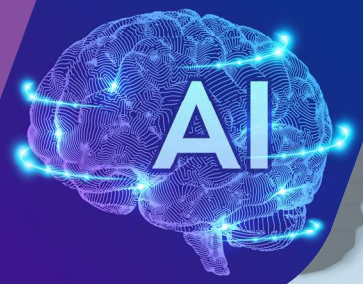
AINS

Artificial Intelligence for Near Infrared Spectroscopy

The AINS platform uses artificial intelligence (AI) to analyse visible (Vis) and near-infrared (NIR) light. It helps quickly process data to create models for checking materials and products, accelerating decision-making and product development faster across different industries



Overview

AINS utilises AI algorithms for NIR analysis to enable a fast model generation process. This allows for quick implementation and analysis of data from materials and products in a variety of industries such as biomedical, agriculture, food and beverage (F&B), manufacturing, pharmaceutical, cosmetics and environment. The platform also offers a low-cost pay-per-use model, making it accessible for users and extensive in applications.

Features

AINS: Making NIR Data Analysis Smarter and Simpler

- **Smart NIR Data Analysis**
  Powered by advanced AI, like neural networks and multivariate analysis. AINS delivers precise, reliable results from the NIR data.
- **User-Friendly Interface**
  No steep learning curves. AINS features an intuitive interface that's accessible to users of all experience levels.
- **Rapid AI Model Generation**
  Quickly build and deploy AI models, significantly reducing down the time and cost compared to traditional NIR methods.
- **Easy Adaptation to New Data**
  As data volumes increase, AINS evolves, ensuring updates and refinements to AI models continue to be accurate and relevant.

Technology Benefits

- **Accessible SaaS Platform**
  AINS is delivered as a Software-as-a-Service (SaaS) solution with a pay-per-use model, making it affordable, easy to access, and suitable for various user needs.
- **AI-Powered NIR Analysis**
  AINS applies advanced AI to interpret NIR data, helping users generate accurate insights and significant data for material and product analysis across industries.
- **Scalable for Any Setup**
  Whether for small-scale setups or enterprise-level operations, AINS grows with your needs.
- **Efficiency at Its Best**
  Users have reported up to 100 times more productivity, making AINS an efficient and cost-effective alternative to traditional NIR methods.

Applications

Near Infrared (NIR) Analysis for Various Industries: Biomedical, Agriculture, F&B, Manufacturing, Wellness, Pharmaceutical, Cosmetics, Environment

Accelerating NIR Innovation with AINS Across Industries

Biomedical & Wellness (with REVA)	Agriculture	Food & Beverage	Manufacturing	Pharmaceutical
Use Cases Use Case Non~invasive blood parameter validation (e.g glucose. hydration, SpO.)	**Use Cases** Soil nutrient detection, crop rioness, pesticide residue	**Use Cases** Freshness prediction models without lab equipment	**Use Cases** Polymer identification, metal alloy verification and coating monitoring.	**Use Cases** Test tablet uniformity across formulation simultaneously
Validation 1 month	**Validation** 1 month	**Validation** 1 month	**Validation** Real-time on production lines	**Validation** 1 month
Benefits 90% cost savings in PoC 10x faster development	**Benefits** 85% cost reduction Higher yields Reduced fertilizer use	**Benefits** 90% cost savings in PoC 10x faster development	**Benefits** No line stoppage Reduce defects using AINS-validated quality control systems.	**Benefits** Cost effective in counterfeit detection systems

MIMOS Berhad 199501006785 (336183-H)
Technology Park Malaysia,
Bukit Jalil, 57000 Kuala Lumpur, Wilayah Persekutuan
Tel: +603 8995 5000 | Fax: +603 8996 2755
E-mail: info@mimos.my
www.mimos.my

mimosmalaysia