

# NEWSLETTER

**LPD Lab Services**

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**One-Stop Shop for Industrial Process Problem Solving, Consulting and Routine Analysis**

Welcome to LPD Lab Services Limited Spring 2010 Newsletter. We aim to keep you up to date with all our latest business, analytical, development and technical support capabilities.

## Product and Benchmarking Process Research and Development

LPD Lab Services has over 120 man-years of product and process focused research and development support work.

We can help turn ideas into manufactured products:

- Giving advice on improvements and alternative designs improving quality and consistency or reducing cost per item
- Offering close co-operation as an extension of customers own research and development departments
- Providing access to a comprehensive range of laboratory techniques and experienced staff

When making the transition from a one-off product to an industrialised product there can be many unexpected problems. If left unsolved they can be financially expensive and result in poor product quality and reproducibility.

As a laboratory that has grown from industrial product research and development support, we understand the need for quick and sensible solutions with clear communication throughout. We don't just report the analytical results, but offer recommendations and deliver context oriented interpretation as a matter of course. We work closely with customers to understand their needs and processes in detail.

Benchmarking of competitor's products provides a direction for a customer's product development either to improve quality, performance or cost advantage. Knowledge about current products and likely developments can retain and even grow market share as well as help establish the correct market price and maximise margins.

Reverse engineering is used to deformulate the competitor's products and requires a unique combination of analytical techniques and materials and chemical process experience. It yields both physical design and structural information, as well as how the competitor makes it. To the experienced eye or with the laboratory's support this information can then be used to improve and develop customer's current products and processes.

The laboratory uses its knowledge to offer practical advice on how to modify the customer's current processes at minimum cost and disruption to deliver the best points of the competitor's product and generate equivalent or more cost effective improvements to the customers products with sensible pay-back times.

## Materials Analysis and Failure Investigation

Product and component material analysis and process characterisation are key to generate improved performance, quality, yield and cost reduction.

LPD Lab Services has both the materials industrial process experience and materials analysis instrumentation to characterise and solve product and process problems in a cost and time efficient manner. The laboratory experience in reverse engineering also means products and processes can be skillfully dismantled to reveal the subtleties of the production methods either to solve failure analysis problems, determine material and product shortcomings or benchmark competitors.

Our analytical capabilities include:

- SEM
- Surface Analysis- SIMS, XPS, AES, Contact Angle and Surface Wetting
- Characterisation,
- Chemical Analytical Techniques- AAS, XRF, FTIR, GC, HPLC, UV-Vis
- Optical Microscopy
- Mechanical Testing

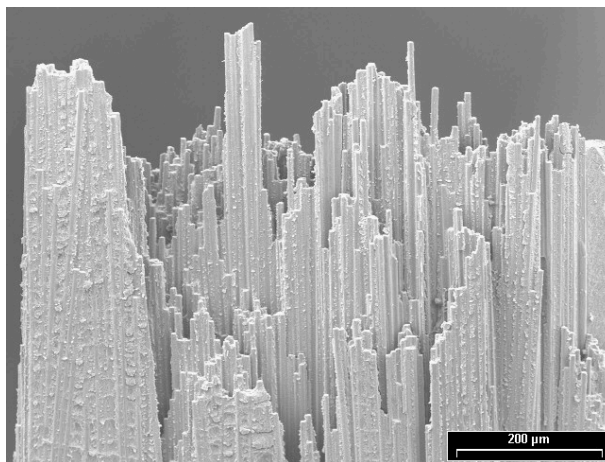
LPD Lab Services has a diverse range of analytical techniques available which allows us to comprehensively undertake many different materials analysis and types of failure investigation work. We have extensive experience gained from our former own manufacturing operations and we have the added benefits of in-house expertise in Health & Safety and environmental consultancy and six sigma statistical techniques for process control and optimisation.

The laboratory's diverse range of analytical techniques combine to allow us to provide the customer with a comprehensive service to investigate failures or materials with added value context orientated interpretation.

Thanks for reading and kind regards

Steve Jenkins (Managing Director)

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## Website Update

For more information on any of the subjects mentioned in this newsletter, please visit our website or feel free to call us on:

**TEL:** +44 (0)1254 676 074

**WEB:** [www.lpdlabservices.co.uk](http://www.lpdlabservices.co.uk)