

Thermo Scientific Environmental Analysis.

What you need for what the world demands. Sample input to data output, we have you covered with the most comprehensive chromatography, mass spectrometry and spectroscopy instrumentation in the world. A complete portfolio of instrumentation, software, applications, columns and consumables for virtually every environmental contaminant. Everything designed to go beyond routine analysis and monitoring because so much rides on everything you do. Not just optimizing productivity in the lab and saving bottom lines, but safeguarding the environment as well.

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A photograph of a man in a striped shirt carrying a young child on his shoulders. They are standing in a vast green field under a dramatic sunset sky with orange and blue clouds. The child is pointing towards the horizon.

Protecting the future.

Protecting the future.

Bringing a brighter tomorrow.

We all know compliance standards and regulations will continue to evolve. As will environmental threats. Year-to-year, country-to-country.

What if the equipment your lab arms itself with today would meet tomorrow's demanding needs as well?

That's the concept behind the Thermo Scientific™ portfolio. The instruments, software, columns, consumables and applications.

We take a leading edge approach to your toughest environmental challenges from simple to complex matrices.

The result? Thinking forward and staying ahead of the game not only helps protect the investments you make today, but helps protect tomorrow's environment, as well.

We're sure you'll agree it's a future filled with nothing but promise all around.



Sample preparation and consumables that simplify environmental analysis as they improve throughput.

We provide complete solutions for both online and offline solid phase extraction as well as systems for automated solvent extraction, to cover even the most challenging analyses. Coupled with customized solutions, you'll find setting up and running the most demanding separation easier than you think.



Automated Solid-Phase Extraction

The Thermo Scientific™ Dionex™ AutoTrace™ 280 Solid-Phase Extraction (SPE) instrument is a fully-automated, offline SPE system used for automatic extraction and concentration of organic contaminants, to accommodate a wide variety of water samples. Including drinking water, surface water, ground water and wastewater.

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Virtuoso Vial Identification System

Thermo Scientific™ Virtuoso™ Vial Identification System is a fast sample identity and security system that provides reliable and accurate customized sample information printed directly onto a vial while maintaining chain-of-custody deeper into the workflow.

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Accelerated Solvent Extraction

Thermo Scientific™ Dionex™ ASE™ 150 and 350 Accelerated Solvent Extraction systems provide walk-away automation that allows you to extract soil and sediment samples overnight. There are no matrix limitations and contaminants can be extracted from low-moisture content or high-water content samples.

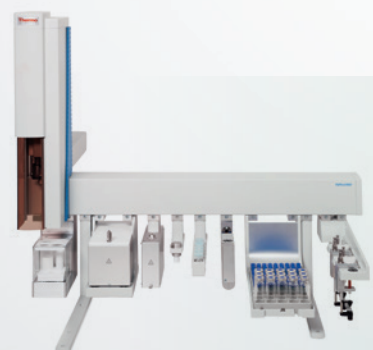
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LC and IC Columns and Consumables

Thermo Scientific™ Acclaim™ Accurore™ and Hypersil™ UHPLC and HPLC Columns deliver innovative chemistries tailored for challenging and critically important applications. Application specific columns utilize novel and unique chemistries to provide superior resolution with ease of use for key environmental applications.

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Liquid Sampling, Headspace Sampling and Solid-Phase Microextraction

The Thermo Scientific™ TriPlus™ RSH Autosampler successfully integrates three modes: liquid, headspace and solid-phase microextraction sampling. Solid-phase microextraction is a technique used to analyze volatile and semi-volatile organic compounds in environmental water samples. This autosampler can automatically switch between modes based on sampling requirements, thereby achieving consistent uniformity with operation and enhancing laboratory efficiency and productivity.

thermoscientific.com/en/product/triplus-rsh-autosampler.html



GC Columns and Consumables

Thermo Scientific™ GC columns and accessories are designed to give optimum system performance for today's challenging analyses. Thermo Scientific™ TraceGOLD™, Thermo Scientific™ TRACE™ and Thermo Scientific™ TracePLOT™ columns provide excellent quality and performance. Our range of GC accessories include all the tools needed by today's gas chromatographers.

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You're completely covered with gas, liquid and ion chromatography separations.

Successful detection, identification and quantitation of contaminants starts with successful separations. Some materials are more amenable to separation by gas, liquid or ion chromatography, while others require additional techniques to achieve separation. Whatever the method, our environmental experts offer support and guidance to determine which solution best meets your needs today and covers you for the future.



Vanquish™ UHPLC System thermoscientific.com/hplc-uhplc

Designed with innovative technology and fine detail, the Thermo Scientific™ Vanquish™ UHPLC system delivers a new standard in UHPLC. More results with better separations and easier interaction simultaneously, without compromise. This fully integrated system features high sample capacity for high-throughput workflows, industry-leading pumping performance, amazingly low signal-to-noise and linearity, and much more. All in a system driven by our uniquely versatile Chromeleon CDS software.



TRACE™ 1310
Gas Chromatography system

Boost productivity, accelerate response times and lower your total cost of ownership with the Thermo Scientific™ TRACE™ 1310 Series GC system. Combining versatility and exceptional GC and GC-MS performance, it's an ideal choice for environmental laboratories. This system features a full touch screen for instrument control, status monitoring and on-instrument methods development. With its instant connect injectors and detectors, you can change modules in minutes to reconfigure for a different workflow, develop new methods and minimize instrument downtime.

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Dionex™ Integrion™
HPIC™ system

The Thermo Scientific™ Dionex™ Integrion™ HPIC™ system ensures versatile and efficient IC analyses through comprehensive application solutions and interactive wellness features that help you adapt to changing demands while keeping your lab running seamlessly.



Simplify targeted contaminants analysis today and tomorrow.

Setting the standard for sensitive, specific quantitation and identification of targeted compounds, Thermo Scientific triple quadrupole GC, LC and IC-MS/MS systems combine superb sensitivity and selectivity with outstanding productivity and reliability. Equip your lab to efficiently meet ever-evolving challenges as you help safeguard earth's air, soil and water.



TSQ™ 8000 systems

Take a major step up in productivity and performance with the Thermo Scientific™ TSQ™ 8000 Evo Triple Quadrupole GC-MS/MS. Designed for and developed with high throughput analytical labs, the TSQ 8000 Evo system delivers the highest productivity of our triple quadrupole GC-MS/MS systems, with MS/MS simplicity and even higher performance SRM. This unique system offers deep integration between hardware and software that helps laboratories adapt to their changing environment and deliver quality results on time, every time.

thermoscientific.com/qqq-gc-ms



DFS™ Magnetic Sector GC-HRMS

The Thermo Scientific™ DFS™ Magnetic Sector GC-HRMS, the Gold Standard for Dioxins & POPs, is the only GC-MS specifically designed for Dioxin and POPs analysis. The DFS GC-HRMS offers worldwide full compliance with any official Dioxin, PCB or PBDE method (for example EPA 1613, 1668, 1614). Exploit the benefits of highest available Dioxin sensitivity and robustness, delivered by our large-volume ion source. The Thermo Scientific DFS GC-HRMS is the solution of choice for the Dioxin expert lab.

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TSQ™ triple quadrupole LC-MS/MS systems

Thermo Scientific™ TSQ Endura™ and TSQ Quantiva™ LC-MS systems provide LODs and LOQs unrivaled in their class. Each offers rugged and reliable operation 24/7, regardless of sample type or matrix complexity. And with an easy-to-use interface that takes the worry out of method development and operation. The result? You can now spend more time thinking about your analysis and less time worrying about instrument set-up and operation.

thermoscientific.com/qqq-lc-ms



Dionex™ IC-MS/MS system

The Thermo Scientific™ Dionex™ IC-MS/MS system offers unmatched retention and chromatographic resolution provided by high-capacity ion chromatography that complement the detectability, selectivity and identification capabilities provided by TSQ triple quadrupole mass spectrometry for contaminants that include ionic and polar pesticides, perchlorate, and haloacetic acids.

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iCAP RQ ICP-MS

The Thermo Scientific™ iCAP™ RQ ICP-MS is the ideal instrument for reliable analytical performance and the ease-of-use needed to meet the demands of the highest throughput laboratories. This complete multi-element analysis solution delivers comprehensive interference removal for assured data accuracy, combined with intuitive workflows to boost productivity. This single quadrupole (SQ) ICP-MS will expand your analytical capabilities. We also offer a portfolio of trace element solutions, including AAS and ICP-OES.

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Delta Ray Connect™

The Thermo Scientific™ Delta Ray™ and Delta Ray Connect™ incorporate state-of-the-art mid-infrared spectrometry for the monitoring and detection of CO₂ sources, sinks and fluxes. Both systems also offer calibrated and verifiable data for CO₂ concentration measurements. Delta Ray and Delta Ray Connect are designed for field portability and operational simplicity in mind. Easy to use with a fully automated software solution and workflow, Delta Ray and Delta Ray Connect provide solutions for continuous monitoring of environmental CO₂ as well as discrete sample measurement.

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The gold standard by which future systems will be judged.

The remarkable Thermo Scientific™ Q Exactive™ GC Orbitrap™ GC-MS/MS high resolution accurate mass (HRAM) mass spectrometers produce data that can be used for highly sensitive and selective quantitation, as well as for in-depth non-targeted unknown analysis. Built-in databases designed for environmental analyses make quantitation and targeted as well as non-targeted analysis from a single data set absolutely seamless. Additionally, they'll give you the option to reanalyze data retrospectively without the need for sample reinjection.



Q Exactive™ GC Orbitrap™ GC-MS/MS system

The Q Exactive™ GC Orbitrap™ GC-MS/MS system represents the first ever combination of capillary gas chromatography and high-resolution/accuratemass (HRAM) Orbitrap mass spectrometry. A formidable combination that provides the most comprehensive characterization of samples and the highest confidence in contaminant testing, identification and quantitation. The system is easy to use and provides unparalleled selectivity and linearity even with the most complex of matrices with the quantitative performance of a GC triple quadrupole MS combined with the high precision, full-scan high-resolution/accurate-mass capability that only Orbitrap technology can offer.

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Q Exactive™ Focus hybrid quadrupole-Orbitrap LC-MS/MS system

The sensitivity, selectivity, flexibility and ease-of-use provided by hybrid quadrupole-Orbitrap mass spectrometers have genuinely set the standard for screening and quantitation, identification and confirmation of targeted and untargeted compounds. The Thermo Scientific Q Exactive Focus hybrid quadrupole-Orbitrap MS makes this power accessible to environmental labs challenged by increasing sample numbers and constrained by strict budgets. It simplifies method development, saving time and decreasing costs while reliably delivering unsurpassed results.

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Exceptional software to power your lab into the future of environmental analysis.

Simplify method development, automate data acquisition, and ensure that the most information is extracted with our intuitive, application-specific software solutions.

Thermo Scientific Integrated Informatics



Laboratory Information Management Systems (LIMS)

By connecting all of your data and automating your laboratory with a Laboratory Information Management System (LIMS) you can transform your business, facilitate better collaboration and information sharing, reduce costs and make more efficient use of your resources - from lab personnel, instruments and other lab investments to software. Thermo Scientific LIMS and Informatics solutions are designed and implemented in collaboration with our customers, fully optimizing existing laboratory instrumentation and equipment investments, delivering solutions to meet current needs but designed to grow as business needs demand. We enable laboratory professionals to automate and integrate their operations to improve access to real-time information and cost-effectively manage samples and resources, capture and analyze quality data, provide essential reports and ensure regulatory compliance.

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TraceFinder™ software

Our Thermo Scientific™ TraceFinder™ software is an easy-to-use, workflow-driven software for laboratories performing quantitation, targeted and non-targeted analysis using GC-MS and LC-MS. TraceFinder software increases productivity with powerful method development, simplified data acquisition, comprehensive data review and extensive reporting features including custom report options.

thermoscientific.com/tracefinder



Chromeleon™ CDS software

Dionex Chromeleon™ CDS software unifies workflows for chromatography (GC, IC, LC) and routine quantitative MS analysis, providing full integration of GC-MS, IC-MS and LC-MS instruments. Quickly and easily process and report MS data in one application. Run your analyses in an enterprise environment, from method creation to quantitation and library-based compound identification.

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Applications Library Resource

Cross-technique application expertise in a single online location for GC, HPLC, UHPLC, IC, GC-MS, IC-MS and LC-MS. Transfer environmental applications easily to your laboratory with direct application download as PDF together with a wide range of analytical methods for environmental analysis ready-to-run in the Chromeleon CDS software.

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