



Accelerate Food & Beverage Product Innovation: From Months to Minutes



Practical AI for Complex Ingredient & Formulation Challenges

Traditional development of chemicals, materials, and ingredients is slow, costly, and difficult to scale.

NobleAI delivers practical AI that helps teams move faster and make confident decisions across formulation, sourcing, and regulatory work. Our Science-Based AI models, delivered on the VIP Platform, use scientific principles and data to guide product development with clarity and precision.

- + Identify risky ingredients and suggest safer, compliant alternatives.
- + Optimize formulations for performance, nutrition, cost, and flavor.
- + Accelerate ingredient discovery with fewer lab iterations.
- + Enable clean-label and sustainable product development.
- + Stay ahead of fast-changing local and global regulations impacting your products.
- + Reduce development cycles and testing costs through predictive modeling.

Use Cases for the Food & Beverage Industry



Product Risk
Assessment



Ingredient
Replacement



Sourcing & Cost
Optimization



Sustainable
Packaging



Waste & Resource
Efficiency



Food Safety
Improvement

...

Many
More

About NobleAI

NobleAI delivers practical AI solutions for complex challenges in chemistry and materials science.

Trusted by global enterprises, NobleAI supports diverse use cases across chemistry, materials, and energy, including ingredient innovation in food and beverage.





VIP (Visualization, Insights & Predictions) Platform



Deploy Your Own Models (DYOM)

Run your existing models to accelerate insights, reduce bottlenecks, and enable collaboration.



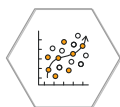
Model Builder for Formulations (MBFF)

Build and train your own SBAI models. No coding or data science expertise needed.



Inverse Designs With Parameter Sweeps

Identify the optimal results based on multiple, predefined goals and constraints.



Forward Prediction With Parameter Sweeps

Generate formulation predictions and run unlimited experiments in software with parameter sweeps.



Dynamic Visualization

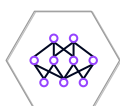
Visualize and analyze data using customizable data, graphs, and tables.



Deep Insights

Understand predictions through uncertainty, confidence, probability, and feature impacts.

Science-Based AI Models



Ensemble Model Architecture

SBAI Models are built from multiple individually trained model elements.



Customized Solution

SBAI models are structured, created and optimized for each specific use case.



Multi-Science, Multi-Scale

SBAI can incorporate any physical law, chemical property, scientific principle or constraint.



Data Efficiency and Privacy

SBAI models don't need to learn scientific principles from data and are inherently private.



Want to learn more? Let's talk.
contact@noble.ai

www.noble.ai

