

ANNUAL REPORT 2019-2020



Defining Quality with Excellence

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FROM THE DESK OF CEO

It is my immense pleasure to put forth the Annual Report of Punjab Biotechnology Incubator (PBTI) for the year 2019-20 - an year full of diverse activities. PBTI, the 1st Biotechnology Incubator in Punjab established jointly by Department of Biotechnology (DBT), Govt. of India (GoI) and Department of Science, Technology and Environment (DSTE), Govt. of Punjab (GoP) has been providing State-of-the-Art world class services to Agri-Food, Water and Environment sectors since its operationalization in 2007.



As evolution of economy in 21st century is depending a great deal upon the development of Biotechnology sector, the GoP has been taking initiatives to create world class Infrastructure & enabling Environment for growth of this sector in the State. The setting up of Knowledge City in Mohali bears a testimony to this vision. During the year 2019-20 the State Govt. envisioned to accelerate the development of this sector in a mission mode. PBTI having established excellence in its domain over the years, was mandated to steer the development of this important sector as Nodal Agency in 2019. As a 1st step in this direction the operations of Punjab State Biotech Corporation (A section-8 company, earlier known as Mohali Biotechnology Park) jointly established by DSTE-GoP and DBT-GoI were transferred to PBTI. One of the main objectives of this company is development of Biotechnology Park in Knowledge City Mohali. To kick start the activities, M/s Ernst & Young (E&Y) LLP was selected as Transaction advisor for selection of developer for development of Biotechnology Park, through open bidding. The company was strengthened with human resource and regular meetings were held with the stakeholders. Andhra Pradesh Med Tech Zone (AMTZ) & Jawaharlal Nehru Pharma City (JNPC) Visakhapatnam were visited to get an insight into such parks & incubators.

The Strengths of the State in Biotech sector were showcased in a Mega International event 'Global Bio India 2019' organized by DBT-GoI. DSTE-GoP signed an MoU with DBT-BIRAC through PSBC for holistic development of Biotechnology sector in the State. Establishment of Global Innovation Hub on 4 acre of land in Knowledge City, Mohali was conceptualized during this period which was launched during Punjab Innovation & Technology Summit- a mega event organized by DSTE-GoP in November 2019.

Further to consolidate the biotech related activities under single umbrella, a multi-Institutional project "Secondary Agriculture Entrepreneurial Network (SAEN)" in Punjab supported by DBT-BIRAC was transferred to PSBC as lead agency, the other partner

Institutes being NABI, CIAB and PU-BioNEST. I am happy to share that the network kicked off successfully from PSBC with the identification of unmet needs of food industry in Fruits & Vegetables and Cereal & Grains sectors through 5 clusters of Punjab networked with 5 Research Institutes namely PAU, GNDU, LPU, MRSPTU & SLIET. The identified problems were shared with research institutes of Punjab to provide innovative scientific solutions to industry. With this good start I am sure the network shall be able to meet its objectives in the coming years.

The long awaited construction of PBTI's building on 01 acre of land in Knowledge City Sector-81, Mohali finally started in February 2020. The construction is being executed by PWD (B&R) at a total cost of Rs. 31 Crores. The 1st of its kind world class facilities of PBTI shall spread over meticulously planned built up area of approx. 60,000 sq.ft.

On analytical front, PBTI got recognized as National Reference Laboratory (along with 13 other national level laboratories) under Network of National Reference Laboratories (NNRL) of FSSAI launched by Hon'ble Minister Health & Family Welfare Govt. Looking at the strengths of PBTI in the area of Honey authenticity testing, the Referral Food Laboratory at PBTI was strengthened for honey testing with financial support from FSSAI. Recognizing the important role being played by PBTI's Analytical facility, GoP notified it as 'State Analytical Agency' in Agriculture, Food, Water & Environment sectors in 2019. PBTI successfully faced integrated assessment by NABL for Renewal of Accreditation/ recognitions by NABL, EIC, APEDA and FSSAI with Scope extension. Currently more than 2700 parameters are covered under NABL scope. The Chairperson FSSAI presented certificate of Appreciation to PBTI for its active participation in Swasth Bharat Yatra under Eat Right India Movement.

On Research and Advisory front the Project Management Consultancy/ Advisory (PMC/PMA) cell of PBTI approved by State Govt. in the last year was operationalized in 2019-20. This Report provides glimpse of various Contractual research, Technical and Advisory Projects executed for Industry and Public sector Organizations this year. Scientists of PBTI being members of various International/National Level committees of regulatory bodies like ISO, FSSAI and BIS contributed for method development and Standardization.

During the year 2019-20 PBTI signed its 1st International Contract with International Atomic Energy Agency (IAEA) Austria under Coordinated Research Project Scheme on Implementation of Nuclear Techniques for Authentication of Foods with High value labeling claims (INTACT- Food). The Project has 12 contract holders and 06 agreement holders from 17 different countries.

All the above achievements could not have been possible without the relentless support of State Government. I would like to place on record my heartfelt thanks to Sh. Karan Avtar Singh, IAS President of PBTI's Society and Chief Secretary, GoP and all the members of the Society & Governing Council of PBTI for their valuable guidance leading to overall development of PBTI. I would also like to place on record my special thanks to Sh. R K Verma IAS and Sh. Alok Shekhar IAS, the Administrative Secretaries Department of Science, Technology & Environment, GoP and Sh. Anirudh Tiwari IAS, Principal Secretary, Department of Finance GoP for their encouraging support during this year.

The untiring efforts of PBTI's dedicated and hard working team for bringing excellence in the activities of PBTI is thankfully acknowledged. I am thankful to Dr. Simranpreet Kaur and Dr. Vandana Awasthi for compilation of the report. I am also thankful to Dr. Sanjivan Alkesh, Sh. Rajiv Mahajan, Mr. K L Thakur and Ms. Manisha for contributing in the report.

My Best wishes to PBTI & PSBC for success in their future endeavors.

Dr (Mrs) Ajit Dua
Chief Executive Officer

*Vision
&
Mission*

1. VISION & MISSION

VISION

Science & Technology for sustainable Development.

MISSION

To provide Incubation Services to translate Research Ideas into Commercially viable Technologies through quality testing, contract research and other allied services in Agri, Food, Water and Environment sectors.

Organization

2. ORGANIZATION

Punjab Biotechnology Incubator (PBTI) is a Society registered under Societies Registration Act (XXI of 1860). The Society is being managed and controlled by the Governing Council in accordance with the rules framed / modified from time to time by the Society. Chief Secretary, Punjab is the President of the Society and Chairman of the Governing Council of PBTI. Chief Executive Officer (CEO)–Member Secretary of the Governing Council / Society is the Administrative Head of PBTI to exercise supervision, have administrative control, receive grants and contributions on behalf of the Society and conduct the financial transactions in the name of the Society. CEO is accountable to the Governing Council.

2.1 SOCIETY FOR PUNJAB BIOTECHNOLOGY INCUBATOR

1.	Chief Secretary to Govt. of Punjab Sh Karan Avtar Singh, IAS	President
2.	Principal Secretary/Secretary Science, Technology & Environment, Govt. of Punjab Sh R K Verma, IAS till 28.01.2020, Sh Alok Shekhar, IAS from 03.02.2020 onwards	Vice President
3.	Principal Secretary, Finance, Govt. of Punjab (Sh Anirudh Tiwari, IAS)	Member
4.	Chief Executive Officer, Punjab Biotechnology Incubator SAS Nagar (Mohali) Dr (Mrs) Ajit Dua	Member Secretary
5.	Administrative-cum-Finance & Accounts Officer, Punjab Biotechnology Incubator, SAS Nagar (Mohali) (Mr Arwinder Singh, AF&AO till 11.04.2019, Mr Rajiv Mahajan from 12.04.2019 to 25.06.2019 Ms Tanu Sondhi, AF&AO from 26.06.2019 onwards)	Treasurer
6.	Dr B S Dhillon Vice Chancellor Punjab Agricultural University Ludhiana	Member

7.	Nominee of Secretary Department of Biotechnology Govt. of India, New Delhi	Member
8.	Sh D S Brar Chief Executive Officer G V K Biosciences Pvt Ltd, Gurgaon	Member
9.	Dr S K Saxena Director Export Inspection Council Gol Delhi	Member
10.	Director National Institute of Pharmaceutical Education and Research(NIPER) Mohali	Member
11.	Dr B Sesikaran Former Director National Institute of Nutrition, Hyderabad	Member
12.	Dr Lalitha Gowda Former Director Central Food Laboratory and Chief Scientist at CSIR-CFTRI, Mysore	Member
13.	Dr K C Bansal Former Director ICAR National Bureau of Plant Genetic Resources (NBPGR), Former Professor, NRC on Plant Biotechnology IARI, Govt of India, Delhi	Member
14.	Dr Naresh Kumar Former Scientist H/Outstanding Scientist & Head R&D and Planning, CSIR Delhi	Member

2.2 GOVERNING COUNCIL

1.	Chief Secretary to Govt. of Punjab (Sh Karan Avtar Singh, IAS)	Chairman
2.	Principal Secretary/Secretary Science, Technology & Environment, Govt. of Punjab Sh R K Verma, IAS till 28.01.2020 and Sh Alok Shekhar from 03.02.2020	Vice Chairman
3.	Principal Secretary, Finance, Govt. of Punjab (Sh Anirudh Tiwari, IAS)	Member
4.	Chief Executive Officer Punjab Biotechnology Incubator, SAS Nagar (Mohali) Dr (Mrs) AjitDua	Member Secretary
5.	Administrative-cum-Finance & Accounts Officer, Punjab Biotechnology Incubator, SAS Nagar (Mohali) (Mr Arwinder Singh, AF&AO till 11.04.2019 and Mr Rajiv Mahajan 12.04.2019 to 25.06.2019 and Ms Tanu Sondhi from 26.06.2019 onwards)	Treasurer
6.	Director Indian Institute of Science, Education and Research (IISER) Knowledge City, SAS Nagar (Mohali) (Prof J Gowrishankar)	Member
7.	Member Secretary Central Pollution Control Board, New Delhi (Dr Prashant Gargava)	Member
8.	Dr S S Marwaha Chairman Punjab Pollution Control Board, Patiala	Member
9.	Director International Centre for Plant Genetic Engineering and Biotechnology, New Delhi (Dr Dinakar M. Salunke)	Member
10.	Dr Naresh Kumar Former Scientist H/ Outstanding Scientist & Head R&D and Planning, CSIR, Delhi Chandigarh	Member
11.	Director National Bureau of Plant Genetic Resources (NBPGR) New Delhi (Dr Kuldeep Singh)	Member

12.	Executive Director National Agri Food Biotechnology Institute, Mohali (Dr T R Sharma till 27.01.2020 and Dr Ramesh V Sonti onwards)	Member
13.	Dr Sanjay Trehan President Panacea Biotech Ltd, Mohali	Member
14.	Dr Jasvir Singh Regulatory, Scientific and Government Affairs Leader South Asia Dupont Nutrition & Health Danisco (India) Pvt. Ltd	Member

2.3 TECHNO COMMERCIAL COMMITTEE (For Purchase of Plant/ Machinery/ Equipment)

1.	Dr (Mrs) Ajit Dua Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar,(Mohali)	Chairperson
2.	Representative (not below the rank of Joint Secretary) Department of Finance Punjab Civil Secretariat, Chandigarh.	Member
3.	Special/Additional/Joint Secretary Secretary, Science, Technology & Environment Govt. of Punjab, Chandigarh	Member
4.	Director or his nominee Indian Institute of Science Education and Research(IISER) SAS Nagar (Mohali)	Member
5.	Dr Naresh Kumar Former Scientist H/Outstanding Scientist & Head R&D and Planning, CSIR Delhi	Member
6.	Dr Arvind Kumar Bansal Prof. & Head, Department of Pharmaceuticals NIPER, SAS Nagar (Mohali)	Member
7.	Er P S Saini Superintending Hospital Engineer PGIMER, Chandigarh	Member

8.	Sh Ravinder Kumar Joint Registrar IIT, Ropar	Member
9.	Dr Manish Kumar Vice President (Analytical) Panacea Biotech Ltd SAS Nagar (Mohali)	Member
10.	Senior Scientist Member Head Technical Operations and Quality Manager Punjab Biotechnology Incubator, SAS Nagar (Mohali) Dr (Mrs) Ajit Dua	Convener

2.4 BUSINESS DEVELOPMENT COMMITTEE (BDC)

1.	Dr (Mrs) Ajit Dua Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar (Mohali)	Chairperson
2.	Dr A K Bachawat Dean Faculty Professor of Biological Science Indian Institute of Science, Education and Research (IISER) SAS Nagar (Mohali)	Member
3.	Dr Anil Angrish Associate Professor Pharmaceutical Management National Institute of Pharmaceutical Education & Research (NIPER) SAS Nagar (Mohali)	Member
4.	Dr Sanjay Trehan President Panacea Biotech Ltd, SAS Nagar (Mohali)	Member
5.	Senior Scientist Head Technical Operations and Quality Manager Punjab Biotechnology Incubator, SAS Nagar (Mohali) Dr (Mrs) Ajit Dua	Member
6.	Administrative- cum- Finance & Accounts Officer Punjab Biotechnology Incubator SAS Nagar (Mohali) (S Arwinder Singh till 11.04.2019 and Mr Rajiv Mahajan 12.04.2019 to 25.06.2019 and Ms Tanu Sondhi from 26.06.2019)	Convener Member

2.5 MANAGEMENT REVIEW COMMITTEE

1.	Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar, (Mohali) Dr (Mrs) Ajit Dua	Chairperson
2.	Senior Scientist Head Technical Operations and Quality Manager Punjab Biotechnology Incubator SAS Nagar (Mohali) Dr (Mrs) Ajit Dua	Member
3.	Scientist (Biology) Incharge Biological Section and Dy. Quality Manager Punjab Biotechnology Incubator SAS Nagar (Mohali) Dr Vandana Awasthi	Convener Member
4.	Scientist (Chemical) Incharge Chemical Section Punjab Biotechnology Incubator SAS Nagar (Mohali) Mr Santosh Kumar	Member
5.	Assistant Scientific Officer Incharge Analytical Section Punjab Biotechnology Incubator SAS Nagar (Mohali) Dr Sanjivan Alkesh	Member
6.	Administrative Cum Finance & Accounts Officer Punjab Biotechnology Incubator SAS Nagar(Mohali) S Arwinder Singh /Mr Rajiv Mahajan / Ms Tanu Sondhi	Member
7.	Store & Purchase Officer Punjab Biotechnology Incubator SAS Nagar (Mohali) Sh Rajiv Mahajan	Member

2.6 EMPOWERED BUILDING CONSTRUCTION COMMITTEE

1.	Principal Secretary/ Secretary Science, Technology and Environment, Govt. of Punjab	Chairman
2.	Director Indian Institute of Science Education & Research (IISER) Knowledge City, Sector 81 SAS Nagar (Mohali)	Member
3.	Dr. R. S. Khandpur (Till Nov. 2019) Former Director General, Pushpa Gujral Science City SAS Nagar (Mohali)	Member
4.	Er. A. N. Chaudhary Former Chief Engineer (Civil) PWD (B & R) Jalandhar	Member
5.	Ar. S. L. Kaushal Former Chief Architect, Punjab Chandigarh	Member
6.	Dr. Sanjay Trehan, President M/s Panacea Biotech Ltd, SAS Nagar (Mohali)	Member
7.	Dr (Mrs) Ajit Dua Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar (Mohali)	Convener Member

2.7 IMPORTANT MEETINGS

MEETING	DATE
EMPOWERED BUILDING CONSTRUCTION COMMITTEE	
8th meeting of EBCC	26.04.2019
9th meeting of EBCC	23.10.2019
10th meeting of EBCC	09.03.2020
BUSINESS DEVELOPMENT COMMITTEE	
14 th meeting of BDC	23.03.2020
MANAGEMENT REVIEW COMMITTEE	
15th meeting of MRC	29.04.2019
MEETINGS OF BOARD OF DIRECTORS OF PSBC* ORGANIZED BY PBTI	
11 th meeting of BOD	10.05.2019
12 th meeting of BOD	31.07.2019
13 th meeting of BOD	05.09.2019
14 th meeting of BOD	26.09.2019
15 th meeting of BOD	23.10.2019
16 th meeting of BOD	09.12.2019
17 th meeting of BOD	21.01.2020

*The operations of Punjab State Biotech Corporation (PSBC) were transferred to PBTI in May 2019 as per decision of Govt. of Punjab

Staff Structure

3. STAFF STRUCTURE

3.1 ADMINISTRATION

Sr. No	Name	Designation
1.	Dr (Mrs) Ajit Dua	Chief Executive Officer
2.	S. Arwinder Singh/ Sh Rajiv Mahajan/ Ms Tanu Sondhi	Administrative- cum- Finance & Accounts Officer
3.	Sh Rajiv Mahajan	Store and Purchase Officer
4.	Mr K L Thakur	Assistant (Store & Purchase)
5.	Mr Surya Kant	Accounts Assistant (upto 25.09.2019)
6.	Ms Manisha Kumari	Office Assistant (from 23.07.2019)
7.	Ms Manisha	Data Entry Operator (from 01.07.2019)
8.	Ms Chandan Sharma	Sr Executive (Reporting Cell)
9.	Ms Shaizi Khan	Executive(Reporting Cell)
10.	Ms Parneet Kaur	Executive (Front Office)
11.	Ms Sandeep Kaur	Executive (Store & Purchase)
12.	Mr Parveen Kumar	Executive (Customer Care)

3.2 SCIENTIFIC/TECHNICALSTAFF

Sr. No	Name	Designation
1.	Dr (Mrs) Ajit Dua	Chief Executive Officer & Senior Scientist
2.	Dr (Mrs)Vandana Awasthi	Scientist (Biology)
3.	Mr Santosh Kumar Singh	Scientist (Chemical)
4.	Dr (Mrs) Simranpreet Kaur	Scientist (from 06.08.2019)
5.	Dr(Mrs) Sanjivan Alkesh	Assistant Scientific Officer
6.	Mr Amit Aggarwal	Assistant Scientific Officer
7.	Ms Ravneet Kaur	Assistant Scientific Officer(upto12.09.2019)
8.	Dr Harjit Singh	Assistant Scientific Officer (up to 31.10.2019)
9.	Ms Pratibha Shahi	Assistant Scientific Officer (from 18.09.2019)
10.	Ms Shainandani Dogra	Junior Scientific Officer
11.	Ms AnjuThakur	Junior Scientific Officer
12.	Ms Aarti Bhardwaj	Junior Scientific Officer (upto 20.02.2020 / Assistant Scientific Officer from 20.02.2020)
13.	Ms Harmeet Kaur	Junior Scientific Officer (from 24.06.2019)
14.	Mr Harmanpreet	Scientific Assistant (upto19.07.2019)
15.	Mr Jitender Sharma	Scientific Assistant
16.	Dr Suksham	Scientific Assistant (From 10.02.2020)
17.	Mr Praveen Singh Danu	Project Fellow
18.	Ms Priyanka Gupta	Project Assistant (upto29.10.2019)
19.	Ms Puja Rai	Project Scientist (upto06.02.2020)
20.	Dr Sanjay Singh	Project Scientist
21.	Dr Simranjeet Singh	Project Scientist
22.	Ms Aarti Bharmoria	Project Associate (upto26.08.2019)
23.	Mr Jatinder Singh	Project Associate
24.	Mr Mohd Aadil Yattoo	Project Fellow
25.	Mr Deerghayu Prasad	Sample Collecting Officer
26.	Ms Saloni Bhalla	Executive (Projects & Trainings) (upto 15.11.2019)
27.	Ms Pratibha Shahi	Executive (Sample Cell) (upto17.08.2019)
28.	Ms Meenu	Executive (Sample Cell) (since 23.09.2019)

*Analytical
Services*

4. ANALYTICAL SERVICES

4.1 ACCREDITATION/RECOGNITIONS OF ANALYTICAL SERVICES



NATIONAL ACCREDITATION BOARD FOR TESTING & CALIBRATION LABORATORIES (NABL)

- PBTI is accredited by NABL in Chemical and Biological fields as per International standard ISO/IEC/17025 since 2009 which is being renewed periodically.
- As NABL adopted into unified approach of accreditation/ recognition along with EIC, APEDA, FSSAI and Spice Board, on-line application as per schedule was submitted for integrated renewal of accreditation/recognition by NABL, EIC, APEDA & FSSAI.
- The transition of Quality Management System from ISO/IEC 17025:2005 to ISO/IEC 17025: 2017 version was executed.
- Integrated Assessment was carried out by NABL from 3rd July to 11th July 2019 as per ISO/IEC 17025:2017 for renewal of accreditation/recognition and scope extension under NABL, EIC, APEDA & FSSAI. Based on it accreditation/recognition was extended till July 2021 and currently more than 2700 parameters are covered under the scope.





EXPORT INSPECTION COUNCIL (EIC)

- PBTI is approved under EIC Lab approval scheme for Chemical & Biological fields since February 2015 which is being renewed periodically.
- As per unified approach of accreditation/recognition integrated assessment for renewal and scope extension was carried out and the validity has been extended till July 2021.



AGRICULTURAL & PROCESSED FOOD PRODUCTS EXPORT DEVELOPMENT AUTHORITY (APEDA)

- PBTI is recognized by APEDA, since April 2014.
- As per unified approach of accreditation/ recognition integrated assessment for renewal was carried out and the validity has been extended till July, 2021.



FOOD SAFETY & STANDARDS AUTHORITY OF INDIA (FSSAI)

- PBTI is empanelled by FSSAI for the purpose of carrying out of analysis of food samples taken under Food Safety and Standard's Act 2006 for the testing of regulatory and imported food samples since November 2011.
- FSSAI conducted 1st onsite audit of laboratory under Integrated assessment scheme along with NABL and continued the empanelment till July 2021.



Bureau of Indian Standards
The National Standards Body of India

BUREAU OF INDIAN STANDARDS (BIS)

- PBTI is recognized by Bureau of Indian Standards (BIS) since February 2010 which is being renewed periodically.
- Based on last assessment the recognition is valid till February 2022.
- As per lab approval scheme guidelines, BIS conducted surprise audit of PBTI on 28th & 29th January 2020.



CENTRAL POLLUTION CONTROL BOARD (CPCB)

- PBTI is notified as Environment Laboratory under Environment Protection Act 1986 by Central Pollution Control Board (CPCB) since September 2010.
- Based on last desktop audit in 2016, the validity of recognition is upto March, 2021.



PUNJAB POLLUTION CONTROL BOARD (PPCB)

- Recognition by PPCB as Class 'A' Laboratory for consent purposes continued since August, 2010.

4.2 TARGET SECTORS



FOOD

- Bakery & Confectionary Products
- Cereals, Pulses & Cereal products
- Milk & Dairy Products
- Honey & Honey Based Products
- Thermally processed food
- Tea & Coffee Products
- Beverages (Alcoholic/Non-alcoholic)
- Meat & Meat Products
- Water
- Herbs, Spices & Condiments and Related products
- Infant Foods
- Fruits & Vegetables and their products
- Canned & Processed Food
- Nut & Nut products
- Salt
- Ready to eat & Ready to cook
- Oil & Fats
- Edible Colour & Flavors



AGRICULTURE AND AGRI INPUTS

- Chemical Fertilizers
- Bio Fertilizers
- Organic Fertilizers
- Micro & Macro Nutrients
- Pesticide Formulations
- Soil, Irrigation Water
- Potato seeds
- GM crops



ANIMAL FEED AND FEED INGREDIENTS

- Cattle Feed
- Poultry Feed
- Fish Feed
- Feed Ingredients
- Mineral Mixture



INDUSTRIAL & FINE CHEMICALS

- Biocides
- Disinfectant Fluids



ENVIRONMENT

- Ambient Air
- Stack Emissions
- Noise
- Soil & Sludge
- Hazardous Waste
- Water & Waste Water



DRUGS & PHARMACEUTICALS

- Drug Intermediates & Raw Material
- Natural Drugs (Medicinal Plant Preparation)



AYUSH

- Ayurvedic Drugs /AYUSH Products
- Raw Material

4.3 ANALYTICAL SERVICES

Chemical

- Pesticide Residues
- Drug Residues
- Heavy Metals
- Polychlorinated Biphenyls(PCBs)
- Poly Aromatic Hydrocarbons(PAH)
- Process Contaminants
- Naturally Occurring Toxic Substances(NOTS)
- Mycotoxins
- Isotopic analysis
- Food Additives
- Food Colors
- Adulterants
- Nutritional Profiling including Vitamin Profiling
- Mineral Profiling, Amino Acid Profiling & Fatty Acid Profiling
- Micro & Macronutrient Profiling of Soil and Water
- Physico-Chemical Parameters
- Textural & Rheological Properties
- Sensory Evaluation
- Physical analysis
- Gaseous Pollutants
- Particulate Matter
- Hazardous Pollutants
- Noise Monitoring
- Weather Monitoring

Biological

- Food & Water Pathogens
- Bioassay
- Bioburden Monitoring
- Surface & Personal Hygiene Monitoring
- GMO Testing
- DNA fingerprinting
- Sequencing
- Microbial Identification
- Potato Seed Viruses
- Antibiotic Susceptibility

Miscellaneous

- Shelf Life Studies
- Method Validation
- Technology validation
- Impurity Profiling
- Chromatographic profiling
- Spectroscopic profiling

4.3.1 EXPANSION OF SCOPE OF ANALYTICAL SERVICES:

During the period under report, PBTI developed/ standardized / validated the methods for analysis of following parameters and started providing services for the same:

- Special Markers for Rice Syrup (SMR) in Honey
- $\Delta\delta^{13}\text{C}$ Max, $\Delta\delta^{13}\text{C}$ Fru – Glu in Honey
- Piperine content in black pepper
- PBTI has added many new parameters under NABL, EIC, APEDA & FSSAI scope of accreditation/ recognition and currently more than 2700 parameters are covered under the scope.

4.4 ANALYTICAL STRENGTHS

4.4.1 Existing Major Equipment in Chemical Section

i.	EA-LC-IRMS
ii.	LCMS-MS (02Nos)
iii.	GCMS-MS (02Nos), GCMS, GC-ECD, NPD/TSD&FID
iv.	HPLC-RID, FLD&DAD
v.	LC-ICP-MS, AAS
vi.	Ion Chromatography System and Amino Acid Analyser
vii.	Alveo Consistograph, Failling number apparatus, Glutomatic System, Starch Damage Analyser, Texture Analyser
viii.	Solid Phase Extraction System(SPE)and Accelerated Solvent Extraction System(ASE)
ix.	Crude Fiber Extraction System, Automated Protein Estimation System, Soxhlet Extraction System (Standards, Warm, Hot and Continuous modes)
x.	FT-IR, UV-Vis Spectrophotometer, Spectrophotometer
xi.	Respirable Dust Sampler, Gaseous Sampler, Fine particulate sampler, Stack Sampler, NDIR based CO Analyzer, Sound Level Meter, Weather Monitoring System, Flue Gas Analyzer
xii.	Fourier-transform infrared spectroscopy (FTIR)
xiii.	Portable CO analyzer



4.4.2 New Equipment being Added

i.	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)
ii.	Elemental Analyzer Isotope Ratio Mass Spectrometry (EA-IRMS)
iii.	High Performance Liquid Chromatography (HPLC) with Evaporative Light Scattering Detector(ELSD)



4.4.2 Existing Major Equipment in Biology Section

i.	DNA Sequencer
ii.	Real Time-PCR (02 Nos)
iii.	Gradient Thermocycler- PCR-Machine (02 Nos)
iv.	BioSpectrophotometer (02 Nos)
v.	Gel Electrophoresis & Documentation System
vi.	DNA Vacuum Concentrator
vii.	ELISA Reader and Washer
viii.	Grindomix
ix.	Microbiology setup including Pathogen detection



4.5 QUALITY ASSURANCE ACTIVITIES

Quality assurance is an integral part of Management activities involving planning, implementation, assessment, reporting and quality improvement to ensure that the test results are accurate and fit for the purpose. PBTi follows following different approaches to ensure the quality of its analytical services:

- Participation in International & National Proficiency Testing (PT)/ Interlaboratory Comparison (ILC) programmes
- In-house Quality Checks (IQC) like replicate analysis, recovery studies & retained samples re-testing, Blind samples, Spiked or fortified samples, Functional Checks, Periodic Internal Audits, Intermediate Checks, Instrument Calibrations etc.

4.5.1 PARTICIPATION IN PROFICIENCY TESTING (PT) PROGRAMMES

During the period under the report PBTI has satisfactorily performed in 07 International and 06 National level proficiency testing programmes for more than 50 Chemical & Biological parameters. The details are summarized below:

INTERNATIONAL						
Nodal Agency/ PT provider	Product / Material	Type of Parameter	Month / Year	Number of Participating Laboratories	Performance of PBTI	
 Eurofins Analytics - France	Honey	Authenticity-Isotopic Parameters	December 2019	23	Satisfactory	
 FAPAS - FERA Science Limited - UK	Vegetable Puree	Safety Parameters - Contaminants	November 2019	72		
 Grain Inspection, Packers & Stockyards Administration United States Department of Agriculture (GIPSA, USDA)	Ground corn	GM Detection	November 2019	200		
	Ground corn & Ground soya bean	GM Detection	July 2019	200		
 LGC standards - UK	Mineral Water	Microbiology – Hygiene & Safety Parameters	October 2019	149		
	Oat Meal Powder	Microbiology – Safety Parameters	September 2019	120		
	Food Powder	Microbiology – Hygiene & Safety Parameters	August 2019	150		
NATIONAL						
Nodal Laboratory	Product / Material	Type of Parameter	Month / Year	Number of Participating Laboratory		Performance of PBTI
 NDDB - Gujarat	Milk Powder	Quality Parameters	February 2020	23	Satisfactory	
	Cattle Feed	Quality Parameters	January 2020	19		
 Trilogy Analytical Laboratory Pvt Ltd Hyderabad	Milk Powder	Safety Parameters- Mycotoxin	January 2020	20		
 National Institute of Plant Health Management, Hyderabad	Red Gram Powder & Okra Paste	Safety Parameters - Residues	January 2020	44	Satisfactory	
	Guava Paste	Safety Parameters- Residues	July 2019	28		
Green Economy Initiative Pvt Ltd, Zirakpur	Water	Safety Parameters- Contaminants	August 2019	21		

4.5.2. PARTICIPATION IN INTER-LABORATORY COMPARISON PROGRAMME

During the period under report PBTI participated in 02 Inter-laboratory Comparison Programme for 15 parameters and 07 commodities. The details are summarized below:

Nodal Laboratory	Product / Material	Type of Parameter	Month / Year	Number of Participating Laboratory	Performance of PBTI
Upasi Tea Research Foundation, Tamil Nadu	Zinc Sulphate	Quality Parameters	July 2019	06	Satisfactory
	Magnesium Sulphate			16	
	Tea			20	
Export Inspection Agency, Kolkata	Wheat Flour Rice Flour Iodized Salt Honey		May 2019		

4.5.3 INTERNAL QUALITY AUDITS:

To ensure the continued compliance against documented Quality Management System (QMS) as per ISO / IEC 17025:2017, internal audits of different sections of PBTI including Quality Management & Support Functions and Technical Operations of all the laboratories were conducted in April 2019.

S. No.	Section	Date of Audit
1.	Analytical Lab	22.04.2019
2.	Microbiology Lab	
3.	Food & Feed Lab	23.04.2019
4.	Molecular Lab	
5.	Soil, Water & Agri-input lab	24.04.2019
6.	Elemental Analysis Lab	25.04.2019

*Referral
Laboratory
Status*

5. REFERRAL LABORATORY STATUS



STATE WATER & AIR LABORATORY

Notification of PBTI as State Water Laboratory under Sub-section-I of section 52 of the water (Prevention & Control of Pollution) Act 1974 & State Air Laboratory under section 1 of section 28 of Air (Prevention & Control of Pollution) Act 1981; by Administration, Union Territory Chandigarh is continued since February 2019.



सत्यमेव जयते
Ministry of Agriculture & Farmers Welfare
Government of India

NATIONAL REFERRAL LABORATORY FOR LMO/GMO DETECTION

Notification of PBTI as National Referral Laboratory (NRL) for Living Modified Organism/ Genetically Modified Organism (LMO/GMO) detection by Ministry of Agriculture & Farmers Welfare GoI, under Seeds Act 1966 is continued since November 2017.



STATE WATER LABORATORY

Notification of PBTI under Sub-section-I of section 52 of the water (Prevention & Control of Pollution) Act 1974 by Govt. of Punjab for the testing of water and waste water is continued since January, 2009.



PBTI is notified as Referral Laboratory under subsection (2) of section 43 of Food Safety and Standards Act by FSSAI since July 2018. FSSAI sanctioned Rs. 3.00 Crores for strengthening of Elemental analysis and Authenticity testing under "Grant-in-aid to Referral laboratory under Central sector Scheme (2018-19)" to Punjab Biotechnology Incubator being Referral Laboratory of FSSAI. Funds of Rs. 2.40 Crore were received from FSSAI during this period. The equipment sanctioned under the project includes:

- i. Inductively Coupled Plasma Mass Spectrometry (ICP-MS)
- ii. Elemental Analyzer Isotope Ratio Mass Spectrometry (EA-IRMS)
- iii. High Performance Liquid Chromatography (HPLC) with Evaporative Light Scattering Detector(ELSD)

Further process regarding purchase has been started.

*State
Analytical
Agency*

6. STATE ANALYTICAL AGENCY



STATE ANALYTICAL AGENCY

- " Govt. of Punjab notified PBTI as State Analytical Agency in September 2019, based on the analytical strengths of PBTI in Agriculture, Food, Water and Environment sectors
- " As per notification, all the departments & organizations of the State Govt. including Boards, Corporations, Societies and Cooperative etc shall mandatorily use the services of PBTI for their analytical requirements and shall use the private laboratories only if the service is not being provided by PBTI.
- " It is also notified that the charges for analytical services at PBTI are duly approved by Governing Council of PBTI headed by Chief Secretary Punjab; the same may be paid by various departments and other organizations of Punjab without any tendering process.
- " After notification departments/ organizations of the State have started using PBTI analytical services. It has reduced the outflow of funds to other states and wastage of time in transportation of samples to far away places.

**Government of Punjab
Department of Science, Technology and Environment
(STE Branch)**

NOTIFICATION

No. 10/236/2019-STE (3)/ 1576193/1

Dated, Chandigarh the 17th September 2019

1. The Governor of Punjab is pleased to notify Punjab Biotechnology Incubator (PBTI), Mohali as State agency for Analytical Services in Agriculture, Food, Water & Environment sectors. The services include:

- (i) Pesticides/ Drugs residues;
- (ii) Heavy metals;
- (iii) Mycotoxins;
- (iv) Nutritional Profiling - Vitamins, Minerals, Amino Acids, Fatty Acids, Sugars, Proximate;
- (v) Food adulterants, Additives, Contaminants;
- (vi) Food Authenticity;
- (vii) Microbiological Analysis;
- (viii) Testing for Genetic Modifications (GMO/ LMO);
- (ix) DNA Fingerprinting/ Sequencing;
- (x) Microbial identification;
- (xi) Virus indexing;
- (xii) Environmental Monitoring – Water/ Effluents/ Air/ Hazardous waste/ Solid waste/ Noise/ Weather/ Bioburden;
- (xiii) Macro/ Micro Nutrient Profiling of Soil & Irrigation water;
- (xiv) General Physico-chemical /Chromatographic/ Spectroscopic/Titrimetric/ Gravimetric Analysis.

2. The charges for analytical services are duly approved by Governing Council of the Society headed by Chief Secretary, Punjab and the same can be paid by various Departments and other Organizations of the State Government without any tendering process.

3. It is hereby directed that all the Departments and Organizations of the State Government including Boards, Corporations, Societies and Cooperatives etc. shall mandatorily use the services of PBTI for any of the analytical services stated above and shall use the private laboratories only if the service is not being provided by PBTI.

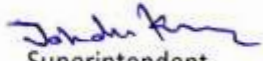
Dated, Chandigarh, the
12 September, 2019

R.K.Verma, IAS
Principal Secretary to Govt. of Punjab
Deptt. of Science, Technology & Environment

-2-

Endst. No. 10/236/2019-STE (3)/1576193/2 Dated, Chandigarh the 17th September 2019

- (i) A copy along with two spare attested copies of the Notification are forwarded to the Controller, Printing and Stationery, Punjab for publication of this Notification in the Punjab Government Gazette (Ordinary) and to supply 100 copies of the same to this Department.


Superintendent

Endst. No. 10/236/2019-STE (3)/1576193/3-4 Dated, Chandigarh the 17th September 2019

A copy is forwarded to the following for information please:

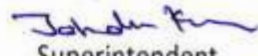
- (i) Chief Principal Secretary to Chief Minister, Punjab
(ii) Chief Secretary, Punjab


Superintendent

Endst. No. 10/236/2019-STE (3)/1576193/5-13 Dated, Chandigarh the 17th September 2019

A copy is forwarded to the following for information and necessary action please:

- (i) All the Special/Additional Chief Secretaries/ Principal Secretaries/ Administrative Secretaries to the Government of Punjab
(ii) All the Heads of the Departments, Government of Punjab
(iii) All the Heads of Boards/Corporations/Cooperative Societies and PSUs in the State of Punjab
(iv) All the Vice Chancellors of Universities in the State of Punjab
(v) Registrar, Punjab and Haryana High Court
(vi) All the Deputy Commissioners in the State of Punjab
(vii) All the Municipal Commissioners in the State of Punjab
(viii) Chief Executive Officer, P.B.T.I., Mohali.
(ix) All the Executive Officers of Municipal Committees/ Municipal Councils/ Nagar Panchayats in the State of Punjab


Superintendent

*Network of
National
Reference
Laboratories*

7. NETWORK OF NATIONAL REFERENCE LABORATORIES

Food Safety and Standards Authority of India (FSSAI) in order to strengthen the reliability & uniformity of testing in the country established Network of National Reference Laboratories (NNRL) in India under Regulation 3 of Food Safety and Standards (Recognition and Notification of Laboratories) Regulations, 2018. Fourteen (14) notified food laboratories have been approved as National Reference Laboratories (NRL) and Ancillary National Reference Laboratories (ANRL) with following envisaged benefits:

- Enhance reliability of results & continuous adherence to international laboratory practices
- Result in greater availability of competent laboratories and proficient personnel
- Allow uniformity in protocols and procedures across the laboratory network
- Reduce litigations among the stakeholders/ trade partners
- Allow effective utilization of existing laboratory infrastructures

Hon'ble Minister Health & Family Welfare Govt. of India launched the Network of National Reference Laboratories (NNRL) of FSSAI on 23.08.2019 at Ghaziabad.



PBTI had the honor to be the only State lab approved as "NRL for Sweets and Confectionery including Honey". The other labs in the network include 03 ICAR Labs, 02 CSIR Labs, 03 EIC (which includes 01 NRL and 02 ANRLs), 05 Private Labs. The functions of NRL are:

- a. Be a Resource Centre for provision of information for certified reference materials and Reference Material;
- b. Develop standards for routine testing procedures and reliable testing methods;
- c. Provide technical support in the area of competence;

- d. Evaluate the performance of other notified laboratories;
- e. Collaborate for data generation among the network of notified food laboratories and Referral food laboratories and collate the data related to their specific domain; and
- f. Such other functions as may be specified by the food authority.



After approval as NRL; PBTI has validated method for Trace Marker for Rice Syrup (TMR), Special Marker for Rice syrup (SMR), $\Delta\delta^{13}C$ Max, $\Delta\delta^{13}C$ Fru - Glu and foreign oligosaccharides in Honey. To further check the performance of validated methods inter Laboratory Comparison for SMR & TMR was done with Central Food Technological Research Institute (CFTRI), Mysore and Centre for Analysis and Learning in Livestock and Food-National Dairy Development Board (ICAR-CALF-NDDDB), Anand. PBTI as NRL has successfully participated in International PT programmes organized by FAPAS, UK and Eurofin analytics France in Honey.

File No. 12013/02/2017-QA (Vol. 1)
Food Safety and Standards Authority of India
 (A statutory Authority established under the Food Safety and Standards Act, 2006)
 (Quality Assurance Division)
 FDA Bhawan, Kotla Road, New Delhi - 110002

Dated, the 25th August, 2019

ORDER

In continuation of this office order number 12013/02/2017-QA dated 19.03.2019, the following notified food laboratories are recognized as National Reference Laboratory (NRL) by FSSAI under Regulation 3 of Food Safety and Standards (Recognition and Notification of Laboratories) Regulations, 2018 for specific areas mentioned against each NRL for a period of three years from 08.08.2019-

S. No.	Name of the Laboratory/ Institution/Organization	Address	Specific area for which declared as NRL
1.	Central Food Technological Research Institute	FS & AQCL Department, CFTRI, Mysore - 570020	Nutritional information and labelling
2.	Export Inspection Agency	27/1767 A, Shipyard Quarters Road, Panampilly Nagar (South), Kochi, Kerala 682036	GMO testing*
3.	Punjab Biotechnology Incubator	SCO 7-8, Phase-V, SAS Nagar, Mohali - 160059, Punjab	Sweets & Confectionary including Honey
4.	ICAR-National Research Centre For Grapes	P.O. Manjiri Farm, Solapur Road, Pune - 412307	Pesticides Residues and Mycotoxins
5.	Central Institute of Fisheries Technology	CIFT Junction, Willingdon Island Matsyapuri P.O., Kochi - 682029	Fish & Fish Products
6.	Centre for Analysis and Learning in Livestock and Food - National Dairy Development Board	Opposite IRMA Main Gate, Near Anandalaya School, Anand - 388001	Dairy & Dairy Products
7.	CSIR-Indian Institute of Toxicology Research	Vishvigyan Bhawan, 31, Mahatama Gandhi Marg, Lucknow - 226001, Uttar Pradesh	Toxicological evaluation/risk assessment of nutraceuticals, functional foods and novel/emerging foods/ food ingredients
8.	Trilogy Analytical Laboratory Pvt. Ltd.	Plot No. 7, C.F. Area, Phase-II, IDA Cherlapally, Hyderabad - 500051	Mycotoxins in cereals & pulses, spices & condiments and related PT activities
9.	Edward Food Research & Analysis Centre Limited	Subhas Nagar, Barasat P.O., Nilgunj Bazar, Kolkata - 700121	Veterinary drug residues, antibiotics & hormones
10.	Vimta Labs Limited	Life Sciences Campus, 5, MN Park, Genome Valley, Shamceerpet, Hyderabad - 500101	Water, Alcoholic and Non-Alcoholic Beverages
11.	Fare Labs Pvt. Ltd.	L-17/3, DLF, Ph - II, IFFCO Chowk, M.G. Road, Gurugram - 122002	Oils and Fats
12.	Neogen Food & Animal Security (India) Private Limited	Uchikkal Lane, Poonithura P.O., Kochi - 682038	Food Allergens

(*subject to implementation of GMO regulations)

2. Further, the following notified food laboratories are recognized as Ancillary National Reference Laboratory (ANRL) by FSSAI for acting as a support facility to all the NRLs for a period of three years from 08.08.2019-

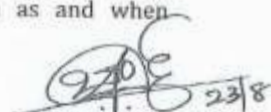
S. No.	Name of the Laboratory/ Institution/Organization	Address	Specific area for which declared as ANRL
Government Laboratories as NRL			
13.	Export Inspection Agency EIA, Chennai	6 th Floor, CMIDA Tower-II, 1, Gandhi Irwin Road, Egmore, Chennai - 600008	Support facility as PTP in microbiological testing
14.	Export Inspection Agency EIA, Kolkatas	101, Southend Conclave, 1582, Rajdanga Main Road, Kolkata - 700107	Support facility as PTP in the area of heavy metals in all food categories

3. Each NRL shall carry out the following functions, namely:-

- be a resource centre for provision of information for certified reference materials and reference materials;
- develop standards for routine testing procedures and reliable testing methods;
- provide technical support in the area of competence;
- evaluate the performance of other notified laboratories;
- coordinate exchange of information amongst notified food laboratories;
- collaborate for data generation among the network of notified food laboratories and referral food laboratories and collate the data related to their specific domain; and
- such other functions as may be specified by the Food Authority.

4. The ANRL shall be a support facility to National Reference Laboratories:

- as a Proficiency Testing Provider in the specific area mentioned against each
- assist NRL in method validation/ inter-laboratory comparison as and when requested by NRL(s) and/ or FSSAI.


(Bhaskar N.)
Advisor (QA)

To:

- All National Reference Laboratory
- All Ancillary National Reference Laboratory
- IT Division, FSSAI – for uploading on FSSAI's website

Copy for information to:

- PPS to Chairperson, FSSAI
- PS to CEO, FSSAI

*Technical
Audits
by External
Bodies*

8. TECHNICAL AUDITS BY EXTERNAL BODIES

8.1 INTEGRATED ASSESSMENT BY NABL, EIC, APEDA & FSSAI

- NABL conducted integrated assessment of PBTI for Renewal of Accreditations/ recognitions & Scope extension of NABL, EIC, APEDA & FSSAI for 9 days i.e. from 3rd July to 11th July 2019.
- Based on the integrated assessment accreditation/ recognition has been renewed till 24th July, 2021. Currently more than 2700 parameters are under NABL scope of accreditation.



8.2 BUREAU OF INDIAN STANDARDS (BIS)

BIS conducted surprise audit of PBTI on 28th & 29th January 2020. No non-conformance was observed during the Audit and BIS continued the recognition of PBTI.



Bureau of Indian Standards
The National Standards Body of India

PBT1
in Regulations
&
Standardization

9. PBTI IN REGULATIONS & STANDARDIZATION



International
Organization for
Standardization

PBTI has contributed in standardization at International level, CEO-PBTI being member of ISO working group on PROPOLIS under Technical Committee **ISO/TC 34/SC 19/WG 2**.



PBTI has contributed in National Food Regulations, CEO-PBTI being a member of following National Level committees:

- Apex Scientific Committee
- Scientific Panel on Sweets, Confectionery, Sweeteners, Sugars and Honey
- Scientific Panel on Methods of Sampling & Analysis
- Scientific Panel on Biological Hazards



PBTI has contributed in National Standards being a member of following committees under Food and Agricultural Division:

- Apiary Industry Sectional Committee (FAD-03),
- Biotechnology for Food & Agriculture Sectional Committee (FAD-23),
- Pesticide Residual Analysis Sectional Committee (FAD-27)

*Participation
in State/
National
Level Bodies*

10. PARTICIPATION IN STATE/ NATIONAL LEVEL BODIES

Dr Ajit Dua, Chief Executive Officer & Senior Scientist

1. Principal member of FAD-3 – Apiary Industry Sectional Committee constituted by Bureau of Indian Standard (BIS) since 27.01.2020.
2. Principal member of FAD-23 Biotechnology for Food & Agriculture sectional committee constituted by Bureau of Indian Standard (BIS) since 30.01.2020
3. Principal member of FAD-27 – Pesticide residual analysis sectional committee constituted by Bureau of Indian Standard (BIS) since 14.02.2020.
4. Selected as expert member of the Scientific Panel of FSSAI on Sweets, Confectionery, Sweeteners, Sugars and Honey in January 2020.
5. Selected as expert member of the Scientific Panel of FSSAI on Methods of Sampling and Analysis in January 2020.
6. Expert Member in Scientific Panel for Biological Hazards constituted by FSSAI till December 2019.
7. Upgraded as Lead Assessor by NABL in addition to being Empanelled as Technical Assessor for Biological Field since 2011: Has audited various laboratories for compliance against ISO/IEC 17025 on behalf of NABL during the period under report.
8. Nominated as member of Test Methods Review Group constituted by FSSAI
9. Nominated as Chairperson of the sub group (Microbiology) by FSSAI to address analytical issues constituted under Methods Review Group.
10. Director, Board of Directors, Punjab State Biotech Corporation (Earlier Mohali Biotechnology Park)
11. Head of the committee constituted by Chairman PPCB for evaluation and Inspection of new/approved laboratories for recognition by PPCB
12. Expert member of the committee regarding strengthening of Laboratory Infrastructure of the Board at Punjab Pollution Control Board Patiala.
13. Member of Purchase committee constituted by Chairman PPCB for purchase of Laboratory items, Equipment, Chemicals and Glassware for Air Laboratory of PPCB.
14. Nominated as an expert in the Panel to visit state/UT laboratories for implementation of Central Sector scheme “ Strengthening of Food Testing System in the country

including provision of Mobile Food Testing Labs” of FSSAI- Visited State and Regional Food Laboratories at Rajasthan

15. Member Internal Quality Assurance Cell (IQAC) of Central University of Punjab Bathinda
16. Member of steering committee of institutions of Knowledge City, Sector-81, Mohali
17. Life Member of Indian Association of Air Pollution Control (IAAPC), Association of Food Scientists and Technologists (India), AFSTI, Mysore, Association of Microbiologist of India (AMI) and Member of AOAC India Chapter & Chandigarh Region Innovation Knowledge Cluster (CRIKC)
18. Internal Member of Food Safety Knowledge Assimilation Network (FSKAN) of FSSAI.

Dr. Vandana Awasthi, Scientist (Biology)

1. Member of Technical Expert Committee for upgradation of laboratories constituted by FSSAI
2. Alternate member of FAD-23 Biotechnology for Food & Agriculture sectional committee constituted by Bureau of Indian Standard (BIS) since 30.01.2020

Mr. Santosh Kumar Singh Scientist (Chemical)

1. Alternate member of FAD-27- Pesticide residual analysis sectional committee constituted by Bureau of Indian Standard (BIS) since 14.02.2020.

Dr. Sanjivan, Assistant Scientific Officer

1. Member of Technical Expert Committee for upgradation of laboratories constituted by FSSAI
2. Alternate member of FAD-3- Apiary Industry Sectional Committee constituted by Bureau of Indian Standard (BIS) since 27.01.2020.

*Research
&
Incubation
Services*

11. RESEARCH & INCUBATION SERVICES

11.1 RECOGNITION OF RESEARCH & INCUBATION SERVICES



सत्यमेव जयते
Ministry of Agriculture & Farmers Welfare
Government of India

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH (DSIR)

- PBTI is recognized as Scientific & Industrial Research Organization (SIRO) by Department of Scientific and Industrial Research (DSIR) Govt. of India since July, 2006; which is being renewed periodically.
- Current validity of DSIR recognition has been extended till 31st March 2020.



NODAL AGENCY FOR INCUBATION SERVICES

Punjab Biotechnology Incubator has been notified by Govt. of Punjab as Nodal Agency for Incubation services and to recommend proposals of start-ups to avail fiscal benefits under Industrial and Business Development Policy in September 2018.

11.2 CONTRACTUAL RESEARCH & OTHER TECHNICAL PROJECTS

During the period under report, 06 contractual research projects were handled which includes 05 ongoing projects of last year and 01 new project.

11.2.1 Industry Sponsored projects

IOL Chemicals and Pharmaceuticals Ltd. Barnala:

- Completed validation of method of analysis of elemental impurities in Lamotrigine USP by ICP-MS as per method USP <233>
- Awarded validation of method of analysis of elemental impurities in Pantoprazole USP by ICP-MS as per method USP <233>

11.2.2 Public Sector Projects

1. National Bee Board (NBB), Department of Agriculture & Farmers Welfare, Gol:

PBTI jointly with Punjab Agricultural University, Ludhiana is executing the project “Integrated Bee keeping Development Centre (IBDC)/ Centre of excellence (COE)” sanctioned by National Bee Board (NBB), Department of Agriculture & Farmers Welfare, Gol since March 2017. PBTI is contributing towards Honey & other bee hive products testing. Under this project various methods for testing of quality, safety and authenticity of honey have been validated and applied. PBTI has completed the Method Validation /Standardization of 3 parameters, 16 new parameters were included in the scope of NABL Accreditation. A total of 200 commercial samples of Honey have been analyzed under the project.



2. Department of Agriculture, Cooperation & Farmers Welfare, GoI:

PBTI is a part of Network of 26 National Laboratories and State Agricultural Universities all over India for regularly monitoring the presence and levels of pesticide residues in food commodities and environmental samples under Central Sector Scheme, **“Monitoring of Pesticide Residues at National Level (MPRNL)”** since 2018. The scheme is being implemented through Indian Agricultural Research Institute, New Delhi. PBTI is analyzing total 240 seasonal vegetable samples per year using GSMS-MS / LCMS-MS analytical techniques for the detection of Pesticide Residues from the state of Punjab.



3. Food Safety and Standards Authority of India (FSSAI):

PBTI became the part of a National level project **“Study to generate baseline data on the occurrence of Metal Contaminants in Vegetables”** in November 2018. PBTI collected and



analyzed total of 858 samples (including 99 samples from farm locations) for 14 elements including heavy metals i.e. Lead, Cadmium, Chromium, Manganese, Nickel, Arsenic, Mercury, Aluminum, Selenium, Cobalt, Antimony, Iron, Copper and Zinc in vegetables for **North Zone** consisting of 8 States/UTs including Punjab, J&K, Himachal Pradesh, Uttarakhand, Haryana, Uttar Pradesh, Chandigarh and Delhi.

The representative vegetable samples collected and analysed were of three main categories: **Leafy vegetables** [Spinach, Amaranth, and Fenugreek (Methi)], **Fruit vegetables** (Bottle Guard (Lauki), Brinjal, Lady's finger, Tomato) and **Root vegetables** (Potato, Onion, Radish and Carrot). The report for the same is being compiled up.

4. Punjab Pollution Control Board:

PBTI started evaluating quality of ground water of solid waste dumping sites in the state of Punjab on behalf of Punjab Pollution Control Board (PPCB), Patiala in May 2018 under the project “**Conducting ground water analysis of Solid waste dumping sites in the State of Punjab**”. The project was awarded for a period of three Years which involves pre-monsoon and post-monsoon evaluation of water collected from Urban Local Bodies specified by PPCB. During the period under report, PBTI completed and analyzed samples from total 25 Urban Local Bodies.



*Project
Management
Advisory
Services*

12. PROJECT MANAGEMENT ADVISORY SERVICES

12.1 DEPARTMENT OF WATER SUPPLY & SANITATION (DWSS), GOVT. OF PUNJAB

1. **Operation and Management Services for RAWTL:** DWSS had setup Regional Advance Water Testing Lab (RAWTL) at Mohali with the financial support from World Bank. The department approached PBTI in 2015 to provide Operation and Management Services to run the lab and to get it accredited by NABL. PBTI is providing trained Scientific & support staff, imparting regular trainings, providing technical knowhow for operation of the laboratory, technical support for third party inspection of newly installed hi-end equipment and conducting internal audits since 2015. Also Laboratory Quality Management System (LQMS) as per requirements of International standard ISO/IEC 17025:2005 was established and being implemented at RAWTL, Mohali by PBTI. The agreement for Operation and Management Services for RAWTL is being renewed periodically by DWSS and as per the latest agreement the validity is upto August 2020.

2. **Advisory Consultancy for LQMS documentation as per ISO/IEC 17025:2017:** DWSS has awarded Advisory Consultancy for preparing Laboratory Quality Management System (LQMS) documentation as per ISO/IEC 17025:2017 for RAWTL, Mohali & TWERU, Patiala in June 2019. Drafts for Laboratory Quality Management System Documents – Quality Manual, Quality System procedures and Formats has been shared and are being finalized. Training was arranged at PBTI for staff of DWSS on transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 by External Expert from 15th – 16th April 2019.



*International
Meetings/
Trainings*

13. INTERNATIONAL MEETINGS/TRAININGS

13.1 1ST RESEARCH COORDINATION MEETING AT IAEA, VIENNA AUSTRIA

PBTI entered into Research Contract with International Atomic Energy Agency (IAEA) Austria to execute the research project “Stable Carbon Isotope Ratio based Authentication of Honey-Validation of the tool for Indian Honey” under IAEA Coordinated Research Project scheme “D52042” entitled “Implementation of Nuclear Techniques for Authentication of Foods with High-Value Labeling Claims (INACT-FOOD)” for a period of 05 years.

The 1st Research Coordination Meeting for the said project was held at the Vienna International Centre, Austria from the 13th to 17th May, 2019 which was attended by the Contract holders from China, Indonesia, Jamaica, Malaysia, Morocco, Myanmar, Slovenia, Thailand, Uruguay including India, Agreement Holders from Denmark, Germany, Italy, Japan, New Zealand, Spain and Observers from Austria, China and Germany.

From India, **Dr. Ajit Dua, Chief Scientific Investigator (CSI)** of the project attended the meeting and presented the “Work Plan” for 1st phase and the “Abstract” of the Project. As per buddy matrix prepared during the meeting PBTI interacted with “Tentamus Global Center for Food Fraud” at Germany and Imprints Analytics GmbH, Austria for technical inputs in the project.



13.2 UP-SKILLING AT IAEA LABORATORIES, SEISBERSDORF AUSTRIA

The Food and Agriculture Organization of the United Nations (FAO) and the International Atomic Energy Agency (IAEA) jointly organized a training course on “the Use of Stable Isotope Techniques to determine Food Origin and verify Food Authenticity” at IAEA Laboratory in Seisbersdorf, Austria from 07th- 18th October, 2019. The purpose of the event was to strengthen Member States' surveillance and research laboratory capacities in using stable isotope ratio mass spectrometry to verify labelling claims related to the origin and authenticity of food products. The purpose was to support effective control measures to protect the public from fraud, including and associated unintended safety issues, mitigate and disruptive impact of emergencies affecting the food chain and minimize disruption to trade in agricultural commodities. The training was attended by scientists from 14 different countries including Argentina, Bangladesh, Costa Rica, China, India, Indonesia, Jamaica, Korea, Malaysia, Morocco, Pakistan, Sri Lanka, Thailand, and Vietnam.

Dr Sanjivan Alkesh Assistant Scientific Officer & **Secondary Chief Scientific Investigator (SCSI)** of the project being executed by PBTi attended the said training along with Mr Sumit Gupta Scientific Officer from Bhabha Atomic Research Centre (BARC), Mumbai. The knowledge gained during the training was used for standardizing and validating the method of detection and adulteration of honey with sugar of C3 plant origin by EA-LC-IRMS.



*National
Collaborations*

14. NATIONAL COLLABORATIONS

14.1 COLLABORATION WITH UNIVERSITIES

The collaboration of PBTI with the following universities was continued to promote Human Resource Development (HRD) and Research & Development (R&D) in the areas relevant to the needs of the State.

INDIRA GANDHI NATIONAL OPEN UNIVERSITY

(IGNOU)–PBTI was approved as Programme Study Centre for PG Diploma Programme in Food Safety & Quality Management System by IGNOU in June, 2014. 81 learners have been benefitted till date.

PUNJAB AGRICULTURAL UNIVERSITY (PAU), Ludhiana:

Imparted induction training to Assistant Chemists from Department of Chemistry PAU. The scientists of different departments of PAU also visited PBTI to explore the possibilities of collaborative research work in light of the facilities available with PBTI.



CENTRAL UNIVERSITY OF PUNJAB, BATHINDA (CUPB) – PBTI and CUPB have entered into an MoU to promote research, academic and service activities in Punjab region.

14.1 COLLABORATION WITH INDUSTRY

PBTI entered into an agreement on 03.01.2020 with M/s Baijnath Pharmaceuticals Private Limited for the purpose of Quality Evaluation of Herbal and Ayurvedic drugs including Nutritional parameters, Heavy Metals & Microbiological analysis as per API & WHO protocols.



*Human
Resource
Development &
Outreach
Activities*

15. HUMAN RESOURCE DEVELOPMENT & OUTREACH ACTIVITIES

15.1 POST GRADUATE DIPLOMA IN FOOD SAFETY & QUALITY MANAGEMENT-IGNOU

IGNOU and APEDA jointly launched Post-Graduate Diploma in Food Safety and Quality Management (PGDFSQM) with an emphasis on practical proficiency development exercises. PBTI got recognized as the Programme Study Centre for PGDFSQM by IGNOU in 2014. The diploma is of 1 year after completing graduation. In service candidates are especially getting benefitted out of this diploma. The program is a boon for meeting the increasing Human resource requirements for food safety and quality management professionals in Agri & Food sectors.

Induction program for the learners of PG Diploma in Food Safety & Quality Management (PGDFSQM) for the session 2019-20 was held on 12.10.2019. Total 34 learners enrolled in the current session.



15.2 TRAINING

Technical training on transition of International Standard on "General requirements for the competence of testing and calibration laboratories" from ISO/IEC17025:2005 to ISO/IEC17025:2017 organized by PBTI for Food & Drug Administration, Punjab and Department of Water Supply & Sanitation GoP from Punjab 15th -16th April 2019. Total 14 participants from FDA Punjab and DWSS Punjab attended the training.



15.3 PUNJAB INNOVATION AND TECHNOLOGY SUMMIT 2019

Department of Science, Technology & Environment, GoP organized “Punjab Innovation & Technology Summit” on 5th November, 2019 at hotel 'The Lalit, Chandigarh' to develop a robust ecosystem for research and innovation in the State which will enhance competitiveness, boost growth and create quality jobs.

More than 50 eminent speakers from across the globe assembled for the Summit and shared their views and experiences in the field of research & innovation. An Exhibition of start-ups and innovations, powered by the Thapar Institute of Engineering & Technology (TIET) was organized for universities, research institutions and industries to showcase the strength of Punjab's innovation ecosystem.



PBTI coordinated two sessions namely “Exploring Global opportunities for collaboration & convergence” and “Social Innovation & Enterprises”.

Exploring Global Opportunities for Collaboration and Convergence

The session focused on opportunities for International collaborations and included the following:

- i. Sharing experiences of global actors & stakeholders and to adopt their innovations for setting up Global innovation Hub in Punjab
- ii. Exploring the possibilities of collaboration with various Governments & organizations across various fields
- iii. To utilize Punjab research capabilities for fulfilling various innovative needs of the state through Global alliances and partnerships



SESSION #3

EXPLORING GLOBAL OPPORTUNITIES FOR COLLABORATION AND CONVERGENCE

MODERATOR : MR. VISHAL GOEL, PARTNER, CERESTRA

PANELISTS

MR RATIKA JAIN, CEO, GITA

PROF HENRY CHEN, COUNSELOR CUM DIRECTOR, S&T DIV, TECC

DR. VIVEK DHAM, ADBISOR FOR RESEARCH & INNOVATION, EU DELEGATION

MR. RON MALKA, AMBASSADOR OF ISREAL TO INDIA

PROF GRAHAM BALL, SCHOOL OF SCIENCE & TECHNOLOGY, NOTTINGHAM TRENT UNIVERSITY

MR KIRTIMAN AWASTHI, SENIOR POLOCY ADVISOR - CCA & CLIMATE FINANCE READINESS

Social Innovations and Enterprises

The session included following points:

- i. Emerging innovations & technologies to build a robust delivery mechanism for governments in the field of Health, Education, Agriculture, Skill, Digital Payments, Securities, etc.
- ii. To leverage Punjab research strengths to promote citizen centric innovations having social impact.



SESSION #6

SOCIAL INNOVATIONS AND ENTERPRISES

MODERATOR : MR. VIVEK ATRAY, FORMER IAS

PANELISTS

MR. PARAM SINGH, FOUNDER, MOOOFARM PVT. LTD.

MR. AMIT NARANG, CEO, PAYMART AND PLAYMART

DR. VISHAL UPADHYAY, CEO, AGILE HEALTHCARE AND REHABILITATION SERVICES

MS. ANANYA CHANDRA, AVP, AGNI, INVEST INDIA

MS. SANSKRITI DAWLE, CEO, THINKERBEL L LABS

MR. AMARDEEP, SIBIA, CEO SATSURE LTD

Round Table Meeting to strengthen bilateral coordination of academia & industry

PBTI coordinated the Round Table meeting with Dr. Manish Dewan, Head – Strategic Partnership & Entrepreneurship Development (BIRAC) DBT, Dr. Vivek Dham, Advisor Research & Innovation, Delegation of European Union, Dr. Srinivasa Kaveri, CNRS Office in India, Embassy of France, New Delhi and Dr. Maan Singh Sidhu, Science & Technology Counsellor, Royal Norwegian Embassy, New Delhi. The meeting was chaired by Dr. A.S. Nanda (VC, GADVASU Ludhiana). The representatives of GADVASU, IISER, GVS Biotech Pvt. Ltd., MRSPTU, Punjabi University, PBTI and PSCST attended the meeting. The attendees were apprised with various initiatives, schemes and relevant websites which can strengthen bilateral coordination of academia & industry at International level.



15.4 INVITED LECTURES/ TALKS

1. Dr Ajit Dua, CEO delivered a Lecture on **“Quality, safety and authenticity of Honey-Regulatory and Analytical Aspects”** as a Resource Person for Apiculture Training Course for Scientists & officials from Govt. of Tripura on Scientific Beekeeping under the aegis of National Bee Board at Department of Entomology, PAU, Ludhiana on 13th June 2019.
2. Dr Ajit Dua, CEO Chaired a Session in National Level Conference on **“Innovations in Bioprocess Technology”** organized by Center of Innovative and Applied Bioprocessing (CIAB) and National Agri-Food Biotechnology (NABI), Mohali from 11th -13th December, 2019.



3. Dr Ajit Dua, CEO delivered Expert talk on **“Good Laboratory Practices and ICP-MS for Water Quality Analysis”** organized by Central Scientific Instruments Organization–Central Scientific Instruments Organization(CSIR–CSIO) on 16.12.2019



4. Dr Ajit Dua, CEO PBTI delivered a Guest lecture on Initiatives of State Government for Promotion of Life Sciences Sector in Punjab at Sri Guru Granth Sahib World University Fatehgarh Sahib on 30.01.2020.



*Our
Memberships*

16. OUR MEMBERSHIPS



Life Member of Association of Food Scientists and Technologists (India), AFSTI, Mysore



Life Member of Indian Association of Air Pollution Control (IAAPC)



Member of Chandigarh Region Innovation and Knowledge Cluster



Member of NetProFaN Chandigarh Chapter Member of
Chandigarh Region Innovation and Knowledge Cluster

*Participation in
Seminars / Workshops /
Trainings*

17. UPSKILLING OF STAFF

22. PARTICIPATION IN SEMINARS/ WORKSHOPS/ TRAININGS

As an endeavor to provide quality services, PBTI keeps on updating the skills of its staff through their participation in Seminars, Conferences, Workshops, Trainings etc. During the period under report, PBTI's staff participated in various International and National programmes and activities:

Dr Ajit Dua, Chief Executive Officer & Senior Scientist

1. Global Bio India-2019, a Mega International Event, jointly organized by BIRAC and DBT, Gol on 21.11.2019 and State Connect Programme.
2. Punjab Innovation and Technology Summit-2019 organized by Department of Science Technology & Environment, GoP at Hotel Lalit, Chandigarh Innovation on 05.11.19.
3. Regional Conference on Environment with theme " No time left Act now" organized by Govt. of Punjab in partnership with Govt of Haryana, HP, UT Chandigarh on 14.12.19.
4. Nobel Prize series -2019 (3rd edition) held by Department of Biotechnology (DBT), Gol in partnership with GoP on September 11th -12th, 2019 at NABI, Mohali.
5. Progressive Punjab Investor Summit organized by GoP (Department of Investment Promotion) on 5th -6th December, 2019 at the Indian School of Business (ISB), SAS Nagar (Mohali).
6. National Level Conference on "Innovation in Bioprocess Technology" from 11th -13th December, 2019 organized by Center of Innovative and Applied Bioprocessing (CIAB) and National Agri-Food Biotechnology (NABI), Mohali.
7. Workshop on "Awareness for Environment protection" organized by Punjab Pollution Control Board jointly with Directorate of Environment & Climate Change (DECC) at Punjab Agricultural University Ludhiana on 07.02.2020.
8. 3rd Brainstorming session on promotion of Investment & export in Agri/Agri Processing on 05.08.2019 chaired by ACS (Industries) organized by Punjab Bureau of Investment Promotion (PBIP).

Dr Vandana Awasthi, Scientist (Biology)

1. Global Bio India-2019, a Mega International Event, jointly organized by BIRAC and DBT, Gol on 21.11.2019 and State Connect Programme.
2. Punjab Innovation and Technology Summit-2019 organized by Department of Science Technology & Environment, GoP at Hotel Lalit, Chandigarh Innovation on 05.11.19.
3. Regional Conference on Environment with theme " No time left Act now" organized by Govt. of Punjab in partnership with Govt. of Haryana, HP, UT Chandigarh on 14.12.19.
4. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empanelled NABL trainer at PBTI from 15.04.2019 to 16.04.2019.

Mr Santosh Kumar Singh, Scientist (Chemical)

1. Technical Training on "Multi Pesticide Residue Analysis in Fruits & Vegetables" organized by FSSAI on 11.11.19 to 15.11.19 at Food Safety Solution Center (FSSC), National Food Laboratory (NFL), Ghaziabad.
2. Training on "Sample preparation and analysis of Vegetable samples for pesticides residue by GCMS-MS" organized from 14.08.2019 to 31.08.2019 at PBTI, Mohali
3. Technical Training on "Water Quality Assessment" organized on 02.08.2019 & 03.08.2019 at Punjab State Pollution Control Board, Thapar University, Patiala
4. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empaneled NABL trainer at PBTI from 15.04.2019 to 16.04.2019

Dr Simranpreet Kaur, Scientist (PMC/PMA Cell)

1. Punjab Innovation and Technology Summit-2019 organized by Department of Science Technology & Environment, GoP at Hotel Lalit, Chandigarh Innovation on 05.11.19.

Dr Sanjivan Alkesh, Assistant Scientific Officer

1. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empaneled NABL trainer at PBTI from 15.04.2019 to 16.04.2019
2. Training Programme on "Use of Stable Isotope Techniques to determine Food Origin & Verify Food Authenticity "Organized by Division of Nuclear Techniques in Food & Agriculture, IAEA from 07.10.19 to 18.10.19 at IAEA's Laboratories in Seibersdorf, Vienna-Austria.

Mr Amit Agarwal, Assistant Scientific Officer

1. "One day workshop on Awareness for Environment Protection" organized by PPCB with Directorate of Environment & Climate Change, GoP, Deptt. of Rural Development & Panchayats and Municipal Corporation on 07.02.2020 at Punjab Agricultural University (PAU), Ludhiana.
2. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empaneled NABL trainer at PBTI from 15.04.2019 to 16.04.2019.

Ms Ravneet Kaur, Assistant Scientific Officer

1. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empaneled NABL trainer at PBTI from 15.04.2019 to 16.04.2019

Ms Pratibha Shahi, Assistant Scientific Officer

1. Four Days "Training Program on Understanding & Implementing ISO/IEC: 17025:2017 including Management System Documentation & Internal Auditing" Organized by NITTTTR in collaboration with Green Economy Initiatives Pvt. Ltd. from 03.03.2020 to 06.03.2020 at National Institute of Technical Teachers Training & Research (NITTTTR), Sector-26, Chandigarh.

Ms Shainandini Dogra, Junior Scientific Officer

1. Technical Training on "Analysis of Pesticide Residues in Water & Food Samples by GCMS-MS&LCMS-MS" organized from 02.09.19 to 18.09.19 at PBTI, Mohali
2. Training of Trainers (TOT) Program on Mycotoxins organized from 27.08.19 to 30.08.19 at ICAR-NRCG, Pune.
3. Technical Training on "Analysis of Antibiotic Residues in Honey & Milk" organized from 01.08.19 to 19.08.19 at PBTI, Mohali
4. Technical Training on "Sample preparation for analysis of Pesticide Residues in Water & Food samples" organized from 22.07.19 to 07.08.19 at PBTI, Mohali
5. Technical Training on "Analysis of Fatty Acids & Cholesterol in Food Samples by GC-FID" organized from 08.06.19 & 15.06.19 at PBTI, Mohali
6. Technical training on "Transition from ISO/IEC 17025:2005 to ISO/IEC 17025:2017 for Laboratory Quality Management System" by empaneled NABL trainer at PBTI from 15.04.2019 to 16.04.2019.

Ms Anju Thakur, Junior Scientific Officer

1. Training on "Analysis of Benzene & Benzopyrene in Air Samples by using GC-FID" organized from 03.06.19 to 19.06.19 at PBTI, Mohali

Mr Jitender Sharma, Scientific Assistant

1. Training of Trainers (TOT) Program on Analysis of Mycotoxins Organized by FSSAI in collaboration with Export Inspection Council of India on from 10.12.19 to 13.12.19 at Export Inspection Agency (EIA), Kochi.
2. Technical Training on "Estimation of Aflatoxins in Food samples by using HPLC" organized from 28.11.19 to 7.12.2019 at PBTI, Mohali
3. Technical Training on "Physiochemical Analysis of Ayush Products" organized from 26.07.2019 at Herbal Health Research Consortium Pvt. Ltd, Amritsar.

Dr Harmanpreet, Scientific Assistant

1. "Training on sampling of Food Products including Rice, Fruits, Vegetables, Honey etc. as per APEDA guidelines" organized on 17.04.2019 at PBTI, Mohali.

Dr Suksham Pal, Scientific Assistant

1. Training on "Proximate Analysis of Food Samples" organized from 11.03.2020 to 27.03.2020 at PBTI, Mohali.
2. Technical Training on "Analysis of Moisture, Ash, Acid Insoluble Ash & Fat in Food & Feed Samples" organized from 14.02.2020 to 02.03.2020 at PBTI, Mohali.

Ms Harmeet Kaur, Junior Scientific Officer

1. Training on "DNA Extraction by Conventional Method & Kit based method" organized from 18.07.19 to 03.08.19 at PBTI, Mohali
2. Technical Training on "Analysis of Potato Viruses by ELISA Method" organized from 10.07.2019 to 16.07.2019 at PBTI, Mohali

Mr Praveen Singh Danu, (Project Fellow)

1. One day workshop on Awareness For Environment Protection" organized by PPCB with Directorate of Environment & Climate Change, GoP, Deptt. of Rural Development & Panchayats and Municipal Corporation on 07.02.2020 at Punjab Agricultural University (PAU), Ludhiana.

Ms Priyanka Sharma, (Project Associate)

1. Technical Training on "Analysis of Waste Water /Water for pH, TSS, TDS, Oil & Grease, COD, BOD" organized from 13.01.2020 to 18.01.2020 at PBTI, Mohali.
2. Technical training on "Estimation of Vitamin B-Complex in Food Products" from 01.08.19 & 19.08.19 at PBTI, Mohali.

Ms Saloni (Executive)

1. Technical Training on "Analysis of Packaged Drinking Water (as per IS14543), Packaged Natural Mineral Water (as per IS13428) & Drinking Water as per IS10500:2012 for Gravimetric, Titrimetric & Spectrophotometric Parameters. (except Cyanide & Phenolic Compounds)" from 10.04.19 to 27.04.19 at PBTI, Mohali

Ms Arti Bharmoria (Project Associate)

1. Technical Training on "Estimation of Aflatoxin M1 in Milk by using HPLC" organized from 05.08.19 & 13.08.19 at PBTI, Mohali.
2. Technical Training on "Estimation of Sudan Dyes in Food Samples by using HPLC" organized from 18.07.19 & 03.08.19 at PBTI, Mohali.
3. Technical Training on "Estimation of Aflatoxin M1 in Milk by using HPLC" organized from 05.08.19 & 13.08.19 at PBTI, Mohali.
4. Technical Training on "Estimation of Sudan Dyes in Food Samples by using HPLC" organized from 18.07.19 & 03.08.19 at PBTI, Mohali

Ms Pooja Rai (Project Scientist)

1. Technical Training on "Analysis of Ambient Air Monitoring, Stack emission and Work zone Monitoring samples" organized from 01.08.19 to 19.08.19 at PBTI, Mohali

Dr Jatinder Singh (Project Associate)

1. Technical Training on "Multiresidue analysis in cereals by using GCMS-MS & LCMS-MS" organized by FSSAI on 17.02.2020 to 21.02.2020 at Food Safety Solution Center(FSSC),
2. Technical Training on "Sample preparation for analysis of Pesticide Residues in Fruit & Vegetable samples to 27.01.2020 at PBTI, Mohali

Mr Mohd Aadil Yattoo (Project Assistant)

1. Training on "Analysis of Vitamins using HPLC." organized from 22.01.2020 to 7.02.2020 at PBTI, Mohali.

Ms Tanu Sondhi (AF&AO)

1. Training on "Administrative Matters" organized on 26.07.19, 30.07.19 & 01.08.2019 organized at PBTI, Mohali

Ms Manisha Kumari (Office Assistant-PMC/PMA Cell)

1. Training on "Administrative Matters" organized on 26.07.19, 30.07.19 & 01.08.2019 organized at PBTI, Mohali.

*Promotion of
Biotechnology
Sector in
Punjab*

18. PROMOTION OF BIOTECHNOLOGY SECTOR IN PUNJAB

DBT-Gol and DSTE-GoP jointly incorporated section 8 company “Mohali Biotechnology Park (MBP)” in 2011 for development of Biotechnology Park at Knowledge City, Mohali as one of the main objectives. The Board of Directors consists of Principal Secretary, Science, Technology and Environment (PSSTE) as the Chairman and Secretary Expenditure, Department of Finance, GoP; Executive Director, NABI; Chief Executive Officer, CIAB; Executive Director, PSCST and Chief Executive Officer, PBTI as Directors. Since inception, the company was being serviced by Punjab State Council for Science & Technology (PSCST).

Hon'ble Minister Science & Technology while reviewing the roadmap for the development of Science and Technology and Organizations under the Department in 2019; decided to consolidate the Biotechnology related activities being carried out at Biotech division of PSCST, PBTI & MBP under a single umbrella.

Accordingly, PBTI was given the mandate to steer “Mission Biotech Punjab”. The name of the company “Mohali Biotechnology Park” was changed to “Punjab State Biotech Corporation (PSBC)” on 03.10.2019 for holistic development of Biotechnology sector in Punjab. In pursuance to the decision, the accounts of the company were transferred to PBTI in May 2019. CEO, PBTI was given the additional charge as Managing Director of the company and AF & AO, PBTI was given additional charge as AF & AO. In addition, a multi-institutional project “Secondary Agriculture Entrepreneurial Network (SAEN) in Punjab” being executed by Biotech division of PSCST was transferred to PSBC. Thereafter, various actions were taken to promote Biotechnology Sector in Punjab.

18.1 DEVELOPMENT OF BIOTECH PARK IN KNOWLEDGE CITY MOHALI

One of the key objectives of the corporation is to set up Life Sciences/ Biotechnology Park at Knowledge City Sector 81, Mohali. The Park site is strategically co-located in Knowledge City in vicinity of co-domain premier institutions like National Agri-Food Biotechnology Institute (NABI), Center of Innovative and Applied Bioprocessing (CIAB), Punjab Biotechnology Incubator (PBTI), Indian School of Business (ISB), Institute of Nano Science and Technology (INST) and Indian Institute of Science, Education & Research (IISER) so as to enable the industry to derive synergies from other components of Knowledge Cluster as well as from the institutions in and around Knowledge City, Mohali.



A Request for Proposal (RFP) for selection of consultant for selection of Developer for development of Life Sciences Park in Knowledge City Mohali was floated and M/s E&Y was appointed as Transaction Advisor through open bid system. A team of scientists from PBTI, PSBC and representatives of E&Y visited the ecosystem partners i.e. NABI, CIAB, INST and NIPER for synergizing the activities of the cluster.

CEO, PBTI as a part of Delegation led by MD-PSIEC visited Andhra Pradesh Medtech Zone (AMTZ) and Jawaharlal Nehru Pharma-City Vishakhapatnam on 11.03.2020 for gaining insights into various components and types of facilities being provided by such parks/ incubation centres in Andhra Pradesh, the frontrunner state in biotechnology sector.



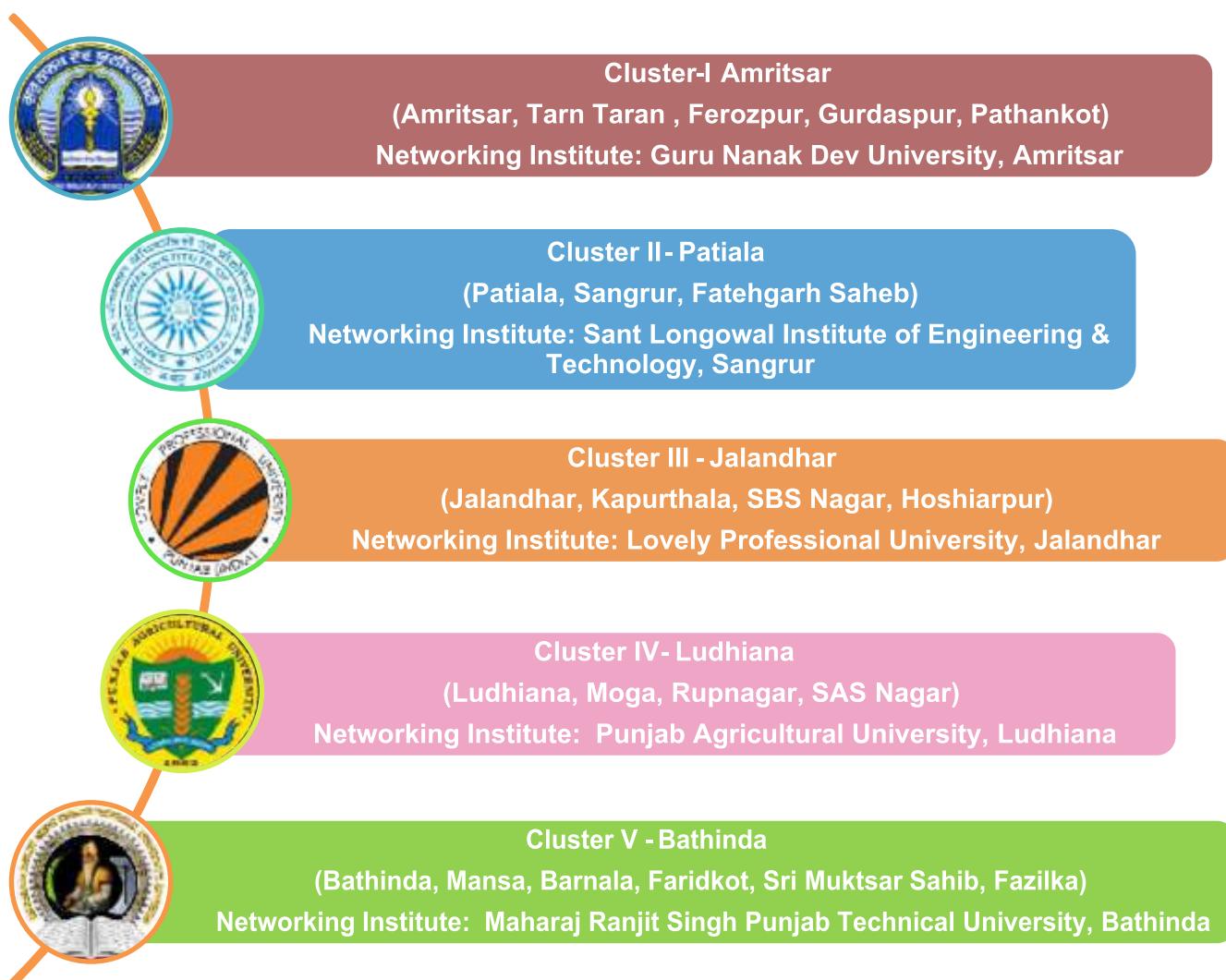
18.2 SECONDARY AGRICULTURE ENTREPRENEURIAL NETWORK (SAEN) IN PUNJAB

SAEN is a strategic initiative launched by BIRAC in collaboration with Govt. of Punjab for Early translation Acceleration from Primary to Secondary Agriculture by supporting industry and promoting start-ups in agri-food sector in Punjab. The network was launched by Hon'able Chief Secretary, Punjab & Secretary, Department of Biotechnology, Govt. of India. The project was being steered by Punjab State Council for Science & Technology (PSCST), Chandigarh since its launch in February 2018. However, in 2019 state Govt. reorganized Deptt. of Science Technology & Environment, and accordingly the project was transferred to Punjab State Biotech Corporation. An official supplementary agreement in this regard was signed between PSBC and DBT-BIRAC on 31st January, 2020.



The project is being implemented by Punjab State Biotech Corporation (PSBC) as Lead Agency with National Agri-Food Biotechnology Institute (NABI), Center of Innovative and Applied Bioprocessing (CIAB) and BIONEST-PU as the Partner Institutes. During Phase 1, two sectors namely Fruits & Vegetable and Cereal & Grains were focused.

The Unmet needs of these sectors were identified through five clusters viz. Amritsar, Ludhiana, Jalandhar-Hoshiarpur, Patiala-Sangrur and Bathinda linked with Research Institutions namely Guru Nanak Dev University (GNDU), Punjab Agricultural University (PAU), Lovely Professional University (LPU), Sant Longowal Institute of Engineering & technology (SLIET) and Maharaja Ranjit Singh Punjab Technical University (MRSPTU), respectively through Agri-Innovation Fellows. Project proposals for addressing the unmet needs were received from the state institutions for funding support.



Composition of Industry-Academia Clusters under SAEN

18.3 CONCEPTUALIZATION OF GLOBAL INNOVATION HUB

Mohali has all the elements of success as an Innovation City such as Universities and Research Institutions, Good Infrastructure, Human Capital and a supportive Government, there is still need to connect them and encourage collaborations not only within the regional and national context but globally. The State Govt. in 2019 envisaged to set up a Global Innovation Hub on 4 acres of land in Knowledge City Mohali to fill the gaps in current ecosystem for Research & Innovation in Mohali. The Global Innovation Hub, Mohali is envisaged to propel Mohali to becoming a Global Destination taking the State to a new trajectory of growth. The scope of Hub is envisaged to include following services:

- Access to incubation space
- Access to state & other public programs
- Access to research laboratories
- Pilot plants or demonstration labs, open to startups and entrepreneurs
- Access to Risk Capital-Community of VCs/ investor network
- Organize networking events for access to successful entrepreneurs/ experts/ mentors
- Facilitate proof-of-concept funding
- Mentoring on business planning, marketing and sales strategy
- Assistance on technology and market assessments, human resource issues
- Offer a place for faculty and students to work with industry
- Serve as a landing pad for recruitment of industry to region
- Encourage commercialization of intellectual Property and tech transfer from the institutions in the region
- Institution's educational course offerings to Startups
- Workforce advanced technology training facilities



A meeting was held with various universities and research institutions on 16.10.2019 to invite Expression of Interest from them for selection of Knowledge Partner with Govt. of Punjab for Setting up of Global Innovation Hub. On 29.10.2019, Plaksha University, Guru Nanak Dev Engineering College, Chitkara University, IIT Ropar, Thapar University and Lovely Professional University presented their strengths and vision for being knowledge partner. Presentations were reviewed by a committee under the chairmanship of PSSTE.

Plaksha University was selected as prospective Knowledge partner. An MoU was signed between DSTE, GoP and Plaksha University on 05th November 2019 during Innovation and Technology Summit organized by DSTE, GoP at Chandigarh.

18.4 PROMOTIONAL ACTIVITIES- PARTICIPATION IN GLOBAL BIO INDIA 2019

PBTI and PSBC actively participated in the Bio event organized by Department of Biotechnology, Govt of India & its Public sector Undertaking, BIRAC-"Global Bio-India Summit 2019", a mega international congregation of biotechnology stakeholders, including international bodies, regulatory bodies, Central and State Ministries, SMEs, large industries, bioclusters, research institutes, investors, and the startup ecosystem from 21st -23rd Nov, 2019 at New Delhi.

The strengths of State in Life Sciences Sector and initiatives in pipeline were showcased during the exhibition. PAU, Ludhiana, Dr Dozo Laboratories, M/s GVS Ltd., M/s Agro Tech Chandigarh & E& Y (PMC for development of Biotech Park at Knowledge City Mohali) also participated as the stakeholders from Punjab.



During the State connect program held on 21.11.2019, Memorandum of Understanding (MoU) was signed between BIRAC and the State of Punjab to jointly promote innovation ecosystem in Punjab to meet space, service and knowledge requirement for biotechnology.



*Infrastructure
Development in
Knowledge City,
Mohali*

19. INFRASTRUCTURE DEVELOPMENT IN KNOWLEDGE CITY, MOHALI

Punjab Biotechnology Incubator was allotted one (01) Acre land in Knowledge City, Sector 81, Mohali in 2014. The Administrative approval for construction to be executed through PWD (B&R) was given in October 2019 but the construction could not be started due to paucity of funds. At some instances it was discussed to construct building in phased manner. However, being scientific building it was strongly recommended to construct in one go. With the continuous support from State Govt. PBTI could arrange partial funds.



PWD (B&R) submitted the revised cost estimates of Rs.3091.68 Lakhs against Rs.2483.01 Lakhs for which Administrative approval was earlier given to PWD (B&R), due to increase in input material cost and inclusion of HVAC work which was earlier not part of estimate. The cost estimate of Rs. 3091.68 Lakhs was approved by EBCC in its meeting held on 23.10.2019 and Administrative approval for same was conveyed to PWD (B&R) the executing agency. Being deposit work available funds were transferred to PWD (B&R). It was also decided to complete the civil structural work with the available funds and finishing may be executed in phased manner as per availability of funds.

PWD (B&R) floated the tender in Dec. 2019 and awarded the work for Civil, Electrical & Public Health in Feb. 2020 (HVAC work to be got executed through separate tender). The contractor started the work in March 2020; which had to be temporarily suspended due to outbreak of COVID-19 pandemic.

Simultaneously the Sub-Committee constituted by EBCC for Technical infrastructure Development in its meeting held on 24.12.2019 reviewed and recommended to design HVAC system based on Water Chiller & Screw Compressors.

PBTI is very optimistic for arranging the additional funds for completion of building in one go.

*Clientele
Profile*

20. CLIENTELE PROFILE

PBTI's facilities are being used by Farmers, Farmer Groups, State Cooperatives, Industrial Houses, Entrepreneurs, R&D Institutes/Organizations, Germ Plasma/Seed Producers, National & Multi-National Companies (MNCs) from food and environment sectors. During the period under report Sharman Woollen Mill, Jugiana; Guru Gobind Singh Refineries, Talwandi Sabo; Usha Martin Ltd, Hoshiarpur; Apollo Processors, Amritsar; Auro Deying Engineering, Baddi; Suvidhi Cotsyn, Ludhiana; Pavillion Mall, Ludhiana; GVK Gobindwal Sahib Thermal plant; Bio-green International, Ludhiana; Sri Shiv-Shakti Bakers, Jalandhar; Shreeji Cattle Feed, Ludhiana; Regent Venture, Jalandhar; A.P. Organics, Sangrur; Bagrry India Pvt. Ltd., Rajasthan; Neolacta Life Science Pvt. Ltd., Bangalore are new major groups associated with PBTI.

Export Inspection Agency, Kolkata and BIS, Kolkatta has started using PBTI facilities during the period under report. Royal Importer-Exporter, Mohali & Jaswindra Export, Jalandhar are new exporters and Moods & Minds, Derabassi, Delecious bites, Ludhiana & Mapic Food, Ludhiana are new entrepreneur/ start-up associated with PBTI during the period under report. Other major Regulatory agencies/ clients used consultancy services during 2019-20 includes Food Safety & Standards Authority of India, Department of Agriculture & Farmers Welfare, Gol, Department of Water Supply & Sanitation (DWSS) Punjab, Punjab Pollution Control Board, IOL Chemical & Pharmaceutical Ltd., Barnala.



*Testimonials
&
Media
Coverage*

21. TESTIMONIALS & MEDIA COVERAGE

This is an eye opener for me to see such a wonderful analytical facility as an incubator. Extremely pleased to meet and interact with Dr. Dua.

Dr. Deepanwita Chattopadhyay
Chairperson & CEO, IKP Knowledge Park
Hyderabad

"Very Impressed with the facility available here"

Dr. Saroj Mishra
IIT Delhi

**"Amazed by the competence and quality of analysis & analytic facilities available"
Wish you all the best!**

Dr. Sanjay Nene
NCL Innovation Park, Pune

"Lab facilities are very comprehensive, very much functional, Meeting the need of Industry. My best compliments & Good luck to the developers of this lab"

Dr. S.K. Sharma,
Ex. Adv. Ayurveda (AYUSH),
Chairman S.P Nutraceuticals FSSAI

ਪੰਜਾਬ ਸਰਕਾਰ ਵਲੋਂ ਡੀ. ਬੀ. ਟੀ. ਬੀ. ਆਈ. ਆਰ. ਏ. ਸੀ. ਨਾਲ ਐੱਮ. ਓ. ਯੂ. ਸਹੀਬਪੁਰ

ਚੰਡੀਗੜ੍ਹ, 22 ਨਵੰਬਰ (ਅਸ਼ਵਨੀ) - ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਖੇਤਰ ਨੂੰ ਪੰਜਾਬ ਦੇ ਆਰਥਿਕ ਵਿਕਾਸ ਦੇ ਮੁੱਖ ਧੁਰੇ ਵਜੋਂ ਪਛਾਣਦਿਆਂ ਸੂਬਾ ਸਰਕਾਰ ਵਲੋਂ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ-ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਇੰਡਸਟਰੀ ਅਸਿਸਟੈਂਟ ਕੌਂਸਲ (ਬੀ. ਆਈ. ਆਰ. ਏ. ਸੀ.) ਨਾਲ ਇਕ ਐੱਮ. ਓ. ਯੂ. ਸਹੀਬਪੁਰ ਕੀਤਾ ਗਿਆ ਹੈ ਤਾਂ ਜੋ ਸੂਬੇ 'ਚ ਇਸ ਖੇਤਰ ਨਾਲ ਸਬੰਧਤ ਸਵੈ-ਰੋਜ਼ਗਾਰੀ



ਪੰਜਾਬ ਸਰਕਾਰ ਅਤੇ ਡੀ. ਬੀ. ਟੀ. ਬੀ. ਆਈ. ਆਰ. ਏ. ਸੀ. ਦੇ ਅਧਿਕਾਰੀ ਐੱਮ. ਓ. ਯੂ. ਕਰਨ ਸਮੇਂ।

ਸੇਵਾਵਾਂ ਅਤੇ ਲੋੜੀਂਦੇ ਗਿਆਨ ਦੇ ਵਾਤਾਵਰਣ ਨੂੰ ਪ੍ਰਬੰਧਿਤ ਕੀਤਾ ਜਾ ਸਕੇ।

ਸਾਇੰਸ, ਟੈਕਨਾਲੋਜੀ ਅਤੇ ਵਾਤਾਵਰਣ ਦੇ ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ ਅਤੇ ਪੰਜਾਬ ਰਾਜ ਬਾਇਓਟੈਕ ਕਾਰਪੋਰੇਸ਼ਨ ਦੇ ਚੇਅਰਮੈਨ ਆਰ. ਕੇ. ਵਰਮਾ ਨੇ ਬੀ. ਆਈ. ਆਰ. ਏ. ਸੀ. ਦੇ ਮੈਨੇਜਿੰਗ ਡਾਇਰੈਕਟਰ ਡਾ. ਮੁਹੰਮਦ ਨਾਲ ਸਮਝੌਤੇ 'ਤੇ ਦਸਤਖਤ ਕੀਤੇ। ਅਸਲਮ ਵਲੋਂ ਭਾਰਤ ਸਰਕਾਰ ਦੇ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ ਦੇ ਸਕੱਤਰ ਅਤੇ ਬੀ. ਆਈ. ਆਰ. ਏ. ਸੀ. ਦੇ ਚੇਅਰਪਰਸਨ ਡਾ. ਰੇਨੂ ਸਵਰੂਪ ਦੀ ਹਾਜ਼ਰੀ ਵਿਚ ਨਵੀਂ ਦਿੱਲੀ ਵਿਖੇ ਆਯੋਜਿਤ ਮੈਗਾ ਏਵੈਂਟ 'ਗਲੋਬਲ ਬਾਇਓ-ਇੰਡੀਆ 2019' ਦੌਰਾਨ ਇਹ ਐੱਮ. ਓ. ਯੂ. ਸਹੀਬਪੁਰ ਕੀਤਾ ਗਿਆ। ਇਸ ਸਮਾਰੋਹ ਦਾ ਉਦਘਾਟਨ ਸਾਇੰਸ ਅਤੇ ਟੈਕਨਾਲੋਜੀ ਅਤੇ ਸਿਹਤ ਤੇ ਪਰਿਵਾਰ ਕਲਾਸੀ ਖੇਤਰੀ ਡਾ. ਹਰਜ ਕੁਮਾਰ ਨੇ ਕੀਤਾ।

JAB THE TIMES OF INDIA, CHANDIGARH
FRIDAY, SEPTEMBER 20, 2019

Bioincubator Pb's latest tool against adulteration

All State Departments Directed To Avail Agency's Services

Vinod Kumar3
@timesgroup.com

MUCH-NEEDED BOOST

KEY SERVICES

Chandigarh: In a push to its fight against food adulteration, water contamination and environment issues, the state government has notified Punjab Biotechnology Incubator (PBTI) — a first-of-its-kind multi-sectoral, high-end facility in the public sector — as the state agency for analytical services in agriculture, food, water and environment sectors.

The move will facilitate quicker analysis of samples, followed by speedy action on defaulters under the Hindustan Punjab Mission.

At present, the samples are analyzed by the respective departments — health, agriculture pollution control board and water supply — of the state government. However, most laboratories are facing shortage of infrastructure and manpower, causing delay in the analysis of samples. Due to non-availability of high-end facilities, these departments are forced to avail the services of external laboratories at higher rates.

A meta study on food-testing laboratories system in India by the Food Safety and Standards Authority of India (FSSAI) released earlier this year had laid bare the gap in laboratories ratio in Punjab and had called for improving the capabilities of existing laboratories within the states to cater to the ever-increasing requirements.

The government has made mandatory the use of PBTI's analytical services for all its departments including boards, corporations, societies and cooperatives. The use of private laboratories has been allowed only for services not available with the PBTI.

The charges for these services have been approved by the governing council of the society headed by the chief secretary and the same can be paid by various departments without any tendering process. "This is the state government's a step towards providing safe food, water and environment under the Hindustan Punjab Mission," said PBTI chief executive officer (CEO) Dr Ajit Daa. The CEO added that all the departments' boards will get up analytical services under one roof which can be availed without any tendering process, thus saving time and resources in addition to access to quality services.

PBTI is equipped with high-end facilities like trace analysis for pesticides, drugs and heavy metals, food additive analysis, adulterants analysis.

MoU SIGNED WITH DBT-BIRAC TO GIVE IMPETUS TO BIOTECHNOLOGY SECTOR

Identifying biotechnology as the key driver for the state's economic development, Punjab Government on Friday inked an MoU with Department of Biotechnology (DBT)-Biotechnology Industry Assistance Council (BIRAC) to jointly promote biotechnology innovation ecosystem in the State to meet space, service and knowledge requirement of the sector.

The state Principal Secretary (Science, Technology and Environment) and Punjab State Biotech Corporation chairman RK Verma signed the MoU with BIRAC managing director Dr Mohd Aslam in the presence of Secretary to Government of India, DBT and BIRAC chairperson Dr Renu Swarup during the mega event 'Global Bio-India 2019' held at New Delhi.

bright
02 Punjab Express
CHANDIGARH, SATURDAY, NOVEMBER 23, 2019

PUNJAB

Government gives impetus to biotechnology sector in state

PUNJAB GOVERNMENT SIGNS MOU WITH DBT-BIRAC

HIGHLIGHTS



- Punjab participated as partner state in this 'Global Bio- India 2019', mega event which witnessed the presence of over 3,000 delegates and experts from more than 30 countries.
- The state showcased its existing strengths in the area of Biotechnology and future initiatives in pipeline.

PUNJAB EXPRESS BUREAU
Chandigarh, November 22

Industry Assistance Council (BIRAC) to jointly promote biotechnology innovation ecosystem in the state to meet space, service and knowledge requirement of the sector.

Punjab State Biotech Corporation, RK Verma signed the MoU with Managing Director, BIRAC Dr Mohd. Aslam in the presence of Secretary to the Centre, DBT and Chairperson BIRAC Dr Renu Swarup during the mega event 'Global Bio- India 2019' held at New Delhi.

Punjab having identified biotechnology as the key driver for economic development of the state has inked an MoU with the Department of Biotechnology (DBT)-Biotechnology

The Principal Secretary Science, Technology & Environment and Chairman

The event was inaugurated by Minister of Science and Technology and Health & Family Welfare Dr Harsh Vardhan.

Sharing state government's vision & strategic road-map for holistic development of Biotech sector during the event, Verma said that handholding of BIRAC would help Punjab in emerging as Global Biotech destination. Dr Swarup lauded Punjab's initiatives

and emphasised the importance of contribution of states in achieving the goal of 100 billion dollar economy by 2025 by India.

Notably, Punjab participated as Partner State in this mega event which witnessed the presence of over 3,000 delegates and experts from more than 30 countries. The state showcased its existing strengths in the area of Biotechnology and future initiatives in pipeline.

ਪੰਜਾਬ ਸਰਕਾਰ ਨੇ ਬੀਆਈਆਰਏਸੀ ਨਾਲ ਕੀਤਾ ਸਮਝੌਤਾ

ਪੰਜਾਬੀ ਜਾਗਰਣ ਬਿਊਰੋ, ਚੰਡੀਗੜ੍ਹ : ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਖੇਤਰ ਨੂੰ ਪੰਜਾਬ 'ਚ ਪ੍ਰਫੁੱਲਿਤ ਕਰਨ ਲਈ ਸੂਬਾ ਸਰਕਾਰ ਨੇ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ-ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਇੰਡਸਟਰੀ ਅਸਿਸਟੈਂਟ ਕੌਂਸਲ (ਬੀਆਈਆਰਏਸੀ) ਨਾਲ ਇਕ ਐਮਓਊ ਸਹੀਬ ਕੀਤਾ ਹੈ। ਸਾਇੰਸ, ਟੈਕਨਾਲੋਜੀ ਤੇ ਵਾਤਾਵਰਨ ਦੇ ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ ਤੇ ਪੰਜਾਬ ਰਾਜ ਬਾਇਓਟੈਕ ਕਾਰਪੋਰੇਸ਼ਨ ਦੇ ਚੇਅਰਮੈਨ ਆਰਕੇ ਵਰਮਾ ਨੇ ਬੀਆਈਆਰਏਸੀ ਦੇ ਐਮਡੀ ਡਾ. ਮੁਹੰਮਦ ਅਸਲਮ ਨਾਲ ਸਮਝੌਤੇ 'ਤੇ ਦਸਤਖਤ ਕੀਤੇ। ਅਸਲਮ ਨੇ ਭਾਰਤ ਸਰਕਾਰ ਦੇ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ ਦੇ ਸਕੱਤਰ ਅਤੇ ਬੀਆਈਆਰਏਸੀ ਦੇ ਚੇਅਰਪਰਸਨ ਡਾ. ਰੇਨੂ ਸਵਰੂਪ ਦੀ ਹਾਜ਼ਰੀ 'ਚ ਨਵੀਂ ਦਿੱਲੀ ਵਿਖੇ ਮੋਰਾ ਈਵੈਂਟ 'ਗਲੋਬਲ ਬਾਇਓ-ਇੰਡੀਆ



ਸੂਬੇ 'ਚ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਖੇਤਰ ਨੂੰ ਪ੍ਰਫੁੱਲਿਤ ਕਰਨਾ ਹੈ ਮੁੱਖ ਮਕਸਦ

2019' ਦੌਰਾਨ ਇਹ ਐਮਓਊ ਸਹੀਬ ਕੀਤਾ। ਇਸ ਸਮਝੌਤੇ ਦਾ ਉਦਘਾਟਨ ਸਾਇੰਸ ਤੇ ਟੈਕਨਾਲੋਜੀ ਤੇ ਸਿਹਤ ਤੇ ਪਰਿਵਾਰ ਫਲਾਈ ਮੰਤਰੀ ਡਾ. ਹਰਸ਼ ਵਰਧਨ ਨੇ ਕੀਤਾ। ਵਰਮਾ ਨੇ ਕਿਹਾ ਕਿ ਬੀਆਈਆਰਏਸੀ ਨਾਲ ਪਾਈ ਇਸ ਸਾਂਝ ਨਾਲ ਪੰਜਾਬ ਨੂੰ ਗਲੋਬਲ ਬਾਇਓਟੈਕ ਡੈਸਟੀਨੇਸ਼ਨ ਵਜੋਂ ਉੱਭਰਨ 'ਚ ਸਹਾਇਤਾ ਮਿਲੇਗੀ। ਡਾ. ਸਵਰੂਪ ਨੇ ਪੰਜਾਬ ਦੀਆਂ ਪਹਿਲਕਦਮੀਆਂ ਦੀ ਸ਼ਲਾਘਾ ਕੀਤੀ ਤੇ ਭਾਰਤ ਵੱਲੋਂ 2025 ਤਕ 100 ਅਰਬ ਡਾਲਰ ਦੀ ਆਰਥਿਕਤਾ ਦਾ ਟੀਚਾ ਪ੍ਰਾਪਤ ਕਰਨ 'ਚ ਰਾਜ ਦੇ ਯੋਗਦਾਨ ਦੀ ਮਹੱਤਤਾ 'ਤੇ ਜ਼ੋਰ ਦਿੱਤਾ।

ਚੰਡੀਗੜ੍ਹ ਸਪੈਸ਼ਲ ਸੈਕਸ਼ਨ 3

ਉਦਯੋਗਿਕ ਕੌਂਸਲ ਨਾਲ ਸਰਕਾਰ ਨੇ ਵਪਾਰ ਸਮਝੌਤਾ ਕੀਤਾ ਸਹੀਬ

ਪੰਜਾਬ 'ਚ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਖੇਤਰ ਨੂੰ ਪ੍ਰਫੁੱਲਿਤ ਕਰਨਾ ਹੈ ਮੁੱਖ ਉਦੇਸ਼

ਚੰਡੀਗੜ੍ਹ, 22 ਨਵੰਬਰ (ਹਰਿਕਾਰੋਕ ਸੇਵਾਯੋਗ ਸੇਵਾ) : ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਖੇਤਰ ਨੂੰ ਪੰਜਾਬ ਦੇ ਆਰਥਿਕ ਵਿਕਾਸ ਦੇ ਮੁੱਖ ਖੇਤਰ ਵਜੋਂ ਪਛਾਣਦਿਆਂ ਸੂਬਾ ਸਰਕਾਰ ਵਲੋਂ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ-ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਇੰਡਸਟਰੀ ਅਸਿਸਟੈਂਟ ਕੌਂਸਲ (ਬੀਆਈਆਰਏਸੀ) ਨਾਲ ਇਕ ਐਮਓਊ ਸਹੀਬ ਕੀਤਾ ਗਿਆ ਹੈ ਤਾਂ ਜੋ ਸੂਬੇ ਵਿਖੇ ਇਸ ਖੇਤਰ ਨਾਲ ਸਬੰਧਤ ਸੁਣੌਤੀਆਂ, ਸੋਲਾਓ ਅਤੇ ਲੋੜਵੀਂ ਸਿਧਾਂਤਾਂ ਦੇ ਵਾਤਾਵਰਣ ਨੂੰ ਪ੍ਰਸ਼ਿੱਠਤ ਕੀਤਾ ਜਾ ਸਕੇ।



ਸਾਇੰਸ, ਟੈਕਨਾਲੋਜੀ ਅਤੇ ਵਾਤਾਵਰਨ ਦੇ ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ ਅਤੇ ਸਿਹਤ ਤੇ ਪਰਿਵਾਰ ਫਲਾਈ ਮੰਤਰੀ ਡਾ. ਹਰਸ਼ ਵਰਧਨ ਨੇ ਕੀਤਾ। ਵਰਮਾ ਨੇ ਕਿਹਾ ਕਿ ਬੀਆਈਆਰਏਸੀ ਨਾਲ ਪਾਈ ਇਸ ਸਾਂਝ ਨਾਲ ਪੰਜਾਬ ਨੂੰ ਗਲੋਬਲ ਬਾਇਓਟੈਕ ਡੈਸਟੀਨੇਸ਼ਨ ਵਜੋਂ ਉੱਭਰਨ 'ਚ ਸਹਾਇਤਾ ਮਿਲੇਗੀ। ਡਾ. ਸਵਰੂਪ ਨੇ ਪੰਜਾਬ ਦੀਆਂ ਪਹਿਲਕਦਮੀਆਂ ਦੀ ਸ਼ਲਾਘਾ ਕੀਤੀ ਤੇ ਭਾਰਤ ਵੱਲੋਂ 2025 ਤਕ 100 ਅਰਬ ਡਾਲਰ ਦੀ ਆਰਥਿਕਤਾ ਦਾ ਟੀਚਾ ਪ੍ਰਾਪਤ ਕਰਨ 'ਚ ਰਾਜ ਦੇ ਯੋਗਦਾਨ ਦੀ ਮਹੱਤਤਾ 'ਤੇ ਜ਼ੋਰ ਦਿੱਤਾ।

ਉਦਯੋਗਿਕ ਅਤੇ ਵਪਾਰ ਸਮਝੌਤੇ 'ਤੇ ਦਸਤਖਤ ਕੀਤੇ। ਅਸਲਮ ਨੇ ਭਾਰਤ ਸਰਕਾਰ ਦੇ ਬਾਇਓਟੈਕਨਾਲੋਜੀ ਵਿਭਾਗ ਦੇ ਸਕੱਤਰ ਅਤੇ ਬੀਆਈਆਰਏਸੀ ਦੇ ਚੇਅਰਪਰਸਨ ਡਾ. ਰੇਨੂ ਸਵਰੂਪ ਦੀ ਹਾਜ਼ਰੀ 'ਚ ਨਵੀਂ ਦਿੱਲੀ ਵਿਖੇ ਮੋਰਾ ਈਵੈਂਟ 'ਗਲੋਬਲ ਬਾਇਓ-ਇੰਡੀਆ

*Accounts
Statement*

22. ACCOUNTS STATEMENT

The Annual Statement of Accounts of PBTI for the F.Y. 2019-20 has been finalized and prepared in the prescribed format. This includes the Balance Sheet, Income & Expenditure Account and relevant schedules. The accounts have been prepared on accrual basis. The annual accounts of PBTI for 2019-20 have been audited by a Firm of M/s U K Mehta & Associates, Chartered Accountants who had been appointed as Statutory Auditor of PBTI by the Governing Council.

The Balance Sheet for the year 2019-20 is placed on the proceeding pages.

U K Mehta & Associates
Chartered Accountants



904, SECTOR 40-A, CHANDIGARH
CHANDIGARH 160036
Ph. 9814301213, 172-4691213

FORM NO. 10B

[See Rule 17B]

Audit Report under section 12A (b) of the Income-tax Act, 1961 in the case of charitable or religious trusts or institutions

I have examined the balance sheet of PUNJAB BIOTECHNOLOGY INCUBATOR AAAJP0817G [name and PAN of the trust or institution] as at 31/03/2020 and the Profit and loss account for the year ended on that date which are in agreement with the books of account maintained by the said trust or institution

I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purposes of the audit. In my opinion, proper books of account have been kept by the head office and the branches of the above-named institution visited by me so far as appears from my examination of the books, and proper Returns adequate for the purposes of audit have been received from branches not visited by me subject to the comments given below:

In my opinion and to the best of my information, and according to information given to me the said accounts give a true and fair view: -

- i. in the case of the balance sheet of the state of affairs of the above-named institution as at 31/03/2020
- ii. in the case of the profit and loss account, of the profit or loss of its accounting year ending on 31/03/2020

The prescribed particulars are annexed hereto.

For U K Mehta & Associates
Chartered Accountants



(Uma Kant Mehta)
Prop

M No: 092639
FRN: 013381N

Place :CHANDIGARH
Date : 31/12/2020
UDIN : 21092639AAAAAI4460

**ANNEXURE
STATEMENT OF PARTICULARS**

I Application of income for charitable or religious purposes.

1.	Amount of income of the previous year applied to charitable or religious purposes in India during that year.	42703258
2.	Whether the institution has exercised the option under clause (2) of the Explanation to section 11 (1)? If so, the details of the amount of income deemed to have been applied to charitable or religious purposes in India during the previous year.	No
3.	Amount of income Accumulated or set apart for application to charitable or religious purposes, to the extent it does not exceed 15 per cent of the income derived from property held under trust Wholly for such purposes.	8161685
4.	Amount of income eligible for exemption under section 11(1)(c) [Give details]	No
5.	Amount of income, in addition to the amount referred to in item 3 above, accumulated or set apart for specified purposes under section 11(2)	3546290
6.	Whether the amount of income of mentioned in item 5 above has been invested or deposited in the manner laid down in section 11(2)(b)? If so, the details thereof.	FDR with Scheduled banks
7.	Whether any part of the income in respect of which an option was exercised under clause (2) of the Explanation to section 11(1) in any earlier year is deemed to be income of the previous year under section 11(B)? If so, the details thereof.	No
8.	Whether, during the previous year, any part of income accumulated or set apart for specified purposes under section 11(2) in any earlier year :-	
a.	has been applied for purposes other than charitable or religious purposes or has ceased to be accumulated or set apart for application thereto, or	No
b.	has ceased to remain invested in any security referred to in section 11(2)(b)(i) or deposited in any account referred to in section 11(2)(b)(ii) or section 11(2) (b) (iii), or	No
c.	has not been utilised for purpose for which it was accumulated or set apart during the period for which it was to be accumulated or set apart, or in the year immediately following the expiry thereof? If so, the details thereof	No

II. Application or use of income or property for the benefit of persons referred to in section 13 [3].

1.	Whether any part of the income or property of the institution was lent, or continues to be lent, in the previous year to any person referred to in section 13(3) (hereinafter referred to in this Annexure as such person) ? If so, give details of the amount, rate of interest charged and the nature of security, if any.	NO
2.	Whether any land, building or other property of the institution was made, or continued to be made, available for the use of any such person during the previous year? If so, give details of the property and the amount of rent or compensation charged, if any.	NO

3.	Whether any payment was made to any such person during the previous year by way of salary allowance or otherwise? If so, give details.	NO
4.	Whether the services of the institution were made available to any such person during the previous year? If so, give details thereof together with remuneration or compensation received, if any.	NO
5.	Whether any share, security, or other property was purchased by or on behalf of the institution during the previous year from any such person? If so, give details thereof together with the consideration paid.	NO
6.	Whether any share, security, or other property was sold by or on behalf of the institution during the previous year to any such person? If so, the details thereof together with the consideration received.	NO
7.	Whether any income or property of the institution was diverted during the previous year in favour of any such person? If so, give details thereof together with the amount of income or value of property so diverted.	NO
8.	Whether the income or property of the institution was used or applied during the previous year for the benefit of any such person in any other manner? If so, give details.	NO

III. Investment held at any time during the previous year(s) in concerns in which persons referred to in section 13(3) have a substantial interest.

Sl.No	Name and address of the concern	Where the concern is a company No. and class of shares held	Nominal value of the investment	Income from the investment	Whether the amount in Col. 4 exceeded 5% of the capital of the concern during the previous year-say. Yes/No

For U K Mehta & Associates
Chartered Accountants



(Handwritten signature)

(Uma Kant Mehta)
Prop
M. No: 092639
FRN: 013381N

Place : CHANDIGARH
Date : 31/12/2020
UDIN : 21092639AAAAA14460

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI
BALANCE SHEET AS AT 31ST MARCH, 2020

SOURCES OF FUNDS	SCHEDULE		AMOUNT (Rs.)
Capital Fund	A		259814552.39
Unspent Fund	B		49153410.00
Grand Total			308967962.39
APPLICATION OF FUNDS			
Fixed Assets	C		198673730.27
Current Assets, Loans & Advances	D	125654945.96	
Less: Current Liabilities & Provisions	E	<u>15360713.84</u>	110294232.12
Grand Total			308967962.39

Significant Accounting Policies & Notes to Accounts

L

As per report of even date attached

For U.K. Mehta & Associates
 Chartered Accountants
 FRN: 013381N

(U.K. Mehta), Prop
 M. No.092639



For Punjab Biotechnology Incubator

[Signature]
 31/12/2020
 AF & AO

[Signature]
 31/12/2020
 Chief Executive Officer

Date : 31.12.2020
 Place : Chandigarh

**PUNJAB BIOTECHNOLOGY INCUBATOR
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31ST MARCH 2020**

Expenditure	Schedule	Amount (Rs)	Income	Schedule	Amount (Rs)
Opening Stock		3391852.00	Grant Received from		
Purchases			-Govt Of Punjab	20572023.00	
Lab Chemicals		2001974.60	-FSSAI (NRL Project)	1000000.00	
Lab Consumables		2441248.22	-Intl. Atomic Energy Agency (IAEA)	537544.00	
Auditor Remuneration		14000.00	-PAU Ludhiana (IBDC Project)	152420.00	
Electricity & Water Expenses		649834.91			22261987.00
Establishment Expenses	G	21030329.00	Interest Received	F	1480572.00
Legal & Professional Charges		127600.00	Testing & Project Fees		30574228.85
Office Expenses	H	748705.72	Miscellaneous Income		93964.09
Other Expenses	I	184438.32	Excess or Short Recoveries		481.08
Quality Assurance/ Tech. Audit Exp	J	1137720.25	Closing stock		2692757.00
Stipend		0.00			
Rent		6768086.00			
Repair & Maintenance Expenses	K	5234959.85			
Running & Maintenance Expenses					
Car		146252.28			
Tata Winger		270097.98			
Security Charges		478749.00			
Sitting Fees		190100.00			
Testing Charges Paid (Outsourced)		151871.00			
Travelling Expenses		219340.78			
Excess of Income over Expenditure		11916830.11			
TOTAL: Rs.		57103990.02	TOTAL: Rs.		57103990.02

Significant Accounting Policies & Notes to Accounts - Schedule L

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 013381N

(U.K. Mehta), Prop.
M. No.092639



For Punjab Biotechnology Incubator

[Signature]
21/12/2020
AF & AO

[Signature]
21/12/2020
Chief Executive Officer

Date : 31.12.2020
Place : Chandigarh

**PUNJAB BIOTECHNOLOGY INCUBATOR
INCOME AND EXPENDITURE APPROPRIATION ACCOUNT
FOR THE YEAR ENDING 31st March 2019**

Expenditure	Amount (Rs)	Income	Amount (Rs)
Depreciation (As per Schedule C)	9956303.65	Excess of Income Over Expenditure (Trf From Income & Expenditure A/c)	11916830.11
Amt transfer to Accumulated Fund A/c	1960526.46	Amt transfer to Accumulated Fund A/c	
TOTAL: Rs.	11916830.11	TOTAL: Rs.	11916830.11

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN/013381N

(U.K. Mehta), Prop
M. No.092639

Date : 31.12.2020
Place : Chandigarh



For Punjab Biotechnology Incubator

[Signature]
31/12/2020
AF & AO

[Signature]
31/12/2020
Chief Executive Officer

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

SCHEDULE A : CAPITAL FUND

PARTICULARS	AMOUNT (RS)
Capital Fund	
- Opening Balance	121054592.93
Less: Utilised	827357.00
Add: Transfer from Unspent Balances (Being amount utilised during the year)	137626790.00
Add: Excess during the Year (Transfer from Income & Exp A/c)	1960526.46
Total: Rs.	259814552.39

SCHEDULE B : UNSPENT FUND

PARTICULARS	AMOUNT (RS)
Opening balance	155351912.00
Add: Grants received during the year (FSSAI)	24000000.00
Less: Amount spent and transfer to Capital Fund	137626790.00
Less: Utilized on Maintenance	533317.00
Add: Interest received on Grant Accounts	7961605.00
Total: Rs.	49153410.00

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 013381N

(U.K. Mehta), Prop
M. No.092639



For Punjab Biotechnology Incubator

[Signature]
31/12/2020
AF&AO Chief Executive Officer

Date : 31.12.2020
Place : Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

Schedule C : Fixed Assets

PARTICULARS	WDV as on 01.04.2019	Additions		Disposals	Total	Rate in %	Depreciation	WDV as on 31.03.2020
		upto 30.09.2019	after 30.09.2019					
Furniture & Fixtures	3306141.31				3306141.31	10	330614.13	2975527.18
Electrical Fitting & Installation	1155567.98				1155567.98	10	115556.80	1040011.18
Computers & Peripherals	31240.85	24877	13500		69617.85	40	25147.34	44470.51
Computer Software	39552.68		2360		41912.68	40	16293.07	25619.61
Plant & Machinery	47731.92				47731.92	15	7180.29	40571.63
Fire Extinguisher	67616.19				67616.19	15	10142.43	57473.76
Office Equipments	91989.44	0	5839		97828.44	15	14235.91	83592.52
Electrical Equipments	415742.02	3042	0		418784.02	15	62817.45	355966.57
Generator	164662.35				164662.35	15	24699.35	139963.00
Vehicle								
-Car (Ambassador)	62364.82				62364.82	15	9354.97	53009.85
- Car (Honda City)	836152.78				836152.78	15	125422.97	710729.81
- Cycle	283.59				283.59	15	42.94	240.65
- Tata Winger	334716.72				334716.72	15	50207.96	284508.76
Lab Equipments	30988249.86	59600	0		31047849.86	15	4657177.98	26390671.88
Library Books	118297.09	98012	0		216309.09	15	32446.01	183863.08
Assets under Aside Project								
Furniture & Fixtures	2427827.34			0	2427827.34	10	242783.03	2185044.31
Electrical Fiting & Installation	420888.94				420888.94	10	42088.99	378799.95
Computers & Peripherals	4006.69				4006.69	40	1602.28	2404.41
Computer Software	502.18				502.18	40	201.07	301.11
Fire Extinguisher	81920.35				81920.35	15	12268.05	69632.30
Electrical Equipment	477056.43				477056.43	15	71558.06	405498.37
Lab Equipments	19272537		0	5092	19267445.00	15	2890116.75	16377328.25
Equipments (DG Set)	1012224.53				1012224.53	15	151833.93	860390.60
Lab Equipments (UNEP- GEF)	664187.65				664187.65	15	99628.10	564559.55
Office Furniture	28503.02		0		28503.02	15	4275.00	24228.02
Mobile Phone		1625			1625.00	15	243.75	1381.25
Lab Furniture (UNEP- GEF Project)	33034.04				33034.04	10	3304.00	29730.04
Lab Equipments (under MOFPI Grant)	6367075.16				6367075.16	15	955061.02	5412014.14
Capital work in progress (Building)	2349408		137626790		139976198.00		0.00	139976198.00
Total	70799480.93	187156.00	137648489.00	5092.00	208630033.93		9956303.65	198573730.27

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 013381N


(U.K. Mehta)
Prop.



For Punjab Biotechnology Incubator


31/12/2020
AF & AO


31/12/2020
Chief Executive Officer

Date : 31.12.2020
Place: Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

Schedule D : CURRENT ASSETS, LOANS AND ADVANCES

PARTICULARS	Amount (Rs)	Amount (Rs)
Bank Balance		
Saving account in Corporation Bank	1305409.52	
Saving account in Punjab National Bank	113369.86	
Current account in State Bank of India	55794.50	1474573.88
Fixed deposits with		
Punjab National Bank	3460000.00	
Corporation Bank	81661053.00	85121053.00
Security deposits		
Chandigarh Gases (for Argon Gas cylinder)	30000.00	
Mohali Gas Enterprises (for LPG Cylinder)	16000.00	
Distt. Education officer Chandigarh	5000.00	
Lindstorme Services india Pvt Ltd (Lab Coats)	8064.00	
Khaira Traders (for Water Bottles)	1050.00	
Food Safety Standards Authority of India, New Delhi	100000.00	
PSPCL(Credit adjustment)	241124.09	
Punjab State Power Corporation Ltd	576537.00	
CITCO	30000.00	1007775.09
Staff Advances		7000.00
Cash in Hand		22922.00
Prepaid Expenses- CMS and AMC		202006.00
Closing Stock		2692757.00
Tax deducted at Source		14326675.00
Sundry Debtors		
-Outstanding for less than 6 Months	13183350.61	
-Outstanding for more than 6 Months	7049039.28	20232389.89
Cheque deposit but not yet realised		151482.00
GST Recoverable		330694.19
Advance to Suppliers		85617.91
Total: Rs.		125654945.96

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 013381N



(U.K. Mehta), Prop.

for Punjab Biotechnology Incubator



AF & AO



Chief Executive Officer

Date : 31.12.2020
Place: Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

SCHEDULE E: CURRENT LIABILITIES & PROVISIONS

PARTICULARS	AMOUNT(RS)
Audit Fees Payable	14000.00
Professional Fee Payable	9000.00
Earnest Money Payable	1120864.00
EPF Payable	453857.00
TDS Salary Payable	133509.00
Salaries Payable	611190.00
Rent Payable	616899.00
Sundry Creditors	9475256.04
Cheque Issue But Not Yet Presented in Bank	1312202.00
TDS Payable	230091.00
GST Payable	444292.00
Punjab State Dev Tax Payable	47600.00
Advance From Customers	891953.80
Total: Rs.	15360713.84

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 013381N



(U.K. Mehta), Prop.

for Punjab Biotechnology Incubator



AF & AO



Chief Executive Officer

Date : 31.12.2020
Place: Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI**SCHEDULE F : INTEREST RECEIVED**

PARTICULARS	AMOUNT(RS)
Interest in FDR'S	963514.00
Interest on Saving Bank account	517058.00
Total: Rs.	1480572.00

SCHEDULE G: ESTABLISHMENT EXPENSES

PARTICULARS	AMOUNT(RS)
Salary & Wages	16757265.00
Contribution To Employees Provident Fund	1500528.00
Manpower/ Helper Charges (O/S)	2607570.00
Staff Welfare	151278.00
Accidental Insurance	13688.00
Total: Rs.	21030329.00

SCHEDULE H: OFFICE EXPENSES

PARTICULARS	AMOUNT(RS)
Advertisement & Publicity Expenses	1947.00
Lab Waste Disposal Expenses	38139.00
House Keeping Charges	223313.00
Insurance Of Assets	37811.00
Office Expenses	51804.00
Newspaper & Periodicals	34329.00
Printing & Stationery	203234.62
Postage & Courier	58807.00
Subscription & Publications	7512.00
Telephone Expenses	81295.10
Meeting Expenses	10514.00
Total: Rs.	748705.72

SCHEDULE I : OTHER EXPENSES

PARTICULARS	AMOUNT(RS)
Fees & Taxes	11404.00
Bank Charges	1319.34
Recruitment Charges	75717.00
Expenses- FDA Project	2611.50
Expenses - DWSS (O&M) Project	2611.50
Expenses- FSSAI project	26589.00
Hiring of Taxi	1303.00
Training Fee/ Exp	30000.00
Foreign Fluctuation Fund	1195.00
Labour Charges	5903.00
Tender Expenses	24503.00
Miscellaneous Expenses	1281.98
Total: Rs.	184438.32

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN 013381N

(U.K. Mehta), Prop.

Date : 31.12.2020

Place: Chandigarh



for Punjab Biotechnology Incubator

[Signature]
21/12/2020
AF & AO

[Signature]
21/12/2020
Chief Executive Officer

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI**SCHEDULE J : QUALITY ASSURANCE (TECHNICAL) AUDIT EXPENSES**

PARTICULARS	AMOUNT(RS)
Accreditation/ Recognition Fees	373920.00
Caliberation Charges	190568.00
EIC/ NABL/ Apeda/ BIS Audit Expenses	341964.47
Proficiency Testing Charges	231267.78
Total: Rs.	1137720.25

SCHEDULE K : REPAIR & MAINTENANCE

PARTICULARS	AMOUNT(RS)
Repair & Maintenance - General	276683.00
Repair & Maintenance - Electrical	193931.37
Repair & Maintenance- Computer	138940.48
Repair & Maintenance- Lab Equipments	604287.00
Annual Maintenance Charges Equipments	4005974.00
Repair & Maintenance- DG Set	15144.00
Total: Rs.	5234959.85

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN 013381N


(U.K. Mehta), Prop.


for Punjab Biotechnology Incubator


31/12/2020
AF & AO


31/12/2020
Chief Executive Officer

Date : 31.12.2020
Place: Chandigarh

**PUNJAB BIOTECHNOLOGY INCUBATOR-SAS NAGAR
ANNEXURE TO THE BALANCE SHEET
NOTES TO ACCOUNTS**

SCHEDULE: L

SIGNIFICANT ACCOUNTANT POLICIES

1. CONVENTION

The accounts have been prepared on the mercantile/accrual basis under the historical cost convention and on the accounting principle of a going concern. Applicable Accounting Standards issued by the institute of Chartered Accountants of India and with the generally accepted accounting principles.

2. REVNUUE RECOGNITION

Punjab Biotechnology Incubator is testing laboratory and revenue is recognized on accrual basis.

3. FIXED ASSETS AND DEPRECIATION

Fixed Assets have been shown at historical cost. However, no cost of land (measuring 01 acre) has been taken into account as the same has been allotted by Punjab Govt. through Punjab State Council for Science and Technology free of cost vide Letter No.PSCST/3932 dated 13.08.2014. Depreciation is provided on written down value method at the rates and in the manner prescribed in the Income Tax Act, 1961 on the assets put to use during the year under audit. Cost is inclusive of Freight, Duties, levies and any other directly attributable cost of bringing the assets to their working condition for intended use.

4. GOVERNMENT GRANTS

Government grants received are being treated as capital fund contribution received in case of capital grants and income in case of revenue grants and are being depicted in accounts as funds received from the government.

5. EMPLOYEE BENEFITS

Employees of the PBTI are covered under the Gratuity Act amended from time to time. Further they are also having the earned leave facility as provided in the service rules. However, PBTI has not maintained any provision/reserve for payment of Gratuity and Leave encashment to its employees under employee's benefits as per AS-15 issued by ICAI.

6. FOREIGN CURRENCY TRANSACTIONS

Initial recognition-Foreign currency transactions are recorded in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of transaction.

Conversion - Foreign currency monetary items are retranslated using the exchange rate prevailing at the reporting date.



Exchange Differences - Exchange differences arising on the settlement of monetary items, or on reporting such monetary items at rates different from those at which they were initially recorded during the year, or reported in the previous financial statements, are recognized as income or as expense in the year which they arise.

B NOTES ON ACCOUNTS

1. Government Grants

Punjab Biotechnology Incubator (PBTI) has received revenue Grant for payment of salaries has also been received during the year from Govt. of Punjab amounting to Rs.205.72 Lacs, the same has been routed in the Income and Expenditure account for the year under Audit. In addition, Rs.10.00 Lacs, Rs.5.38 Lac and Rs.1.52 lacs received from FSSAI, Delhi Project title – National Reference Laboratory-for sweets and confectionery including honey”, International Atomic Energy Agency, Austria – Project titled "Carbon Isotope Ratio based Authentication of Honey – Validation of Indian Honey" and PAU, Ludhiana Project titled – "Centre of Excellence –IBDC", has been routed in the Income and Expenditure account for the year under Audit.

2. Current Assets, Loans and Advances

The current assets are approximately of the value stated, if realized in the ordinary course of business. The provision for all known liabilities is adequate and not in the excess of the amount considered reasonably necessary.

3. Closing Stock

Closing Stock is taken as valued and certified by Store and Purchase Officer, PBTI on cost or market price whichever is lower. For calculating the value, FIFO method has been followed.

4. Contingent Liabilities

Punjab Biotechnology Incubator (PBTI) has given performance Bank Gurarantee in favour of Export Inspection Agency, New Delhi amount of Rs. 1.00 lakh (Rs. One Lakh) vide Guarantee no. PBG2015/2 dated 13.02.2015 from Corporation Bank in respect of approval granted under EIC's Laboratory Approval Scheme. The same is still in force.

5. Sundry Debtors and Sundry Creditors

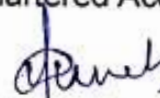
Before finalization of Balance Sheet, the confirmation was sought from Debtors and Creditors. Most of them have not responded for the same. The Sundry Debtors as on 31st March, 2020 were Rs.2,02,32,390/- consisting of Rs.1,63,13688/- from Govt. organizations. The recoveries have been expedited to recover the same. Further, for set off small recoverable amounts approval of the Competent Authority shall be taken.



6. The Society is registered under the Section 12 AA of the Income Tax Act, 1961 vide S.No. 180-P in the register of application u/s 12 A (a) maintained in the office of the Commissioner of Income tax, Chandigarh- II w.e.f. 08.07.2005. In view of the same, no provision for income tax has been made thereof.
7. Tax deducted at source shown under Schedule D amounting to Rs. 1,43,26,675/- includes Tax deducted at source during the year under audit amounting to Rs.15,02,491/- and the balance amount pertains to previous years.
8. Schedule 'A' to 'L' forms as integral part of Balance Sheet and Income & Expenditure Account.

As per report of even date attached

For U.K Mehta & Associates
Chartered Accountants


(U.K Mehta)
Prop.

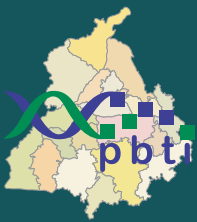


For Punjab Biotechnology Incubator


31/12/2020
AF & AO


31/12/20
Chief Executive Officer

Date: 31.12.2020
Place: Chandigarh



📍 SCO- 7 & 8, Phase-V, SAS Nagar 160059, Punjab, India

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