

## Introductory Headspace Measurement Service Offer

The LIGHTHOUSE Measurement Service Labs offer an introductory sample analysis package enabling customers to easily assess the benefits of using laser-based headspace analysis for gaining insight into their sterile pharmaceutical product and process quality. Examples of projects performed for global pharmaceutical clients are:

#### Headspace oxygen analysis:

- For container closure integrity testing
- For formulation oxidation studies
- For assessing efficiency of nitrogen purging
- To investigate packaging permeation
- In vials, syringes, ampoules, and bottles

#### **Headspace moisture analysis:**

- For lyo product moisture determination
- For lyo chamber moisture mapping
- For lyo cycle development
- For determining water activity of OSD product

#### **Headspace pressure analysis:**

- For CCI testing of lyo product
- For CCI testing of product in deep cold storage
- To determine maintenance of vacuum

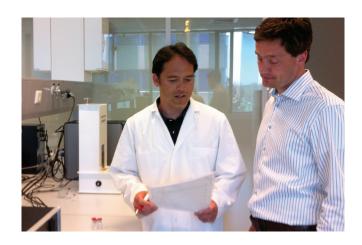
#### Headspace carbon dioxide analysis:

- For CCI testing of product transported on dry ice
- For detecting microbial growth in media vials

#### **The Measurement Service Offer**

- 1. Send up to 20 samples to a LIGHTHOUSE Lab
- **2.** Samples will be analyzed for a chosen headspace parameter
- **3.** A Final Report will be generated by a LIGHTHOUSE Application Scientist
- **4.** Measurements are non-destructive so samples can be returned for further testing upon request

### **Introductory offer: € 1800**



# Contact us now to take advantage of this opportunity!

LIGHTHOUSE Instruments is a leading global supplier of laser test and measurement systems for the pharmaceutical, biopharmaceutical and contract manufacturing industries. With global presence in the U.S., Europe, and Asia its operations are divided into three business units: Measurement Services, Laboratory Instruments, and Automation.

