

North of Scotland KTP Centre

Case Study

www.ktp-link.co.uk

OPUS PLUS

The KTP was designed to enhance the provision of ecotoxicological chemical testing that could be offered as a commercial service.

Challenge

The three key targets of the KTP were in the establishment and evaluation of freshwater biodegradation testing, freshwater Daphnia chronic toxicity testing and determining culturing conditions for the marine sedimentary toxicity test species Crophium. The rationale behind targeting these key areas was to enhance the provision of available ecotoxicological, widening the range of assays offered to clients and also increasing the robustness and sustainability of a current bioassay (Crophium).

"The KTP worked extremely well for Opus and this was almost entirely down to the ability, commitment and determination of the associate with excellent support from the academic supervisor at RGU."

Glen McLellan,
Company Facilitator

Results

As a result of the KTP, Opus has the capability of offering the Daphnia and chronic tests as well as the OECD 310D and OECD 301B biodegradation tests. These assays are now established along with a successfully operating freshwater biodegradation test system. The Crophium work was particularly novel, providing excellent insight into the most suitable culture conditions. Analysis of historic data also helped to identify key times when field samples may be more prone to high mortality rates. This finding can greatly increase efficiency in targeting organism collection.

Benefits

Opus now has the capability of offering the Daphnia acute and chronic tests as well as the OECD 310D and OECD 301B biodegradation tests. Excellent progress was also made on the culturing of Crophium. Knowledge gained from the KTP has been embedded into the business through staff training and standard operating procedures which have been written for each of the new tests as well as culturing procedures.

Knowledge
Transfer
Partnerships



Opus provides services and technologies to help oil companies increase their production and improve their environmental performance. Environmental services' developmental activity has essentially focused on the marine environment, providing laboratory services and regulatory support.



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