



PUNJAB BIOTECHNOLOGY INCUBATOR

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Defining Quality with Excellence

ANNUAL REPORT 2018-19



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PREFACE

With the humble beginning from the basement of Punjab State Council for Science & Technology (PSCST) in 2005, PBTI has grown exponentially over the years. The Analytical, R&D, Advisory and Skill enhancement services of PBTI in Food, Agriculture, Water and Environment sectors have not only gained National importance but have also started reaching at International level.



PBTI entered into its 1st International Collaboration with International Atomic Energy Agency (IAEA) Austria during this year under Coordinated Research Project Scheme on “Implementation of Nuclear Techniques for Authentication of Foods with High Value Labelling Claims”. Honey being important export commodity for Punjab as well as India, PBTI shall work on Stable Carbon Isotope Ratio based authentication of Honey-Validation of the tool for Indian Honey, under this collaboration.

PBTI’s accreditation and recognition by various Statutory/ Regulatory bodies helped it to enhance its customer base. During the current year, looking at the strengths of PBTI in Food sector, FSSAI notified it as Referral Food Laboratory under Food Safety & Standards Act-2006. Further having established strength in Honey sector, PBTI was approved as National Reference Laboratory (NRL) for Sweets & Confectionary including Honey as a part of National Network of Reference Laboratories launched by FSSAI, after a rigorous evaluation process. Similarly having established credibility in Environment sector, PBTI got notified as State Water Laboratory under Water (Prevention & Control of Pollution) Act 1974 and State Air Laboratory under Air (Prevention & Control of Pollution) Act 1981 by Chandigarh Administration during the period under report.

PBTI started providing Contractual Research Services to Pharma Sector for the first time in this year and successfully completed four industry sponsored projects. PBTI also became a part

of Network of Laboratories carrying out Monitoring of Pesticides Residues at National Level being co-ordinated by Department of Agriculture, Co-operation & Farmers Welfare Govt of India. Having developed the expertise in designing, setting up and operating the laboratories, PBTI provided advisory services to other Government Departments including Food and Drug Administration and Department of Water Supply and Sanitation Punjab. FDA Labs which were designed and established with the technical support of PBTI were made operational during this period.

PBTI also took initiative towards building up its incubation services. During the period under report, Govt of Punjab recognized PBTI as Nodal agency for recommending proposals of startups to avail fiscal benefits under Industrial and business development policy.

As an effort to build & upgrade the skills of staff, the trainings and interactive meetings for the scientists of PBTI were organized at Manchester, Austria and Singapore in addition to trainings at reputed Institutes/Laboratories within India.

The construction of PBTI's own building in Knowledge City Mohali could not be started due to paucity of funds. During this year we could arrange funds to the tune of Rs 14 Crores for construction and technical strengthening of PBTI under different schemes of Govt of India. The construction is likely to be started in the next year.

I sincerely place on record my gratitude to Sh Karan Avtar Singh, IAS President of PBTI's Society and Chief Secretary, Govt of Punjab and all the members of the Society and Governing Council of PBTI for their visionary suggestions leading to overall development of PBTI.

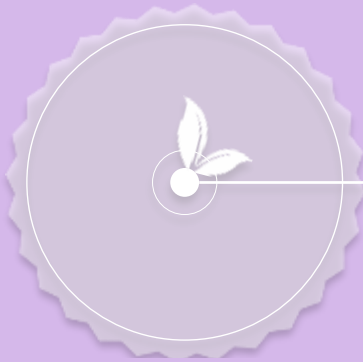
I express my gratitude to Mrs Vini Mahajan, IAS Additional Chief Secretary (Industry & Commerce) GoP and Sh Viswajeet Khanna, IAS Additional Chief Secretary (Development) for their unconditional support to PBTI. I am also thankful to FSSAI for supporting for strengthening of PBTI. All time support and cooperation of Dr Roshan Sunkaria, IAS and Sh Rakesh Verma, IAS Administrative Secretaries Department of Science, Technology & Environment GoP is thankfully acknowledged.

I am thankful to sincere and dedicated team of PBTI whose hardwork led to the achievements of PBTI during 2018-19. My special thanks are due to Dr Vandana Awasthi, Dr Simranpreet Kaur, Sh Rajiv Mahajan, Ms Pratibha Shahi, Sh K L Thakur, Ms Kamalpreet Kaur and Ms Manisha for their help in compiling of the Annual Report.

Dr (Mrs) Ajit Dua

Chief Executive Officer

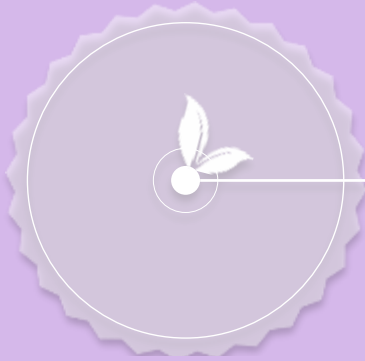
Punjab Biotechnology Incubator



Mission

1. 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. **President**
Chief Secretary to Govt. of Punjab
(Sh Karan Avtar Singh, IAS)
2. **Vice President**
Principal Secretary/Secretary
Science, Technology & Environment, Govt. of Punjab
Dr Roshan Sunkaria, IAS till 20.08.2018 and Sh R K Verma, IAS from 20.08.2018 onwards
3. **Member**
Principal Secretary, Finance, Govt. of Punjab
(Sh Anirudh Tiwari IAS)
4. **Member Secretary**
Chief Executive Officer,
Punjab Biotechnology Incubator
SAS Nagar (Mohali)
Dr (Mrs) Ajit Dua
5. **Treasurer Member**
Administrative-cum-Finance & Accounts Officer,
Punjab Biotechnology Incubator, SAS Nagar (Mohali)
(Mr Arwinder Singh, AF&AO)
6. **Dr B S Dhillon**
Vice Chancellor
Punjab Agricultural University,
Ludhiana

- 7. Nominee of Secretary**
Department of Biotechnology
Govt. of India, New Delhi
- 8. Sh D S Brar**
Chief Executive Officer
GVK Biosciences Pvt Ltd, Gurgaon
- 9. Dr S K Saxena**
Director
Export Inspection Council GoI Delhi
- 10. Director**
National Institute of Pharmaceutical Education and Research (NIPER)
Mohali
- 11. Dr B Sesikaran**
Former Director
National Institute of Nutrition , Hyderabad
- 12. Dr Lalitha Gowda,**
Former Director
Central Food Laboratory and Chief Scientist at CSIR-CFTRI, Mysore
- 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
- 14. Dr Naresh Kumar**
Former Scientist H /Outstanding Scientist &
Head R & D and Planning, CSIR Delhi

2.2 GOVERNING COUNCIL

1. **Chairman**
Chief Secretary to Govt. of Punjab
(Sh Karan Avtar Singh, IAS)
2. **Vice Chairman**
Principal Secretary/Secretary
Science, Technology & Environment, Govt. of Punjab
Dr Roshan Sunkaria, IAS till 20.08.2018 and Sh R K Verma, IAS from 20.08.2018 onwards
3. **Member**
Principal Secretary, Finance, Govt. of Punjab
(Sh Anirudh Tiwari, IAS)
4. **Member Secretary**
Chief Executive Officer
Punjab Biotechnology Incubator, SAS Nagar (Mohali)
Dr (Mrs) Ajit Dua
5. **Treasurer Member**
Administrative-cum-Finance & Accounts Officer,
Punjab Biotechnology Incubator, SAS Nagar (Mohali)
(Mr Arwinder Singh, AF&AO)
6. **Director**
Indian Institute of Science, Education and Research (IISER)
Knowledge City SAS Nagar (Mohali)
Prof (Dr) Debi Prasad Sarkar
7. **Member Secretary**
Central Pollution Control Board, New Delhi
(Sh A. Sudhakar)
8. **Dr S S Marwaha**
Former Professor of Applied Agriculture &
Chairman, Central Instrumentation Laboratories (CIL), Central University of Punjab,
Bathinda , Presently Chairman, Punjab Pollution Control Board, Patiala
9. **Director**
International Centre for Plant Genetic Engineering and Biotechnology, New Delhi
(Dr Dinakar M. Salunke)
10. **Dr Naresh Kumar**
Former Scientist H /Outstanding Scientist &
Head R & D and Planning, CSIR Delhi

- 11. Director**
National Bureau of Plant Genetic Resources (NBPGR)
New Delhi
(Dr Kuldeep Singh)
- 12. Executive Director**
National Agri Food Biotechnology Institute, Mohali
(Dr T R Sharma)
- 13. Dr Sanjay Trehan**
President
Panacea Biotech Ltd, Mohali
- 14. Dr Jasvir Singh**
Regulatory, Scientific and Government Affairs Leader
South Asia Dupont Nutrition & Health Danisco (India) Pvt Ltd

2.3 TECHNICAL ADVISORY COMMITTEE (TAC)

1.	Dr (Mrs) Ajit Dua Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar, (Mohali)	Chairman
2.	Director Institute of Microbial Technology (IMTECH) Chandigarh	Member
3.	Dr Sanjay Trehan President Panacea Biotech Limited, SAS Nagar (Mohali)	Member
4.	Representative Department of Biotechnology, Govt. of India New Delhi	Member
5.	Director Indian Institute of Science Education and Research (IISER) SAS Nagar (Mohali)	Member
6.	Dr K S Sandhu Ex Sr. Vegetable Technologist (QM) Quality Control Lab, PHPTC, PAU Ludhiana	Member
7.	Dr Dinesh Benbi Dept. of Soil Sciences, Punjab Agricultural University, Ludhiana	Member
8.	Sh J S Sandhu Scientist-F (Retd.), CFTRI Progressive Society Chandigarh	Member
9.	Dr (Mrs) Ajit Dua Senior Scientist Head Technical Operations and Quality Manager, Punjab Biotechnology Incubator SAS Nagar (Mohali)	Convener Member

2.4 TECHNO COMMERCIAL COMMITTEE

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.	Dr (Mrs) Ajit Dua Senior Scientist Head Technical Operations and Quality Manager Punjab Biotechnology Incubator, SAS Nagar (Mohali)	Convener Member

2.5 BUSINESS DEVELOPMENT COMMITTEE (BDC)

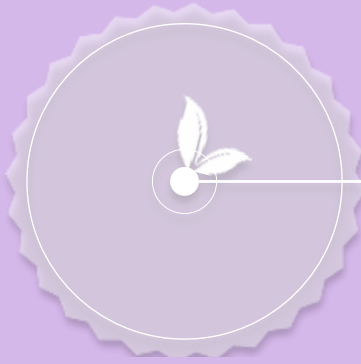
1.	Dr (Mrs) Ajit Dua Chief Executive Officer Punjab Biotechnology Incubator SAS Nagar, (Mohali)	Chairman
2.	Dr A K Bachawat Dean Faculty Professor of Biological Science Indian Institute of Science, Education and Research (IISER) SAS Nagar (Mohali)	Member
3.	Dr Anil Angrish Associate Professor Pharmaceutical 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)	Convener Member

2.6 MANAGEMENT REVIEW COMMITTEE

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

2.7 IMPORTANT MEETINGS

Meeting	Date
Governing Council	
28 th meeting of Governing Council	28.06.2018
29 th meeting of Governing Council	26.02.2019
Techno Commercial Committee (Earlier Core Committee)	
27 th meeting of Core Committee	17.12.2018
Empowered Building Construction Committee	
6 th meeting of EBCC	04.04.2018
7 th meeting of EBCC	17.01.2019
Business Development Committee	
13 th meeting of BDC	27.11.2018
Management Review Committee	
15 th meeting of MRC	29.04.2019



Staff Structure

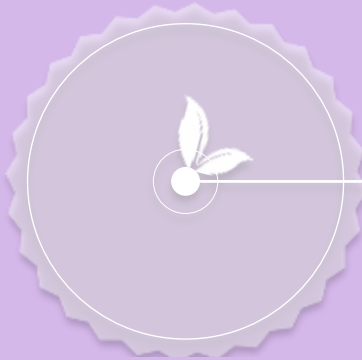
3. STAFF STRUCTURE

3.1 ADMINISTRATION

Sr. No.	Name	Designation
1.	Dr(Mrs) Ajit Dua	Chief Executive Officer
2.	S. Arwinder Singh	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
6.	Ms Chandan Sharma	Sr. Executive (Reporting Cell)
7.	Ms Shaizi Khan	Executive (Reporting Cell)
8.	Ms Sandeep Kaur	Executive (Store & Purchase)
9.	Ms Parneet Kaur	Executive (Front Office)

3.2 SCIENTIFIC / TECHNICAL STAFF

Sr. No.	Name	Designation
1.	Dr(Mrs) Ajit Dua	Chief Executive Officer & Senior Scientist
2.	Dr Vandana Awasthi	Scientist (Biology)
3.	Mr Santosh Kumar	Scientist (Chemical)
4.	Dr Sanjivan Alkesh	Assistant Scientific Officer
5.	Mr Amit Aggarwal	Assistant Scientific Officer
6.	Ms Ravneet Kaur	Assistant Scientific Officer
7.	Dr Harjit Singh	Assistant Scientific Officer
8.	Ms Shainandani Dogra	Junior Scientific Officer
9.	Ms Anju Thakur	Junior Scientific Officer
10.	Ms Aarti Bhardwaj	Junior Scientific Officer
11.	Ms Dimple Trikha	Junior Scientific Officer
12.	Mr Harmanpreet	Scientific Assistant
13.	Mr Vikas Chandra Roy	Scientific Assistant
14.	Mr Jitender Sharma	Project Associate/Scientific Assistant
15.	Mr Praveen Singh Danu	Project Fellow
16.	Ms Priyanka Gupta	Project Assistant
17.	Ms Puja Rai	Project Scientist- FSSAI
18.	Dr P Ravi Kumar	Project Scientist- DWSS
19.	Mr Sanjay Singh	Project Scientist- DWSS
20.	Mr Simranjeet Singh	Project Scientist- DWSS
21.	Ms Aarti Bharmoria	Project Associate
22.	Ms Saloni Bhalla	Executive (Projects & Trainings)
23.	Mrs Pratibha Shahi	Executive (Sample Cell)



Accreditation /Recognitions

4. ACCREDITATION / RECOGNITIONS



NATIONAL ACCREDITATION BOARD FOR TESTING & CALIBRATION LABORATORIES (NABL)

- PBTI is NABL Accredited in Chemical and Biological fields since 2009 which is being renewed periodically.
- As per schedule, NABL conducted desktop audit of PBTI in August 2018 based on which PBTI's accreditation continued till July 2019.
- PBTI submitted application for scope extension to add 08 pesticide residues in Basmati Rice as per European Union guidelines under the scope of accreditation/ recognition of NABL. Integrated assessment for renewal of NABL Accreditation, EIC Approval, APEDA Recognition and FSSAI Approval was conducted by NABL in March 2019 and additional scope was recommended.



EXPORT INSPECTION COUNCIL (EIC)

- PBTI has been approved under EIC Lab approval scheme for Chemical & Biological fields since February 2015 which is being renewed periodically.
- Based on the last assessment the validity of EIC recognition was till March 2019.
- EIC has entered into unified approach of accreditation/ recognition and hence further extended the validity of recognition upto July 2019 so that scope for EIC may be covered under integrated assessment being planned by NABL.



AGRICULTURAL & PROCESSED FOOD PRODUCTS EXPORT DEVELOPMENT AUTHORITY (APEDA)

- PBTI is recognized by APEDA, since April 2014. Recognition was valid till April 2018.
- Application for renewal of recognition of PBTI was submitted for which audit was conducted on 17.04.2018.
- Based on the assessment the recognition has been extended till 27.07.2019



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 and Rules & Regulations made there under.
- Empanelment under Food Safety and Standards Act for the testing of regulatory and imported food samples, continued since November 2011.



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.
- Renewal of recognition of PBTI by BIS was due in February 2019 for which application was submitted in December 2018.
- Based on the Desktop audit the recognition has been continued for further three (03) years i.e. till February 2022.



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 with a validity of five years.
- Based on last desktop audit in 2016, the validity of recognition is upto March, 2021.



PUNJAB POLLUTION CONTROL BOARD (PPCB)

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



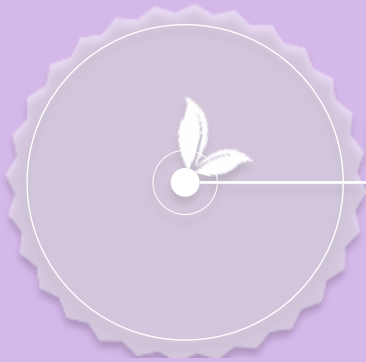
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH (DSIR)

- PBTI is recognized as Scientific & Industrial Research Organization (SIRO) by Department of Scientific and Industrial Research (DSIR) since July, 2006; which is being renewed periodically.
- Current validity of DSIR recognition is 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.



Referral Laboratory Status

5. REFERRAL LABORATORY STATUS



REFERRAL LABORATORY

FSSAI notified PBTI as Referral Laboratory under sub section (2) of section 43 of Food Safety and Standards Act in July 2018 based on strengths of PBTI in Food Quality & Safety.



STATE WATER & STATE AIR LABORATORY

PBTI was notified 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 in February 2019.



सत्यमेव जयते
Ministry of Agriculture & Farmers Welfare
Government of India

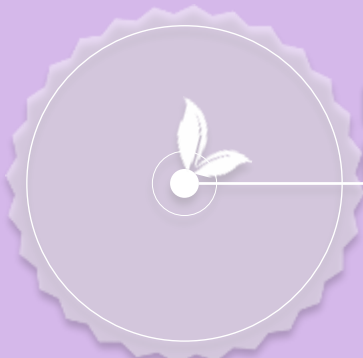
NATIONAL REFERRAL LABORATORY FOR LMO/GMO DETECTION

PBTI has been Notified 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 since November 2017.



STATE WATER LABORATORY

PBTI has been notified 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 since January, 2009.



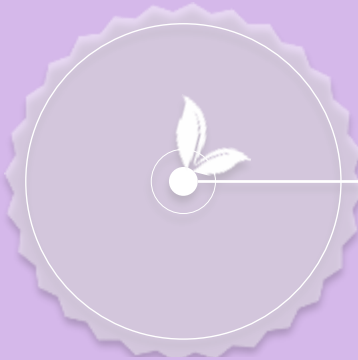
National Network of Reference Laboratories

6. NATIONAL NETWORK OF REFERENCE LABORATORIES

Food Safety and Standards Authority of India (FSSAI) in order to strengthen the reliability & uniformity of testing in the country, expressed interest to establish Network of National Reference Laboratories (NNRL) in India. The mission of Reference Laboratory is to set up a country wide standard for routine procedures, reliable testing methods & validation of standard procedure/testing methods, development of new methods and ensuring proficiency in testing across the food laboratories with special reference to the risks or food categories.

PBTI participated in Expression of Interest (Eoi) floated by FSSAI for declaration of Laboratories/Institutions/Organization based on their technical strengths, as National Reference Laboratory (NRL). PBTI was shortlisted based on its strengths. Thereafter a presentation was made to the core committee constituted by FSSAI for provisional selection based on scoring system for various strengths of the Lab. PBTI was provisionally selected.

The Core Committee visited PBTI on 14.07.2018 to assess the Analytical strengths. Based on the presentation and assessment visit of Core Committee PBTI was approved by FSSAI under regulation 3 of Food Safety and Standards (Recognition and Notification of Laboratories) Regulations, 2018 as National reference Laboratory (NRL) for Sweets and Confectionary including Honey on 19.03.2019.



Technical Audits by External Bodies

7. TECHNICAL AUDITS BY EXTERNAL BODIES

7.1 National Accreditation Board for Testing and Calibration Laboratories (NABL)

- Desktop Audit by NABL: August 2018
- Integrated assessment for scope extension by NABL, EIC, APEDA & FSSAI : 2nd & 3rd March 2019

7.2 Agricultural & Processed Food Products Export Development Authority (APEDA)

- Audit for renewal of recognition: 17.04.2018

7.3 Bureau of Indian Standards (BIS)

- Desktop Audit for renewal of recognition: February 2019



Analytical Services

8. ANALYTICAL STRENGTHS AND SERVICES

8.1 TARGET SECTORS



Food

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



Agriculture and Agri Inputs

Chemical Fertilizers, Bio Fertilizers, organic fertilizers, Micro & Macro Nutrients, Pesticide Formulations, Soil, Irrigation Water, Potato seeds, GM crops etc.



Animal feed and feed ingredients

Cattle Feed, Poultry Feed, Fish Feed, Feed Ingredients, etc.



Environment

Ambient Air, Stack Emissions, Noise, Soil & Sludge, Hazardous Waste, Water & Waste Water, etc.



Industrial & Fine Chemicals

Biocides, Disinfectant Fluids



Drugs & Pharmaceuticals

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



AYUSH

Ayurvedic Drugs/ AYUSH Products. Raw Material

8.2 ANALYTICAL SERVICES

Chemical

- Pesticide Residues
- Drug Residues
- Heavy Metals
- Polychlorinated Biphenyls (PCBs)
- Poly Aromatic Hydrocarbons (PAH)
- Process Contaminants
- Naturally Occurring Toxic Substances (NOTS)
- Mycotoxins
- 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 of rice, paddy
- Cereal & Pulses etc.
- Gaseous Pollutants
- Particulate Matter
- Hazardous Pollutants
- Noise Monitoring
- Weather Monitoring

Biological

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

Miscellaneous

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

8.2.1 Expansion of scope of Analytical Services:

During the period under report, PBTI developed / standardized / validated the methods for analysis of some new parameters based on market demand and started providing services for the same as listed below:

- Humic acid in soil
- Bromide in water
- Rancidity in Food & Feed
- Anthocyanin in plant product
- Phenolic compounds in Food
- Catechin content in Katha
- Potassium permanganate colour retention in water
- Antibiotic residues Sulphonamide group
- Metronidazole
- Trimethoprim

8.3 ANALYTICAL STRENGTHS

8.3.1 New Equipment Added/ Commissioned

- | | |
|------|--|
| i. | Fourier-transform infrared spectroscopy (FTIR) |
| ii. | Portable CO analyzer |
| iii. | Filtration Assembly |
| iv. | Digital Weighing balance -30 kg |

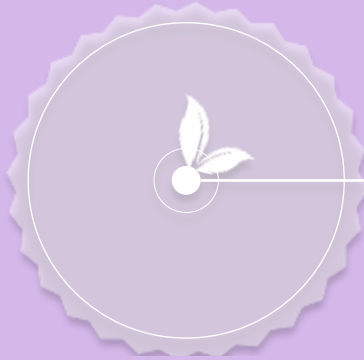
8.3.2 Existing Major Equipment in Chemical Section

- | | |
|-------|---|
| i. | EA-LC-IRMS |
| ii. | LCMS-MS (02 Nos) |
| iii. | GCMS-MS (02 Nos), 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. | AlveoConsistograph, Falling 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, Direct Reading 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
-

8.3.3 Major Equipment in Biology Section

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



Quality Assurance Activtites

9. 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 different approaches including participation in International & National Proficiency Testing (PT) / Inter laboratory Comparison (ILC) programmes, In-house Quality Checks (IQC) like replicate analysis, recovery studies & retained samples re-testing, Periodic Internal Audits, Intermediate Checks, Instrument Calibrations, etc., to ensure the quality of the analytical services provided by PBTi.

9.1 PARTICIPATION IN PROFICIENCY TESTING (PT) PROGRAMMES

During the period under report, PBTi successfully participated in eight (08) Proficiency Testing (PT) Programmes organized by LGC standards UK, Grain Inspection, Packers & Stockyards Administration, United States Department of Agriculture (GIPSA, USDA), Research Management Center Department of Chemistry Malaysia, Pesticide Management Division, National Institute of Plant Health Management, Hyderabad.

Various commodities including Brown Rice, Powdered Corn & Soya, Apple Puree, Wheat Powder, Animal feed, Cauliflower and Rice Powder were analysed for following Chemical and Biological parameters:

Chemical

Total arsenic, Cadmium, Lead, Inorganic Arsenic, Pesticide residues such as Bifenthrin, Ethion, Fenvalerate, Phosphomidon, Triazophos, Chlorpyrifos, Cypermethrin, Quinalphos, Carbofuran, Deltamethrin, Phorate, Quinalphos, Spinosad, Acetamiprid, Buprofezin & Thiamethoxam

Biological

Qualitative GM Testing for P35S & TNOS, Pat Gene, Bar gene, Ctp2-Cp4-EPSPS

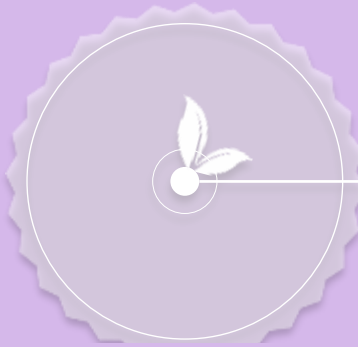
9.2 PARTICIPATION IN INTER LABORATORY COMPARISON (ILC) PROGRAMMES

PBTI successfully participated in seven (07) Inter Laboratory Comparison (ILC) Programmes for 40 parameters. Participating laboratories included Interstellar Testing Center Panchkula, Regional Ayurveda Drug Development Institute, Chennai, NDRI, Karnal, Interstellar Testing Center Panchkula.

The commodities included Packaged Drinking Water, Churna, Guggulu, Taila, Skimmed Milk Powder, Water & Waste Water for the parameters including Bromate, pH, Water soluble Extract, Loss on Drying, Iodine Value, Saponification value, Acid value, Moisture, Protein, Milk Fat Insolubility Index, Total Ash, Turbidity, Conductivity, Fluoride, Ammoniacal, Nitrogen, Chloride, Barium, Copper, Iron, Manganese, Zinc, Silver, Aluminium & Selenium.

9.3 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 from time to time.



Contractual Research & other R&D Activities

10. CONTRACTUAL RESEARCH and OTHER R&D ACTIVITIES

10.1 Industry Sponsored projects

- 1. IOL Chemicals and Pharmaceuticals Ltd., Barnala:** PBTI has successfully executed 04 projects regarding validation of method of analysis of elemental impurities in drug substances/ drug products (Metformin Hydrochloride, Fenofibrate, Ibuprofen USP, Clopidogrel Bisulphate USP) by ICP-MS as per method USP<233> for IOL Chemicals and Pharmaceuticals Ltd., Barnala.

10.2 Public Sector Projects

- 1. National Bee Board (NBB), Department of Agriculture & Farmers Welfare, GoI:** PBTI jointly with Punjab Agricultural University, Ludhiana is executing the project **“Integrated Beekeeping Development Centre (IBDC)/ Centre of excellence (COE)”** sanctioned by National Bee Board (NBB), Department of Agriculture & Farmers Welfare, GoI 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.



- 2. Department of Agriculture, Cooperation & Farmers Welfare, GoI:** The department is 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)”**.

The scheme was initiated during 2005-2006 and is being implemented through Indian Agricultural Research Institute, New Delhi. PBTI having strength in pesticide residue analysis became a part of this Network of 25 National Laboratories and State Agricultural Universities all over India on 22.03.2018 for Monitoring of Pesticide Residues from the state of Punjab.

3. **Food Safety and Standards Authority of India (FSSAI):** Based on the recommendations of Scientific Panel on Contaminants in Food Chain, FSSAI decided to conduct the **“Study to Generate baseline data on the occurrence of Metal Contaminants in Vegetables”**. PBTI

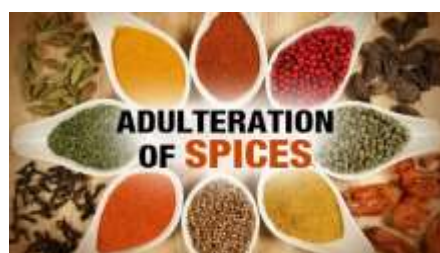
was invited to contribute in the study for North Zone consisting of 8 States/ UTs including Punjab, J&K, Himachal Pradesh, Uttarakhand, Haryana, Uttar Pradesh, Chandigarh and Delhi. The other laboratories involved in the project are Export Inspection Agency, Kolkata (East zone), Export Inspection Agency, Mumbai (West zone), UAS, Raichur



(Central zone) and Export Inspection Agency, Chennai (South zone). Total 11 Vegetable samples belonging to three main categories: Leafy vegetables (Spinach, Amaranth & Fenugreek), Fruit vegetables (Bottle Guard, Brinjal, Okra, Tomato) and Root vegetables (Potato, Onion, Radish, Carrot) are being collected and analysed every alternate month. The samples are being analyzed for fourteen (14) elements i.e. Mercury, Lead, Cadmium, Chromium, Manganese, Nickel, Arsenic, Selenium, Cobalt, Antimony, Iron, Copper, Zinc and Aluminium using common protocol for sample preparation using Microwave digestion system and analysis using ICP-MS.

4. **Central Institute of Post-Harvest Engineering & Technology (CIPHET):**

CIPHET, Ludhiana has developed various kits for detection of adulterants in spices. The Third Party Validation of these kits was carried out by PBTI. The Third Party



Validation is required for commercialization of any kind of technology/kits developed.

- 5. 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, Patiala in May 2018. The project awarded at the end of 2017 for a period of three Years involves pre monsoon and post monsoon evaluation of these sites.

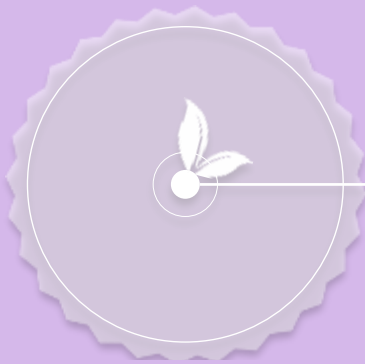


- 6. Punjab Pollution Control Board:**

PBTI carried out Third Party Inspection/ (TPI)/ Monitoring of project of in-situ treatment of



sewage through Bioremediation in Budha Nallah (Punjab) under National River conservation plan on behalf of Punjab Pollution Control Board, Patiala. The project awarded for a period of One Year was successfully completed in 2018 and the report was submitted.



Advisory Services

11. ADVISORY SERVICES

11.1 Department of Water Supply & Sanitation (DWSS), Govt. of Punjab

Operation and Management Services for RAWTL under DWSS, Mohali: 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 signed a MoU for a period of 2 years initially which was renewed for 2018-19. PBTI is providing trained Scientific & support staff, imparting regular trainings and providing technical knowhow for operation of the laboratory. Also Laboratory Quality Management System (LQMS) as per requirements of International standard ISO 17025:2005 was established and being implemented at RAWTL, Mohali by PBTI.

11.2 Food and Drug Administration, Punjab

1. **Designing and procurement of Modular laboratories furniture for Punjab FDA labs:** PBTI successfully executed the project for designing and procurement of Modular laboratories furniture in the Food and Drug Testing Laboratories of FDA, Punjab. The laboratory infrastructure was made ready for installation of equipment and operationalization of the laboratories.
2. **Setting Up, Operationalization & getting NABL Accreditation for Punjab FDA labs** -The laboratory equipment required as per food safety and standards regulations was identified, specifications finalized and equipment was procured through tendering process during the project. The installation of the equipment was supervised by PBTI's team and laboratories were made operational during the period under report.



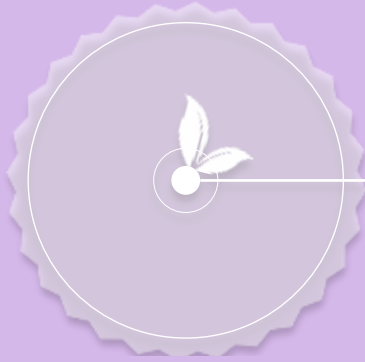
Clientele Profile

12. 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 Megastar Foods Pvt. Ltd., Ebro India Pvt. Ltd., Adani Wilmar, Aamz to Faamz Technosolution, Shapoorji Pallonji & company Pvt. Ltd., Oniosome Health care Pvt. Ltd., Nectar Life Sciences, IOL Chemical & Pharmaceutical Ltd., Kuantum Paper Mill, are new major groups associated with PBTI. IOL Chemical & Pharmaceutical Ltd. a major Pharma group has also started using consultancy services of PBTI. Other major clients continued using consultancy services during 2018-19 includes Department of Water Supply & Sanitation (DWSS) Punjab, Food and Drugs Administration (FDA) Department of Health and Family Welfare Punjab, Food Safety and Standards Authority of India (FSSAI), National Bee Board (NBB) GoI, Punjab Pollution Control Board.





International Tie-ups

13. INTERNATIONAL TIE-UPS

13.1 Elementar Manchester, UK

Dr Ajit Dua, Senior Scientist cum CEO and Dr Sanjivan Bahman, Assistant Scientific Officer, PBTI were invited by M/s Elementar UK Ltd, UK on 21st & 22nd January 2019 to attend a training programme on “Operation and Applications of Elemental Analyser – Isotopic Ratio Mass Spectrometer (EA-IRMS) in Honey Authenticity and other Food analysis” at Application Lab of Elementar, Manchester, UK. The way forward for Collaborative studies in the area of Food Authenticity using Nuclear Technique and other food related applications of IRMS technique was discussed.



13.2 International Atomic Energy Agency (IAEA), Seibersdorf, Austria

Dr Ajit Dua, Senior Scientist cum CEO and Dr Sanjivan Bahman, Assistant Scientific Officer, PBTI visited International Atomic Energy Agency (IAEA), Seibersdorf, Austria on 24th January 2019. Dr Simon Kelly, Food Safety Specialist (Traceability) guided a tour to the Food and Environment Protection Labs at IAEA which are involved in developing and validating novel and innovative analytical techniques for combating food fraud. IAEA

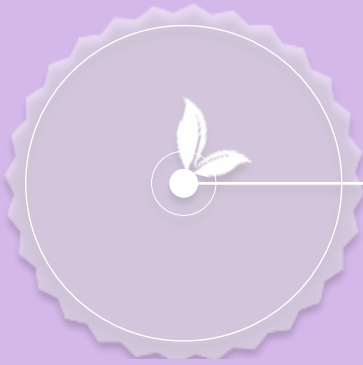


establishes International Networks of Research and Food Regulatory Institutions through Coordinated Research Projects involving both developing and developed member states on research topics of common interest. PBTI presented its strengths in application of nuclear technique in honey authenticity. The IAEA team, looking at the strengths of PBTI advised it to apply under their recently launched Coordinated Research Project Scheme “Implementation of Nuclear Techniques for Authentication of Foods with High Value Labelling Claims”. The project aims to safeguard consumers and reputable producers; to ensure regulatory and ethical compliance; to stimulate domestic markets; and to reduce barriers to international trade. A proposal on “Stable Carbon Isotope Ratio based Authentication of Honey-Validation of the tool for Indian Honey” was submitted to IAEA under this scheme which was approved. PBTI has collaborated with IAEA for 05 years under this project

13.3 Agri-Food & Veterinary Authority of Singapore

Ms. Aarti Bhardwaj, Junior Scientific Officer, PBTI was selected and sponsored by FSSAI for participation in Food Safety Training Programme on “Detection of Mycotoxins” organized by FSSAI in collaboration with Global Food Safety Partnership (GFSP) World Bank Group, Singapore Office from 08.01.2019 to 10.01.2019 at the Laboratories of Agri-Food & Veterinary Authority of Singapore. The trainers trained in this programme shall impart trainings to Food Laboratories in India.





Outreach Activities

14. OUTREACH ACTIVITIES



PBTI showcasing activities in FOOD INDUSTRY & CRAFT MELA held on October 2018 at PAU Ludhiana



PBTI along with sister organisations under Department of Science Technology & Environment Punjab showcasing activities in India International Science Festival-2018 held at Lucknow



Participation of PBTI in Swasth Bharat Yatra, a Pan India Cyclothon organised by FSSAI from 16.10.2018-27.01.2019



CEO, PBTI receiving the Certificate of Appreciation from Chairperson FSSAI in recognition of PBTI's contribution and active participation during the Swasth Bharat Yatra under Eat Right India Movement



Organization of Trainings & Interactive Meets

15. ORGANIZATION OF TRAININGS & INTERACTIVE MEETS

During the period under report PBTI organized following trainings and interactive meets for technical persons of Industry / Labs / Institutes / Organizations

Trainings

1. Elemental Analysis of Food Samples using ICP-MS organized for FDA Punjab from 20.12.2018 & 21.12.2018 at PBTI Mohali.
2. Training on Fatty Acid Profiling in food samples by GC-FID organized for FDA Punjab from 19.11.2018 & 20.11.2018.

Interactive meets

3. The trainees of Indian Technical and Economic Cooperation (ITEC) Programme of Ministry of External Affairs, GoI from NIPER visited the facilities of PBTI and interacted with the Scientists on 09.08.2018. The participants included the scientists from Sri Lanka, Iraq, Egypt, Ethiopia, Bhutan, Sudan, Tanzania, West Indies, Uzbekistan etc



4. The participants of International Training Programme on “Laboratory Quality Management Systems for developing countries” under ITEC Programme of Ministry of External Affairs, GoI from Bureau of Indian Standards (BIS) visited the facilities of PBTI and interacted with the Scientists on 15.02.2019. The participants included the scientists from Tanzania, Mexico, Sudan, Sri Lanka, Vietnam, Mauritius etc.





National Collaborations

16. NATIONAL COLLABORATIONS

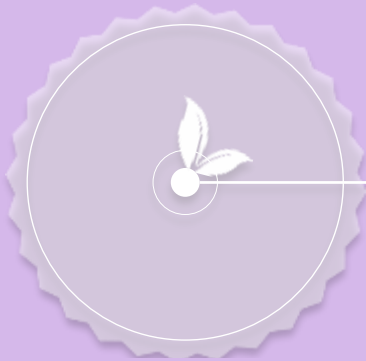
The collaboration of PBTI with the following universities was continued to promote Human Resource Development (HRD) and Research & Development (R&D) in the areas relevant to the needs of the State.

INDIRA GANDHI NATIONAL OPEN UNIVERSITY (IGNOU) – PBTI was approved as Programme Study Centre for PG Diploma Programme in Food Quality & Safety Management System by IGNOU in June, 2014. PBTI has successfully run five batches for the said diploma.

PUNJAB AGRICULTURE 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)– Imparted six (06) weeks technical training to Research Scholars under the MoU signed between both the organizations.



Invited Lectures/Talks

17 INVITED LECTURES / TALKS

Dr Ajit Dua, Chief Executive Officer & Senior Scientist

1. Chief Guest for the inaugural function of International Training Programme organized by NIPER Mohali on "Recent Trends and Challenges in Regulation and Standardization of Herbal Drugs and Formulations" under Indian Technical and Economic Co-operation (ITEC) Course.
2. Delivered Lecture on "Microbiological Safety as regulatory criteria-EU and Indian scenario" during Hands-on Training on Advanced Microbiological Techniques organised by FSSAI jointly with French Agency for Food, Environment and Occupational Health & Safety (ANSES) France at State Food Lab, Vadodara, Gujarat.
3. Delivered invited Talk on "Upcoming Quality Standards of Honey" during awareness workshop organized by Punjab Agricultural Management & Extension Training Institute (PAMETI) at PAU, Ludhiana.



CEO PBTi delivering lecture at "Upcoming Quality Standards of Honey" during awareness workshop organized by Punjab Agricultural Management & Extension Training Institute (PAMETI) at PAU, Ludhiana

4. Delivered Invited Talk on "Food Authenticity, Quality and Safety" during Chandigarh Science Congress with theme "Science & Technology for New India" organized by Punjab University in collaboration with Chandigarh Region Innovation and Knowledge Cluster (CRIKC).

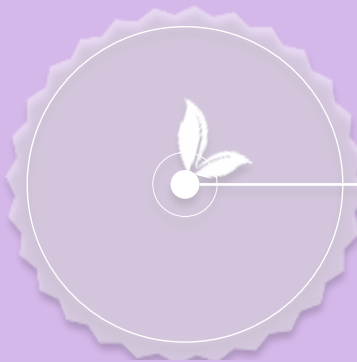
5. Delivered invited Talk as Resource Person for Biotechnology in Acceleration Programme under Start-up India Punjab Yatra organized by State Govt in association with Start-up India.

Dr Sanjivan , Assistant Scientific Officer

1. Delivered lectures during Training on Fatty Acid Profiling in food samples by GC-FID organized for FDA Punjab from 19.11.2018 & 20.11.2018

Mr Santosh Kumar Singh

1. Imparted training to Assistant Chemists, Deptt. of Chemistry, Punjab Agriculture University Ludhiana, as a part of "Induction training for newly recruited Assistant Professor Level Teachers.
2. Imparted training to scientific staff of Food & Drug lab Punjab on "Elemental Analysis of food samples by using ICP-MS technique



Participation in State/National Level Bodies

18 PARTICIPATION IN STATE / NATIONAL LEVEL BODIES

Dr Ajit Dua, Chief Executive Officer & Senior Scientist

1. Member of Board of Directors of Mohali Biotechnology Park, a Section 8 Company incorporated by Govt of Punjab and Department of Biotechnology, Govt of India.
2. Nominated member of Steering Committee of Institutions of Knowledge City, Sector-81 Mohali.
3. Empanelled by NABL as Technical Assessor for Biological Field since 2011 for auditing Testing laboratories for compliance against ISO/IEC 17025 on behalf of NABL: Audited various laboratories during the period under report.
4. Expert Member in Scientific Panel for Biological Hazards constituted by Food Safety and Standards Authority of India (FSSAI) for providing scientific opinions to Food authority .
5. Nominated member of Test Methods Review Group constituted by FSSAI.
6. Nominated as Chairperson of the sub group (Microbiology) to address analytical issues constituted under Methods Review Group by FSSAI.
7. Expert member of the committee constituted by Secretary Punjab Mandi Board for setting up of Assaying labs under Electronic National Agricultural Marketing (e-NAM).
8. Head of the committee constituted by Chairman PPCB for evaluation and Inspection of new/approved laboratories for recognition by PPCB.
9. Member of Purchase committee constituted by Chairman PPCB for purchase of Laboratory items, Equipment, Chemicals and Glassware for Air Laboratory of PPCB.
10. 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.

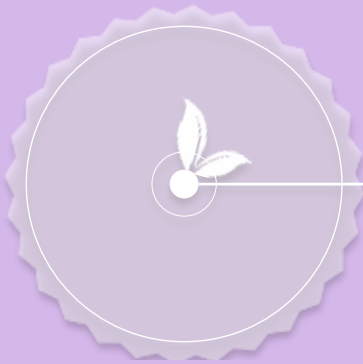
11. Member Internal Quality Assurance Cell (IQAC) of Central University of Punjab Bathinda (CUPB).
12. Life Member of Indian Association of Air Pollution Control (IAAPC), Association of Food Scientists and Technologists (India), AFSTI, Mysore, Association of Microbiologist of India (AMI) and Member of AOAC India Chapter & Chandigarh Region Innovation Knowledge Cluster (CRIKC)
13. Internal Member of Food Safety Knowledge Assimilation Network (FSKAN) of FSSAI.
14. Member of State Biotechnology Co-ordination Committee (SBCC) regarding NOC for conduct of field trials of GM food crops in Punjab

Dr Vandana Awasthi, Scientist (Biology)

1. Member of Technical Expert Committee for upgradation of laboratories constituted by FSSAI – Visited and attended meeting at Food & Drug Administration (FDA) Haryana as Technical Expert and Public Analyst Laboratory, Meerut.

Dr Sanjivan, Assistant Scientific Officer

1. Member of Technical Expert Committee for upgradation of laboratories constituted by FSSAI



Our Memberships

19. MEMBERSHIP OF PROFESSIONAL BODIES



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



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



Annual Member of AOAC India Chapter.



Up-Skilling of Staff

20 UP-SKILLING OF STAFF

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. Training programme on “Operation and Applications of Elemental Analyser – Isotopic Ratio Mass Spectrometer (EA-IRMS) in Honey Authenticity and other Food analysis” at Application Lab of Elementar, Manchester, UK on 21st & 22nd January 2019
2. Invited and sponsored by FSSAI to Attend FSSAI-ICMSF-CHIFFS International Symposium and Training on Microbiological Food Safety Sampling and Testing in Food Safety Management jointly organized by FSSAI & International Commission on Microbiological Specifications for Food (ICMSF) at New Delhi.
3. NABL Assessor Orientation Program for transition of Laboratory Quality Management System from 2005 to 2017 version of ISO/IEC 17025 organized by NABL for its empanelled Assessors.

Dr Vandana Awasthi Scientist (Biology)

1. “One Day Awareness Program on the Process Approach of Integrated Assessment for the Laboratories” organized by NAL, EIC, APEDA on 06.10.2018 at Mumbai
2. “Laboratory Awareness Program on ISO/IEC 17025:2017- Transition of ISO/IEC 17025:2005 to ISO 17025: 2017” organized by NABL on 07.05.2018 at Chandigarh.
3. Training on “Advanced three days training course for Chief Vigilance Officer’ organized by Mahatma Gandhi State Institute of Public Administration, from 04.04.2018 to 06.04.2018 at MGSIPA, Chandigarh.

Mr. Santosh Kumar Singh, Scientist (Chemical)

1. Technical Training on “Sampling, Analysis & Facility Development for Hazardous & Non-Hazardous waste as per as per waste management rule 16 schedule - II” organized by Central Pollution Control Board on 22.11.2018 at Central Pollution Control Board, Delhi.
2. “Training programme on ISO-IEC-17025: 2017” Coordinated by IARI, New Delhi (Division of Agri Chemicals) under MPRNL-Central Sector Scheme on 11.07.2018 at NIPHM, Hyderabad.
3. “Training on sampling of Food Products including Rice, Fruits, Vegetables, Honey etc. as per APEDA guidelines organized on 24.05.2018 at National Research Centre for Grapes, Pune.
4. “Basic & Operational training on Thermo TSQ 8000 GCMS-MS” organized by Thermo Fisher Scientific India from 21.05.2018 to 23.05.2018 at Thermo Fisher Scientific India Lab, Mumbai.

Dr Sanjivan Alkesh Assistant Scientific Officer

1. Training Programme on “Operation & Application of Element Analyzer Isotope Ratio Mass Spectrometer (EA-IR-MS) in Honey Authenticity & other Food Analysis” Organized by M/s Elementar UK Ltd on 21.01.2019 to 22.01.2019 & 24.01.19 at Elementar UK Ltd. at UK.
2. Technical Training on “GC Method Development & Column Selection” organized by CSD Agilent Technologies on 08.05.2018 at PBTI Mohali.

Ms. Ravneet Kaur Assistant Scientific Officer

1. Technical Training on “GC Method Development & Column Selection” organized by CSD Agilent Technologies on 08.05.2018 at PBTI Mohali.
2. Training on “Method of analysis of Fortificants” Jointly organized by FSSAI & CALF-NDDB, Gujarat on 11.06.2018 to 15.06.2018 at Centre for Analysis & Learning in Livestock’s & Food (CALF), Anand, Gujarat.
3. Training on “Method Validation Characteristics” organized on 15.09.2018 at PBTI, Mohali.

Mr. Amit Agarwal, Assistant Scientific Officer

1. 5-Days Hands-on Training on “Advanced Microbiological Techniques” Organized by FSSAI in collaboration with Direction Generale de l’Alimentation (DGAL), France & Food & Drug Administration (FDA), Gujarat from 26.11.2018 to 30.11.2018 at Food & Drugs Laboratory, Vadodara, Gujarat
2. Training on “Risk Assessments in Ready to Eat Foods from EFSA- Application in Indian context” Organized by Better Training for Safer Food (BTSF) in collaboration with FSSAI on 14.11.2018 at FSSAI HQ , New Delhi.
3. “International Symposium on Microbiological Food safety Sampling and Testing in Food Safety Management” Organized by FSSAI in partnership with The International Commission on Microbiological Specifications of Foods (ICMSF) & CII-HUL initiative on Food Safety Sciences (CHIFSS) on 09.10.18 & 10.10.18 at New Delhi.
4. Technical Training on “Basmati Authentication Testing by DNA Sequencer” organized on 07.01.2019 to 17.01.2019 at Molecular Biology Lab, PBTI Mohali.
5. Technical Training on “Microbial Identification by DNA Sequencer” organized from 04.01.2019 to 15.01.2019 at Molecular Biology Lab, PBTI Mohali.

Dr Harjit Singh, Assistant Scientific Officer

1. Training on “Method Validation Characteristics” organized on 15.09.2018 at PBTI, Mohali.
2. Technical Training on “Operation & Software of LCMS-MS” organized from 27.03.2019 to 29.03.2019 at AB SCIEX Centre of Excellence,121, Udyog Vihar-4, Gurgaon.
3. Training on “Operation of Fire Detection & Fighting Systems” organized on 20.12.2018 at PBTI, Mohali.
4. Technical Training on “Analysis of Antibiotic Residues in Honey” organized from 20.09.2018 to 28.09.2018 at PBTI Mohali.
5. “Training on sampling of Food Products including Rice, Fruits, Vegetables, Honey etc. as per APEDA guidelines organized on 24.05.2018 at National Research Centre for Grapes, Pune.

6. “Basic & Operational training on Thermo TSQ 8000 GCMS-MS” organized by Thermo Fisher Scientific India from 21.05.2018 to 23.05.2018 at Thermo Fisher Scientific India Lab, Mumbai.
7. Technical Training on “GC Method Development & Column Selection” organized by CSD Agilent Technologies on 08.05.2018 at PBTI Mohali.

Ms. Shainandini Dogra, Junior Scientific Officer

1. Training on “Method Validation Characteristics” organized on 15.09.2018 at PBTI, Mohali.
2. Technical Training on “Analysis of C3 & C4 Sugars in Honey by EA LC-IRMS” organized from 23.04.18 to 03.05.18 at PBTI, Mohali

Ms. Aarti Bhardwaj, Junior Scientific Officer

1. Food Safety Training Programme on “Detection of Mycotoxins” Organized by FSSAI in collaboration with Global Food Safety Partnership (GFSP) World Bank Group from 08.01.2019 to 10.01.2019 at the laboratories of Agri-Food Veterinary Authority Singapore.
2. Training on “Method Validation Characteristics” organized on 08.09.2018 at PBTI, Mohali.
3. Technical Training on “GC Method Development & Column Selection” organized by CSD Agilent Technologies on 08.05.2018 at PBTI Mohali.

Ms. Anju Thakur Junior Scientific Officer

1. Training on “Method Validation Characteristics” organized on 08.09.2018 at PBTI, Mohali.
2. Training on “Measurement Uncertainty in Microbiological Analysis as per ISO/TS 19036” (In-house at PBTI Mohali from 29.04.16 to 18.05.16).

3. Operation of Fire Detection & Fighting Systems organized by Fire Safety Consultant on 18.08.2016 at PBTI

Mr. Vikas C. Roy, Scientific Assistant

1. Technical Training on “GC Method Development & Column Selection” organized by CSD Agilent Technologies on 08.05.2018 at PBTI Mohali.

Mr. Harmanpreet, Scientific Assistant

1. On- site Training on “Sampling of Water & Waste Water and Ambient Air Monitoring as per National Ambient Air Quality Standards” organized from 05.03.2019 to 05.04.2019
2. Training on “Proximate Analysis of Food Samples” organized from 05.03.2019 to 05.04.2019 at PBTI, Mohali.

Mr. Praveen Singh Danu, (Project Fellow)

1. Technical Training on “Microbiological Analysis of Packaged Drinking Water (as per IS 14543) & Packaged Natural Mineral Water (as per IS 13428)” organized on 14.02.2019 to 06.03.2019 at PBTI, Mohali.
2. Technical Training on “Basmati Authentication Testing by DNA Sequencer” organized from 07.01.2019 to 17.01.2019 at Molecular Biology Lab, PBTI Mohali.
3. Technical Training on “Microbial Identification by DNA Sequencer” organized from 04.01.2019 to 15.01.2019 at Molecular Biology Lab, PBTI Mohali.
4. Technical Training on “Principles & Operations of DNA Sequencer” organized from 01.01.2019 to 16.01.2019 at Molecular Biology Lab, PBTI Mohali
5. Indo-US Workshop on “Safeguarding Dual use Chemicals” organized on 16.07.18 & 17.07.18 at Deptt. of SAIF/CIL, Panjab University, Chandigarh
6. Technical Training on “Ambient Air Monitoring for 12 parameters as per National Ambient Air Quality Standards” organized on 16.05.18 & 17.05.18 at site Godrej and Boyce Mfg Co Ltd A-40, Industrial Area, Phase 8 A, Mohali.

7. Technical Training on “Analysis of Chloride, Total Dissolved Solids, Sulphate, Nitrate as NO₃, pH, Total Hardness (as CaCO₃), Color, Odour, and Turbidity in water samples” organized from 09.04.18 to 09.05.18 at PBTI Mohali.

Ms. Priyanka Gupta, (Project Associate)

1. Training on “Operation of Fire Detection & Fighting Systems” organized on 20.12.2018 at PBTI, Mohali.
2. Training on “Estimation of Vitamin A & D in Food & Feed Samples by using HPLC” organized from 17.09.2018 to 22.09.18 at PBTI, Mohali.
3. Training on “Method Validation Characteristics” organized on 15.09.2018 at PBTI, Mohali.
4. Training on “Method of analysis of Fortificants in Oils & Fats” organized by FSSAI from 24.09.2018 to 28.09.2018 at Fare Labs Pvt. Ltd. Gurugram.
5. Training on “Basic Operations of HPLC with special reference to Vitamins analysis” organized on 25.08.2018 at PBTI, Mohali.
6. Training on “Principles & Fundamentals of HPLC” organized on 11.08.2018 at PBTI, Mohali.

Ms. Saloni (Executive)

1. Training on “Method Validation Characteristics” organized on 08.09.2018 at PBTI, Mohali
2. Training on “Analysis of Ghee for Quality Parameters as per FSSAI Regulations” organized from 22.08.2018 to 29.08.2018 at PBTI, Mohali.
3. Training on “Operation of Fire Detection & Fighting Systems” organized on 20.12.2018 at PBTI, Mohali.
4. Technical Training on “Analysis of Waste Water/ Water for pH, TSS, TDS, Oil & Grease, COD, BOD” organized from 12.12.2018 to 20.12.2018 at PBTI, Mohali.
5. Technical Training on “Analysis of Dietary Fiber in Food samples” organized from 20.09.2018 to 28.09.2018 at PBTI, Mohali

Ms. Arti Bharmoria (Project Associate)

1. Technical Training on “Sample preparation for analysis of Pesticide Residues in Water & Food samples” organized on 07.03.19 to 07.04.19 at BTI, Mohali

Ms. Pooja Rai (Project Scientist)

1. Technical Training on “Analysis of Waste Water/ Water for pH, TSS, TDS, Oil & Grease, COD, BOD” organized from 22.02.2019 to 14.03.2019 at PBTI, Mohali.
2. Technical Training on “Preparation of samples for Elemental Analysis using ICPMS” organized from 13.02.2019 to 21.03.2019 at PBTI, Mohali.

Mr. Arwinder Singh (AF& AO)

1. “Advanced three days training course for Chief Vigilance Officer’ organized by Mahatma Gandhi State Institute of Public Administration, on 04.04.2018 to 06.04.2018 at MGSIPA, Chandigarh.

Mr. K.L. Thakur (Assistant Store & Purchase)

1. Workshop on “Information Security Sensitization Program on Critical Information Infrastructure Protection” Organized by Department of Governance Reforms, Punjab & Sponsored By NCIIPC (GoI) on 15.05.2018 at Hall No-1, MGSIPA, Sector-26, Chandigarh.



Infrastructural Development in Knowledge City, Mohali

21 INFRASTRUCTURE DEVELOPMENT IN KNOWLEDGE CITY, MOHALI

The Government of Punjab allocated 1 acre of land to PBTI in Knowledge City, Sector 81, Mohali as per the decision of Cabinet of Ministers in 2014. It was decided to construct the building in phased manner in light of availability of limited funds. The cost estimates of Rs. 8.8 Cr for construction of phase 1 of building were submitted by Deptt. of Rural Development & Panchayats. It was advised that PBTI should arrange for the funding from Gol schemes.

PBTI could arrange total funds of Rs. 10.75 Cr in addition to already lying funds of Rs. 4.0 Cr under the following schemes of Govt. of India/Punjab.

1. **Assistance to States for Infrastructure Development for Exports (ASIDE) Scheme:** Rs. 4.75 Cr were sanctioned and released by Punjab Small Industries & Export Corporation (PSIEC), in December 2018 under ASIDE scheme for the project “Development of PBTI’s infrastructure as per the Statutory Guidelines to Promote Export from Punjab”.
2. **Rashtriya Krishi Vikas Yojana -Remunerative Approaches for Agriculture & Allied Sector Rejuvenation (RKVY-RAFTAR)** Rs. 6.00 Cr were sanctioned by Deptt. Of Agriculture and Farmers Welfare, GoP against the proposal submitted by PBTI for “Strengthening & Expansion of Punjab Biotechnology Incubator” under RKVY-RAFTAAR scheme.

Thus, making Rs 14.75 Cr available for construction of the building. Based upon the availability of funds with PBTI Governing Council of PBTI accorded Administrative approval of Rs.24.83 Cr, for construction of complete building of PBTI through PWD (B&R) as Executing agency. PBTI is trying to arrange for balance funds for construction of building. The construction is likely to start in the next year.

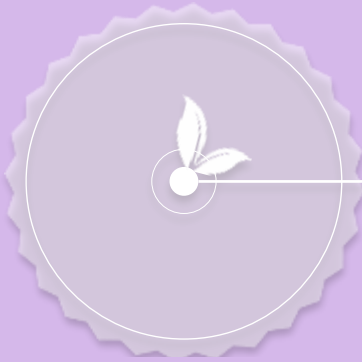


Strengthening of Referral Food Lab

22 STRENGTHENING OF REFERRAL FOOD LAB

PBTI being a notified Referral Laboratory of FSSAI was 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)” by FSSAI in March 2019. The equipment sanctioned under the project includes:

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



Testimonials

23 TESTIMONIALS

“Excellent facility developed and I am sure it was made possible only through dedicated work by the employee and management. Heartiest congratulations to PBTI for getting NABL approved even by installing in a commercial space.

Keep it Up!”

Dr A Raghuram Rao,
Director, NIPER, SAS Nagar
(Mohali)

“Very proud to see an Incubator which has been initially supported by Dept. of Biotechnology. Excellent work done by PBTI in a rented accommodation. Great effort by the team and big help to Industry and Society at large”.

Dr Sundeep Sarin Advisor
Department of Biotechnology Gol
New Delhi

Dr Sanjeev Agrawal Additional
Director, Central Pollution
Control Board, MoEF&CC New
Delhi

“PBTI is having excellent facilities for analyzing food & environmental samples such as water, air etc. I wish that PBTI may get success in achieving their goals for overall protection of environment.

“PBTI is having excellent facilities covers food and fresh item, molecular, environment etc. and plays role in safety aspects. Had scope for collaborative R&D.

All the best for future!”

Dr O P Chaurasia Director Defence Institute of High Altitude Research (DIHAR)-DRDO Leh-Ladakh

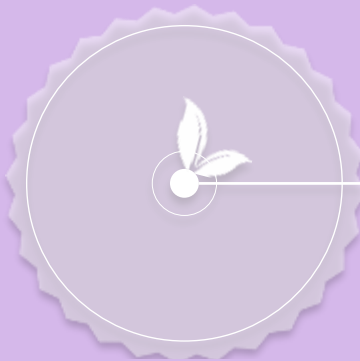
“We have great experience of learning water tests and we also wait to include these tests in our country

Mr Eric Babayev , The State Service of Turkish Standard Central Laboratory, Turkmenistan

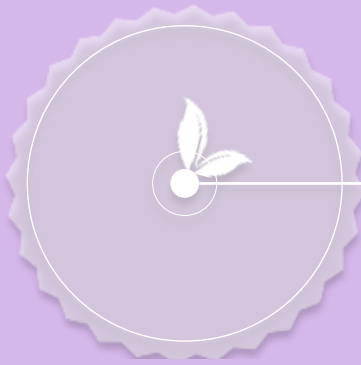
“From the beginning, presentation made in conference room to visit in different sections we were impressed by the knowledge variety of action, professionalism cleanliness etc.

Keep it up! Congrats”

Mrs. Loveetah Chummun
Mauritius Standards Bureau



PBTI in News



Accounts Statement

25 ACCOUNTS STATEMENT

The Annual Statement of Accounts of PBTI for the F.Y. 2018-19 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 2018-19 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 2018-19 is placed on the proceeding pages.

U K Mehta & Associates
Chartered Accountants



904, SECTOR 40-A, CHANDIGARH
CHANDIGARH - 160036
Ph. 9814301213, 172-4691213
E-mail: ukmehtas@gmail.com

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 31/03/2019 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:

No provision for retirement benefits has been made for the year under audit

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 31/03/2019
- ii. in the case of the profit and loss account, of the profit or loss of its accounting year ending on 31/03/2019

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 : 25/09/2019
UDIN : 19092639AAAAAX2630

ANNEXURE
STATEMENT OF PARTICULARS

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.	41550206
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.	4596050
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)	0
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.	NA
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.	NA
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



(Signature)

(Uma Kant Mehta)
Prop

M. No: 092639
FRN: 013381N

Place :CHANDIGARH
Date : 25/09/2019
UDIN : 19092639AAAAAX2630

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI
BALANCE SHEET AS AT 31ST MARCH, 2019

SOURCES OF FUNDS	SCHEDULE	AMOUNT (Rs.)
Capital Fund	A	121054592.93
Unspent Fund	B	155351912.00
Grand Total		<u>276406504.93</u>
APPLICATION OF FUNDS		
Fixed Assets	C	70799480.93
Current Assets, Loans & Advances	D	219477942.00
Less: Current Liabilities & Provisions	E	<u>13870918.00</u>
Grand Total		<u>276406504.93</u>

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

Janu Sondhi
AF & AO

[Signature]
Chief Executive Officer

Date : 25.09.2019
Place : Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31ST MARCH 2019

Expenditure	Schedule	Amount (Rs)	Income	Schedule	Amount (Rs)
Opening Stock		3394813.00	Grant Received from		
Purchases:			-Govt Of Punjab		17000000.00
Lab Chemicals		2113106.00	-FSSAI		827357.00
Lab Consumables		1889740.00	Interest Received	F	1168042.00
Auditor Remuneration		23000.00	Testing & Project Fees		27107831.00
Electricity & Water Expenses		4365432.00	Miscellaneous Income		43026.00
Establishment Expenses	G	19540153.00	Closing Stock		3391852.00
Legal & Professional Charges		85400.00			
Office Expenses	H	678415.00			
Other Expenses	I	223312.04			
Quality Assurance/ Tech. Audit Expenses	J	600604.00			
Stipend		40000.00			
Rent		6451948.00			
Repair & Maintenance Expenses	K	2268336.00			
Running & Maintenance Expenses					
Car		218228.00			
Tata Winger		203221.00			
Security Charges		453637.00			
Sitting Fees		182000.00			
Testing Charges		517473.00			
Travelling Expenses		186152.00			
Excess of Income over Expenditure		6103137.96			
TOTAL: Rs.		49538108.00	TOTAL: Rs.		49538108.00

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


AF & AO


Chief Executive Officer

Date : 25.09.2019
Place : Chandigarh

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

Expenditure	Amount (Rs)	Income	Amount (Rs)
Depreciation (As per Schedule C)	11441258.03	Excess of Income Over Expenditure (Trf From Income & Expenditure A/c)	6103137.96
		Amt transfer to Accumulated Fund A/c	5338120.07
TOTAL: Rs.	11441258.03	TOTAL: Rs.	11441258.03

As per report of even date attached

For U.K. Mehta & Associates
Chartered Accountants
FRN: 0113381N

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

Date : 25.09.2019
Place : Chandigarh



For Punjab Biotechnology Incubator

Taru Sondur
AF & AO

Blor
Chief Executive Officer

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

SCHEDULE A : CAPITAL FUND

PARTICULARS	AMOUNT (RS)
Capital Fund	
- Opening Balance	127257400.00
Less Transfer to Unspent Balances (Being amount utilised during the year)	864687.00
Less: Deficit during the Year (Transfer from Income & Exp A/c)	5338120.07
Total: Rs.	121054592.93

SCHEDULE B : UNSPENT FUND

PARTICULARS	AMOUNT (RS)
Implementation of Scheme	
Opening balance	52969959.00
Add Grants received during the year (PSIEC)	47484685.00
Add Grants received during the year (RKVY)	50000000.00
Less: Amount spent and transfer to Capital Fund	0.00
Less: Utilized on Maintenance	654110.00
Add: Interest received on Grant Accounts	4686691.00
Add Unspent Balance from Capital Funds	864687.00
Total: Rs.	155351912.00

As per report of even date attached

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

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

Date : 25.09.2019
Place : Chandigarh

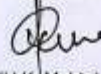
For Punjab Biotechnology Incubator

Taru Indlu
AF&AO *[Signature]*
Chief Executive Officer

Schedule C : Fixed Assets

PARTICULARS	WDV as on 01.04.2018	Additions		Disposals	Total	Rate in %	Depreciation	WDV as on 31.03.2019
		upto 30.09.2018	after 30.09.2018					
Furniture & Fixtures	3673490.34				3673490.00	10	367349.00	3306140.00
Electrical Fitting & Installation	1283964.42				1283964.00	10	128396.00	1155570.00
Computers & Peripherals	26401.77		19249.98		45652.00	40	14411.00	31240.00
Computer Software	7492.58		43821.42		51314.00	40	11761.00	39550.00
Plant & Machinery	56155.79				56156.00	15	8423.00	47730.00
Fire Extinguisher	79548.46				79548.00	15	11932.00	67620.00
Office Equipments	108222.38				108222.00	15	16233.00	91990.00
Electrical Equipments	450758.16		35240.47		485999.00	15	70256.76	413099.00
Generator	193720.41				193720.00	15	29058.00	164660.00
Vehicle								
- Car (Ambassador)	73370.67				73371.00	15	11006.00	62365.00
- Car (Honda City)			903949		903949.00	15	67796.00	836153.00
- Cycle	334.11				334.00	15	50.00	284.00
- Tata Winger	393784.91				393785.00	15	59068.00	334717.00
Lab Equipments	35543684.86	87167	1001423	263871	36368403.96	15	5380154.00	30988250.00
Library Books	128013	9418.46	1600		139032.00	15	20734.72	118297.28
Assets under Arise Project								
Furniture & Fixtures	3059310.27			361724	2697586.00	10	269758.60	2427827.40
Electrical Fitting & Installation	467654.49				467654.00	10	46765.00	420889.00
Computers & Peripherals	6677.15				6677.00	40	2671.00	4006.00
Computer Software	837.3				837.00	40	335.00	502.00
Fire Extinguisher	96376.88				96377.00	15	14457.00	81920.00
Electrical Equipment	561242.39				561242.00	15	84186.00	477056.00
Lab Equipments	22673572.94		0	0	22673573.00	15	3401035.95	19272537.05
Equipments (DG Set)	1190852.68				1190853.00	15	178628.00	1012225.00
Lab Equipments (UNEP- GEF)	781397.18				781397.00	15	117210.00	664187.00
Office Furniture			30813.58		30814.00	15	2311.00	28503.00
Lab Furniture (UNEP- GEF Project)	36705.15				36705.00	10	3671.00	33034.00
Lab Equipments (under MOFPI Grant)	7490676.37				7490676.00	15	1123601.00	6367075.00
Capital work in progress (Building)	2349408				2349408.00		0.00	2349408.00
Total	80733652.66	96585.46	2036097.45	625595	82240738.96		11441258.03	70799480.93

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 : 25.09.2019
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	5931816.00	
Saving account in Punjab National Bank	112713.00	
Current account in State Bank of India	59020.00	6103549.00
Fixed deposits with		
Punjab National Bank	3280000.00	
Corporation Bank	178200209.00	181480209.00
Security deposits		
Chandigarh Gases (for Argon Gs cylinder)	30000.00	
Dist. Education Officer, Chandigarh (EMD)	5000.00	
Mohali Gas Enterprises (for LPG Cylinder)	16000.00	
Khaira Trabders (for Water Bottles)	1050.00	
Food Safety Standards Authority of India, New Delhi	100000.00	
Punjab State Power Corporation Ltd	479803.00	
CITCO	30000.00	661853.00
Cash in Hand		9037.00
Prepaid Expenses- CMS and AMC		300033.00
Closing Stock		3391852.00
Tax deducted at Source		12824184.00
Sundry Debtors		
-Outstanding for less than 6 Months	6952923.00	
-Outstanding for more than 6 Months	7620499.00	14573422.00
Cheque deposited but not yet realised		58281.00
Advance to Suppliers		75522.00
Total: Rs.		219477942.00

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 : 25.09.2019

Place: Chandigarh

PUNJAB BIOTECHNOLOGY INCUBATOR, MOHALI

SCHEDULE E: CURRENT LIABILITIES & PROVISIONS

PARTICULARS	AMOUNT(RS)
Audit Fees Payable	23000.00
Earnest Money Payable	1120864.00
EPF Payable	358289.00
Electricity Expenses Payable	178332.00
Professional Charges Payable	4500.00
Punjab Development Tax	26880.00
Advance From FSSAI	459643.00
Sundry Creditors	8728482.00
Cheque Issue But Not Yet Presented in Bank	1856158.00
TDS Payable	261091.00
GST Payable	939.00
Advance From Customers	852740.00
Total: Rs.	13870918.00

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 : 25.09.2019

Place: Chandigarh

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

PARTICULARS	AMOUNT(RS)
Interest in FDR'S	999355.00
Interest on Saving Bank account	168687.00
Total: Rs.	1168042.00

SCHEDULE G: ESTABLISHMENT EXPENSES

PARTICULARS	AMOUNT(RS)
Salary & Wages	15265769.00
Contribution To Employees Provident Fund	1578998.00
Manpower/ Helper Charges (O/S)	2275982.00
Staff Welfare	98480.00
Claim From Labour Commissioner Charges	304668.00
Accidental Insurance	16256.00
Total: Rs.	19540153.00

SCHEDULE H: OFFICE EXPENSES

PARTICULARS	AMOUNT(RS)
Advertisement & Publicity Expenses	3980.00
Lab Waste Disposal Expenses	37359.00
House Keeping Charges	223543.00
Insurance Of Assets	33726.00
Office Expenses	10824.00
Newspaper & Periodicals	870.00
Printing & Stationery	201685.00
Postage & Courier	43470.00
Subscription & Publications	11992.00
Telephone Expenses	82771.00
Meeting Expenses	28195.00
Total: Rs.	678415.00

SCHEDULE I : OTHER EXPENSES

PARTICULARS	AMOUNT(RS)
Fees & Taxes	6750.00
Recruitment Charges	131317.00
Expenses- FDA Project	2000.00
Expenses- FSSAI project	28076.00
Hiring of Taxi	24575.00
Training Fee/ Exp	2150.00
Tender Expenses	25664.00
Miscellaneous Expenses	2780.04
Total: Rs.	223312.04

As per report of even date attached

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

(U.K. Mehta), Prop.



for Punjab Biotechnology Incubator

Tanu Sondhi
AF & AO

[Signature]
Chief Executive Officer

Date : 25.09.2019
Place: Chandigarh

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

PARTICULARS	AMOUNT(RS)
Accreditation/ Recognition Fees	115245.00
Caliberation Charges	146266.00
Quality Assurance Charges	7142.00
EIC/ NABL/ Apeda/ BIS Audit Expenses	307951.00
Proficiency Testing Charges	24000.00
Total: Rs.	600604.00

SCHEDULE K : REPAIR & MAINTENANCE

PARTICULARS	AMOUNT(RS)
Repair & Maintenance - General	111380.00
Repair & Maintenance - Electrical	130549.00
Repair & Maintenance- Computer	103904.00
Repair & Maintenance- Lab Equipments	679823.00
Annual Maintenance Charges	1233880.00
Repair & Maintenance- DG Set	8800.00
Total: Rs.	2268336.00

As per report of even date attached

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



(U.K. Mehta), Prop.

for Punjab Biotechnology Incubator

Tamir Singh
AF & AO

[Signature]
Chief Executive Officer

Date : 25.09.2019
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. REVENUE 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 & 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 in which the arise.

B NOTES ON ACCOUNTS

1. Government Grants

Punjab Biotechnology incubator (PBTI) has received Capital grants of Rs.5.00 Crores (Rs. Five Crores) under RKVY scheme from Department of Agriculture, Govt of Punjab and Rs. 4.75 Crore (Rs. Four Crores Seventy Five Lakhs) from Punjab Small Industries & Export Corp. Ltd. Both these grants have been received for Construction of PBTI's Building for which Land has already been allotted by Govt. of Punjab vide letter No. PSCST/3932 dated 13.08.2014 through Punjab State Council for Science & Technology free of Cost Revenue Grant for payment of Salaries and Rent has also been received during the year from Govt. of Punjab amounting to Rs. 170 Lacs, the same has been routed in Income and Expenditure account for the year under Audit.

2. Current Assets, Loans & 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 excess of the amount considered reasonably necessary.

3. Closing Stock

Closing Stock is taken as valued and certified by Store & 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 Guarantee in favour of Export Inspection Agency, New Delhi amount of Rs. 1.00 Lakh (Rs. One Lakh) vide Guarantee No. PBG 2015/2 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 to the same. The Sundry Debtors as on 31 st March, 2019 were Rs. 1,45,73,422/- consisting of Rs. 11097015.00 from Govt. organizations. The recoveries have been expediated to recover the same.

6. The Society is registered under the Section 12AA of the Income Tax Act, 1961 vide S.no.180-P in the register of application u/s 12A (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. Some of the expenditure of revenue nature are being charged to capital and accordingly deducted from unspent balance in the absence of any clear guidance in sanction letter/ release letter in this regard. An amount of Rs. 8,64,687/- was deducted twice from unspent Balance for which rectification has been carried out.
8. Tax deducted at source shown under Schedule D amounting to Rs.1,28,24,184/- includes
 - Tax deducted at source during the year under audit amounting to Rs.16,31,994/- and the balance amount pertains to previous years
9. Schedule 'A' to 'L' forms an 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

Tarun Bouda
AF & AO

AB
Chief Executive Officer

Date : 25.09.2019
Place: Chandigarh