

Food & Ingredients Formula for Success

Your Product Development Partner

With today's volatile markets and short product life spans, companies are finding it more challenging to stay competitive. Outsourcing product development activities is becoming increasingly popular as a viable strategy for getting market ready products to the consumer in record-breaking time.

As your product development partner, POS provides services, systems and resources you need:

- Strict confidentiality protocols
- Project management systems for superior results and rapid market entry
- Experienced staff to complement your technical and operational capabilities
- Full line of product development capabilities from bench scale to production
- Comprehensive regulatory and quality support

At POS, we create long term, value added relationships with our clients to enhance their new product development capabilities.

Service Offering

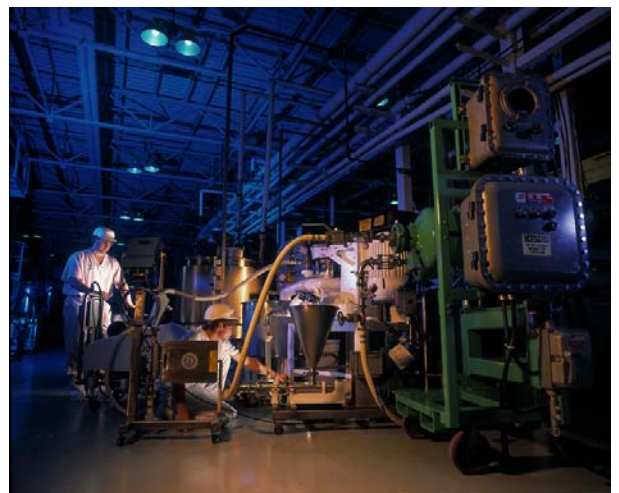
POS focuses on developing new products and ingredients to meet specific market niches. Areas of expertise include:

- Ingredient selection and compatibility testing
- Product formulations and modifications
- Product and process development and optimization
- Formulation and cost optimization
- Experimental design and statistical analysis
- Product standardization
- Analytical methodology development
- Logistics

The Facility to Match Your Every Need

- Five large GMP compliant processing areas
- Scalability ranging from grams to tons to suit every stage of development
- Unmatched process documentation and sampling protocols
- Solvent extraction for many different solvents and raw materials
- Processes coordinated with in-house analytical support for rapid results
- Confidentiality systems to protect your intellectual capital
- Eleven laboratories for bench scale product development and product analysis
- Pilot plant on a regular 24 hour-a-day operating schedule for realistic process simulation and production
- cGMP, HACCP, CFIA and HPB compliance*
ISO: 9001:2000 compliance

* Current Good Manufacturing Practice, Hazard Analysis and Critical Control Point, Canadian Food Inspection Agency, Health Protection Branch



POS has the capabilities you need to develop successful new products



This is just one of POS's five large, flexible, well maintained pilot plant areas available for your use.

Processing Operations

POS offers a range of equipment options unavailable anywhere else. Here is a partial list:

Extraction (solvent or aqueous)

- **Extractors:** Heinkel inverting basket centrifuge, Crown solvent extractor, Soxhlet, Supercritical fluid
- **Desolventizers** for solids and liquids: DE Laval scraped surface evaporator, rising film evaporator, Littleford vacuum mixer dryer, down draft desolventizer, desolventizer toaster
- **Dryers:** Spray, fluidized bed, convection, and freeze dryer
- **Mills:** hammer, pin, flaking, cracking, disc, Szego, Fitzpatrick Comminuting

Fractionation

- **Centrifuges:** Alfa Laval S-194, Westfalia SA-7 and SA-14, bench scale CentriPeel
- **Filters and screens:** Plate and frame filters, pressure leaf filters, stainless steel screens
- **Winterization:** Vessels for solvent and non-solvent from bench scale to 4,000 L
- **Edible oil deodorizers:** Glass and stainless steel mini scale, 250 kg/hr continuous, 400 L batch

Purification

- **Chromatography:** CPC unit (centrifugal partitioning chromatograph)
- Ultrafiltration (various module types available)

Modification (enzyme and chemical)

- **Reactors:** Various sizes from bench scale to 2,600 L, full vacuum, pressure, high temperature

Other Equipment

- Microfluidizer
- Homogenizers
- Pasteurization

POS continually updates its equipment. Please contact us with specific requests.

About POS

POS is a private, confidential, contract research and development organization serving bioprocessing related industries such as food, lipids, nutraceuticals, functional foods, biomaterials, cosmetics, animal feeds and industrial bioproducts.

All services at POS are fully integrated and supported by in-house departments specialized in Analytical Services, Quality Assurance & Regulatory Compliance, Pilot Plant Services, Logistics, and Information Services.

Contact POS for a free consultation to discuss your needs. POS will evaluate your objectives and design a customized program to suit your individual requirements. All matters are completely confidential.

For more information contact:

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