



WE CRAFT ASSURANCE

Analytical Solutions for Wet Chemistry





WE CRAFT ASSURANCE. For Our Partners, For Their Customers.

Founded in 2015 and comprised of nine strong product brands, KPM Analytics is a global leader in analytical instrumentation, inspection systems, and machinery, that enable companies to effectively manage product quality and brand value. Through long partnerships with global blue-chip companies in the industry, we focus on serving craftspeople in the food, agriculture, and environmental sectors, offering a comprehensive range of products and services to analyze critical parameters in their processes and solve their unique challenges. As a partner, we provide key metrics and intelligence to reduce waste and costs, increase energy efficiency, improve quality, and help companies protect their brands.

OUR PURPOSE

We provide premium quality assurance equipment for food producers, environmental researchers, industrial manufacturers, and others through expert craftsmanship and intimate knowledge of their business needs.

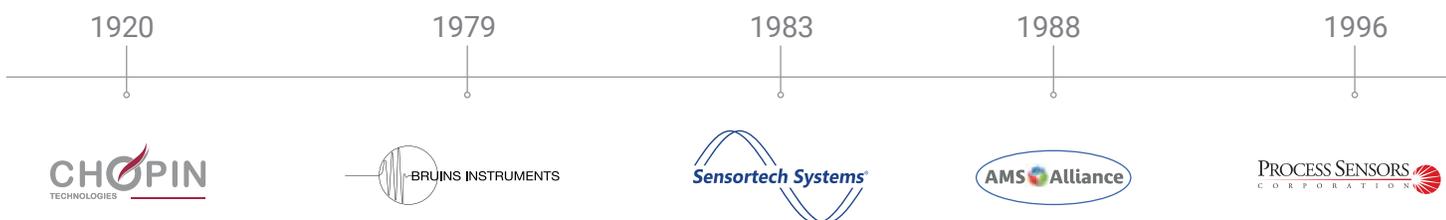
OUR VISION

Our partners all over the world will grow stronger from our driven, dedicated, and caring approach to solving their challenges, enabling KPM to become the global industry leader.

OUR MISSION

We provide the best solutions to help our partners control their product quality, scale capacity, and protect their brands.

NINE STRONG BRANDS SPANNING OVER 100 YEARS IN QUALITY ASSURANCE



Automated Chemical Analyzers that Streamline Operations

KPM Analytics provides automated wet chemistry instruments designed to automate and streamline the process of chemical analysis of liquids. Laboratories around the world conducting research, environmental analysis of water and soil, or food and beverage analysis utilize these instruments to perform routine tests on a daily basis.

For three decades, our AMS Alliance brand of discrete analyzers, continuous flow analyzers, and lactic acid activity monitors have helped laboratories improve operational efficiencies.

Key benefits:



Automation to increase throughput and reduce the potential for human error: sample preparation, reagent addition, mixing, heating, and measurement processes.



Flexibility to support a wide range of applications, including the ability to handle different sample types and volumes.



Advanced data management to facilitate data collection, analysis and reporting.



User-Friendly interface and intuitive software for users of all skill levels to simplify training and operation.



Accuracy and precision to ensure trusted results that meet regulatory standards.

1999



2001



2009



2012

SMARTVISIONWORKS

2015



Serving Research, Environmental & Food Industries

Thousands of organizations worldwide use KPM Analytics' discrete and continuous flow analyzers, and in-line pH, temperature, and redox potential systems to provide accurate testing results in a variety of applications.



PLANT, SOIL, AND FERTILIZER ANALYSIS

- Optimize agricultural practices, ensure proper nutrient management, enhance crop productivity, and protect the environment.



WATER AND BEVERAGE ANALYSIS

- Assess pH, dissolved oxygen, impurities, acid, sugars, alcohol content, and several other parameters to ensure quality control and compliance.



FOOD EXTRACT ANALYSIS

- Help ensure the safety and integrity of food products, protect consumer health, and support accurate product labeling.



ACIDIFICATION TESTING

- Used by ferment and starter culture manufacturers for product quality and the development of new cultures for the dairy and fermented foods industries.

SmartChem® Series - Automated Discrete Analyzers for Wet Chemistry

The SmartChem® Series is a high-precision, fully automated spectrophotometer platform for wet chemistry analysis. With thousands of installations worldwide, it is widely used for **water analysis (drinking, wastewater, surface, seawater), as well as beverages, soil, fertilizers, and food extracts.**

Available in seven models, SmartChem® offers an intuitive software environment that simplifies daily laboratory operations. By automating routine tasks such as testing, cleaning, calibration, quality control, and data management, it improves productivity and operational consistency. Its versatility allows multiple matrices and test parameters to be handled within a single workplan, even in complex analytical workflows.

Designed for efficiency and sustainability, SmartChem® delivers a low cost of ownership thanks to robust hardware, minimal maintenance, reusable cuvettes, and microliter reaction volumes. It significantly reduces reagent consumption and waste while maintaining high-quality, reliable performance.

Core benefits of the SmartChem® platforms

- Fully automated wet chemistry analysis
- Walk-away operation to reduce operator workload
- Low reagent consumption and reduced waste
- Reliable, reproducible results with minimal maintenance
- Ready-to-use dedicated reagents

Find the SmartChem® model that fits your laboratory workload

			
	SmartChem® 200	SmartChem® 210	SmartChem® 450
Software	SmartChem 200	SmartChem Pro V3	SmartChem Pro V3
Test/hour	Up to 200	Up to 300	Up to 450
Samples Capacity	126	60	68/100
Sample Refrigeration	No	No	No
Reagent Refrigeration	Optional	No	Yes
Cuvette Positions	60	60	80
Recommended Use Case	Small to mid size labs	Small to mid size labs	Mid size labs
Typical Daily Samples	20 - 80	20 - 100	20 - 100

				
	SmartChem® 600	SmartChem® 800	SmartChem® 810	SmartChem® 820
Software	SmartChem Pro+	SmartChem® Pro V5	SmartChem® Pro V5	SmartChem® Pro V5
Test/hour	Up to 600	Up to 600	Up to 600	Up to 600
Samples Capacity	200	Up to 800	Up to 800	Up to 800
Sample Refrigeration	No	No	No	Yes
Reagent Refrigeration	Yes	No	Yes	Yes
Cuvette Positions	85	85	85	85
Recommended Use Case	Large Labs	Very high-volume labs	Very high-volume labs	Very high-volume labs
Typical Daily Samples	100 - 200	200-800	200-800	200-800

SmartChem® 600 and SmartChem® 800 Series

HIGH-CAPACITY AUTOMATION FOR DEMANDING LABORATORY WORKLOADS

The SmartChem® 600 and SmartChem® 800 Series are designed for laboratories operating at high and very high analytical volumes. Built on the same SmartChem® platform, they provide extended capacity, long walk-away operation, and robust automation to handle dense and demanding daily workloads with consistency and reliability.

These systems are intended for laboratories where throughput, autonomy, and operational efficiency are critical to maintaining turnaround times and productivity.

SmartChem® 600

HIGH-CAPACITY AUTOMATION FOR SUSTAINED HIGH-VOLUME TESTING

The SmartChem® 600 is designed for laboratories managing high, stable analytical volumes. Its increased sample and reagent capacity enables long unattended runs, helping laboratories optimize productivity without adding staff or instruments.

RECOMMENDED USE CASE

- High-volume laboratories
- Typical daily samples: **100–200**



SmartChem® 800 / 810 / 820

NEXT-GENERATION PLATFORM FOR VERY HIGH- VOLUME LABORATORIES

The SmartChem® 800 Series represents the next generation of SmartChem® analyzers, designed for laboratories facing very high sample volumes and unpredictable workloads. With extended sample capacity, true random access, and maximum autonomy, it supports continuous operation throughout the day while maintaining reliable analytical performance.

RECOMMENDED USE CASE

- Medium to high-volume laboratories
- Typical daily samples: **100+**



Equipped with SmartChem® Pro V5 software, common to SmartChem® 210–820 models, simplifying user training and instrument transitions across the series.

SmartChem® 210 and 450

AUTOMATED WET CHEMISTRY FOR MEDIUM-VOLUME LABORATORY WORKLOADS

The SmartChem® 210 and SmartChem® 450 are fully automated discrete wet chemistry analyzers designed for laboratories operating at medium analytical volumes. Built on the same SmartChem® platform, they deliver higher throughput and extended autonomy while maintaining consistent analytical performance and ease of use.

By automating routine and higher-density analytical workflows, both systems help laboratories manage stable, medium-volume workloads efficiently—without increasing operator workload or operational complexity.

SmartChem® 210

EFFICIENT AUTOMATION FOR MEDIUM-VOLUME ROUTINE TESTING

The SmartChem® 210 delivers a throughput of **up to 300 tests per hour**, making it well suited for laboratories with regular, medium-volume analytical demands. Its compact bench-top design and automated operation support reliable day-to-day workflows while preserving simplicity.

RECOMMENDED USE CASE

- Medium-volume laboratories
- Typical daily samples: **20–100**
- 60 reaction cuvettes



SmartChem® 450

INCREASED AUTONOMY FOR SUSTAINED MEDIUM-VOLUME WORKLOADS

With a throughput of **up to 450 tests per hour**, the SmartChem® 450 is designed for laboratories requiring greater autonomy and higher sample and reagent capacity. It supports denser analytical schedules while allowing operators to focus on other tasks through reliable walk-away operation.

RECOMMENDED USE CASE

- Medium-volume laboratories
- Typical daily samples: **20–100**
- 80 reaction cuvettes
- Reagent refrigeration



Equipped with SmartChem® Pro V5 software, common to SmartChem® 210–820 models, simplifying user training and instrument transitions across the series.

SmartChem[®] 200

SIMPLE AND EFFICIENT ROUTINE TESTING

The SmartChem[®] 200 is a fully automated discrete wet chemistry analyzer offering a throughput of **up to 200 tests per hour**.

Designed for routine laboratory workloads, it automates everyday analytical tasks and reduces the need for operators to perform repetitive manual procedures.

Combined with its dedicated SmartChem[®] 200 software, the system provides a simple and reliable working environment that helps laboratories streamline daily operations while delivering consistent and reproducible results.

RECOMMENDED USE CASE

- Low to mid-volume laboratories
- Typical daily samples: **20–80**



DEDICATED SMARTCHEM[®] 200 SOFTWARE

The SmartChem[®] 200 software is specifically designed for this platform, focusing on simplicity, clarity, and ease of use for routine laboratory operations.

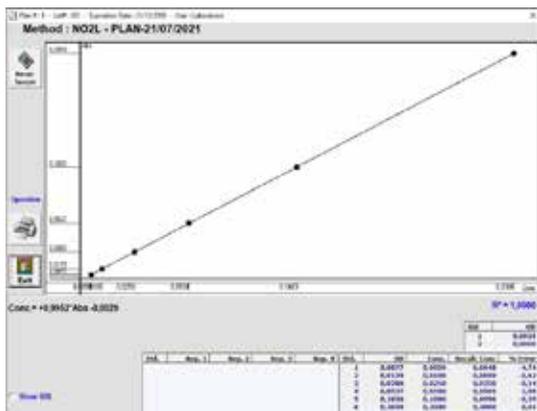
Operators are guided step by step through daily workflows, from workplan setup to result reporting, allowing fast onboarding and confident operation, even for non-specialist users.

Software highlights

- Dedicated interface optimized for SmartChem[®] 200
- Guided workflows for routine wet chemistry analysis
- Automated calibration and quality control procedures
- Clear visualization of instrument status and ongoing analyses
- Automated result reporting with LIMS connectivity available



System Monitor - View Instrument Status During Testing



Calibration Curve

A screenshot of the Workplan Results software interface, displaying a table of test results. The table has columns for Sample ID, Date, Time, Result, and Status. The results are organized into a grid with multiple rows and columns.

Workplan Results

SmartChem® Pro V5 Software

A new standard for ease of use in automated wet chemistry analysis

SmartChem® Pro Software is a modern software environment designed to simplify daily laboratory operations while supporting advanced automated workflows.

Used across SmartChem® analyzers from 210 to 820, it provides a consistent user experience that helps laboratories streamline training, ensure operational continuity, and manage increasing analytical demands with confidence.

Beyond routine operation, SmartChem® Pro enables laboratories to manage multiple test plans within a single run while offering built-in service and support features to improve uptime and reduce dependency on external assistance.

Complete control and real-time visibility

SmartChem® Pro Software gives operators **full control and clear visualization** of the instrument's operation and performance throughout the analytical run.

From setup to execution, users can monitor system status, reagent levels, sample progress, and ongoing analyses in real time, helping them anticipate actions, manage priorities, and maintain smooth laboratory workflows.

Designed for ease of use in busy laboratories

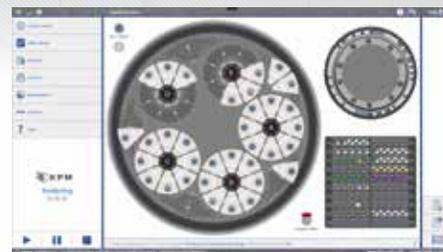
Built on years of SmartChem® field experience, SmartChem® Pro combines an intuitive interface with structured workflows to simplify every step, reduce training time and minimize operator errors.

Clear visual guidance and logical navigation allow operators of all experience levels to complete daily tasks quickly and confidently, even in high-throughput environments.

Integrated support and troubleshooting

SmartChem® Pro Software includes **built-in service features** designed to support operators directly within the software environment.

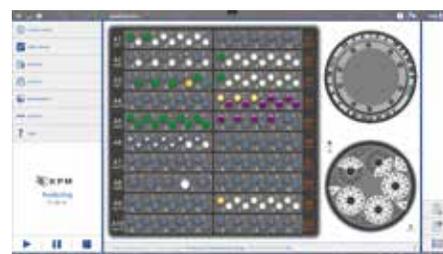
An integrated troubleshooting guide, combined with a multimedia library of tutorial videos and support documents, helps users quickly identify the root cause of issues and resolve them independently, improving uptime and reducing interruptions.



System Monitor - Reagent Plate



Workplan Setup



System Monitor - Sample Plate (ongoing analysis)



Calibration Curve

NexaFlo® Segmented Flow Analyzers



For over 30 years, KPM has been a leader in developing and innovating segmented flow analysis. Our FUTURA line of segmented flow analyzers have been widely used in industrial and commercial labs around the world for environmental, tobacco, soil, fertilizer, wine, food and feed, and other applications.

The new segmented flow analyzer, NexaFlo®, is a significant step up from the FUTURA, with intelligent flow management, simplified design for improved reliability, easier diagnostic and serviceability, all while maintaining the flexibility and broad application range of the popular FUTURA series.



- Reagent containment system that prevents solvent vapor accumulation, reducing the risk of reagent spillage for a safer working environment.
- Helps overcome common industry challenges, such as working with ultrapure water as a carrier or a potassium chloride (KCl) solution, and supplying a workaround when there is risk of trace amounts of ammonia in commercial KCl.
- Precision and accuracy to meet the requirements for low limits of quantitation (LLOQ).
- Automatic testing and inline sample preparation.
- Low level of detection.
- Up to 120 samples/hour with autosampler for high throughput sampling.
- Up to 14 channels for parallel testing.
- Two models available: NexaFlo® 400 without local display, and NexaFlo® 450 with color touchscreen display.

DESIGNED FOR EFFICIENT LABORATORY OPERATIONS

NexaFlo® enables laboratories to streamline analytical workflows, meet regulatory requirements, and support informed decision-making for environmental protection and product quality control.



NexaFlo® Software

The user friendly NexaFlo® analytical software prepares calibration, standards, runs samples and quality controls, dilutes any out-of-range samples, prints reports and QC charts, exports data to LIMS, washes out the manifold and manages shutdown operations.

- Simplifies day-to-day operations by running the analysis of all parameters on each channel (up to 14 channels)
- Drives auto-samplers and accessories for automatic sample preparation
- Monitors all performance details during analysis (heating bath temperature, voltages, detector outputs) and alerts the user of any problems

A simplified version of the NexaFlo® software is run on NexaFlo® 450 with a color touchscreen display for easier diagnostics, maintenance, device setup, significantly improve the user experience.

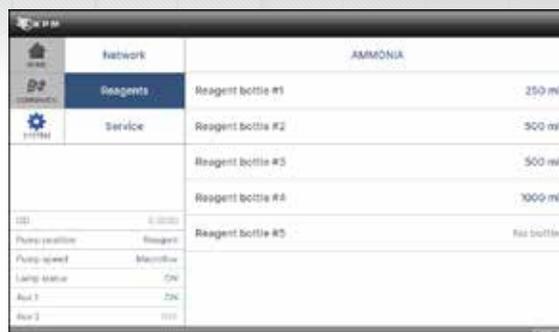
Modular design

NexaFlo® features a modular manifold architecture designed to adapt precisely to each analytical method.

Manifolds are configured to ensure accurate, repeatable measurements across a wide range of parameters while maintaining flexibility for evolving laboratory needs.

Each manifold configuration may include:

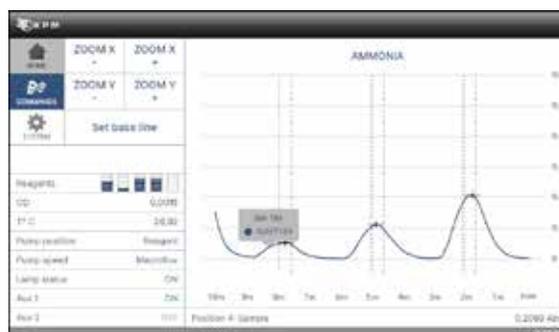
- Custom coil sets for controlled sample and reagent flow.
- Internal or external heating bath, depending on method requirements.
- Flow cells with different optical path lengths (10 mm or 50 mm).
- Detector options including UV/Vis colorimeter (standard), flame photometer, or fluorimeter.
- Optional inline pre-treatment modules, such as digestion or distillation, can be integrated according to the analytical method and are described in the following section.



Reagents Configuration



Reagents Level



Workplan + Commands + Value Label

Achieving Complete Automated Analysis with the NexaFlo® Ecosystem

NexaFlo® is at the core of a complete analytical ecosystem designed to automate every step of wet chemistry analysis. From sample introduction and conditioning to inline pre-treatment, system washing, and module integration, dedicated complementary devices extend NexaFlo® capabilities to deliver **fully automated, end-to-end analysis**.

ANALYTICAL FUNCTIONS

- **Distillation / Dialysis / UV Digestion / Extraction:** Inline pre-treatment modules within the NexaFlo® manifold
- **Injection:** Autosampler
- **Dilution:** Auto Dilutor
- **Mixing, Incubation:** CFA principle within the NexaFlo® manifold

AUTOMATED SAMPLE INTRODUCTION

NexaFlo® supports a range of **autosamplers** from 104 to 360 positions, adapting to different throughput and automation needs. All configurations ensure reliable and repeatable sample injection, enabling unattended, high-throughput operation while reducing manual handling.

Sample conditioning is extended through optional configurations:

- **Auto Dilutor** for automatic pre- and post-dilution of off-range samples
- **Multiple Probe option** for parallel sampling and probe rinsing, reducing carryover and improving workflow continuity

INLINE PRE-TREATMENT MODULES

Depending on the analytical method, NexaFlo® can be equipped with **optional inline pre-treatment modules** performing automated **distillation, thermal or UV digestion, extraction, and reaction control**, fully integrated into the NexaFlo® manifold.

Examples of available modules: Distillation module, UV digestion module, Inline extraction, External heating bath (single or double), Autoclave for TP/TN

AUTOMATED SYSTEM WASHING

The **5-Way Valve Assembly** provides automated system washing and rinsing, ensuring consistent cleaning of fluidic paths between analyses, reduced cross-contamination, and reliable unattended operation.

SYSTEM INTEGRATION

The Full **Auto Power Supply** for External Test Modules ensures synchronized and stable operation with external modules.



Autosampler 104S



Distillation module



UV Digestion

NexaFlo® Application and Seawater

APPLICATIONS

Laboratories use NexaFlo® to perform tests on important parameters in water and soils (drinking, waste, surface, sea and ground water), tobacco, and beverages such as:

Drinking Water	Wastewater	Seawater	Soil/Fertilizer	Tobacco	Wine	Dairy
Ammonia					Enzymatic sugars	Nitrate
Nitrates/Nitrite, TKN				Nitrite	Free Total SO ₂	Nitrite
Phosphate, TP, TN				Cyanide	Volatile acidity	Formaldehyde
MBAS	Silicates	Cr	Starch	Reducing sugars		
Phenol	Chloride	K	Sorbic Acid			

Application Focus: Low-Level Nutrient Analysis in Seawater

Seawater is a challenging analytical matrix due to its high salinity and high concentrations of major ions, while nutrients are often present at **low levels**. Reliable analysis therefore requires stable analytical conditions and precise control of the segmented flow process.

NexaFlo® supports seawater nutrient analysis using **validated marine chemistries** for nitrate, nitrite, phosphate, and silicate, as well as the **OPA fluorometric method for ammonium**. Dedicated manifolds and optimized flow conditions ensure stable baselines and reproducible results during extended analytical runs.

Seawater Nutrient Method Performance

NexaFlo® methods for nitrate, nitrite, silicate, phosphate and ammonia show **excellent analytical stability** and **low detection limits**.

NexaFlo® methods for nitrate, nitrite, silicate, phosphate and ammonia show excellent stability and very low detection limits.

Example calibration – Nitrite (N-NO₂): strong linear response and low variability. Equivalent performance was obtained for all analytes.

LOD = 0,03 ppd
 LOQ = 0,1 ppd
 MDL = 0.03 ppd
 std.dev. = 0.01



LOD and LOQ calculated according ISO 13530 - MDL based on EPA, sub.D-CFR Appendix B to Part 136

iCinac Lactic Acid Bacteria Fermentation Monitor Series

The iCinac Series is a first-of-its-kind solution designed for acidification activity of lactic acid bacteria, as well as simultaneous monitoring of pH, temperature, and Oxidation Reduction Potential (ORP).

The iCinac Series is used by ferment and starter culture manufacturers, both for product quality control and the development of new cultures for the dairy and fermented foods industries.



iCinac Wired

- Ensures inter-batch kinetics consistency in compliance with ISO standards.
- Reduces product development timelines because of the reactor-scale and your choice of ferment.
- Select the number of channels and electrodes for your needs.

iCinac Wireless

- Unique solution designed for acidification activity of L.A.B.: simultaneous monitoring of pH, temperature, and Oxidation Reduction Potential (ORP).
- Alternative for laboratories that want to perform L.A.B. kinetics monitoring without the bioreactor control part that the iCinac wired offers.



iCinac Software features:

- pH/ORP temperature compensation management
- Monitor and track trial set points
- Control external modules (digital / analog output)
- Calculate all feature points
- Real time data logging
- Diverse graphical plotting
- pH calibration history
- Libraries management and creation (average curves, standard deviation, etc.)

iCinac For Dairy Product Development & Research

In **dairy** applications, iCinac is widely used to characterize starter cultures, compare acidification profiles, and assess fermentation performance under controlled conditions, supporting informed decision-making during culture development and optimization. (Compliant with **ISO 26323 / IDF 213** for continuous pH measurement of dairy cultures).

In addition, iCinac has been applied in research settings to monitor LAB acidification kinetics in bread-derived fermentation media, providing analytical insight into pH evolution in non-dairy matrices.

This capability also supports continuous monitoring of sourdough acidification kinetics in research and laboratory study contexts.



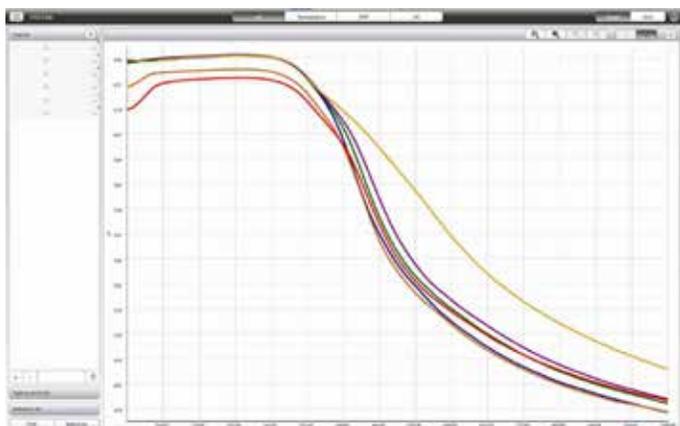
iCinac wired (left) and iCinac wireless (right).

By delivering high-resolution and reproducible kinetic data, iCinac supports:

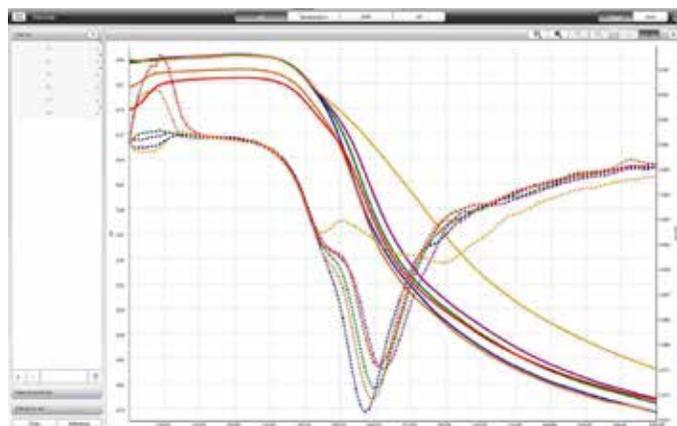
- Objective comparison of LAB cultures
- Analysis of acidification dynamics
- Generation of consistent datasets for R&D and laboratory studies

Key analytical strengths:

- Continuous monitoring of acidification kinetics
- High reproducibility across comparative trials
- Scalable architecture for multi-sample experimentation



Example pH curve.



Example dpH curve.

Committed to Keeping Your Operation Seamless, from Start to Finish

At KPM Analytics, our focus is to provide your organization with end-to-end support through our highly skilled customer service teams and worldwide network of distributor partners. Each instrument and application are matched with specific support offerings to get the most out of your investment, including:



Field Service Commissioning & Training

KPM's team of qualified service engineers offer professional guidance and expertise to ensure a seamless process.



Annual Calibration & Preventive Maintenance

KPM offers various annual services (in field & depot) to ensure equipment is running at factory standards.



Remote Commissioning

For some instruments, remote commissioning provides a simpler, cost-effective method to ready your KPM technology for use.



Depot Repair at Global Service Centers

For issues that cannot be addressed on-site or remotely, our worldwide Depot network is available to quickly inspect, repair, and return your equipment in a timely manner.



Remote Support & Troubleshooting

To minimize downtime, remote support from KPM is available to help companies quickly correct issues and save costs.



Training Collateral

From "Best Practice" recommendations to quick startup and maintenance guides, KPM provides customers with the tools they need to succeed.



Working with KPM means you have a partner for the life of your equipment and beyond. Let's discuss how we can help you solve production challenges and protect your brand value.

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