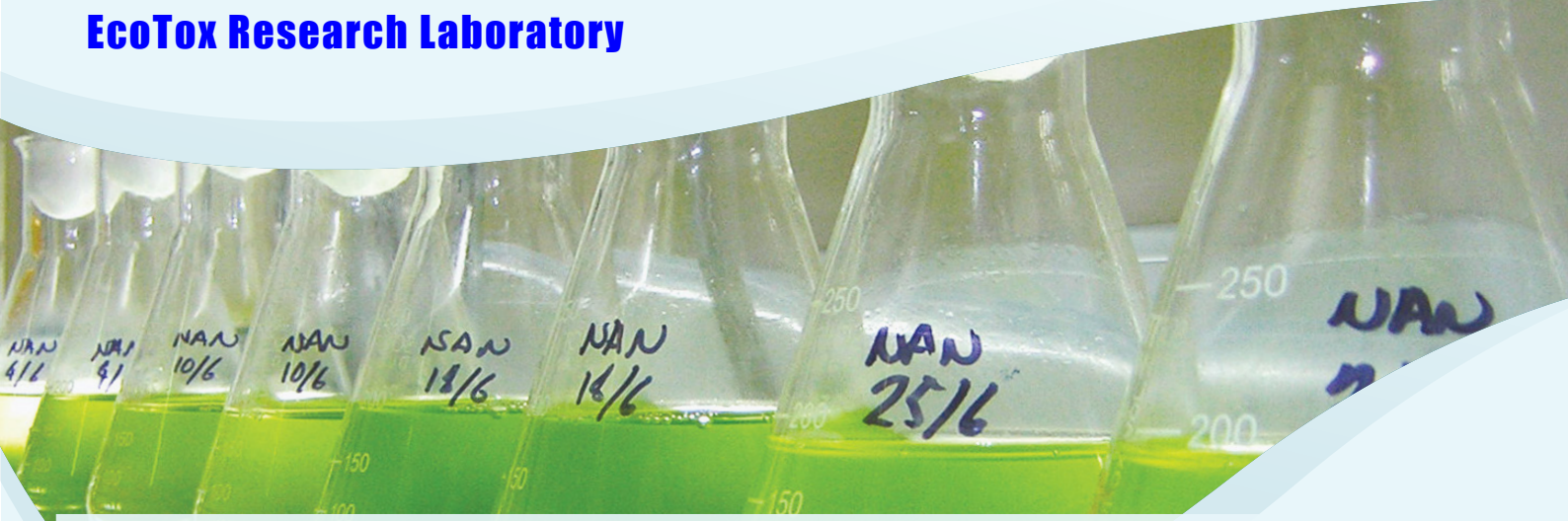


EcoTox Research Laboratory



ABT Innovia is an independent aquatic, aquaculture, biotechnology research facility that forms part of the **AquaBioTech Group**.

AquaBioTech Group is an international aquaculture and fisheries consulting company strategically located in the Mediterranean, on the island of Malta. It operates globally, with clients and projects in over fifty-five countries. Staff are recruited from across the globe, enabling communication with clients in thirteen languages.

AquaBioTech Group undertakes a variety of aquaculture, fisheries, marine surveying, aquatic environmental, financial, and technical projects, performed with its selected, worldwide partners.

AquaBioTech Group has an established, global reputation in designing and installing recirculation aquaculture systems (RAS).

AREAS OF APPLICATION

PHARMACEUTICALS – WASTE WATER

A great deal of attention has been directed to the ecological and physiological risk associated with pharmaceutical compounds and their metabolites in water and the environment. In the last decade, most research in this area has focused on steroid hormones and antibiotics.

NANOTECHNOLOGY

Due to the expected growth in this field and the increasing public exposure to nanomaterials, both from intentional administration and inadvertent contact, improved characterization and reliable toxicity screening tools are required for new and existing nanomaterials.



AQUATIC ENVIRONMENT – AQUACULTURE

Farmed products may be exposed to more natural and man-made toxic substances, e.g. antibiotics, pesticides, heavy metals and persistent organic pollutants, than wild fish. These contaminants in fish can pose health concerns to consumers; ecotoxicity and bioaccumulation tests are needed to assess the risk of contamination.

TERRESTRIAL ENVIRONMENT – PESTICIDE AND FERTILISER RUNOFF

Agricultural use of pesticides and fertilisers has remained high due to economic reasons. Because aquatic species may bioaccumulate pesticides more readily than terrestrial organisms, there has been much concern about pesticides in agricultural runoff. As a result of this concern, there is continuous research conducted to provide information on the impact specific pesticide amounts have on agricultural runoff and waste water.



AquaBioTech Group

EcoTox Research Laboratory



ECOTOX RESEARCH LABORATORY

The EcoTox research laboratory at **AquaBioTech Group** uses universally recognised techniques to measure and screen hazardous substances which are released or may be released into the environment. Many regulations require ecotoxicological studies in order to fulfil applications for registration, e.g. the European REACH regulation on chemicals and the Certification of Bioplastics.

TEST FACILITIES AND CORE SERVICES

The **AquaBioTech Group** EcoTox laboratory carries out standardised and specialised tests concerning toxicity and bioaccumulation. These tests are used to detect toxic substances by using living organisms as detectors of environmental quality. Our facility has close collaboration with local and international laboratories who are able to conduct physical and chemical analyses as well as other analytical work. New techniques can and

VALUES

- Animal welfare
- Minimising test requirements
- Focused and effective testing strategies
- Good Laboratory Practices (GLP) based in OECD directives

STANDARDS AND TECHNIQUES

- Coral larvae toxicity test
- Artemia sp. acute test
- Sediment toxicity testing
- Acute toxicity in fish- OECD 203
- Bioconcentration test- OECD 305
- Prolonged toxicity test- OECD 204
- Fish juvenile growth test- OECD 215
- Plant growth with Lemna sp. - OECD 221
- Algal growth inhibition test- OECD 201
- Daphnia magna acute and chronic test- OECD 202/211
- FET (Zebrafish Embryo Teratogenesis assay)- OECD 210

