## **LEADS GROUP**

LEADS is a decade old multi-faceted business group with diversified interests spread across Insurance, Agri-tech, Marketing and Research based services.



## Leads Insurance Brokers Pvt. Ltd.

An IRDA licensed company providing Insurance Broking & Risk Management services to a varied clientele that includes large corporates, MSMEs, shopkeepers and farmers. Leads has established itself as one of the most trusted companies for comprehensive insurance solutions.



## LeadsConnect Services Pvt. Ltd.

An agri-technology based Data, Risk Management and Financial Services company







### R.L.R.C. Private Limited

H.O./R.O.: B 4, Road No. 1, Parsakhera Industrial Area, Bareilly 243502 (U.P.) Telephone: +91 89370 04411-4477

info@rlrcindia.com | www.rlrcindia.com





# Allc

## Partnering the Industry

RLRC is India's fastest growing analytical laboratory engaged in commercial testing, agri-research, training, consultancy and advisory services. RLRC is equipped with world class sophisticated equipments and industry leading manpower resources that provides precise and reliable solutions to a wide range of industries.

RLRC's specialised services covers distinct segments like food, agriculture, edible oils, pesticides, soaps & detergents, milk & milk derived products, etc. Testing at RLRC is done in accordance to various national and international standards such as FSSAI, BIS, AOAC, AOCS, Agmark, ASTM, etc.

Spread aacross 800 sqm of space, RLRC operates with state-of-the-art, modern laboratory instruments.,

At RLRC, our clients see us as an extension of their own industrial activities, filling their internal gaps and providing accurate, authentic and reliable testing services for their industry.

Satisfying the customer needs with full commitment to quality of testing results and report is the main objective of our laboratory. Our expert scientist not just perform analysis, but also undertake customer oriented research and development work and offer consultancy for critical problems to the industries. We also provide training to the students from different recognized and reputed institutes & universities such as IITs, NITs, and other prestigious institutions.

The only NABL accredited lab in Bareilly region .

## Mission • Be the most competitive and reliable service organization of the world in the field testing and R&D. • Be the market leader internationally in analytical testing services. • To become an organization that will generate opportunities for health as well as wealth for the nation and thereby enhance the quality of life of its people. Vision • To provide accurate and precise testing services in a timely manner. • To adhere to quality and accuracy. • To lead the analytical industry with innovation and up gradation. • To endeavour for strong association with our customer and business associates. • Continual improvement of lab personnel for their technical knowledge.



## Our Quality Methodology

- Complying IS/ISO/IEC 17025:2005 Standards.
- Practising GLP (Good Laboratory Practices).
- Complying other ISO 14001, ISO 18001 and ISO 22000 Standards.
- To adopt the most modern and advanced equipment/ methods to provide accurate and reliable results.
- To adhere to quality and perfection.
- To ensure that every employee is treated with dignity and respect and in a fair, consistent and equitable manner.
- To lead the analytical industry with innovation and up gradation.
- To endeavour for strong association with our customer and business associates.

## Dr. R.P. Singh

## Managing Director's Message



Since the inception of RLRC Pvt. Ltd. (2016), we adhere to the quality testing to ensure that food products reaching to the consumers are safe and free from any chemical contaminations. Our laboratory is the only lab in this region having NABL accreditation along with other ISO certifications. As director of RLRC, I ensure the possibility and implementation of any improvement in quality of lab personnel and technology. Within two year of life span, RLRC has earned very good image among its clients and industries. Our R&D department always tries to develop new products and technology which can help various industries as well as society either directly or indirectly.

I truly and deeply appreciate the help of my team of managers and scientist who have always stood by me and worked with full commitment and unwavering enthusiasm towards the attainment of our goals. We welcome challenges, and look forward to associate with any organizations to develop the pioneering solutions and to tackle some of the most pressing issues faced by the industries.

## Ms. Richa Khandelwal

## Director's Message



Accurate and precise analytical testing is essential to drive the growth engines of Industry as it removes challenges and prompts innovations, which in turn, save precious resources and time. RLRC has been founded to provide accurate, authentic and reliable testing services to the industry.

At RLRC, we see a bright outlook as our scientific and technological accomplishments, combined with our vision for the future, position us well to contribute in the industrial and agriculture development. We will continue our quest for more scientific and analytical breakthroughs, collaborating with our research partners and leveraging our world-class facilities. We can expect RLRC to pursue opportunities in a variety of sectors.

As a brand, RLRC reflects our commitment to superior customer service with Total Quality Assurance. RLRC seeks to be a pioneer, anticipating the needs of its clients with bold innovations. Behind all our services lies our customer promise - expertise, delivered consistently with precision, pace and passion, enabling our customers to move ahead safely and swiftly with RLRC as their trusted partner for end-to-end analytical services.

## Ms. Swati Khandelwal

## Director's Message



Since its foundation, RLRC Lab has always endeavored to exceed customers' expectations by providing timely and quality assured results for their products. In order to maintain highest quality standards of services, we have equipped ourselves with the most advanced instruments and equipments along with a highly qualified team. With professional analytical solutions, we support our customers in solving quality related problems to their utmost satisfaction.

In today's dynamic industry environment, it is critical that the knowledge and expertise of analytical Chemists/Scientists is continuously updated. At RLRC, we regularly organise training & development for our staff and make sure that their skills are at par with the best in the industry. I am pleased to note that team RLRC is one of the best to handle analysis of food and non-food products.

Our organisation has worked around one common purpose – Improving lives by ensuring quality and Innovation. We abide by our vision to provide the best service to our customers for enhanced safety and good health.

## Dr. Prachi Srivastava

## Director's Message



RLRC Labs was formed with a vision of offering an end to end solution for customers with respect to testing of food, water, soap & detergents, soil, herbal products, etc.

Our focus has always been on delivering a great experience to our customers through on time delivery of reports, solutions for problems in quality and overall value addition. We also ensure the secrecy of analytical reports for our customers.

I am proud to say that as an NABL accredited laboratory, RLRC can now go the extra mile for our valuable clients and touch the lives of millions by ensuring that they make available good quality products to the customers by improved testing services. RLRC also provides research support to its customers.

Our future endeavour is to take all the necessary accreditation which will help the customers to get single window solutions.



## Oils & Fats Testing

- Pesticides Analysis
- Vitamin Test
- Fatty Acid Profile Test
- Tocopherol Test
- Triglycerides Analysis
- Total Polar Component Test
- Anti-Oxidant and mcpd Test
- Oxidative Stability Index (shelf-life) Test
- Adulteration Test
- Phyisco-Chemical Analysis

## **Ghee Testing**

- RM Value
- Butyro fat Content
- Adulteration Test
- Phyisco-Chemical Analysis







## Soil Testing

- Physiochemical Test
- Macro Nutrient
- Micro Nutrient
- Organic Matter Test

## Soap & Detergent Testing

- Total Alkali, Free Alkali And Combined Alkali Test
- Total Fatty Matter Test
- Unsaponified AND Unsaponifiable Matter
- Rosin Test
- Titre Of Total Fatty Acids
- Borax, Perborates, Phosphates, Sulphates, Glycerol, Combined Sodium And Potassium Oxides, Carbolic Acid And Cresylic Acid, Carbonates, Free Carbonated Alkali, Iodine Value (Wijs) and Chlorides Test
- · Active Ingredient By Cation Titration
- Molecular Mass Of Sodium Salt Of Alkyl Benzene Sulphonic Acid
- Total Phosphates
- Sodium Tripolyphosphate (STPP) Content
- Active (Reserve) Alkalinity



## Microbiology Testing

- Total Coliforms Test
- E. coli Test
- Faecal Coliforms Test
- Standard Plate Count Test
- Salmonalla Sp. Test
- Shigella Sp. Test
- Pseudo Monas Aeruginosa Test
- Vibro cholera Test
- V parahaemolyticus Test
- Yeast & Mould Test
- Sulphite Reducing Anarobes Test
- S Aureus Test
- Faecal Sreptococci Test
- · Total Planktons Test
- Lipolytic Organisms Test
- Proteolytic Organism Test
- Aerobic Microbial CountsTest
- Thermophyllic Bacterial Count Test
- Enterobacteriaceae Test
- Listeria monocytogenes Test
- · Bacillus cereus Test

## **Packaging Testing**

- Complete Testing of all kinds of Packaging Boxes
- Complete Testing of Jars
- Complete Testing of Pet Bottles
- Complete Testing of all kinds of Preforms
- Complete Testing of all kinds of labels
- Complete Testing of all kinds of Pouches
- Complete Testing of all kinds of Caps & Handles

## **Aromatic Compound Testing**

- GC/GCMS
   (Identification of Components eluted in GC)
- Density/Specific Gravity
- Colour
- Solubility
- Optical Rotation
- · Refractive Index
- · Essential Oils
- Extracts
- Absolute
- CO2 extract
- Concrete for quantitative
- Qualitative
- Chirality
- Purity

## Menthol & Mentha Product Analysis

- Color & Appearance
- Specific Gravity at 27°C
- Solubility in 70% Ethyl alcohol at 27°C
- Refractive Index at 27°C 1.4590
- Congealing Point
- Alkaline Test
- Solid Sedimentation test
- Paper test Water test Flash Point
- Total Menthol Content (TMC)
- Solubility in Ethanol Acid Value Ester Value
- Flash Point Carbonyl Value

## Technology

- RLRC provides complete testing services for all types of food products, soil, water and other environmental aspects under one roof. We have fulfilled the entire requisite to offer a complete testing service to our clients.
- Our in-house lab is installed with the technically advanced scientists and equipments that produce precise and accurate results.

### Agilent 7800 ICPMS

- The Agilent 7800 ICP-MS combines proven, robust hardware, auto-optimization tools, and Pre-set Methods to simplify routine analysis.
- With high matrix tolerance, wide dynamic range, and effective control of polyatomic interferences, the hardware takes the uncertainty out of analyzing complex or variable sample matrices.
- ICP-MS Octopole Reaction System (ORS) brings collision/reaction cell (CRC) technology to routine environmental analysis of trace metals in drinking waters.
- The result is easier set-up, lower detection limits, faster analysis, and improved interference removal, especially for the difficult plasma based interferences affecting iron and selenium.

### Agilent LC-MS/MS

- LC/MS/MS triple quadrupole provides best-in-class sensitivity, precision, and scan speed, so you can dilute or use less sample and still have complete confidence in the accuracy of your results. The system's proven robustness and reliability mean less maintenance and more uninterrupted laboratory productivity.
- The Agilent LC- MS/MS system delivers robust performance for commercial, regulatory, life sciences, and research applications.
- LC-MS/MS system employs two technological advantages: Agilent Jet Stream ion source and curved geometry collision cell.
- These innovations enable you to reliably detect target compounds at low levels in diverse matrices, while achieving wide linear dynamic range.

#### Agilent GC-MS/MS

- Agilent's Pesticides and Environmental Pollutants GC/MS/MS Analyzer 4.0 with the Mass Hunter Pesticide & Pollutant MRM Database provides the lowest possible detection and quantitation limits for pesticides residues in complex matrices.
- Dynamic MRM provides enhanced analytical efficiency by focusing on MRMs within its own RT window.
- Capillary Flow Technology (CFT) backflush optimizes cycle time, enhances robustness, and provides superior selectivity and sensitivity for routine operation.
- Concern over pesticides contamination increases the demand for trace level analysis of residual pollutants in food, beverage and environmental samples.
- Extracts from these matrices contain target residues plus a mixture of organic compounds co-extracted during sample preparation that increase the difficulty to accurately quantitate and confirm the presence of target compounds.









### GC/MS

- The ShimadzuGCMS-QP2010SE is our advanced standard gas chromatograph mass spectrometer. Descended from the GCMS-QP2010S, it combines the benefits of economy, simple operation and enhanced performance. The enhanced maximum column flow enables a variety of columns to be selected. Productivity and sample throughput can be dramatically increased.
- Ecology mode saves power and carrier gas consumption allowing for a lower cost of ownership and less environmental stress.

#### **HPLC**

- The Shimadzu HPLC LC20 AD is equipped with a Spectrophotometric detector (SPD). The HPLC is an analytical instrument in which a liquid mobile phase transports a sample through a column containing a stationary phase. The interaction of the sample with the stationary phase selectively retains individual chemical species and permits the separation of thesample components.
- HPLC can be used for separation & quantification of non-volatile organic compounds: flavonoids, poliphenolic acids, ,catechin, coumarin, sterols etc.
- Taking sensitivity to the limit, the SPD-20A/20AV has a noise level of 0.5×10-5 AU max., making it the world's most sensitive UV-Vis detector (ASTM Standards).

#### **Rancimat**

- The 892 Professional Rancimat is an analysis system for the simple and safe determination of the oxidation stability of natural fats and oils with the well-established Rancimat method.
- With eight measuring positions in two heating blocks. The built-in display shows the status of the instrument and each individual measuring position. Start buttons for every measuring position enable the measurement start on the instrument.
- Cleaning effort can be reduced to a minimum through the use of practical disposable reaction vessels and dishwasher-safe accessories.
- This saves time and costs and significantly improves accuracy and reproducibility.

## 870 KF Titrino plus

- The inexpensive 870 KF Titrino plus is a KF titrator for volumetric water content determination. With it, water contents from a few ppm to 100% can be determined reliably and precisely in solid, liquid and gaseous samples.
- With its user interface, which is tailored to routine users, the 870 KF Titrino plus is so simple to operate that only brief orientation periods are required. It is the ideal titrator for routine determinations, also because of its robustness.











#### Refractometer

- Measure the refractive index and concentration of liquids, gels and solids using laboratory refractometers from Anton Paar—the universally applicable and user-friendly Abbemat series.
- Simply take your pick depending on the accuracy, temperature range and level of automation you require.

### Flash point

- The automatic Pensky Martens closed-cup tester measures the flash point at the lowest temperature at which the application of an ignition source causes the vapors of a sample to ignite.
- PMA 5 is suitable for flammability applications on both biodiesel and biodiesel-blended fuels along with distillate fuels like diesel, heating oil and kerosene.
- It is also commonly used for other potentially flammable liquids.

### Spectrophotometer

- Designed in accordance with the governing Japanese and European Pharmacopoeia, the new UV-1800 UV-VIS spectrophotometer achieves a resolution of 1 nm, the highest in its class, in a compact design.
- Capable of analyzing DNA and proteins using the following quantitation methods.
- Nucleic Acid Quantitation- Quantitates DNA or protein using the absorbance at 260/230 nm or 260/280 nm, Protein Quantitation, Lowry method, UV absorption method (direct measurement at 280 nm)
- Separately quantitates up to eight components mixed in a single sample. Pure components or mixtures of components can be used as standard samples

#### **Gas Chromatography**

- NUCON 5700 GAS CHROMATOGRAPH is simple, rugged, most reliable instrument being used in Industry and Research for routine Q.C. and Research application.
- Standard outfit is with Dual Injector with option of adding one additional Injector. It can house three Detectors simultaneously.
- With Dual Channel Data Station, two Detectors can be operated simultaneously. Single Ramp Temperature Programming with Initial Hold Time upto 99 min. and programming rate from 0.1 Deg.C. to 30 Deg.C. With Glass Lined Injector, Quartz Jet FID and Glass Column, it becomes all Glass System which makes it specially suitable for Labile compounds like Alkaloids, Steriloid, VFA, etc.

#### Bomb caloriemeter

- The instrument is designed and made as per Applicable IS standards. The heat capacity of the instrument is 500 cal/gm~10000cal/gm.
- It is suitable to determine heat value of petroleum products (Gasoline, jet fuels, diesel oil and fuel oils), coal, paraffin, food and other combustible Substance.













#### **BOD** Incubator

- REMI Cooling Incubators are designed for applications in pharmaceutical, microbiology, biotechnology, chemical & research labs. These chambers are used for BOD test culture of bacteria, microorganism, tissue culture, incubation, immunological work & storage of vaccines etc.
- These chambers meet all critical requirements.

#### Laminar Air Flow

- A laminar flow cabinet is a carefully enclosed bench designed to prevent contamination of semiconductor wafers, biological samples, or any particle sensitive materials. Air is drawn through a HEPA filter and blown in a very smooth, laminar flow towards the user.
- The cabinet is usually made of stainless steel with no gaps or joints where spores might collect.
- Such hoods exist in both horizontal and vertical configurations, and there are many different types of cabinets with a variety of airflow patterns and acceptable uses.

#### Portable Thickness Gage

- The Magna-Mike® 8600 is a portable thickness gage that uses a simple magnetic method to make reliable and repeatable measurements on nonferrous materials.
- Measurements are made when its magnetic probe is held or scanned on one side of the test material and a small target ball (or disk or wire) is placed on the opposite side or dropped inside a container.
- The probe's Hall Effect sensor measures the distance between the probe tip and target ball

#### **POLARISCOPE**

- Defects caused during molding process can be easily detected using this Operation
- A preform is held parallel to viewing field to study a colour pattern known as iso chromatic fringe.
- This indicates magnitude of the stresses introduced during moulding process and when perform is held 45 deg to viewing field a coloured pattern known as isoclinic is seen, this indicates direction of stresses.

#### Top Load Tester

- Top Load Tester is used for measuring vertical strength of bottle.
- Good strength avoids damage of bottles during, Stacking Transportation Storage Packing.

























## Research & Development

Research and Development is the beginning of most systems of industrial production. The innovations that result in new products and new processes usually have their roots in research and have followed a path from laboratory idea, through pilot or prototype production and manufacturing start-up, to full-scale production and market introduction.

At RLRC, we understand that new product development is essential to our customers' growth and success. We have learned that 'research' is the starting point for producing excellent quality products, and that new product development cannot be successful without the application of this research in combination with our R&D team's experience.

We have invested in our R&D department which operates in a 500 square meter on-site development laboratory. Our R&D team is made up of Oil Technologist, Biotechnologist, food Technologist with many years of experience in new product development. Our team has access

to innovative materials and process which can help bring that 'great new idea' to life.

We believe the new product development process should be collaborative and must include input from both our customers and our development team. We regularly work with our customers through the process of preparing bench samples and providing supplement facts for approval. Once a sample has been approved, we can produce a pilot batch for marketing samples, analytical testing and stability study.

Our Quality process is involved in every step of our operation, including new product development.

We realize the importance of testing a new product's potency and stability prior to production and distribution, and we use both inhouse testing and outside analytical labs for thiswork. Our goal is to produce that special, unique product that fills our customer's need and meets our high quality standards.





## **Quality Certifications & Accreditations**





#### ISO CERTIFICATION









**OHSAS CERTIFICATION** 



NABL CERTIFICATION