

# **PUNJAB BIOTECHNOLOGY INCUBATOR**

A component of Agri Food Biotechnology Cluster, Knowledge City, SAS Nagar

(An Establishment of Punjab Government)

Defining Excellence with Quality











### **ABOUT US**

Department of Science, Technology and Environment, Government of Punjab (GoP) with the financial support of Department of Biotechnology (DBT), Govt. of India (GoI) setup Punjab Biotechnology Incubator (PBTI) in 2005. PBTI is an integral component of Agri Food Biotechnology Cluster in Knowledge City, Sector 81, SAS Nagar (Mohali). PBTI, a registered Society under Societies Registration Act XXI of 1860 and amended by Punjab Amendment Act 1957 is professionally governed by Governing Council under the Chairmanship of Chief Secretary Punjab.

### VISION

Science and Technology for Quality and Safety of Food & Environment.

### **MISSION**

To provide Incubation Services to Entrepreneurs / Enterprises in Agri, Food and Environment sectors to enable them to translate their Research Ideas into Commercially viable Technologies through Quality Testing, Contractual Research and Capacity Building Services.

### **CORE VALUES**

- Quality
- · Integrity
- Confidentiality
- Relationship
- Commitment

### **AREAS OF OPERATION**

- Quality Testing
- Contractual Research
- Capacity Building
- Project Management Consultancy/ Advisory



### = RECOGNITIONS =

NABL - Accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL), Govt. of India

BIS - Recognized by Bureau of Indian Standards (BIS), Govt. of India

FSSAI - Approved by Food Safety and Standards Authority of India (FSSAI), Govt. of India

EIC - Approved by Export Inspection Council (EIC), Govt. of India

**APEDA** - Recognized by Agricultural and Processed Food Products Export Development Authority (**APEDA**), Govt. of India

NRL for LMO/ GMO detection - Notified as National Referral Laboratory (NRL) for LMO/ GMO detection under Seed Act 1966 by Dept. of Agriculture Co-operation and Farmers Welfare (DAC&FW), Govt. of India.

**DSIR** - Recognized as Scientific & Industrial Research Organization (**SIRO**) by Department of Scientific and Industrial Research (**DSIR**), Govt. of India

**EPA** – Notified as Environment Laboratory under Environment Protection Act (**EPA**) by Central Pollution Control Board (**CPCB**), Govt. of India

PPCB - Recognized by Punjab Pollution Control Board (PPCB), Govt. of Punjab

OHSAS – Certified by Joint Accreditation System of Australia & New Zealand (JAS-ANZ) in Compliance to the Requirements of Occupational Health and Safety Assessment Series (OHSAS) - ISO 18001

CTL - Approved as Contract Testing Laboratory (CTL) by MNC's in Food and Environmental Sectors



### = SERVICES =

#### **FOOD AND AGRICULTURE**

- Residue and Trace Analysis
  - Pesticides
  - Drugs/ Antibiotics
  - Heavy Metals
  - Mycotoxins
- Microbiological Analysis
  - Pathogens
  - Viruses
  - Toxins
  - Bio Burden
  - Sterility
  - Personal Hygiene
  - Plant Hygiene
  - Microbial Identification
- GMO/LMO Testing
- DNA Sequencing
- PCBs and PAH Analysis
- Food Additive Analysis
- · Adulterants Analysis
- Physico Chemical Analysis
- Process Contaminants Analysis

- Nutritional Profiling
- Vitamin Profiling
- · Mineral Profiling
- Amino Acid Profiling
- Fatty Acid Profiling
- Sugar Profiling
- Textural and Rheological Properties
- Sensory Evaluation
- Shelf Life Studies
- Phytochemicals
- Micronutrient Profiling Soil & Water
- Macronutrient Profiling Soil
   Water

#### **NOVEL FACILITIES**

- · Authenticity testing of Honey
- Authenticity testing of Basmati Rice

#### **POLLUTION & ENVIRONMENT**

- Gaseous Pollutants
- Particulate Matter
- Physico- Chemical Parameters
- Biological Parameters
- Hazardous Pollutants
- Noise Monitoring
- Weather Monitoring
- Dioxins

#### **MISCELLANEOUS**

- Method Validation
- · Antibiotic Susceptibility
- Impurity Profiling
- Pesticide Formulation
- Chromatographic/ Spectroscopic Analysis
- HPLC Profiling

#### **CAPACITY BUILDING SERVICES**

- Skill Development Programmes
- Awareness Workshops
- · Hands-on trainings
- Programme Study Center for IGNOU
- Collaboration with State / Central Universities for HR Development and R&D

#### **CONTRACT RESEARCH**

- Food Sector
- Environment Sector
- · Agri and agri input sector

#### PMC / PMA SERVICES

- Setting up of Laboratories
- O&M of Laboratories
- Support for Accreditation of laboratories





### = SECTORS SERVED =

#### **FOOD AND AGRICULTURE**

- Fresh Agri Produce
- · Milk & Milk products
- · Oils & Fats
- Fruits & Vegetables Products
- Cereal & Cereals Products
- Spices and Condiments
- Honey & Honey Based Products
- · Rice/Basmati Rice
- Sweets & Confectionary
- Beverages
- Food Additives
- Potato Seeds
- Tissue Culture Raised Plants
- Meat & Meat Products
- Fish & Fish Products
- Food Grains
- Infant Food
- Ready to Eat / Ready to Cook

#### WATER

- Drinking Water
- Water for Processed Food Industry
- Irrigation Water
- · Swimming Pool Water

#### **NATURAL PRODUCTS**

- Herbs & Herbal Products
- Neutraceuticals

#### **AGRI INPUTS**

- Fertilizers
- Micro & Macro Nutrients
- Pesticide Formulations
- · Soil

#### **ANIMAL FEEDS**

- Cattle feed
- Poultry feed
- Feed Ingredients

#### **ENVIRONMENT**

- · Air
- Noise
- Soil & Sludge
- Hazardous waste
- · Water & Waste Water
- Bioburden
- Swab (Surface/Hand)

#### **OTHERS**

- Biocides
- Disinfectants

# = ANALYTICAL STRENGTH =

- EA-IRMS and LC-IRMS
- LCMS-MS, HPLC-RID, FLD & DAD
- GCMS-MS, GCMS, GC-ECD, NPD/ TSD & FID
- ICP-MS
- AAS
- Ion Chromatography System
- Amino Acid Analyser
- Automated Protein Estimation System
- DNA Sequencer
- · Real Time- PCR, PCR
- ELISA Reader and Washer
- Gel Electrophoresis & Documentation System
- Alveo Consistograph
- Falling Number Apparatus
- Glutomatic System
- Starch Damage Analyser
- Texture Analyser

- Dietary Fiber Extraction System
- Crude Fiber Extraction System
- Solid Phase Extraction (SPE) System
- Accelerated Solvent Extraction (ASE) System
- Soxhlet Extraction System (Standard, Warm, Hot and Continuous Modes)
- FT-IR
- UV-Vis Spectrophotometer
- Respirable Dust Sampler
- Gaseous Sampler
- Fine Particulate Sampler
- NDIR Based CO Analyser
- Sound Level Meter
- Weather Monitoring System
- Stack Sampler
- Flue Gas Analyser

## = LOCATION =

Punjab Biotechnology Incubator (PBTI) is presently operational from a transit premises in Phase V, Mohali. PBTI is an integral component of Cluster of Agri Food Biotechnology being developed in Knowledge City, Sector-81, Mohali in tri-city i.e. Chandigarh Panchkula-Mohali. The National Institutions setup/being setup in Knowledge City include Indian Institute of Science Education and Research (IISER), National Institute for Nanotechnology (NINT), National Agri-Food Biotechnology Institute (NABI), Center of Innovative and Applied Bioprocessing (CIAB) and Indian School of Business (ISB). The other Institute of National repute operative in the tri-city are Institute of Microbial Technology (IMTECH), National Institute of Pharmaceutical Education and Research (NIPER), Panjab University (PU), Post Graduate Institute of Medical Education and Research (PGIMER), Punjab Engineering College (PEC) etc.



PBTI's Building Coming up at Knowledge City, Sector 81, Mohali

### **PUNJAB BIOTECHNOLOGY INCUBATOR**

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