

Sunscreen SPF Testing: UV-1000 Master Class

A one-day course to help you get the most out of your Labsphere UV-1000S Sunscreen SPF Analyser

There's no reason to get "burnt" when testing sunscreens; with this training course, you will learn how to get the most out of your instrument, improve your in-vitro to in-vivo SPF correlation and help bring new formulations to market more quickly and at lower cost. The syllabus includes the science of in-vitro SPF and UVA determination, UV-1000S theory of operation, the in-vitro to in-vivo correlation and guidance on correct sample preparation procedures. The key topics addressed in the course include:

- ▶ Learn how to operate the UV-1000 correctly.
- ▶ Understand the jargon and science of in-vitro SPF and UVA ratio determination.
- ▶ Exploding the myths – in-vitro SPF testing really does work.
- ▶ Appreciate the sources of variability in all sunscreen testing, both in-vivo and in-vitro.
- ▶ The correlation between in-vivo and in-vitro measurements.
- ▶ The importance of correct sample preparation procedures.
- ▶ Develop a self-help protocol to ensure you get the right results.



Course Outline

SPF – the Background Science

- » What is SPF?
- » Ultraviolet radiation & its biological effects.
- » Solar spectral irradiance function.
- » CIE erythral effectiveness function.
- » The science of sunscreens – what's in a sunscreen? Chemical versus physical filters, understanding cosmetic jargon and how does a sunscreen work?
- » In-vivo SPF determination: the COLIPA test method; regulatory framework; the variability of in-vivo SPF tests; the limitation of SPF as a measure of protection.
- » In-vitro SPF & UVA ratio determination: the Diffey/Robson method; sample preparation – the deciding factor; substrate materials; the early days; correlation studies; common misconceptions with in-vitro SPF; UVA ratio, Boots' Star Rating system & Critical Wavelength.

Overview of the Labsphere UV-1000S

- » Design & features.
- » Value proposition.
- » Software interface.
- » Measurement geometry.
- » Measurement sensitivity.
- » Accuracy.
- » What happens if the sample fluoresces?

UV-1000S First Aid Training – What to do When You Get the “Wrong” Numbers

- » Practical guidance on how to avoid the common mistakes when performing in-vitro SPF measurements using the UV-1000.

Practical Session

- » Put your new knowledge to the test!

Registration Details

The course is delivered on-site at individual companies or user groups. The standard course rate is £975 (ex. VAT) plus travelling expenses. We recommend that no more than 10 delegates attend each training session. For further information, please contact Pro-Lite.