 **MESTECH Research Project** 

**Project Title:**

The Role of Passive Sampling in screening and monitoring of new and emerging chemicals

**Project Researcher:**

Lisa Jones

**Partners:**

DCU, MI, IFI, UK EA, TE Labs

**Project Summary:**

The challenges of monitoring our waters for compliance with WFD and the expansion of the list of organic chemicals that are to be added for monitoring, provides impetus for investigation of alternative monitoring approaches such as passive sampling.

The work being carried out represents an important collaboration between two research centres (DCU & MI) together with agency (EA UK and Inland Fisheries Ireland) and industry (TelLab) to assess the potential of passive sampling in monitoring priority pollutants in Ireland. This work is underpinned by a some studies carried out in Ireland already by the Marine Institute and a vast array of literature in the area of priority pollutant monitoring. The impact of this study may lie in the establishment of a capability to utilise passive sampling in themonitoring programme in Ireland for WFD.

This project pilots the use of passive sampling technology (PDMS and POCIS) combined with biota monitoring to assess the presence of priority substances in Irish surface waters. The project focuses in particular on new pollutants earmarked as candidates for the Annex X priority substances list under the EU Water Framework Directive e.g. E2 and EE2, pharmaceuticals, pesticides, PFOS etc. This considers the implications for compliance with current and proposed EQS and investigates the potential for incorporating passive sampling and biota testing in future compliance, investigative and trend monitoring.

**Key Outputs:**

* Development of two workshops
* A number of Collaborative publications
* Completion of a literature review due in month six
* Data set of passive sampling results