

G&E GEORESOURCES AND ENVIRONMENT, BORDEAUX

EA 4592

Fields of application
The environment
Georesources

Research themes and know-how

1 - Sedimentary systems and carbonate reservoirs:

Factors controlling the architecture and dynamics of sedimentary systems: a-Architecture and dynamics of epicontinental platforms; b-Sedimentary recording of tectonic and diapiric deformations; c-Platform-basin sedimentary transfers.

Genesis and diagenesis of carbonate and siliciclastic reservoirs: a-Sedimentology and mineralization processes in microbial carbonate systems; b-Sedimentology and diagenesis of sedimentary bodies in estuarine and fluvial domains; c-Relationships between diagenesis and reservoir properties in carbonate systems; d-Geological storage of CO₂.

2 - Transfers and interactions in aquifer systems:

Transfer and recharge dynamics, interactions and exchanges in complex aquifers: fluid-rock interactions, deep geothermics, environmental monitoring, the water cycle.

Pollutant transfer, decontamination of polluted sites and soil, geoelectrical methods: reactive transport modeling of pollutants, soil remediation, geophysical methodology development vs. fluid-rock interaction, hydrogeophysics.

Imaging - Remote sensing: HR and VHR satellite imaging, hyperspectral and LIDAR remote sensing; processing and analysis of space-time sequences; detection of land boundaries using regional segmentation and classification techniques.

Main equipment	<p>A DGPS (Leica)</p> <p>An autonomous pumping unit and an off-road vehicle for campaigns on the field</p> <p>A Dionex ion chromatography system</p> <p>A Perkin Elmer SIMAA 6000</p>	<p>atomic absorption graphite oven</p> <p>An Ortec alpha spectrometer</p> <p>A mercury porosimeter</p> <p>Two air permeameters</p> <p>An RMN system</p> <p>A BET system</p>	<p>A Geometrics ES-3000 8-channel seismograph</p> <p>A GEM Systems GSM-19 magnetometer</p> <p>An X-ray diffractometer</p> <p>Two field resistivity meters (Terrameter and Syscal Pro)</p>	<p>An EM34 field conductivity meter (measurements by electromagnetic induction)</p>
----------------	---	---	---	---

Partnerships

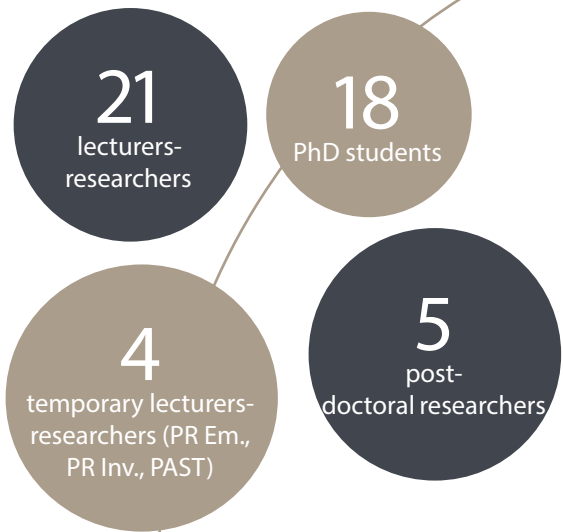
Industrial partnerships: TOTAL, Statoil, Engie, Repsol, IFPEN, ADCO, PDO, ANTEA, NIST, Forel Institute, Géoservices, Suez environnement, Fonroche, EDF, SNCF, Ford, Renault

Institutional partnerships: ADEME, Nouvelle-Aquitaine region, ANR, MAE, Campus Fr., CNES, BRGM, AEAG, ONEMA, IRSTEA, INRA

Spearheaded by



G&E in figures



Contact:

Director:
Myriam SCHMUTZ

Bordeaux INP ENSEGID
1 Allée Fernand Daguin
33 607 PESSAC

myriam.schmutz@ipb.fr

+33 (0)5 56 84 69 39

<http://geoenv.ensegid.fr>