
  - Trace element Fundamental Parameters quantification in low Z matrices
  - Data collection modes: Spectrum acquisition, Line scan, Mapping

Application: Forensics, Gem and Jewery, Metal, Electronic parts, Industrial QC, Glass, Ceramic, Geology and more

## **FORENSICS** MICROSCOPE SYSTEM FIREARMS AND TOOL MARKS COMPARISION MICROSCOPE





## The Leeds Discover-Z

Leeds, the Discovery-Z providing the motorization of both stages and the focus movement. These new stages allow the examiner to measure sample features in both the X and Y axis on both the left and right-hand stages. The Discovery-Z was designed to enhance the workflow for a firearms examiner. In addition, the Discovery-Z offers over 900 matched magnification set points and 23mm field of view.



## Discovery-trace

Introducing the Trace-Z, a powerful trace evidence comparison microscope encompassing Zeiss optical components. The Trace-Z is designed for forensic science and other applications which require side-by-side comparison of various specimens. The Trace-Z, incorporating world-class optics, offers a unique, 23mm field of view, the largest field of view in the forensic marketplace. The Trace-Z can be configured for brightfield, darkfield, polarized light, phase contrast, fluorescence, and other contrast methods.



# DIGITAL FORENSICS



#### **MAGNET** AXIOM CYBER™

Correlate evidence from mobile, computer, and cloud

#### **MAGNET WITNESS™**

Recover and analyze CCTV footage without passwords



Trusted standard in digital evidence collection and analysis





#### **MSAB XRY**

Extract, decrypt, and analyze mobile data securely

### BELKASOFT EVIDENCE CENTER X

All-in-one forensic analysis made fast and simple



# FORENSIC SCIENCE



## FUME CARE

The Cyanoacrylate Fuming Chamber is used to develop latent prints from non-porous surfaces in a controlled and safe environment. The ductless design allows immediate use. Simply plug-in and go.



#### Master&Twtns Bullet Recovery Systems

The bullet recovery water system is used for the firearms identification.





- Fingerprint powder
- Magnetic powder
- Fingerprint ink
- Footprint GEL
- Mikrosil casting putty kit



# TRITECHFORENSICS

- Fiberglass latent print brush
- Flat camel hair latent print brush Phenolphthalein blood test kit
- Rabbit latent print brush
- Latent print magnetic powder applicator
- Single cardholder unit



### CRIME SCENE **INVESTIGATION EQUIPMENT**

- Evident paper/plastic bag
- Evident tape, tag and seal
- Scale and measurement device
- Crime Scene Investigation protection





- BLUESTAR® FORENSIC® Latent Blood Reagent
- BLUESTAR® OBTI® (formerly: Hexagon OBTI)



HEMASTIX PRESUMPTIVE BLOOD TEST

# **CSI Smartphone**

The power of a crime lab in the palm of your hand.



#### System Features



Fully customized 6" Forenscope Smartphone



Internal Forensic Control Software

Ring Light System -

White Polarizer, White

Power, UV (UVA),

Blue 1, Blue 2, Green



UV (UVA) VIS & Polarizer High Resolution Multispectral Camera



RAW + Jpeg. RAW:15.4 MB, 4030x 3015 JPEG: 760 KB, 4000x3000



Built in Lithium Battery



Photo scale cap for Darkroom

## Orange Ring Filter System **Software Features**

Full Spectrum, Polarizer,

Special Long pass Yellow,



1:1 Photography



Video Recording



Compare



Edit



Report



Export

#### ALPHA II

ALPHA II Compact FT-IR Spectrometer Dedicated to rapid routine chemical analysis with maximum user convenience and reliability. Compact form factor paired with benchtop QC performance.



#### INVENIO

INVENIO FT-IR Spectrometer Platform Anytime upgradeable FTIR spectroscopy platform for advanced quality control, analytical service and multi spectral research applications.



#### LUMOS II

MOBILE-IR II Portable FT-IR Spectrometer A mobile FT-IR spectrometer with true laboratory performance that you can take anywhere. Even on the road, you never have to sacrifice performance or compromise on reliability or spectral quality.

















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