

PRIME at the heart of your projects

The BRGM mobilizes its competencies and its know-how so as to satisfy your expectations, ranging from the observation of basic principles up to operational systems (TRL 1 – 9), according to a variety of conditions

- Collaborative projects (conception, achievement, valorization) based on regional, national or European funding,
- Service delivery at various levels of the value chain,
- Possibilities for development, tests, or validation of methods and equipment,
- Studies:
 - Multi-scale (from cm³ up to some hundreds of m³),
 - Multi-contaminants (inorganic and organic),
 - Multi-matrix (soils, sediments, water, rocks),
 - Multi-method (physical, chemical, biological).
- Formation/demonstration support.

They rely on us

Private partners

Accelor Mittal, Arkema, Biorem Engineering, Brézillon, D-Gutzwiller, EODD, Géohyd, Géotex, ICF Environnement, IDDEA, Inovyn, Intera, Jean Voisin, Mahytech, MicroHumus, Nano Iron, RMIS, SAUR, SERPOL, SITA remédiation, Soldata, Solvay, Sol Environnement, Suez, SUEZ remédiation, Tauw, Total, VALTERRA, Véolia, MicroHumus.

Public financiers

ADEME, ANR, FUI, Appel Projets Régionaux d'Intérêt Régional (e. g. Centre – Val de Loire), European Union.



BRGM is France's reference public institution for Earth Science applications in the management of surface and subsurface resources and risks. BRGM is a Carnot Institute and implements research partnerships with industrial sectors and businesses of every size. The aim is to deliver innovative management solutions for a range of topic areas, including soils and subsoils, raw materials, water resources and prevention of natural and environmental risks.



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PIVOTS

www.plateformes-pivots.eu

PIVOTS is a coordinated set of experimental and analytical platforms dedicated to the development of environmental engineering and metrology for activities with a high consumption of natural resources. Along the entire value chain, it brings together public and private-sector actors in monitoring the quality of the environment and the sustainable management of natural resources (soil, subsurface, surface water, groundwater, sediment, air).



With the support of:



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PIVOTS

PRIME

Platforms for Remediation and Innovation in service of Environmental Metrology

Centi- to pluri-metric experimental pilots and analytical means for developing, validating and qualifying the tools and methods used in environmental metrology and in remediation techniques.

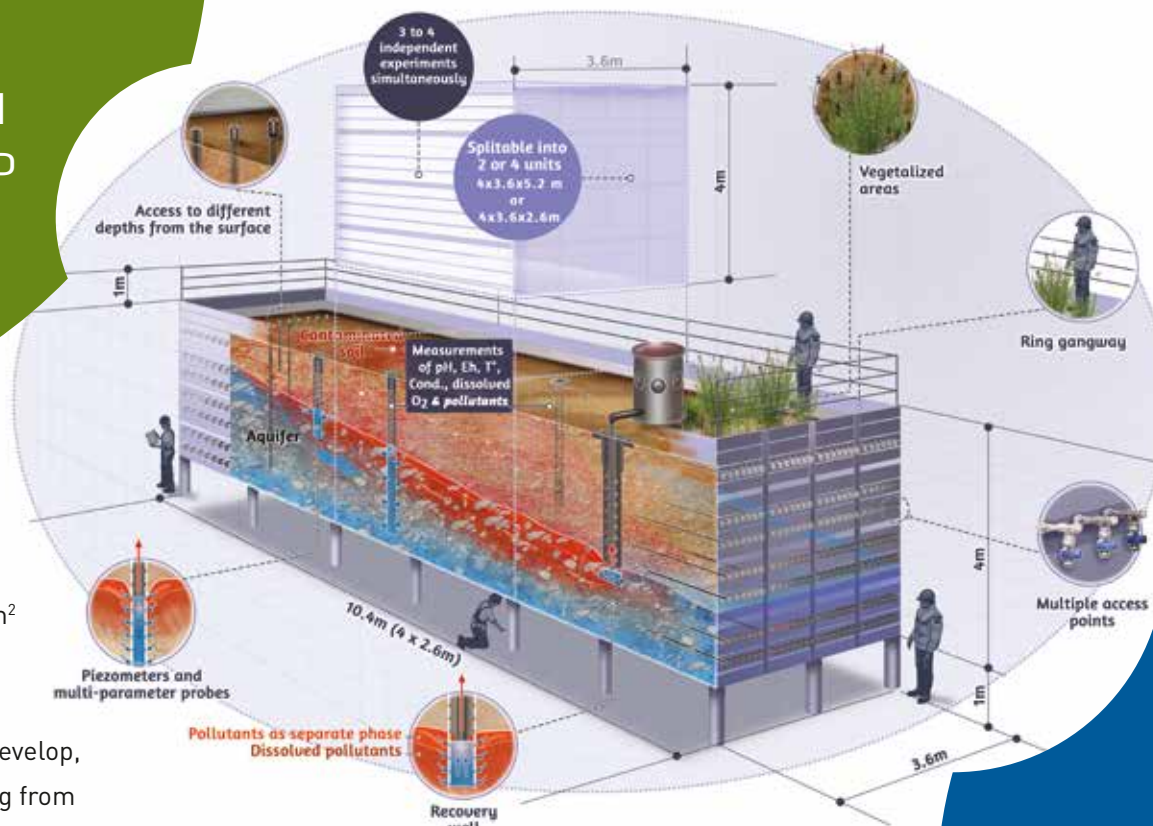


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Tools dedicated to environmental metrology and to the development of remediation processes

The experimental and analytic means of **PRIME** are regrouped within a 1000 m² hall in Orléans, in direct connection with BRGM's other analytical platforms and tools. **PRIME** makes it possible to develop, qualify and validate, at all scales ranging from the few ml reactor up to the industrial pilot of 100 m³, tools in environmental metrology (sensors, samplers,...), and remediation methods and procedures (physical, chemical and biological).

All the means available in **PRIME** can be mobilized in the framework of collaborative research projects and of services. Classified ICPE, the hall that hosts **PRIME** makes available to partners all the guarantees associated with this statute, notably for industrial processes.



Pluri-metric pilot
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Decimetric columns

Available means of study

- Batch reactors (closed containers) a centimetric to decimetric scale,
- Columns and tanks on a decimetric to metric scale (H = 0.2 to 5 m, interior diameter = 0.05 to 1 m),
- Pluri-metric pilot (12 x 4 x 4 m that can be broken down into 3 or 6 independent modules),
- Equipment for monitoring physical, chemical and microbiological measurements and for samplings (water, gas, solids) adapted to all the spatio-temporal scales under study,
- Laboratory environment for chemical analyses (isotopic and mineralogical, both inorganic and organic, major and traces analyses) in water, solids and gas, and for the physical characterizations of solids,
- A staff of technicians, engineers, research personnel and chargé d'affaires that can be mobilized from the conception of the studies to the valorization of the results.

Applications of PRIME

- Simulation of groundwater circulation in order to test passive sensors and samplers, for example,
- Migration and fate of contaminants through solid matrices, fragmented (soils, sediments) or consolidated (rocks), under conditions that are either non-saturated, saturated, or a continuum of the two, in an environment either aerobic or anaerobic,
- Implementation and validation (comparison with standardized methods, mass balance, cost-benefit analysis) of remediation tools and processes (physical, chemical, biological) at various scales up to that of industrial pilot,
- Other applications: consult us.