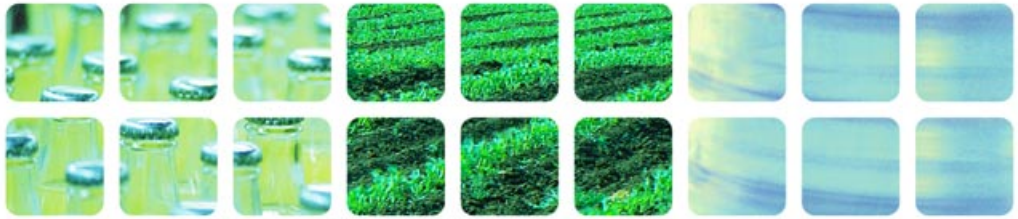


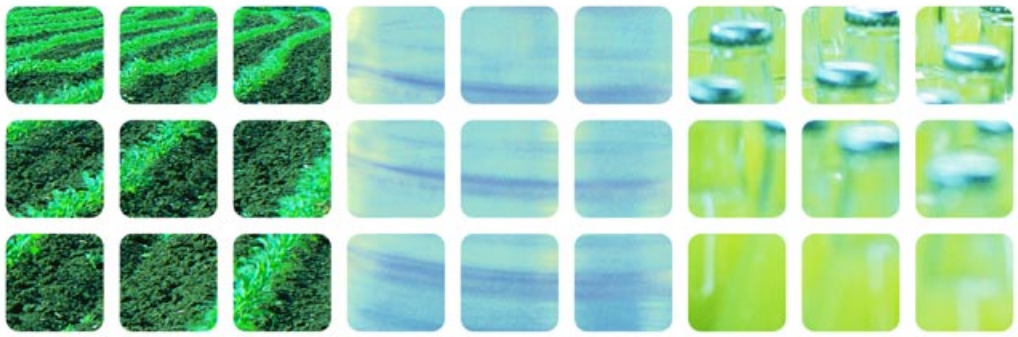
OPTICS AND PHOTONICS TECHNOLOGY SERVING THE AGRI-FOOD, ENVIRONMENTAL, AND BIOMEDICAL SECTORS

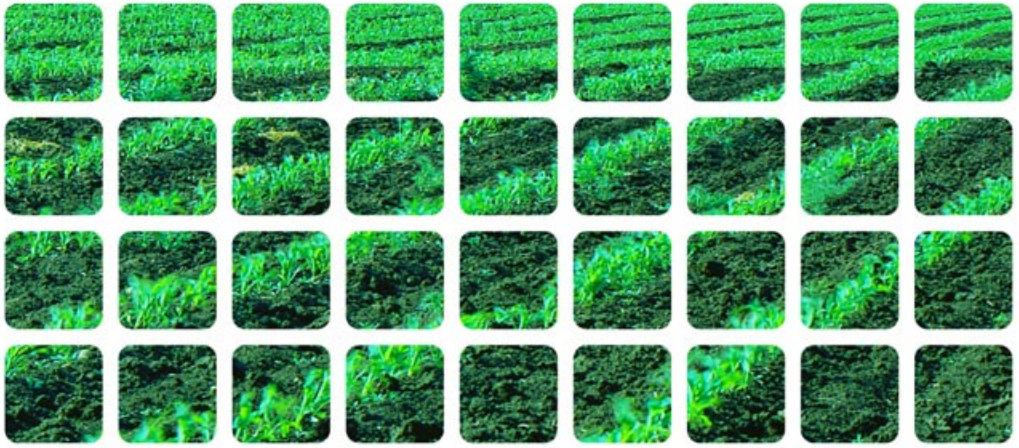
INO

CHALLENGING LIGHT

WHEN IT COMES TIME TO SELECT A PARTNER FOR YOUR AGRI-FOOD, ENVIRONMENTAL, OR BIOMEDICAL R&D PROJECTS, INO IS THE OBVIOUS CHOICE.

A private ISO 9001 (2000)—certified organization, INO has played a keyrole, over the years, in the development of optics and photonics-based systems for diverse applications. Among others, INO has collaborated on such projects as a laser-based 3-D measurement system. INO is actively pursuing other technology platforms using techniques such as fluorescence, infrared, and ultraviolet spectroscopy.





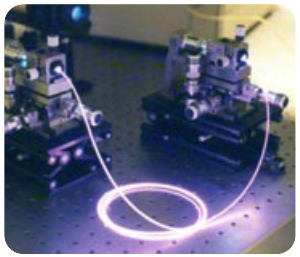
AGRI-FOOD

EXAMPLES OF ACHIEVEMENTS

» THERMAL IMAGING SYSTEM

» FIBRE OPTIC STRESS, PRESSURE, AND TEMPERATURE SENSORS

» OPTICAL PROCESSOR TO DETECT MANUFACTURING DEFECTS FOR INDUSTRIAL INSPECTION AND QUALITY CONTROL



» AUTOMATED INSECT DETECTION AND QUANTIFICATION SYSTEM

» OPTICAL CHARACTER RECOGNITION

» CONTINUOUS 3D VERIFICATION SYSTEM FOR MANUFACTURING PROCESSES (PARTS MEASUREMENT, VOLUME CONTROL, IMPERFECTIONS, ETC.)

» DEVELOPMENT OF FIBRE SENSORS TO MEASURE SUGAR AND SALT CONTENT IN HIGHLY COLOURED SOLUTIONS

ENVIRONMENTAL

EXAMPLES OF ACHIEVEMENTS

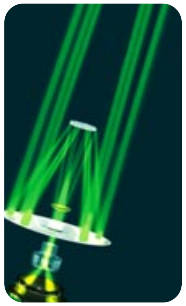
» FIBER OPTIC SENSOR TO INDICATE END OF SERVICE LIFE FOR RESPIRATORY FILTERS

» AUTOMATED PLASTICS CLASSIFICATION SYSTEM

» REMOTE INFRARED DETECTION SYSTEM FOR RECOGNITION AND MONITORING

» REMOTE AIR POLLUTANT DETECTION SYSTEM

» CONTINUOUS MEASUREMENT OF HYDROGEN FLUORIDE CONCENTRATIONS IN ALUMINUM SMELTERS



» POROUS FIBRES FOR CHEMICAL SENSING

BIOMEDICAL

EXAMPLES OF ACHIEVEMENTS

» OPTICAL HYPOGLYCEMIA DETECTOR

» MOLECULAR IMAGING SYSTEM FOR PHARMACEUTICAL DEVELOPMENT

» DEVELOPMENT OF A LASER SYSTEM FOR VIEWING HUMAN TISSUE ABNORMALITIES AND DETECTING CANCEROUS LESIONS

» HIGH-RESOLUTION LENS FOR DIGITAL X RAYS

» 3D DIGITAL CAMERA FOR BIOMETRIC MEASUREMENT

» LASER HAIR REMOVAL SYSTEM

INO IS UNIQUE IN ITS ABILITIES AND EXPERTISE

INO's facilities and equipment are state-of-the-art, ensuring a variety of comprehensive, integrated services:

» A multi-disciplinary team to design, program, and manufacture prototypes without subcontractors

» Environmental test laboratories, including humidity chambers and systems for thermal, and vibration testing

» Optical design and manufacturing

INO CAN TURN YOUR NEEDS INTO REALITY

Our many years of experience combined with our highly qualified research team and a commitment to your unique needs make INO the ideal partner for this generation of R&D solutions.

Whether you want to improve an existing technology, develop custom optics applications, or simply find out what the field of optics can do for you, INO has the experience and expertise you need.

Optics is a solution for today and tomorrow—at the heart and soul of INO. Team up today with a partner looking to the future.

VISIT OUR WEBSITE: WWW.INO.CA
OR CONTACT US DIRECTLY:
INFO.BIOPHOTONIQUE@INO.CA

THE POTENTIAL OF INO'S TECHNOLOGY

	AGRI-FOOD	ENVIRONMENTAL	BIOMEDICAL
FIBRE SENSOR	• Continuous testing in manufacturing processes • Measurement of turbidity in juice • Refractive index (Brix degree) determination and beverage colour measurement	• Measurement of dissolved oxygen concentration in groundwater • Water analysis	• Cell cultivation • Measurement of blood oxygen levels • Measurement of skin moisture levels
2D INSPECTION	• Food colour and texture analysis • Cosmetic and surface imperfections	• Plastics sorting	• Macroscopic identification • Continuous cell growth measurement • Tissue classification (histology)
3D INSPECTION	• Volumetric analysis • Detection of shape defects		• Monitoring of skin healing • Measurement of eye abnormalities
TEMPERATURE MICRO SENSOR	• Measurement of heat distribution • Detection of inflammation or infection in animals	• Thermal detection of animals in the forest • Measurement of calorific loss • Forest fire detection	• Non-contact positioning of inflammation • Non-contact inflammation localization
SPECIALTY LASER SYSTEMS	• Optically guided agricultural machinery • Automated cutting	• Detection of pollutants	• Ultra-precise surgery • Phototherapy

	AGRI-FOOD	ENVIRONMENTAL	BIOMEDICAL
PARTICLE DETECTOR	• Factory pollutants • Suspended particulates in milk	• Real time monitoring of dust • Remote detection of fog banks • Pesticide drift tracking	• Pollutants in hospital ventilation systems
SPECTROSCOPY	• Fluid analysis • Prediction of taste qualities • Food ingredient identification and quantification	• Gas and pollutant monitoring • Soil analysis • Micro-spectrophotometry	• Biological fluid analysis • Cell identification for oncology • Red blood cells quantification
FLUORESCENCE	• Meat contaminant detection • Sanitation management • Biofilm detection	• Water analysis	• Cardiovascular diagnosis • Study of tissue metabolism
MULTIPARAMETER INSTRUMENT	• Simultaneous analysis of the colour, volume, and temperature of thermal flux	• Measurement of temperature, colour, and microorganisms for bio-decontamination processes	• Microorganism analysis and measurement of particles such as blood platelets or cholesterol