

## About Battelle

Battelle is the world's largest nonprofit independent research and development organization, providing innovative solutions to the world's most pressing needs through its four global businesses: Health and Life Sciences, National Security, Energy Technology, and Laboratory Management. It advances scientific discovery and application by conducting \$5 billion in global R&D annually through contract research, laboratory management, and technology commercialization.



## Environmental Fate

Battelle offers the full range of studies to support agrochemical development and global registration (EU, EPA, and JMAFF). We are pleased to conduct single studies and manage whole programmes including dossier preparation and submission.

Our senior staff are industry-trained with more than 160 years of combined experience and a proven track record in successfully completing complex environmental fate projects.

At our GLP-compliant facilities, we have modern purpose-built laboratories including all the equipment and instrumentation required for environmental fate studies.

Using our network of contacts, we can source soils and sediments from all over Europe and the United States.

Standard studies are designed to fulfil current regulatory guidelines. Non-standard studies can be tailored to an individual customer's requirements or to tackle specific issues.

### Studies offered include:

#### **Aerobic and anaerobic transformation in soil and in aquatic sediment systems**

Specific soils, sediments, and water can be obtained to suit any requirement. Battelle has custom-made glassware to offer both flow-through and static designs. Test systems are incubated in our temperature-controlled rooms in the absence of light.

#### **Adsorption/desorption**

We offer both standard design studies and higher-tier (aged desorption) studies designed to refine groundwater risk assessments.

#### **Leaching and aged leaching**

These studies provide a more realistic insight to the leaching potential of some products. Studies can follow the formation and movement of metabolites or show restricted leaching under simulated use conditions.

#### **Soil dissipation**

These studies are designed to provide more information on products that degrade slowly in soil under laboratory conditions. Both small-scale studies with radiotracers and large programs with non-labelled end use products are conducted outdoors under typical use conditions.

#### **Lysimeter**

Studies are aimed at assessing long-term leaching potential. Lysimeters can be conducted with a choice of soils under realistic climatic conditions.

#### **Hydrolysis**

Studies are designed to meet specified international regulatory guidelines.

#### **Photolysis (aqueous and soil)**

Studies are conducted using Hereaus Suntest artificial sunlight sources and a choice of static or flow-through designs to:

- Evaluate risks from a full spectrum of contaminants and media
- Conduct reliable and defensible risk assessments