

Certificate No. T-2956 & T-2957



### TANI PHARMACEUTICALS LIMITED

(An ISO 9001: 2008 certified company)



ISO 9001:2008 (Certified)

### **ANALYTICAL DIVISION**

(A GOVT. APPROVED TESTING LABORATORY)

Bringing Success Through Science & Technology



Multani Pharmaceutical Limited (Analytical Division) was established in 2008, which was approved for the testing of Ayurvedic, Unani and Siddha Drugs in Feb 2010 by the Directorate of Ayurvedic & Unani Services Dehradun (UK) under the Department of AYUSH; Ministry of Health and Family Welfare, Government of India.

Renovation and up-gradation of Laboratory to meet the current regulatory requirements, completed in January 2013.

#### **CREDENTIALS**

Approved Lab for the testing of Ayurvedic, Unani & Veterinary Drugs by the Directorate of Ayurvedic & Unani Services Dehradun (UK) under the Department of AYUSH; Ministry of Health and Family Welfare, Government of India vide Approval No. UK.AY.DTL-02/2010, Dated: 14/07/2010.

Approved for the testing of Drugs & Pharmaceuticals, Homeopathic Drugs and Cosmetics Products by Drug Controller & Licensing Authority, Directorate of Health Services Dehradun (Uttarakhand) vide Approval No. 1/UA/CTL/2013, dated: 01/11/2013.

#### ISO 9001:2008 Certified

NABL Accredited Laboratory since 19th May 2014 for Chemical and Biological Testing Scope of Drugs &

Pharmaceuticals, Cosmetics Products, Food Products and Veterinary Feeds.

**GLP Compliant Lab**; Certified according to Schedule -L1, Drugs and Cosmetics Act (India).

**Globally Competent Laboratory**; Participating in International Proficiency Testing Program on regular basis and has been continuously Successful.

**Supporting to 100 plus customers** in their Quality Control and Basic Research.

#### **SALIENT FEATURES**

- A team of Doctors (Ph.D., MD & BAMS), Academicians & Industrial experienced of several decades.
- One of the most Competitive Testing Laboratory designed in 6500 SF Area according to the required norms of Environment, Health and Safety.



- Chemical, Instrumental and Microbiological Laboratories are well separated to avoid cross Contaminations.
- Equipped with most Advanced Techniques/ Instruments according to current regulatory and statutory requirements.
- Well defined system in place to handle conflict of interest.
- Analytical Research in Herbal (Ayurvedic, Unani, Siddha, Homeopathic & Veterinary) Drugs for active ingredients and contaminates.

- Testing of Pharmaceuticals, Cosmetics Products, Food products & Water according to recommended guidelines.
- Stability Studies (Incubation & Testing).
- Analytical Method Development and Validations.
- Contract Research in Public Private Partnership (PPP).
- Training and Development for Researchers, Students and Industrial employees.
- Online Data management system through Multani LIMS.

### **TECHNIQUES**



### Atomic Absorption Spectroscopy (Fast Sequential with Graphite, Flame and HVGA)

- Highly Sensitive and Confirmatory technique.
- Reproducible within acceptance criteria.
- Best technique for trace elements.
- Analysis and standardization for Bhasma & Herbomineral, Nutraceuticals preparations.
- Estimation of Residual Inorganic Elements in Active Pharmaceuticals Ingredients (API).
- Estimation of Inorganic Elements (Zn, Cr, Fe, Ca etc.) in Food Products / Nutraceuticals.
- Referee technique in disputed cases.

# High Performance Liquid Chromatography (HPLC)



# For Standardization and Quality Control of Drugs and Pharmaceutical product.

- Best technique for Qualitative and Quantitative analysis.
- Quick & Accurate technique.
- Quite sensitive and Reproducible.
- Automated and FDA 21 CFR part 11 compliant software.
- Detecting techniques UV/VIS, PDA, RI and Fluorescence available.



### Fourier Transform-Infra Red Spectroscopy (FT-IR)

- Molecular Identification/ Finger Print profiling in Seconds & Quantitation in few seconds.
- Simethicone testing & Mineral oil in water.
- Characterization of Organic molecules.

# STABILITY STUDIES



### Shelf life Studies

(Accelerated and Real Time)
Incubation and Testing as per preset protocol and Pharmacopoeial requirements.
Stability Studies as per ICH guidelines. Data compilation for Dossier submission.
Online storage of data.



### **Advanced Microbiology Laboratory**

- Man & Material movement well controlled.
- Separate AHU for different areas. Dynamic pass boxes for material movement between different zones.
- Well designed to handle all kind of the Microbiological analysis.



### **Gas Chromatography**

- Quick & accurate estimation of volatile Organic ingredients.
- Estimation of residual solvents in drug products.
- Fatty acids in Oils/Fats
- Alcohol estimation in Asava/Arishta.

### SCOPE OF ANALYSIS

### Chemistry

- Physico-chemical Analysis.
- ldentification by chemical reactions, FTIR, UV/VIS Spectrophotometer, HPTLC, HPLC, GC, AAS, Microbiologically, Microscope & Macroscopically.
- pH, Melting Point, Boiling Point, Boiling Range, Optical Rotation, Refractive Index, Disintegration Time, Bursting Strength, Water etc.
- Dissolution Profile of Tablet / Capsules.
- Loss of Drying with vacuum and without vacuum at different temperatures.
- Water content by Karl Fischer and by Dean and Stark apparatus.
- Heavy metal analysis (Limit tests for Lead and Arsenic) and by AAS.
- Soluble extractive (Water, Alcohol etc.)
- Sulphated ash, Total ash and Acid Insoluble ash.
- Alkaloids, Saponins and Flavonoids.
- Tannins, Curcuminoids, Boswellic acids, Stevioside & Rebaudiosides etc.
- Quantitative analysis of herbs and herbal preparation based on specific marker compounds by HPTLC /HPLC/GC/UV-VIS Spectrophotometric methods.
- Stability Studies
- Method Development and Validations.
- Standardization of Herb, Herbal Extract (Active Botanicals Ingredients) and Herbal Finished Products based on Bio-active or Non Bio-active marker compounds using HPLC/HPTLC/GC etc.
- Aflatoxins analysis.
- > Testing of Food Products for Protein, Carbo-hydrates, Fat, Vitamins, and Minerals & Energy Value.
- Analysis of Water (Raw, Effluent & Purified).

### Microbiology

- Total Plate counts & Yeast and moulds
- Preservative Efficacy Tests, Sterility, Bacterial Endotoxin Test (BET)
- Rideal-Walker coefficient (RWC) in Disinfectants.
- Microbiological assay of Vitamins & Antibiotics.
- Environmental monitoring (Swab tests and Settle plates)

### **Cultures Available**

Staphylococcus aureus, Kocuria rhizophila, Staphylococcus epidermidis, Saccharomyces cerevisiae, Bacillus subtilis, Escherichia coli, Pseudomonas aeruginosa, Escherichia coli, Bacillus pumilus, Aspergillus brasiliensis, Candida albicans, Pediococcus acidilactici, Lactobacillus leichmannii, Klebsiella pneumonia, Lactobacillus plantarum, and many more.

### TRAINING



- Hands on High Performance Liquid Chromatograph.
- Hands on High Performance Thin Layer Chromatograph.
- Hands on of Gas chromatograph.
- Hands on Atomic Absorption Spectroscopy.
- Hands on Chemical Analysis e.g., Potentiometric titrations, Limit tests, General titrations, extractions techniques.
- Training in Quality Assurance (Production and Quality Control).
- Training in Microbiology Laboratory.

### Support to Educational Institutions



#### Address:

Khasra No.-37, Village-Makkanpur Mehmood Alam, Pargana-Bhagwanpur, Tehsil-Roorkee, District-Haridwar, Uttarakhand-247661 (India) Telefax. +91 133 2232 793, +91 9756 20 6403 Email: multanilab@gmail.com, lab@multani.org Website: www.multanilabs.com

#### Registered & Corporate Office:

H-36, Connaught Place, New Delhi-110 001 (India) Ph.: +91-9654350711-12, Fax: +91-11-41513323/06 Email: multaniayurveda@hotmail.com